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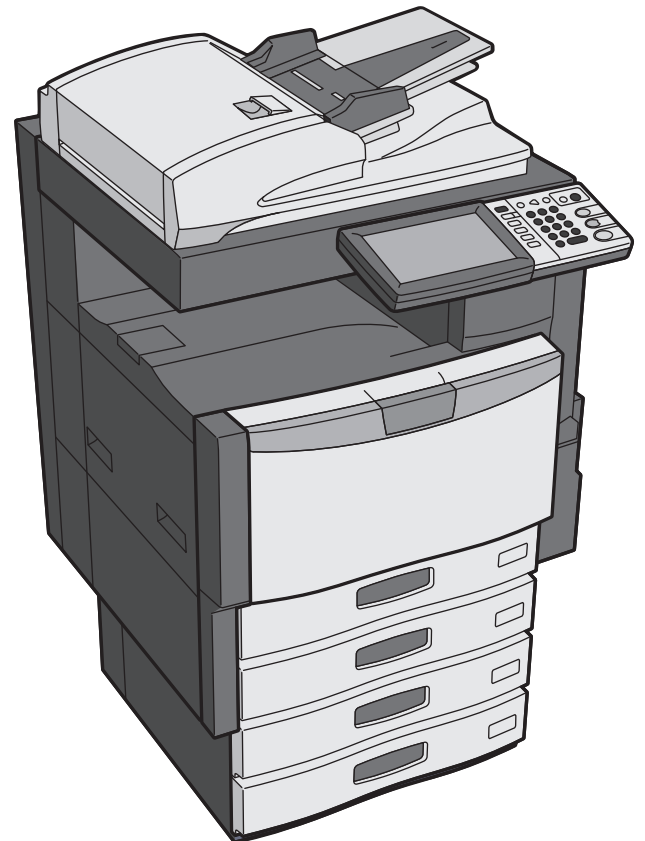
SERVICE MANUAL

MULTIFUNCTIONAL DIGITAL COLOR SYSTEMS

e-STUDIO02040C/2540C

e-STUDIO03040C/3540C

e-STUDIO04540C



Model: FC-2040C/2540C/3040C/3540C/4540C
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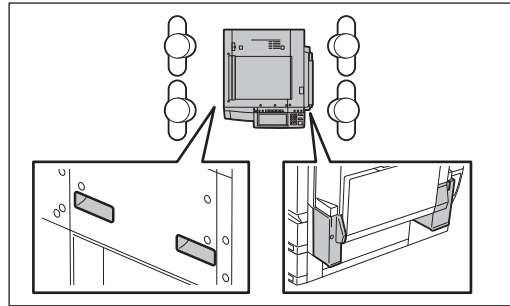
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GENERAL PRECAUTIONS REGARDING THE SERVICE FOR e-STUDIO2040C/2540C/3040C/3540C/4540C

The installation and service shall be done by a qualified service technician.

1. Transportation/Installation

- When transporting/installing the equipment, employ four persons and be sure to hold the positions as shown in the figure.
The equipment is quite heavy and weighs approximately 121 kg (266.75 lb.) or 123 kg (271.16 lb.), therefore pay full attention when handling it.



- Be sure not to hold the movable parts or units (e.g. the control panel, ADU or RADF) when transporting the equipment.
- Be sure to use a dedicated outlet with AC 110 V / 13.2 A, 115 V / 12 A, 220-240 V / 8 A for its power source.
- The equipment must be grounded for safety.
- Select a suitable place for installation. Avoid excessive heat, high humidity, dust, vibration and direct sunlight.
- Provide proper ventilation since the equipment emits a slight amount of ozone.
- To insure adequate working space for the copying operation, keep a minimum clearance of 30 cm (11.8") on the left, 80 cm (32") on the right and 10 cm (4") on the rear.
- The equipment shall be installed near the socket outlet and shall be accessible.
- Be sure to fix and plug in the power cable securely after the installation so that no one trips over it.
- If the unpacking place and where the equipment is to be installed differ, perform image quality adjustment (automatic gamma adjustment) according to the temperature and humidity of the place of installation and the paper to be used.

2. General Precautions at Service

- Be sure to turn the power OFF and unplug the power cable during service (except for the service should be done with the power turned ON).
- Unplug the power cable and clean the area around the prongs of the plug and socket outlet once a year or more. A fire may occur when dust lies on this area.
- When the parts are disassembled, reassembly is the reverse of disassembly unless otherwise noted in this manual or other related documents. Be careful not to install small parts such as screws, washers, pins, E-rings, star washers, harnesses in the wrong places.
- Basically, the equipment should not be operated with any parts removed or disassembled.
- The PC board must be stored in an anti-electrostatic bag and handled carefully using an antistatic wrist strap since the ICs on it may be damaged due to static electricity.

Caution: Before using the antistatic wrist strap, unplug the power cable of the equipment and make sure that there are no charged objects which are not insulated in the vicinity.

- Avoid exposure to laser beam during service. This equipment uses a laser diode. Be sure not to expose your eyes to the laser beam. Do not insert reflecting parts or tools such as a screwdriver on the laser beam path. Remove all reflecting metals such as watches, rings, etc. before starting service.
- Be sure not to touch high-temperature sections such as the exposure lamp, fuser unit, damp heater and areas around them.
- Be sure not to touch high-voltage sections such as the chargers, transfer belt, 2nd transfer roller, developer, high-voltage transformer, exposure lamp control inverter, inverter for the LCD backlight and power supply unit. Especially, the board of these components should not be touched since the electric charge may remain in the capacitors, etc. on them even after the power is turned OFF.
- Make sure that the equipment will not operate before touching potentially dangerous places (e.g. rotating/operating sections such as gears, belts pulleys, fans and laser beam exit of the laser optical unit).
- Be careful when removing the covers since there might be the parts with very sharp edges underneath.
- When servicing the equipment with the power turned ON, be sure not to touch live sections and rotating/operating sections. Avoid exposing your eyes to laser beam.
- Use designated jigs and tools.
- Use recommended measuring instruments or equivalents.
- Return the equipment to the original state and check the operation when the service is finished.
- Be very careful to treat the touch panel gently and never hit it. Breaking the surface could cause malfunctions.
- Do not leave plastic bags where children can get at them. This may cause an accident such as suffocation if a child puts his/her head into a bag. Plastic bags of options or service parts must be brought back.
- There is a risk of an electric shock or fire resulting from the damage to the harness covering or conduction blockage. To avoid this, be sure to wire the harness in the same way as that before disassembling when the equipment is assembled/disassembled.

3. General operations

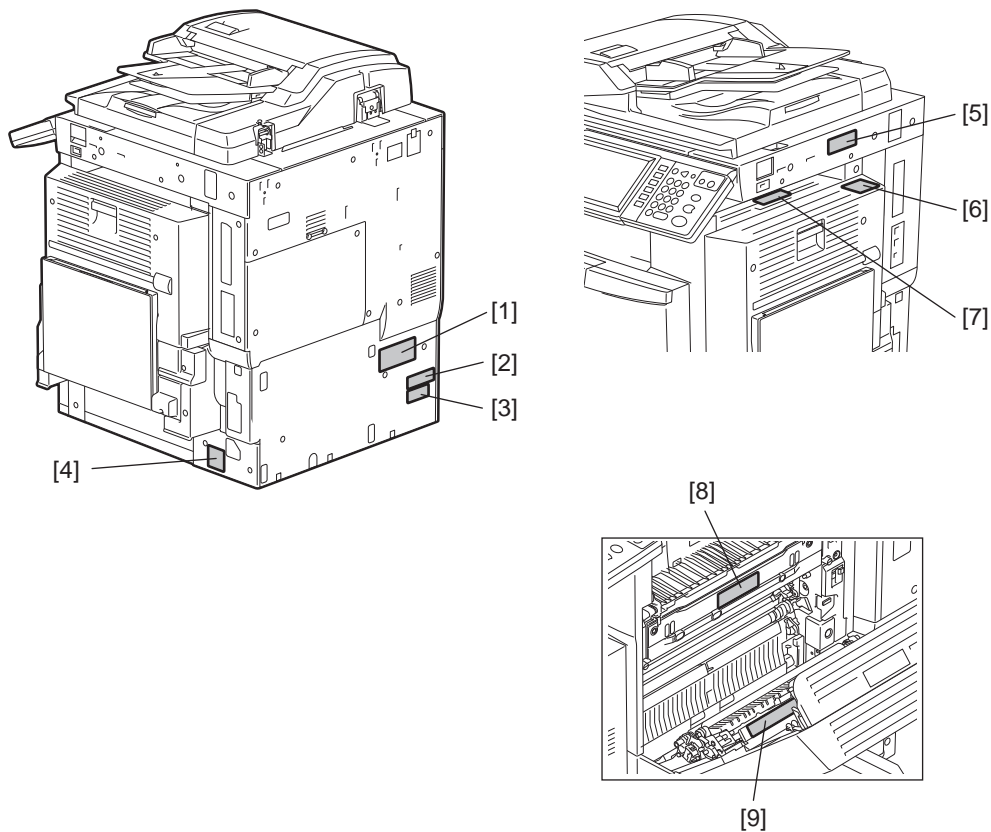
- Check the procedures and perform them as described in the Service Manual.
- Make sure you do not lose your balance.
- Avoid exposure to your skin and wear protective gloves as needed.

4. Important Service Parts for Safety

- The breaker, door switch, fuse, thermostat, thermofuse, thermistor, batteries, IC-RAMs including lithium batteries, etc. are particularly important for safety. Be sure to handle/install them properly. If these parts are short-circuited and their functions become ineffective, they may result in fatal accidents such as explosion or burnout. Avoid short-circuiting and do not use parts not recommended by Toshiba TEC Corporation.

5. Cautionary Labels

- During servicing, be sure to check the rating plate and cautionary labels to see if there is any dirt on their surface and if they are properly stuck to the equipment.



- [1] Explanatory label
- [2] Identification label
- [3] Certification label
- [4] Warning for grounding wire
- [5] Warning for high temperature area (fuser unit)
- [6] Warning for high temperature area (ventilation holes)
- [7] Warning for high temperature area (fuser unit)
- [8] Warning for high temperature area
- [9] Warning for handling transfer belt

6. Disposal of the Equipment, Supplies, Packing Materials, Used Batteries and IC-RAMs

- Regarding the recovery and disposal of the equipment, supplies, packing materials, used batteries and IC-RAMs including lithium batteries, follow the relevant local regulations or rules.

7. When the option has been installed:

- When the EFI printer board has been installed, be sure to unplug the power cable before performing maintenance and inspection, otherwise troubles such as a communication error may occur.

Caution:

Dispose of used batteries and IC-RAMs including lithium batteries according to this manual.

Attention:

Se débarrasser de batteries et IC-RAMs usés y compris les batteries en lithium selon ce manuel.

Vorsicht:

Entsorgung der gebrauchten Batterien und IC-RAMs (inclusive der Lithium-Batterie) nach diesem Handbuch.

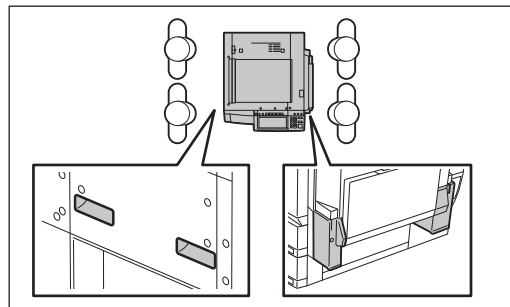
ALLEGEMEINE SICHERHEITSMASSNAHMEN IN BEZUG AUF DIE WARTUNG FÜR e-STUDIO2040C/2540C/3040C/3540C/4540C

Die Installation und die Wartung sind von einem qualifizierten Service-Techniker durchzuführen.

1. Transport/Installation

Zum Transportieren/Installieren des Gerätes werden 4 Personen benötigt. Nur an den in der Abbildung gezeigten Stellen tragen.

Das Gerät ist sehr schwer und wiegt etwa 121 kg oder 123 kg; deshalb muss bei der Handhabung des Geräts besonders aufgepasst werden.



Beim Transportieren des Geräts nicht an den beweglichen Teilen oder Einheiten (z.B. das Bedienungsfeld, die Duplexeinheit oder die automatische Dokumentenzuführung) halten.

Eine spezielle Steckdose mit Stromversorgung von AC 110 V / 13.2 A, 115 V oder 127 V / 12 A, 220-240 V / 8 A als Stromquelle verwenden.

Das Gerät ist aus Sicherheitsgründen zu erden.

Einen geeigneten Standort für die Installation wählen. Standorte mit zuviel Hitze, hoher Luftfeuchtigkeit, Staub, Vibrieren und direkter Sonneneinstrahlung sind zu vermeiden.

Für ausreichende Belüftung sorgen, da das Gerät etwas Ozon abgibt.

Um einen optimalen Kopierbetrieb zu gewährleisten, muss ein Abstand von mindestens 80 cm links, 80 cm rechts und 10 cm dahinter eingehalten werden.

Das Gerät ist in der Nähe der Steckdose zu installieren; diese muss leicht zu erreichen sein.

Nach der Installation muss das Netzkabel richtig hineingesteckt und befestigt werden, damit niemand darüber stolpern kann.

Falls der Auspackungsstandort und der Installationsstandort des Geräts verschieden sind, die Bildqualitätsjustierung (automatische Gammajustierung) je nach der Temperatur und Luftfeuchtigkeit des Installationsstandorts und der Papiersorte, die verwendet wird, durchführen.

2. Allgemeine Sicherheitsmassnahmen in bezug auf die Wartung

Während der Wartung das Gerät ausschalten und das Netzkabel herausziehen (ausser Wartung, die bei einem eingeschalteten Gerät, durchgeführt werden muss).

Das Netzkabel herausziehen und den Bereich um die Steckerpole und die Steckdose die Umgebung in der Nähe von den Steckerzacken und der Steckdose wenigstens einmal im Jahr reinigen. Wenn Staub sich in dieser Gegend ansammelt, kann dies ein Feuer verursachen.

Wenn die Teile auseinandergenommen werden, wenn nicht anders in diesem Handbuch usw erklärt, ist das Zusammenbauen in umgekehrter Reihenfolge durchzuführen. Aufpassen, dass kleine Teile wie Schrauben, Dichtungsringe, Bolzen, E-Ringe, Stern-Dichtungsringe, Kabelbäume nicht an den verkehrten Stellen eingebaut werden.

Grundsätzlich darf das Gerät mit entfernten oder auseinandergenommenen Teilen nicht in Betrieb genommen werden.

Das PC-Board muss in einer Anti-elektrostatischen Hülle gelagert werden. Nur Mit einer Manschette bei Betätigung eines Armbandes anfassen, sonst könnte es sein, dass die integrierten Schaltkreise durch statische Elektrizität beschädigt werden.

Vorsicht: Vor Benutzung der Manschette der Betätigung des Armbandes, das Netzkabel des Gerätes herausziehen und prüfen, dass es in der Nähe keine geladenen Gegenstände, die nicht isoliert sind, gibt.

Setzen Sie sich während der Wartungsarbeiten nicht dem Laserstrahl aus. Dieses Gerät ist mit einer Laserdiode ausgestattet. Es ist unbedingt zu vermeiden, direkt in den Laserstrahl zu blicken. Keine reflektierenden Teile oder Werkzeuge, wie z. B. Schraubendreher, in den Pfad des Laserstrahls halten. Vor den Wartungsarbeiten sämtliche reflektierenden Metallgegenstände, wie Uhren, Ringe usw., entfernen.

Auf keinen Fall Hochtemperaturbereiche, wie die Belichtungslampe, die Fixiereinheit, die Heizquelle und die umliegenden Bereiche, berühren.

Auf keinen Fall Hochspannungsbereiche, wie die Ladeeinheiten, das Transferband, die zweite Transferwalze, die Entwicklereinheit, den Hochspannungstransformator, den Steuerumrichter für die Belichtungslampe, den Umrichter für die LCD-Hintergrundbeleuchtung und das Netzgerät, berühren. Insbesondere sollten die Platinen dieser Komponenten nicht berührt werden, da die Kondensatoren usw. auch nach dem Ausschalten des Geräts noch elektrisch geladen sein können.

Vor dem Berühren potenziell gefährlicher Bereiche (z. B. drehbare oder betriebsrelevante Bereiche, wie Zahnräder, Riemen, Riemenscheiben, Lüfter und die Laseraustrittsöffnung der optischen Lasereinheit) sicherstellen, dass das Gerät sich nicht bedienen lässt.

Beim Entfernen von Abdeckungen vorsichtig vorgehen, da sich darunter scharfkantige Komponenten befinden können.

Bei Wartungsarbeiten am eingeschalteten Gerät dürfen keine unter Strom stehenden, drehbaren oder betriebsrelevanten Bereiche berührt werden. Nicht direkt in den Laserstrahl blicken.

Ausschließlich vorgesehene Werkzeuge und Hilfsmittel verwenden.

Empfohlene oder gleichwertige Messgeräte verwenden.

Nach Abschluss der Wartungsarbeiten das Gerät in den ursprünglichen Zustand zurück versetzen und den einwandfreien Betrieb überprüfen.

Das berührungsempfindliche Bedienungsfeld stets vorsichtig handhaben und keinen Stößen aussetzen. Wenn die Oberfläche beschädigt wird, kann dies zu Funktionsstörungen führen.

Bewahren Sie Kunststofftüten kindersicher auf. Es besteht Erstickungsgefahr, wenn sich Kinder beim Spielen eine Kunststofftüte über den Kopf ziehen. Bitte nehmen Sie die Kunststofftüten von Optionen oder Serviceparts wieder zurück.

Wenn der Schutzmantel eines Kabels oder die Steckerisolierung beschädigt werden, besteht Brandgefahr oder die Gefahr eines elektrischen Schlags. Um dies zu vermeiden, sollten Kabel in der gleichen Weise verlegt werden, wie sie vor der Demontage/dem Transport verlegt waren.

3. Allgemeine Sicherheitsmassnahmen

- Die Verfahren sind zu überprüfen und wie im Wartungshandbuch beschrieben durchzuführen.
- Vorsichtig, dass Sie nicht umfallen.
- Um Aussetzung zur Haut zu vermeiden, tragen Sie wenn nötig Schutzhandschuhe.

4. Sicherheitsrelevante Wartungsteile

Der Leistungsschutzschalter, der Türschalter, die Sicherung, der Thermostat, die Therмосicherung, der Thermistor, der Akkus, die IC-RAMs einschließlich der Lithiumakkus usw. sind besonders sicherheitsrelevant. Sie müssen unbedingt korrekt gehandhabt und installiert werden. Wenn diese Teile kurzgeschlossen und funktionsunfähig werden, kann dies zu schwerwiegenden Schäden, wie einer Explosion oder einem Abbrand, führen. Kurzschlüsse sind zu vermeiden, und es sind ausschließlich Teile zu verwenden, die von der Toshiba TEC Corporation empfohlen sind.

5. Warnetiketten

Im Rahmen der Wartung unbedingt das Leistungsschild und die Etiketten mit Warnhinweisen überprüfen [z. B. „Unplug the power cable during service“ („Netz kabel vor Beginn der Wartungsarbeiten abziehen“), „CAUTION. HOT“ („VORSICHT, HEISS“), „CAUTION. HIGH VOLTAGE“ („VORSICHT, HOCHSPANNUNG“), „CAUTION. LASER BEAM“ („VORSICHT, LASER“) usw.], um sicherzustellen, dass sie nicht verschmutzt sind und korrekt am Gerät angebracht sind.

6. Entsorgung des Geräts, der Verbrauchs- und Verpackungsmaterialien, alter Akkus und IC-RAMs

In Bezug auf die Entsorgung und Wiederverwertung des Geräts, der Verbrauchs- und Verpackungsmaterialien, alter Akkus und IC-RAMs, einschließlich Lithiumakkus, sind die einschlägigen nationalen oder regionalen Vorschriften zu befolgen.

Caution:

Dispose of used batteries and IC-RAMs including lithium batteries according to this manual.

Attention:

Se débarrasser de batteries et IC-RAMs usés y compris les batteries en lithium selon ce manuel.

Vorsicht:

Entsorgung der gebrauchten Batterien und IC-RAMs (inclusive der Lithium-Batterie) nach diesem Handbuch.

- Laseremissionseinheit

Diese Einheit besteht aus der Laserdiode, dem Fokussierungsobjektiv, der Blende und dem Zylinderobjektiv.

Laserdiode

Diese Laserdiode zeichnet sich durch eine geringe Regeldifferenz, eine kleine Laservariation und einen niedrigen Schwellenstrom aus.

Die Blende der Laseremissionseinheit ist unter dem Fokussierobjektiv angeordnet, um die Form der Laserstrahlen in der primären und sekundären Scanrichtung festzulegen.

Die Laserdiode gibt Laserstrahlen als Reaktion auf die Signale der Laseremissionssteuerung (ein/aus) von der Lasertreiber-PC-Platine (LDR) aus. Die durch das Fokussierobjektiv geführten Laserstrahlen werden auf die Trommeloberfläche fokussiert.

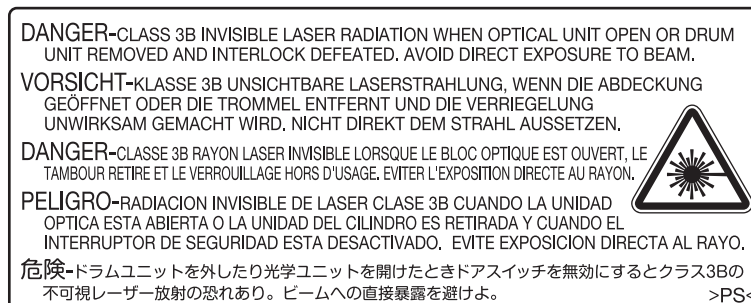
Vorsichtsmaßnahmen im Zusammenhang mit Lasern

Dieses Gerät enthält eine Laserdiode, die einen unsichtbaren Laserstrahl emittiert.

Da man diesen Laserstrahl nicht sehen kann, ist bei der Handhabung der Komponenten der optischen Lasereinheit, bei der Durchführung von Arbeiten und bei der Justierung des Laserstrahls äußerste Vorsicht geboten. Arbeiten dürfen niemals anhand anderer als den vorgeschriebenen Anleitungen durchgeführt werden; andernfalls kann es zu einer Schädigung Exposition durch Laserstrahlung kommen.

Die Lasereinheit ist vollständig mit einer Schutzabdeckung versiegelt. Solange ausschließlich die Arbeitsschritte der vorgeschriebenen Anleitungen durchgeführt werden, tritt der Laserstrahl nicht aus, und es besteht keine Gefahr, der Laserstrahlung ausgesetzt zu werden.

Das folgende Laser-Warnetikett ist an der Abdeckung vorne rechts angebracht.



Warnhinweise:

Setzen Sie sich während der Wartungsarbeiten nicht dem Laserstrahl aus.

Dieses Gerät ist mit einer Laserdiode ausgestattet. Es ist unbedingt zu vermeiden, direkt in den Laserstrahl zu blicken. Keine reflektierenden Teile oder Werkzeuge, wie z. B. Schraubendreher, in den Pfad des Laserstrahls halten. Vor den Wartungsarbeiten sämtliche reflektierenden Metallgegenstände, wie Uhren, Ringe usw., entfernen.

Bei Wartungsarbeiten am eingeschalteten Gerät dürfen keine unter Strom stehenden, drehbaren oder betriebsrelevanten Bereiche berührt werden. Nicht direkt in den Laserstrahl blicken.

Im Rahmen der Wartung unbedingt das Leistungsschild und die Etiketten mit Warnhinweisen überprüfen [z. B. „Unplug the power cable during service“ („Netzkabel vor Beginn der Wartungsarbeiten abziehen“), „CAUTION. HOT“ („VORSICHT, HEISS“), „CAUTION. HIGH VOLTAGE“ („VORSICHT, HOCHSPANNUNG“), „CAUTION. LASER BEAM“ („VORSICHT, LASER“) usw.], um sicherzustellen, dass sie nicht verschmutzt sind und korrekt am Gerät angebracht sind.

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1. FEATURE

1.1 Main Feature of e-STUDIO2040C/2540C/3040C/3540C/4540C

- The customizing ability is improved and high security performance is given by adopting a new OS. (New standard IEEE2600 embedded)
- The open platform interface using Web Service is embedded.
- The energy saving feature is included. The electrical power in the sleep mode is reduced to 5W (approx. 1/5).
- An IC chip is mounted to the toner cartridge.
- The Saddle stitch finisher (optional) is adopted.

Item	Model name
Saddle stitch finisher	MJ-1106

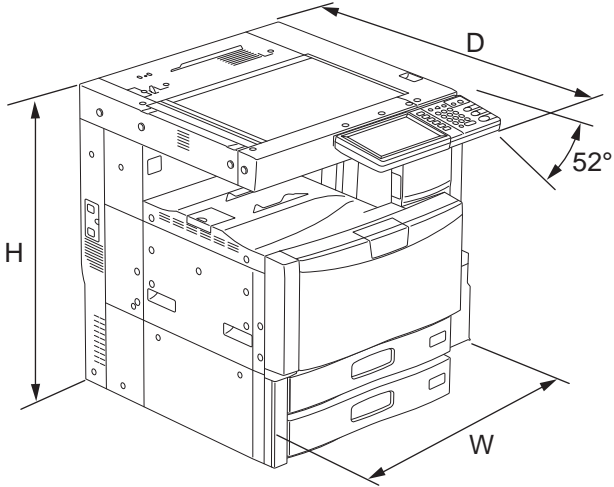
2. SPECIFICATIONS/ACCESSORIES/OPTIONS/SUPPLIES

2.1 Specifications

2.1.1 General

Type	Desktop type (Console type: when optional Paper Feed Pedestal (PFP) or optional Large Capacity Feeder (LCF) is installed.)	
Original glass	Fixed	
Color	Full color, Twin color, Mono color	
Copy process	Indirect electrophotographic method (dry)	
Developing system	2-component magnetic brush developing	
Fixing method	Belt fusing system	
Photosensor type	OPC	
Original scanning sensor	Linear CCD sensor	
Scanning light source	Xenon lamp	
Resolution	Scanning	600 dpi x 600 dpi
	Writing	2400 dpi x 600 dpi (black print, except Photo and gray scale) 600 dpi x 600 dpi (color print / Photo / gray scale)
Gradation	256	
Paper feeding	2 drawers + Bypass feeding + PFP 1 drawer (optional) 2 drawers + Bypass feeding + PFP 2 drawers (optional) 2 drawers + Bypass feeding + LCF (optional)	
Paper supply	Drawers /PFP (optional)	Stack height 60.5 mm, Approx. 550 sheets (80 g/m ² , 21.3 lb. Bond), Approx. 500 sheets (105 g/m ² , 28 lb. Bond)
	Bypass feeding	Stack height 11 mm, Approx. 100 sheets (80 g/m ² , 21.3 lb. Bond), Approx. 80 sheets (105 g/m ² , 28 lb. Bond)
	LCF (optional)	Stack height 137.5 mm, Approx. 2500 sheets (80 g/m ² , 21.3 lb. Bond), Approx. 2000 sheets (90 g/m ² , 28 lb. Bond)
Paper size	Drawers / PFP (optional)	A3, A4, A4-R, A5-R, B4, B5, B5-R, FOLIO, 8K, 16K, 16K-R, LD, LG, LT, LT-R, ST-R, COMPUTER, 13"LG, 8.5" x 8.5",
	Bypass feeding	A3, A4, A4-R, A5-R, B4, B5, B5-R, FOLIO, 8K, 16K, 16K-R, 305 x 457 mm (A3Wide), 320 x 450 mm (SRA3), 320 x 460 mm, LD, LG, LT, LT-R, ST-R, COMPUTER, 13" LG, 8.5" x 8.5", 12" x 18" (Full Bleed), Non-standard: Paper size within 100 - 320 mm (5 1/2" - 12.6") (Length), 148 - 460 mm (8 1/2" - 18.1") (Width) <For printing functions, within 461 mm - 1200 mm (18.15" - 47.24") (width)>
	LCF (optional)	A4, LT

Paper type	Drawers / PFP (optional)	Plain paper, Recycled paper, Thick 1, Thick 2, Thick 3
	Bypass feeding	Plain paper, Recycled paper, Thick 1, Thick 2, Thick 3, Thick 4, Sticker labels, OHP film, Tab paper, Water proof paper, Extra large paper
	LCF (optional)	Plain paper, Recycled paper
Paper weight	Drawers / PFP (optional)	64 g/m ² to 256 g/m ² (17 lb. Bond to 94.5 lb. Cover)
	Bypass feeding	64 g/m ² to 280 g/m ² (17 lb. Bond to 150 lb. Cover)
	LCF (optional)	64 g/m ² to 105 g/m ² (17 lb. Bond to 28 lb. Bond)
Automatic duplexing unit	Type	Stackless, Switchback type
	Acceptable paper size	A3, A4, A4-R, A5-R, B4, B5, B5-R, FOLIO, 8K, 16K, 16K-R, 305 x 457mm (A3Wide), LD, LG, LT, LT-R, ST-R, COMPUTER, 13"LG, 8.5" x 8.5", 12" x 18" (Full Bleed)
	Acceptable paper weight	64 g/m ² to 256 g/m ² (17 lb. Bond to 94.5 lb. Cover)
Toner supply		Automatic toner density detection/supply
Density control		Automatic density mode and manual density mode selectable in 11 steps
Total counter		Electronic counter
Memory (RAM)	Main memory	1 GB
	Page Memory	512 MB
HDD		80 GB
Account Codes		10,000 codes
Department Codes		1,000 codes
Machine version		NAD: North America, Brazil MJD: Europe AUD: Australia ASD: Asia, Hong Kong, Latin America TWD: Taiwan SAD: Saudi Arabia ASU: Saudi Arabia, Asia CND: China KRD: Korea ARD: Argentina JPD: Japan
Warm-up time	e-STUDIO2040C e-STUDIO2540C e-STUDIO3040C e-STUDIO3540C	Approx. 99 sec. (100 V series) <Stand-alone, temperature: 20°C> Approx. 89 sec. (200 V series) <Stand-alone, temperature: 20°C>
	e-STUDIO4540C	Approx. 160 sec. <Stand-alone, temperature: 20°C>
Power requirements		AC 110 V / 13.2 A, 115 V or 127 V / 12 A 220-240 V / 8 A (50/60 Hz) * The acceptable value of each voltage is ± 10%.
Power consumption		1.5 kW or less (100 V, 115 V) 1.6 kW or less (127 V) 2.0 kW or less (200 V series) * The electric power is supplied to the RADF, Finisher, PFP and LCF through the equipment.
Weight		Approx. 121 kg (266.75 lb.) (for NAD and MJD) Approx. 122 kg (269.01 lb.) (for others)

Dimensions of the equipment	<p>W 699 x D 742 x H 759 (mm)</p> <p>* When the tilt angle of the control panel is 52 degrees.</p> 
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2.1.2 Copy

[1] Copy specifications

Storage capacity		Max. 1000 sheets or until the memory is full
Original glass	Original scanning system	Flat surface scanning system (the left rear corner used as guide to place originals)
	Original type	Sheets, books and 3-dimensional objects
	Original size	Max. A3/LD
Reversing Automatic Document Feeder (optional)	Original scanning system	Fixed scanning system by feeding the original (the center used as guide to place originals)
	Original type	Sheets (carbon, bounded or stapled originals cannot be accepted)
	Original size	A3, A4, A4-R, A5-R, B4, B5, B5-R, FOLIO, LD, LG, LT, LT-R, ST-R, COMPUTER
	Original paper weight	Single-sided copy: 35-157g/m ² (9.3 lb. Bond - 58 lb. Cover) Double-sided copy: 50-157g/m ² (13.3 lb. Bond - 58 lb. Cover)
	Original capacity	Max. 100 sheets (80 g/m ²) (Stack height 16 mm)
Eliminated portion	Black copy	Leading edges: 4.2 +2.8/-1.2 mm, Trailing edges: 2.0 ± 2.0 mm, Side edges: 2.0 ± 2.0 mm
	Color copy	Leading edges: 5.0 ± 2.0 mm, Trailing edges: 3.0 ± 2.0 mm, Side edges: 3.0 ± 2.0 mm
Multiple copying		Up to 999 copies: Key in set numbers

[2] First copy time

e-STUDIO2040C e-STUDIO2540C e-STUDIO3040C	Black	Approx. 6.5 sec.
	Color	Approx. 8.4 sec.
e-STUDIO3540C	Black	Approx. 5.2 sec.
	Color	Approx. 8.4 sec.
e-STUDIO4540C	Black	Approx. 5.2 sec.
	Color	Approx. 6.8 sec.

[3] Copy speed (Copies/min.)

[3-1] Plain paper

- Plain paper: 64 g/m2 to 105 g/m2 (17 lb. Bond to 28 lb. Bond)
e-STUDIO2040C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	20 (20)	20 (20)	10 (10)	20 (20)	20 (20)
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	15 (15)	15 (15)	15 (15)	15 (15)	-
B4, LG, FOLIO, COMPUTER	12 (12)	12 (12)	10 (10)	12 (12)	-
A3, LD	10 (10)	10 (10)	10 (10)	10 (10)	-
305 x 457mm, 320 x 450mm (SRA3)	-	9 (9)	-	-	-

e-STUDIO2540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	25 (25)	25 (25)	15 (15)	25 (25)	25 (25)
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	20 (20)	20 (20)	15 (15)	20 (20)	-
B4, LG, FOLIO, COMPUTER	17 (17)	17 (17)	15 (15)	17 (17)	-
A3, LD	15 (15)	15 (15)	15 (15)	15 (15)	-
305 x 457mm, 320 x 450mm (SRA3)	-	14 (14)	-	-	-

e-STUDIO3040C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	30 (30)	30 (30)	18 (16)	30 (30)	30 (30)
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	23 (23)	23 (23)	18 (16)	23 (23)	-
B4, LG, FOLIO, COMPUTER	19 (19)	19 (19)	18 (16)	19 (19)	-
A3, LD	16 (16)	16 (16)	16 (16)	16 (16)	-
305 x 457mm, 320 x 450mm (SRA3)	-	15 (15)	-	-	-

e-STUDIO3540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	35 (35)	35 (35)	22 (18)	35 (35)	35 (35)
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	26 (26)	26 (26)	22 (18)	26 (26)	-
B4, LG, FOLIO, COMPUTER	22 (22)	22 (22)	22 (18)	22 (22)	-
A3, LD	18 (18)	18 (18)	22 (18)	18 (18)	-
305 x 457mm, 320 x 450mm (SRA3)	-	17 (17)	-	-	-

e-STUDIO4540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	45 (45)	45 (45)	22 (22)	45 (45)	45 (45)
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	32 (32)	32 (32)	22 (22)	32 (32)	-
B4, LG, FOLIO, COMPUTER	26 (26)	26 (26)	22 (22)	26 (26)	-
A3, LD	22 (22)	22 (22)	22 (22)	22 (22)	-
305 x 457mm, 320 x 450mm (SRA3)	-	22 (22)	-	-	-

- * “-” means “Not acceptable”.
- * When originals are manually placed for single-sided, continuous copying.
- * Plain paper is selected for the paper type.
- * When the Reversing Automatic Document Feeder is used, the copying speeds of the equipment is only possible under the following conditions:
 - Original: A4 or LT (single-sided)
 - Mode: APS and Automatic density not selected, Plain paper mode
 - Reproduction ratio: 100%
- * The values in () can be realized in the color mode.

[3-2] Thick 1/Thick 2/Thick 3

- Thick 1: 106 g/m² to 163 g/m² (90 lb. Index)
- Thick 2: 164 g/m² to 209 g/m² (110 lb. Index)
- Thick 3: 210 g/m² to 256 g/m² (140 lb. Index)

e-STUDIO2040C/2540C/3040C/3540C/4540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	17.5 (17.5)	17.5 (17.5)	8.5 (8.5)	17.5 (17.5)	-
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	13 (13)	13 (13)	8.5 (8.5)	13 (13)	-
B4, LG, FOLIO, COMPUTER	10.5 (10.5)	10.5 (10.5)	8.5 (8.5)	10.5 (10.5)	-
A3, LD	8.5 (8.5)	8.5 (8.5)	8.5 (8.5)	8.5 (8.5)	-
305 x 457mm, 320 x 450mm (SRA3)	-	8 (8)	-	-	-

* “-” means “Not acceptable”.

* When originals are manually placed for single-sided, continuous copying.

* The values in () can be realized in the color mode.

[3-3] Thick 4

- Thick 4: 257 g/m² to 280 g/m² (150 lb. Index)

e-STUDIO2040C/2540C/3040C/3540C/4540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	-	17.5 (17.5)	8.5 (8.5)	-	-
B5, A5-R, ST-R					-
A4-R, B5-R, LT-R	-	13 (13)	8.5 (8.5)	-	-
B4, LG, FOLIO, COMPUTER	-	10.5 (10.5)	8.5 (8.5)	-	-
A3, LD	-	8.5 (8.5)	8.5 (8.5)	-	-
305 x 457mm, 320 x 450mm (SRA3)	-	8 (8)	-	-	-

* “-” means “Not acceptable”.

* When originals are manually placed for single-sided, continuous copying.

* The values in () can be realized in the color mode.

[3-4] OHP film

e--STUDIO2040C/2540C/3040C/3540C/4540C

Paper supply Paper size	Drawer	Bypass feed		PFP	LCF (A4/LT only)
		Size specified	Size not specified		
A4, LT	-	14.5 (14.5)	-	-	-

* “-” means “Not acceptable”.

* When originals are manually placed for single-sided, continuous copying.

* The values in () can be realized in the color mode.

[4] System copy speed

Copy mode		Sec.		
		e-STUDIO2040C	e-STUDIO2540C	e-STUDIO3040C
Single-sided originals ↓	1 set	33.00 (34.74)	26.29 (34.30)	26.29 (28.21)
	3 sets	94.90 (96.62)	70.79 (85.61)	70.79 (76.33)
Single-sided copies	5 sets	154.07 (155.74)	113.13 (137.06)	113.13 (114.89)
	1 set	38.42 (40.16)	31.60 (36.61)	31.60 (33.83)
Single-sided originals ↓	3 sets	97.93 (99.20)	78.27 (91.91)	78.27 (76.09)
	5 sets	156.45 (158.33)	116.33 (142.09)	116.33 (118.64)
Double-sided originals ↓	1 set	70.50 (72.75)	61.71 (67.18)	61.71 (64.43)
	3 sets	190.42 (192.66)	146.44 (170.49)	146.44 (149.43)
Double-sided copies	5 sets	308.62 (311.20)	231.28 (273.28)	231.28 (234.05)
	1 set	65.89 (67.05)	55.11 (64.19)	55.11 (58.50)
Double-sided originals ↓	3 sets	183.56 (185.29)	140.11 (162.75)	140.11 (142.58)
	5 sets	302.32 (303.56)	224.86 (266.15)	224.86 (228.09)

Copy mode		Sec.	
		e-STUDIO3540C	e-STUDIO4540C
Single-sided originals ↓	1 set	22.33 (24.10)	18.03 (19.35)
	3 sets	58.69 (60.34)	46.92 (47.82)
Single-sided copies	5 sets	93.13 (94.41)	73.46 (74.35)
	1 set	30.60 (31.00)	30.95 (26.39)
Single-sided originals ↓	3 sets	66.21 (68.06)	61.03 (55.61)
	5 sets	102.90 (104.72)	83.51 (84.97)
Double-sided originals ↓	1 set	61.02 (64.45)	58.17 (60.50)
	3 sets	134.24 (137.46)	116.96 (118.88)
Double-sided copies	5 sets	207.54 (210.85)	175.09 (177.28)
	1 set	55.12 (58.02)	53.89 (56.41)
Double-sided originals ↓	3 sets	123.25 (126.84)	106.97 (109.42)
	5 sets	191.18 (194.06)	159.83 (162.32)

* Shows the period of time from when the [START] button is pressed until the message “Ready” is displayed. (10 sheets of A4/LT size original are set on the RADF and one of the copy modes above is selected.)

* Setting: when in the Text/Photo mode with Automatic density and APS/AMS set to OFF, or when in the sort mode with paper fed from the 1st drawer.

* The Saddle Stitch Finisher and hole punch unit not installed.

* The values in () are the speeds of when in the color mode.

2.1.3 Print

Supported Page Description Language (Printer Driver)		PCL6, PostScript 3 emulation, XPS
Supported Page Description Language (RIP)		PCL6, PostScript 3 emulation, XPS, PCL5e, PCL5c, PDF (emulation)
Supported Client OS		Windows XP / Vista / 7 / Server 2003 / Server 2008 / Server 2008R2 Mac OS X (Ver. 10.2 or higher) Solaris (SUN) / HP-UX / AIX (IBM) / Linux / SCO
Resolution	Black	600 x 600 dpi, 8bit
	Color	600 x 600 dpi, 8bit
Eliminated portion	Black / Color	Leading edges: 4.2+2.8/-1.2 mm, Trailing edges: 5.0 ± 2.0 mm, Side edges: 4.2 ± 2.0 mm
Interface	Standard	Ethernet (1000BASE-T/100BASE-TX/10BASE-T), USB 2.0 (High speed)
	Optional	Wireless LAN (IEEE 802.11b/g)

2.1.4 Scan

Scanning speed	Color / Black	45 sheets/min. (600 x 600 dpi) 53 sheets/min. (400 x 400 dpi) 57 sheets/min. (300 x 300 dpi)
Resolution		100, 150, 200, 300, 400 and 600 dpi
Scan mode		Black, Gray scale, Color and ACS (Auto color Selection)
File formats		JPEG, Multi/Single page TIFF, Multi/Single page PDF, Slim PDF, Multi/Single page XPS

* When scanning single-sided A4/LT landscape originals using RADF

2.1.5 e-Filing

Number of Boxes	Public Box	1
	User Box	200
Number of Folder		100 folders per box
Number of Document		400 documents per box/folder
Number of Page		200 pages per document
Capacity of HDD	e-Filing	13 GB

* When scanning single-sided A4/LT landscape originals using RADF

2.1.6 Internet Fax

[1] Internet FAX transmission

Resolution	TX Resolution < dots/mm >	Standard (8 x 3.85), Fine (8 x 7.7), U-Fine (16 x 15.4)* * If U-Fine is selected in TX resolution, data is converted to Fine resolution in RX.
Scanning	Original Document Size	A3, B4, A4, A4-R, A5, B5, B5-R, A5-R, LT, LT-R, LG, LD, ST, ST-R, Computer, Folio
	Speed	0.7 sec. (per page/A4) Max. 50 spm (ITU-T No.1, A4, 8 x 3.85, Text mode)
	Gray scale	256 levels (Error Diffusion)
Address book	Address Book	1000 stations
	Group	Max. 200 stations
Transmission Features	Broadcast transmission	Max. 400 destinations/job. (Fax number and E-mail address are available to registered in same job.)
	Message size limitation	Max. 100MB
	Message division	Page by page

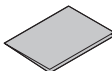


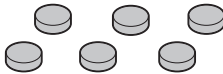

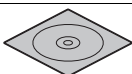




[2] Internet FAX receiving

Format of receive attachment	TIFF-FX (Profile S, F, J)
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2.1.7 Network Fax

Compatibility		Super G3, G3 (ITU-T.30) Internet Fax (Simple mode) (ITU-T.37)
TX Resolution	PSTN	Standard: 200 x 100 dpi, Fine: 200 x 200 dpi, Super Fine: 200 x 400 dpi, Ultra Fine: 400 x 400 dpi
	Internet Fax	200 dpi x 200 dpi
Original Document Size		A3, A4, A5, B4, B5, FOLIO, LD, LG, LT, ST, COMPUTER
Mail Box	User defined	Max. 300 boxes
Routed document format	Send to e-Filing	MMR
	Send to File (SMB)	Single TIFF, Multi-TIFF, Single PDF, Multi PDF
	Send to FTP	Single TIFF, Multi-TIFF, Single PDF, Multi PDF
	Send to E-mail	Single TIFF, Multi-TIFF, Single PDF, Multi PDF
	Send to I-Fax	TIFF-S
	Send to PSTN-FAX	MMR

2.2 Accessories

Unpacking/Setup instruction		1 set
Operator's manual		1 set - Safety Information: 1 manual - Quick Start Guide: 1 manual
Power cable		1 pc.
Warranty sheet		1 pc. (for NAD)
Setup report		1 set (for NAD, MJD and CND)
Sub tray		1 pc. (for NAD)
Rubber plug		6 pcs.
Blind seal (small / large)		1 pc. /3 pcs.
DVD-ROM		1 pc. - Client Utilities/User Documentation DVD
Developer material (Y, M, C, K)		1 pc. each (for CND)
Approval sheet		1 set (for CND)
Screw		1 pc.
Gasket		2 pcs.
Gasket screw		2 pcs.

* Machine version

NAD:	North America, Brazil
MJD:	Europe
AUD:	Australia
ASD:	Asia, Hong Kong, Latin America
TWD:	Taiwan
SAD:	Saudi Arabia
ASU:	Saudi Arabia, Asia
CND:	China
KRD:	Korea
ARD:	Argentina
JPD:	Japan

Notes:

Check that the above accessories are correctly co-packed at the time of unpacking.

2.3 System List

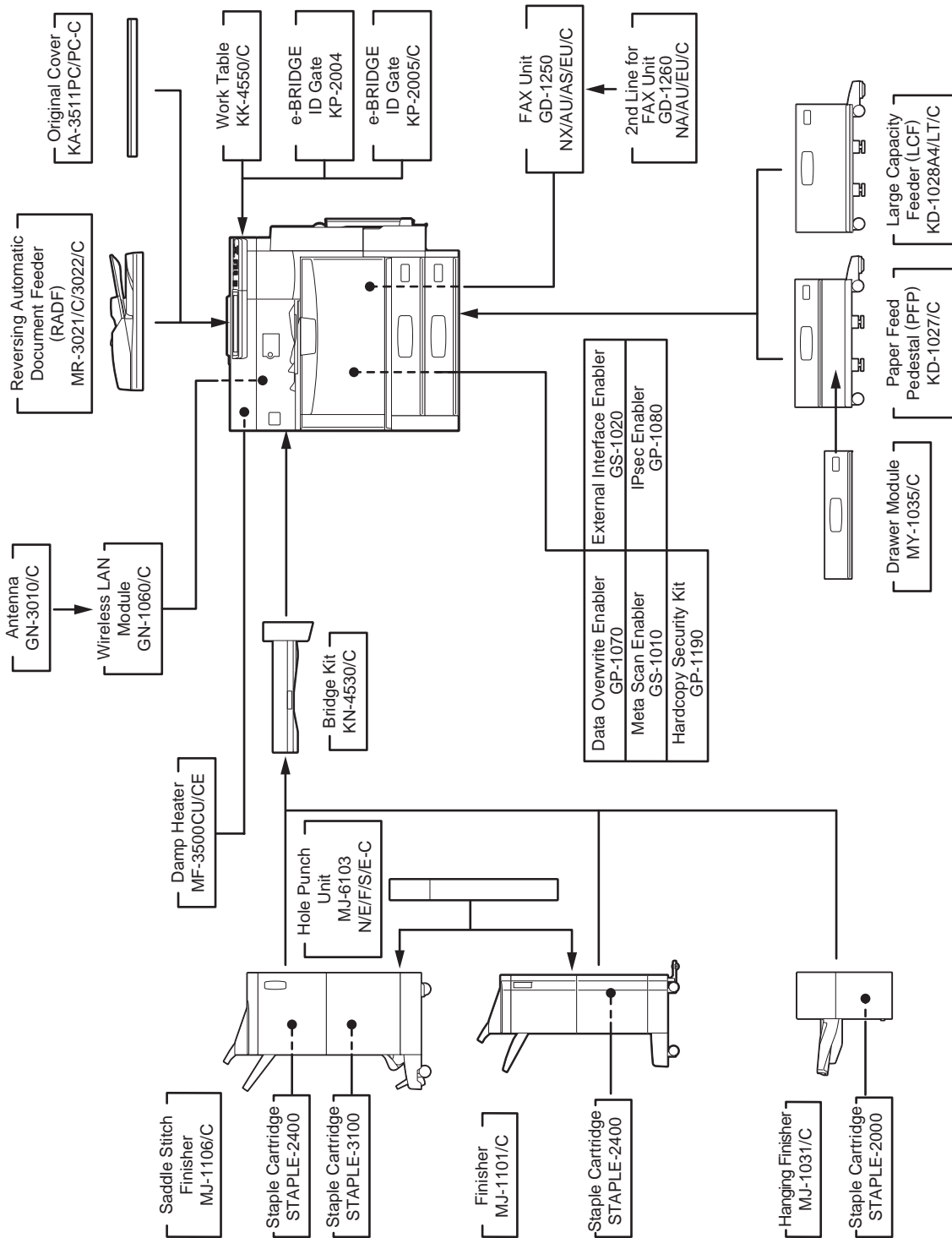





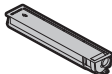
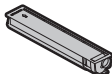
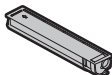
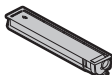



Fig. 2-1

Notes:

- The bridge kit (KN-4530) is necessary for installation of the finisher (MJ-1101/1031/1106).
- The finisher (MJ-1101 or MJ-1106) is necessary for installation of the hole punch unit (MJ-6103N/E/F/S/E-C).
- The antenna (GN-3010) is necessary to enable the wireless LAN module (GN-1060/C).

2.4 Supplies

Drum 	OD-FC25 OD-FC25C (for China)
Developer material (K) 	D-FC25K
Developer material (Y) 	D-FC25Y
Developer material (M) 	D-FC25M
Developer material (C) 	D-FC25C
Toner cartridge (K) 	PS-ZTFC25K (for North America, Central and South America) PS-ZTFC25EK (for Europe) PS-ZTFC25DK (for Australia and Asia) PS-ZTFC25CK (for China) PS-ZTFC25CK5K(1)(for China) PS-ZTFC25DK5K(1) (for Singapore) PS-ZTFC25AK (for Argentina)
Toner cartridge (Y) 	PS-ZTFC25Y (for North America, Central and South America) PS-ZTFC25EY (for Europe) PS-ZTFC25DY (for Australia and Asia) PS-ZTFC25CY (for China) PS-ZTFC25CY5K(1)(for China) PS-ZTFC25DY5K(1) (for Singapore) PS-ZTFC25AY (for Argentina)
Toner cartridge (M) 	PS-ZTFC25M (for North America, Central and South America) PS-ZTFC25EM (for Europe) PS-ZTFC25DM (for Australia and Asia) PS-ZTFC25CM (for China) PS-ZTFC25CM5K(1)(for China) PS-ZTFC25DM5K(1) (for Singapore) PS-ZTFC25AM (for Argentina)
Toner cartridge (C) 	PS-ZTFC25C (for North America, Central and South America) PS-ZTFC25EC (for Europe) PS-ZTFC25DC (for Australia and Asia) PS-ZTFC25CC (for China) PS-ZTFC25CC5K(1)(for China) PS-ZTFC25DC5K(1) (for Singapore) PS-ZTFC25AC (for Argentina)
Waste toner box 	PS-TBFC25 (except for Europe and China) PS-TBFC25E (for Europe) PS-TBFC25C (for China)

3. OUTLINE OF THE MACHINE

3.1 Sectional View

3.1.1 Front side-1

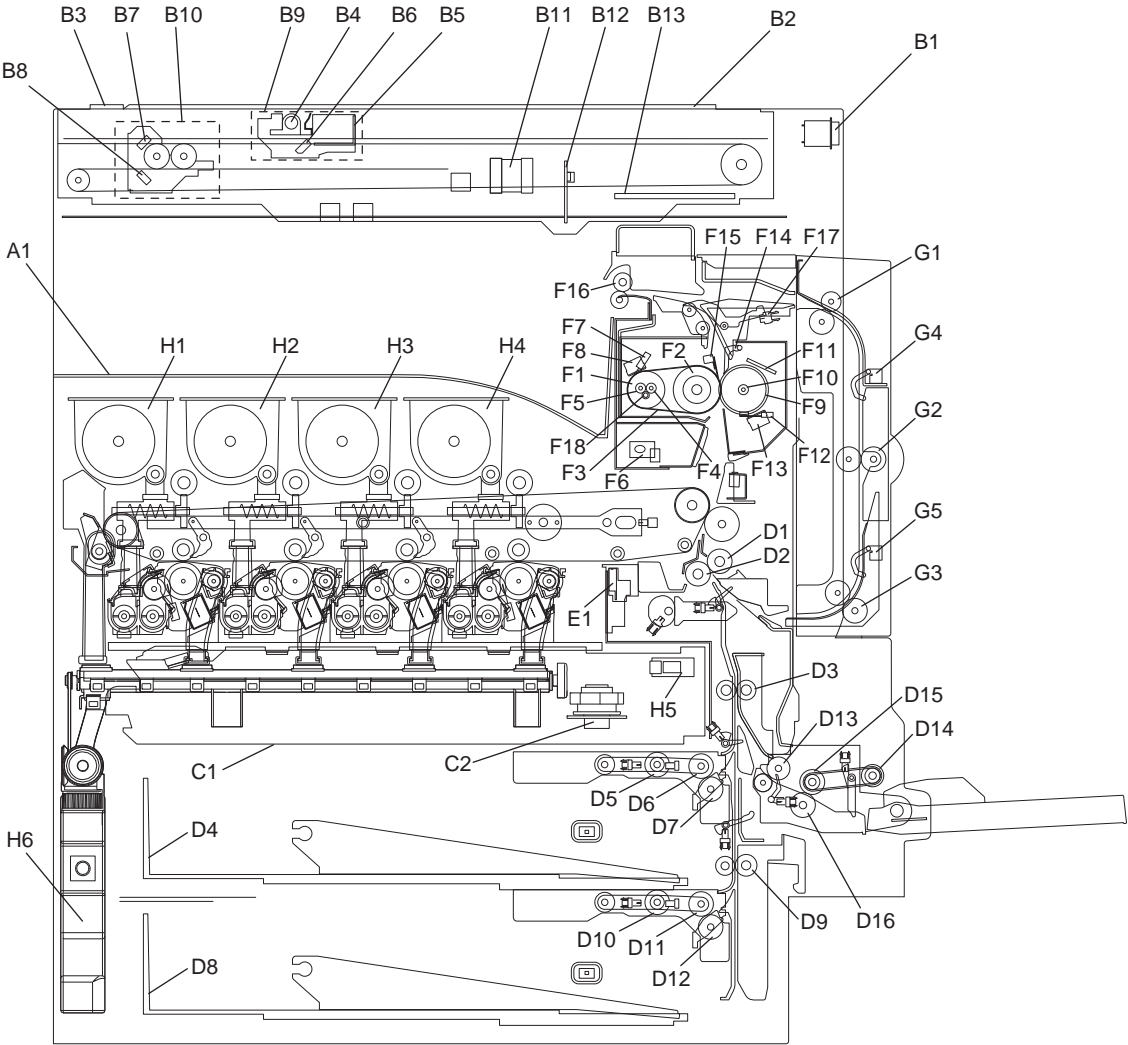


Fig. 3-1

A1	Inner tray	E1	Image quality sensor
B1	main power switch	F1	Heat roller
B2	Original glass	F2	Fuser roller
B3	RADF original glass	F3	Fuser belt
B4	Exposure lamp	F4	Center heater lamp
B5	Inverter board	F5	Side heater lamp
B6	Mirror-1	F6	Heat roller center/rear thermopile
B7	Mirror-2	F7	Heat roller front thermistor
B8	Mirror-3	F8	Heat roller center/rear thermostat
B9	Carriage-1	F9	Pressure roller
B10	Carriage-2	F10	Pressure roller lamp
B11	Lens	F11	Pressure roller center thermistor
B12	CCD driving PC board	F12	Pressure roller rear thermistor
B13	Scanning section control PC board	F13	Pressure roller thermostat
C1	Laser optical unit	F14	Separation finger
C2	Polygonal motor	F15	Separation plate
D1	Registration roller (rubber roller)	F16	Exit roller
D2	Registration roller (metal roller)	F17	Exit sensor
D3	Transport roller	F18	Sub heater lamp (e-STUDIO4540C only)
D4	1st drawer	G1	Upper transport roller
D5	1st drawer pickup roller	G2	Middle transport roller
D6	1st drawer feed roller	G3	Lower transport roller
D7	1st drawer separation roller	G4	ADU entrance sensor
D8	2nd drawer	G5	ADU exit sensor
D9	Transport roller	H1	Toner (Y)
D10	2nd drawer pickup roller	H2	Toner (M)
D11	2nd drawer feed roller	H3	Toner (C)
D12	2nd drawer separation roller	H4	Toner (K)
D13	Bypass transport roller	H5	Temperature/Humidity sensor
D14	Bypass pickup roller	H6	Waste toner box
D15	Bypass feed roller		
D16	Bypass separation roller		

3.1.2 Front side-2

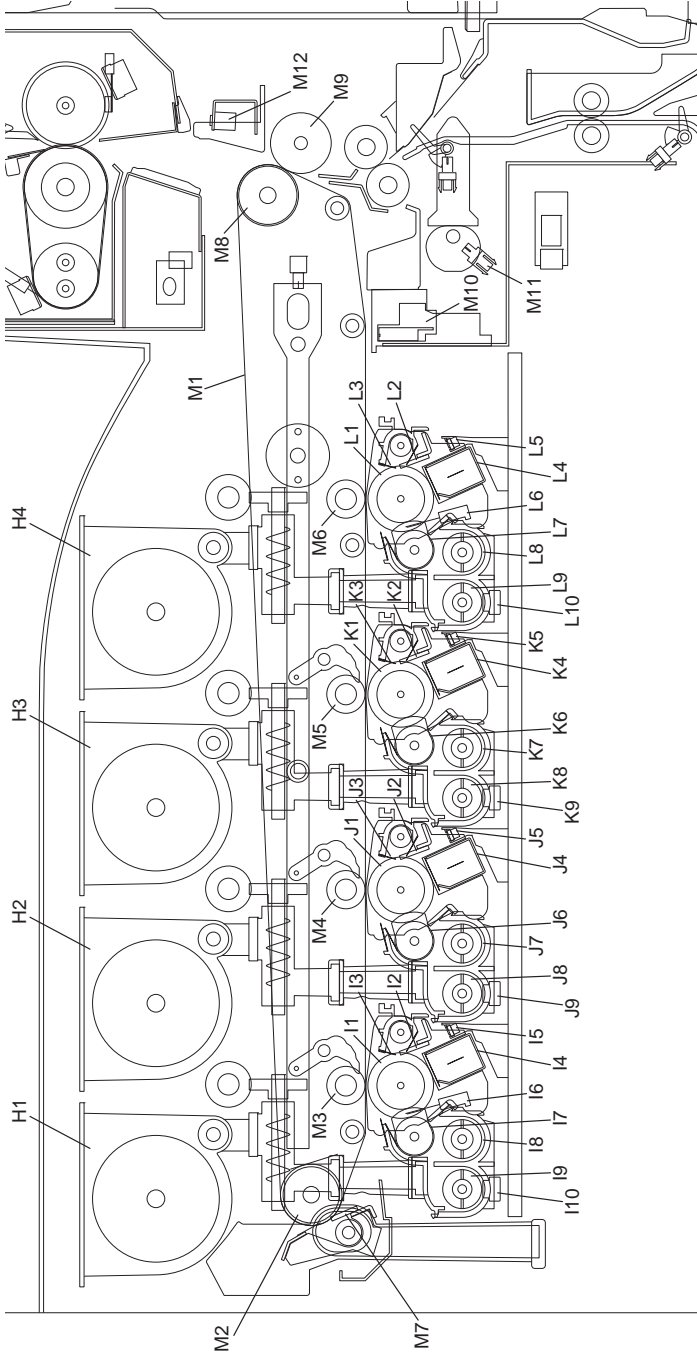


Fig. 3-2

I1	Drum (Y)	L1	Drum (K)
I2	Cleaning blade (Y)	L2	Cleaning blade (K)
I3	Recovery blade (Y)	L3	Recovery blade (K)
I4	Main charger unit (Y)	L4	Main charger unit (K)
I5	Discharge LED (Y)	L5	Discharge LED (K)
I6	Drum thermistor (Y)	L6	Drum thermistor (K)
I7	Developer sleeve (Y)	L7	Developer sleeve (K)
I8	Mixer-1 (Y)	L8	Mixer-1 (K)
I9	Mixer-2 (Y)	L9	Mixer-2 (K)
I10	Auto-toner sensor (Y)	L10	Auto-toner sensor (K)
J1	Drum (M)	M1	Transfer belt
J2	Cleaning blade (M)	M2	Transfer belt drive roller
J3	Recovery blade (M)	M3	1st transfer roller (Y)
J4	Main charger unit (M)	M4	1st transfer roller (M)
J5	Discharge LED (M)	M5	1st transfer roller (C)
J6	Developer sleeve (M)	M6	1st transfer roller (K)
J7	Mixer-1 (M)	M7	Transfer belt cleaning blade
J8	Mixer-2 (M)	M8	2nd transfer facing roller
J9	Auto-toner sensor (M)	M9	2nd transfer roller
K1	Drum (C)	M10	Image position aligning sensor (front / rear)
K2	Cleaning blade (C)	M11	2nd transfer roller position detection sensor
K3	Recovery blade (C)	M12	Paper clinging detection sensor
K4	Main charger unit (C)		
K5	Discharge LED (C)		
K6	Developer sleeve (C)		
K7	Mixer-1 (C)		
K8	Mixer-2 (C)		
K9	Auto-toner sensor (C)		

3.1.3 Rear side

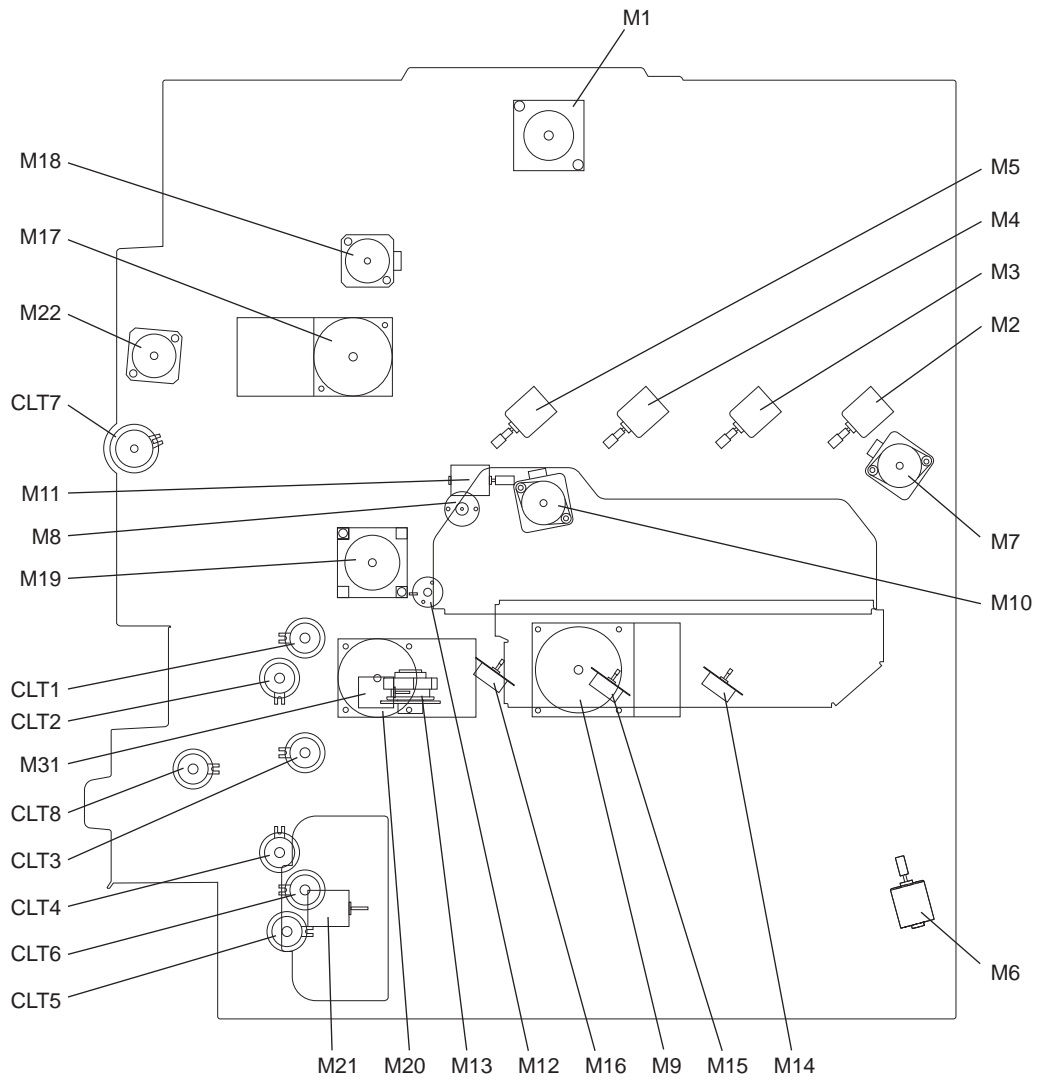


Fig. 3-3

M1	Scan motor	CLT1	1st drawer transport clutch (High speed)
M2	Toner motor-Y	CLT2	1st drawer transport clutch (Low speed)
M3	Toner motor-M	CLT3	1st drawer feed clutch
M4	Toner motor-C	CLT4	2nd drawer transport clutch (Low speed)
M5	Toner motor-K	CLT5	2nd drawer transport clutch (High speed)
M6	Waste toner paddle motor	CLT6	2nd drawer feed clutch
M7	Transfer belt motor	CLT7	ADU clutch
M8	1st transfer roller cam motor	CLT8	Bypass feed clutch
M9	Developer unit motor		
M10	Drum motor		
M11	Drum switching motor		
M12	Shutter motor		
M13	Polygonal motor		
M14	Mirror motor-M		
M15	Mirror motor-C		
M16	Mirror motor-K		
M17	Fuser motor		
M18	Exit motor		
M19	Registration motor		
M20	Feed/transport motor		
M21	Tray-up motor		
M22	ADU motor		
M31	Waste toner transport motor		

3.2 Electric Parts Layout

[A] Scanner unit, control panel

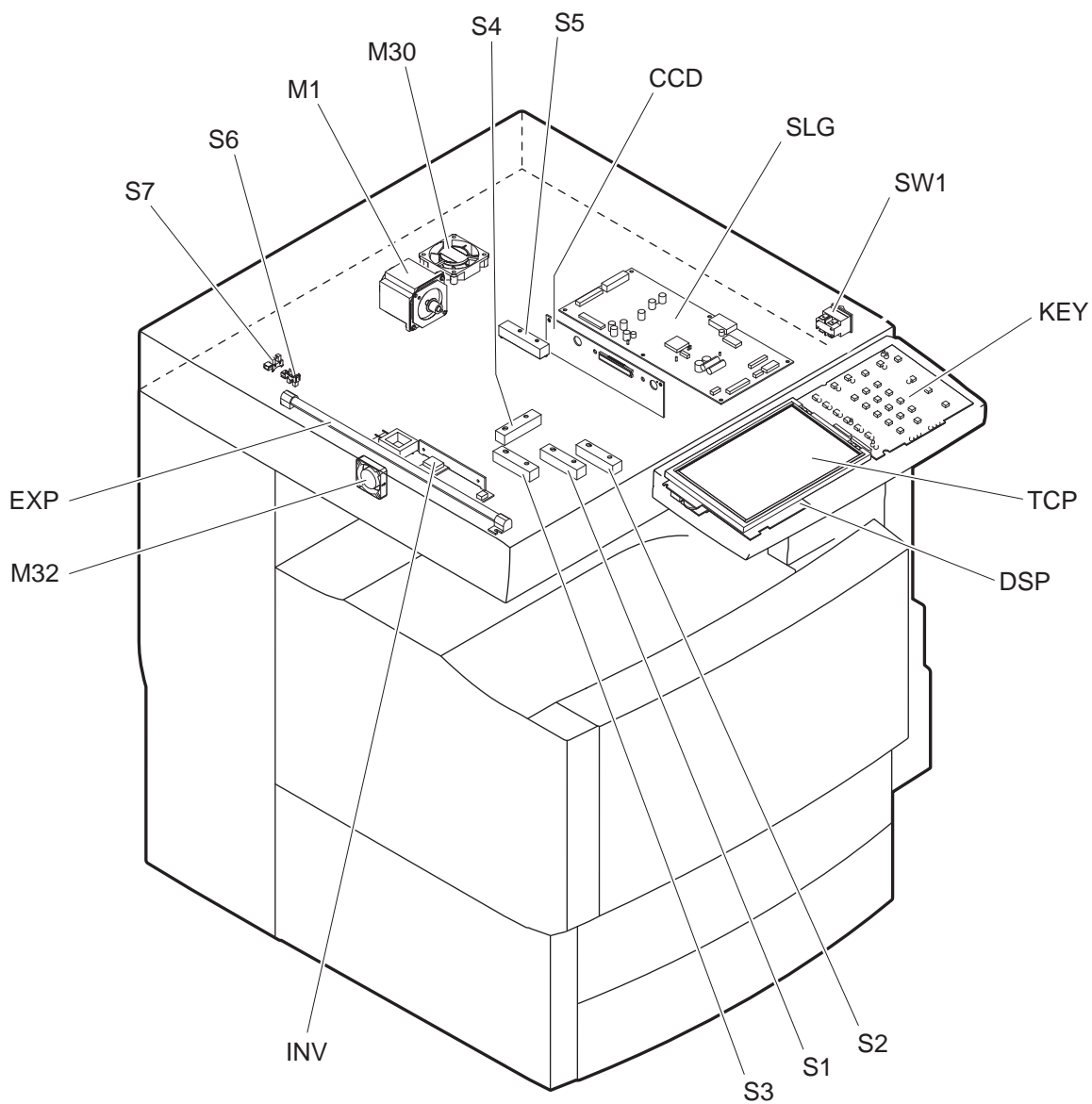


Fig. 3-4

[B] Toner cartridge, waste toner box

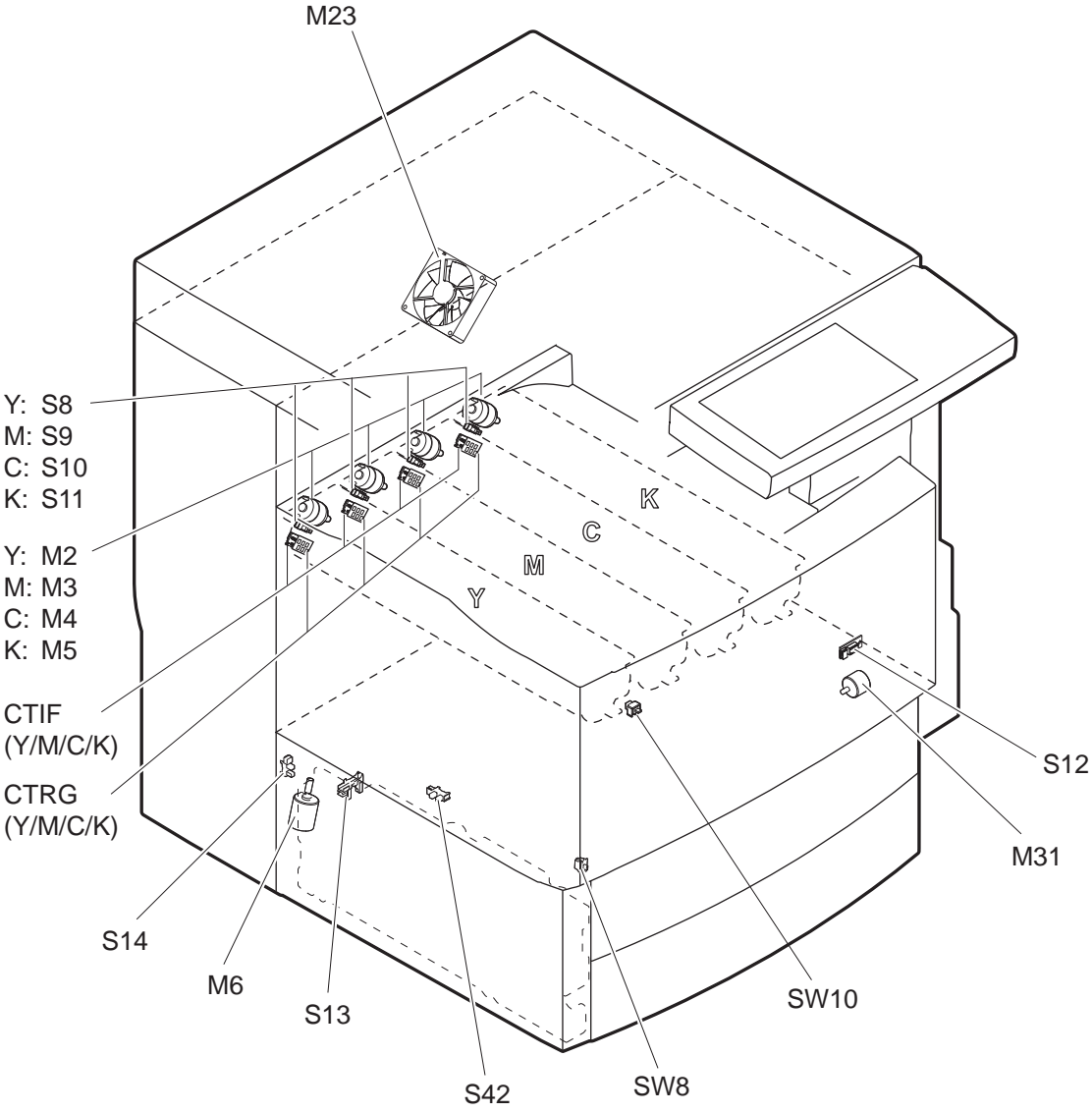


Fig. 3-5

[C] Transfer belt unit

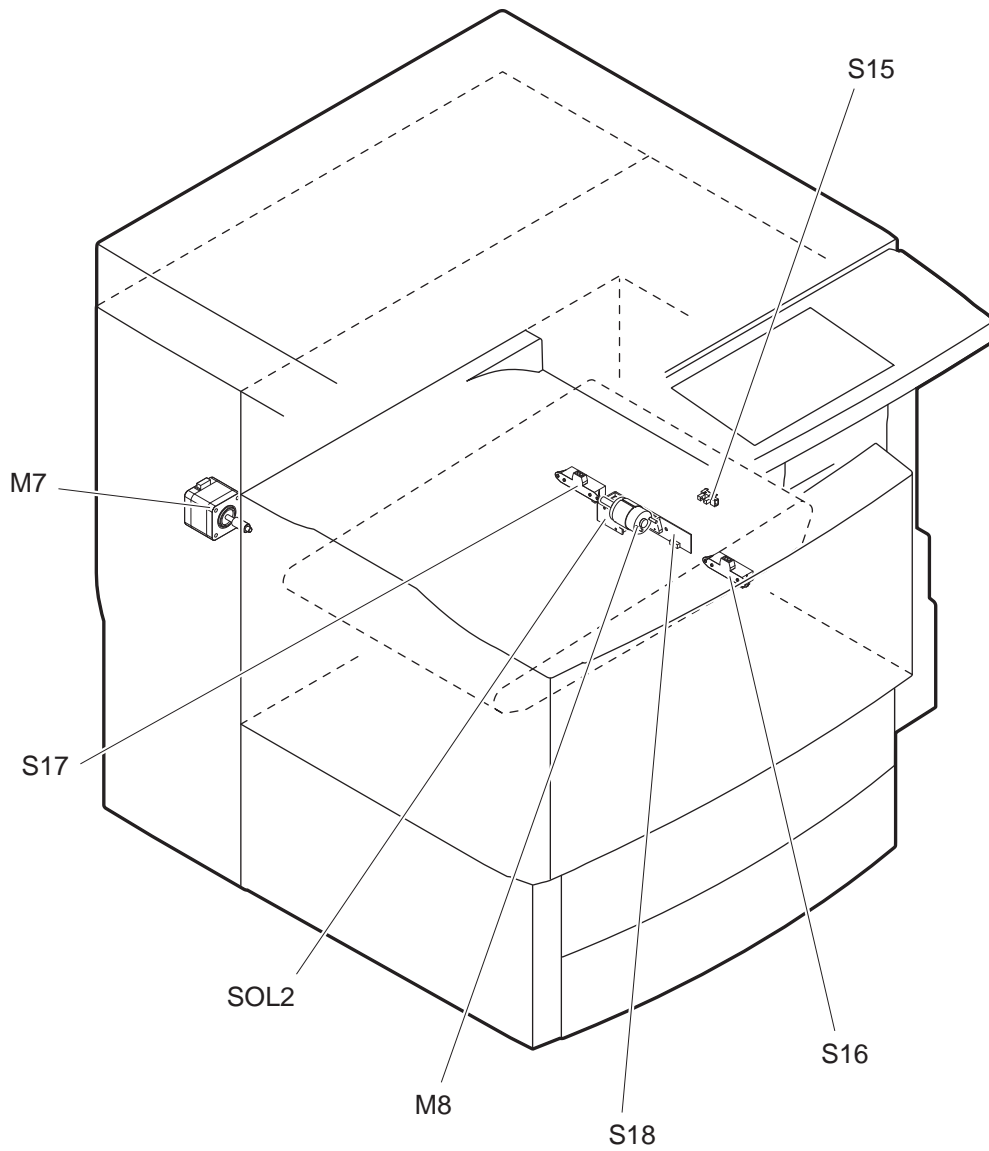


Fig. 3-6

[D] Developer unit

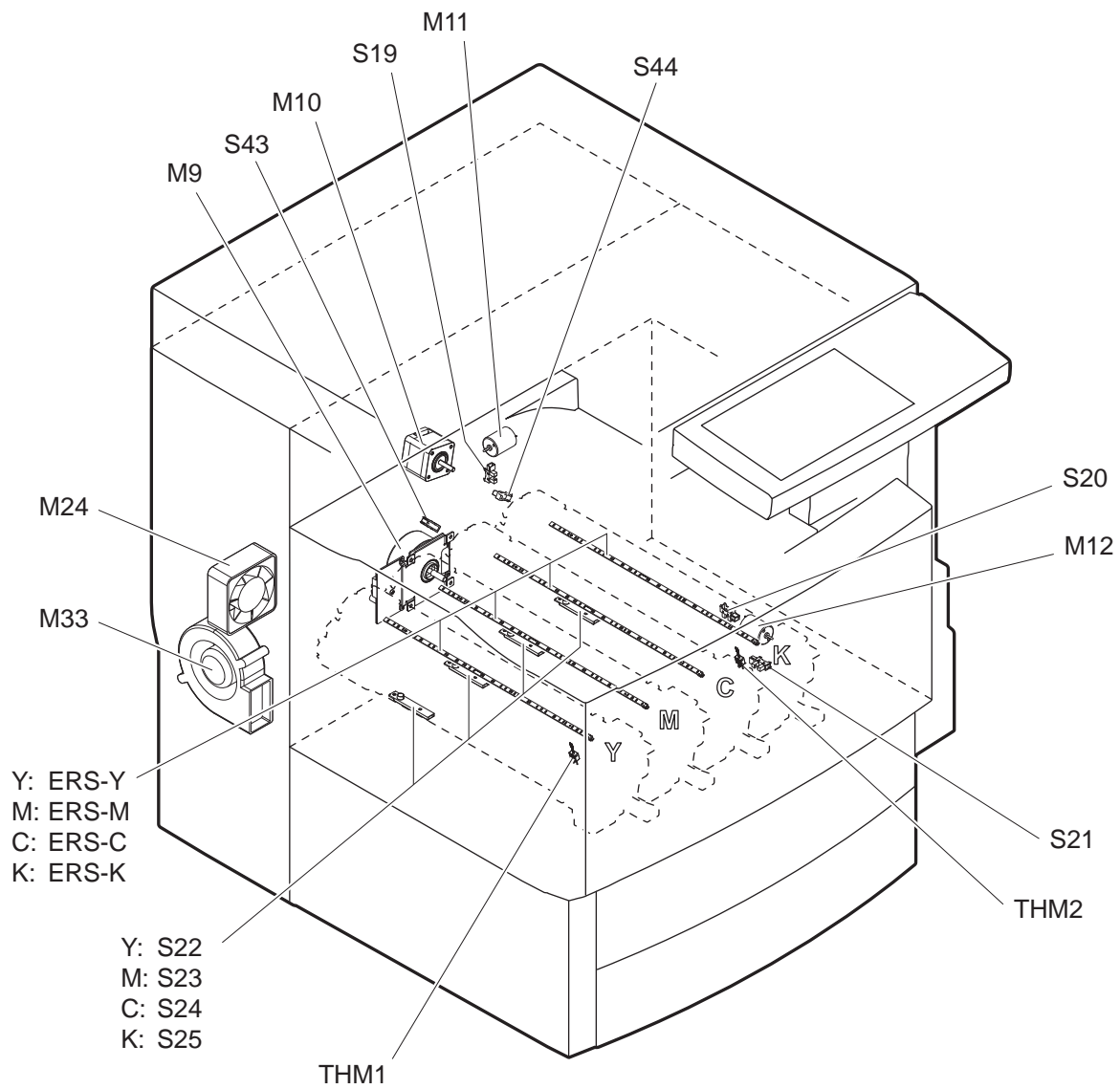


Fig. 3-7

[E] Laser unit

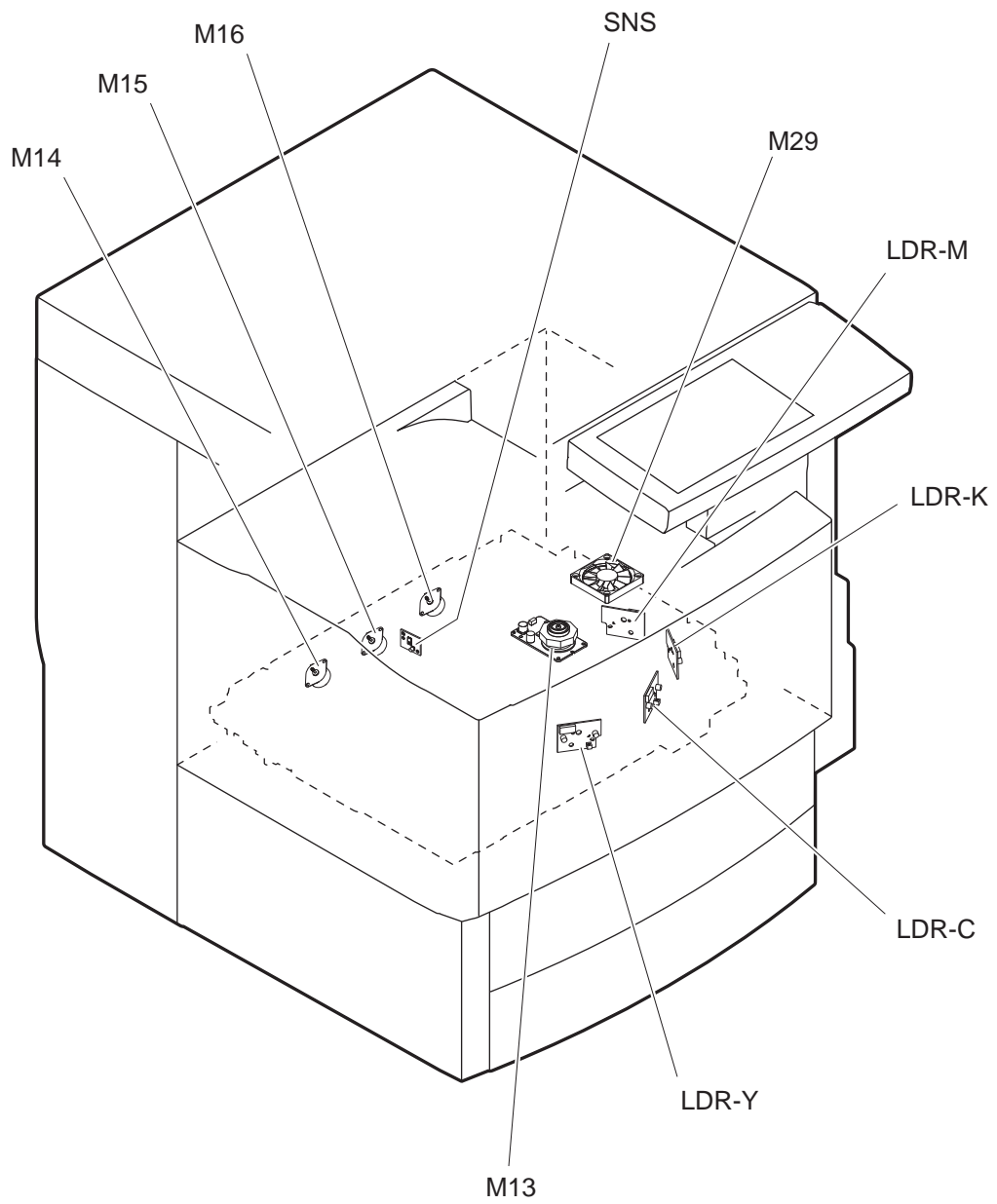


Fig. 3-8

[F] Fuser unit

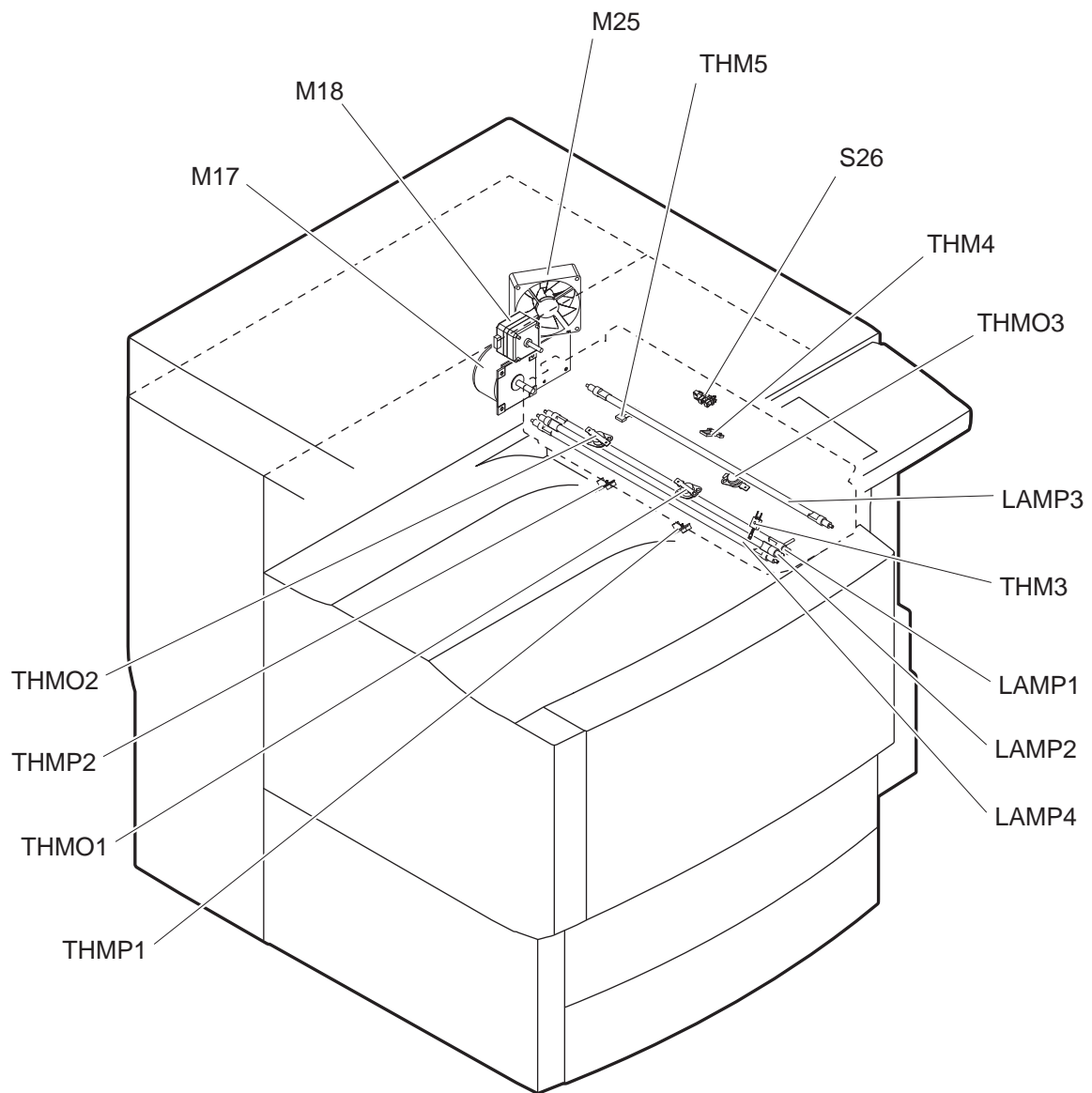


Fig. 3-9

[G] Transfer unit

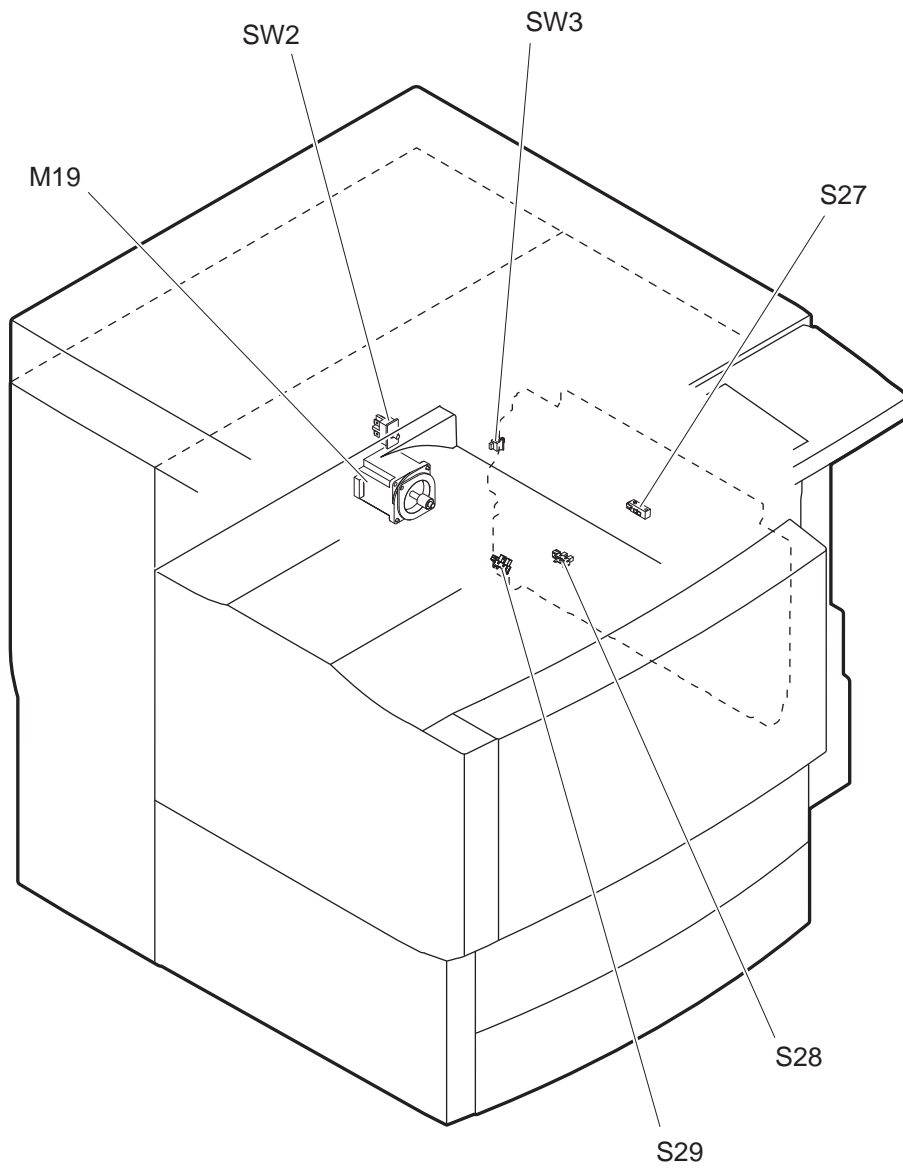


Fig. 3-10

[H] Paper feeding unit

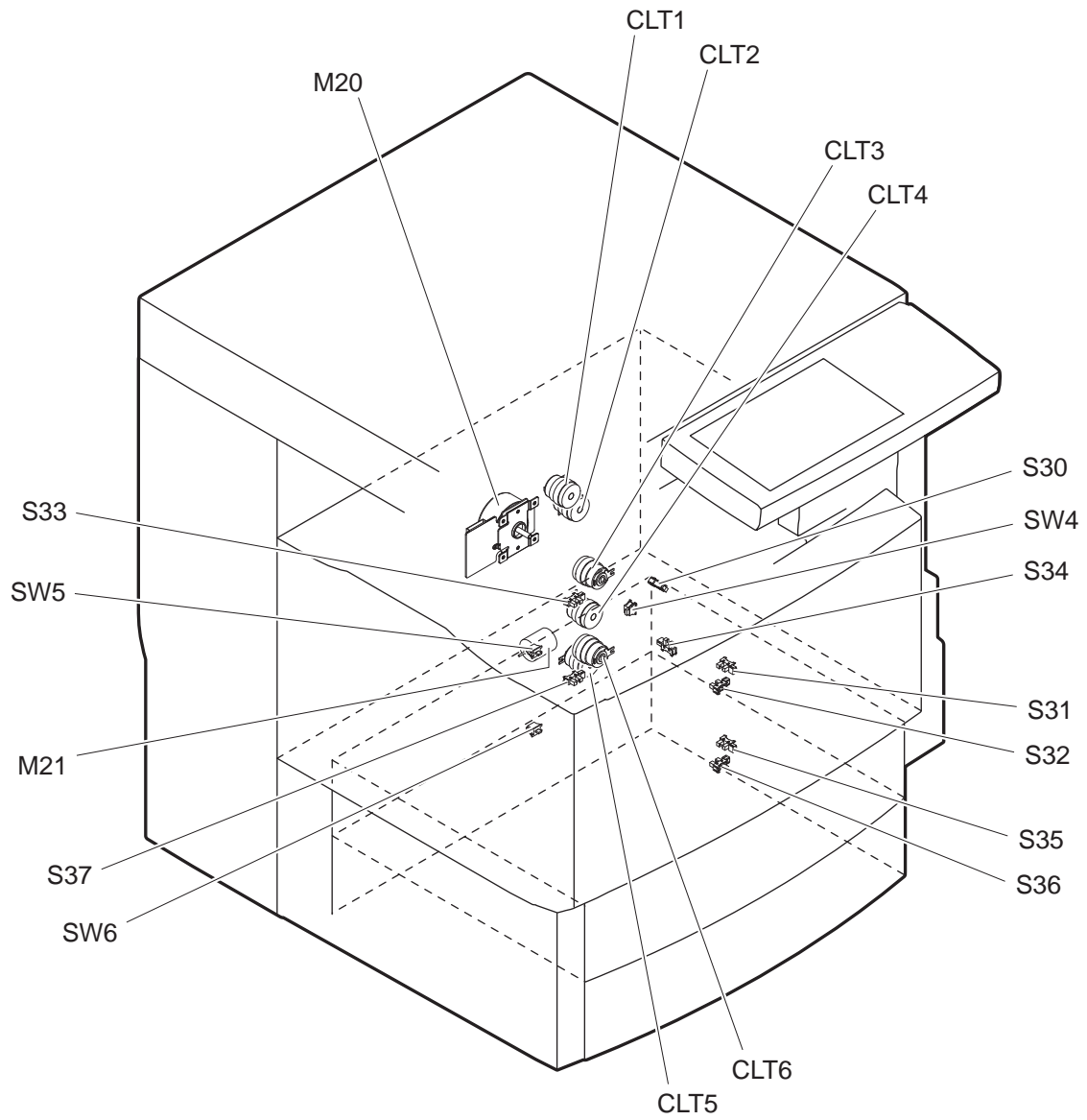


Fig. 3-11

[I] Automatic duplexing unit, bypass feed unit

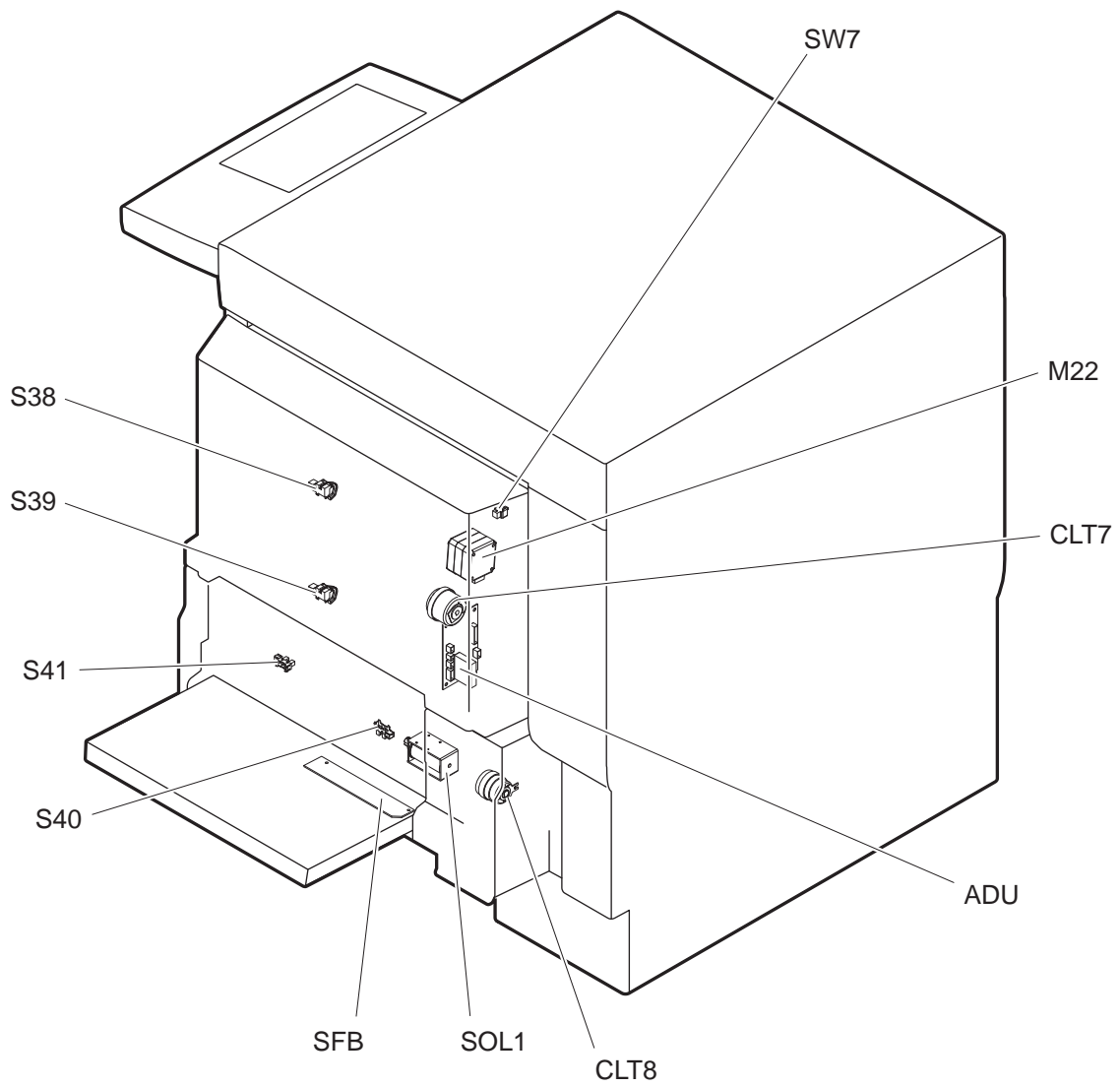


Fig. 3-12

[J] PC board, power supply

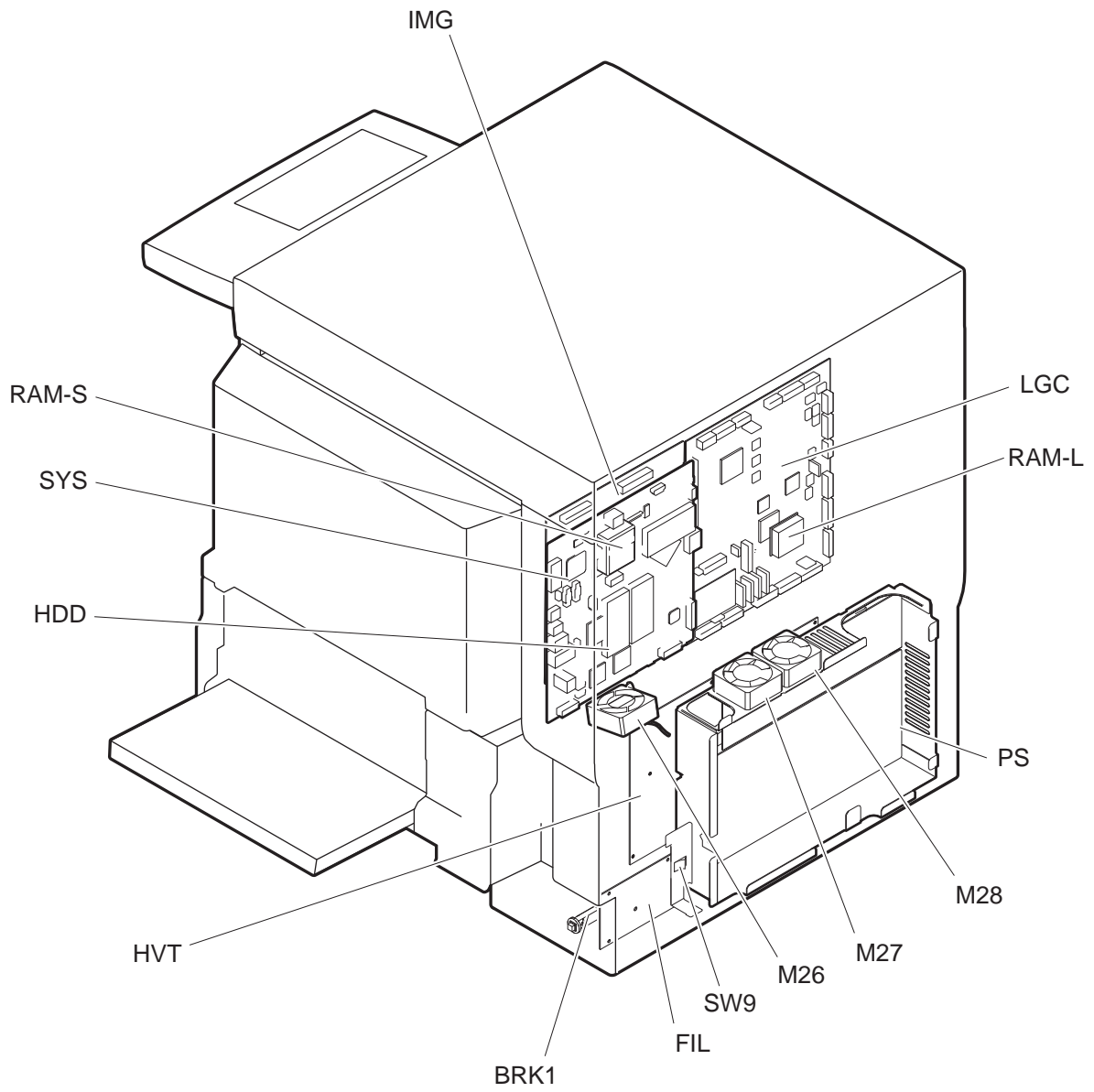


Fig. 3-13

[K] Damp heater

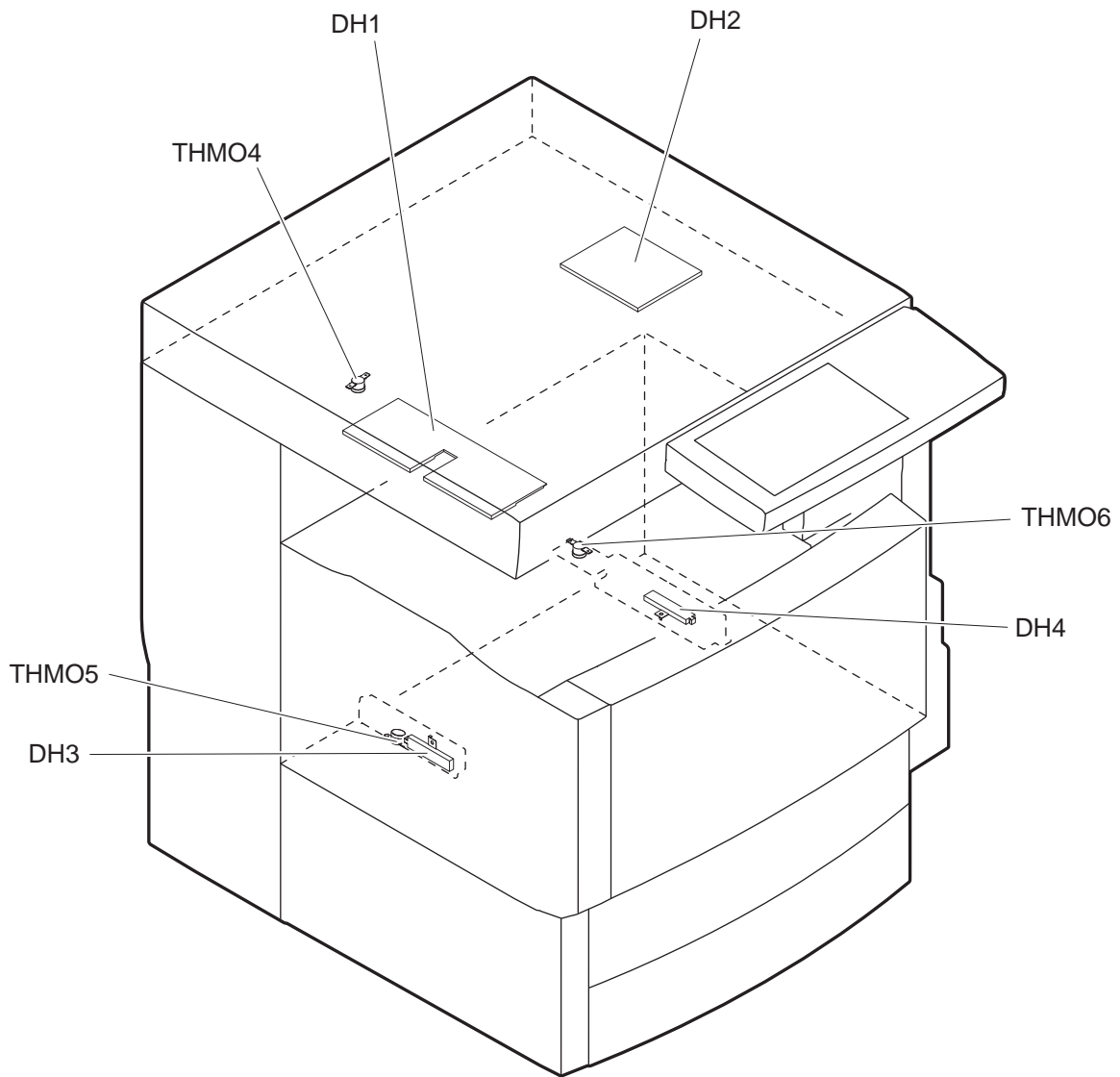


Fig. 3-14

3.3 Symbols and Functions of Various Components

The column "P-I" shows the page and item number in the parts list.

3.3.1 Motors

Symbol	Name	Function	Remarks	P-I
M1	SCAN-MOT Scan motor	Driving the carriages	Fig. 3-4	19-8
M2	TNR-MOT-Y Toner motor-Y	Transporting toner from the Y toner cartridge to the developer unit	Fig. 3-5	41-105
M3	TNR-MOT-M Toner motor-M	Transporting toner from the M toner cartridge to the developer unit	Fig. 3-5	41-105
M4	TNR-MOT-C Toner motor-C	Transporting toner from the C toner cartridge to the developer unit	Fig. 3-5	41-105
M5	TNR-MOT-K Toner motor-K	Transporting toner from the K toner cartridge to the developer unit	Fig. 3-5	41-105
M6	USD-TNR-MOT Waste toner paddle motor	Driving the paddle in the waste toner box (agitating the accumulated waste toner)	Fig. 3-5	4-18
M7	TBU-MOT Transfer belt motor	Driving the transfer belt	Fig. 3-6	15-107
M8	TR1-CAM-MOT 1st transfer roller cam motor	Driving the 1st transfer roller contact/release movement	Fig. 3-6	32-19
M9	DEV-MOT Developer unit motor	Driving the developer	Fig. 3-7	15-2
M10	DRM-MOT Drum motor	Driving the drum	Fig. 3-7	16-2
M11	DRM-SW-MOT Drum switching motor	Transmitting/releasing the drive to the Y/M/C drums	Fig. 3-7	16-22
M12	SHUT-MOT Shutter motor	Driving the laser emission outlet (slit glass) protective shutter	Fig. 3-7	36-2
M13	POL-MOT Polygonal motor	Driving the polygonal mirror	Fig. 3-8	11-3
M14	MIR-MOT-M Mirror motor-M	Adjusting the irradiation angle of the M laser	Fig. 3-8	11-3
M15	MIR-MOT-C Mirror motor-C	Adjusting the irradiation angle of the C laser	Fig. 3-8	11-3
M16	MIR-MOT-K Mirror motor-K	Adjusting the irradiation angle of the K laser	Fig. 3-8	11-3
M17	FUS-MOT Fuser motor	Driving the fuser	Fig. 3-9	18-4
M18	EXIT-MOT Exit motor	Driving the exit roller	Fig. 3-9	18-22
M19	RGST-MOT Registration motor	Driving the registration roller	Fig. 3-10	17-16

Symbol	Name	Function	Remarks	P-I
M20	FEED/TRNS-MOT Feed/transport motor	<ul style="list-style-type: none"> Driving the feed roller and pickup roller of each drawer or the bypass feed unit Driving the transport rollers of the 1st and 2nd drawers 	Fig. 3-11	17-12
M21	CST-TRY-MOT Tray-up motor	Lifting up the trays in the 1st and 2nd drawers	Fig. 3-11	4-9
M22	ADU-MOT ADU motor	Driving the automatic duplexing unit	Fig. 3-12	48-18
M23	INTRNL-FAN-MOT Internal cooling fan	Cooling down inside of the equipment (around the toner cartridge)	Fig. 3-5	7-35
M24	OZN-FAN-MOT Ozone exhaust fan	Suctioning ozone generated at charging	Fig. 3-7	7-26
M25	FUS/EXIT-FAN-MOT Fuser/exit section cooling fan	Cooling down the fuser and exit section	Fig. 3-9	18-19
M26	SYS-FAN-MOT SYS/HDD cooling fan	Cooling down the SYS board and hard disk	Fig. 3-13	9-31
M27	PS-FAN-MOT-1 Switching regulator cooling fan-1	Cooling down the switching regulator	Fig. 3-13	8-9
M28	PS-FAN-MOT-2 Switching regulator cooling fan-2	Cooling down the switching regulator	Fig. 3-13	8-9
M29	LSU-FAN-MOT Laser unit cooling fan	Cooling down the polygonal motor	Fig. 3-8	11-15
M30	SCAN-FAN-MOT Scanner unit cooling fan	Cooling down the scanner unit	Fig. 3-4	12-30
M31	UT-CARRY-MOT Waste toner transport motor	Driving the auger in the waste toner transport unit	Fig. 3-5	42-36
M32	FANFRONT Exposure lamp cooling fan	Cooling down the exposure lamp	Fig. 3-5	-
M33	EPU-FAN EPU cooling fan	Cooling down the EPU (e-STUDIO4540C only)	Fig. 3-7	7-29

3.3.2 Sensors and switches

Symbol	Name	Function	Remarks	P-I
S1-5	APS1-3, APS-C, APS-R Automatic original detection sensor	Detecting original size *S1: only for A4 series models	Fig. 3-4	12-12 12-13
S6	HOME-SNR Carriage home position sensor	Detecting the carriage home position	Fig. 3-4	12-17
S7	PLTN-SNR Platen sensor	Detecting the opening/closing status of the platen cover or RADF	Fig. 3-4	19-10
S8	TNR-SNR-Y Toner cartridge detection sensor-Y	Detecting the rotation of the Y toner cartridge	Fig. 3-5	41-101
S9	TNR-SNR-M Toner cartridge detection sensor-M	Detecting the rotation of the M toner cartridge	Fig. 3-5	41-101
S10	TNR-SNR-C Toner cartridge detection sensor-C	Detecting the rotation of the C toner cartridge	Fig. 3-5	41-101
S11	TNR-SNR-K Toner cartridge detection sensor-K	Detecting the rotation of the K toner cartridge	Fig. 3-5	41-101

Symbol	Name	Function	Remarks	P-I
S12	TEMP/HUMI-SNR Temperature/humidity sensor	Detecting the ambient temperature/humidity of the equipment	Fig. 3-5	42-42
S13	USD-TNR-FLL-SNR Waste toner box full detection sensor	Detecting the full status of used toner in the waste toner box	Fig. 3-5	4-109
S14	USD-TNR-LCK-SNR Waste toner paddle motor lock detection sensor	Detecting the lock status of waste toner paddle motor	Fig. 3-5	4-108
S15	TR1-SNR 1st transfer roller status detection sensor	Detecting contact/release status of the 1st transfer roller for each color	Fig. 3-6	32-105
S16	IMG-POS-SNR-F Image position aligning sensor (Front)	Detecting the front side position of a toner image (test pattern) developed on the transfer belt	Fig. 3-6	27-4
S17	IMG-POS-SNR-R Image position aligning sensor (Rear)	Detecting the rear side position of a toner image (test pattern) developed on the transfer belt	Fig. 3-6	27-4
S18	TNR-LVL-SNR Image quality sensor	Detecting the density of a toner image (test pattern) developed on the transfer belt surface	Fig. 3-6	27-5
S19	DRM-SW-SNR Drum switching detection sensor	Detecting contact/release status of the drive to the Y/M/C drums	Fig. 3-7	16-20
S20	SHUT-SNR Shutter status detection sensor	Detecting the status of the laser emission outlet (slit glass) protective shutter	Fig. 3-7	36-101
S21	CH-CLN-SNR Needle electrode cleaner detection sensor	Detecting the cleaning operation for the needle electrode (Detecting that the needle electrode cleaner has reached the limit position) (only for K)	Fig. 3-7	36-101
S22	ATTNR-SNR-Y Auto-toner sensor-Y	Detecting the toner density in the Y developer unit	Fig. 3-7	38-31
S23	ATTNR-SNR-M Auto-toner sensor-M	Detecting the toner density in the M developer unit	Fig. 3-7	38-31
S24	ATTNR-SNR-C Auto-toner sensor-C	Detecting the toner density in the C developer unit	Fig. 3-7	38-31
S25	ATTNR-SNR-K Auto-toner sensor-K	Detecting the toner density in the K developer unit	Fig. 3-7	38-31
S26	EXIT-SNR Exit sensor	Detecting paper exit	Fig. 3-9	45-101
S27	CLNG-SNR Paper clinging detection sensor	Detecting whether the paper is clinging to the transfer belt or not	Fig. 3-10	13-108
S28	RGST-SNR Registration sensor	Detecting paper transport at the registration roller section	Fig. 3-10	25-102
S29	TR2-SNR 2nd transfer roller position detection sensor	Detecting the contact/release status of the 2nd transfer roller	Fig. 3-10	11-102
S30	CST1-FEED-SNR 1st drawer feed sensor	Detecting paper transport and paper jam at the paper feeding system of the 1st drawer	Fig. 3-11	25-102
S31	CST1-TRY-SNR 1st drawer tray-up sensor	Detecting the lifting status of the tray in the 1st drawer	Fig. 3-11	20-30

Symbol	Name	Function	Remarks	P-I
S32	CST1-EMP-SNR 1st drawer empty sensor	Detecting the presence of paper in the 1st drawer	Fig. 3-11	20-30
S33	CST1-NEMP-SNR 1st drawer paper stock sensor	Detecting the paper remaining in the 1st drawer	Fig. 3-11	20-30
S34	CST2-FEED-SNR 2nd drawer feed sensor	Detecting paper transport and paper jam at the paper feeding system of the 2nd drawer	Fig. 3-11	26-101
S35	CST2-TRY-SNR 2nd drawer tray-up sensor	Detecting the lifting status of the tray in the 2nd drawer	Fig. 3-11	20-30
S36	CST2-EMP-SNR 2nd drawer empty sensor	Detecting the presence of paper in the 2nd drawer	Fig. 3-11	20-30
S37	CST2-NEMP-SNR 2nd drawer paper stock sensor	Detecting the paper remaining in the 2nd drawer	Fig. 3-11	20-30
S38	ADU-U-SNR ADU entrance sensor	Detecting transported paper at the automatic duplexing unit entrance section	Fig. 3-12	49-3
S39	ADU-L-SNR ADU exit sensor	Detecting transported paper inside the automatic duplexing unit	Fig. 3-12	48-50
S40	SFB-SNR Bypass paper sensor	Detecting the presence of paper on the bypass feed unit	Fig. 3-12	24-5
S41	SFB-FEED-SNR Bypass feed sensor	Detecting transported paper fed from the bypass feed unit	Fig. 3-12	24-5
S42	TNTRLK Auger lock detection sensor	Detecting the auger operation in the waste toner transport unit	Fig. 3-5	42-27
S43	DRM-SNR Color drum phase sensor	Detecting the rotation phase of Y, M and C drums	Fig. 3-7	16-20
S44	DRM-SNR2 K drum phase sensor	Detecting the rotation phase of K drum	Fig. 3-7	16-20
SW1	MAIN-SW Main power switch	Turning the power of the equipment ON/OFF	Fig. 3-4	12-28
SW2	COV-INTLCK-SW Cover interlock switch	Supplying or shutting off AC power to the switching regulator (voltage-generating circuit interlocked with these covers) according to the opening/closing status of the front cover or automatic duplexing unit (Cover open: Shut off)	Fig. 3-10	7-19
SW3	TR-COV-SW Transfer cover switch	Detecting the opening/closing status of the transfer cover	Fig. 3-10	6-106
SW4	SIDE-COV-SW Side cover switch	Detecting the opening/closing status of the side cover	Fig. 3-11	26-102
SW5	CST1-SW 1st drawer detection switch	Detecting the presence of the 1st drawer	Fig. 3-11	21-102
SW6	CST2-SW 2nd drawer detection switch	Detecting the presence of the 2nd drawer	Fig. 3-11	21-102
SW7	ADU-SET-SW ADU opening/closing switch	Detecting the opening/closing status of the automatic duplexing unit	Fig. 3-12	49-7
SW8	UTN-COVER Waste toner cover open/close detection switch	Detecting the opening/closing status of the waste toner cover	Fig. 3-5	48-26

Symbol	Name	Function	Remarks	P-I
SW9	DAMP-HEATER-SW Damp heater switch	Enabling the damp heater	Fig. 3-13	8-14
SW10	FRT-COV-SW Front cover switch	Detecting the opening/closing status of the front cover	Fig. 3-5	47-113

3.3.3 Electromagnetic spring clutches

Symbol	Name	Function	Remarks	P-I
CLT1	CST1-TR-H-CLT 1st drawer transport clutch (High speed)	Driving the transport roller of the 1st drawer (High speed)	Fig. 3-11	17-11
CLT2	CST1-TR-L-CLT 1st drawer transport clutch (Low speed)	Driving the transport roller of the 1st drawer (Low speed)	Fig. 3-11	17-11
CLT3	CST1-FEED-CLT 1st drawer feed clutch	Driving the feed roller and pickup roller of the 1st drawer	Fig. 3-11	20-29
CLT4	CST2-TR-L-CLT 2nd drawer transport clutch (Low speed)	Driving the transport roller of the 2nd drawer (Low speed)	Fig. 3-11	21-23
CLT5	CST2-TR-H-CLT 2nd drawer transport clutch (High speed)	Driving the transport roller of the 2nd drawer (High speed)	Fig. 3-11	21-23
CLT6	CST2-FEED-CLT 2nd drawer feed clutch	Driving the feed roller and pickup roller of the 2nd drawer	Fig. 3-11	20-29
CLT7	ADU-CLT ADU clutch	Driving the transport roller of the automatic duplexing unit	Fig. 3-12	48-16
CLT8	SFB-FEED-CLT Bypass feed clutch	Driving the transport roller, feed roller and pickup roller of the bypass feed unit	Fig. 3-12	23-20

3.3.4 Solenoids

Symbol	Name	Function	Remarks	P-I
SOL1	SFB-SOL Bypass pickup solenoid	Driving the lifting movement of the bypass pickup roller	Fig. 3-12	24-11
SOL2	SNR-SHUT-SOL Sensor shutter solenoid	Driving the sensor shutter of the image position aligning sensor (front / rear) and image quality sensor	Fig. 3-6	27-6

3.3.5 PC boards

Symbol	Name	Function	Remarks	P-I
CCD	PWA-F-CCD CCD driving PC board (CCD board)	Scanning originals with CCD	Fig. 3-4	12-10
SLG	PWA-F-SLG Scanning section control PC board (SLG board)	Controlling the scanning section	Fig. 3-4	12-38

Symbol	Name	Function	Remarks	P-I
DSP	PWA-F-DSP Display PC board (DSP board)	Controlling the whole control panel	Fig. 3-4	3-24
KEY	PWA-F-KEY Key PC board (KEY board)	Controlling the key switches and LEDs	Fig. 3-4	3-25
CTIF	PWA-F-CTIF Toner cartridge interface PC board (CTIF board)	Interface for detecting the toner cartridge (Detecting the CTRG board)	Fig. 3-5	41-107
CTRG	PWA-F-CTRG Toner cartridge PC board (CTRG board))	Storing the status of the toner cartridge	Fig. 3-5	-
LDR-Y	PWA-F-LDR-Y Laser driving PC board-Y (LDR-Y board)	Driving the Y laser diode	Fig. 3-8	11-3
LDR-M	PWA-F-LDR-M Laser driving PC board-M (LDR-M board)	Driving the M laser diode	Fig. 3-8	11-3
LDR-C	PWA-F-LDR-C Laser driving PC board-C (LDR-C board)	Driving the C laser diode	Fig. 3-8	11-3
LDR-K	PWA-F-LDR-K Laser driving PC board-K (LDR-K board)	Driving the K laser diode	Fig. 3-8	11-3
SNS	PWA-F-SNS H-sync detection PC board (SNS board)	Detecting the laser beam position	Fig. 3-8	11-3
ADU	PWA-F-ADU ADU control PC board (ADU board)	Controlling the automatic duplexing unit	Fig. 3-12	48-30
SFB	PWA-F-SFB Paper width detection PC board (SFB board)	Detecting the width of paper on the bypass tray	Fig. 3-12	22-13
SYS	PWA-F-SYS System control PC board (SYS board)	Controlling the whole system and image processing	Fig. 3-13	9-17
LGC	PWA-F-LGC Logic PC board (LGC board)	Controlling the print engine section	Fig. 3-13	9-16
IMG	PWA-F-IMG Image processing PC board (IMG board)	Controlling the image processing	Fig. 3-13	9-8
FIL	PWA-F-FIL Filter PC board (FIL board)	<ul style="list-style-type: none"> Filtering out the AC power noise Power supplying to each damp heater 	Fig. 3-13	8-2
RAM-S	PWA-F-SRAM-S SRAM board <for SYS board>	Storing the setting or adjustment value, etc. used for the control by the system control PC board	Fig. 3-13	9-18
RAM-L	PWA-F-SRAM-L SRAM board <for LGC board>	Storing the setting or adjustment value, etc. used for the control by the logic PC board	Fig. 3-13	9-14

3.3.6 Lamps and heaters

Symbol	Name	Function	Remarks	P-I
EXP	LP-EXPO Exposure lamp	Exposing originals	Fig. 3-4	29-6
ERS-Y	LP-ERS-Y Discharge LED-Y	Eliminating residual charge on the Y drum surface	Fig. 3-7	36-19
ERS-M	LP-ERS-M Discharge LED-M	Eliminating residual charge on the M drum surface	Fig. 3-7	36-19
ERS-C	LP-ERS-C Discharge LED-C	Eliminating residual charge on the C drum surface	Fig. 3-7	36-19
ERS-K	LP-ERS-K Discharge LED-K	Eliminating residual charge on the K drum surface	Fig. 3-7	36-19
LAMP1	LP-HTR-C Center heater lamp	Heating the center section of the fuser roller	Fig. 3-9	43-27
LAMP2	LP-HTR-S Side heater lamp	Heating the section of the both sides of the fuser roller	Fig. 3-9	43-28
LAMP3	LP-PR Pressure roller lamp	Heating the pressure roller	Fig. 3-9	44-35
LAMP4	LAMP-TRIPLE Sub heater lamp	Sub heating of the fuser roller (e-STUDIO4540C only)	Fig. 3-9	43-26
DH1	SCN-DH-L Scanner damp heater (Left)	Preventing condensation of the mirrors of the carriage	Fig. 3-14	12-22
DH2	SCN-DH-R Scanner damp heater (Right)	Preventing condensation of the lens	Fig. 3-14	12-32
DH3	DRM-DH-L Drum damp heater (Left)	Preventing condensation of the drum	Fig. 3-14	47-103
DH4	DRM-DH-R Drum damp heater (Right)	Preventing condensation of the drum	Fig. 3-14	

3.3.7 Thermistors, thermopiles, and thermostats

Symbol	Name	Function	Remarks	P-I
THM1	THMS-DRM-Y Drum thermistor-Y	Detecting the surface temperature of the drum for Y	Fig. 3-7	38-33
THM2	THMS-DRM-K Drum thermistor-K	Detecting the surface temperature of the drum for K	Fig. 3-7	38-33
THM3	THMS-FBLT-F Fuser belt front thermistor	Detecting the surface temperature of the front end of the fuser belt	Fig. 3-9	43-21
THM4	THMS-PR-C Pressure roller center thermistor	Detecting the surface temperature of the center of the pressure roller	Fig. 3-9	44-14
THM5	THMS-PR-R Pressure roller rear thermistor	Detecting the surface temperature of the rear end of the pressure roller	Fig. 3-9	44-14
THMP1	THMP-FBLT-C Fuser belt center thermopile	Detecting the surface temperature of the center of the fuser belt	Fig. 3-9	46-4
THMP2	THMP-FBLT-R Fuser belt rear thermopile	Detecting the surface temperature of the rear end of the fuser belt	Fig. 3-9	46-4
THMO1	THERMO-FBLT-C Fuser belt center thermostat	Preventing overheating of the center portion of the fuser belt	Fig. 3-9	43-20
THMO2	THERMO-FBLT-S Fuser belt rear thermostat	Preventing overheating of the rear portion of the fuser belt	Fig. 3-9	43-19

Symbol	Name	Function	Remarks	P-I
THMO3	THERMO-PR Pressure roller thermostat	Preventing overheating of the pressure roller in the fuser unit	Fig. 3-9	44-13
THMO4	THERMO-SCN-DH Scanner damp heater thermostat	Controlling the temperature of the scanner damp heater	Fig. 3-14	12-22
THMO5	THERMO-DRM-DH-L Drum damp heater thermostat (Left)	Controlling the temperature of the drum damp heater	Fig. 3-14	47-11
THMO6	THERMO-DRM-DH-R Drum damp heater thermostat (Right)	Controlling the temperature of the drum damp heater	Fig. 3-14	36-27

3.3.8 Transformer

Symbol	Name	Function	Remarks	P-I
HVT	PS-HVT High-voltage transformer	Generating high-voltage and supplying it to the following sections <ul style="list-style-type: none"> • Main charger needle electrode • Main charger grid • Developer bias • Transfer bias 	Fig. 3-13	8-8

3.3.9 Others

Symbol	Name	Function	Remarks	P-I
INV	INV Lamp inverter board	Controlling the exposure lamp	Fig. 3-4	29-7
TCP	TCP Touch panel	Displaying and entering various kinds of information	Fig. 3-4	3-22
HDD	HDD Hard disk	Saving program data and image data	Fig. 3-13	9-19
PS	PS-ACC Switching regulator	Generating DC voltage and supplying it to each section of the equipment	Fig. 3-13	8-9
BRK	BRK Breaker	Preventing overcurrent to the equipment	Fig. 3-13	8-106

3.4 Copy Process

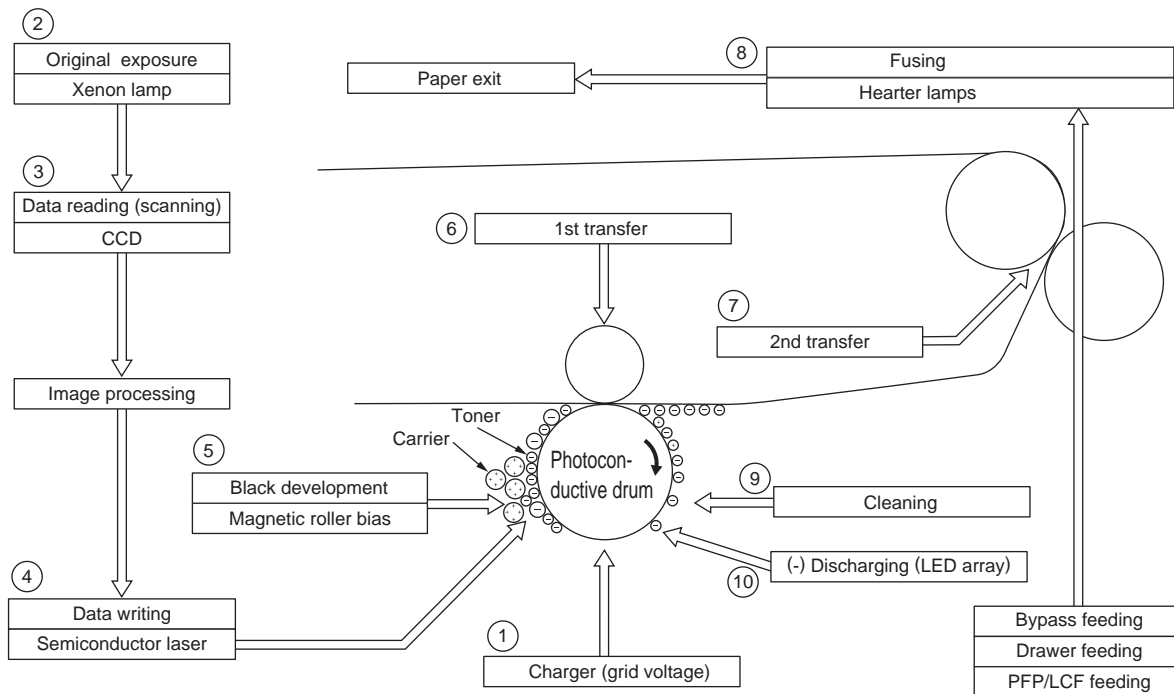


Fig. 3-15

- | | |
|--|--|
| <p>(1) Charging: Places a negative charge on the surface of the photoconductive drum.</p> <p style="text-align: center;">↓</p> <p>(2) Original exposure: Converts images on the original into optical signals.</p> <p style="text-align: center;">↓</p> <p>(3) Data reading: The optical image signals are read into CCD and converted into electrical signals.</p> <p style="text-align: center;">↓</p> <p>(4) Data writing: The electrical image signals are changed to light signals (by laser emission) which expose the surface of the photoconductive drum.</p> <p style="text-align: center;">↓</p> <p>(5) Development: Negatively-charged toner is made to adhere to the photoconductive drum, producing a visible image.</p> <p style="text-align: center;">↓</p> | <p>(6) 1st transfer: Transfers the visible image (toner) on photoconductive drum to the transfer belt.</p> <p style="text-align: center;">↓</p> <p>(7) 2nd transfer: Transfers the visible image (toner) on the transfer belt to paper.</p> <p style="text-align: center;">↓</p> <p>(8) Fusing: Fuses the toner image to the paper by applying heat and pressure.</p> <p style="text-align: center;">↓</p> <p>(9) Blade cleaning: While scraping off the residual toner from the drum by the blade.</p> <p style="text-align: center;">↓</p> <p>(10) (-) Discharging: Eliminates the residual (-) charge from the surface of the photoconductive drum.</p> |
|--|--|

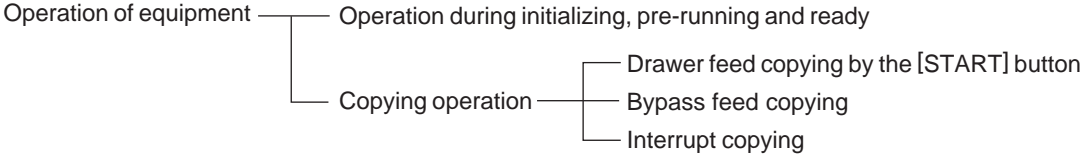
3.5 Comparison with e-STUDIO2020C/2330C/2820C/2830C/3520C/3530C/4520C

Process		e--STUDIO2020C/2330C/2820C/ 2830C/3520C/3530C/4520C	e-STUDIO2040C/ 2540C/3040C/ 3540C	e-STUDIO4540C	
1. Photoconductive drum	Drum	OD-FC35 (OPC drum)	OD-FC25 (OPC drum)		
	Sensitivity	Highly sensitized drum (ø30)	←		
2. Charging		Scorotron type -300 to -1200 V (grid voltage) (adjusting by image quality control)	←		
3. Data writing	Light source	Semiconductor laser	←		
	Light amount	3.5 nJ/mm ²	←		
4. Image control		Image quality control by detecting toner adhesion amount	←		
5. Development	Magnetic roller	One magnetic roller	←		
	Auto-toner detection	Magnetic bridge-circuit method	←		
	Toner supply	Toner cartridge replacing method	←		
	Toner-empty detection	Density detection method	←		
	Toner	NAD T-FC28-K, T-FC28-Y T-FC28-M, T-FC28-C MJD T-FC28E-K, T-FC28E-Y T-FC28E-M, T-FC28E-C CND T-FC28C-K, T-FC28C-Y T-FC28C-M, T-FC28C-C OthersT-FC28D-K, T-FC28D-Y T-FC28D-M, T-FC28D-C (K: Black, Y: Yellow, M: Magenta, C: Cyan)	NAD T-FC25-K, T-FC25-Y T-FC25-M, T-FC25-C MJD T-FC25E-K, T-FC25E-Y T-FC25E-M, T-FC25E-C CND T-FC25C-K, T-FC25C-Y T-FC25C-M, T-FC25C-C OthersT-FC25D-K, T-FC25D-Y T-FC25D-M, T-FC25D-C (K: Black, Y: Yellow, M: Magenta, C: Cyan)		
	Developer material	D-FC28-K (black) D-FC28-Y (yellow) D-FC28-M (magenta) D-FC28-C (cyan)	←		
	Developer bias	DC -200 to -900V (adjusting by image quality control) AC 1100 V / 7.5 to 10 kHz	←		
6. Transfer	1st transfer	Transfer belt method	←		
	2nd transfer:	Transfer roller method	←		
7. Separation		Self-separation by transfer belt and 2nd transfer roller	←		
8. Photoconductive drum cleaning	Method	Blade cleaning	←		
	Recovered toner	Non-reusable	←		

Process		e--STUDIO2020C/2330C/2820C/ 2830C/3520C/3530C/4520C	e-STUDIO2040C/ 2540C/3040C/ 3540C	e-STUDIO4540C
9. Transfer belt cleaning		Blade cleaning	←	
10. Discharge		LED array (red)	←	
11. Fusing	Method	Belt fusing system	←	
		Fuser roller: Aluminium roller (ø30) (Heater lamp: 600 W x 2) (Heater lamp: 280 W x 1 (e- STUDIO4520C))	Fuser roller: Aluminium roller (ø30) (Heater lamp: 600 W x 2)	Fuser roller: Aluminium roller (ø30) (Heater lamp: 600 W x 2, 280 W x 1)
		Fuser belt: PFA tube belt (ø60)	←	
		Fuser roller: Sponge roller (ø38)	←	
		Pressure roller: Silicon rubber roller, (Surface-PFA tube)(ø40) (Heater lamp: 280 W x 1)	Pressure roller: Silicon rubber roller, (Surface-PFA tube)(ø40) (Heater lamp: 280 W x 1 (100 V series) 350 W x 1 (200 V series)	
	Cleaning	None	←	
	Heater temperature	ON/OFF control and power control by thermistor	←	
Heater	Heater lamp	←		

3.6 General Operation

3.6.1 Overview of Operation



3.6.2 Description of Operation

[1] Warming-up

1. Initialization

- Power ON
- Heater lamps (LAMP1,2,3) ON
- Set number "1", reproduction ratio "100%" and "Wait Warming Up" are displayed.
- Fan motors ON
- Initialization of laser optical system
- The polygonal motor (M13) rotates at high speed.
- Initialization of feeding system
- Each drawer tray goes up.
- Pre-running operation is stopped after five seconds.
- Drum phasing
- Drum motor (M10) is turned ON.
- Transfer belt motor (M7) is turned ON.
- Cleaning of transfer belt
- (Performs color registration control.)*¹
- (Performs image quality control.)*¹
- Initialization of scanning system
- The carriage moves to the home position.
- The carriage moves to the peak detection position.
- The exposure lamp (EXP) is turned ON.
- Peak detection (white color is detected by the shading correction plate)
- The exposure lamp (EXP) is turned OFF.
- Pre-scanning <forward/backward> moves by 420 mm <A3 (landscape)>.
- The polygonal motor (M13) rotates at low speed.
- "READY (WARMING UP)" is displayed.

2. Pre-running operation

Pre-running operation is started when the temperature of the fuser belt surface reaches a certain level.

- Fuser motor (M17) is turned ON.
- Fuser roller rotation.

3. When the temperature of the fuser belt surface becomes sufficient for fusing,

- "READY" is displayed.

*1: Image quality control and color registration control should be performed only at change of environment or periodical performing timing.

[2] Ready (ready for copying)

- Buttons on the control panel enabled
- When no button is pressed for a certain period of time,
 - Set number "1" and reproduction ratio "100%" are displayed. Equipment returns to the normal ready state.

[3] Drawer feed copying (1st drawer paper feeding)

1. Press the [START] button ON
 - "READY" changes to "COPYING"
 - Exposure lamp (EXP) turned ON
 - Scan motor (M1) turned ON → Carriages-1 and -2 move forward
 - The polygonal motor (M13) rotates at high speed.
 - Drum motor (M10), transport motor (M20), transfer belt motor (M7), developer unit motor (M9), fuser motor (M17) and exit motor (M18) turned ON
 - Drum, transfer belt, fuser unit, developer unit and exit roller are driven

2. Drawer paper feeding
 - Fans rotated at high speed and 1st drawer feed clutch (CLT1) turned ON
 - Pickup roller, feed roller, separation roller and transport roller start to rotate
 - Paper reaches the 1st drawer feed sensor (S30)
 - 1st drawer feed sensor (S30) is turned ON
 - Paper reaches the registration roller
 - Registration sensor (S28) is turned ON and aligning is performed
 - 1st drawer feed clutch (CLT1) is turned OFF after a certain period of time

3. A certain period of time passed after the carriage operation
 - Registration motor (M19) is turned ON after a certain period of time → Paper is transported to the transfer area
 - Copy counter operates

4. Completion of scanning
 - Exposure lamp (EXP) turned OFF
 - Scan motor (M1) turned OFF
 - Registration motor (M19) turned OFF (after the trailing edge of the paper passed the registration roller)
 - "READY (PRINTING)" is displayed

5. Printing operation
 - 1) Color printing operation**
 - Drum switching motor (M11) turned ON
 - The drum switching detection sensor (S19) checks whether the equipment is in the color or black printing status, and if it is in the black printing status, the motor (M11) is turned ON to switch the status to color printing.
 - Drum motor (M10), transfer belt motor (M7), discharge LED-Y, -M, -C, -K (ERS) turned ON
 - Main charger bias turned ON
 - 1st transfer roller cam motor (M8) turned ON
 - Contact the 1st transfer rollers (Y, M and C) to the transfer belt
 - YMCK developer bias (DC) and developer unit motor (M9) turned ON
 - Registration motor (M19) turned ON
 - Contact the 2nd transfer roller to the transfer belt
 - 2nd transfer bias turned ON
 - YMC and K developer bias (AC) turned ON
 - Laser emission (yellow image)
 - 1st transfer bias (Y) turned ON
 - 1st transfer of yellow image (Yellow image is transferred to the transfer belt)
 - 1st transfer bias (Y) turned OFF
 - Laser emission (magenta image)
 - 1st transfer bias (M) turned ON
 - 1st transfer of magenta image (Magenta image is transferred to the transfer belt)
 - 1st transfer bias (M) turned OFF
 - Laser emission (cyan image)
 - 1st transfer bias (C) turned ON
 - 1st transfer of cyan image (Cyan image is transferred to the transfer belt)
 - 1st transfer bias (C) turned OFF

- Laser emission (black image)
- 1st transfer bias (K) turned ON
- 1st transfer of black image (Black image is transferred to the transfer belt)
- 1st transfer bias (K) turned OFF
- 1st transfer roller cam motor (M8) turned OFF
- Release the 1st transfer rollers (Y, M and C) from the transfer belt
- 2nd transfer of YMCK image (YMCK image on the transfer belt is transferred to the paper)
- Main charger turned OFF
- Developer unit motor (M9) and developer bias (YMC and K) turned OFF
- Registration motor (M19) turned ON
- Release the 2nd transfer roller from the transfer belt
- 2nd transfer bias turned OFF
- Drum phasing
- Drum motor (M10), transfer belt motor (M7), discharge LED-Y, -M, -C, -K (ERS) turned OFF

2) Black printing operation

- Drum switching motor (M11) turned ON
- The drum switching detection sensor (S19) checks whether the equipment is in the color or black printing status, and if it is in the color printing status, the motor (M11) is turned ON to switch the status to black printing.
- Drum motor (M10), transfer belt motor (M7), discharge LED-K (ERS) turned ON
- Main charger bias turned ON
- K developer bias (DC) and developer unit motor (M9) turned ON
- Registration motor (M19) turned ON
- Contact the 2nd transfer roller to the transfer belt
- 2nd transfer bias turned ON
- K developer bias (AC) turned ON
- Laser emission (black image)
- 1st transfer bias (K) turned ON
- 1st transfer of black image (Black image is transferred to the transfer belt)
- 1st transfer bias (K) turned OFF
- 2nd transfer of K image (K image on the transfer belt is transferred to the paper)
- Main charger turned OFF
- Developer unit motor (M9) and developer bias (K) turned OFF
- Registration motor (M19) turned ON
- Release the 2nd transfer roller from the transfer belt
- 2nd transfer bias turned OFF
- Drum phasing
- Drum motor (M10), transfer belt motor (M7), discharge LED-K (ERS) turned OFF

6. Paper exiting

- The exit sensor (S26) detects the trailing edge of the paper
- Toner recovery auger, discharge LED (ERS) turned OFF
- Drum motor (M10), transfer belt motor (M7), transport motor (M20), developer unit motor (M9), fuser motor (M17) and exit motor (M18) turned OFF
- The polygonal motor (M4) rotates at low speed.
- Drum, fuser unit and developer unit are stopped
- Fans return to rotate at the normal rotation speed
- "READY" is displayed and the equipment enters into ready mode

[4] Bypass feed copying

1. Insert a paper into the bypass tray.
 - Bypass paper sensor (S40) is turned ON.
 - "Ready for bypass feeding" is displayed.
 - Carriages move to the home position.
2. Press the [START] button ON
 - "Ready for bypass feeding" changes to "COPYING".
 - Exposure lamp (EXP) ON
 - Scan motor (M1) ON→Carriages-1 and -2 move forward.
 - Drum motor (M10), transfer belt motor (M7), transport motor (M20), developer unit motor (M9), fuser motor (M17) and exit motor (M18) turned ON
 - The drum, transfer belt, fuser unit, developer unit and exit roller are driven.
3. Bypass feeding
 - Fans rotate at high speed.
 - Bypass feed clutch (CLT8) turned ON.
 - The bypass pickup roller is lowered.
 - Bypass pickup solenoid (SOL1) turned ON.
 - The bypass pickup roller, feed roller and separation roller start to rotate.
 - Aligning operation
 - Paper reaches the registration roller.
 - After a certain period of time, the bypass feed clutch (CLT8) turned OFF.
4. Hereafter, operations (3) through (6) of "5.2.3Drawer feed copying (1st drawer paper feeding)" are repeated.

[5] Interruption copying

1. Press the [INTERRUPT] button
 - LED "INTERRUPT" is turned ON.
 - Copying operation in progress is temporarily stopped, and the carriages-1 and -2 return to appropriate positions.
 - "Job interrupted job 1 saved" is displayed.
 - Automatic density and reproduction ratio 100% are set. Set number remains the same.
2. Select the desired copy condition
3. After interruption copying is finished:
 - "Press interrupt to resume job 1" is displayed.
 - LED "INTERRUPT" is turned OFF by pressing the [INTERRUPT] button, and the equipment returns to the status before the interruption.
 - "Ready to resume job 1" is displayed.
4. Press the [START] button
 - The copying operation before the interruption is resumed.

3.6.3 Detection of Abnormality

When something abnormal has occurred in the equipment, symbols corresponding to the type of abnormality are displayed.

[1] Types of abnormality

1. Abnormality cleared without turning OFF the door switch
 - (A) Add paper
 - (B) Paper misfeed in bypass

2. Abnormality not cleared without turning OFF the door switch
 - (C) Misfeed in equipment
 - (D) No toner in the cartridge
 - (E) EPU not installed properly
 - (F) Waste toner box replacement

3. Abnormality not cleared without turning OFF the main power switch
 - (G) Call for service

[2] Description of abnormality

[A] Add paper

[In case of the equipment drawer or PFP drawer] (When drawer is not installed)

Drawer not detected



Drawer is not installed:
Drawer is installed but there is no paper in it:



No paper



A signal sent to the control circuit



Drawer area of the control panel blinks
(When the drawer is selected)



[START] button is disabled.

[In case of the equipment, PFP or LCF drawers] (When drawer is installed)

Based on the combination of the tray-up motor (M10) movement and the status of tray-up sensor and empty sensor, CPU detects the presence of paper.

- When the power is turned ON or LCF drawer is inserted (When the power is turned ON or equipment/PFP drawers are inserted).
LCF performs initialization.



Detects the presence of paper
Tray-up motor ON - The tray goes up



At this time, the tray-up sensor and LCF empty sensor are OFF.

- When the tray-up sensor is not turned ON in a fixed period of time it means that the tray is in abnormal condition
“Add paper” is displayed regardless of presence/absence of paper.

→ Cleared by turning the power ON/OFF

- Tray-up sensor is turned ON in a fixed period of time
 - The tray-up motor stops.

At this time, if the empty sensor is ON: It is judged that there is paper.

OFF: It is judged that there is no paper.



Drawer area of the control panel
blinks.
(When the drawer is selected)

- When the paper in the drawer gets short during copying,

- The tray-up sensor turned OFF
- The tray-up motor turned ON - Tray goes up
- Tray-up sensor turned ON
- Tray-up motor stopped

- Empty sensor turned OFF during the copying in spite of the tray-up sensor is ON



It is judged that there is no paper.



Drawer area of the control panel blinks.
(When the drawer is selected)



The copying operation is stopped.

[B] Paper misfeed in bypass

During bypass feeding

Bypass feed clutch (CLT8) is turned ON



Registration sensor (S28) is turned ON

* Registration sensor (S28) is not turned ON in a fixed period of time (E120)



Bypass misfeeding



Bypass misfeed symbol is displayed



The copying operation is disabled.



Solution: The bypass sensor (S40) is turned OFF by removing the paper from the bypass tray.

[C] Misfeed in equipment

- Exit sensor (S26) detects jamming of the leading edge of paper

↓

Registration motor (M19) turned ON

↓ Fixed time

Exit sensor (S26) turned ON

If the exit sensor (S26) is not turned ON after a fixed time,

↓

Paper jam (E010) The copying operation is stopped.

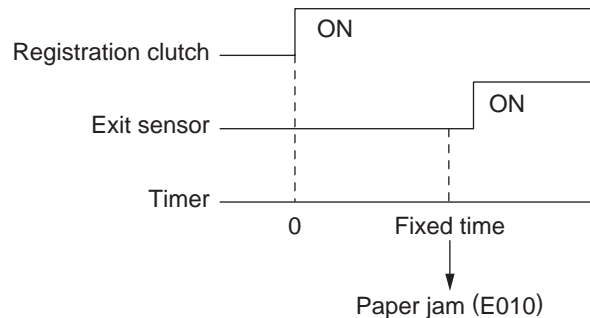


Fig. 3-16

- Exit sensor (S26) detects jamming of the trailing edge of paper

Registration motor (M19) turned OFF

↓ Fixed time.

Exit sensor (S26) turned OFF

If the exit sensor (S26) is not turned OFF a fixed time

↓

Paper jam (E020) The copying operation is stopped.

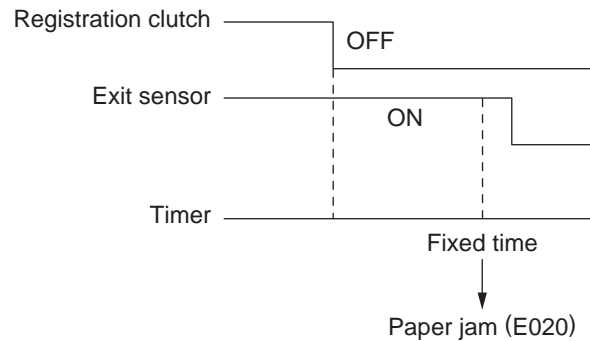


Fig. 3-17

- Immediately after the power ON

↓

Any of all sensors on paper transport path detects paper (ON)

↓

Paper jam (E030)

- Front cover is opened during copying

↓

Paper jam (E410)

- Registration sensor (S28) detects jamming of the leading edge of paper:
The registration sensor (S28) is not turned ON in a fixed period of time after the leading edge of paper passed the transport roller.



Paper jam (E120, E200, E210, E300, E330 and E3C0)

- During paper feeding from ADU:
The registration sensor (S28) is not turned ON in a fixed period of time after the ADU clutch (CLT7) is turned ON.



Paper jam (E110)

- During paper transporting from ADU:
ADU entrance/exit sensors (S38/S39) do not detect the paper at the fixed timing



Paper jam (E510 and E520)

- During paper feeding from the equipment or PFP:
The registration sensor (S28) is not turned ON in a fixed period of time after the feed clutch is turned ON.



Paper jam (E220, E310, E320, E340 to E360, E3D0 and E3E0: Error code defers depending on the paper source.)

[D] No toner in the cartridge

Toner density becomes low



Auto-toner sensor (S22/S23/S24/S25) detects the absence of the toner



Control circuit → “Install new ** toner cartridge” is displayed: the copying operation disabled

Solution Open the front cover and replace the toner cartridge with new one.
: Toner is supplied ◊ copying operation enabled

[E] EPU not installed properly

Disconnection of the connectors of the EPU



“Latch the developer unit” is displayed.

Solution: Install the EPU and close the front cover.

[F] Waste toner box replacement

- Waste toner box is full of used toner



Waste toner box full detection sensor (S13) ON



“Dispose of used toner” is displayed

- Waste toner box full detection sensor (S13) is turned ON during printing




Printing is stopped after the paper being printed is exited

Solution: Replace the waste toner box with new one and close the waste toner cover.

[G] Call for service

Check the error code displayed on the control panel when “Call for service” appears, and handle the abnormality in reference to the error code table.

 P. 8-4 "8.2 Error Code List"

3.7 Control Panel

3.7.1 General Description

The control panel consists of button switches and touch-panel switches to operate the equipment and select various modes, and LEDs and an LCD to display the state of the equipment or the messages. When the operator's attention is required, graphic symbols light or blink with messages explaining the condition of the equipment in the LCD panel. When paper jams and "Call for service" occur, error codes are also displayed to notify users of the problem.

A color LCD is used in this equipment so that visibility and operability are improved.

The [ON/OFF] button is placed on the control panel of this equipment. Use this button instead of the main power switch to turn ON/OFF the power.

Press the [ON/OFF] button for 1 second or more to turn ON/OFF the power of the equipment.

Also, the [ON/OFF] button can be used in the following manner for example: press the [ON/OFF] button while holding down the [0] and [5] buttons simultaneously to activate the Adjustment Mode (05).

However, if the equipment is in the super sleep mode, use the main power switch.

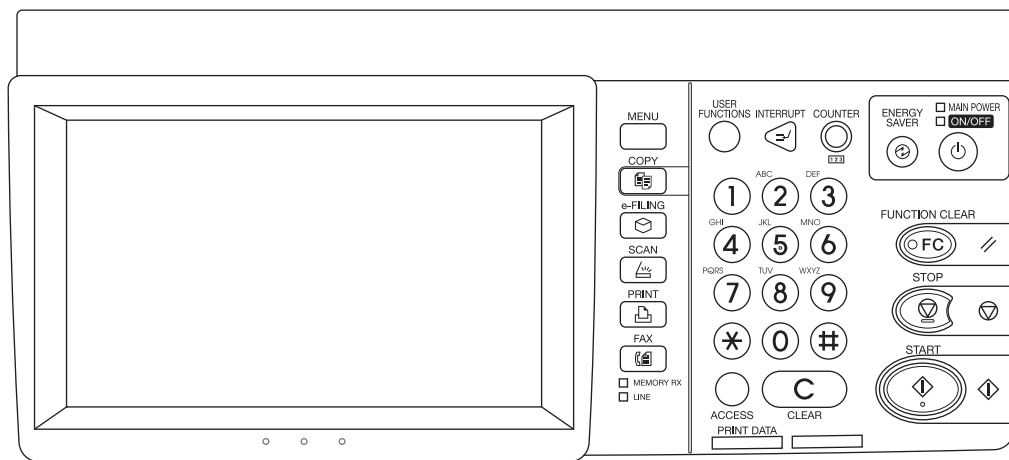


Fig. 3-18

3.7.2 Description of Operation

[1] Dot matrix LCD circuit

[1-1] Structure

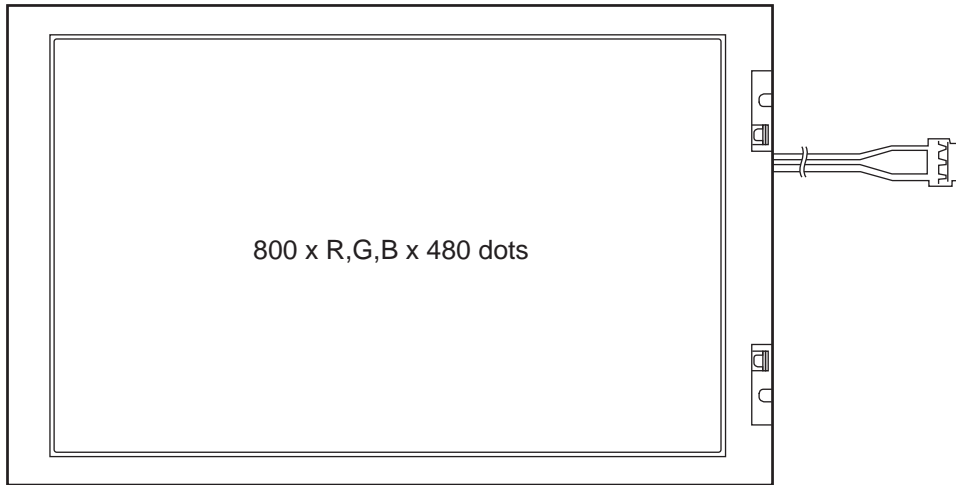


Fig. 3-19

3.8 Scanner

3.8.1 General Description

In the scanning section of this equipment, the surface of an original is irradiated with a direct light and the reflected light is led through mirrors, a lens and a slit to CCD where optical-to-electrical conversion is performed, converting the optical image data into an electrical (analog) signal. This analog signal is changed to a digital signal, which then undertakes various corrective processes necessary for image formation. After that, arithmetic operation is performed on the digital signal, which is then transmitted to the data writing section.

In this equipment, a reduction-type CCD for color processing is used. What this CCD differs from black-and-white CCDs is that its devices are arranged in 3 lines and covered with color filters (Red, Green, and Blue). These lines are composed with 3-line color devices and black-and-white device with no filter.

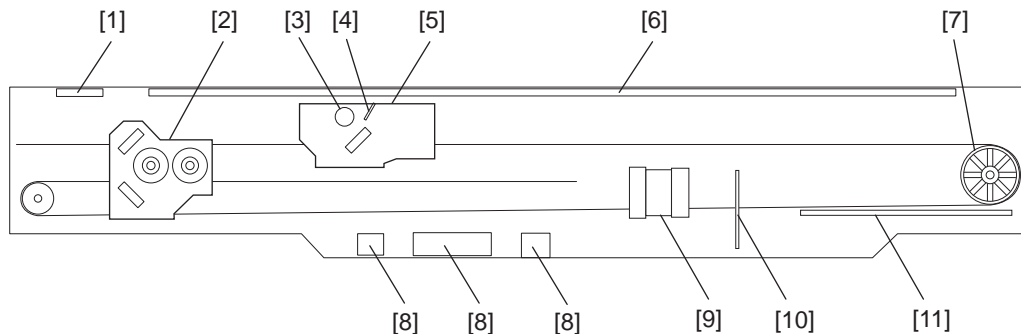


Fig. 3-20

- [1] RADF original glass
- [2] Carriage-2
- [3] Exposure lamp
- [4] Reflector
- [5] Carriage-1
- [6] Original glass
- [7] Drive pulley
- [8] Automatic original detection sensor
- [9] Lens
- [10] CCD board
- [11] SLG board

3.8.2 Construction

Scanner		
Original glass	Original glass	
	RADF original glass	
Carriage-1	Exposure lamp (EXP)	
	Inverter board (INV)	
	Reflector	
	Mirror-1	
Carriage-2	Mirror-2	
	Mirror-3	
Lens unit		
CCD driving PC board (CCD)		
Automatic original detection sensor (S1-5)		
Driving section	Scan motor (M1)	<ul style="list-style-type: none"> • 2-phase stepping motor • Wire drive • Driving the carriage-1 and carriage-2
Other	Scanning section control PC board (SLG)	
	Carriage home position sensor (S6)	
	Platen sensor (S7)	
	Main power switch (SW1)	
	Rubber damper	
	Scanner unit cooling fan (M30)	
Exposure lamp cooling fan (M32)		

3.8.3 Functions

The following shows the construction and purpose of the scanning system:

1. Original glass

This is a glass for placing original. The light from the exposure lamp (EXP) is irradiated to the original through this glass.

The ADF original glass is used when original is read with the Automatic Document Feeder. Original is transported on the ADF original glass by the Automatic Document Feeder, and the transported original is read under the ADF original glass by the carriage. Do not use such solvents as alcohol when cleaning the surface of the ADF original glass, because it is coated so as not to be scratched by originals.

2. Carriage-1

Carriage-1 consists of the exposure lamp (EXP), Inverter board (INV), reflector, mirror-1, etc. It is driven by the scan motor (M1) and scans an original on the glass.

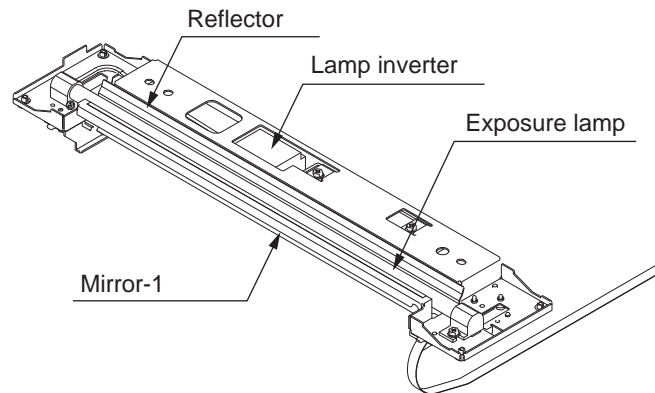


Fig. 3-21

- Exposure lamp (EXP)
This lamp is the light source to irradiate the original on the glass. (One 26 W xenon lamp)
- Inverter board (INV)
Controls lighting of the exposure lamp (EXP).
- Reflector
This is a plate to efficiently direct the light from the exposure lamp (EXP) to the surface of the original on the glass.
- Mirror-1
This mirror directs the light reflected from the original to the mirror-2 described later.

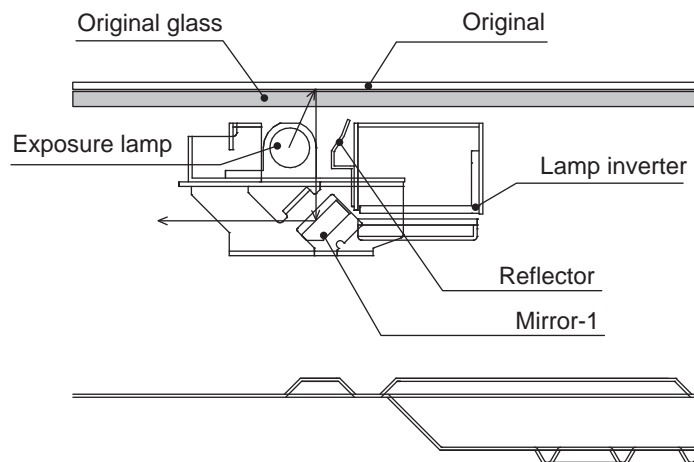


Fig. 3-22

3. Carriage-2

Carriage-2 mainly consists of the mirror-2, mirror-3, etc. and directs the reflected light from the mirror-1 through the mirrors-2 and -3 to the lens.

This carriage is driven by the same scan motor (M1) as that for the carriage-1 at half the scanning speed of the carriage-1 (The scanning distance is also half that of the carriage-1).

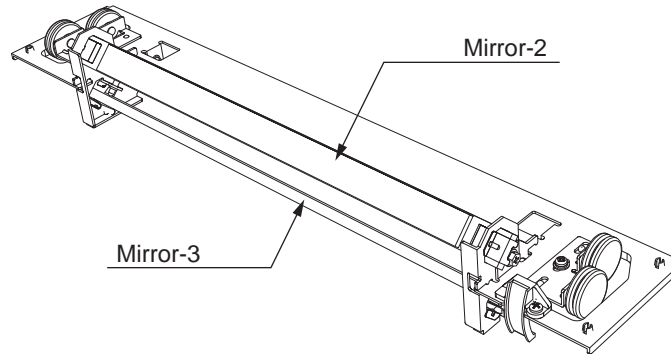


Fig. 3-23

4. Lens unit

The light reflected from the mirror-3 is led to the CCD placed at the focal point of the lens which is fixed in a position.

5. CCD driving PC board (CCD)

Processes such as signal amplification, signal integration and A/D conversion are applied on the electrical signal which was converted by CCD.

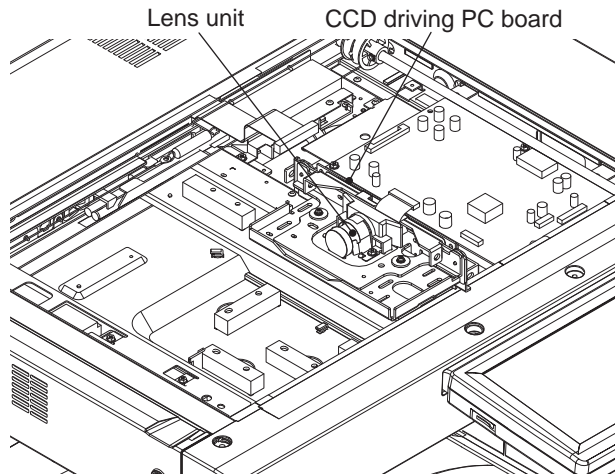


Fig. 3-24

6. Scanning section control PC board (SLG)

This is a board to perform the image correction, such as the shading correction and 3-line correction, and control the scan motor (M1).

7. Automatic original detection sensor (S1-5)

The size of an original placed on the glass is instantly detected using the automatic original detection sensors (S1-5) fixed on the base frame without moving the carriage-1.

3.8.4 Description of Operation

[1] Scanning operation

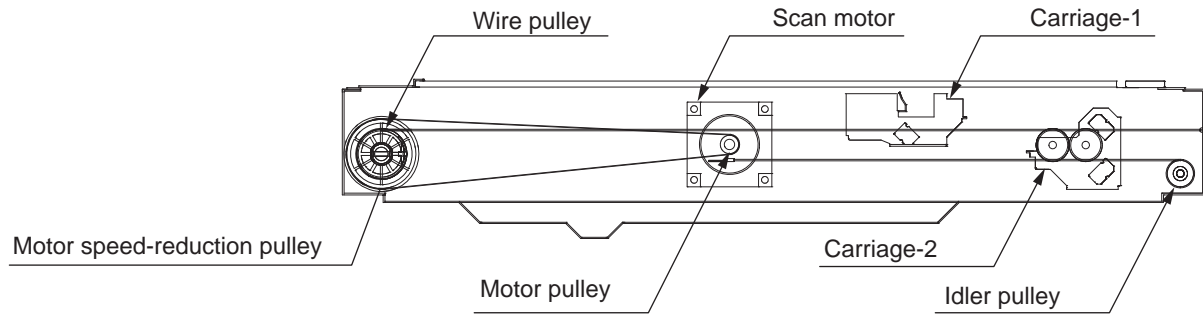


Fig. 3-25

- Scanning of an original placed on the original glass
This motor drives the carriages-1 and -2 through the timing belt and carriage wire. First, the scan motor drives the carriages-1 and -2 to their respective home positions. The home positions are detected when the carriage-1 passes the home position sensor (S6). When the [START] button is pressed, the both carriages start to move and scan the original on the glass.
- Scanning of an original placed on the RADF
The carriage-1 stays at the shading position during shading correction, and at the scanning position during scanning operation.
- Carriage speed
The Carriage speed of the original placed on the original glass in the color mode is the same as that in the black mode.

3.8.5 Process of detection of original size

Reflection type photosensors are placed on the base frame of the scanner unit as shown in the figure below. Each sensor consists of an infrared Light Emitting Diode (LED) on the light emitting side, and a phototransistor on the light receiving side.

When there is an original on the original glass, light beams from the LEDs are reflected by the original and led to the phototransistors. This means that the presence of the original is detected by the presence of reflection (when scanning black image).

Sensor detection points [A4 Series]

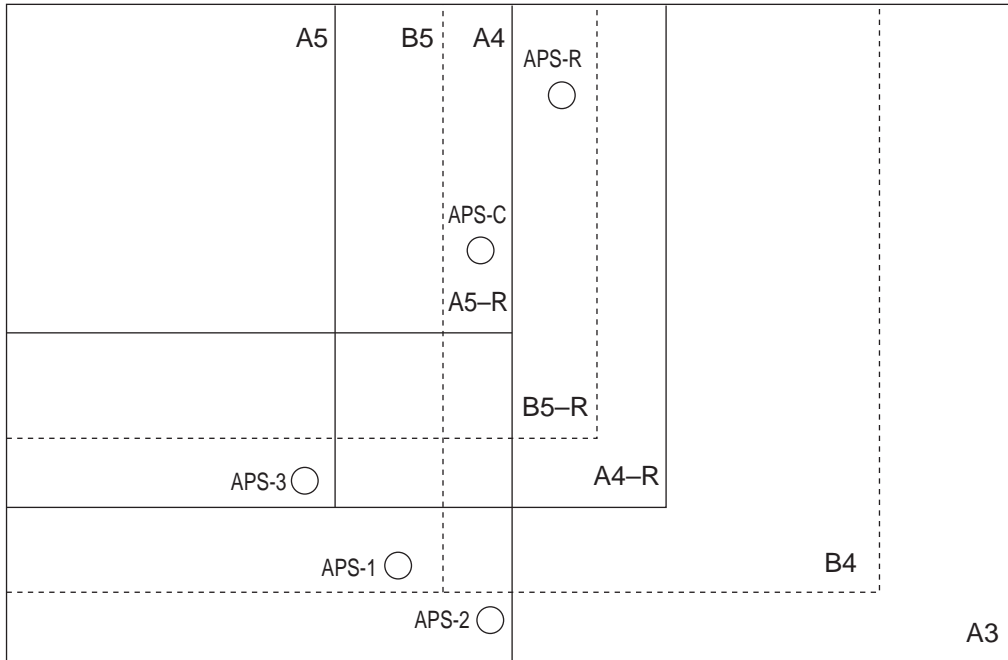


Fig. 3-26

Sensor detection points [LT Series]

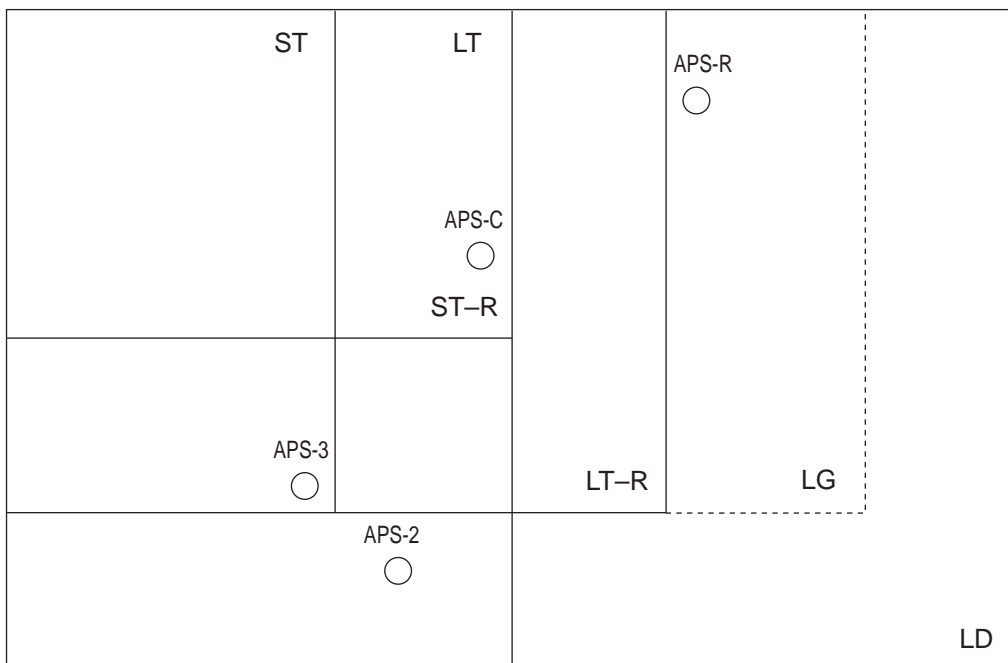


Fig. 3-27

3.9 Laser Optical Unit

3.9.1 General Description

The laser optical unit radiates the laser beam onto the photoconductive drum responding to the digital image signals transmitted from the scanner, USB, network, etc. to create the latent image. Image signal is converted into the light emission signal of the laser diode on the laser driving PC board (LDR), then radiated on the drum through the optical elements such as cylinder lenses, polygonal mirror and f θ lens. The unit must not be disassembled in the field as they are very sensitive to dust and finely adjusted at the factory.

The polygonal motor in e-STUDIO4540C is different from the one in e-STUDIO2040C/2540C/3040C/3540C, and rotates faster. In order to avoid effects by the consequently increased heat and current, in e-STUDIO4540C, the driving PC board is placed outside the laser unit instead of being unified with the polygonal motor.

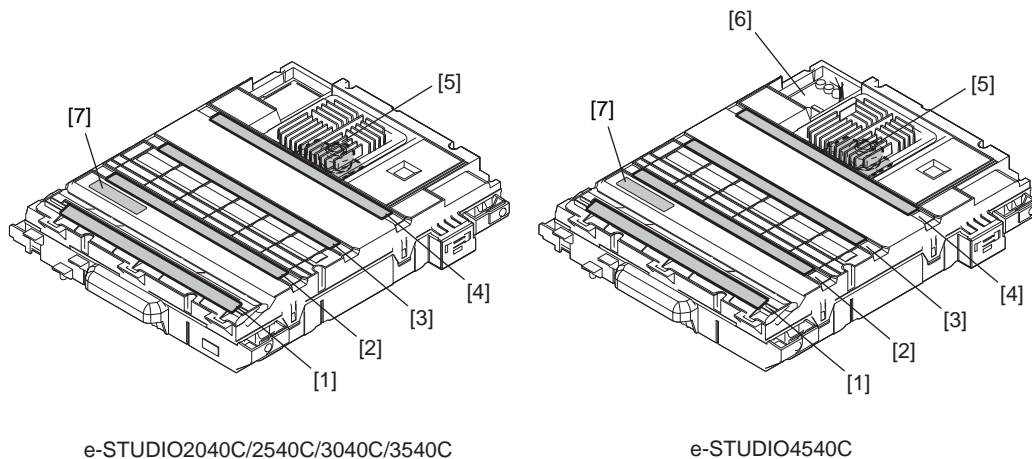


Fig. 3-28

- [1] Slit glass-Y
- [2] Slit glass-M
- [3] Slit glass-C
- [4] Slit glass-K
- [5] Polygonal motor
- [6] Polygonal motor driving PC board
- [7] Lot number of the laser optical unit

Notes:

The lot No. of the laser optical unit is configured in 8 digits with numbers and letters of the alphabet. The applicable model can be identified by the character of the last digit.

[Character of the last digit]

E: Laser optical unit for e-STUDIO2040C/2540C/3540C

F: Laser optical unit for e-STUDIO4540C

3.9.2 Laser Precautions

- A laser diode is used for this equipment and radiates an invisible laser beam. Since it is not visible, be extremely careful when handling the laser optical unit components, performing operations or adjusting the laser beam. Also never perform the procedure with other than the specified manuals because you could be exposed to the laser radiation. The laser unit is completely sealed with a protective cover. As long as only the operations of specified manuals are performed, the laser beam is not leaked and you are in no danger of being exposed to laser radiation.

The following cautionary label for the laser is attached to the front right cover.

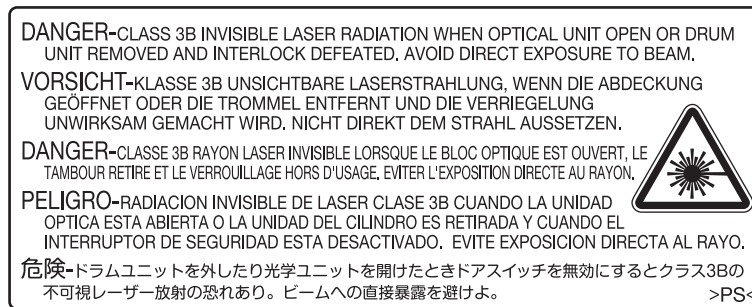


Fig. 3-29

Cautions:

- Avoid expose to laser beam during service. This equipment uses a laser diode. Be sure not to expose your eyes to the laser beam. Do not insert reflecting parts or tools such as a screwdriver on the laser beam path. Remove all reflecting metals such as watches, rings, etc. before starting service.
- When servicing the equipment with the power turned ON, be sure not to touch live sections and rotating/operating sections. Avoid exposing your eyes to laser beam.
- During servicing, be sure to check the rating plate and cautionary labels such as “Unplug the power cable during service”, “CAUTION. HOT”, “CAUTION. HIGH VOLTAGE”, “CAUTION. LASER BEAM”, etc. to see if there is any dirt on their surface and if they are properly stuck to the equipment.

3.10 Paper Feeding System

3.10.1 General Descriptions

This chapter explains how the system works to pick up paper from the drawer or bypass tray and transport it to the 2nd transfer position.

The paper feeding system mainly consists of the pickup roller, feed roller, separation roller, transport roller, registration roller, bypass paper sensor (S40), drawer empty sensor (S32, 36), drawer paper stock sensor (S33, 37), bypass feed sensor (S41), drawer feed sensor (S30, 34), registration sensor (S28) and drive system for these components. The feed/transport motor (M20) and registration motor (M19) drives the above rollers.

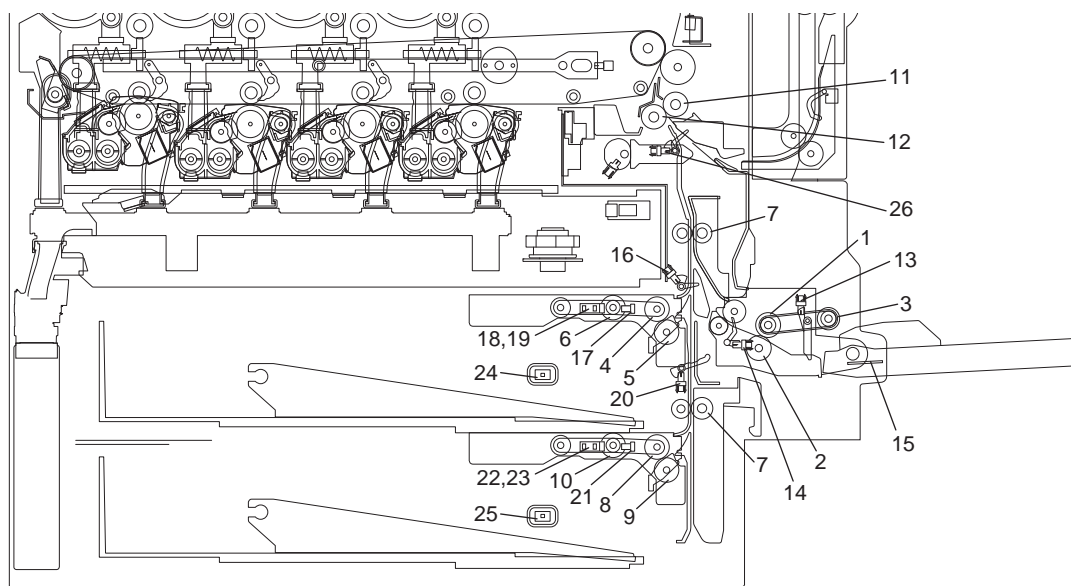


Fig. 3-30

No.	Name	No.	Name
1	Bypass feed roller	14	Bypass feed sensor (S41)
2	Bypass separation roller	15	Paper width detection PC board (SFB)
3	Bypass pickup roller	16	1st drawer feed sensor (S30)
4	1st drawer feed roller	17	1st drawer tray-up sensor (S31)
5	1st drawer separation roller	18	1st drawer empty sensor (S32)
6	1st drawer pickup roller	19	1st drawer paper stock sensor (S33)
7	1st/2nd drawer transport roller	20	2nd drawer feed sensor (S34)
8	2nd drawer feed roller	21	2nd drawer tray-up sensor (S35)
9	2nd drawer separation roller	22	2nd drawer empty sensor (S36)
10	2nd drawer pickup roller	23	2nd drawer paper stock sensor (S37)
11	Registration roller (rubber roller)	24	1st drawer detection switch (SW5)
12	Registration roller (metal roller)	25	2nd drawer detection switch (SW6)
13	Bypass paper sensor (S40)	26	Registration sensor (S28)

3.10.2 Composition

Feeding system		
1st drawer feeding unit / 2nd drawer feeding unit	1st / 2nd drawer pickup roller	PM parts
	1st / 2nd drawer feed roller	PM parts
	1st / 2nd drawer separation roller	PM parts
	1st / 2nd drawer feed clutch	CLT3/CLT6
	1st / 2nd drawer tray-up sensor	S31/S35
	1st / 2nd drawer empty sensor	S32/S36
	1st / 2nd drawer paper stock sensor	S33/S37
1st / 2nd drawer transport clutch (High speed)		CLT1/CLT5
1st / 2nd drawer transport clutch (Low speed)		CLT2/CLT4
1st / 2nd drawer transport roller		
1st / 2nd drawer feed sensor		S30/S34
1st / 2nd drawer detection switch		SW5/SW6
Bypass unit	Bypass pickup roller	PM parts
	Bypass feed roller	PM parts
	Bypass separation roller	PM parts
	Bypass paper sensor	S40
	Bypass feed sensor	S41
	Bypass pickup solenoid	SOL1
	Bypass tray slide guide width detection PC board	SFB
	Bypass feed clutch	CLT8
Feed/transport motor		M20
Registration motor		M19
Registration roller		
Registration sensor		S28
Tray-up motor		M21

3.10.3 Functions

1. Pickup roller (Drawers and bypass feed)
This roller moves up and down and draws out the paper from the bypass tray or drawer and transport it to the feed roller.
2. Feed roller (Drawers and bypass feed)
This roller is placed against the separation roller. It transports the paper from the pickup roller to the transport roller.
3. Separation roller (Drawers and bypass feed)
This roller is placed against the feed roller. When two sheets of paper or more are transported from the pickup roller, the load of the torque limiter of the separation roller is heavier than the frictional force between the sheets. As the result, the separation roller is stopped and the lower paper is not advanced any further. When only one sheet is transported from the pickup roller, the separation roller rotates following the feed roller.
4. Transport roller (Drawers and bypass feed)
This roller transports the paper sent from the feed roller to the registration roller.
5. Registration roller
Paper transported from the transport roller is pushed against the registration roller which aligns the leading edge of the paper.
Then, the registration rollers rotate to transport the paper to the transfer unit.
6. Bypass paper sensor (S40)
This sensor detects if paper is set in the bypass tray. If it is, bypass feeding always comes before drawer feeding.
7. Empty sensor (1st drawer (S32) / 2nd drawer (S36))
This is a transmissive-type sensor and detects the availability of paper in the drawer by using an actuator. When there is no paper in the drawer, the actuator blocks the light path of the sensor, and the sensor determines that there is no paper.
8. Paper stock sensor (1st drawer (S33) / 2nd drawer (S37))
This is a transmissive-type sensor which detects the amount of the remaining paper in the drawer using an actuator. When the remaining paper is consumed and becomes around 100 sheets, the actuator blocks the light path for the transmissive-type sensor to notify that the paper is getting fewer.
9. Feed sensor (1st drawer (S30) / 2nd drawer (S34) / bypass (S41))
This sensor detects if the leading edge or trailing edge of the paper has passed the feed roller. It also detects jamming such as misfeeding.
10. Registration sensor (S28)
This sensor detects that the leading edge of the paper has reached the registration roller and the trailing edge of the paper has passed the registration roller.
11. Drawer tray-up sensor (1st drawer (S31) / 2nd drawer (S35))
This sensor stops the tray at the predetermined height when the tray is moved up. When the tray-up sensor is turned ON, the tray-up motor is turned OFF to stop the upward movement of the tray.
12. Drawer detection switch (1st drawer (SW5) / 2nd drawer (SW6))
This switch detects if the drawer is fully inserted.

13. Feed clutch (1st drawer (CLT3) / 2nd drawer (CLT6) / Bypass (CLT8))
This is a clutch used to transmit the drive from the feed/transport motor to the drawer pickup roller and drawer feed roller.
14. Drawer transport clutch (High speed) (1st drawer (CLT1) / 2nd drawer (CLT5))
This is a clutch used to transmit the drive from the feed/transport motor to the transport roller. When the clutch is turned ON, the transport roller rotates at high speed to transport paper.
15. Drawer transport clutch (Low speed) (1st drawer (CLT2) / 2nd drawer (CLT4))
This is a clutch used to transmit the drive from the feed/transport motor to the transport roller. After the paper is aligned by the registration roller, the drawer transport clutch (High speed) is turned OFF and this clutch is turned ON. Then the transport roller rotates at low speed to transport the paper.
16. Feed/transport motor (M20)
This motor drives the pickup rollers, feed rollers and transport rollers of the drawers and bypass tray.
17. Registration motor (M19)
This motor drives the registration roller. Normal rotation of the motor rotates the registration roller while the reverse rotation of the motor creates the contact/release movement of the 2nd transfer roller with the transfer belt.
18. Tray-up motor (M21)
When this motor rotates normally, the tray in the 1st drawer moves up, and when the motor rotates reversely, the tray in the 2nd drawer moves up.
19. Bypass pickup solenoid (SOL1)
This is a solenoid to move down the bypass pickup roller.
20. Paper width detection board (SFB)
This sensor works directly with the sidewalls of the bypass tray to detect the paper width on the tray.

3.10.4 Description of Operation

[1] Drawer side guide locking mechanism (only for the 1st drawer)

When a drawer is closed without locking its side guide, the slope mounted inside of the equipment locks the drawer automatically. (Only for the 1st drawer)

A slope is mounted inside of the equipment. When a drawer is closed, this slope moves the lever to the locking side.

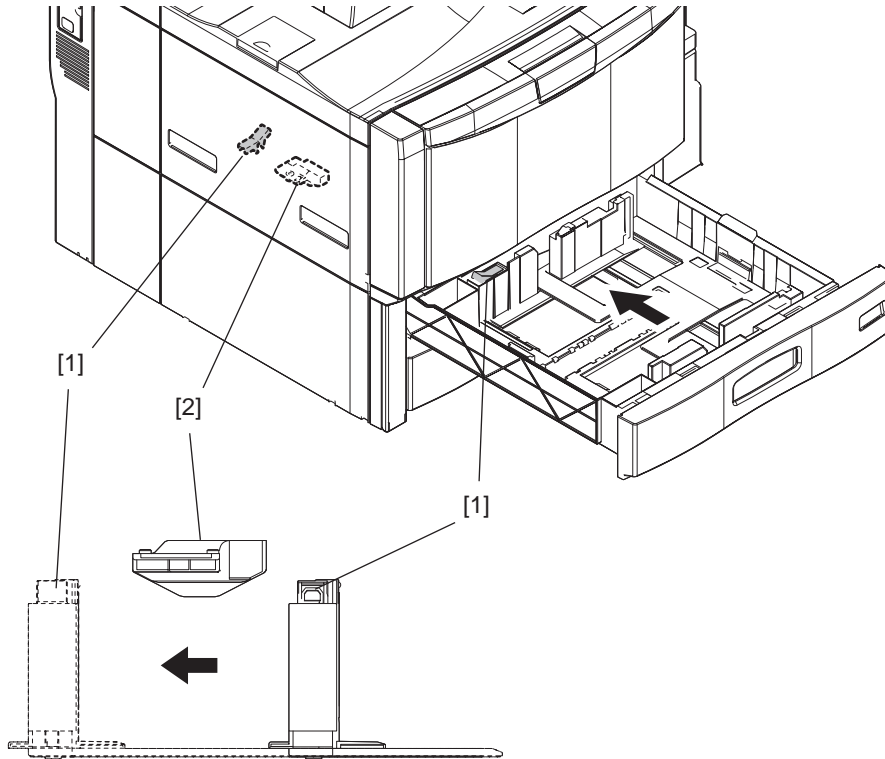
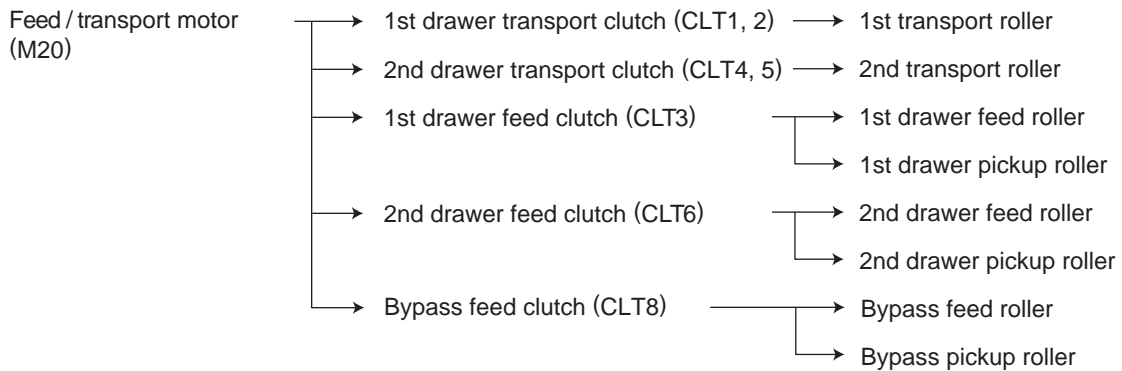


Fig. 3-31

- [1] Drawer side guide lock lever
- [2] Slope

[2] Drive of rollers

The drive of each motor in the paper feeding area activates the paper transfer roller as follows.



- Registration motor (M19) → Registration roller
- Tray-up motor (M21) → Trays in 1st/2nd drawer

[3] Operation of bypass pickup roller

When the bypass pickup solenoid (SOL1) is turned ON, the plunger is pulled, and then the lever is rotated. The pickup arm is then brought down with its own weight. When the bypass pickup solenoid (SOL1) is turned OFF, the pickup arm is brought up by the spring force.

The driving force transmitted through the bypass feed clutch (CLT8) is transmitted to the bypass feed roller through the shaft and then to the bypass pickup roller through the timing belt. The roller is rotated by this driving force.

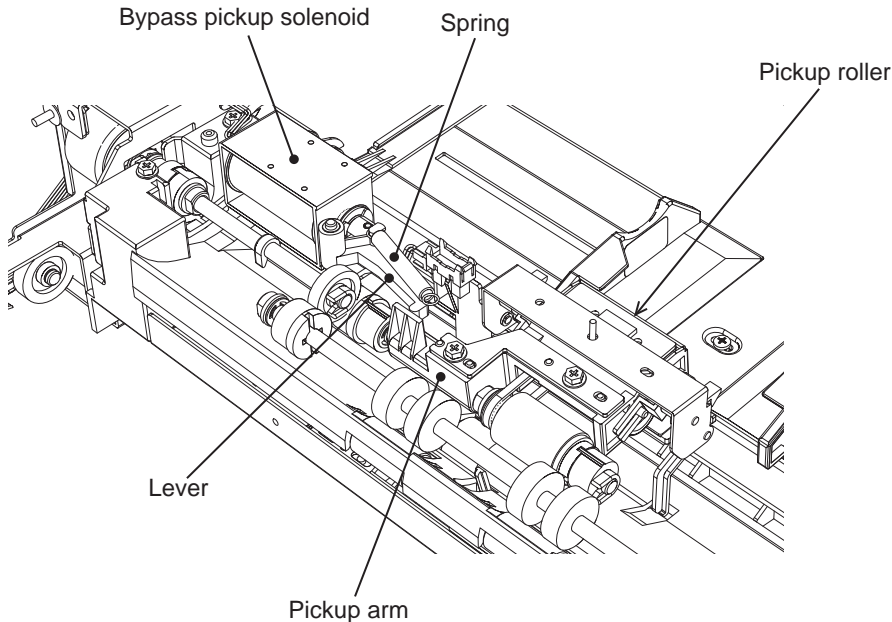


Fig. 3-32

[4] Operation of drawer pickup roller

When the drawer is inserted, the protrusion at the rear side of the drawer moves up the lever (a) to the direction of A. The pickup roller and roller holder are then lowered by it's own weight.

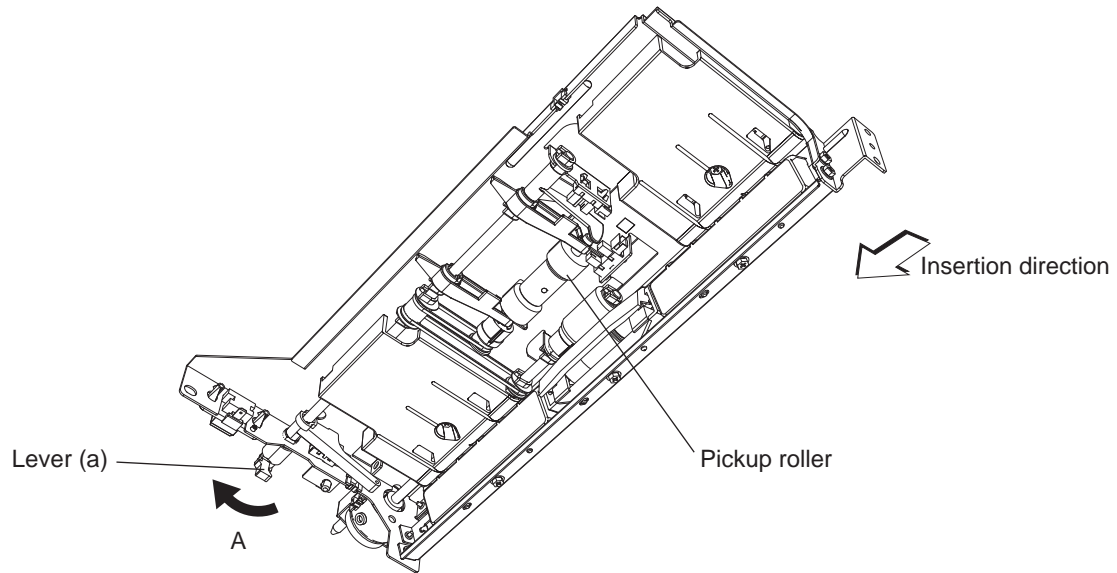


Fig. 3-33

[5] Separation of paper

The separation roller in this equipment works to separate the sheets being fed. The separation roller unit consists of the feed roller, separation roller, spring joint, etc., as shown below.

The feed roller is rotated by the feed clutch in the direction of the white arrow at the same timing as the pickup roller rotation.

The P. 3-59 "Fig. 3-35" shows how duplicate feeding is prevented: Since the friction between two sheets is small, the lower sheet is not transported any further while the upper sheet is transported by the feed roller in the direction of the black arrow.

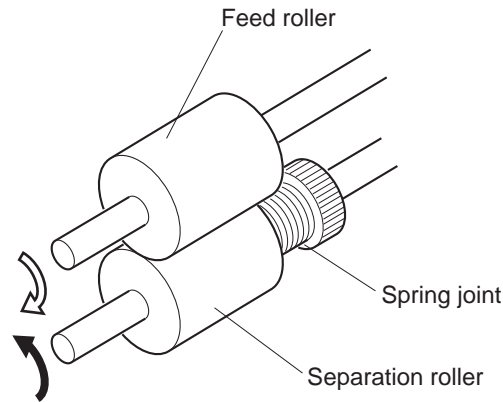


Fig. 3-34

[Example]

When only one sheet enters between the rollers: Since the transporting force of the feed roller is greater than the braking force of the separation roller, the separation roller follows the feed roller, making the sheet go forward to the registration roller.

When two sheets enter between the rollers at the same time:

Since the transporting force of the feed roller and the braking force of the separation roller are greater than the frictional force between two sheets, the paper A is transported to the direction of the black arrow and the paper B is braked by the separation roller and is not transported any further.

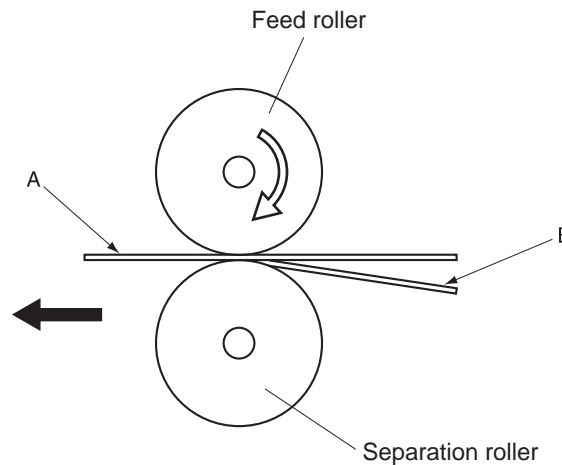


Fig. 3-35

[6] General operation

[A] From power-ON to ready status

1. When the equipment is turned ON, the tray-up motor (M21) is activated and the 1st drawer tray starts to rise. When the tray-up sensor (S31) is turned ON (L→H), the tray-up motor (M21) is turned OFF, and the tray is stopped. At this time, if the empty sensor (S32) is OFF (L), it is judged that there is no paper in the drawer.
If the empty sensor (S32) is ON (H), there is paper in the drawer. The tray stops at raised position regardless of availability of paper. The tray-up motor (M21) then starts to rotate in reverse and the 2nd drawer is raised. The 2nd drawer is stopped in the same manner as the 1st drawer, and the empty sensor (S36) detects if there is any paper in the drawer.
2. If the drawer is not completely inserted when the equipment is turned ON, the tray for that drawer is not raised. When the drawer is inserted completely, the tray is raised and checks the availability of the paper.
3. If either of the sensors on the transport path is ON (means there is paper on the transport path) when the equipment is turned ON, it is determined that a paper jam has occurred and no operation is enabled until the paper is removed.

[B] Ready status

1. After the tray is moved up and availability of paper is checked as described above, the equipment enters the ready status.
At ready status, the tray remains at raised position.
2. When a drawer is inserted or removed at ready status, the tray is raised again to check the availability of paper.

[C] Bypass feeding

- The bypass paper sensor (S40) detects availability of paper.
- The bypass pickup solenoid (SOL1) is turned ON and the bypass pickup roller is lowered.
- The bypass feed clutch (CLT8) is turned ON and then the bypass pickup roller, bypass feed roller and bypass transport roller are rotated and start feeding.
- The leading edge of paper turns ON the bypass feed sensor (S41) and bypass pickup solenoid (SOL1) is turned OFF. Then the bypass pickup roller is raised.
- The leading edge of paper turns ON the registration sensor (S28) and the paper is aligned by the registration roller.
- The bypass feed clutch (CLT8) is turned OFF, and then the bypass pickup roller, bypass feed roller and bypass transport roller are stopped.
- The registration motor (M19) is turned ON and the paper is transported to the 2nd transfer position.

[D] Drawer feeding

[D-1] 2nd drawer

- The feed clutch (CLT6) and the transport clutch (high speed) (CLT1, 5) are turned ON, and the pickup roller, feed roller and transport roller are rotated to start feeding paper.
- Passing of the leading edge of the paper turns ON the 2nd drawer feed sensor (S34), then the feed clutch (CLT6) and transport clutch (high speed) (CLT1, 5) is turned OFF then back ON.
- Passing of the leading edge of the paper turns ON the registration sensor (S28) and the paper is aligned by the registration roller.
- The transport clutch (high speed) (CLT1, 5) is turned OFF and the transport roller is stopped.
- The registration motor (M19) and transport clutch (low speed) (CLT2, 4) are turned ON and the paper is transported to the 2nd transfer position.

[D-2] 1st drawer

- The feed clutch (CLT3) and the transport clutch (high speed) (CLT1) are turned ON, and the pickup roller, feed roller and transport roller are rotated to start feeding paper.
- Passing of the leading edge of the paper turns ON the 1st drawer feed sensor (S30), then the feed clutch (CLT3) and the transport clutch (high speed) (CLT1) are turned OFF then back ON.
- Passing of the leading edge of the paper turns ON the registration sensor (S28) and the paper is aligned by the registration roller.
- The feed clutch (CLT3) and the transport clutch (high speed) (CLT1) is turned OFF and the transport roller is stopped.
- The registration motor (M19) and transport clutch (low speed) (CLT2) are turned ON and the paper is transported to the 2nd transfer position.

3.11 Process Unit Related Section

3.11.1 General description

The equipment has 4 process units (EPU: Electrophotographic process unit). Each process unit consists of the drum cleaner unit and developer unit which are unified, and it corresponds to the image forming process of Y, M, C, K colors. Also, the main charger unit is installed with the cleaner unit, and the discharge LEDs are installed on the ozone duct.

This chapter explains about the process unit and parts around this unit which are provided for image formation. Except the developer unit, which is one of units composing the process unit, is described in chapter 3.13 in detail.

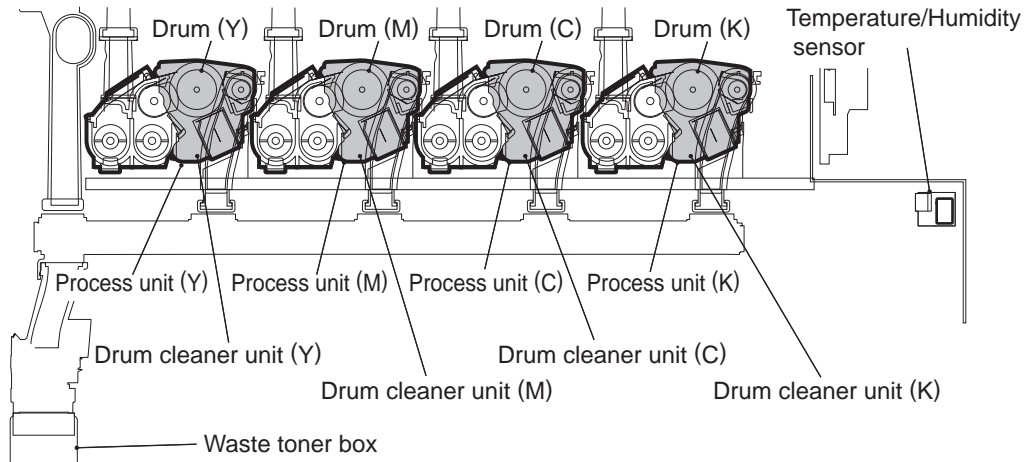


Fig. 3-36

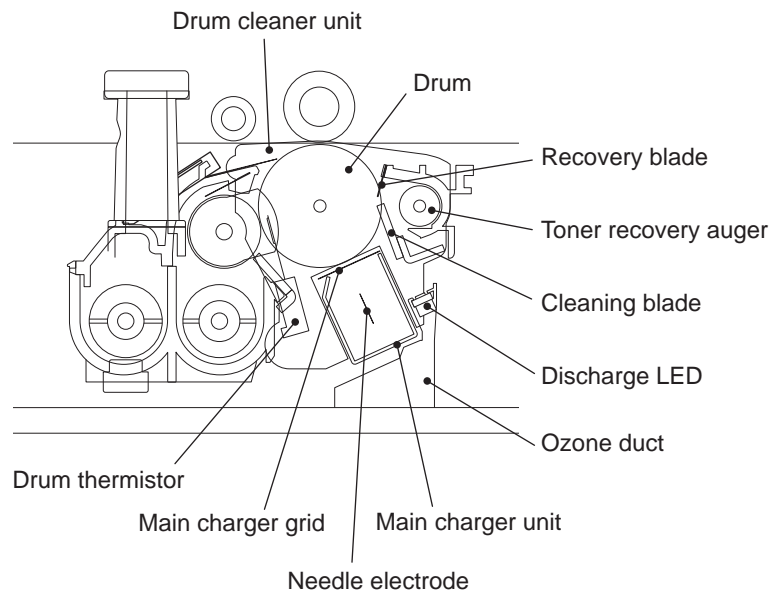


Fig. 3-37

3.11.2 Composition

Process unit (Y, M, C, K)	Drum cleaner unit	Drum	PM parts
		Cleaning blade	PM parts
		Recovery blade	
		Toner recovery auger	
	Main charger unit	Main charger grid	PM parts
		Needle electrode	PM parts
		Needle electrode cleaner	PM parts
	Developer unit		Ch. 3.13
		Drum thermistor-Y, -K	THM1, THM2
	Discharge LED		ERS-Y, -M, -C, -K
Temperature/Humidity sensor		S12	
Ozone filter-1		PM parts	
Ozone filter-2			
Ozone exhaust fan		M24	
High-voltage transformer			
Drum motor		M10	
Drum switching motor		M11	

3.11.3 Functions

1. Drum

Drum is made of a cylindrical aluminum base coated with thin film of organic photoconductive substance. Photoconductive object becomes insulative (high electrical resistance) when it is not exposed to lights and becomes conductive (low electrical resistance) when it is exposed to lights. This object is called photoconductor.

2. Drum cleaner unit

- Cleaning blade
This blade is pressed against the drum surface with a constant force by pressure springs, and scrapes off the residual toner on the drum surface.
- Recovery blade
This blade prevents the toner which was scraped off by the cleaning blade from being scattered to the outside.
- Toner recovery auger
This auger carries the residual toner scraped off to the waste toner box.

3. Main charger

The main charger in this equipment consists of a metal rod with U-shaped section, insulated terminals at both ends of the rod and a needle electrode attached between them. When a high voltage is applied to the needle electrode, the air around it is charged (ionized). The ionized air then flows into the drum causing it to be charged. This phenomenon is called "corona discharge". At the same time, a control bias is applied to the main charger grid to control the charging amount. In a dark place, negative charge is evenly applied onto the drum surface by the corona discharge and this grid. In addition, a cleaner is installed to clean up the dust attached on the needle electrode.

- Needle electrode
The needle electrode has aligned needles and their points perform the corona discharge. These points (electrodes) discharge toward the drum in one direction to realize the more efficient discharging comparing to the charger wire which discharges in a radial direction. Therefore, the needle electrode enables to reduce the ozone amount.

4. Drum thermistor (THM1, THM2)

Since the photoconductive characteristic of the drum surface changes depending on the temperature of the drum surface, the drum thermistor detects the temperature of the drum surface and controls to gain the charging potential according to the environment. The equipment uses 2 drum thermistors and they detect surface temperature of K and Y drums respectively.

5. Discharge LED (ERS-Y, -M, -C, -K)

Discharge is a process to decrease or eliminate the static electricity on the drum surface. The electrical resistance of the photosensitive layer is decreased by the light, and the residual charge on the drum surface is neutralized and eliminated (cleaned). Electrical potential of the drum surface is fixed to a certain amount before the drum is charged.

6. Temperature/humidity sensor (S12)

This sensor measures the environment inside the equipment. The values of the temperature and humidity detected inside the equipment are output to the LGC board.

7. Ozone filter

Ozone produced by corona discharge of the main charger is exhausted through this filter. The catalyzer of the ozone filter degrades the ozone.

8. Ozone exhaust fan (M24)

This fan exhausts air through the ozone filter-1.

9. High-voltage transformer (HVT)

A circuit generates the output control voltage V_c of the main charger bias, main charger grid bias, 1st transfer roller bias, 2nd transfer roller bias and developer bias.

10. Drum motor (M10)

This motor drives each drum and toner recovery auger. The drive of the motor is transmitted to each drum by gears in the following 2 lines: Drum motor → K drum, drum motor → C drum → M drum → Y drum

The gears and drum couplings are assembled with high precision in order to improve accuracy of color overlay.

11. Drum switching motor (M11)

This motor switches ON/OFF the transmission of drive to the Y, M, C drums. When the motor rotates normally or reversely, the gear of the motor moves the rack to shift the guides. And this movement of the guides controls the transmission of the drive by engaging and disengaging gears which transmit the drive to the Y, M, C drums. Additionally, the drum switching sensor detects the phase of the guide to control the drum switching motor, and checks whether the drive is transmitted to the Y, M, C drums or not.

12. Color drum phase sensor (S43), K drum phase sensor (S44)

This sensor matches the phase of Y, M, C drums and K drum. Matching the phase of each drum improves the accuracy of color overlay. The actuator (disk) installed in the same shaft as the driving gear of the K drum and C drum detects the position of their drums to match the phase.

3.11.4 Drum driving sleep mode

When the conditions of humidity inside of the equipment and the accumulated number of outputs are met, the equipment is shifted to the drum driving sleep mode, in which the photoconductive drum is rotated without exposure several times.

This mode prevents the photoconductive drum from being contaminated with ozone exhausted inside of the equipment.

[1] Function

In the standby mode, the photoconductive drum is rotated without exposure according to the specified number of times. The more rotations without exposure increase, the more drive count increases. Consequently, this may reduce the life of the drum.

To prevent a reduction in the life, the drum is rotated without exposure normally once. It is rotated without exposure several times only under certain conditions.

[2] Drum driving sleep mode related codes

08-2380	Control for drum rotation without exposure at standby	Sets ON or OFF for the control of the photoconductive drum rotation without exposure in the standby mode after printing is finished.
08-2381	Starting time of drum rotation without exposure at standby	Sets the time to start the 1st rotation of the photoconductive drum without exposure in the standby mode after printing is finished.
08-2382	Control of drum rotation without exposure at standby: Rotation interval	Sets the rotation interval of the photoconductive drum without exposure between the 1st and 2nd rotations and subsequent intervals.
08-2383	Control of drum rotation without exposure at standby: Maximum number of rotations	Sets the maximum number of rotations allowed without exposure.
08-2384	Control of drum rotation without exposure at standby: Humidity setting	Sets the humidity level to start rotation without exposure.
08-2385	Accumulated number of outputs to shift to drum driving sleep mode	Sets the number of outputs to shift to the drum driving sleep mode.

[3] The drum driving sleep mode setting

[3-1] Case in which the equipment needs to be shifted to the drum driving sleep mode frequently

When uneven density image problem in 94 mm pitch (the circumference of the drum) must be corrected

- Set a value smaller than "7" (default) for 08-2385.

Notes:

If MCV (monthly copy volume) is relatively small, the drive count tends to increase quickly when you set the equipment to shift the drum driving sleep mode often, resulting in a shorter life

[3-2] Case in which the equipment needs to be shifted to the drum driving sleep mode frequently

A: When uneven density image problem in 94 mm pitch (the circumference of the drum) must be corrected

- The ozone exhaust fan keeps rotating for 1 minute after printing is finished. The rotation noise is not so annoying during this period. Therefore set "0" or "1" for 08-2383 so that the rotation of all drums without exposure will be finished within 1 minute.

B: When MCV is relatively small (e.g.; 1k)

- Set "20" for 08-2385 to reduce the number of times to shift the drum driving sleep mode, or set "0" or "1" for 08-2383 to reduce the number of drum rotations without exposure.

C: When the humidity is 40% RH or more

- Set “3” for 08-2384 so that uneven density image problems (in 94 mm pitch) will hardly ever occur under high humidity conditions.

3.11.5 Description of Operation

[1] Drum phase registration mechanism

[1-1] Drive of each drum

Each of Y, M, C and K drums is rotated with drive from the drum in the corresponding color. However in some cases in the black mode (when the transfer belt is released), only the K drum is rotated.

The phase of the K drum will not deviate because it is driven directly with a gear (except in the cases of wrong assembling or a K drum phase sensor defect).

On the other hand, the drive of the Y, M and C drums is transmitted by connecting the gear of each drum with a coupling.

Each gear is connected with the corresponding coupling only at the specified position. However, if the gear ratio is not proper, the phases of the color drums may deviate from that of the K drum.

The color drum phase sensor and the K drum phase sensor thus detect and correct the drum phases.

The phases of the Y, M and C drums will not deviate from each other because their gears are connected in one row, unless they are wrongly assembled.

Drive is transmitted to each drum as shown below.

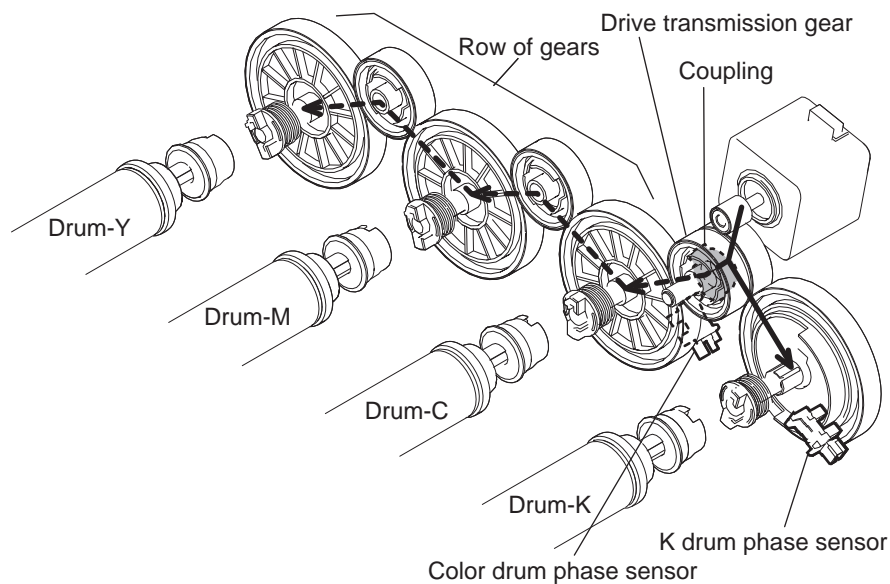


Fig. 3-38

[1-2] Phase checking procedure

Drum phase registration is controlled with signals from the color drum phase sensor installed on the gear of the C drum and the K drum phase sensor installed on that of the K drum.

To check the deviation, the time lag between the output of the K drum phase sensor and that of the color drum phase sensor is considered as the deviation amount.

If this deviation amount falls within the acceptable range, the deviation is corrected. If the deviation amount is still not corrected, an error message (CE71) appears.

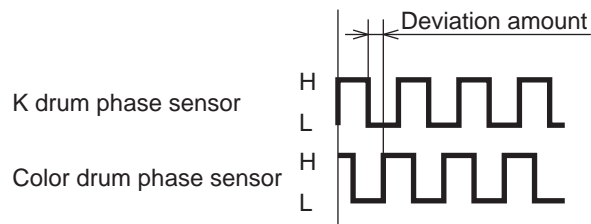


Fig. 3-39

[1-3] Phase check timing

Phase checking is performed at the timings shown below.

- At power-ON
- When a cover is closed
- When starting 04 mode
- When starting 05 mode or starting printing
- Before performing the enforced color registration adjustment (05-4719)

3.12 Developer Unit

3.12.1 General Description

The equipment has 4 process units (EPU: Electrophotographic process unit. Each process unit consists of the drum cleaner unit and developer unit which are unified, and it corresponds to the image forming process of Y, M, C and K colors. This chapter describes the development (developer unit) which is a process of making toner adhere to the drum.

The developer material which is comprised of a mixture of toner and carrier, and is filled in the developer unit of each color. The toner is charged to a negative polarity and the carrier to a positive polarity, due to the friction with each other caused by mixing in the developer unit. The charged toner is supplied to the photoconductive drum surface by means of a magnetic roller, allowing it to adhere to the areas on the drum surface where the potential is lower than the developer bias which is applied to the magnetic roller. Through this process, the latent images are formed on the photoconductive drum surface.

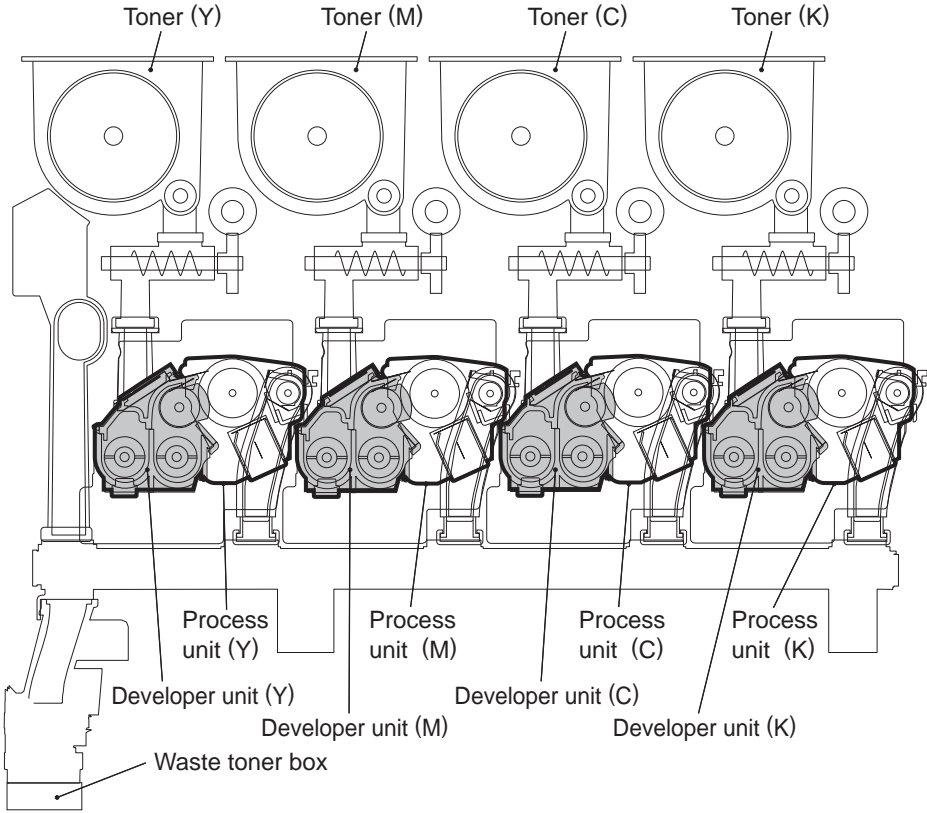


Fig. 3-40

3.12.2 Composition

Process unit (Y, M, C, K)	Drum cleaner unit		Ch. 3.12	
	Main charger unit		Ch. 3.12	
	Developer unit	Developer material		PM parts
		Developer filter		PM parts
		Mixer		
		Developer sleeve (Magnetic roller)		
		Doctor blade		
Auto-toner sensor		S22, 23, 24, 25		
Developer unit motor			M9	

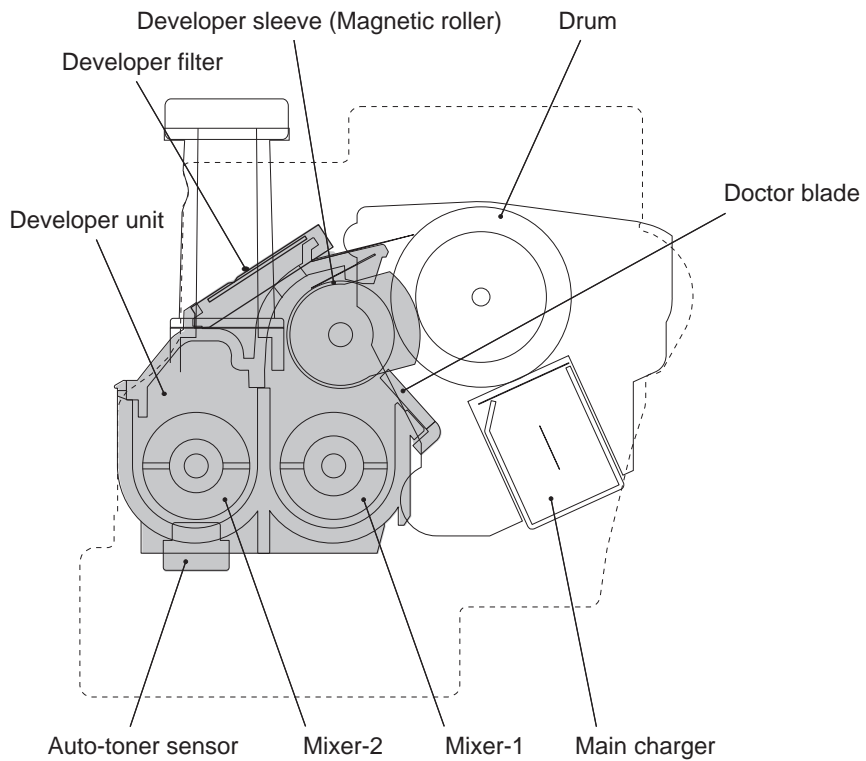


Fig. 3-41

3.12.3 Functions

1. Developer material
The developer material consists of the carrier and toner. Since the developer material deteriorates after a long time use, periodic replacements are needed.
2. Developer filter
This filter equalizes pressure in the developer unit to prevent toner from blowing out of the unit.
3. Mixer
The carrier and toner are frictionized each other when the developer material is stirred. Then the carrier is positively charged (+) and the toner is negatively charged (-), and the toner is adhered by the electrostatic force.
4. Developer sleeve (Magnetic roller)
These aluminum rollers have magnets inside. The developer material is pulled by these magnets to form a magnetic brush. The magnets are fixed at their position so only the sleeve rotates. By this rotation, the developer material is transported to the developer sleeve. Then the magnetic brush formed at the developer sleeve sweeps over the drum surface and thus development is performed.
5. Doctor blade
The doctor blade controls the amount of the developer material from the developer sleeve so that the magnetic brush of the developer material can contact with the drum surface properly.
6. Auto-toner sensor (S22, 23, 24, 25)
To print out a precise image, the proportion (toner density ratio) of the carrier and the toner in the developer material needs to be always constant. The magnetic bridge circuit in the black auto-toner sensor detects the toner ratio in the developer material. This sensor supplies the toner from the toner cartridge.
7. Developer unit motor (M9)
This motor rotates the Y, M, C, K developer units. The drive of the motor is transmitted to each developer unit by gears in the following 2 lines: Developer motor → K developer unit, developer motor → C developer unit → M developer unit → Y developer unit
The one-way clutch is installed in the gear which links the drive. When the motor rotates normally, all the Y, M, C, K developer units rotate, when the motor rotates reversely, only the K developer unit rotates.
8. Toner motor (M2/M3/M4/M5)
These motors drive the paddles and auger in the toner cartridge and transport the toner filled in the cartridge to the developer unit. Each toner cartridge of Y, M, C and K mounts one toner motor correspondingly.
9. Waste toner paddle motor (M6)
This motor rotates the paddles mounted in the Waste toner box to level the Waste toner accumulated in the waste toner box. When the Waste toner paddle motor is locked by the Waste toner paddle motor lock detection sensor (S14), "Reboot the machine" appears. Also, if it is detected twice in a row, a service call (CD70) occurs.

10. Waste toner transport motor (M31)

This motor rotates the auger in the waste toner transport unit, and transports the waste toner discharged from each developer unit of Y, M, C and K or the transfer belt cleaner unit to the waste toner box.

11. Auger lock detection sensor (S42)

This sensor detects locking of the waste toner transport auger. When the waste toner transport auger stops rotating due to load growth and motor defects, this sensor detects locking.

12. Waste toner box full detection sensor (S13)

This sensor is a transmissive sensor to monitor the edge of the Waste toner box. When the Waste toner box becomes full of Waste toner and the accumulated Waste toner shields the sensor path, this sensor detects that the Waste toner box is full.

13. Waste toner box

This collects the residual toner scraped off on the drum surface by the cleaning blade and residual toner scraped off on the transfer belt by the transfer belt cleaning blade.

14. Waste toner cover open/close detection switch (SW8)

This switch detects opening/closing of the waste toner cover. This has also a structure in which the cover cannot be closed if no toner box has been installed.

3.12.4 Functions of the toner cartridge PC board (CTRG)

An IC chip is embedded in this board. Data such as identification information for the recommended TOSHIBA toner cartridge, thresholds to determine if the cartridge is nearly empty, and controlling data for the image quality to be optimal according to the toner characteristics are written in this chip. To measure the amount of toner remaining in the cartridge, when the value of the counter for the period of the toner cartridge rotation time (08-6246) is updated, this equipment writes the updated value into the toner cartridge PC board (CTRG).

These data written in the toner cartridge PC board (CTRG) enable the functions below, and accordingly this equipment operates as shown below.

Data reading is performed every time when the power is turned ON, the front cover is closed, a job is finished and the equipment has recovered from the sleep mode.

[1] Data read by the toner cartridge PC board (CTRG)

- Data to identify recommended TOSHIBA toner cartridges
- Thresholds to determine if the toner cartridge is nearly empty
- Value of the counter for the period of the toner cartridge rotation time
- Data for optimizing image quality
- Threshold of toner remaining displays
- Color code

[2] Functions

- Cartridge detecting function
This function checks whether the toner cartridge is inserted correctly or not, and whether the recommended toner cartridge is used or not.
- Toner remaining check function
This function notifies the user of the near-empty status of toner. Normally, the message “Toner is low” is displayed when the toner is running out, and “Toner empty” when the toner cartridge is empty.
- Toner remaining check notification function
Upon detecting the near-empty status of toner, this function automatically notifies your service representative.
- Image optimization function
This function controls the quality of images to be optimal according to the characteristics of the toner used.
- Toner remaining display function
This function displays the remaining toner amount in 5 phases: 0%, 25%, 50%, 75% and 100%.
- Color code check function
This function checks that the color toner cartridge is installed in each correct station of Y, M, C and K. C910 appears when a color code checking error occurred in two or more colors.

[3] Operations

A sign indicating that the toner cartridge is nearly empty appears in the following cases:

- The counter value for the toner cartridge rotation time has exceeded the threshold previously written in the toner cartridge PC board (CTRG). (Related code: 08-5155)
- The remaining amount of toner is equal to or less than the set amount (percentage or number of sheets). (Related code: 08-5155, 5810, 5811)

When a used cartridge refilled with new toner is used, a sign indicating that the toner cartridge is empty appears because information for determining the empty status is already written in the toner cartridge PC board (CTRG).

When a non-recommended toner cartridge is used, “Toner not recognized” appears on the control panel, and then the equipment may stop normal operations. The toner remaining display function, the toner remaining check function, the automatic remote supply order to TOSHIBA sales representatives and the image optimization function may also be disabled.

The self-diagnosis codes to adjust the timing for displaying the toner near-empty status are as follows.

- Toner near-empty status threshold setting (08-5155)

<Setting value>

0: The period from the appearance of the toner near-empty sign to the actual complete consumption of the toner is set to long.

1: Normal (Default)

2: The period from the appearance of the toner near-empty sign to the actual complete consumption of the toner is set to short.

4: Toner near-empty status threshold value: (%)

5: Toner near-empty status threshold value: (Number of sheets)

- Toner near-empty status threshold value setting (%) (08-5810)

Use this code to specify the threshold value (unit:%) for displaying the toner near-empty status. This code is used when the value of 08-5155 is set to "4".

Sub-code 0: K, sub-code 1: Y, sub-code 2: M, sub-code 3: C

- Toner near-empty status threshold value setting (number of sheets) (08-5811)

Use this code to specify the threshold value (unit: number of sheets) for displaying the toner near-empty status. This code is used when the value of 08-5155 is set to "5".

Sub-code 0: K, sub-code 1: Y, sub-code 2: M, sub-code 3: C

3.13 Transfer Unit

3.13.1 General Descriptions

Transfer is a process of decaling a toner image from the photoconductive drum onto paper. A toner image formed on the photoconductive drum is temporarily transferred onto the transfer belt, and the toner image is then transferred from the transfer belt onto paper. The first transfer from the drum to the transfer belt is called the 1st transfer, and the second transfer from the transfer belt to paper is called the 2nd transfer. To form a color image, the images of yellow (Y), magenta (M), cyan (C) and black (K) are transferred and overlaid on the transfer belt in order, and then the overlaid images are transferred onto paper. After the completion of the 2nd transfer, the residual toner on the transfer belt is scraped off by the transfer belt cleaning blade and then transported to the waste toner box.

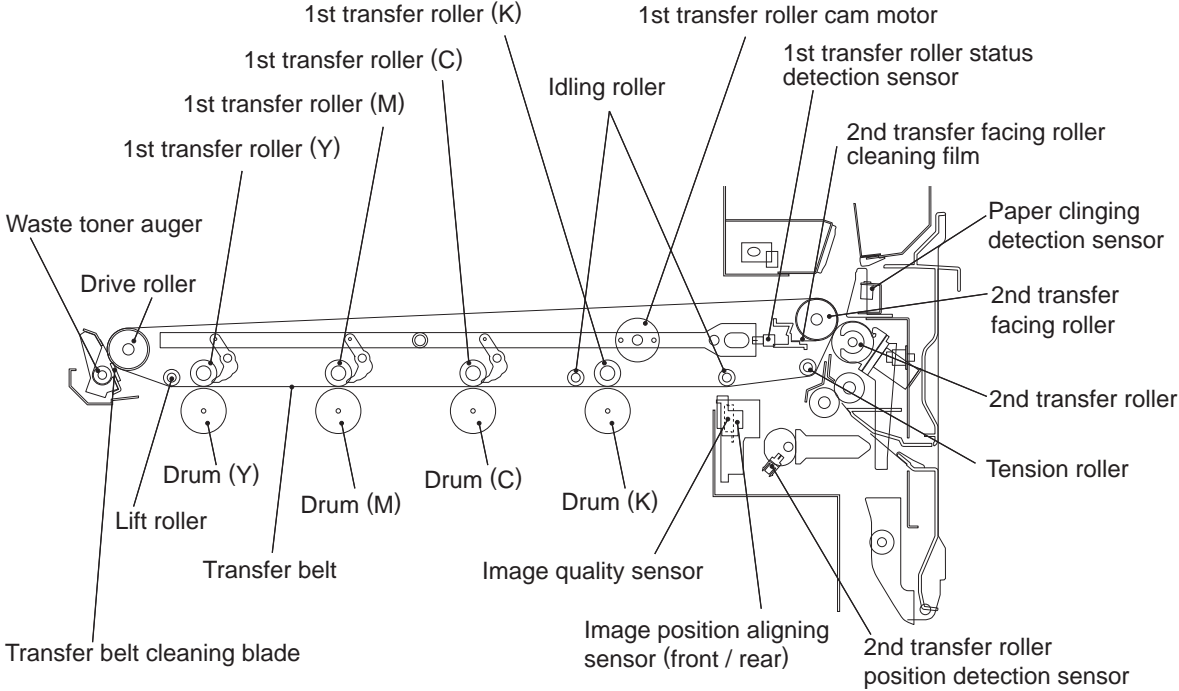


Fig. 3-42

3.13.2 Composition

Transfer belt unit	Transfer belt	
	1st transfer roller	Y, M, C, K
	Drive roller	
	Tension roller	
	2nd transfer facing roller	
	Lift roller	
	Idling roller	
	1st transfer roller cam motor	M8
	1st transfer roller status detection sensor	S15
	2nd transfer facing roller cleaning film	PM parts
	Transfer belt cleaning	Transfer belt cleaning blade
Waste toner auger		
Transfer belt motor		M7
2nd transfer unit	2nd transfer roller	PM parts
	2nd transfer roller position detection sensor	S29
	Paper clinging detection sensor	S27
Image position aligning sensor (front / rear)		S16 / S17
Image quality sensor		S18
Registration motor		M19

3.13.3 Difference of transfer belt unit

Item	e-STUDIO2020C/2330C/2820C/2830C/ 3520C/3530C/4520C	e-STUDIO2040C/2540C/3040C/3540C/4540C
Punch mark	(No mark)	H14X

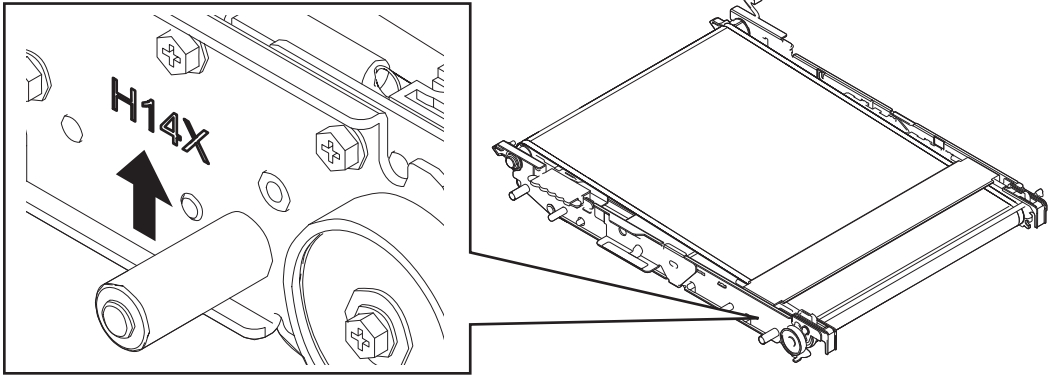


Fig. 3-43

3.13.4 Contacting and releasing movement of the 2nd transfer roller

The contacting and releasing movement of the 2nd transfer roller is driven by the registration motor (M19).

When the registration motor (M19) is rotated in reverse, a gear with a one-way clutch is rotated together with a coaxially mounted cam.

When the cam is rotated, a pusher pushes the holder of the 2nd transfer roller to release it.

The contacting and releasing status of the roller is detected by the 2nd transfer roller position detection sensor (S29).

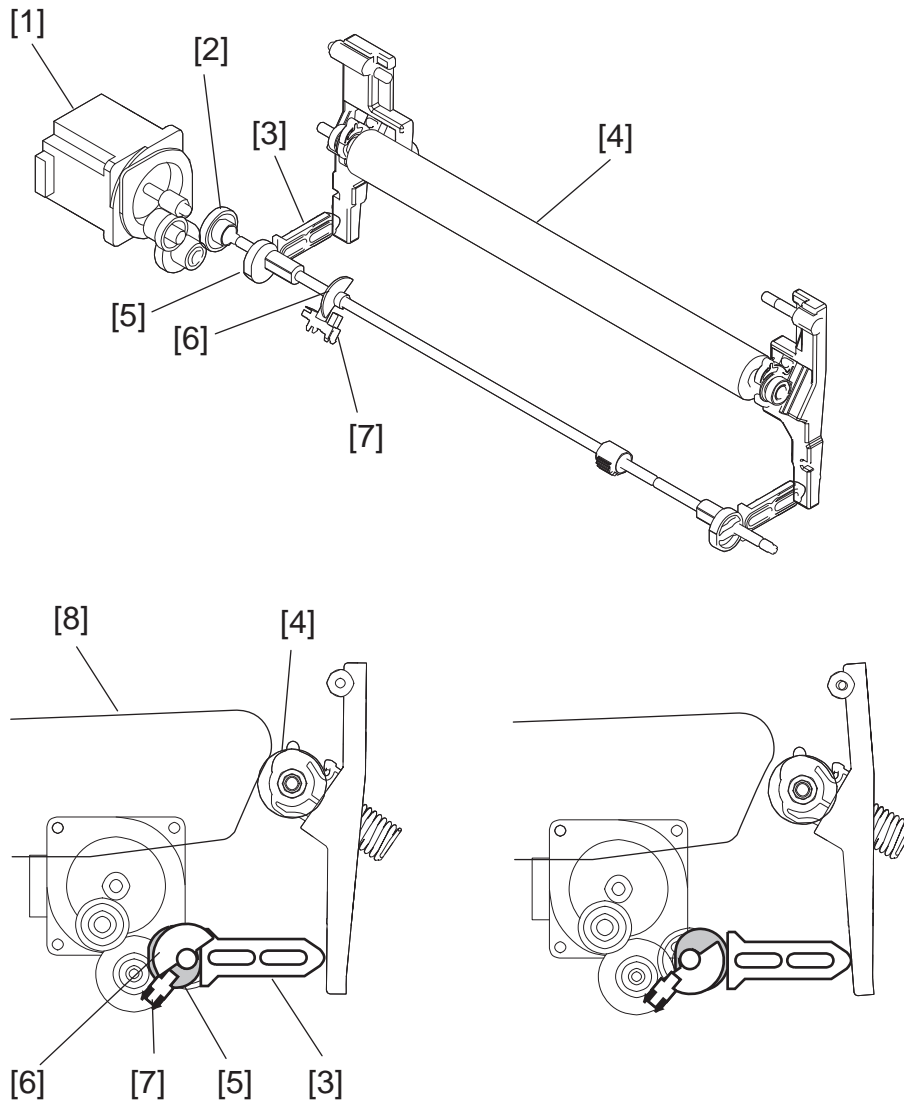


Fig. 3-44

- [1] Registration motor (M19)
- [2] Gear with a one-way clutch
- [3] Pusher
- [4] 2nd transfer roller
- [5] Cam
- [6] Actuator
- [7] 2nd transfer roller position detection sensor (S29)
- [8] Transfer belt

3.14 Image Quality Control

3.14.1 General Description

In this equipment, image quality is controlled by the image quality sensor (S18). At this control, image forming conditions are automatically adjusted so as to minimize the change in the image density or tone reproduction caused by the fluctuation of working environment or life of supply items.

At first, the image quality sensor (S18) operates to output reflected light amount voltage when no toner image is formed on the transfer belt. The output voltage is then converted analog-to-digital to be output as the reflected light amount signal. The light source amount voltage of the sensor is adjusted to correspond with the value set in advance and the output value of reflected light amount signal at this adjustment is stored. This output value is considered as the reading of the belt surface. Next, the sensor outputs the reflected light amount signal when a test pattern is developed on the transfer belt. This output value is considered as the reading of the toner image.

The difference between the reading of the transfer belt and that of the toner image is defined as toner adhesion amount. Image forming conditions are determined in approximating this toner adhesion amount to the value set in advance.

In addition, a shutter operated by the sensor shutter solenoid (SOL2) is equipped on the light receiving/emitting surfaces to prevent stain to the sensor.

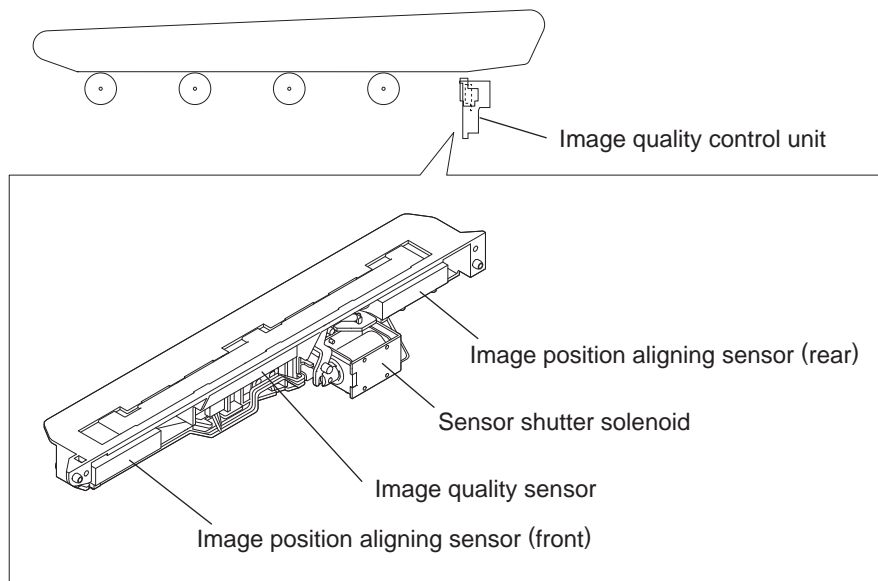


Fig. 3-45

3.15 Fuser unit / Paper exit section

3.15.1 General Description

Toner is fused by applying heat and pressure on the transferred image on the paper which is transported to the fuser unit. The paper is then transported to the inner tray, paper exiting options or ADU. The fuser unit consists of the heater lamps, heat roller, fuser roller, fuser belt, pressure roller, separation fingers, separation plate, thermopiles, thermistors, thermostats, etc.

The heat roller, fuser roller and pressure roller in the fuser unit are driven by the fuser motor, and the exit roller is driven by the exit motor.

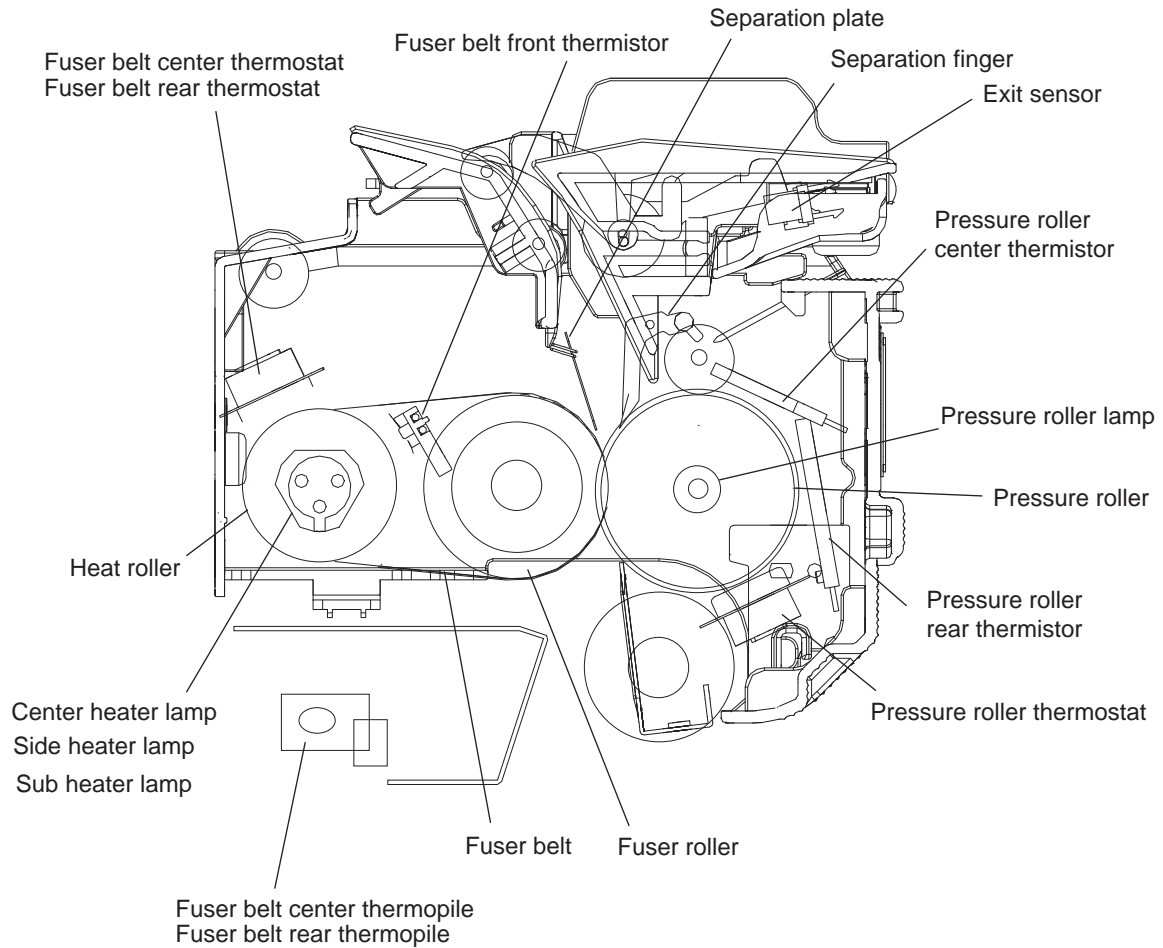


Fig. 3-46

3.15.2 Composition

Fuser belt unit	Fuser belt	PM parts
	Fuser belt guide	PM parts
	Fuser roller	PM parts
	Heat roller	
Center heater lamp		LAMP1 (600 W)
Side heater lamp		LAMP2 (600 W)
Sub heater lamp (e-STUDIO4540C only)		LAMP4 (280 W)
Fuser belt center thermopile		THMP1
Fuser belt rear thermopile		THMP2
Fuser belt front thermistor		THM3
Fuser belt center thermostat		THMO1
Fuser belt rear thermostat		THMO2
Pressure roller		PM parts
Pressure roller lamp		LAMP3 (MJD: 350 W) (except MJD: 280 W)
Pressure roller center thermistor		THM4
Pressure roller rear thermistor		THM5
Pressure roller thermostat		THMO3
Separation finger		PM parts
Separation plate		
Fuser motor		M17
Exit sensor		S26
Exit roller		
Exit motor		M18

3.15.3 Difference of fuser unit

Item	e-STUDIO2020C/2330C/2820C/2830C/ 3520C/3530C/4520C	e-STUDIO2040C/2540C/3040C/3540C/4540C
Lot No.	Black color	Red color

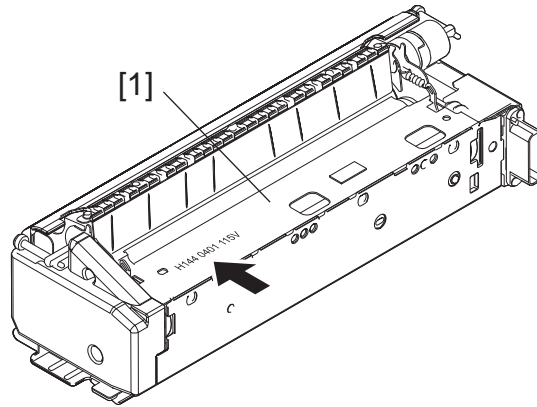


Fig. 3-47

[1] Plate

3.15.4 Electric Circuit Description

[1] Fuser unit control circuit

[1-1] Configuration

In this equipment, 3 heater lamps (center, side, and sub*) which have different heat-generating positions are installed in the heat roller to heat up the fuser belt. Also, one heater lamp (pressure roller lamp) is installed in the pressure roller. The fusing temperature is controlled by turning ON/OFF these heater lamps with the command from the ASIC on the LGC board.

The surface temperature of the fuser belt is detected by a thermistor (fuser belt front thermistor) and 2 thermopiles (fuser belt center and rear thermopiles: non-contact type sensors), and the surface temperature of the pressure roller is detected by 2 thermistors (pressure roller center and rear thermistors). And then the information of these temperatures is input to the ASIC through an A/D converter.

Based on the detected temperature, the ASIC transmits the control signal of the heater lamp to the drive circuit (TRC: Triac) of each heater lamp on the switching regulator via the heater lamp control circuit. The power supply to each heater lamp is thus controlled by driving TRC.

The forcible power-OFF circuit detects the overheating of the fuser belt and pressure roller by each thermistor/thermopile. In case that the surface temperature of the fuser belt or the pressure roller has exceeded the specified temperature, the forcible power-OFF circuit transmits an overheat detection signal to the ASIC and the heater lamp control circuit and transmits a reset signal to the relay in the power supply unit to turn the relay OFF forcibly.

In addition, if these control circuits do not function due to thermistor abnormality or for other reasons and the fuser belt or the pressure roller is abnormally overheated as the result, 3 thermostats (fuser belt center and rear thermostats, pressure roller thermostat) shut off the power supply to the heater lamps to protect the equipment.

*: e-STUDIO4540C only

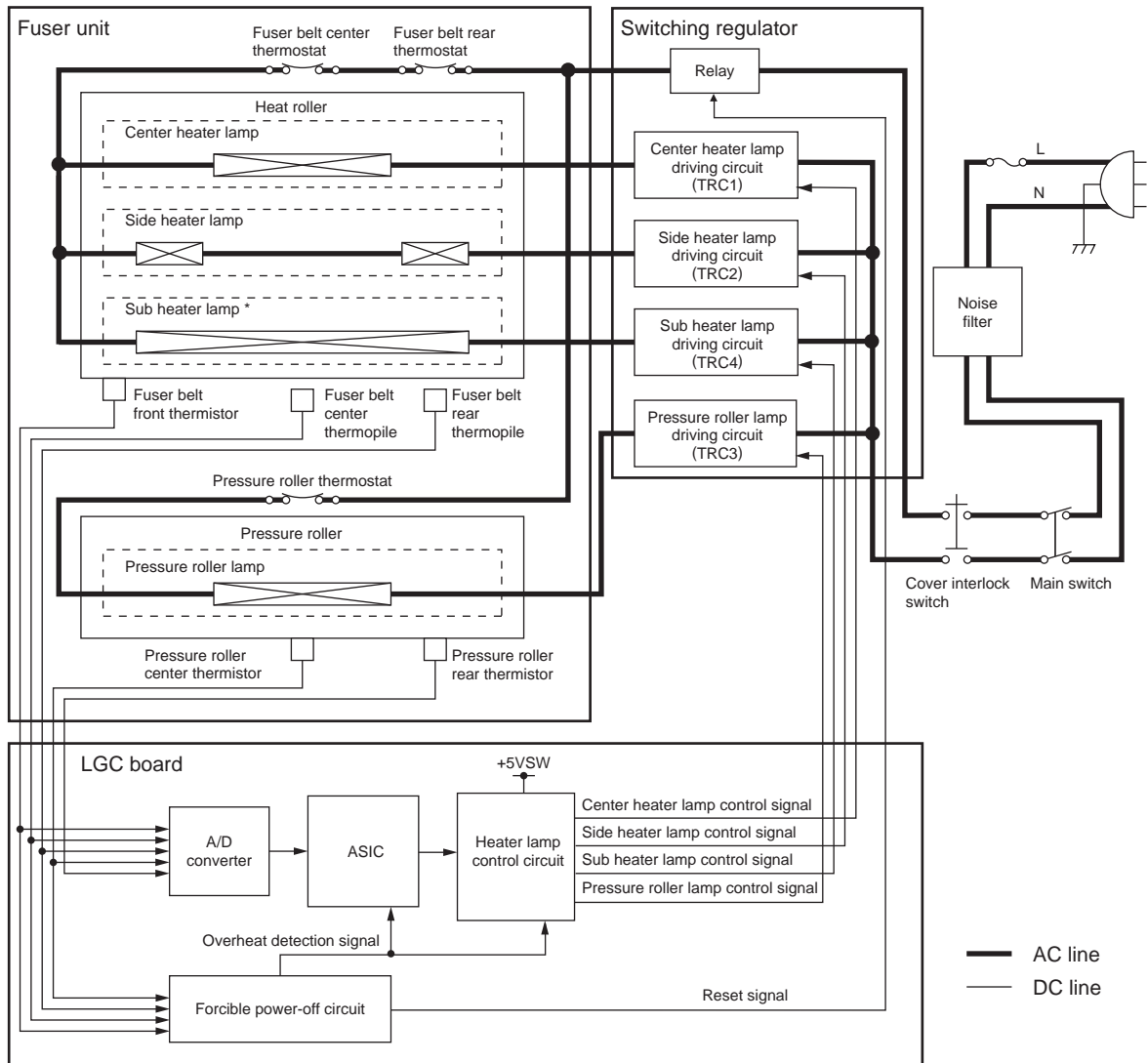


Fig. 3-48

[1-2] Temperature detection section

Fuser unit error status counter control

- To enhance the safety of the fusing section unit, engine CPU provides the following protection:
When the third [C411] error has occurred after two consecutive [C411] errors, the heater lamp is not turned ON and error [C412] is displayed immediately even if an operator turns OFF the power and back ON. However, if the equipment goes into a ready state normally with the fuser unit error status counter "1" or below, the counter is cleared to "0".
- If the error codes [C411] to [C468] are displayed and still not cleared even though the thermistor, thermopile, thermostat and heater lamp have been repaired (and the power ON/OFF does not clear the error), check the Setting Mode (08-2002) to set the fuser unit error status counter to "0".

Remarks:

The fuser unit error status counter (Setting Mode (08-2002)) never has values other than 0 to 51.

- The error [C450] is not determined at its first occurrence. When it occurred for the first time, turn the power of the equipment OFF and then back ON and if temperature abnormality is resolved, the fuser unit error status counter is reset to "0". When it occurred twice or more consecutively, the error [C451] or [C452] is determined. When it occurred three times or more consecutively, the error [C451] or [C452] is determined and the error code is displayed. In this case heater lamps are not turned ON even after the power is turned OFF and then back ON.

Remarks:

Any value other than 1 to 9, 18 to 29, 31 to 39, 41, 42, 45, 48 to 51 will not be written for the code "fuser unit error status counter (08-2002)

- If the heater lamps do not turn ON and the service call [C411] or [C412] is displayed immediately after the power is ON, ensure the fuser unit error status counter is "2" or over. If it is "2" or over, be sure to check the thermistor, thermopile, thermostat and heater lamp. Reset the counter to "0" after repairing them, then turn ON the power.
- If the fuser unit error status counter is "52" or over (e.g., 60), the data in SRAM or SRAM itself may possibly have been ruined due to causes such as leakage from the chargers.
Check the bias, high-voltage transformers and needle electrodes to see if any of them is defective, and also look through all the data in the SRAM.
- When the thermistors detect overheating, the engine CPU decides the error code and counter value of the fuser unit error status. After turning OFF each output (the heater lamp, exposure lamp, control panel display, motors and so on), the engine CPU turns OFF the power to protect the fuser unit.

Error code: C449, C468 ([C] and [8])

Counter value of the fuser unit error status: 8, 9, 18 to 23, 25 to 29 (08-2002)

Thermistors and thermopiles continue detecting the abnormal temperature even after the error codes and counter values are decided. Even if the power is turned ON immediately, it is automatically turned OFF again when the surface temperature of the fuser belt is still higher than the abnormal temperature detected.

Wait until the surface temperature of the fuser belt is lowered enough, and turn ON the power to check the counter value while it is turned OFF again. After confirming that it is the fuser unit abnormality, correct the abnormality and reset the counter value (08-2002) to "0" to start up the equipment normally.

Temperature detection circuit

The thermistor is a device whose resistance varies according to the detected temperature, and the thermopile is a device whose output voltage varies according to the detected temperature. The ASIC detects voltages output from these devices, and judges whether the operation of the fuser unit is normal or abnormal from the changes in voltages.

If one of the thermistors and thermopiles is broken, the control circuit judges that the temperature of the fuser belt or pressure roller is extremely low and keeps turning the heater lamps ON. As a result, the temperature of the fuser belt or pressure roller rises, and possibly activates the thermostat which is a safety protection device. To prevent this in advance, the ASIC works to detect whether each thermistor and thermopile is broken or not.

Also, the control circuit constantly checks the temperature of the heat roller and the pressure roller to prevent them from excessive heating by circuit abnormality or thermistor abnormality, and automatically shuts OFF the power when one of these temperatures exceeds the specified temperature.

Abnormality detection by the thermistors and thermopiles

The following table shows the conditions for judging the temperature abnormality of the fuser belt and pressure roller, and the detecting timing.

Check timing	Condition	Temperature judged					Error code	Counter (08-2002)	Error judging timing
		Fuser belt thermistor / thermopile			Pressure roller thermistor				
		Front	Center	Rear	Center	Rear			
Power ON	1	250°C or above	---	---	---	---	C449	9	Power ON
		---	220°C or above	---	---	---			
		---	---	230°C or above	---	---			
		---	---	---	210°C or above	---	C468	8	
		---	---	---	---	200°C or above			
	2	---	40°C or below	150°C or above	---	---	C412	2	
---		150°C or above	40°C or below	---	---				
Detecting 40°C	1	250°C or above	---	---	---	---	C449	19	On usual
		---	220°C or above	---	---	---			
		---	---	230°C or above	---	---			
		---	---	---	210°C or above	---	C468	18	
		---	---	---	---	200°C or above			
	2	---	40°C or below	---	---	---	C412 (C411)	2 (1)	
		---	---	40°C or below	---	---			
		The temperature of the fuser unit front section is 50°C higher or more than that of the fuser unit center section for more than 2 seconds.				---	---	C451 (C450)	
---	The temperature of the fuser unit front section is 50°C higher or more than that of the fuser unit center section for more than 2 seconds.			---	---	C452 (C450)	50 (48)		

Check timing	Condition	Temperature judged					Error code	Counter (08-2002)	Error judging timing	
		Fuser belt thermistor / thermopile			Pressure roller thermistor					
		Front	Center	Rear	Center	Rear				
Detecting 120°C	1	250°C or above	---	---	---	---	C449	21	On usual	
		---	220°C or above	---	---	---				
		---	---	230°C or above	---	---				
		---	---	---	210°C or above	---	C468	20		
		---	---	---	---	200°C or above				
	2	---	120°C or below	---	---	---	C446 (C443)	6 (3)	Fixed time	
		---	---	120°C or below	---	---				
		The temperature of the fuser unit front section is 50°C higher or more than that of the fuser unit center section for more than 2 seconds.			---	---	C451 (C450)	42 (39)		
		---	The temperature of the fuser unit front section is 50°C higher or more than that of the fuser unit center section for more than 2 seconds.		---	---	C452 (C450)	51 (49)		
	When pre-running end temperature or ready temperature is detected	1	250°C or above	---	---	---	---	C449	22	On usual
---			220°C or above	---	---	---				
---			---	230°C or above	---	---				
---			---	---	210°C or above	---	C468	20		
---			---	---	---	200°C or above				
2		---	Ready temperature or below	---	---	---	C446 (C445)	6 (5)	Fixed time	
		---	---	Ready temperature or below	---	---				
		---	---	---	Ready temperature or below	---	C466 (C465)	6 (5)		Fixed time
		---	---	---	---	Ready temperature or below				

Check timing	Condition	Temperature judged					Error code	Counter (08-2002)	Error judging timing		
		Fuser belt thermistor / thermopile			Pressure roller thermistor						
		Front	Center	Rear	Center	Rear					
During ready	1	---	BHCON or BHSON signal is ON for more than 40 seconds while temperature detected by the pressure roller center thermistor is 80°C or higher.				C448	32	On usual		
		250°C or above	---	---	---	---	C449	23			
		---	220°C or above	---	---	---					
		---	---	230°C or above	---	---					
		---	---	---	210°C or above	---	C468	26			
		---	---	---	---	200°C or above					
	2	40°C or below	---	---	---	---	C447	7			
		---	40°C or below	---	---	---					
		---	---	40°C or below	---	---					
		---	---	---	40°C or below	---				C467	33
---		---	---	---	40°C or below						
During printing	1	250°C or above	---	---	---	---	C449	25	On usual		
		---	220°C or above	---	---	---					
		---	---	230°C or above	---	---					
		---	---	---	210°C or above	---				C468	26
		---	---	---	---	200°C or above					
	2	40°C or below	---	---	---	---	C447	24			
		---	40°C or below	---	---	---					
		---	---	40°C or below	---	---					
		---	---	---	40°C or below	---				C467	34
		---	---	---	---	40°C or below					

Check timing	Condition	Temperature judged					Error code	Counter (08-2002)	Error judging timing
		Fuser belt thermistor / thermopile			Pressure roller thermistor				
		Front	Center	Rear	Center	Rear			
At energy saving mode	1	250°C or above	---	---	---	---	C449	27	On usual
		---	220°C or above	---	---	---			
		---	---	230°C or above	---	---			
		---	---	---	210°C or above	---	C468	26	
		---	---	---	---	200°C or above			
At paper jam	1	250°C or above	---	---	---	---	C449	29	On usual
		---	220°C or above	---	---	---			
		---	---	230°C or above	---	---			
		---	---	---	210°C or above	---	C468	28	
		---	---	---	---	200°C or above			

* The figures in the "Condition" field denote the priority of error checking.

* The figures in the "Error code" and "Counter" fields with parentheses denote that an error status has not yet been determined (= error status is detected only once).

3.16 Automatic Duplexing Unit (ADU)

3.16.1 General Description

The Automatic Duplexing Unit (ADU) is a unit to automatically print on both sides of paper. A switchback method using the exit roller is adopted for the ADU of this equipment.

A sheet of paper is switchbacked by the exit roller right after the printing operation (fusing operation) on one side is completed, and the reversed sheet is transported to the registration section for the other side of the sheet to be printed.

The ADU mainly consists of the transport rollers and their drive system, paper guide and ADU entrance / exit sensor.

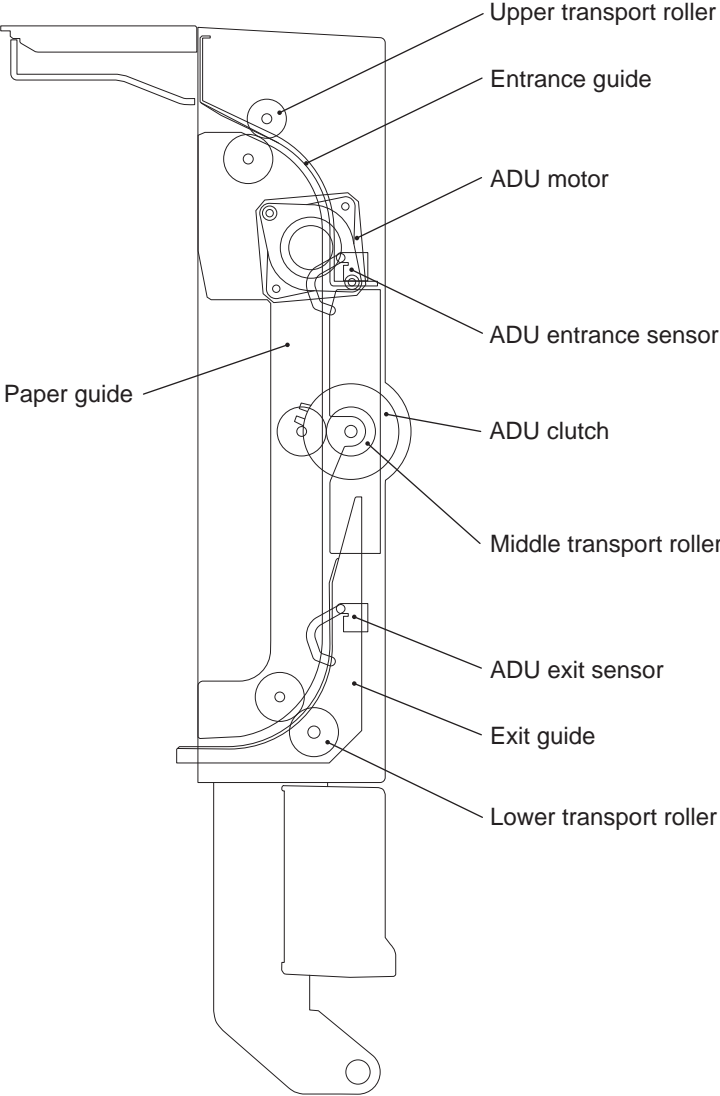


Fig. 3-49

3.16.2 Composition

Automatic Duplexing Unit (ADU)	
ADU motor	M22: Stepping motor
ADU clutch	CLT7
ADU entrance sensor	S38
ADU exit sensor	S39
ADU opening/closing switch	SW7
ADU driving PC board	ADU
Upper transport roller	
Middle transport roller	
Lower transport roller	

3.16.3 Drive of ADU

When the ADU motor (M22) rotates to the direction A, the upper transport roller is rotated driven by the gears and belt. The ADU clutch (CLT7) is then turned ON and the middle transport roller and lower transport roller are rotated.

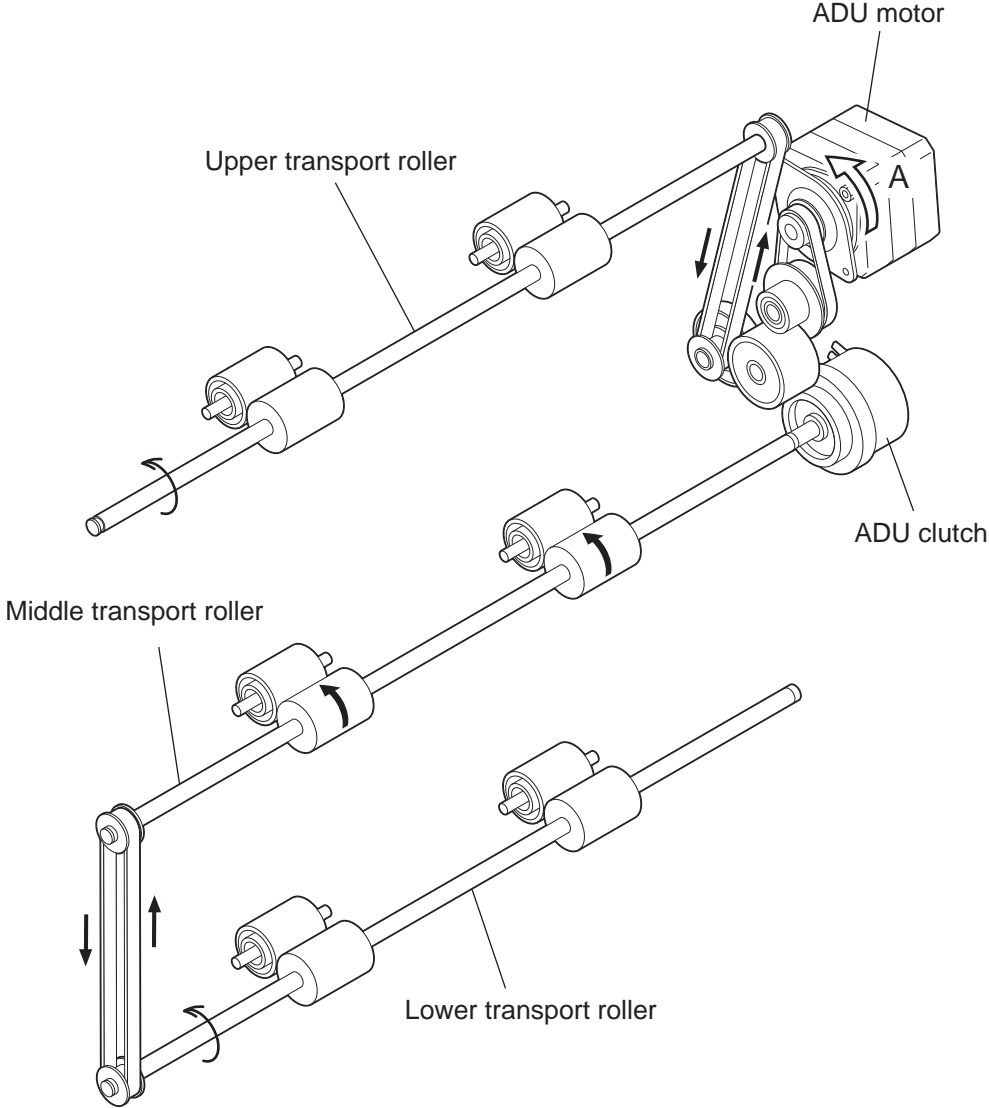


Fig. 3-50

3.16.4 Description of Operations

The back side printing (recording data of the back side of paper) is performed first by selecting duplex printing mode and pressing the [START] button. When the trailing edge of the paper passes the exit gate, the paper is switchbacked by the exit roller and transported into the ADU (the exit gate is closed with its own weight), and then the switchbacked paper is transported with acceleration. The transportation decelerates when the ADU exit sensor (S39) detects the paper. The front side printing (recording data of the front side of paper) is performed at the registration section. The paper passes through the exit gate again and is transported to the inner tray to complete duplex printing.

There are three methods of judging a paper jam: (1) whether the ADU entrance sensor (S38) is turned ON or not in a specified period of time after the switchback to the ADU started (E510). (2) whether the ADU exit sensor (S39) is turned ON or not in a specified period of time after the ADU entrance sensor (S38) is turned ON (E520). (3) whether the registration sensor (S28) is turned ON or not in a specified period of time after the paper feeding from the ADU to the equipment (E110).

If the ADU is opened during duplex printing, the ADU motor (M22) and ADU clutch (CLT7) are stopped, namely, ADU open jam occurs (E430).

The equipment is never to be stopped during printing by interruption in any case except paper jam or service call, if paper remains in the ADU.

The operation of the duplex printing differs depending on the size of the paper; single-paper circulation and alternateness circulation. The figures in the following pages show the circulating operations during duplex copying. The numbers in the figures indicate the page numbers.

1. Single-paper circulation

With the paper larger than A4/LT size, duplex printing (back-side printing→front-side printing) is performed for one sheet at a time as shown below.

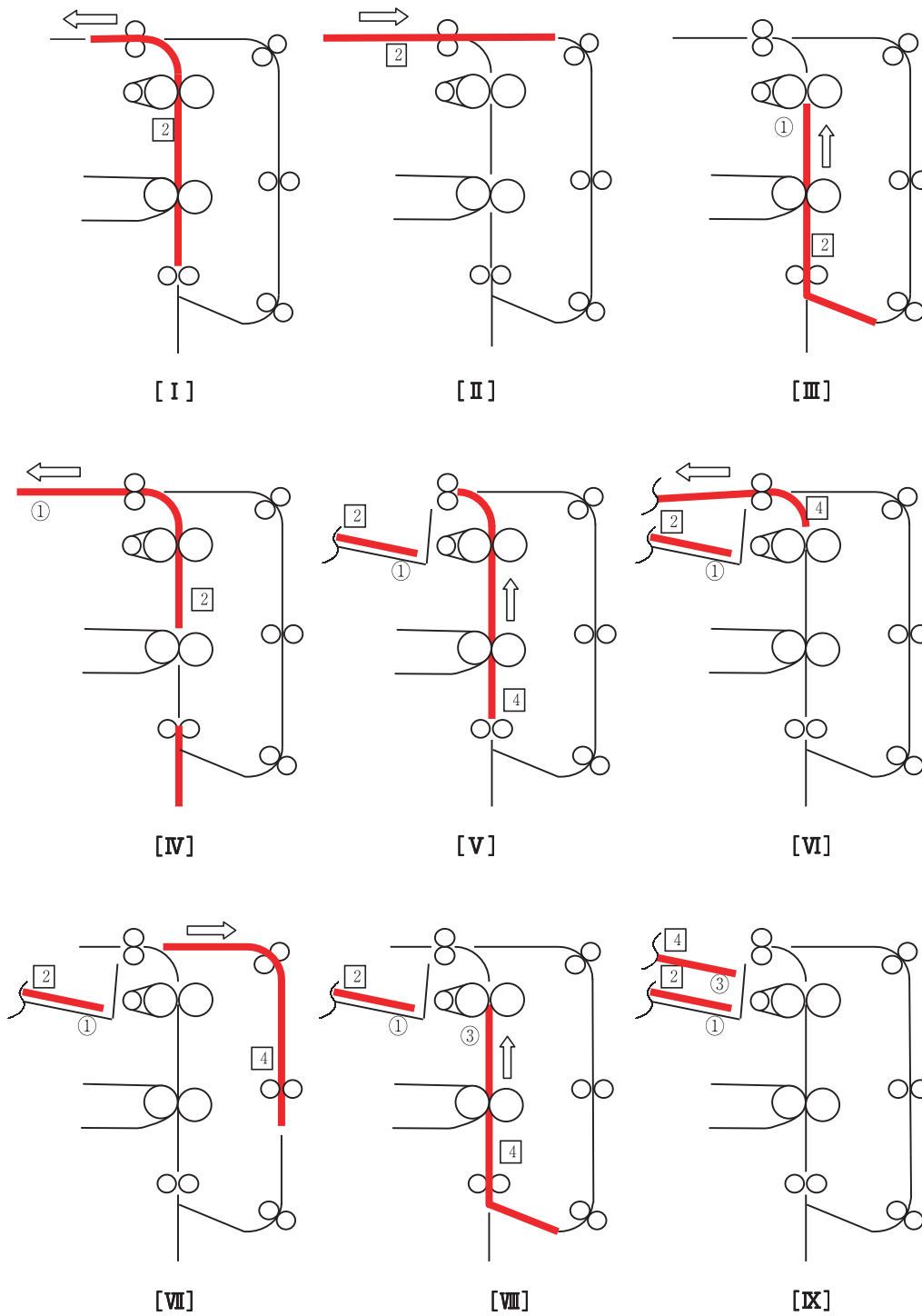


Fig. 3-51

3.17 Power Supply Unit

3.17.1 General description

The power supply unit consists of AC filters, insulation-type DC output circuits and heater lamp control circuits in order to supply stable DC and AC voltage to each electric part of this equipment.

3.17.2 Functions

The power supply unit consists of the AC filter, insulation type DC output circuits and heater lamp control circuit.

1. AC filter
Eliminates noise from the outside and prevents the noise generated by the equipment from leaking to the outside.
2. DC output circuits
Converts AC voltage input from outside to DC voltage and supplies it to each electric part. The DC voltage is divided into the following two lines.
 - a. Main power switch line:
Power supply used in the entire equipment during image forming process. Two kinds of voltage (+5.1 V and +12 V) are output when the main power switch of the equipment is turned ON.
 - b. Cover switch line:
Power supply used in the entire equipment during image forming process, being supplied via the cover switch. Two kinds of voltage (+5.1 VD and +24 VD) are output only when the main power switch of the equipment is turned ON and two covers (front cover and automatic duplexing unit) are closed.
3. Heater lamp control circuit
TRC (Triac) is driven by the heater control signal (BHCON, BHSON, PHON, SUBON) from the LGC board and then AC power is supplied to each heater lamp (center heater lamp, side heater lamp, sub heater lamp and pressure roller lamp) in the fuser unit.

3.17.3 Operation of DC Output Circuits

1. Starting operation of the equipment

When the main switch of the equipment is turned ON, power starts supplying to all the lines only when two doors (front cover and ADU) are closed

2. Stopping line output

When the main switch of the equipment is turned OFF, PWR-DN signal is output after the instantaneous outage insurance time elapses and then the supply of each voltage stops. If the supply of voltage of the main line (+5VS, +5VA, +12VA) stops earlier than the 24V line does, it may cause the damage of the electron device on each control circuit. To prevent this, the supply of these voltages stops after the PWR-DN signal is output and the minimum retaining time elapses.

3. Output protection

Each output system includes an overcurrent and overvoltage protection circuits (a fuse and internal protection circuit). This is to prevent the defectives (damage or abnormal operation of the secondary circuit) which may be caused by an overcurrent due to a short circuit or an overvoltage due to a short circuit between different voltages. If the protection circuit is activated (except the case the fuse is blown out), remove the causes such as short-circuit. Turn ON the power again to clear the overcurrent protection.

4. Recovering from super sleep mode (normal starting))

When the [ON/OFF] button on the control panel is pressed during the super sleep mode, a super sleep mode shifting/recovering signal (SYS-EN) is output from the SYS board and then voltage starts being supplied to all the lines, if no error was detected.

5. Shifting to super sleep mode (normal stopping)

When the [ON/OFF] button on the control panel is pressed for 1 second or more while the main switch of the equipment is toggled ON, a super sleep mode shifting/recovering signal (SYS-EN) is output from the SYS board after the initialization is finished and then all lines for output voltage except +5VS are closed.

The Super sleep mode is disabled under the following conditions.

- When the Super sleep mode is set to be disabled on the control panel, TopAccess and with the code 08-8543
- When the Wireless LAN Module, Bluetooth Module, e-BRIDGE ID Gate or Data Overwrite Enabler is installed, or when the IPsec Enabler is installed and its function is set to be enabled
- When operation is being performed in the self-diagnosis mode (Disabled until the main switch is turned OFF)

6. State of the power supply

- Power OFF
The main switch of the equipment is turned OFF. Since DC voltage is not supplied to each board, the equipment is not operable.
- Normal state (including Energy saving mode)
The main switch of the equipment is turned ON and DC voltage is supplied to each board. When the cover of the equipment is closed, 24V DC voltage is supplied and the equipment enters into the ready/printing state.
- Sleep mode
Since +5VB, +5VD, +12VB and +24V DC voltages are not supplied but +12VA, +5VA and +5VS DC voltages only, the equipment does not enter into the ready state.

- Super Sleep mode
Only DC voltage and +5VS are output from the power supply unit. The [ON/OFF] button is monitored and the LED of the main switch is lit.

3.17.4 Output Channel

The following are 2 output channels for the main power switch line.

- +5.1 V
 - +5.1 VS: CN402 Pin 7 and 8
Output to the SYS board
 - +5.1 VA: CN402 Pins 12, 13 and 14
Output to the SYS board
 - +5.1 VB: CN402 Pin 20
Output to the SYS board
 - +5.1 VB: CN403 Pins 2 and 3
Output to the IMG board
 - +5.1 VB: CN404 Pin 1
Output to the LGC board
 - +5.1 VB: CN405 Pin 1
Output to the LGC board, PFP/LCF board (via LGC board)
 - +5.1 VB: CN406 Pin 4
Output to the Finisher
 - +5.1 VB: CN407 Pin 1 and 2
Output to the SLG board, RADF
 - +5.1 VB: CN410 Pin 1
Output to the FIL board

- +12 V
 - +12 VA: CN402 Pins 17 and 18
Output to the SYS board
 - +12 VB: CN404 Pin 7
Output to the LGC board
 - +12 VB: CN407 Pin 14
Output to the SLG unit

The following are 2 output channels for the cover switch line.

- +5.1 V
 - +5.1 VD: CN405 Pin 4
Output to the LGC board

- +24 V
 - +24 VD1: CN405 Pin 5
Output to the LGC board
 - +24 VD2: CN405 Pin 6
Output to the LGC board
 - +24 VD3: CN405 Pin 7
Output to the LGC board, PFP/LCF (via LGC board)
High-voltage transformer (via LGC board)
 - +24 VD4: CN406 Pin 2
Output to the Finisher
 - +24 VD4: CN407 Pins 9, 10, 11 and 12
Output to the Finisher

Output voltage by the type of connector
main power switch line

Connector	Destination	Voltage
CN402	For the SYS board	+5.1 VA, +5.1 VB, +5 VS, +12 VA
CN403	For the IMG board	+5.1 VB
CN404	For the LGC, PFP/LCF (via LGC board)	+5.1 VB, +12 VB
CN405	For the LGC board	+5.1 VB
CN406	For the finisher	+5.1 VB
CN407	For the SLG board, RADF	+5.1 VB, +12 VB
CN410	For the FIL board	+5.1 VB

Cover switch line

Connector	Destination	Voltage
CN405	For the LGC board, PFP/LCF (via LGC board, high-voltage transformer (via LGC board))	+5.1 VD, +24 VD1, +24 VD2, +24 VD3
CN406	For the finisher	+24 VD4
CN407	For the SLG board, RADF	+24 VD

3.17.5 Fuse

When the power supply secondary fuse is blown out, confirm that there is no abnormality with each part using the following table.

Voltage	Board/Unit	Part		Fuse type
+24VD1	LGC board	Developer motor	M9	F201: 6.3 A (Semi time-lag)
		Polygonal motor	M13	
		Mirror motor-M	M14	
		Mirror motor-C	M15	
		Mirror motor-K	M16	
		Fuser motor	M17	
		Feed/transport motor	M20	
	PFP/LCF			
+24VD2	LGC board	Transfer belt motor	M7	F202: 6.3 A (Semi time-lag)
		Drum motor	M10	
		Exit motor	M18	
		Registration motor	M19	
+5.1VB	LGC board	-	-	F210
+5.1VS	SYS board	-	-	F206

Voltage	Board/Unit	Part		Fuse type
+24VD3	LGC board	Toner motor-Y	M2	F203: 6.3 A (Semi time-lag)
		Toner motor-M	M3	
		Toner motor-C	M4	
		Toner motor-K	M5	
		Used toner paddle motor	M6	
		1st transfer roller cam motor	M8	
		Drum switching motor	M11	
		Shutter motor	M12	
		Tray-up motor	M21	
		ADU motor	M22	
		Internal cooling fan	M23	
		Ozone exhaust fan	M24	
		Fuser/exit section cooling fan	M25	
		Laser unit cooling fan	M29	
		Waste toner transport motor	M31	
		EPU cooling fan	M33	
		Auto-toner sensor-Y	S22	
		Auto toner sensor-M	S23	
		Auto toner sensor-C	S24	
		Auto toner sensor-K	S25	
		1st drawer transport clutch (Low speed)	CLT1	
		1st drawer transport clutch (High speed)	CLT2	
		1st drawer feed clutch	CLT3	
		2nd drawer transport clutch (Low speed)	CLT4	
		2nd drawer transport clutch (High speed)	CLT5	
		2nd drawer feed clutch	CLT6	
		ADU clutch	CLT7	
		Bypass feed clutch	CLT8	
		Bypass pickup solenoid	SOL1	
		Sensor shutter solenoid	SOL2	
Discharge LED-Y	ERS-Y			
Discharge LED-M	ERS-M			
Discharge LED-C	ERS-C			
Discharge LED-K	ERS-K			
High-voltage transformer	HVT			
Bridge unit				
Key copy counter, copy key card, coin controller				
+24VD4	SLG board	Scan motor	M1	F204: 6.3 A (Semi time-lag)
		Lamp inverter board	INV	
	RADF			
	Finisher			

4. DISASSEMBLY AND REPLACEMENT

4.1 Covers

4.1.1 Front cover

- (1) Open the front cover.
- (2) Raise 2 hinge pins on the right and left, and then pull them out.
- (3) Take off the front cover.

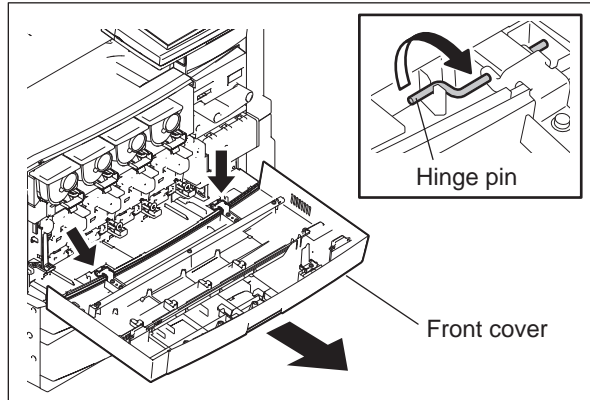


Fig. 4-1

4.1.2 Inner tray

- (1) Open the front cover.
- (2) Remove 2 screws and take off the inner tray.

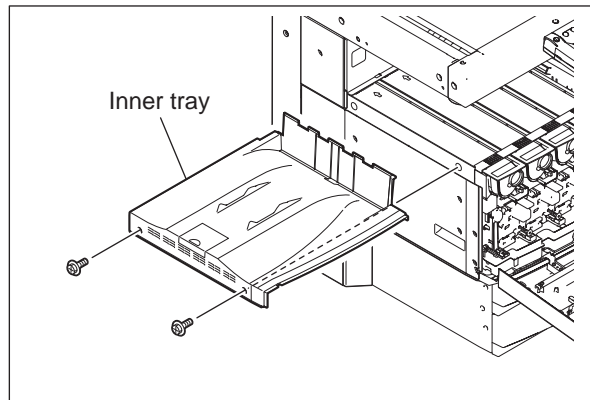


Fig. 4-2

4.1.3 Tray back cover

- (1) Take off the ozone filter-2.
📖 P. 4-105 "4.7.25 Ozone filter-2"
- (2) Take off the inner tray.
📖 P. 4-1 "4.1.2 Inner tray"
- (3) Remove 1 screw and take off the tray back cover.

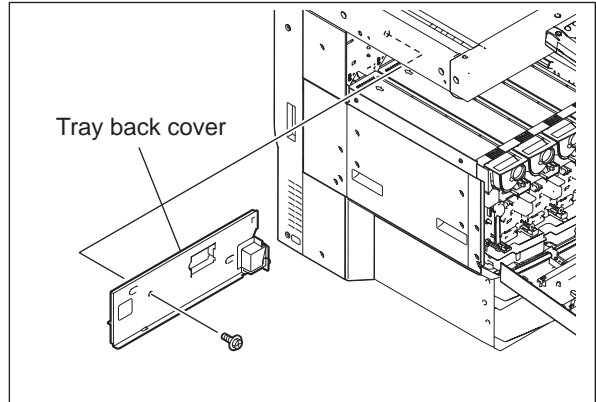


Fig. 4-3

4.1.4 Front upper cover

- (1) Remove 2 screws and take off the front upper cover.

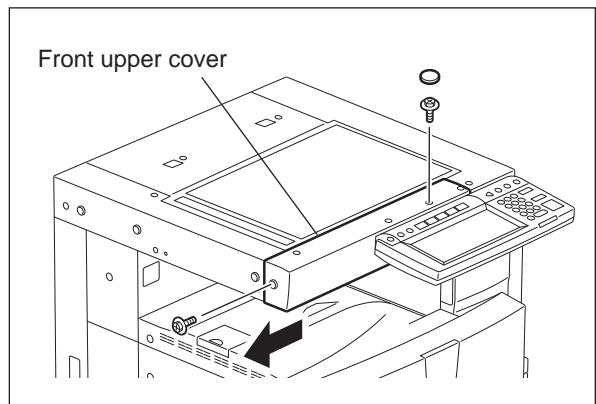


Fig. 4-4

4.1.5 Front right cover

- (1) Open the front cover and ADU.
- (2) Remove 2 screws and take off the TBU lifting lever.

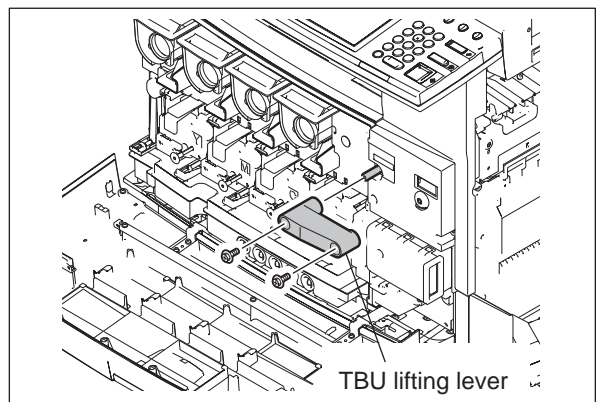


Fig. 4-5

- (3) Remove 2 screws, release 2 latches, and take off the front right cover.

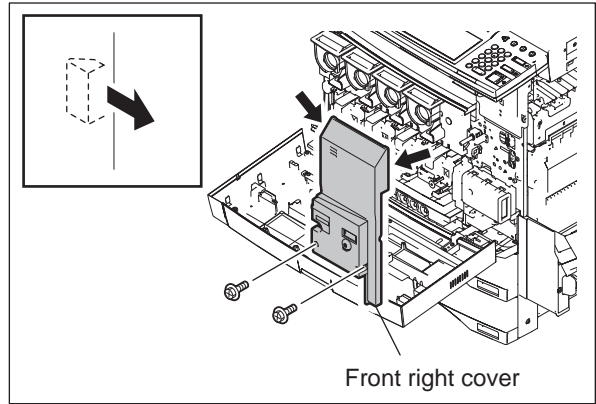


Fig. 4-6

4.1.6 Left upper cover

- (1) Remove 3 screws and take off the left upper cover.

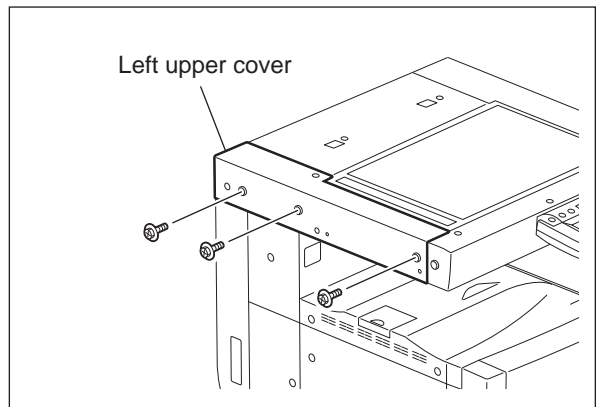


Fig. 4-7

4.1.7 Left cover

- (1) Remove 7 screws and take off the left cover.

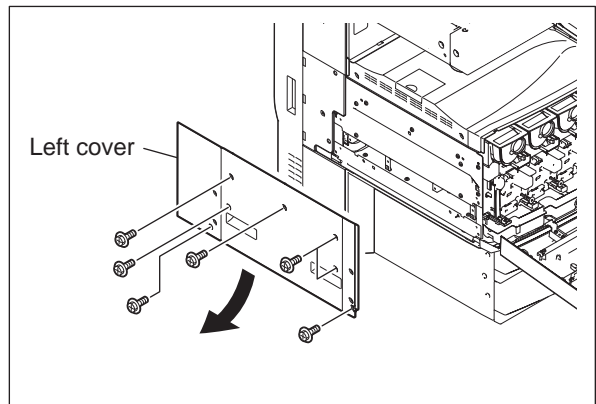


Fig. 4-8

4.1.8 Left lower cover

- (1) Open the waste toner cover.
- (2) Remove 6 screws and take off the left lower cover.

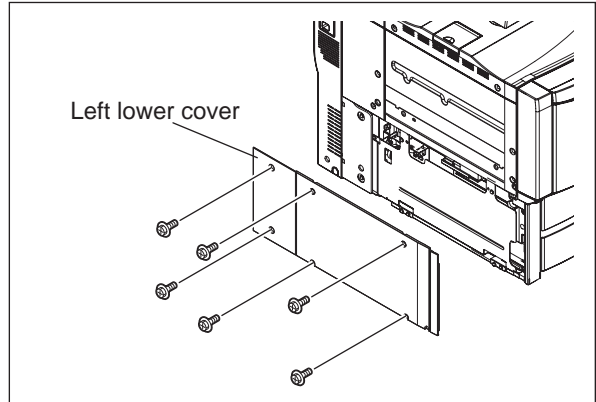


Fig. 4-9

4.1.9 Left rear cover

- (1) Take off the ozone filter-1.
P. 4-103 "4.7.21 Ozone filter-1"
- (2) Take off the left cover.
P. 4-3 "4.1.7 Left cover"
- (3) Take off the left lower cover.
P. 4-4 "4.1.8 Left lower cover"
- (4) Remove 5 screws and take off the left rear cover [1].

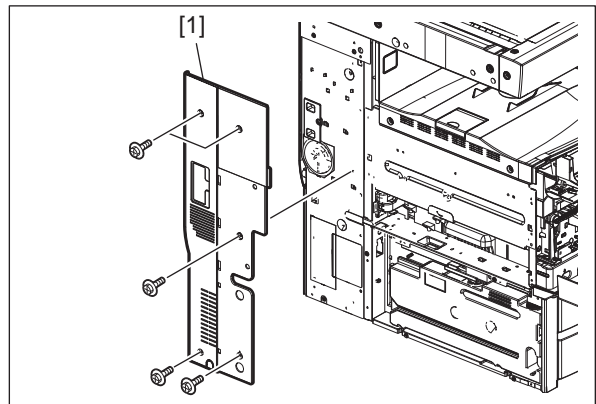


Fig. 4-10

4.1.10 Right upper cover

- (1) Remove 4 screws and take off the right upper cover [1].

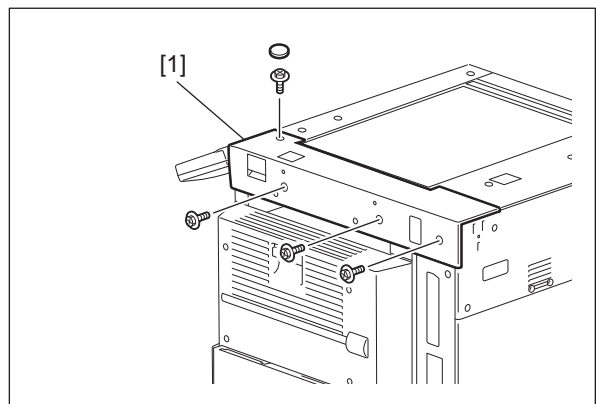


Fig. 4-11

4.1.11 Right rear cover

- (1) Remove 2 screws and take off the right rear cover [1].

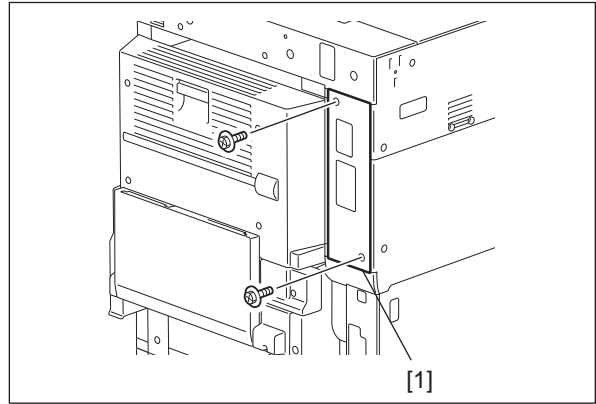


Fig. 4-12

4.1.12 Right rear hinge cover

- (1) Open the ADU.
- (2) Remove 2 screws and take off the right rear hinge cover.

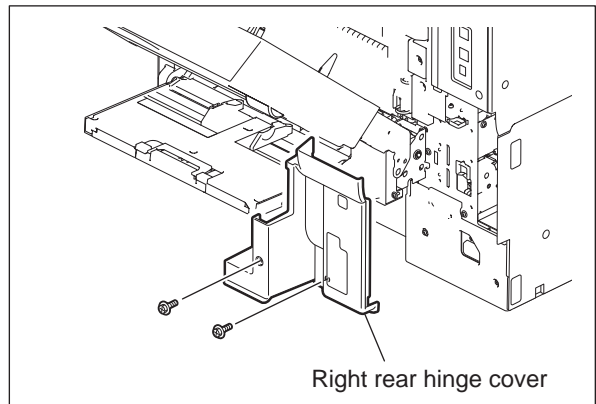


Fig. 4-13

4.1.13 Right lower cover

- (1) Take off the right rear hinge cover.
P. 4-5 "4.1.12 Right rear hinge cover"
- (2) Remove 2 screws and take off the right lower cover.

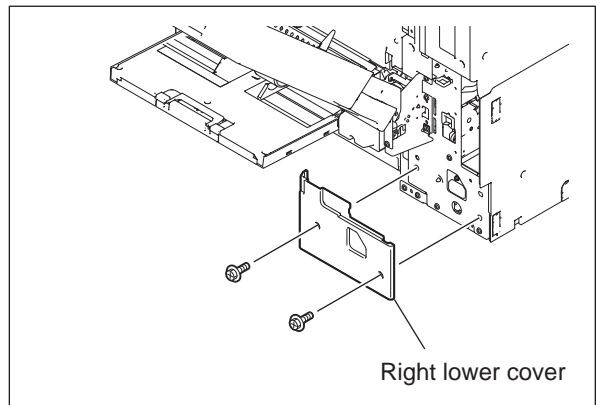


Fig. 4-14

4.1.14 Right front hinge cover

- (1) Pull out the upper and lower drawers.
- (2) Remove 2 screws and take off the right front hinge cover.

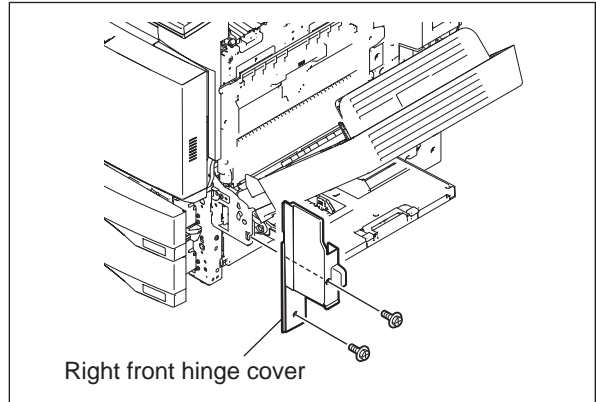


Fig. 4-15

4.1.15 Bypass rear cover

- (1) Remove 1 screw and take off the bypass rear cover.

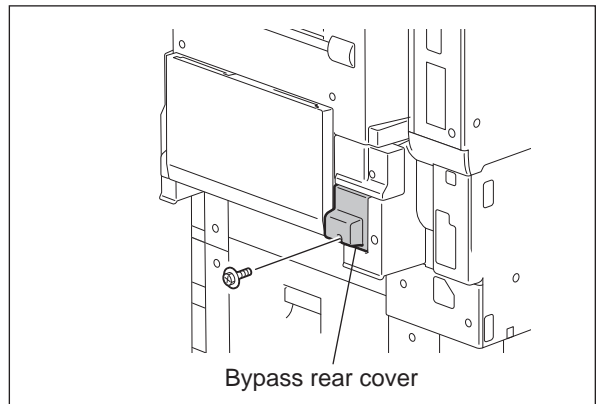


Fig. 4-16

4.1.16 Right inner cover

- (1) Open the ADU and 2nd transfer unit.
- (2) Remove 3 screws and take off the right inner cover.

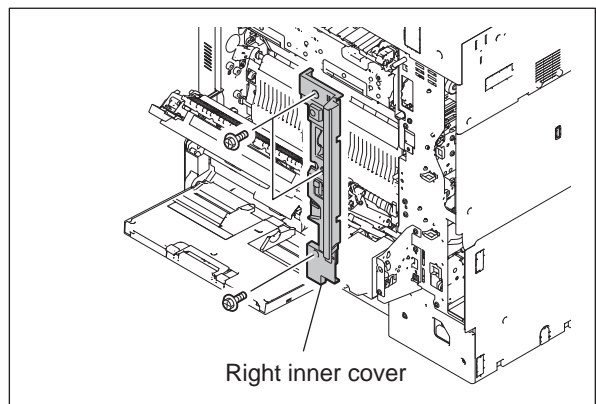


Fig. 4-17

4.1.17 Upper rear cover

- (1) Take off the RADF or the platen cover.
- (2) Take off the left upper cover.
📖 P. 4-3 "4.1.6 Left upper cover"
- (3) Take off the right upper cover.
📖 P. 4-4 "4.1.10 Right upper cover"
- (4) Remove 2 screws and take off the upper rear cover.

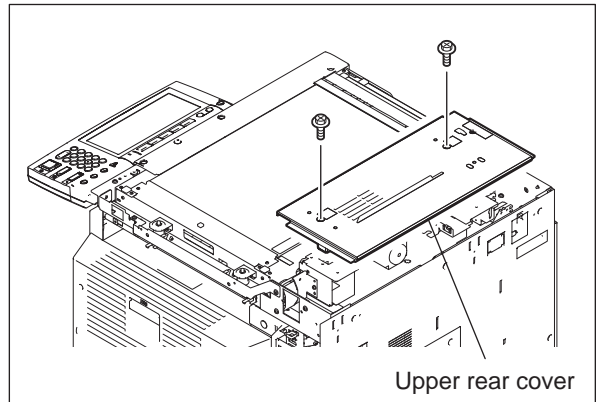


Fig. 4-18

4.1.18 Rear cover-1

- (1) Remove 2 screws and take off the rear cover-1.

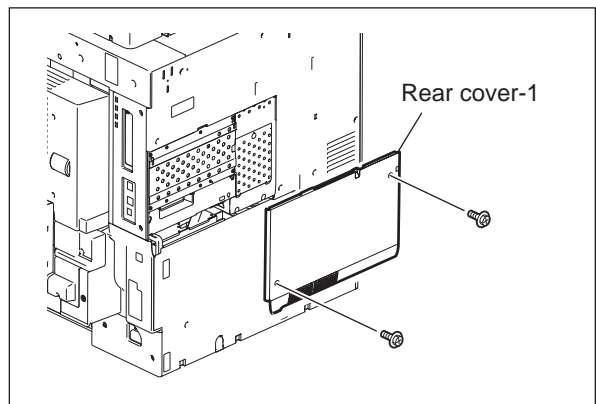


Fig. 4-19

4.1.19 Rear cover-2

- (1) Take off the rear cover-1.
📖 P. 4-7 "4.1.18 Rear cover-1"
- (2) Remove 8 screws and take off the rear cover-2.

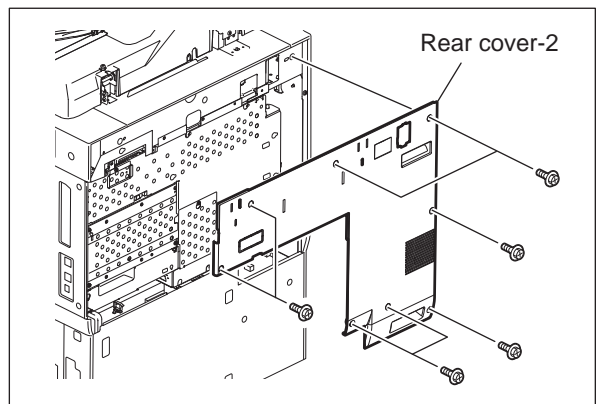



Fig. 4-20

4.1.20 Rear cover-3

- (1) Take off the rear cover-2.
 P. 4-7 "4.1.19 Rear cover-2"
- (2) Remove 3 screws and take off the rear cover-3.

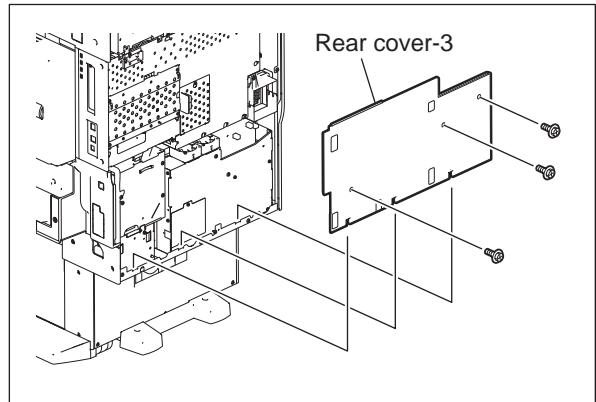


Fig. 4-21

4.1.21 Waste toner cover

- (1) Open the waste toner cover.
- (2) Take off the waste toner cover.

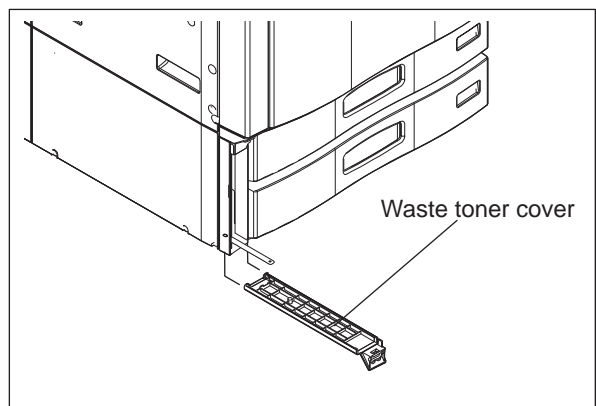


Fig. 4-22

4.2 Control Panel

Notes:

When taking off the control panel, check the position of the stopper; if the stopper is at the position "b", remove the stopper or move it to the position "a".

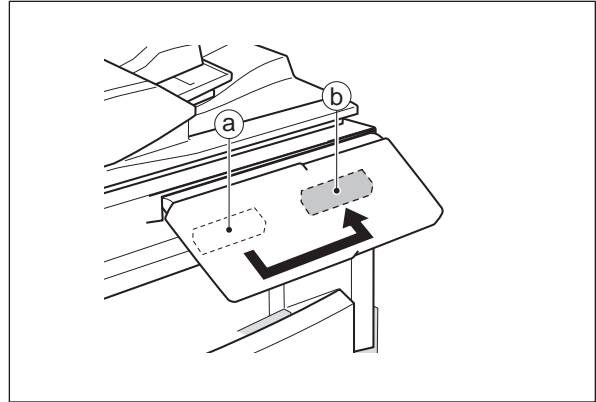


Fig. 4-23

4.2.1 Stopper

- (1) Slide the stopper [1] and pull it out.

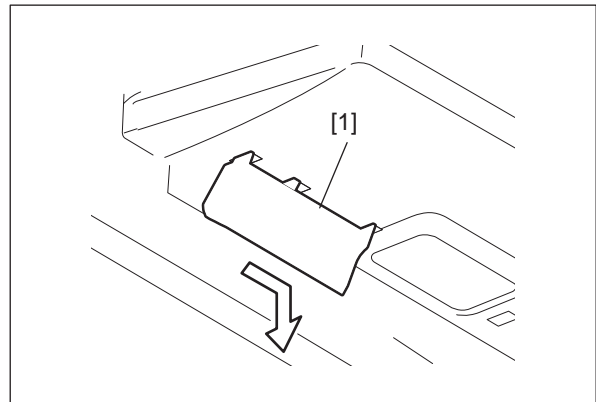



Fig. 4-24

4.2.2 Control panel unit

- (1) Take off the right upper cover.
 P. 4-4 "4.1.10 Right upper cover"
- (2) Release the harness from 6 harness clamps.

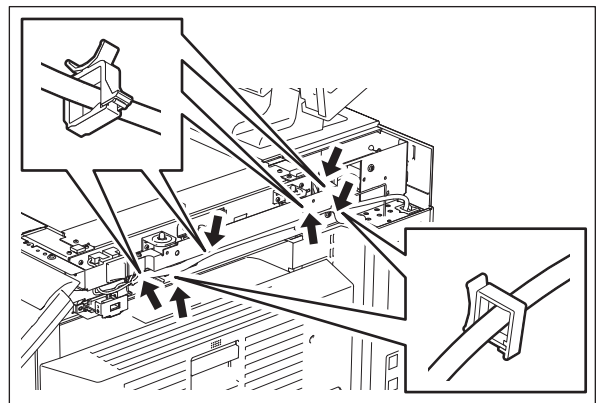


Fig. 4-25

- (3) Lower the control panel unit [1] and remove 2 screws.
- (4) Take off the control panel unit [1] while sliding it.

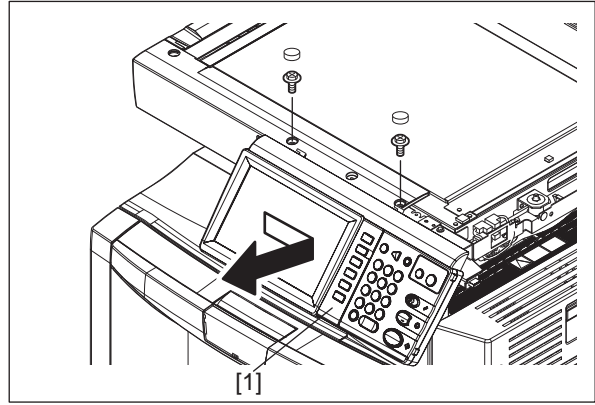


Fig. 4-26

- (5) Remove 3 screws and take off the cover [1].

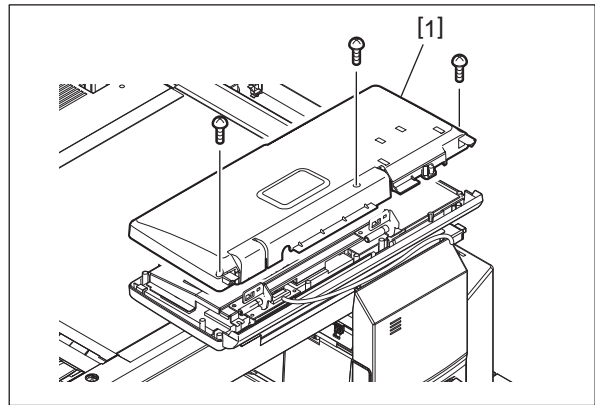


Fig. 4-27

- (6) Remove 1 screw and take out the clamp.

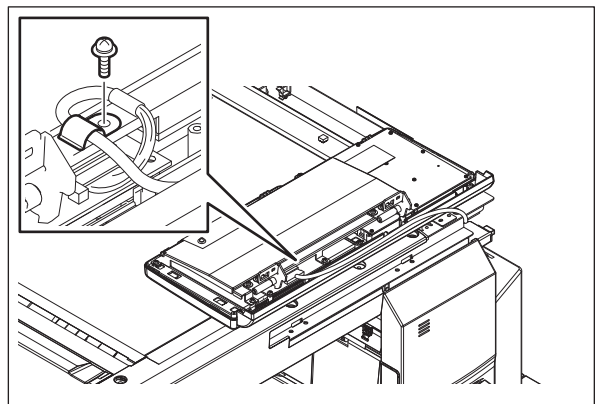


Fig. 4-28

- (7) Disconnect 1 connector, and then take off the control panel unit [2].

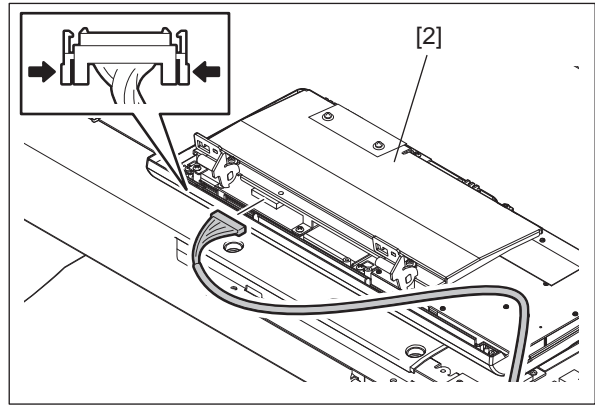


Fig. 4-29

4.2.3 DSP board

- (1) Take off the control panel unit.
 P. 4-9 "4.2.2 Control panel unit"
- (2) Remove 7 screws and take off the hinge bracket [1].

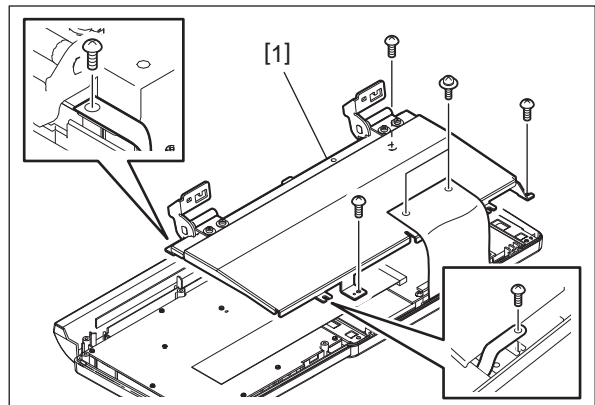


Fig. 4-30

- (3) Disconnect 5 connectors.
- (4) Remove 4 screws and take off the DSP board [2].

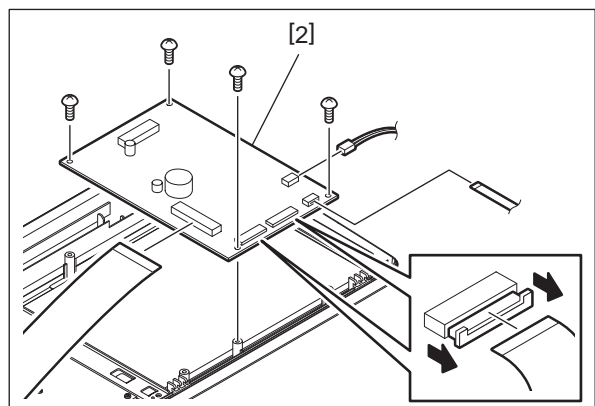



Fig. 4-31

4.2.4 KEY board

- (1) Take off the control panel unit.
 P. 4-9 "4.2.2 Control panel unit"
- (2) Remove 7 screws and take off the hinge bracket [1].

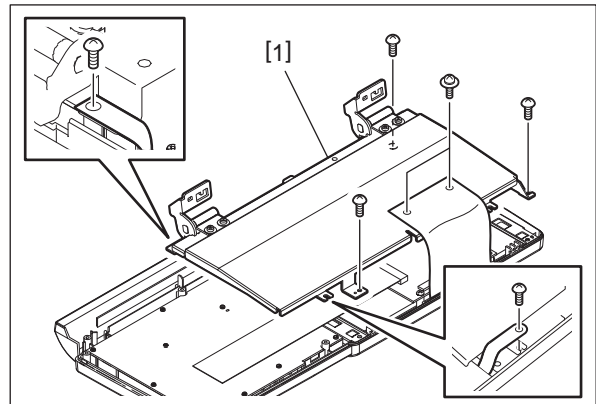


Fig. 4-32

- (3) Disconnect 1 connector and remove 12 screws. Take off the KEY board [2].

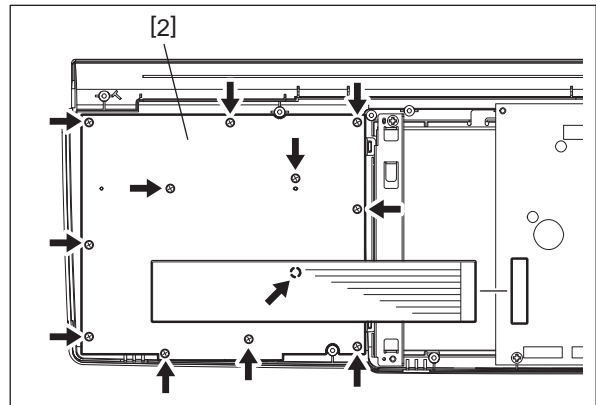




Fig. 4-33

4.2.5 Touch panel (TCP)

- (1) Take off the DSP board (DSP).
 P. 4-11 "4.2.3 DSP board"
- (2) Remove 1 screw of each and take off 2 brackets [1].
 P. 4-11 "4.2.3 DSP board"
- (3) Remove the touch panel [2].

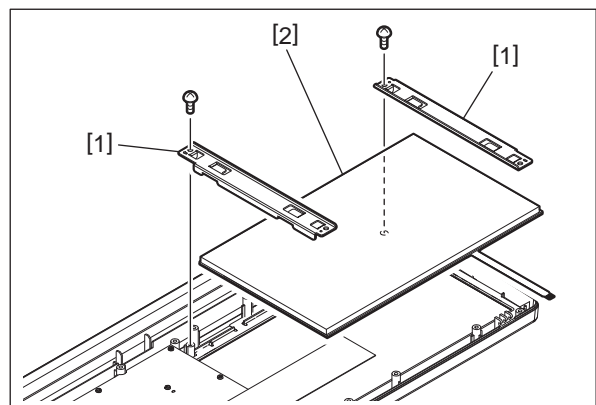


Fig. 4-34

4.2.6 Control panel cover

- (1) Release the 4 latches [1], and take off the control panel cover [2].

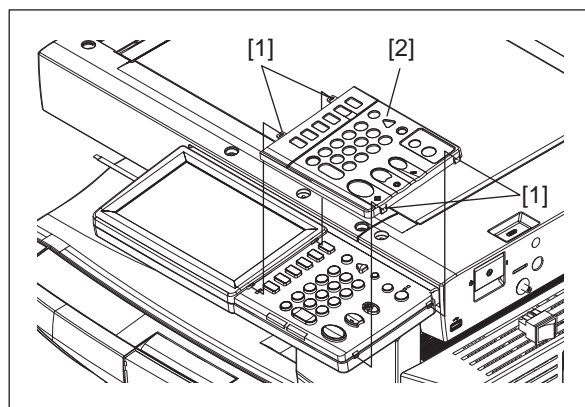


Fig. 4-35

4.3 Scanner

4.3.1 Original glass

- (1) Take off the right upper cover.
📖 P. 4-4 "4.1.10 Right upper cover"
- (2) Take off the original glass.

Notes:

When installing, fit 2 small protrusions of the original glass in the groove of the equipment and fix the original glass with the fixing bracket by pushing it to the left rear direction.

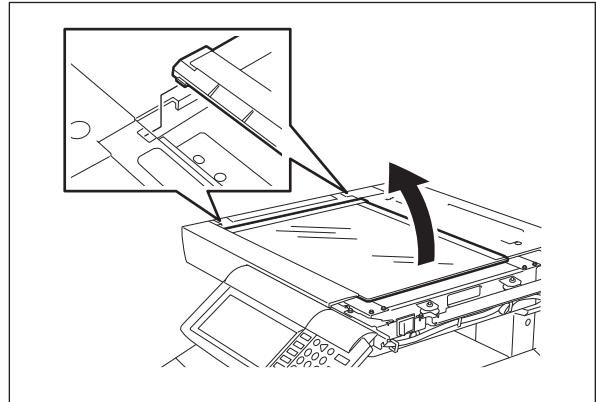


Fig. 4-36

4.3.2 Lens cover

- (1) Take off the original glass.
📖 P. 4-14 "4.3.1 Original glass"
- (2) Remove 6 screws and disconnect 1 connector.
- (3) Take off the lens cover.

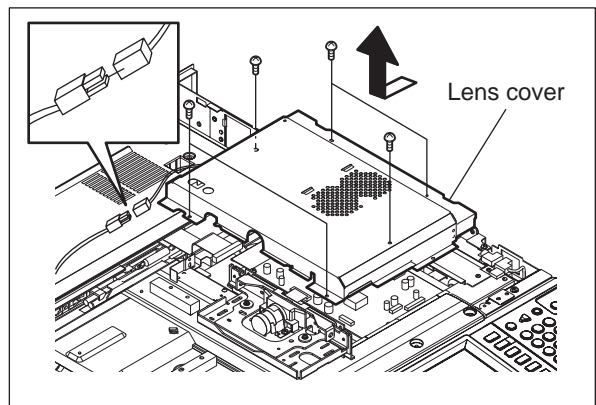


Fig. 4-37

4.3.3 Automatic original detection sensor (APS sensor)

[E] A4 series (APS-1, -2, -3, -C, -R)

- (1) Take off the original glass.
📖 P. 4-14 "4.3.1 Original glass"
- (2) Remove 1 connector and 1 screw, and take off the automatic original detection sensor.

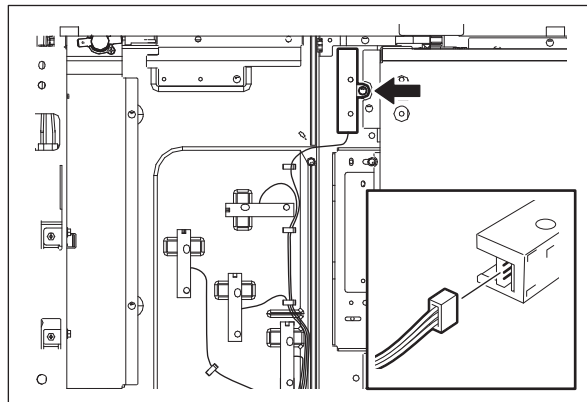


Fig. 4-38

- (3) Remove 1 connector [1] each and 2 latches [2] each, and take off 4 automatic original sensor.

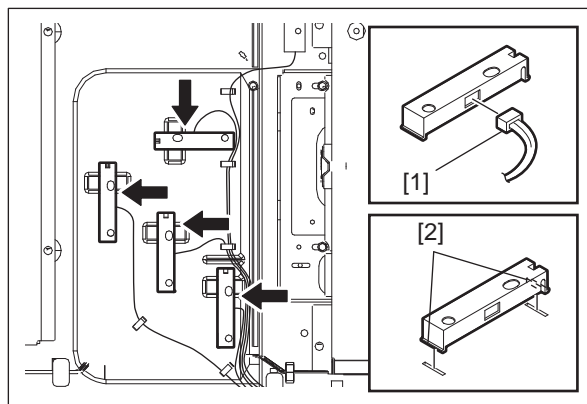


Fig. 4-39

[F] LT series (APS-1, -3, -C, -R)

- (1) Take off the original glass.
📖 P. 4-14 "4.3.1 Original glass"
- (2) Disconnect 1 connector and remove 1 screw for each APS sensor. Take off 4 APS sensors.

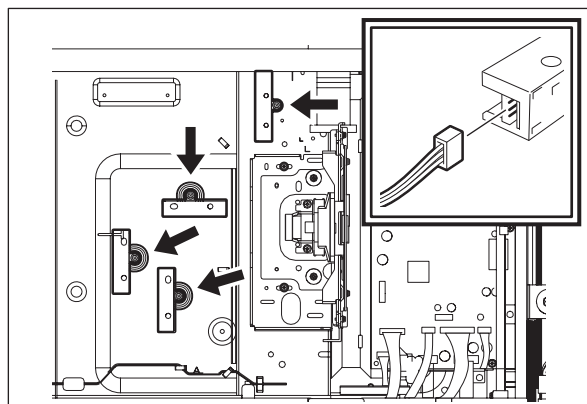


Fig. 4-40

4.3.4 Exposure lamp (EXP)

- (1) Take off the original glass and front upper cover.
P. 4-14 "4.3.1 Original glass"
P. 4-2 "4.1.4 Front upper cover"
- (2) Move the carriage-1 to the center position.

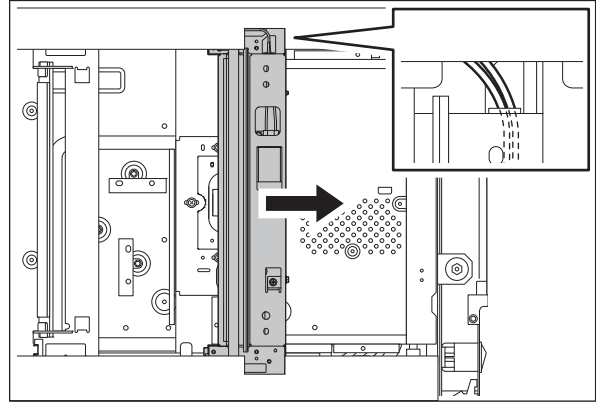


Fig. 4-41

Notes:

Rotate the drive pulley to move the carriage.

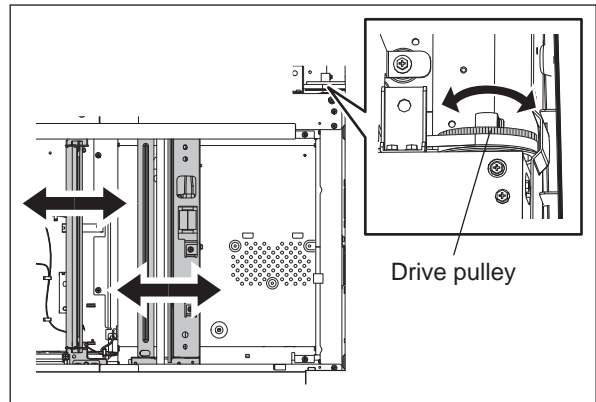


Fig. 4-42

- (3) Disconnect the connector of the exposure lamp.

Notes:

When disconnecting the connector, pay attention not to give load to the carriage frame.

- (4) Release the harness from the harness clamp.

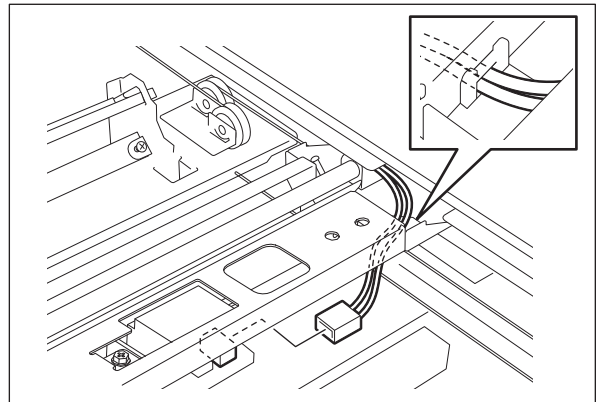


Fig. 4-43

- (5) Move the carriage-1 to the position where the side of the frame is cut out.

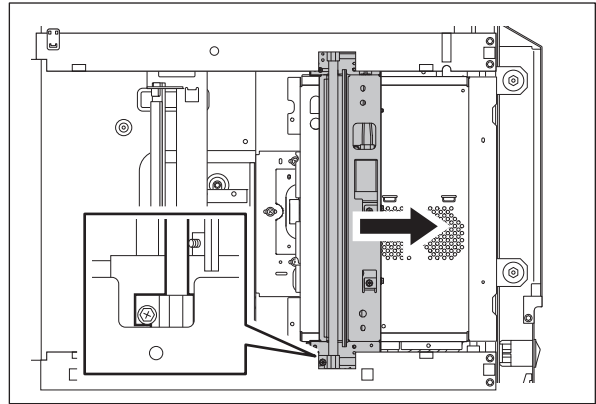


Fig. 4-44

- (6) Remove 1 screw.
- (7) Lift up the front side of the exposure lamp and take off by sliding it.

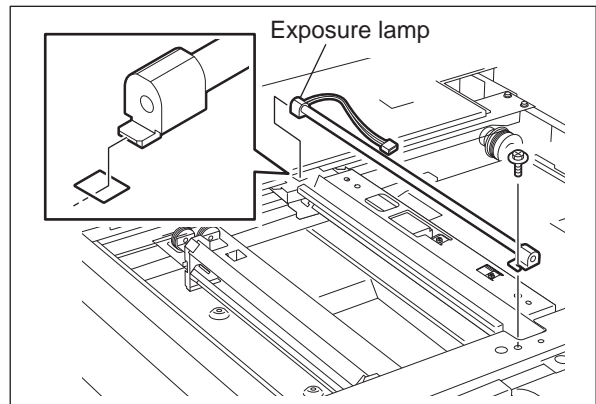



Fig. 4-45

4.3.5 Lens unit

[A] Lens unit

- (1) Remove the lens cover.
 P. 4-14 "4.3.2 Lens cover"
- (2) Disconnect 1 connector, remove 4 screws and take off the lens unit.

Notes:

- When installing the lens unit, fix it while pushing it to the rear direction.
- The lens unit must not be readjusted and some part of its components must not be replaced in the field since the unit is precisely adjusted. If any of the components is defective, replace the whole unit.

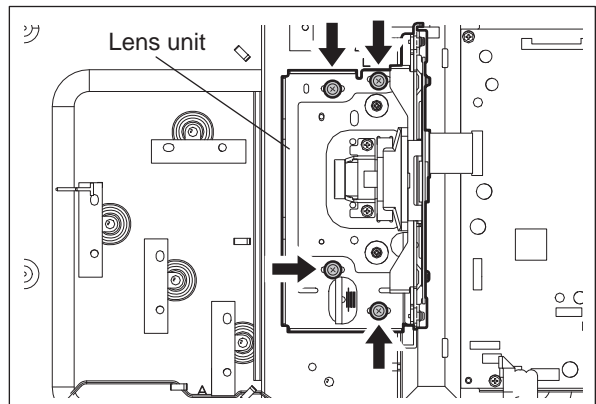


Fig. 4-46

- Do not touch 8 screws shown with the arrows when replacing the lens unit.

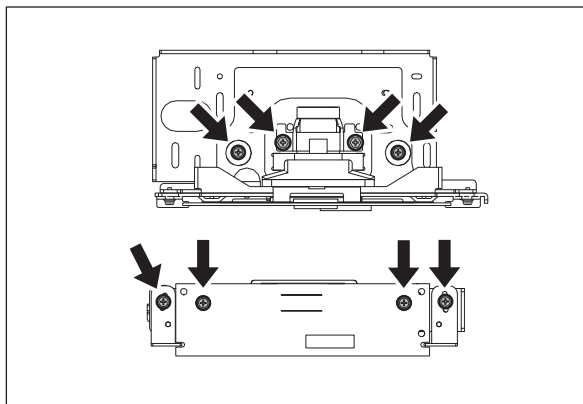


Fig. 4-47

- Handle the unit with care. Do not touch the adjusted area and lens. (Hold the unit as the right figure.)

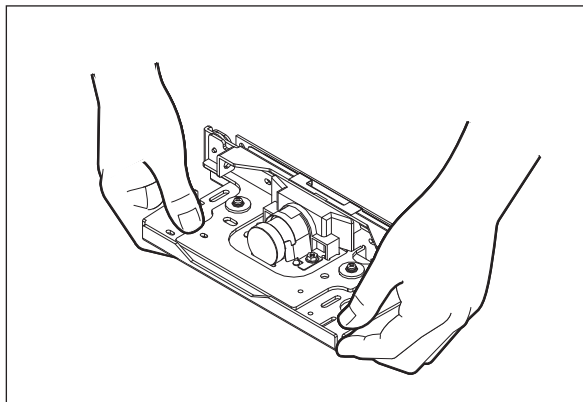


Fig. 4-48

[B] Installation of lens unit

- Attach the lens unit and fix it temporarily with 2 screws.
- Match the center scale of the plate in which the unit is to be installed and the rightmost scale of the adjusting hole on the lens unit plate.

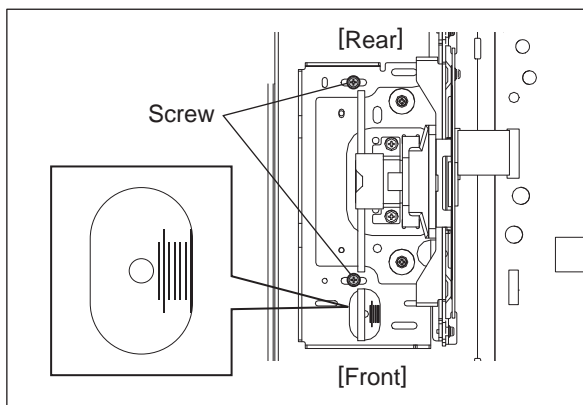


Fig. 4-49

- (3) Tighten 4 screws securely to fix the lens unit while pushing it to the rear side.

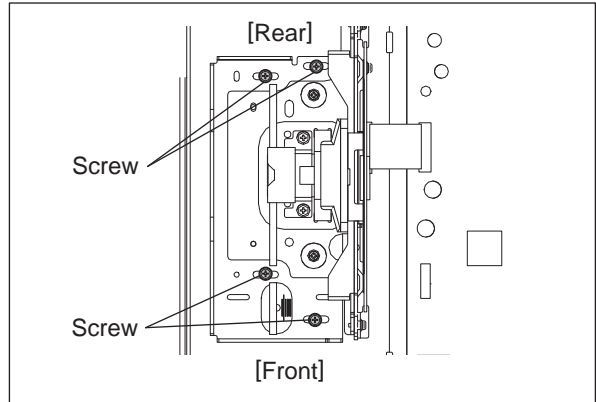


Fig. 4-50

4.3.6 Scan motor (M1)

- (1) Take off the upper rear cover.
 P. 4-7 "4.1.17 Upper rear cover"
- (2) Take off the rear cover-2.
 P. 4-7 "4.1.19 Rear cover-2"
- (3) Disconnect 1 connector [1].

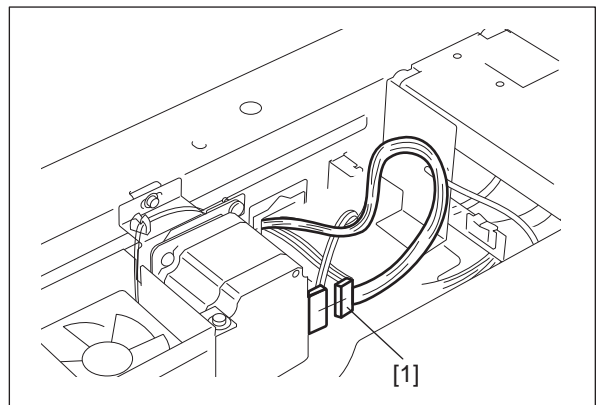


Fig. 4-51

- (4) Release the harness from the harness clamp.
- (5) Remove 3 screws [1] and take off the scan motor [2] with the whole bracket.

Notes:

When installing the scan motor [2], be sure to perform the belt tension adjustment.

P. 6-72 "6.6.2 Belt tension adjustment of the Scan motor"

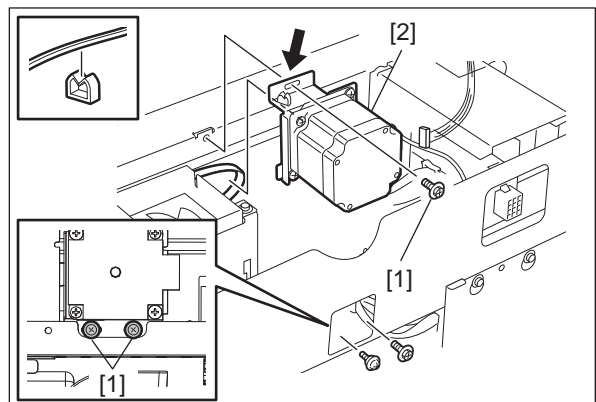


Fig. 4-52

4.3.7 Carriage-1

- (1) Take off the original glass, upper rear cover and front upper cover.
📖 P. 4-14 "4.3.1 Original glass"
📖 P. 4-7 "4.1.17 Upper rear cover"
📖 P. 4-2 "4.1.4 Front upper cover"
- (2) Move the carriage and position the holes of the carriage to the holes of the frame.
- (3) Remove 2 screws and after moving carriage-1 to the position where the side of the frame is cut out, take off the bracket which fixes carriage-1 to the wire.

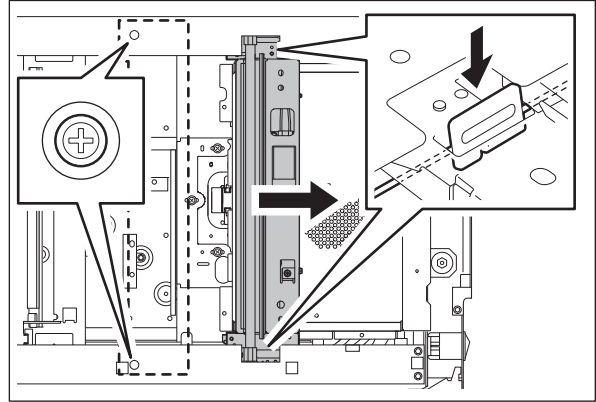


Fig. 4-53

Notes:

Rotate the drive pulley to move the carriage.

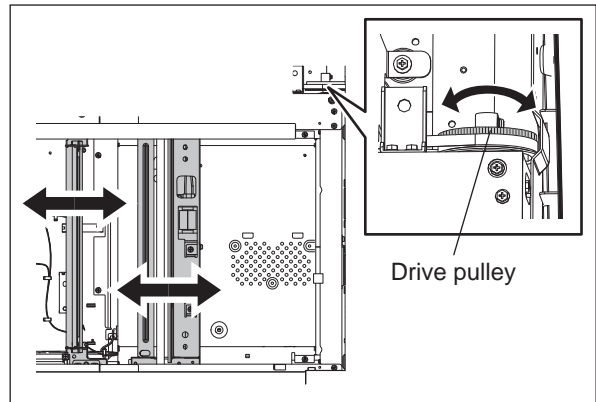


Fig. 4-54

- (4) Remove the square seal fixing the lamp harness to the base. Disconnect the connector of the lamp harness from the SLG board.

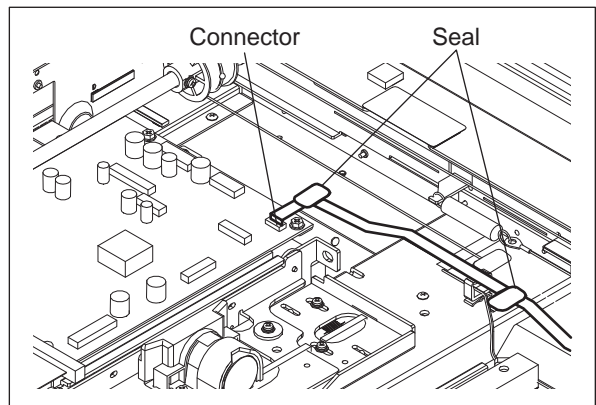


Fig. 4-55

Notes:

1. Be sure to install the lamp harness by following the procedure below. Clean the seal adhering surface with alcohol.
2. Align the bent portion of the lamp harness with the position as shown in the figure, and fix it with a seal.

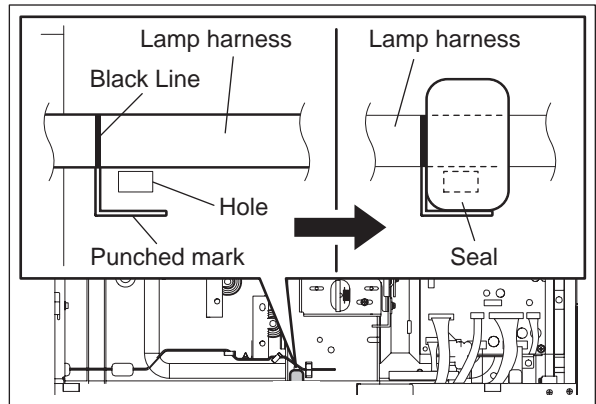


Fig. 4-56

3. Align the black line on the lamp harness with the position as shown in the figure, and fix it with a seal.
4. After the installation, move carriage-1 towards the left and confirm that there is no abnormality in the lamp harness, such as twisting.

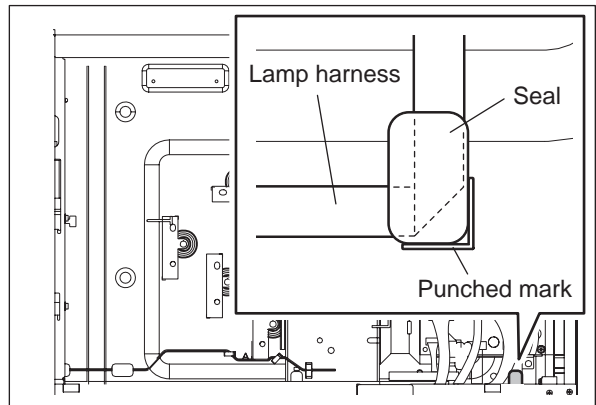


Fig. 4-57

- (5) Rotate the carriage-1 in the direction shown in the figure at right, not to touch the mirror. Then take off the carriage-1.

Notes:

When replacing the mirror-1, replace the carriage-1 together with mirror-1. Mirror-1 should not be removed.

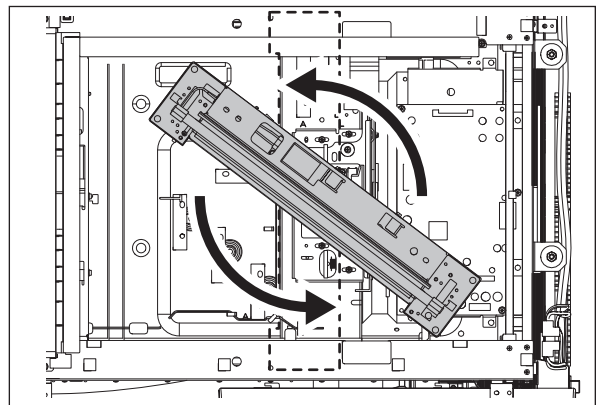


Fig. 4-58

Notes:

When installing carriage-1, fix the bracket temporarily at the position (A). Then move it to the direction (B), push it to the end and fix securely.

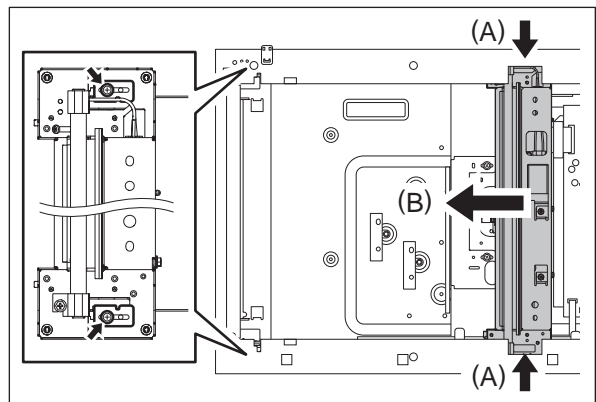


Fig. 4-59

4.3.8 Inverter board (INV)

- (1) Take off the carriage-1.
📖 P. 4-20 "4.3.7 Carriage-1"
- (2) Disconnect 2 connectors.
- (3) Remove 4 screws and take off the inverter cover and inverter board.

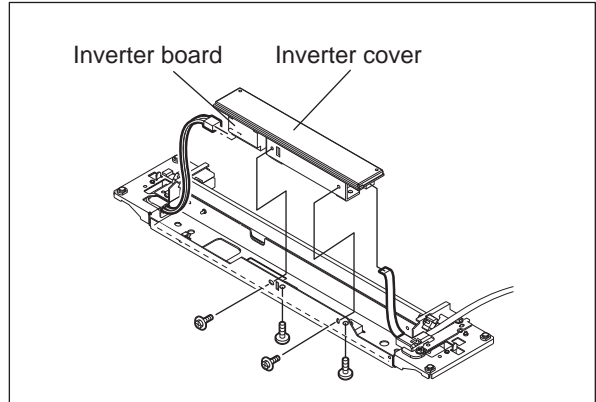


Fig. 4-60

- (4) Remove 2 screws and take off the inverter board.

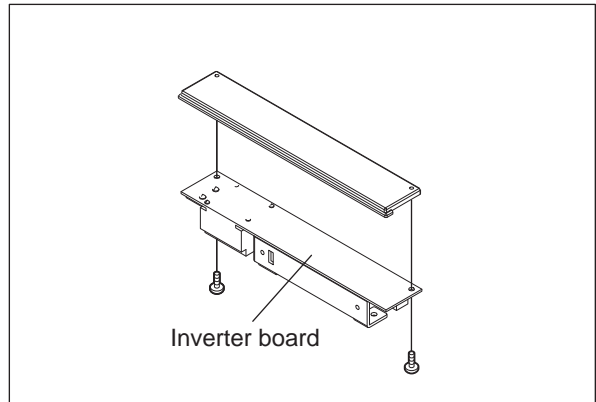


Fig. 4-61

4.3.9 Carriage wire / carriage-2

[A] Carriage wire / carriage-2

- (1) Take off the carriage-1.
📖 P. 4-20 "4.3.7 Carriage-1"
- (2) Attach the wire holder jigs to the pulleys to prevent the wires from loosening.

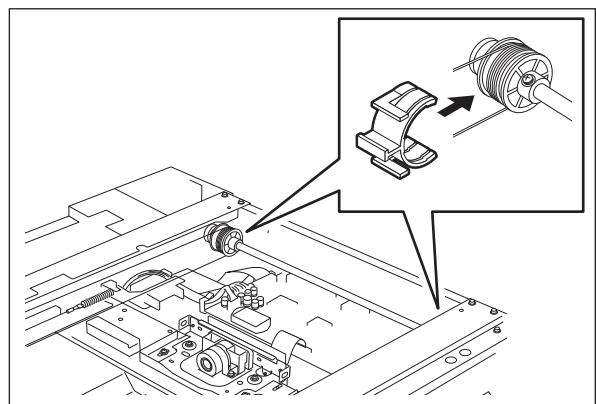


Fig. 4-62

Notes:

- When the wire holder jig is attached, make sure that the wire is not shifted or loosened.
- The wire should come out of the slot of the wire holder jig and be passed under the arm of it.

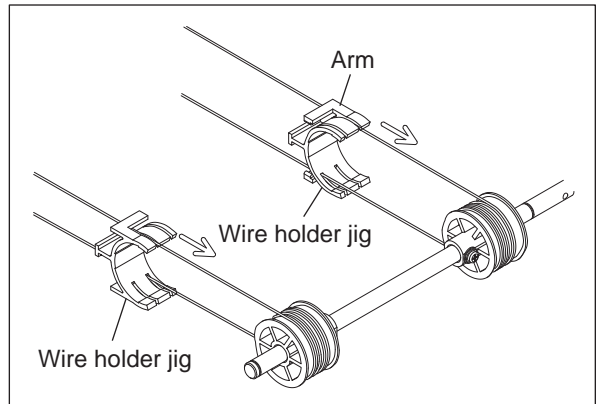


Fig. 4-63

- (3) Detach the tension springs of the front and rear sides.
- (4) Remove the carriage wires.

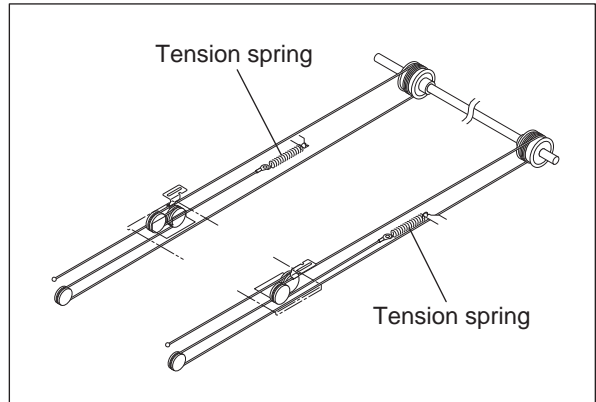


Fig. 4-64

- (5) Rotate the carriage-2 [1] in the direction where the inside of the frame is dented shown in the figure at right, not to touch the mirrors. Then take off the carriage-2 [1].

Notes:

1. When replacing the mirrors-2 and -3, replace the carriage-2 [1] together with mirrors-2 and -3. Mirrors-2 and -3 should not be removed.
2. When installing carriage-2 [1], fix the bracket at the front side temporarily. Then move the wire in the direction (A), push it to the end and fix it with the screw securely.

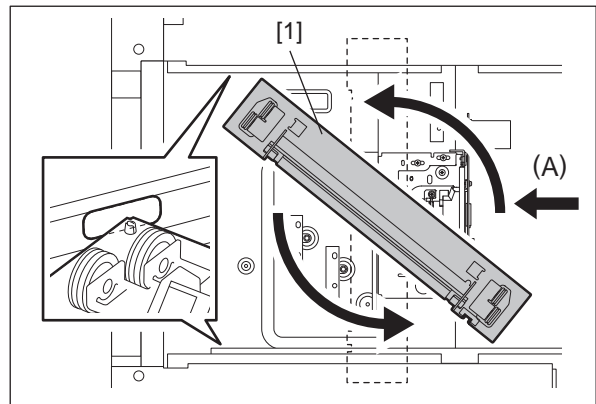


Fig. 4-65

[B] Installing carriage wires

(1) When replacing the carriage wires, refer illustrations below:

Notes:

Adjustment of the carriage wire tension is not necessary since a certain tension is applied to the carriage wires by the tension springs. Make sure the tension applied to the wire is normal.

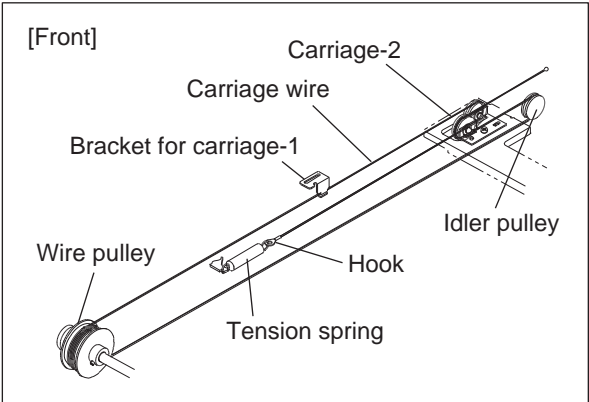


Fig. 4-66

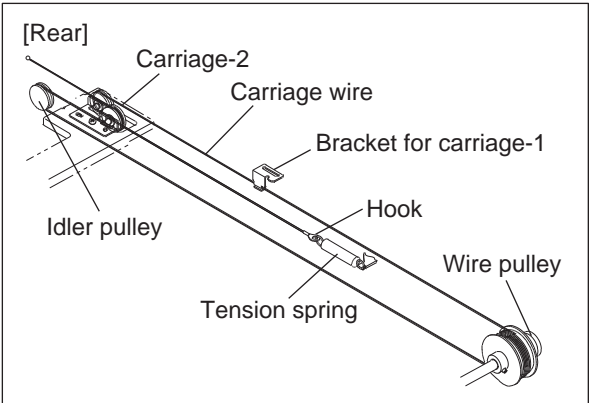


Fig. 4-67

[C] Winding the wires around the wire pulley

- (1) Pull the $\varnothing 3$ ball terminal located at the center of the wire into a hole on the wire pulley. One end of the wire with a hook attached comes to the outside.
- (2) Wind the wires around the wire pulleys of the front and rear sides. The number of turns to be wound are as follows:
 - 2 turns toward the opposite side of the boss
 - 4 turns toward the boss side

Notes:

Pay attention to the followings when the wires are wound around the pulleys:

- Do not twist the wire.
- Wind the wires tightly so that they are in complete contact with the surface of the pulleys.
- Each turn should be pushed against the previously wound turn so that there is no space between them.

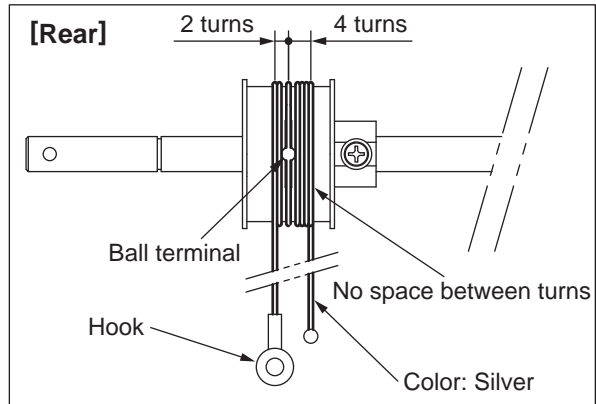


Fig. 4-68

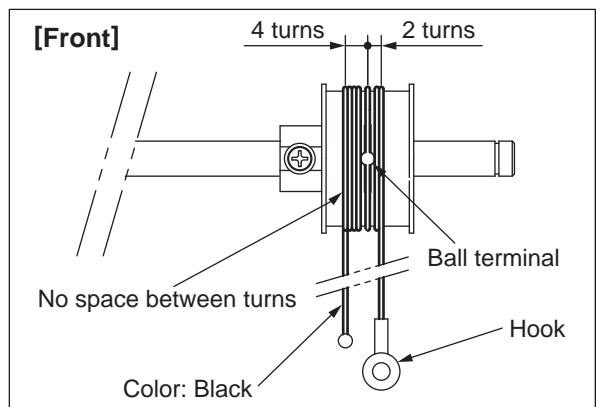


Fig. 4-69

- (3) After winding the wires around the pulleys, attach the wire holder jigs not to loosen the wires.

Notes:

- When the wire holder jig is attached, make sure that the wire is not shifted or loosened.
- The wire should come out of the slot of the wire holder jig and be passed under the arm of it.

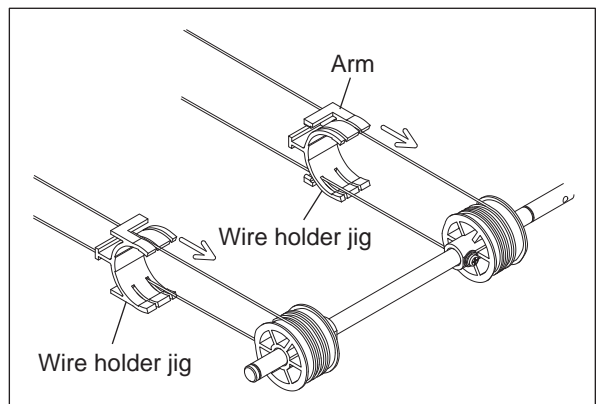


Fig. 4-70

4.3.10 Carriage home position sensor (S6)

- (1) Take off the upper rear cover.
📖 P. 4-7 "4.1.17 Upper rear cover"
- (2) Remove the seal.
- (3) Disconnect 1 connector. Release the latches and take off the carriage home position sensor.

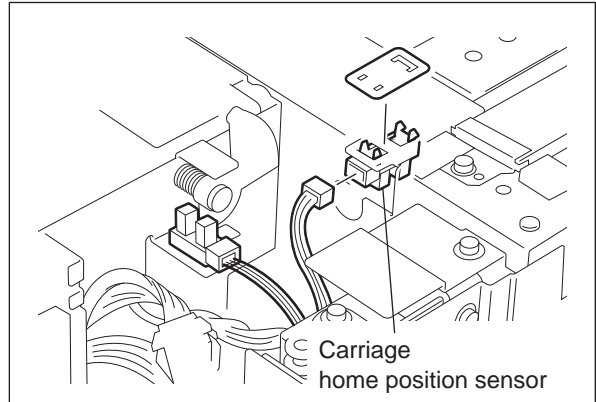


Fig. 4-71

4.3.11 Platen sensor (S7)

- (1) Take off the RADF.
- (2) Take off the upper rear cover.
📖 P. 4-7 "4.1.17 Upper rear cover"
- (3) Remove 1 connector, release the latch, and take off the platen sensor.

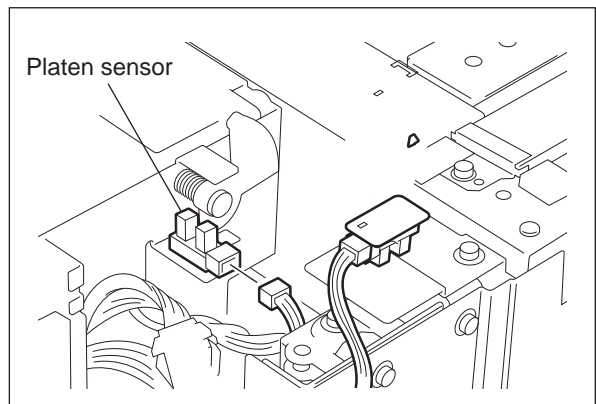


Fig. 4-72

4.3.12 SLG board (SLG)

- (1) Take off the lens cover.
📖 P. 4-14 "4.3.2 Lens cover"
- (2) Disconnect 10 connectors, remove 4 screws and take off the SLG board.

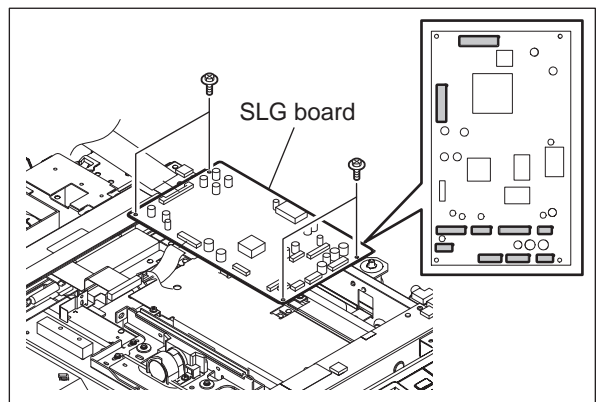


Fig. 4-73

4.3.13 Scanner unit cooling fan (M30)

- (1) Take off the upper rear cover.
📖 P. 4-7 "4.1.17 Upper rear cover"
- (2) Disconnect 1 connector. Remove 2 screws and take off the scanner unit cooling fan [1].

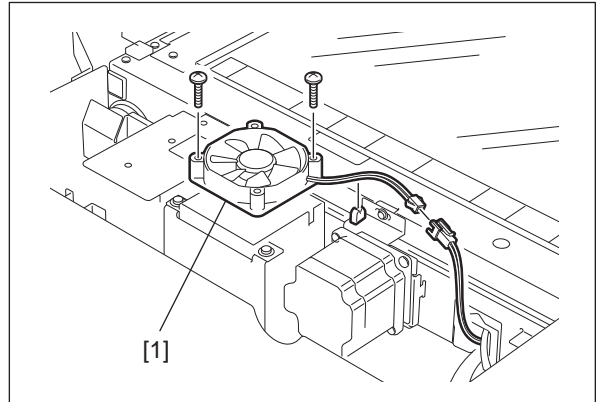


Fig. 4-74

4.3.14 Exposure lamp cooling fan (M32)

- (1) Take off the original glass.
📖 P. 4-14 "4.3.1 Original glass"
- (2) Move the carriage-1 to the right side.
- (3) Remove 2 screws and disconnect 1 connector.
- (4) Remove the exposure lamp cooling fan.

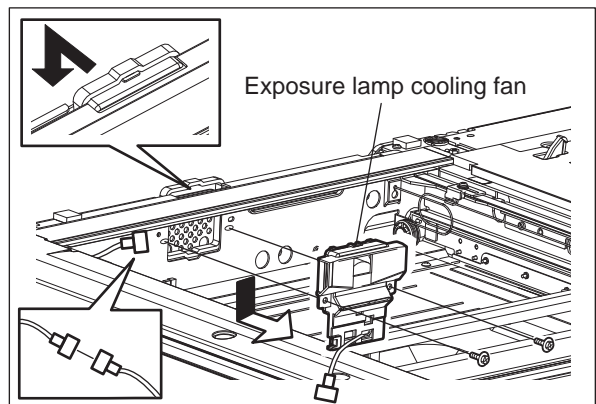


Fig. 4-75

Notes:

Rotate the drive pulley to move the carriage.

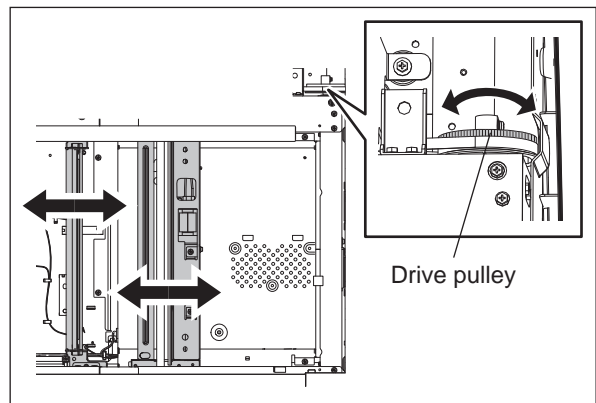



Fig. 4-76

4.4 Laser Optical Unit

4.4.1 Laser optical unit

- (1) Take off the front cover.
 P. 4-1 "4.1.1 Front cover"
- (2) Open the waste toner box.
- (3) Take off the 1st drawer.

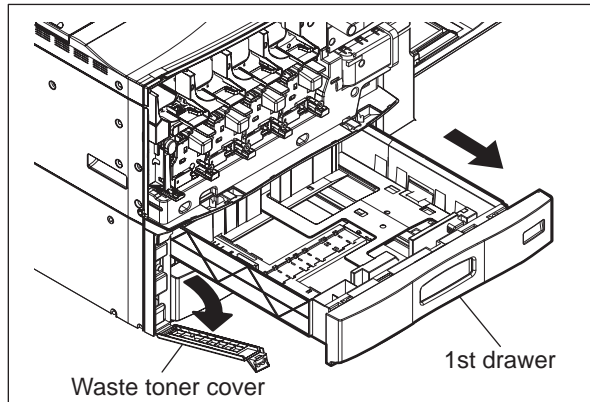


Fig. 4-77

- (4) Take off the front hinge lower cover.

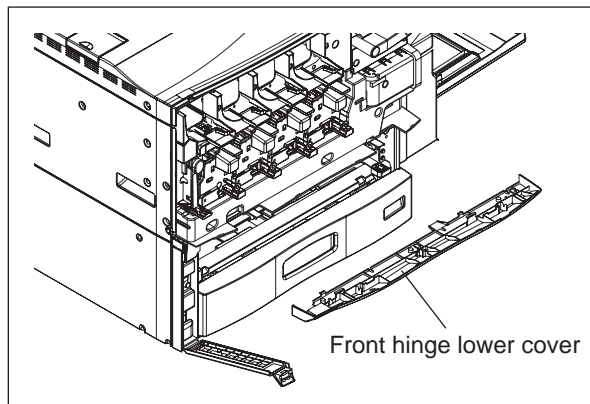


Fig. 4-78

- (5) Remove 2 screws, and release 1 hook [2] while pushing the right side of the inner cover [1] downward and then take off the cover.

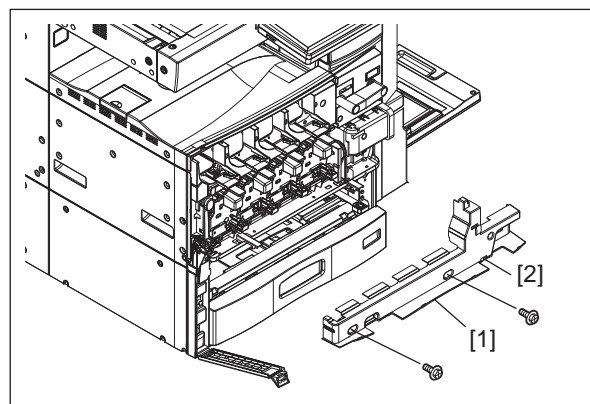


Fig. 4-79

- (6) Remove 2 screws and take off the waste toner transport motor.

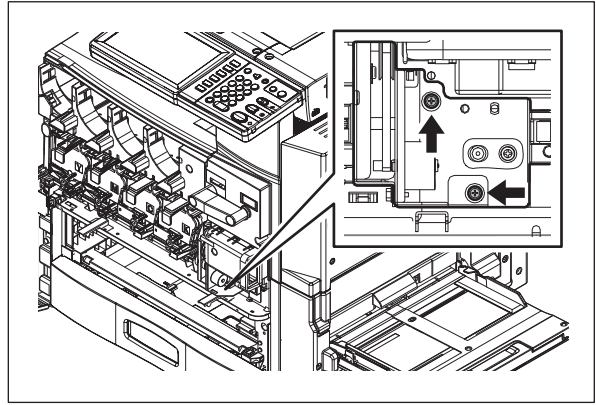


Fig. 4-80

- (7) Disconnect 2 connectors.

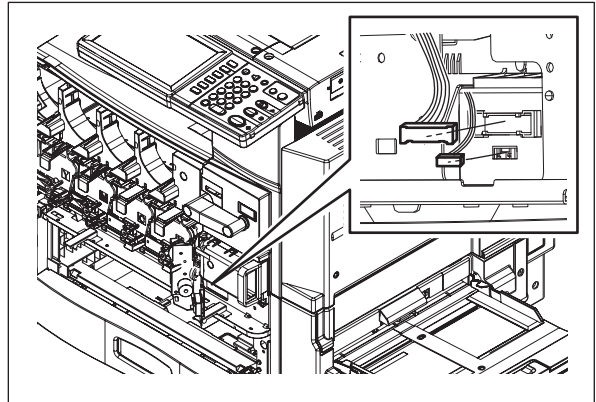


Fig. 4-81

- (8) Remove 2 screws.

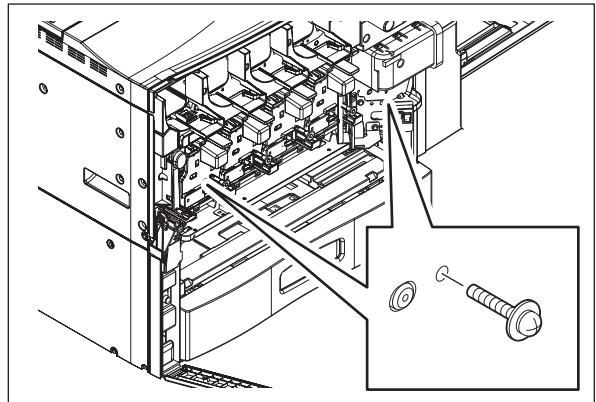



Fig. 4-82

- (9) Take off the left cover.
 P. 4-3 "4.1.7 Left cover"
- (10) Disconnect 2 connectors and 2 harness clamps.
- (11) Place the harness of the Damp Heater Kit (optional) on the rear side.

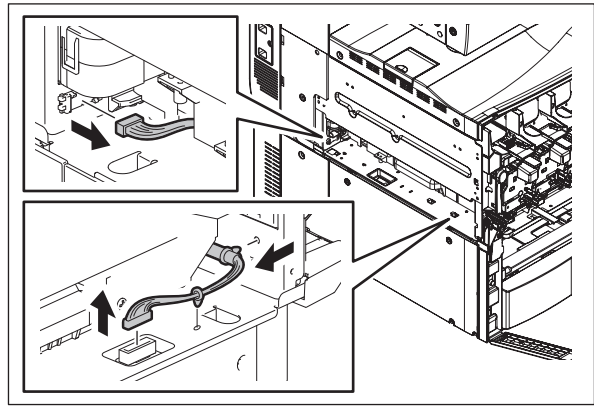


Fig. 4-83

- (12) Pull out the laser optical unit.

Notes:

When the laser optical unit is replaced, start the equipment in the adjustment mode and perform the adjustment code 05-4721 before the normal start-up.

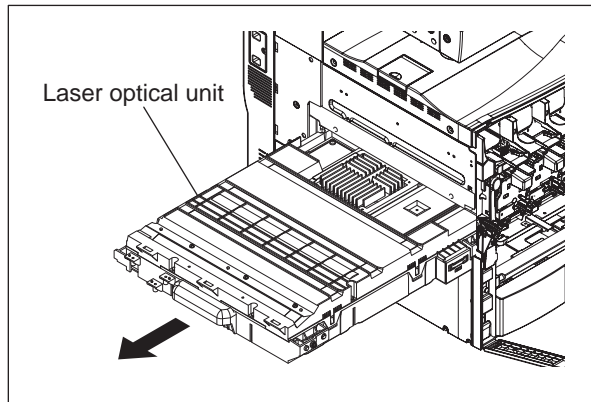


Fig. 4-84

Notes:

If the adjustment screw is mounted on the frame in "8.5.32 Tilted image at the leading edge of paper", follow the procedure below to reinstall the laser optical unit.

1. Remove the adjustment screw shown on the right. (Writing down the adjustment amount will help you perform readjustment.)
2. Reinstall the laser optical unit to the equipment.
3. Perform the procedure of "8.5.32 Tilted image at the leading edge of paper".

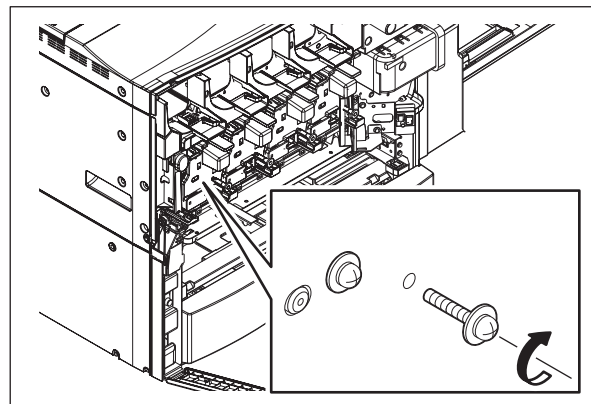


Fig. 4-85

Notes:

- Do not leave fingerprints or stain on the slit glass of the laser optical unit.
- Pay close attention not to make an impact or vibration on the laser optical unit because it is a precise apparatus.
- Place the removed laser optical unit so as not to load on the polygonal motor.
- Do not disassemble the laser optical unit in the field because it is precisely adjusted and very sensitive to dust and stain.
- Hold the laser optical unit vertically. Do not press the top of the unit (the cover) where the slit glass and the polygonal motor are installed with your hands or other things.

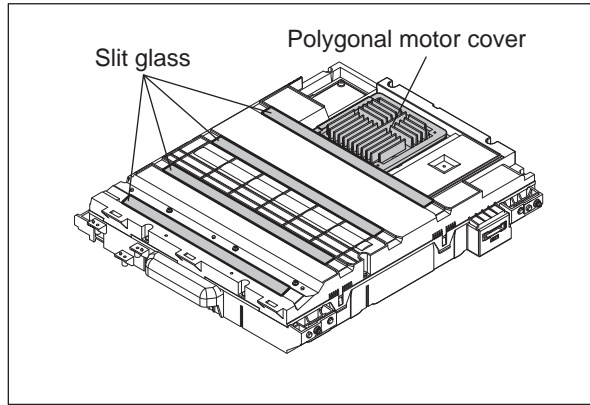


Fig. 4-86

Notes:

The lot No. of the laser optical unit is configured in 8 digits with numbers and letters of the alphabet. The applicable model can be identified by the character of the last digit.

[Character of the last digit]

E: Laser optical unit for e-STUDIO2040C/
2540C/3540C

F: Laser optical unit for e-STUDIO4540C

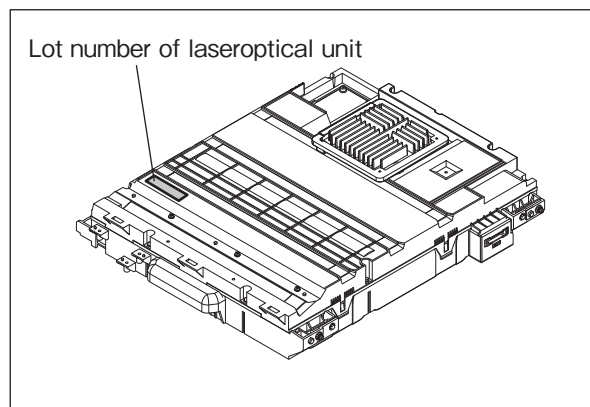



Fig. 4-87

4.4.2 Shutter unit

Notes:

Perform steps (1) and (2) only when the Damp Heater Kit (optional) is installed.

- (1) Open the board case.
 P. 9-10 "9.1.11 Board case"
- (2) Release 2 clamps and disconnect 1 connector of the Damp Heater Kit (optional).

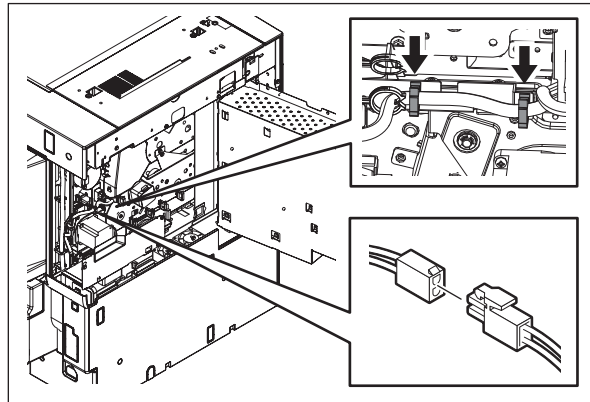






Fig. 4-88

- (3) Take off the laser optical unit.
 P. 4-28 "4.4.1 Laser optical unit"
- (4) Take off the 4 ducts of the discharge LEDs.
 P. 4-76 "4.6.11 Discharge LED (ERS-Y, ERS-M, ERS-C, ERS-K)"
- (5) Take off the left lower cover.
 P. 4-4 "4.1.8 Left lower cover"
- (6) Disconnect 1 connector.
- (7) Take off the left rear cover.
 P. 4-4 "4.1.9 Left rear cover"

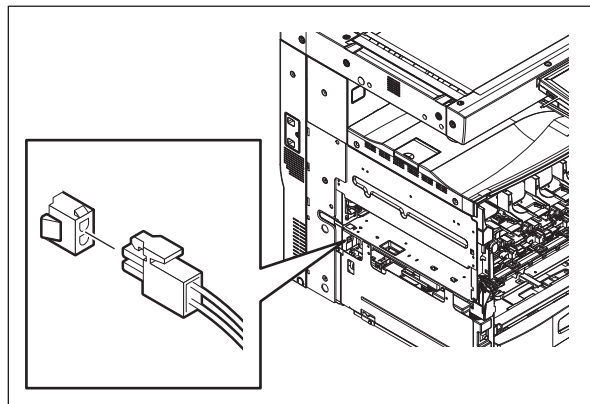


Fig. 4-89

- (8) Remove 7 screws and take off the metal plate on the left side.

Notes:

Check printed images after assembling the unit.

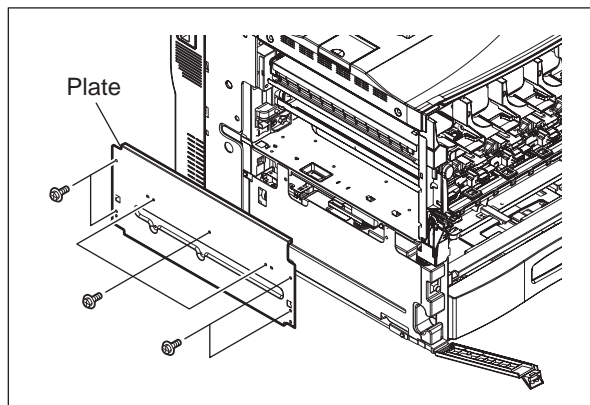


Fig. 4-90

- (9) Remove 2 screws, slide the shutter unit to the front, and then pull it out to the exit side.

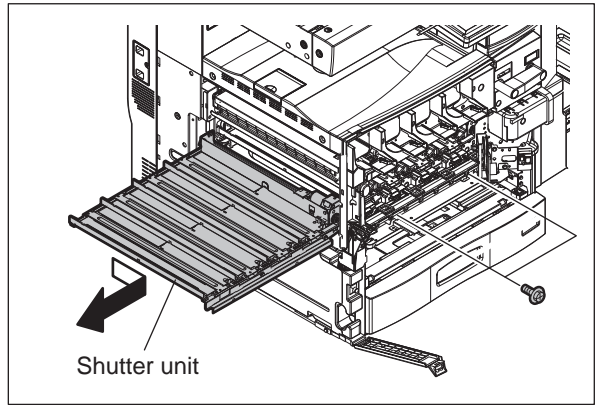
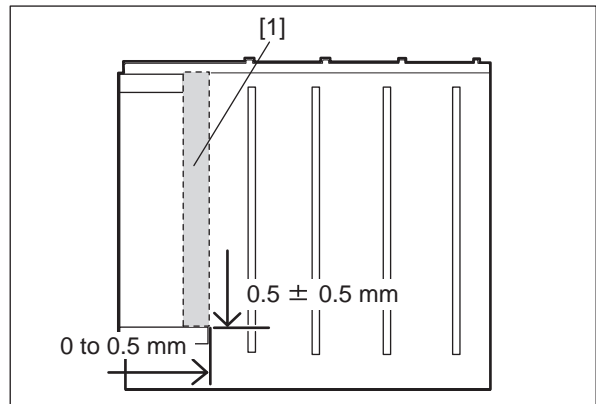


Fig. 4-91

Notes:

When the shutter unit is replaced, attach the sponge [1] to the new one as shown in the figure.



4.4.3 Shutter motor (M12)

- (1) Take off the shutter unit.
P. 4-32 "4.4.2 Shutter unit"
- (2) Disconnect 1 connector, release 2 clamps, remove 3 screws and take off the shutter motor with the bracket.

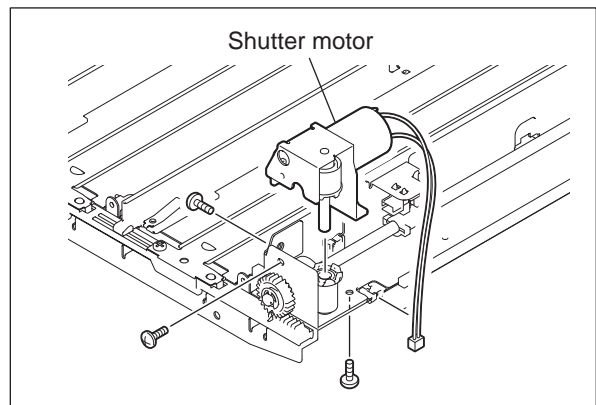


Fig. 4-92

- (3) Remove the E-ring. Then remove 1 gear, 1 spring and 1 polyslider.

Notes:

When assembling the unit, be sure to install the polyslider.

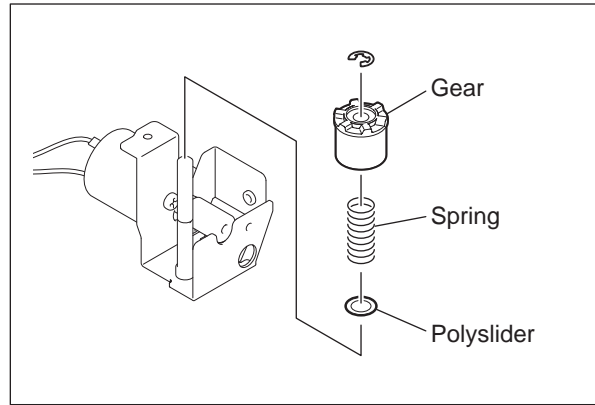


Fig. 4-93

- (4) Remove 2 screws and take off the shutter motor.

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

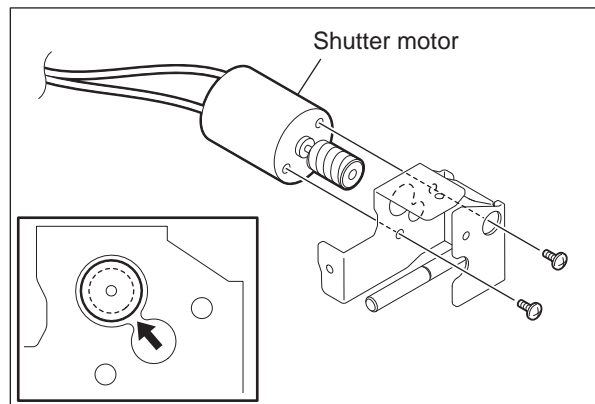


Fig. 4-94

4.4.4 Shutter status detection sensor (S20)

Notes:

Perform step (2) only when the Damp Heater Kit (optional) is installed.

- (1) Take off the shutter unit.
 P. 4-32 "4.4.2 Shutter unit"
- (2) Remove 2 screws, and then take off the Damp Heater Kit (optional).

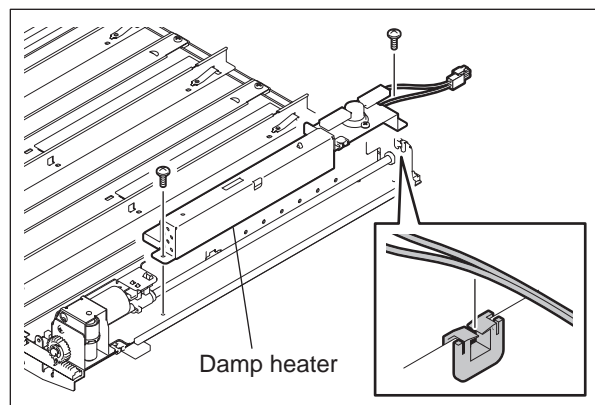


Fig. 4-95

- (3) Remove 1 clip, and then slide the actuator to the rear side.

Notes:

Be sure not to lose the removed pin.

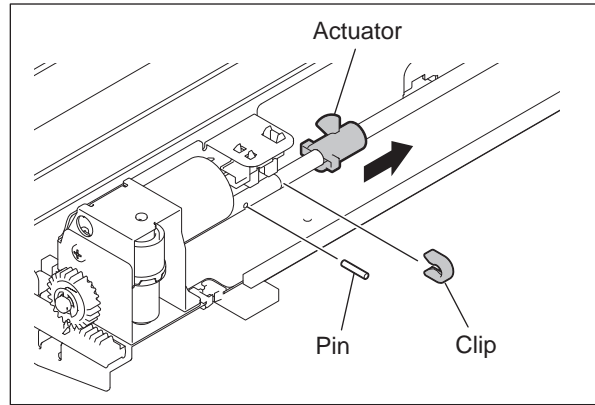


Fig. 4-96

- (4) Disconnect 1 connector, release the latch and take off the shutter status detection sensor.

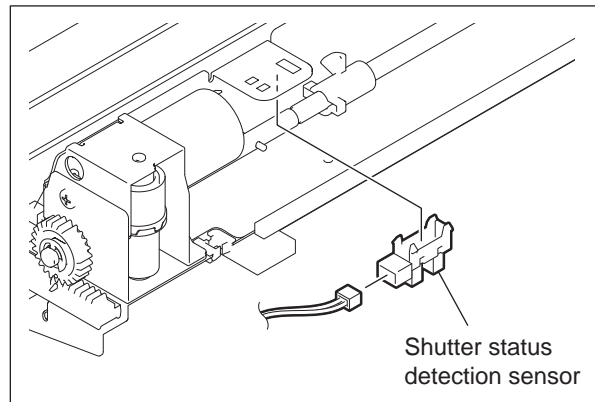


Fig. 4-97

Notes:

If the gears (front/rear) of the shutter unit have been removed, be sure to align the mark on the gears with the one on each side of the rack respectively when reassembling them.

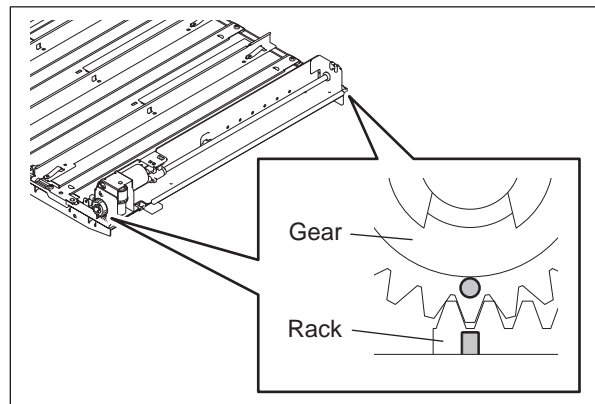


Fig. 4-98

4.4.5 Slit glass cleaning pad

- (1) Open the front door. Then take off the slit glass cleaner.
- (2) Press 2 latches to the inner side, and then remove the slit glass cleaning pad.

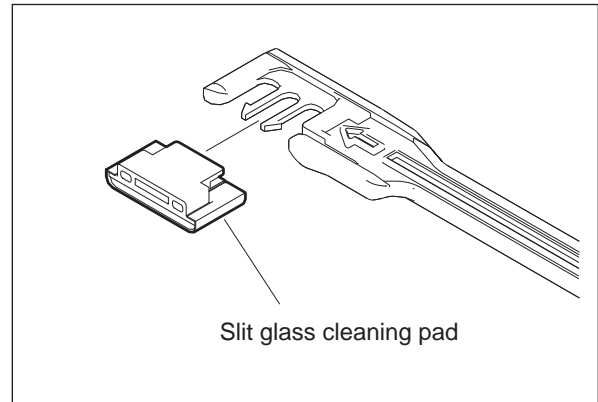


Fig. 4-99

4.4.6 Polygonal motor

Notes:

Polygonal motor replacement is not recommended in the field; the image quality is not guaranteed in such a case.

- (1) Take off the laser optical unit.
P. 4-28 "4.4.1 Laser optical unit"
- (2) Remove 3 screws and take off the polygonal motor cover.

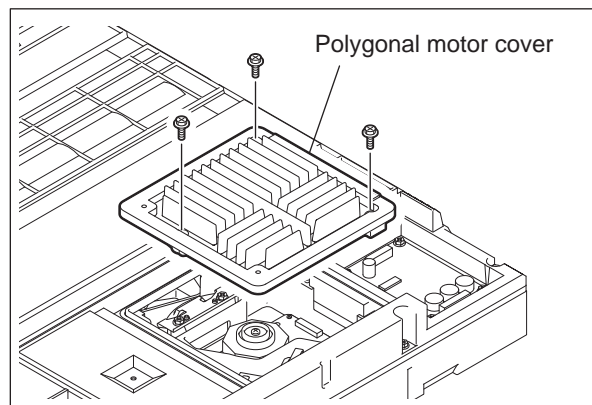


Fig. 4-100

Notes:

- Treat the polygonal motor gently.
- The polygonal motor for e-STUDIO2040C/2540C/3040C/3540C differs from the one for e-STUDIO4540C. Be sure to use the correct one.
- Never touch the surface of the polygonal mirror or glass. If you do so, wipe the dirt off using a clean and soft cloth, taking care not to scratch the surface.

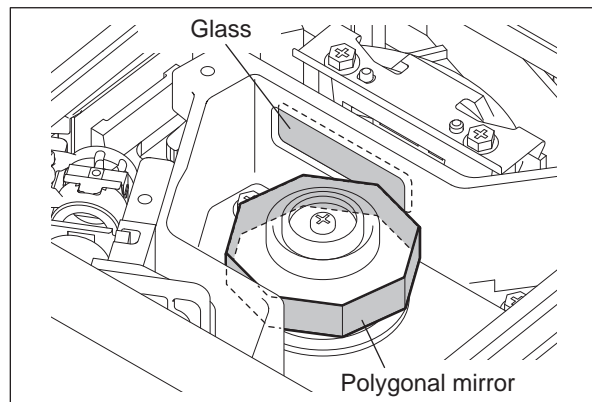


Fig. 4-101

- (3) Disconnect 1 connector, remove 4 screws and then take off the polygonal motor.

Notes:

Check that all 4 fixing screws for the polygonal motor contact the base before fixing the motor.

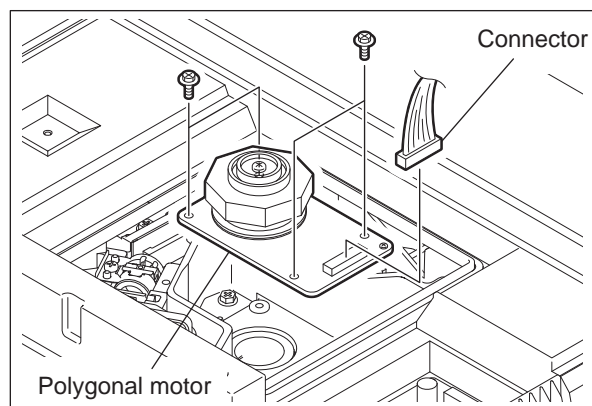




Fig. 4-102

4.5 Paper Feeding System

4.5.1 Bypass unit

- (1) Take off the right front hinge cover.
 P. 4-6 "4.1.14 Right front hinge cover"
- (2) Take off the right rear hinge cover.
 P. 4-5 "4.1.12 Right rear hinge cover"
- (3) Remove 1 screw of ground wires.
Disconnect 1 connector and release the harnesses from 1 harness clamps.

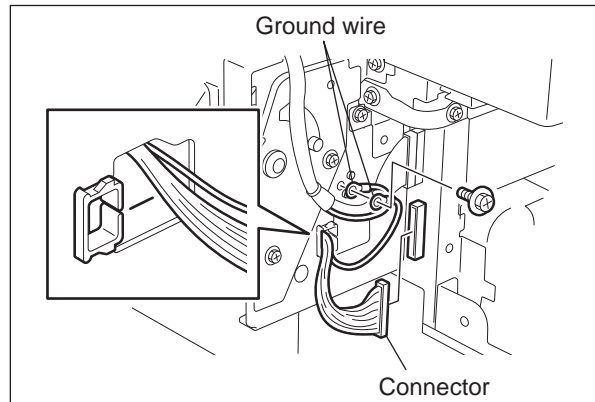


Fig. 4-103

- (4) Remove 1 screw and take off the bypass feed rear cover [1].

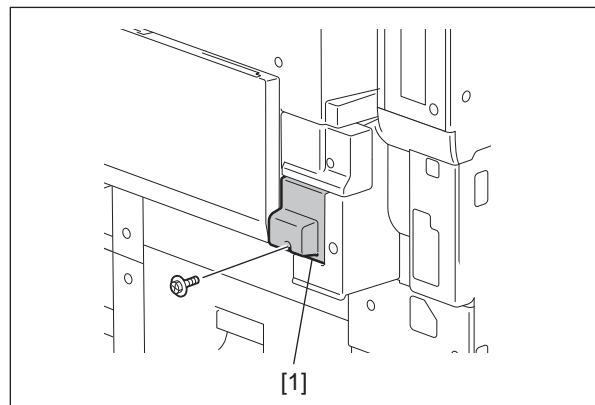


Fig. 4-104

- (5) Open the side cover.
- (6) Remove 2 screws. Lift up the bypass unit and take it off toward you.

Notes:

When installing the bypass unit, make sure that the ADU is closed in advance since the bypass unit occasionally does not slide smoothly.

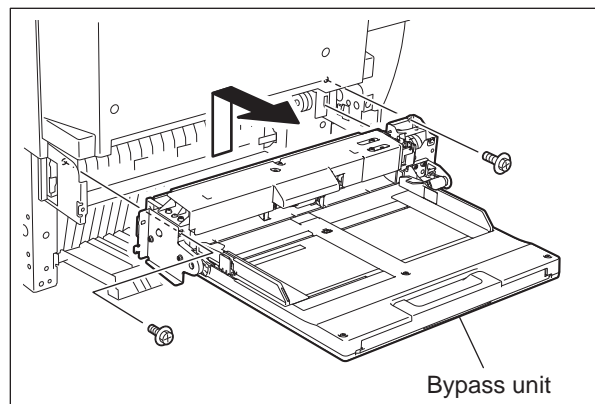


Fig. 4-105

4.5.2 Hinge assembly

- (1) Take off the bypass unit.
📖 P. 4-38 "4.5.1 Bypass unit"
- (2) Disconnect 1 connector and release the harness from the harness clamp.

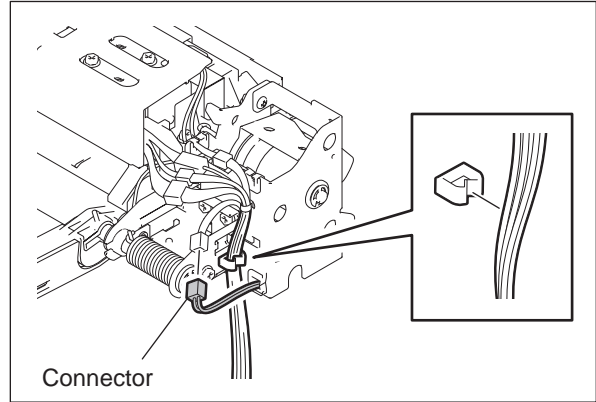


Fig. 4-106

- (3) Release the spring from the hook.

Notes:

Release it while the tray is standing so as to weaken the tension of the spring.

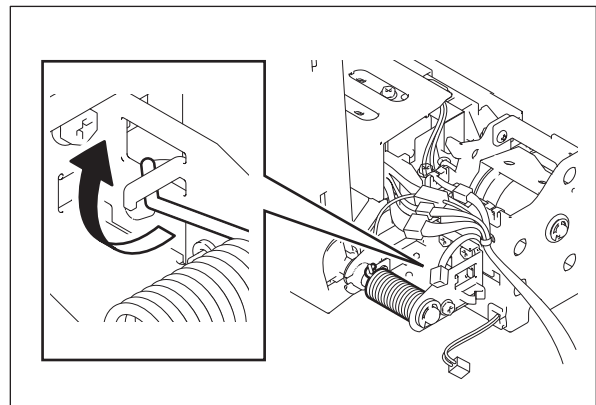


Fig. 4-107

- (4) Remove 2 screws, and then take off the hinge by sliding it.

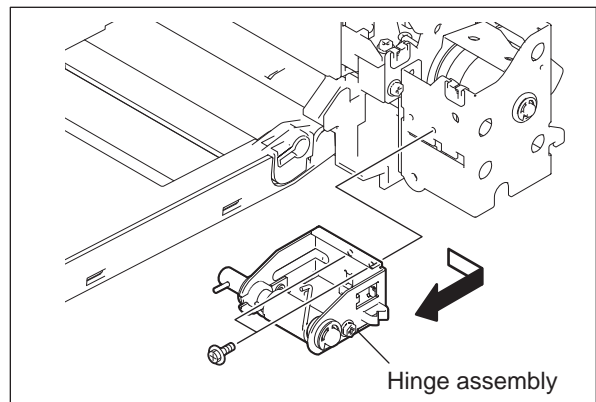


Fig. 4-108

- (5) Take off the tray from the bypass unit.

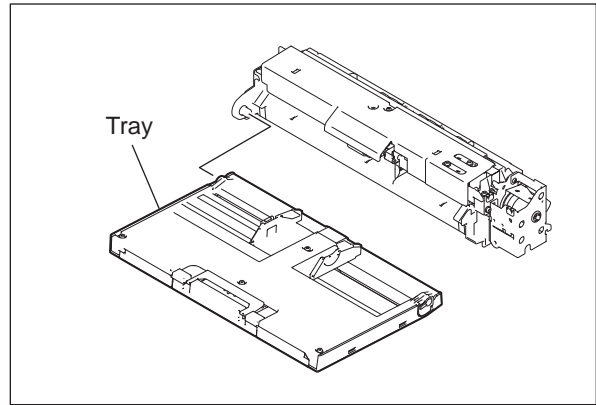


Fig. 4-109

4.5.3 SFB board (SFB)

- (1) Take off the hinge assembly.
P. 4-39 "4.5.2 Hinge assembly"
- (2) Remove 5 screws and take off bypass tray upper cover.

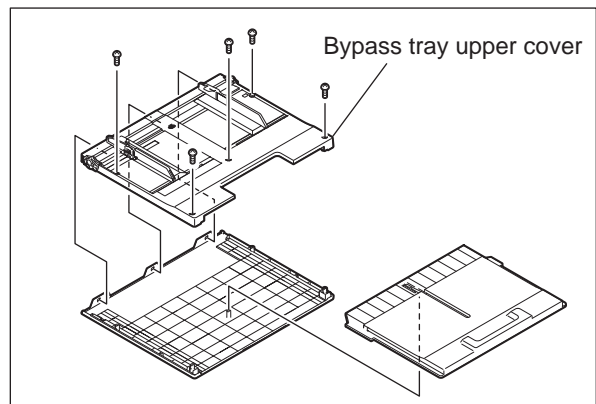


Fig. 4-110

- (3) Remove 1 screw for the leaf spring. And remove 1 screw on the tray side and take off the bracket.

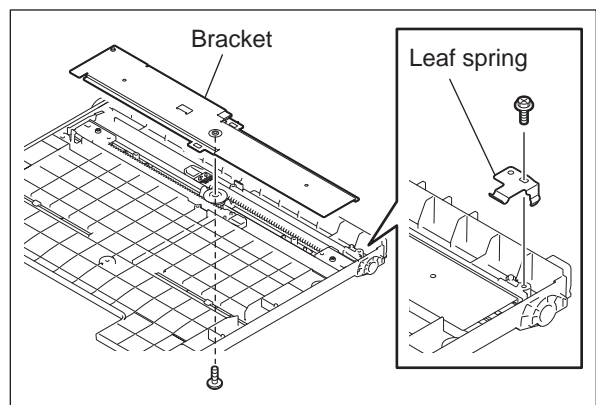


Fig. 4-111

Notes:

Install the bracket so that its pointer is placed at the same position as before.

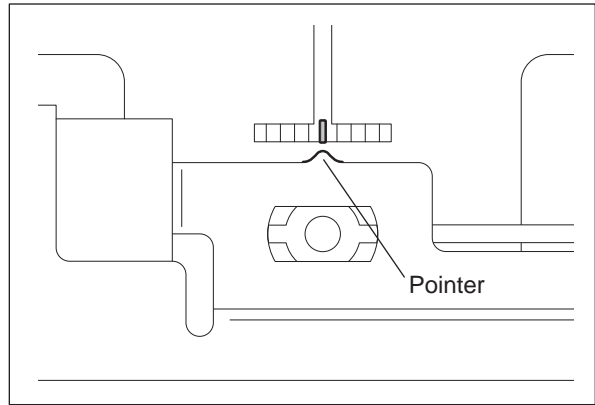


Fig. 4-112

- (4) Disconnect 1 connector, remove 1 screw and take off the SFB board.

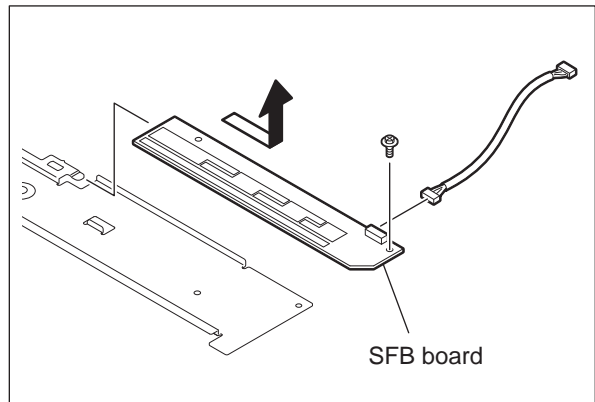


Fig. 4-113

4.5.4 Bypass feed upper cover

- (1) Take off the bypass unit.
P. 4-38 "4.5.1 Bypass unit"
- (2) Remove 1 screw and slide the bypass feed upper cover to take it off.

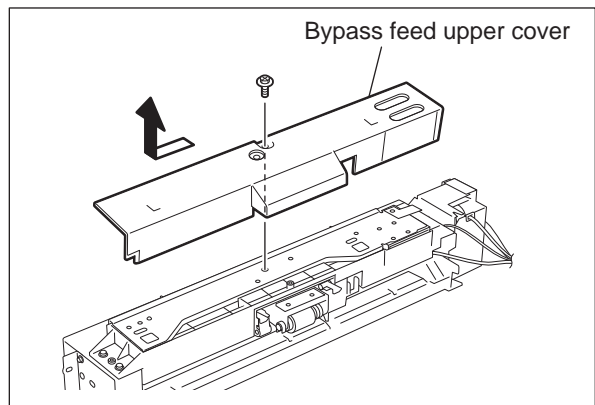


Fig. 4-114

4.5.5 Bypass upper guide

- (1) Take off the bypass feed upper cover.
📖 P. 4-41 "4.5.4 Bypass feed upper cover"
- (2) Remove 4 screws and take off the bypass upper guide.

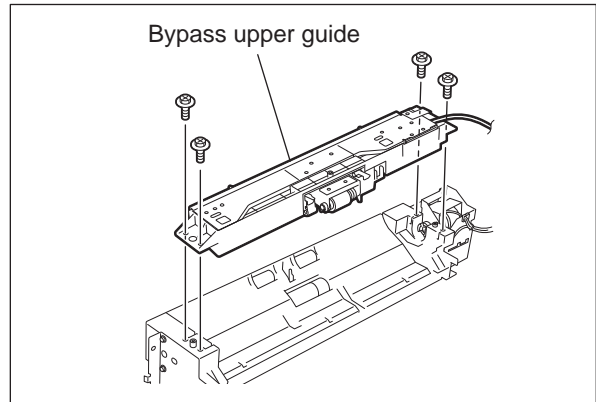


Fig. 4-115

4.5.6 Bypass pickup solenoid (SOL1)

- (1) Take off the bypass feed upper cover.
📖 P. 4-41 "4.5.4 Bypass feed upper cover"
- (2) Remove 4 screws and take off the upper plate.

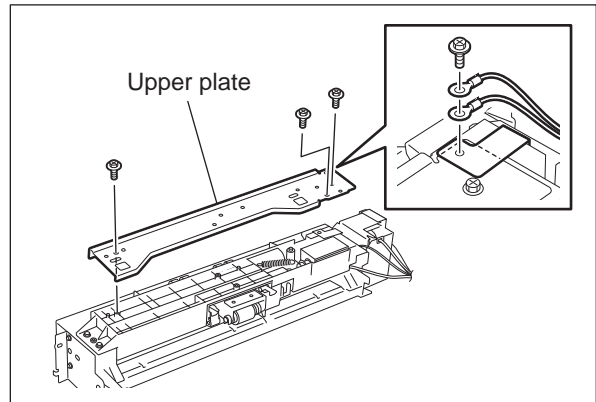


Fig. 4-116

- (3) Remove 1 spring. Disconnect 1 connector and take off the bypass pickup solenoid with the solenoid arm.

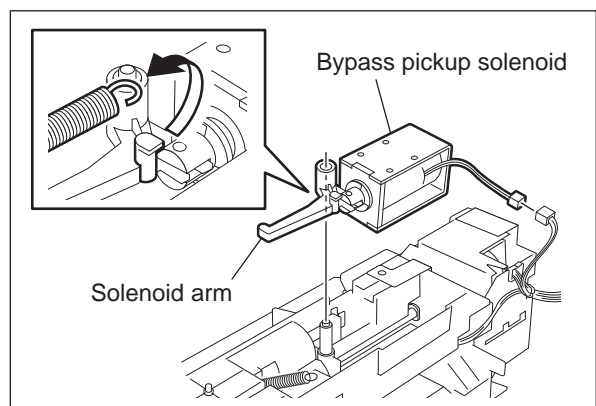


Fig. 4-117

4.5.7 Bypass paper sensor (S40)

- (1) Take off the bypass feed upper cover.
📖 P. 4-41 "4.5.4 Bypass feed upper cover"
- (2) Remove 4 screws and take off the upper plate.

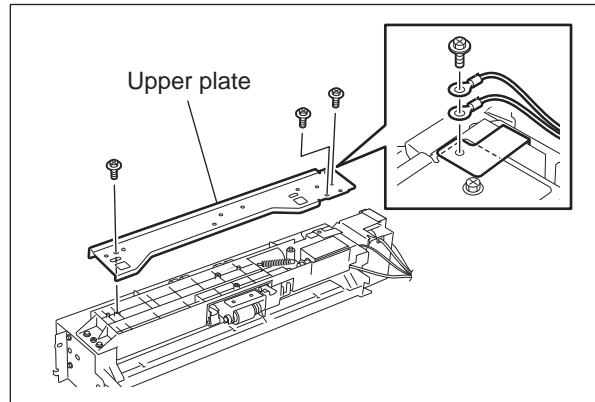


Fig. 4-118

- (3) Take off the sensor arm.

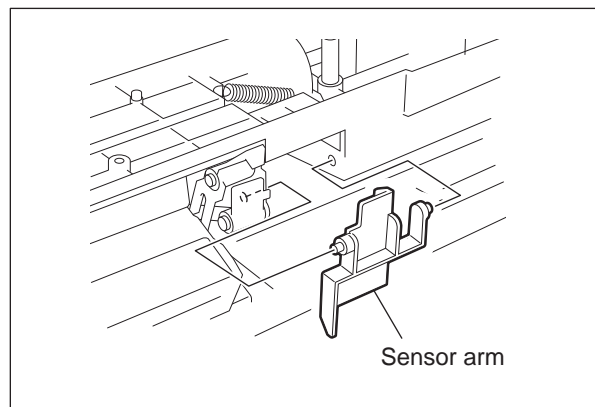


Fig. 4-119

- (4) Disconnect the connector from the sensor and release the latch to take off the bypass paper sensor.

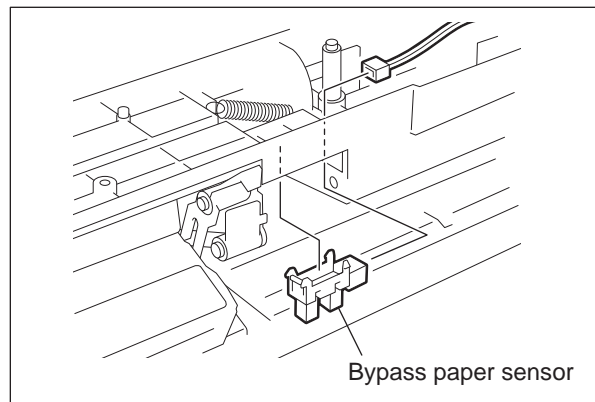



Fig. 4-120

4.5.8 Bypass pickup roller

- (1) Take off the bypass upper guide.
 P. 4-42 "4.5.5 Bypass upper guide"
- (2) Remove the clip, pull out the shaft and take off the bypass pickup roller.

Notes:

Make sure the following items when assembling the bypass pickup roller.

- Set the timing belt to the pulley securely.
- Do not put the wrong position when setting the timing belt.
- Be sure to insert the clip into the groove of shaft.
- Check that there is no stain such as oil on the surface of timing belt, the pulley and the roller.
- Install the bypass pickup roller and the bypass feed roller in the correct direction.

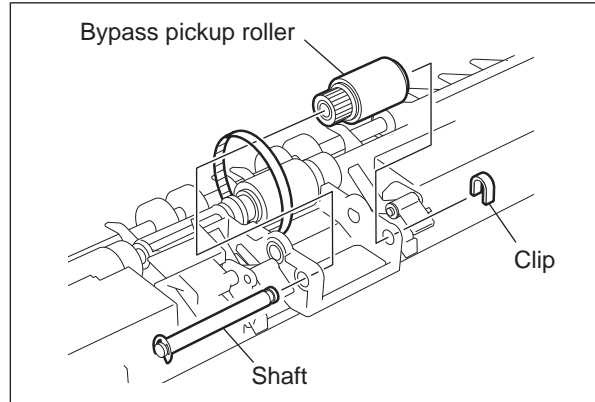



Fig. 4-121

4.5.9 Bypass feed roller

- (1) Take off the bypass upper guide.
 P. 4-42 "4.5.5 Bypass upper guide"
- (2) Remove the clip and take off the bypass feed roller.

Notes:

Make sure the following items when assembling the bypass feed roller.

- Set the timing belt to the pulley securely.
- Do not put the wrong position when setting the timing belt.
- Be sure to insert the clip into the groove of shaft.
- Check that there is no stain such as oil on the surface of timing belt, the pulley and the roller.
- Install the bypass pickup roller and the bypass feed roller in the correct direction.

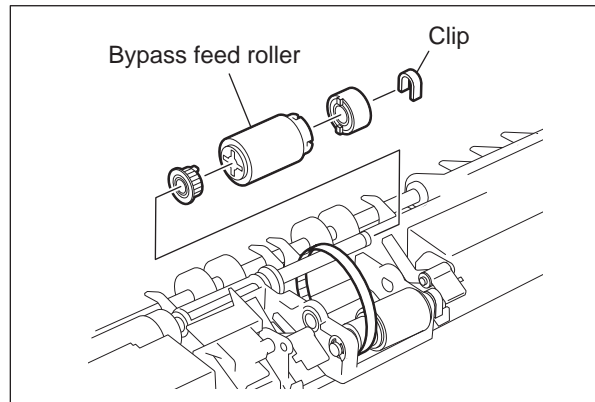


Fig. 4-122

4.5.10 Bypass transport roller

- (1) Take off the bypass upper guide.
📖 P. 4-42 "4.5.5 Bypass upper guide"
- (2) Remove the E-ring, pull out the shaft and take off the bypass transport roller.

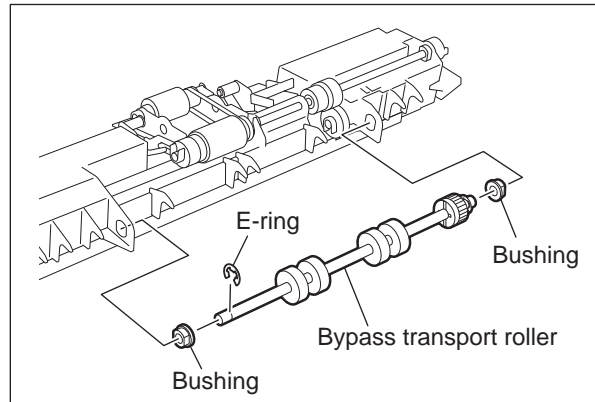


Fig. 4-123

4.5.11 Bypass feed clutch (CLT8)

- (1) Take off the bypass tray and hinge assembly.
📖 P. 4-39 "4.5.2 Hinge assembly"
- (2) Disconnect 1 connector and release the harness clamp.

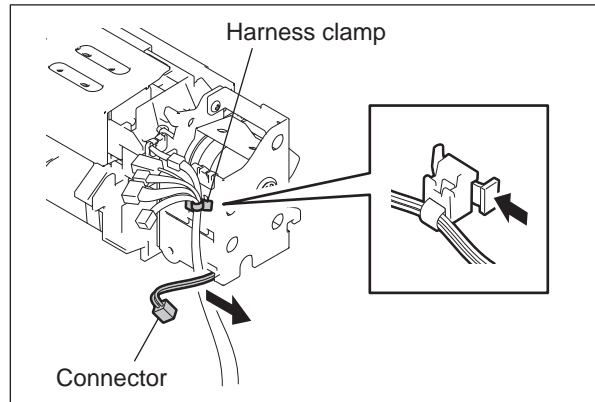


Fig. 4-124

- (3) Remove the E-ring and the bushing.
- (4) Remove 3 screws and take off the bracket.
- (5) Remove the bushing and the bypass feed clutch.

Notes:

Match the protruding portion of the clutch and bracket for assembling.

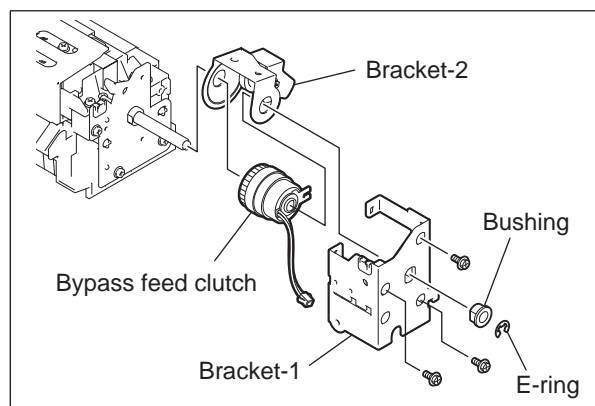



Fig. 4-125

4.5.12 Bypass separation roller

- (1) Take off the bypass unit.
 P. 4-38 "4.5.1 Bypass unit"
- (2) Remove 3 screws and take off the lower plate.

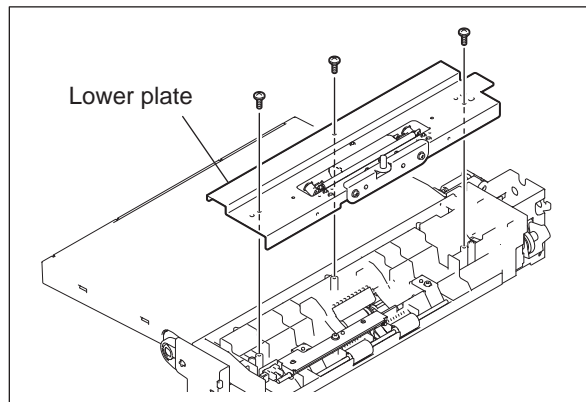


Fig. 4-126

- (3) Take off the bypass separation roller assembly.

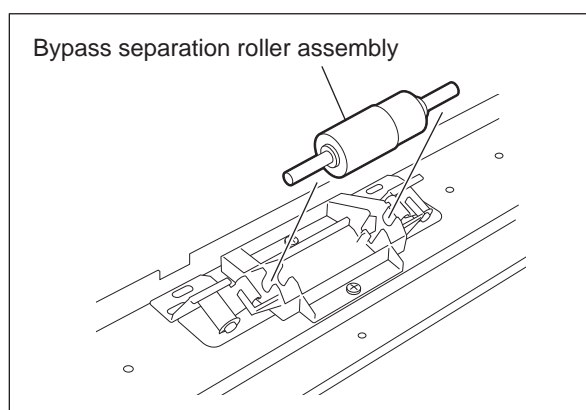


Fig. 4-127

- (4) Detach the cover, the arbor, and the clutch spring from the shaft, and then take off the bypass separation roller.

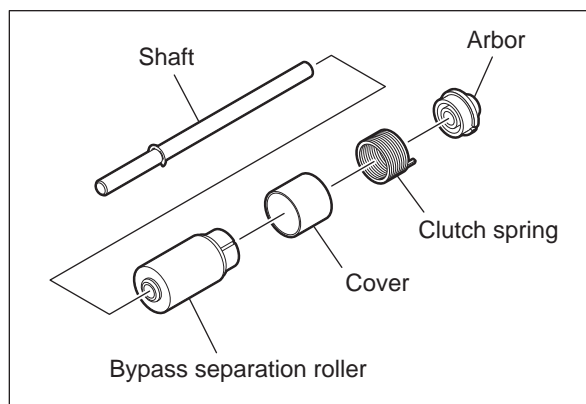


Fig. 4-128

4.5.13 Bypass feed sensor (S41)

- (1) Take off the bypass unit.
📖 P. 4-38 "4.5.1 Bypass unit"
- (2) Remove 3 screws and take off the lower plate.

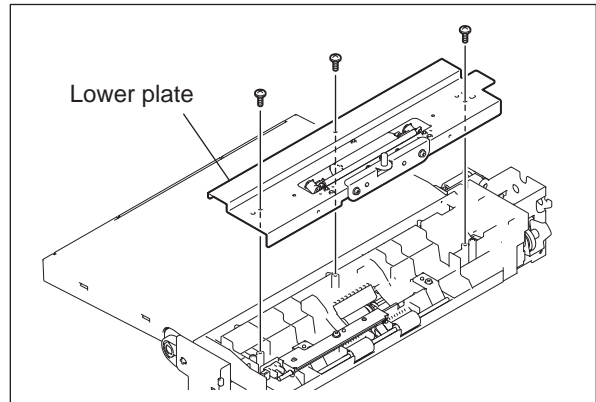


Fig. 4-129

- (3) Disconnect 1 connector. Remove 1 screw and take off the sensor plate.

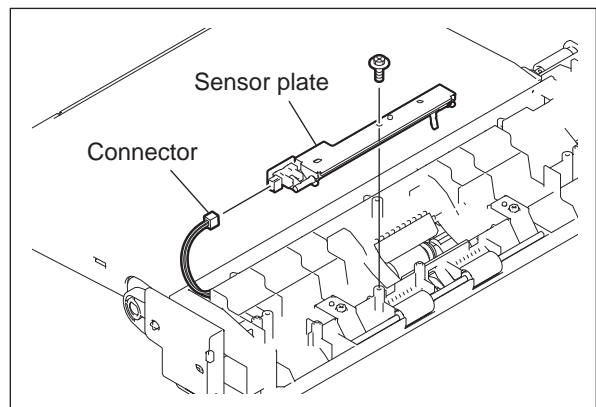


Fig. 4-130

- (4) Release the latch to take off the bypass feed sensor.

Notes:

Be careful not to come off the sensor arm and the sensor spring after taking off the sensor.

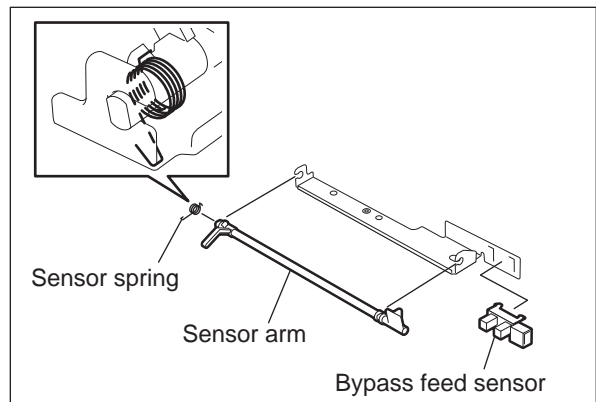


Fig. 4-131

4.5.14 Drawer feeding unit

- (1) Take off the upper and lower drawers.
- (2) Remove 1 screw and take off the drawer feeding unit by sliding it to the front side.

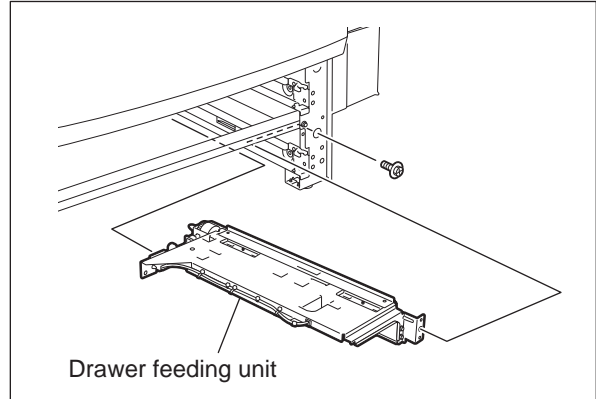


Fig. 4-132

4.5.15 Tray-up sensor (S31/S35) / Empty sensor (S32/S36)

- (1) Take off the drawer feeding unit.
P. 4-48 "4.5.14 Drawer feeding unit"
- (2) Disconnect the connector and release the latch to take off the tray-up sensor.
- (3) Disconnect the connector and release the latch to take off the empty sensor.

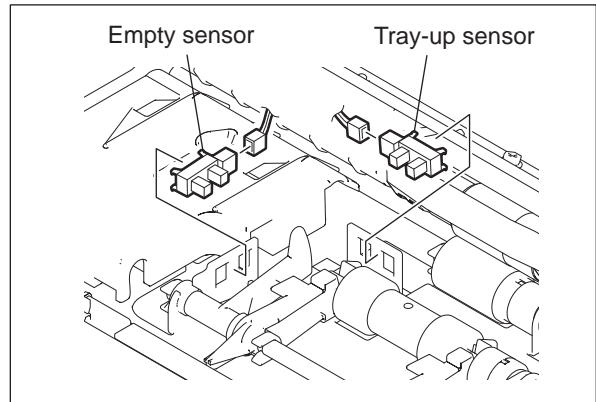


Fig. 4-133

4.5.16 Paper stock sensor (S33/S37)

- (1) Take off the drawer feeding unit.
P. 4-48 "4.5.14 Drawer feeding unit"
- (2) Pull up the paper stock sensor arm.
- (3) Disconnect the connector and release the latch to take off the paper stock sensor.

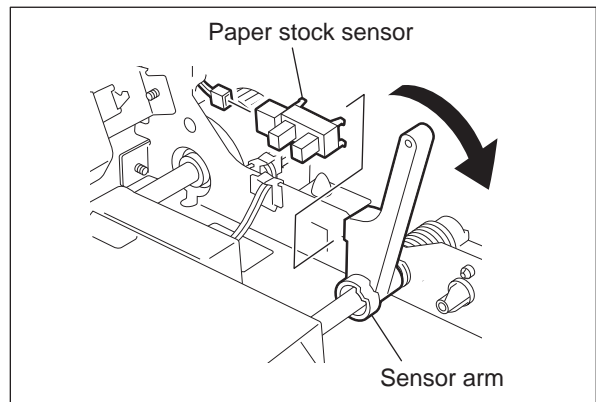



Fig. 4-134

4.5.17 Separation roller

- (1) Take off the drawer feeding unit.
 P. 4-48 "4.5.14 Drawer feeding unit"
- (2) Remove 1 screw and take off the separation roller holder.

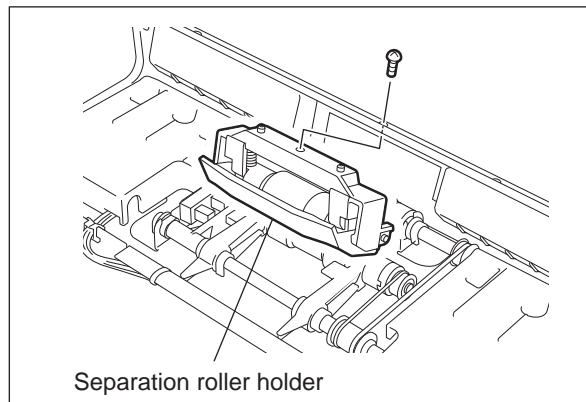


Fig. 4-135

- (3) Detach the lever from the holder and take off the separation roller with the shaft.

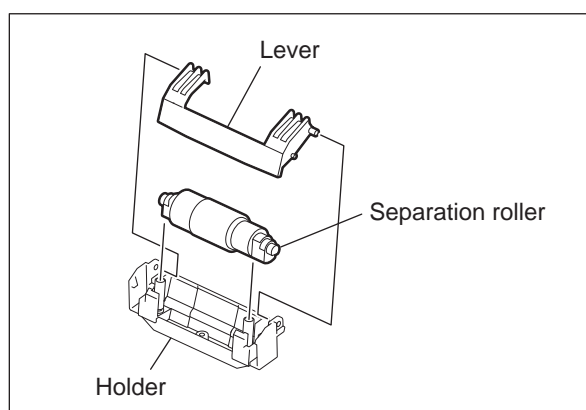


Fig. 4-136

- (4) Detach the cover, the arbor and the clutch spring from the shaft, and then take off the separation roller.

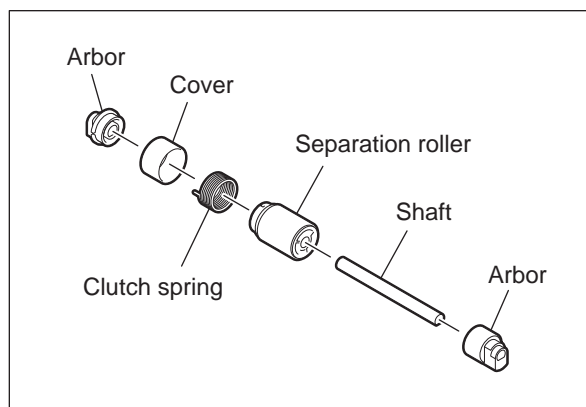



Fig. 4-137

4.5.18 Feed roller

- (1) Take off the separation roller holder.
 P. 4-49 "4.5.17 Separation roller"
- (2) Remove the clip and take off the feed roller.

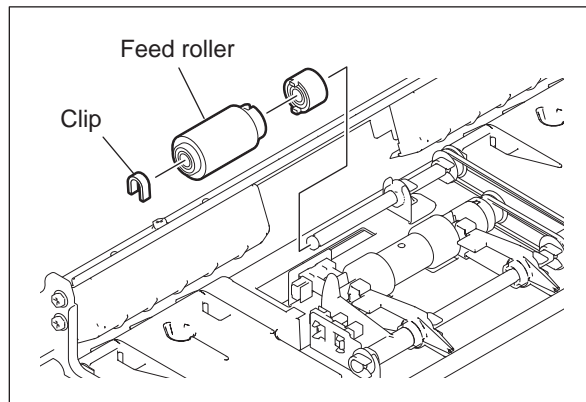



Fig. 4-138

4.5.19 Pickup roller

- (1) Take off the drawer feeding unit.
 P. 4-48 "4.5.14 Drawer feeding unit"
- (2) Remove the pickup roller assembly from the pickup arms and take off the belt.

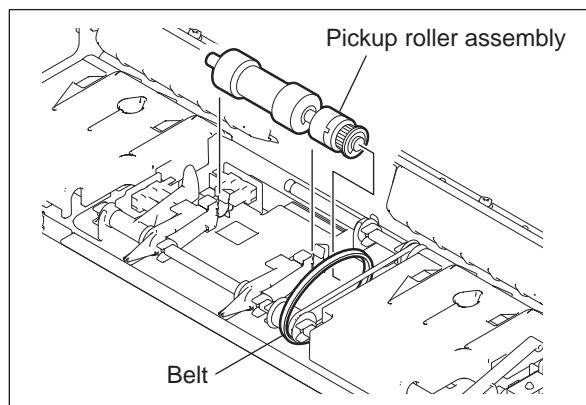


Fig. 4-139

- (3) Remove 3 E-rings, pulley, one-way clutch and take off the pickup roller.

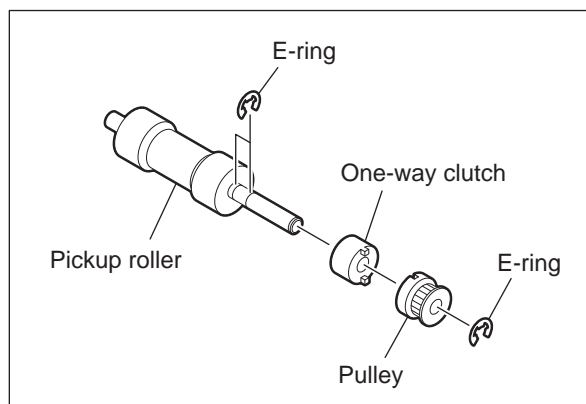


Fig. 4-140

4.5.20 Drawer feed clutch (CLT3/CLT6)

- (1) Take off the drawer feeding unit.
P. 4-48 "4.5.14 Drawer feeding unit"
- (2) Disconnect the connector and release the harness from the harness clamp.

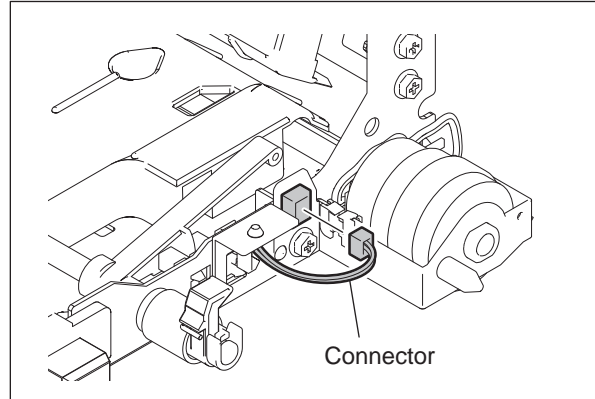


Fig. 4-141

- (3) Remove 2 screws and take off the clutch with the bracket.

Notes:

Match the protruding portion of clutch with the position shown in the figure for assembling

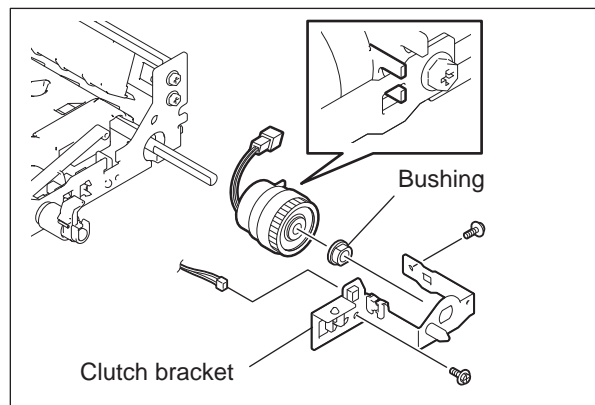


Fig. 4-142

4.5.21 Tray-up motor (M21)

- (1) Remove the upper and lower drawers.
- (2) Take off the filter bracket.
P. 9-8 "9.1.10 FIL board"
- (3) Disconnect 1 connector. Remove 4 screws and take off the tray drive unit.

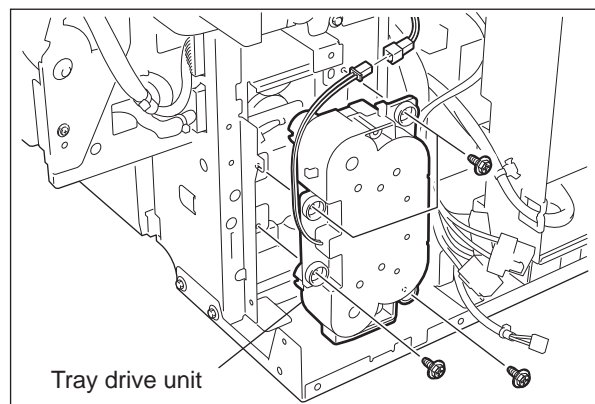


Fig. 4-143

- (4) Place the unit with its coupling up and release 6 latches to take off the cover.

Notes:

Be careful in taking off the cover because there is a spring in the tray drive unit.

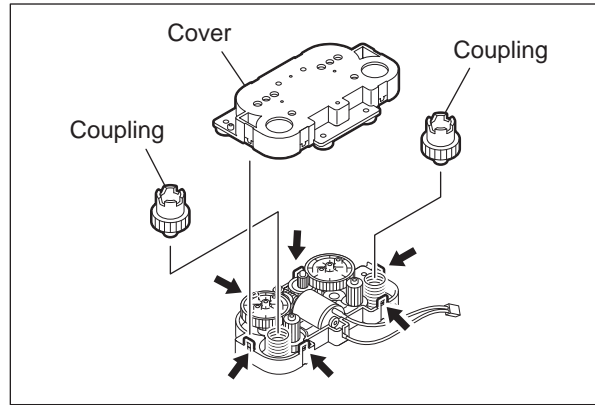


Fig. 4-144

- (5) Take off the tray-up motor.

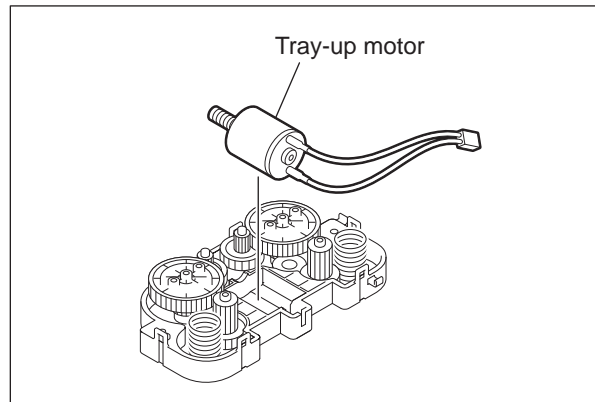


Fig. 4-145

Notes:

Match the boss of the gear with the hole of the cover when installing the motor.

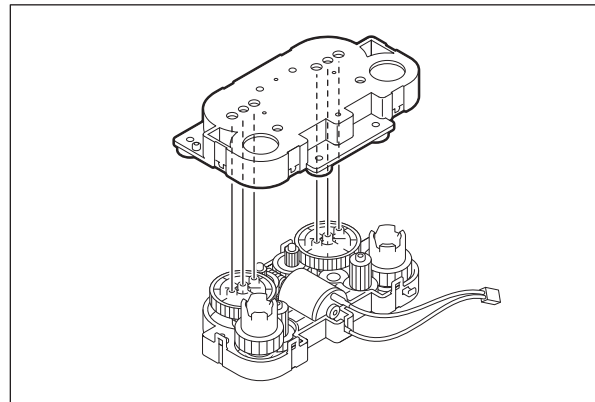



Fig. 4-146

4.5.22 Tray drive unit

- (1) Remove the upper and lower drawers.
- (2) Take off the filter bracket.
 P. 9-8 "9.1.10 FIL board"
- (3) Disconnect 1 connector. Remove 4 screws and take off the tray drive unit with the bracket.

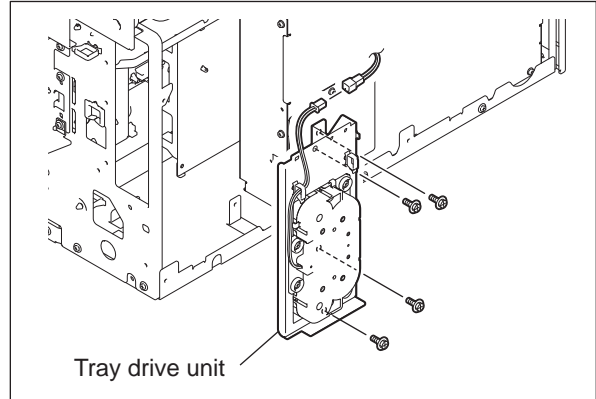



Fig. 4-147

4.5.23 2nd drawer transport clutch (Low speed) (CLT4)

- (1) Take off the tray drive unit.
 P. 4-53 "4.5.22 Tray drive unit"
- (2) Disconnect 1 connector and remove 1 clip to take off the 2nd drawer transport clutch (low speed).

Notes:

When assembling the clutch, match the protruded portion of the clutch with the position shown in the figure.

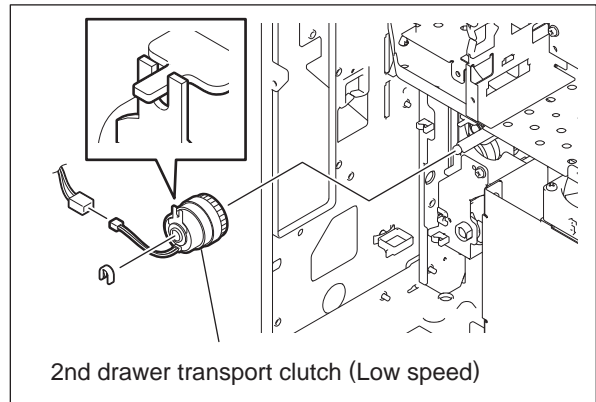



Fig. 4-148

4.5.24 2nd drawer transport clutch (High speed) (CLT5)

- (1) Take off the tray drive unit.
 P. 4-53 "4.5.22 Tray drive unit"
- (2) Disconnect 1 connector and remove 2 screws to take off the whole set of the clutch.
- (3) Take off the bracket, shaft, gear and 2 bushings.

Notes:

When assembling the clutch, match the protruded portion of the clutch with the position shown in the figure.

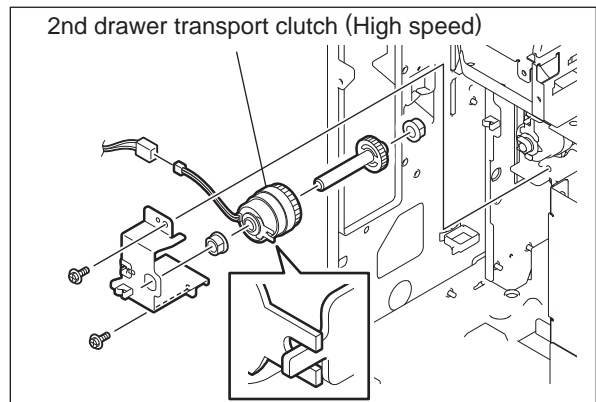


Fig. 4-149

4.5.25 1st drawer detection switch (SW5) / 2nd drawer detection switch (SW6)

- (1) Take off the tray drive unit.
📖 P. 4-53 "4.5.22 Tray drive unit"
- (2) Disconnect 1 connector each from both switches. Then release 2 latches to take off the switches by pushing them out toward the drawer.

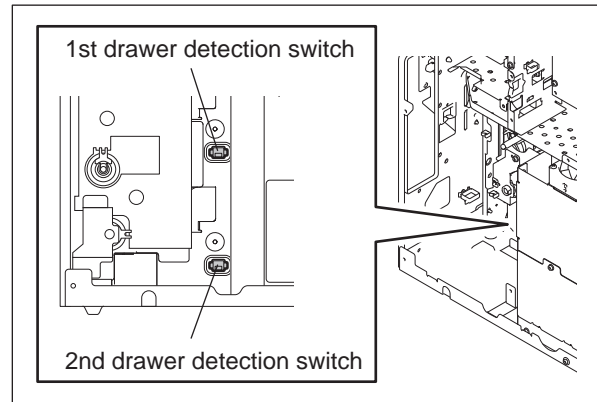


Fig. 4-150

4.5.26 Paper feed guide assembly

- (1) Take off the ADU.
📖 P. 4-164 "4.11.2 Automatic Duplexing Unit (ADU)"
- (2) Take off the bypass unit.
📖 P. 4-38 "4.5.1 Bypass unit"
- (3) Take off the 2nd transfer unit.
📖 P. 4-121 "4.8.11 2nd transfer unit (TRU)"
- (4) Disconnect 1 connector, and then release the harness from 2 hooks.
- (5) Remove 3 screws, and then take off the paper feed guide assembly by sliding it to the rear side slightly.

Notes:

When installing the assembly, be sure not to deform the film on the transport path.

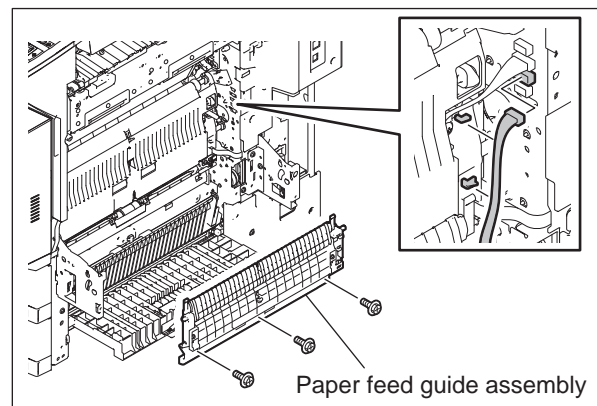


Fig. 4-151

4.5.27 2nd drawer feed sensor (S34)

- (1) Take off the paper feed guide assembly.
📖 P. 4-54 "4.5.26 Paper feed guide assembly"
- (2) Remove the seal and disconnect 1 connector to take off the 2nd drawer feed sensor.

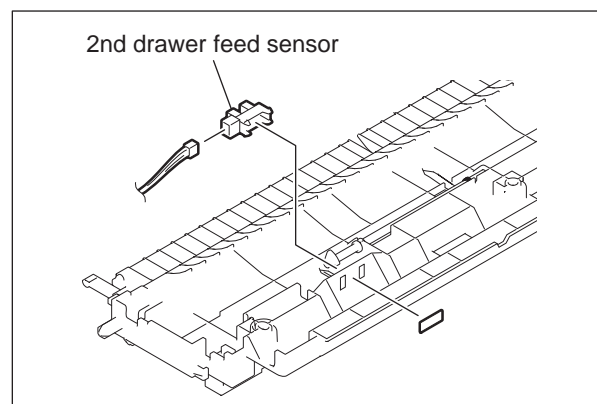


Fig. 4-152

4.5.28 Side cover switch (SW4)

- (1) Take off the paper feed guide assembly.
P. 4-54 "4.5.26 Paper feed guide assembly"
- (2) Remove 2 screws, and then take off the paper feed guide A by sliding it.

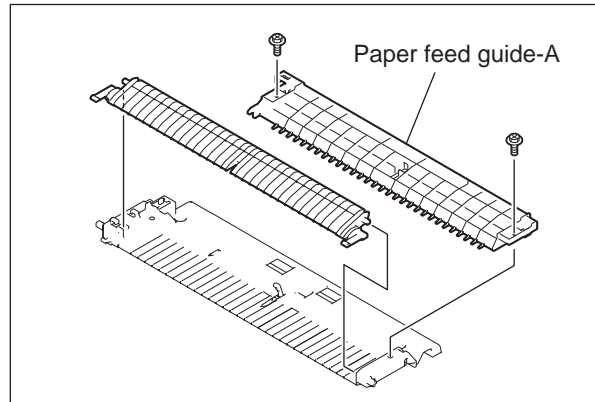


Fig. 4-153

- (3) Disconnect 1 connector, and then release 2 latches to take off the side cover switch.

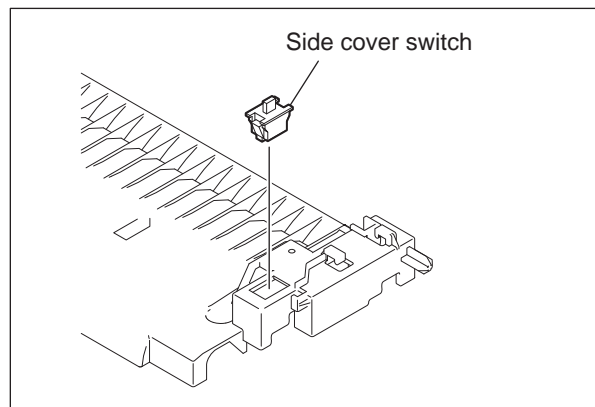


Fig. 4-154

4.5.29 Registration guide

- (1) Perform the output check (03-239) to set the plunger at the retracted position before taking off the registration guide.

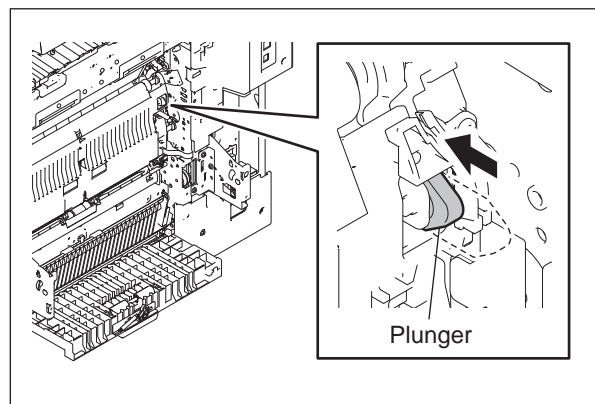



Fig. 4-155

- (2) Take off the paper feed guide assembly.
 P. 4-54 "4.5.26 Paper feed guide assembly"
- (3) Take off each cover of the both sides of the registration guide.

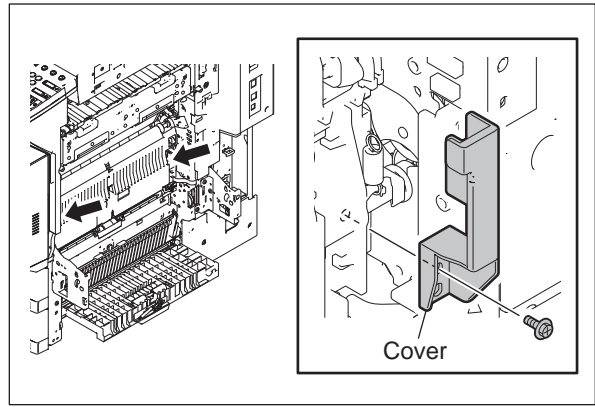


Fig. 4-156

- (4) Remove the spring by releasing the front side hook, and remove the wire and cam.

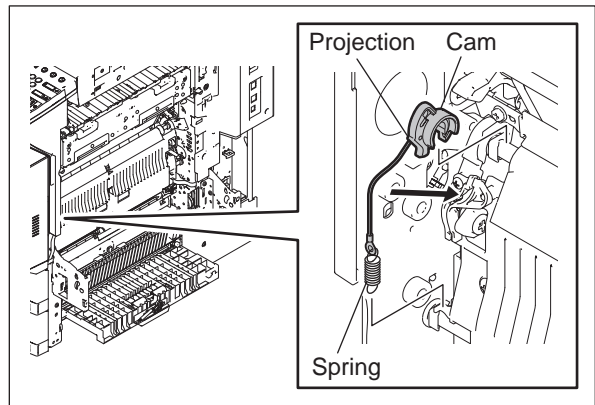


Fig. 4-157

- (5) Remove the spring by releasing the rear side hook, and remove the wire and cam.

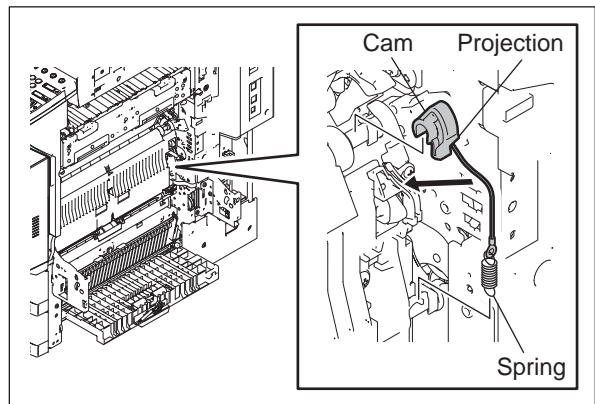


Fig. 4-158

Notes:

Keep the following points in mind when assembling.

- Since the shape of the front and rear side cam is different, be careful not to assemble the wrong one.
- Make sure that you route the wire along the correct wiring route.
- After assembling, check that the front and rear side cams move smoothly.
- Make sure that the protrusions of the cams are on the upper side of the registration guide.

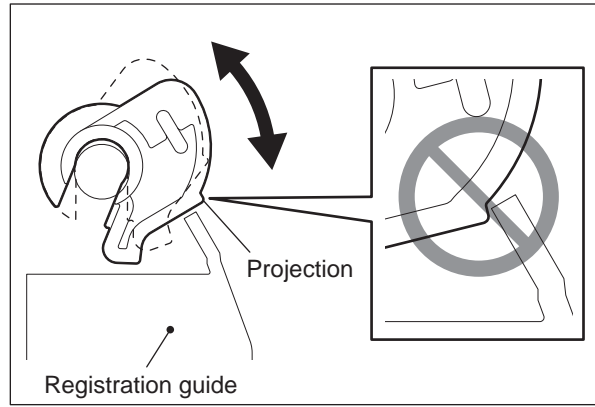


Fig. 4-159

- (6) Disconnect 1 connector and remove 3 screws. Then take off the registration guide.

Notes:

The outer 2 of these 3 screws are stepped screws.

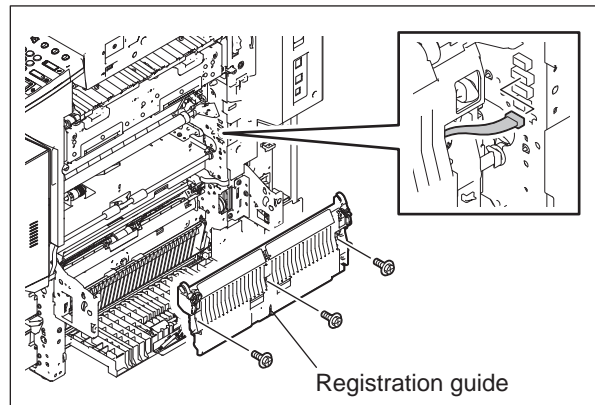


Fig. 4-160

4.5.30 Registration sensor (S28)

- (1) Take off the registration sensor.
 📖 P. 4-55 "4.5.29 Registration guide"
- (2) Disconnect 1 connector and remove 1 screw. Then take off the registration sensor with its bracket.

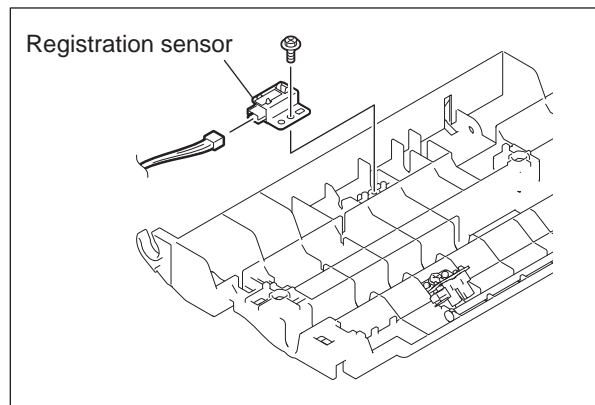


Fig. 4-161

- (3) Remove the seal, and then take off the registration sensor.

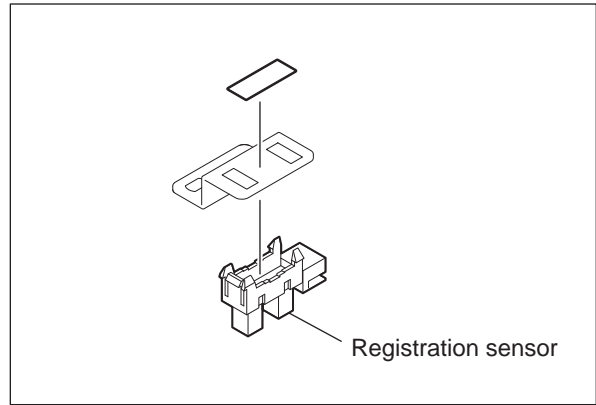



Fig. 4-162

4.5.31 1st drawer feed sensor (S30)

- (1) Take off the registration guide.
 P. 4-55 "4.5.29 Registration guide"
- (2) Disconnect 1 connector and remove 1 screw. Then take off the 1st drawer feed sensor with its bracket.

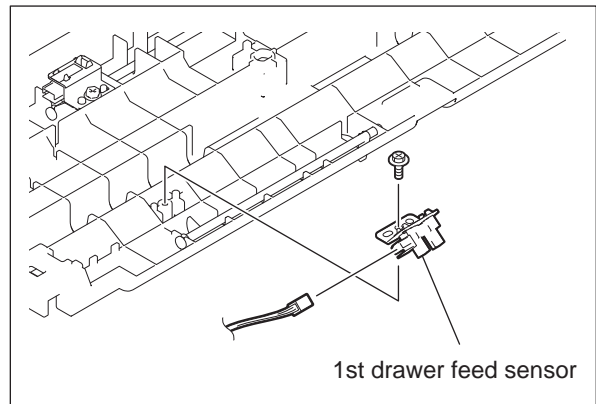


Fig. 4-163

- (3) Remove the seal, and then take off the 1st drawer feed sensor.

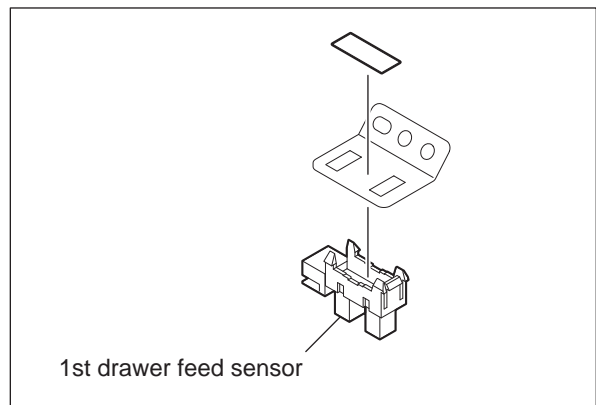


Fig. 4-164

4.5.32 Registration roller (Rubber)

- (1) Open the 2nd transfer unit.
- (2) Remove 1 screw on the front side, and then remove the holder and spring.
- (3) Remove 1 screw on the rear side, and then remove the holder and spring.

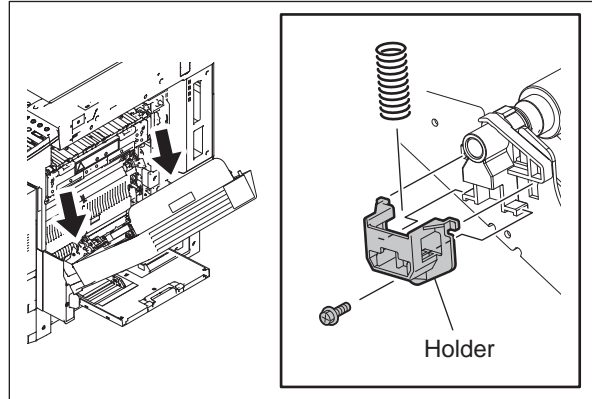


Fig. 4-165

- (4) Take off the registration roller (rubber) with its holder.

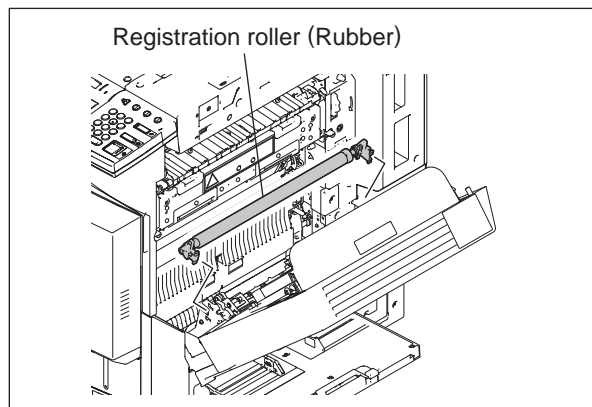


Fig. 4-166

- (5) Remove 2 holders, 3 E-rings, 1 gear and the grounding plate.

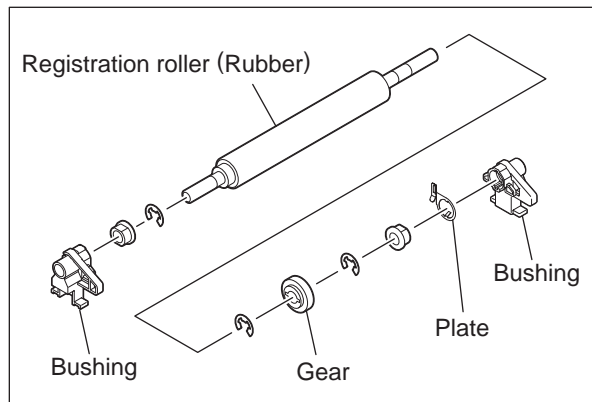


Fig. 4-167

4.5.33 Registration motor unit

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Disconnect 1 connector and remove 4 screws. Then take off the registration motor unit [1].

Notes:

Be sure not to drop the bushing.

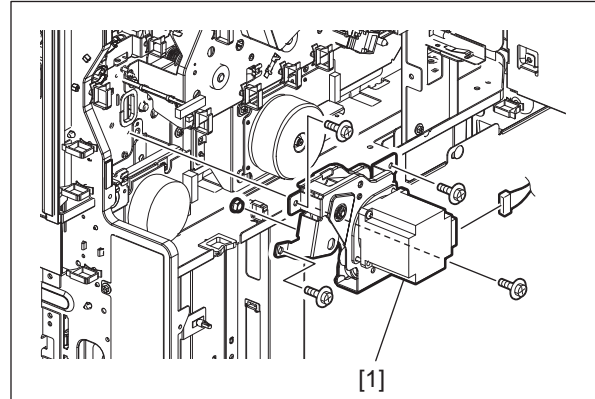


Fig. 4-168

4.5.34 Registration motor (M19)

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Take off the registration motor unit.
📖 P. 4-60 "4.5.33 Registration motor unit"
- (3) Remove 3 screws to take off the plate.

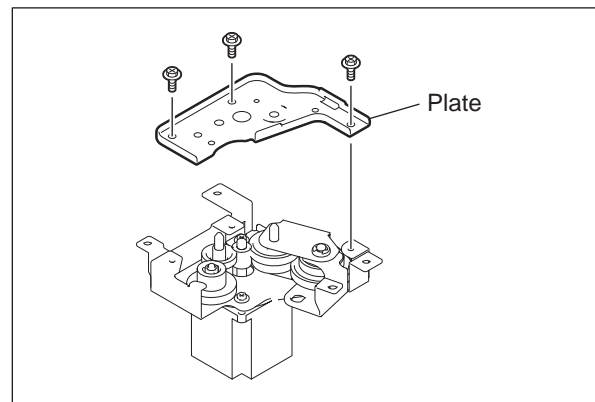


Fig. 4-169

- (4) Remove 1 screw, 3 gears and the bracket with gear.

Notes:

Replace the registration motor with the damper and the bracket installed.

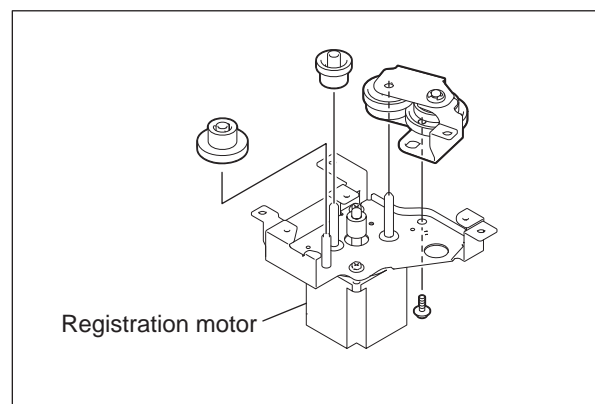


Fig. 4-170

Notes:

Never attempt to loosen 4 screws with lock paint.

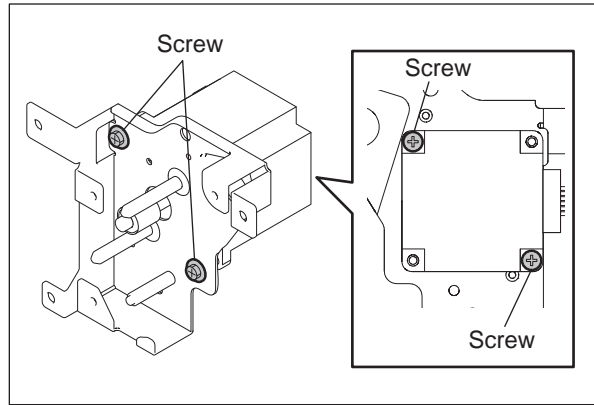


Fig. 4-171

4.5.35 Registration roller (Metal)

- (1) Take off the registration motor unit.
P. 4-60 "4.5.33 Registration motor unit"
- (2) Take off the registration guide.
P. 4-55 "4.5.29 Registration guide"
- (3) Take off the middle guide.

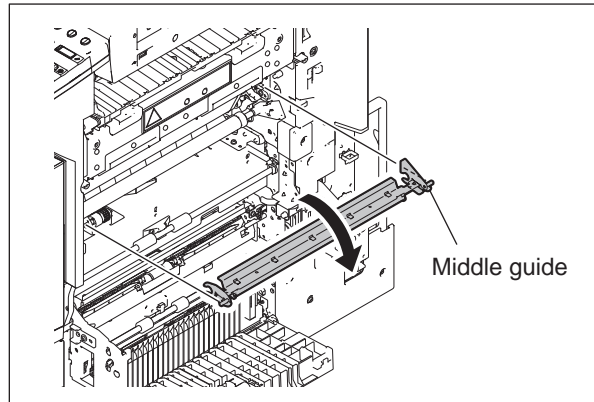


Fig. 4-172

- (4) Remove the clip [1] on the rear side of the registration roller (metal). Then remove the gear [2] and parallel pin [3].

Notes:

Be sure not to drop the parallel pin [3].

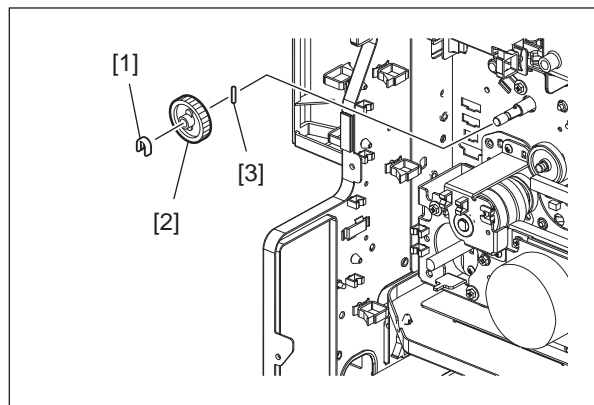


Fig. 4-173

- (5) Remove 2 screws, and then take off the duct.

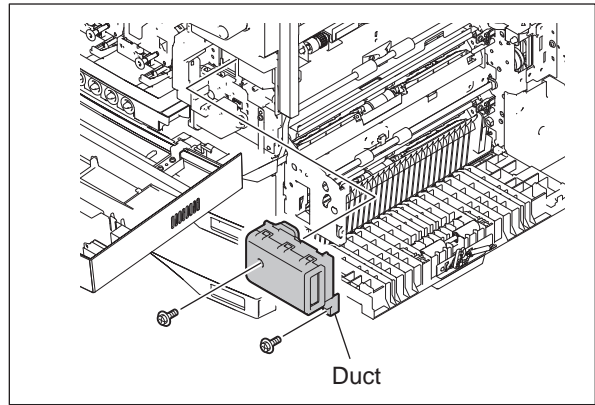


Fig. 4-174

- (6) Remove 1 screw, and then take off the cover.

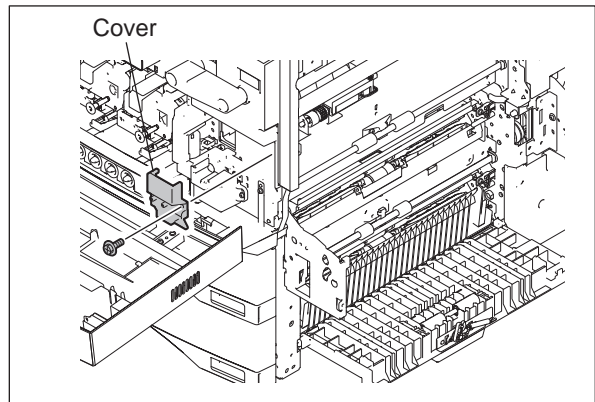


Fig. 4-175

- (7) Remove each 1 screw fixing the both front and rear holders.
- (8) Remove 2 clips, and then move the front and rear holders and bushings to the inner side.
- (9) Move the registration roller (metal) to the rear side, and then take it off from the front side.

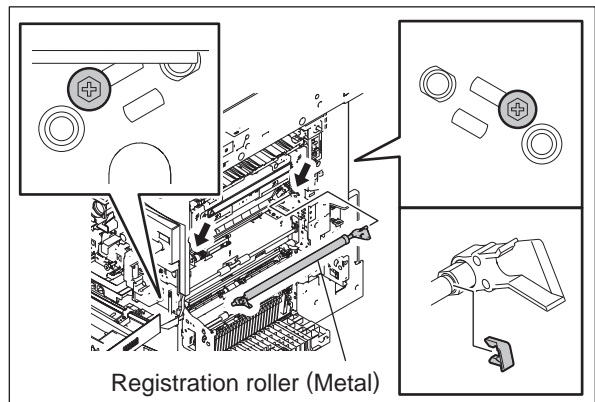


Fig. 4-176

4.5.36 Paper dust holder

- (1) Take off the registration roller (metal).
📖 P. 4-61 "4.5.35 Registration roller (Metal)"
- (2) Remove 2 screws, and then take off the paper dust holder.

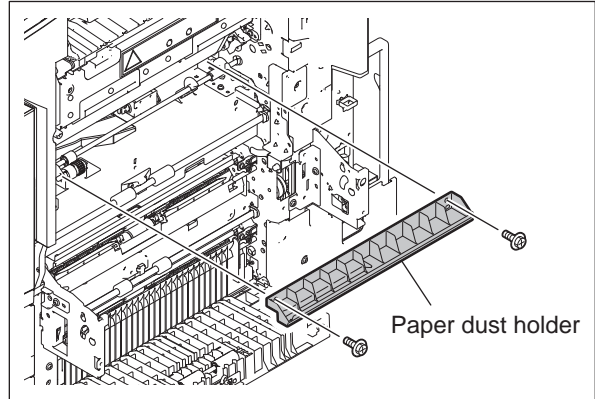


Fig. 4-177

4.5.37 1st drawer transport clutch (Low speed) (CLT2)

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Remove 1 clip [1].
- (3) Disconnect 1 connector and take off the 1st drawer transport clutch (Low speed) [2].

Notes:

When assembling the clutch, match the protruded portion of the clutch with the position shown in the figure.

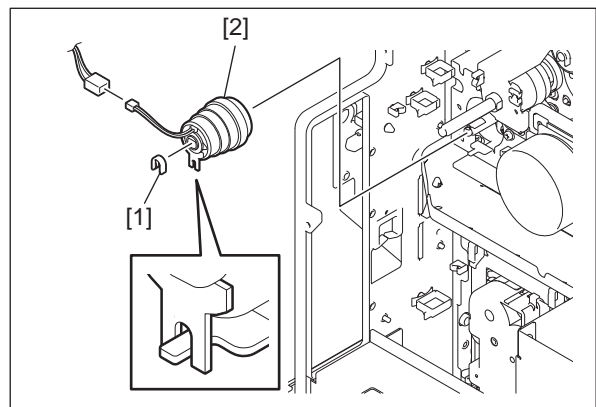


Fig. 4-178

4.5.38 Feed/transport motor (M20)

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Disconnect 1 connector and remove 4 screws to take off the feed/transport motor [1].

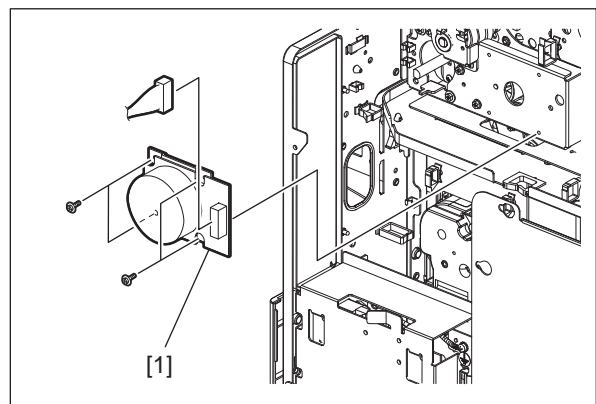


Fig. 4-179

4.5.39 Feed/transport gear unit

- (1) Take off the feed/transport motor.
📖 P. 4-63 "4.5.38 Feed/transport motor (M20)"
- (2) Take off the 1st drawer transport clutch (Low speed).
📖 P. 4-63 "4.5.37 1st drawer transport clutch (Low speed) (CLT2)"
- (3) Disconnect 1 connector, and then release the harness out of the clamp.
- (4) Remove 4 screws, and then take off the feed/transport gear unit.

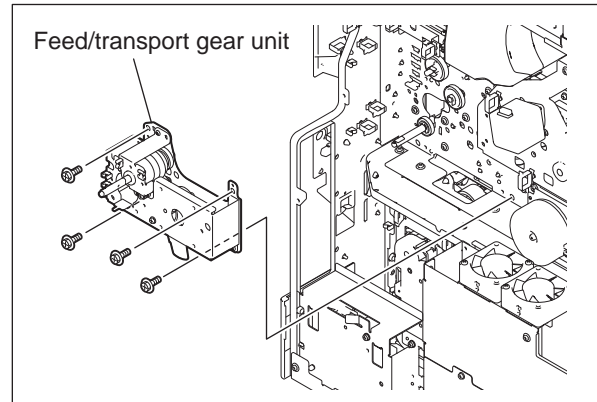


Fig. 4-180

4.5.40 1st drawer transport clutch (High speed) (CLT1)

- (1) Take off the feed/transport gear unit.
📖 P. 4-64 "4.5.39 Feed/transport gear unit"
- (2) Remove 2 screws, and then take off the 1st drawer transport clutch (High speed) [1] with its bracket.
- (3) Remove the shaft and gear from the 1st drawer transport clutch (High speed) [1].

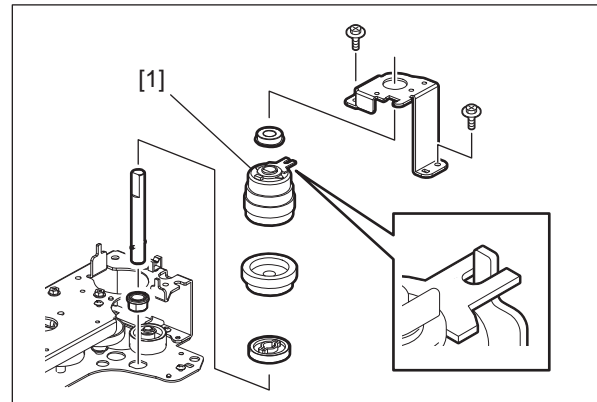


Fig. 4-181

4.5.41 1st drawer transport roller

- (1) Take off the registration guide.
📖 P. 4-64 "4.5.39 Feed/transport gear unit"
- (2) Take off the feed/transport motor.
📖 P. 4-63 "4.5.38 Feed/transport motor (M20)"
- (3) Remove 2 clips to move 2 bushings to the inside.
- (4) Lift up the 1st drawer transport roller and take it off to the rear side.
- (5) Remove 1 E-ring, 1 gear and 2 bushings from the 1st drawer transport roller.

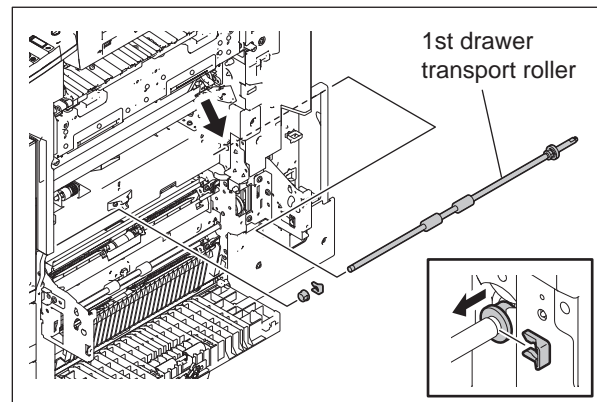


Fig. 4-182

4.5.42 2nd drawer transport roller

- (1) Take off the paper feed guide assembly.
P. 4-54 "4.5.26 Paper feed guide assembly"
- (2) Take off the tray drive unit.
P. 4-53 "4.5.22 Tray drive unit"
- (3) Take off the 2nd drawer transport clutch (low speed).
P. 4-53 "4.5.23 2nd drawer transport clutch (Low speed) (CLT4)"
- (4) Remove 1 clip, and then remove the gear and parallel pin.

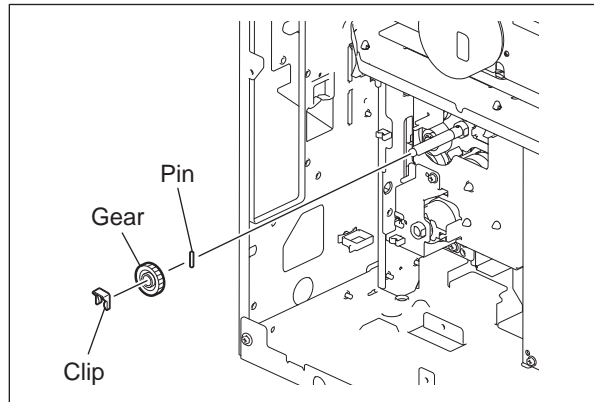


Fig. 4-183

- (5) Remove 2 clips, and then take off the 2nd drawer transport roller by moving it to the rear side slightly.

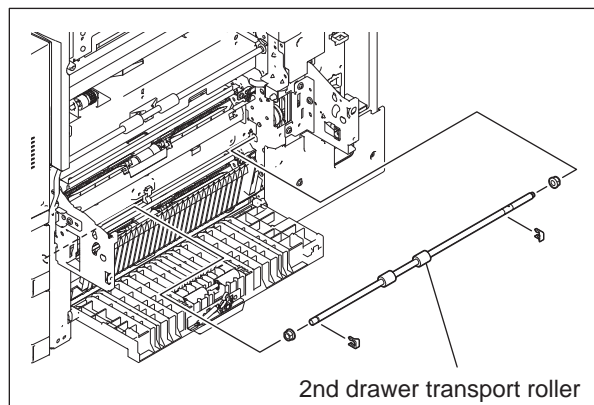


Fig. 4-184

4.6 Process Unit Related Section

4.6.1 Process unit (EPU)

- (1) Open the front cover.
- (2) Remove 1 screw, and then turn the TBU lifting lever counterclockwise for 90 degrees.

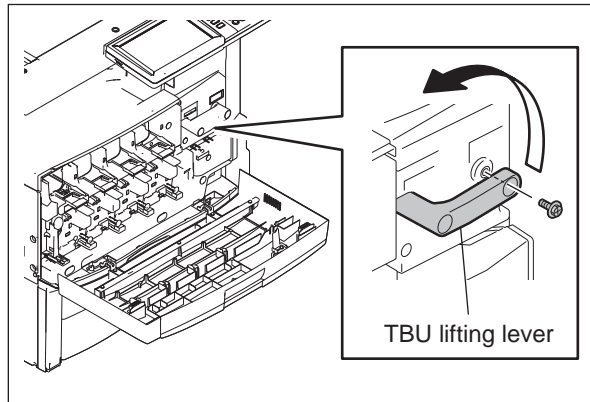


Fig. 4-185

- (3) Hold the A part of the process unit and pull it out while pushing the lock handle down. Then hold the B part and take off each process unit of EPU (Y), EPU (M), EPU (C) and EPU (K).

Notes:

- Be sure not to touch, spit or scratch on the drum surface.
- Check if the shutter of the toner supply opening on the removed process unit is closed.
- Avoid a direct sunlight onto the drum. Move it to a dark place as soon as it is taken off.

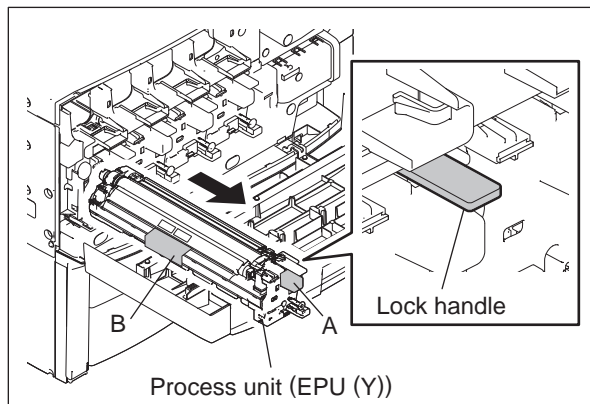


Fig. 4-186

Notes:

When installing, wipe out toner on the drawer connector [1] of the equipment because toner attached on the contacts of the connector will cause conduction blockage.

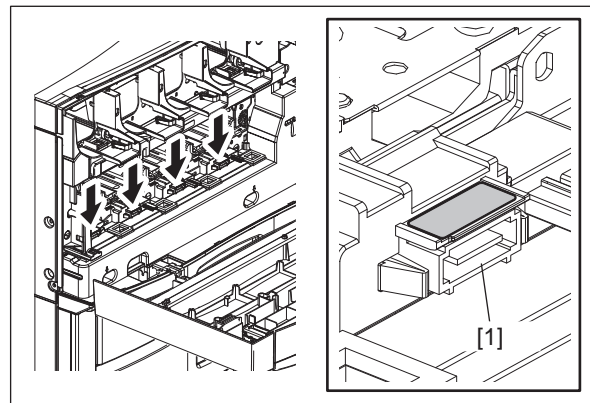


Fig. 4-187

4.6.2 Process cover

- (1) Take off the process unit (EPU).
P. 4-66 "4.6.1 Process unit (EPU)"
- (2) Take off the main charger cleaner handle [1].

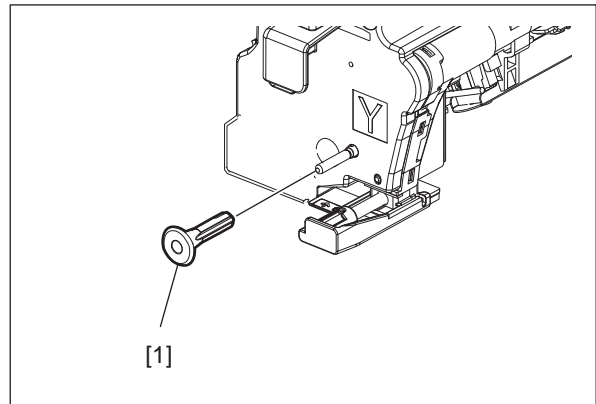


Fig. 4-188

- (3) Disconnect the connector.

Notes:

- Be sure to place the process unit (EPU) in the correct position as shown in Figure to avoid the damage on the drum.
- When installing, be sure not to have harnesses being loosened.

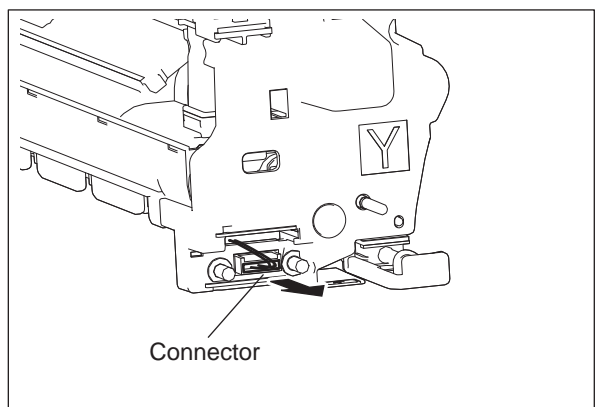


Fig. 4-189

- (4) Remove 2 screws.
- (5) Release the latch, and then take off the process cover.

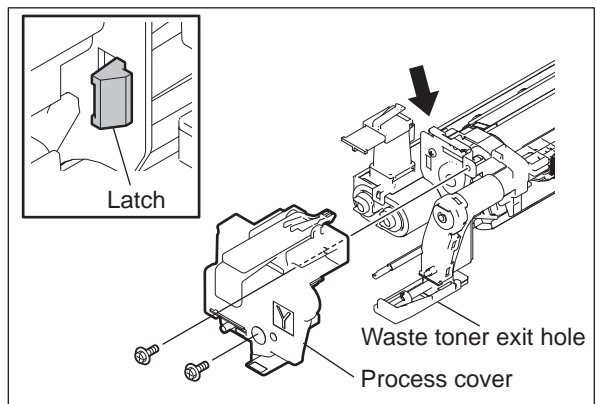


Fig. 4-190

Notes:

When installing, fit 2 bosses of the process cover and 1 boss of the waste toner drain into respective boss holes securely.

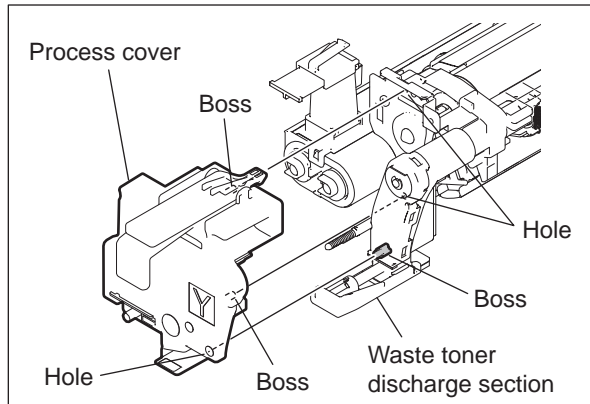


Fig. 4-191

4.6.3 Cleaning unit/ Developer unit

- (1) Take off the process cover.
P. 4-67 "4.6.2 Process cover"
- (2) Remove 2 screws and take off the front retainer.

Notes:

Be sure not to lose the bearing installed on the front retainer.

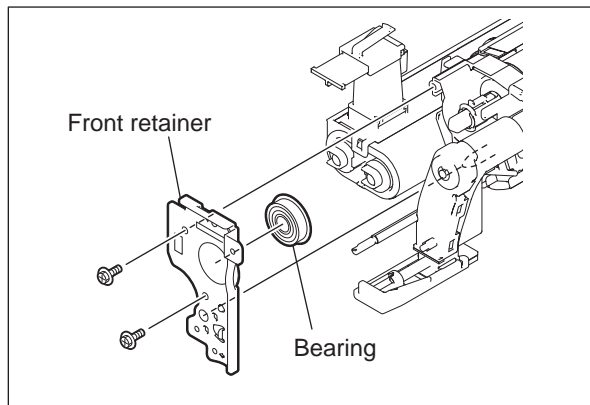


Fig. 4-192

- (3) Release 1 latch on the rear side of the developer unit to open the cleaner unit in the direction of the arrow. Slide the cleaning unit to the rear side to separate it from the developer unit.

Notes:

- Be sure not to touch, spit or scratch on the drum surface.
- Avoid a direct sunlight onto the drum. Move it to a dark place as soon as it is taken off.

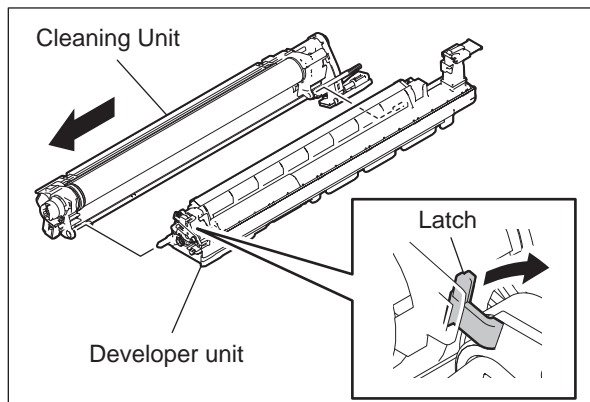


Fig. 4-193

4.6.4 Main charger assembly

- (1) Take off the cleaning unit.
☞ P. 4-68 "4.6.3 Cleaning unit/ Developer unit"
- (2) Hold (A) part on the front side of the main charger assembly, lift the cleaner case up and take off the main charger assembly.

Notes:

- Be sure not to touch, spit or scratch on the drum surface.
- Avoid a direct sunlight onto the drum. Move it to a dark place as soon as it is taken off.

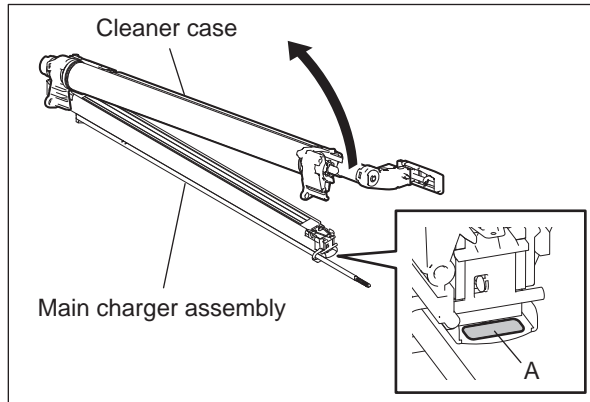


Fig. 4-194

4.6.5 Main charger cleaner

- (1) Take off the main charger assembly.
☞ P. 4-69 "4.6.4 Main charger assembly"
- (2) Remove the main charger cleaner rod from the guide.
- (3) Turn the main charger cleaner rod for 90 degrees to take it off.

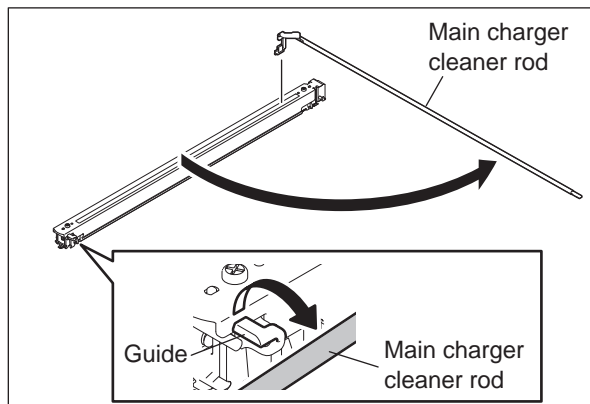


Fig. 4-195

Notes:

Be sure to insert the main charger cleaner rod all the way in before turning it 90 degrees, otherwise the needle electrodes may be damaged.

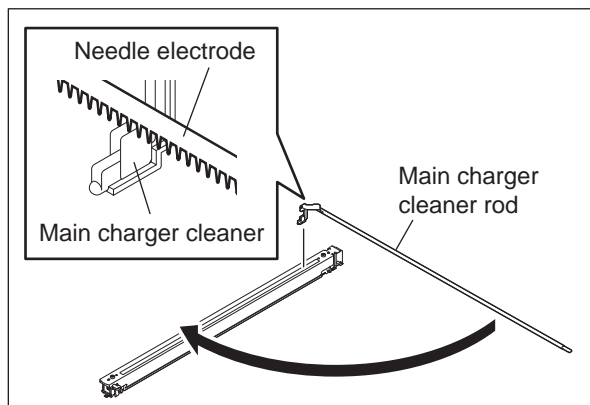


Fig. 4-196

- (4) Peel 2 main charger cleaner [1] and 2 seal [2] off the main charger cleaner rod.

Notes:

Attach the main charger cleaner [1] with its sides contacting the rib [3] of the main charger cleaner rod as indicated by arrows shown in the figure.

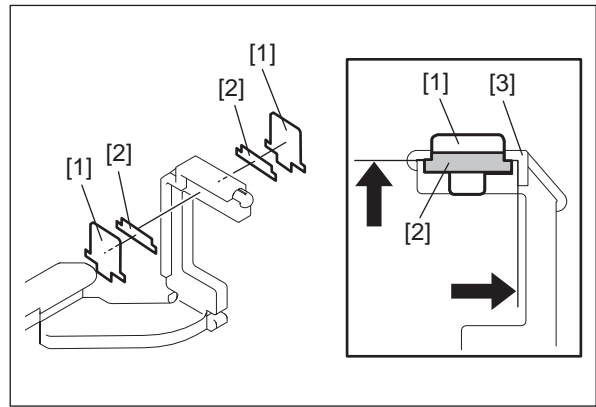



Fig. 4-197

4.6.6 Main charger grid

- (1) Take off the Main charger cleaner.
 P. 4-69 "4.6.5 Main charger cleaner"
- (2) Lift it up the arm [1] of the front terminal, and then take off the main charger grid [2].

Notes:

- Do not touch the mesh area of the grid.
- There are 2 holes [3] on the rear side of the main charger grid for determining which is the front or back surface. Be sure to place the grid so that the 2 holes [3] come as shown in the figure.

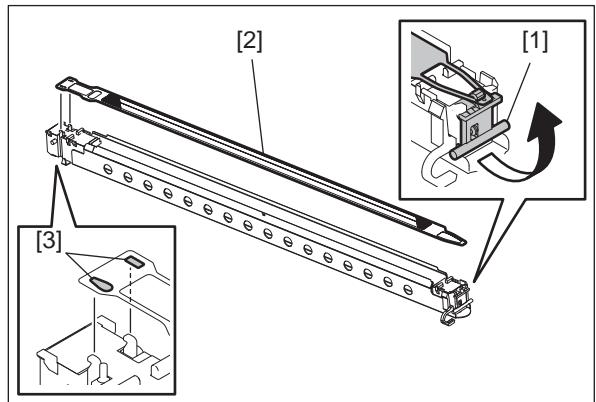


Fig. 4-198

Notes:

- Be sure to use the correct main charger grid during installation since its shape in e-STUDIO2020C/2330C/2820C/2830C/3520C/3530C/4520C is different to that in e-STUDIO2040C/2540C/3040C/3540C/4540C.

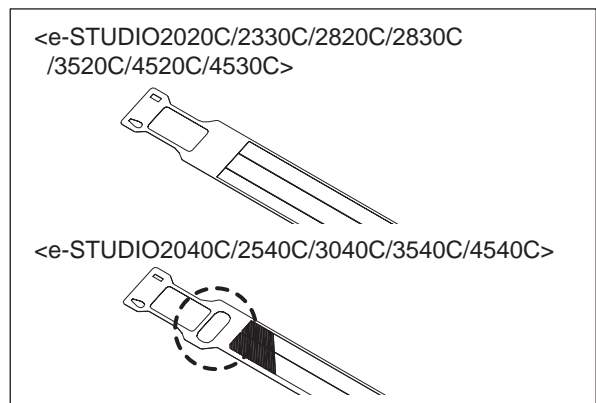



Fig. 4-199

4.6.7 Needle electrode

- (1) Take off the main charger grid.
 P. 4-70 "4.6.6 Main charger grid"
- (2) Remove the terminal cover [1] at the rear.

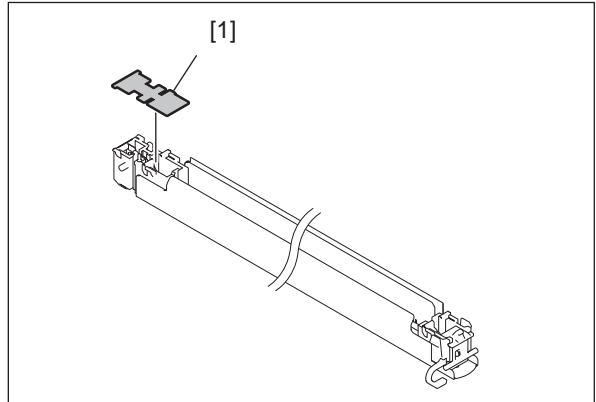


Fig. 4-200

- (3) Remove the arm from the front terminal.
- (4) Take off the spring.
- (5) Hold the front side of the main charger to lift it up, and then take it off from the rear terminal.

Notes:

When installing the needle electrode, be sure of the following:

- Be sure that its needle comes at its top side.
- Hook the needle electrode and the spring on both front and rear terminals securely.
- Do not twist the needle electrode.
- Do not touch the needle electrode directly with bare hands.

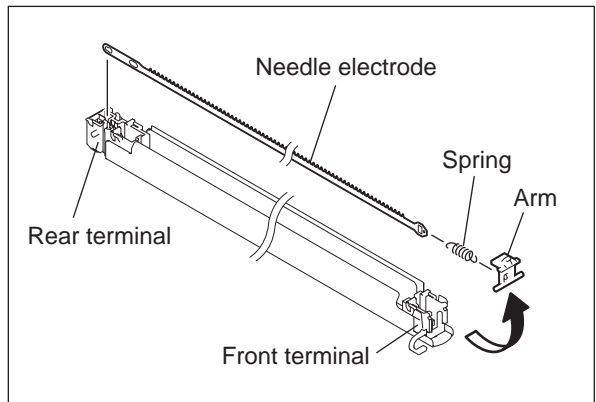



Fig. 4-201

4.6.8 Drum

- (1) Take off the main charger assembly.
 P. 4-69 "4.6.4 Main charger assembly"
- (2) Release the 2 latches, and then take off the bushing.

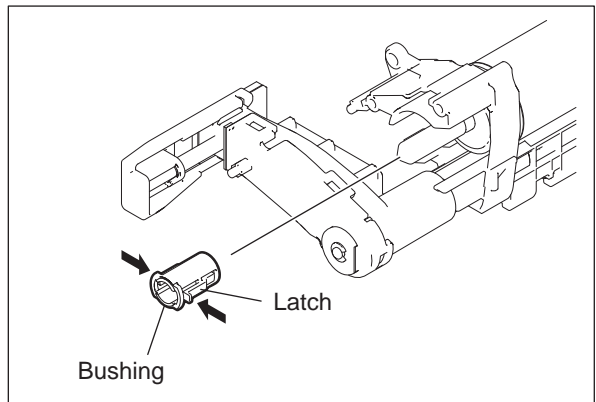


Fig. 4-202

- (3) Pull out the shaft from the rear side, then hold the gear part of the drum and take it off.

Notes:

- Be sure not to lose the sleeve which will remain on the shaft or rear side of the drum.
- Be sure not to lose the bearing installed on the frame.
- Be sure not to touch, spit or scratch on the drum surface.
- Avoid a direct sunlight onto the drum. Move it to a dark place as soon as it is taken off.
- Be sure not to touch or scratch the edge of the drum cleaning blade.

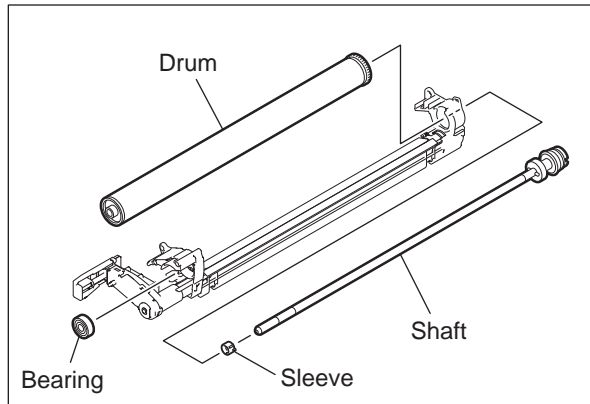


Fig. 4-203

Notes:

When the retainer installed on the drum shaft has been taken off, be sure to install it while aligning the direction of the ribs of the coupling with the pin on the drum shaft.

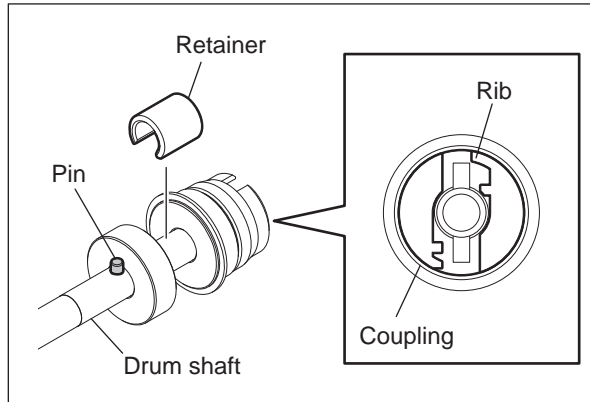


Fig. 4-204

Notes:

When installing the drum, not use a patting powder.
Install the drum, shaft and sleeve by means of the following procedure.

- (1) Install the drum to the cleaner case with its front side boss aligned with the seal on the case. Be careful not to have the seal on the rear side come off of the drum.

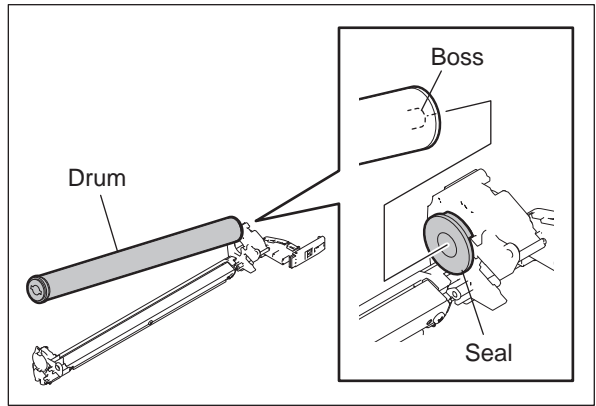


Fig. 4-205

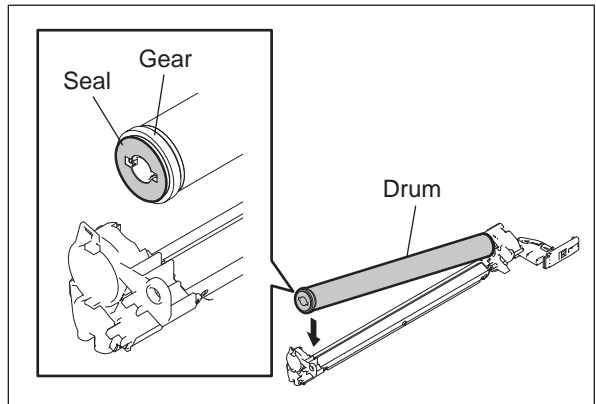


Fig. 4-206

- (2) Install the sleeve with its groove aligned with the pin on the drum shaft.

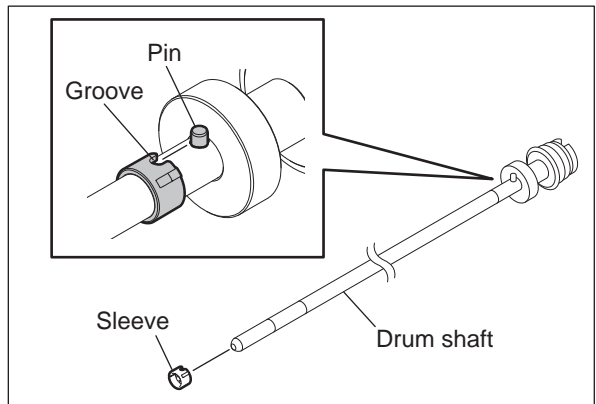


Fig. 4-207

- (3) Insert the drum shaft to the drum while aligning the position of the pin on the shaft with the groove of the drum. After they are aligned, push the shaft fully in to engage the groove and pin with the sleeve.

Notes:

Be sure to align the position before inserting the shaft. If the drum or drum shaft is rotated with the sleeve engaged with the groove and pin, sleeve may be deformed.

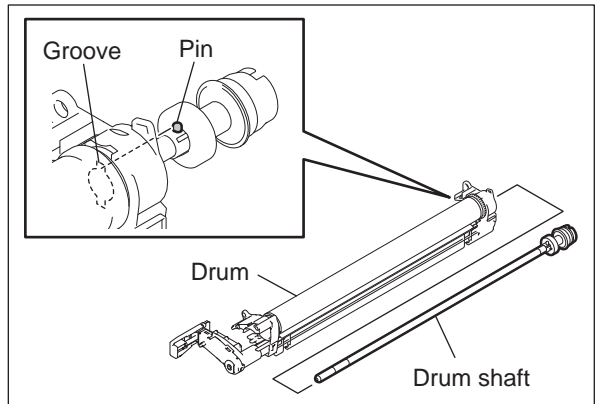



Fig. 4-208

- (4) Install the bearing on the front side of the drum shaft.

4.6.9 Drum cleaning blade

- (1) Take off the Drum.
 P. 4-71 "4.6.8 Drum"
- (2) Remove 2 screws and take off the drum cleaning blade.

Notes:

Be sure not to touch or scratch the edge of the cleaning blade.

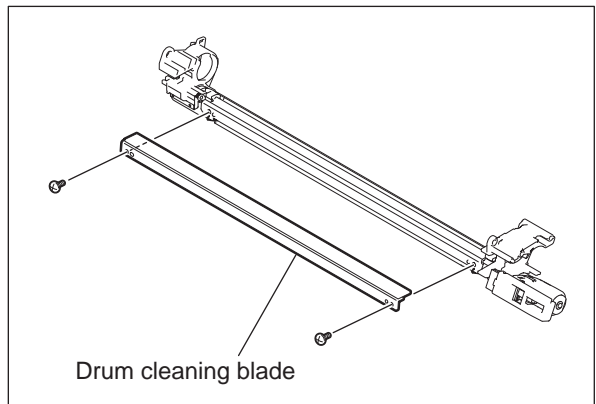


Fig. 4-209

Notes:

When replacing the drum cleaning unit, check if there is no gap between the blade and pad on both ends. If there is, or when the pads put pressure to the cleaning blade, reattach the pads on the position shown in the figure (by slightly pushing them to the direction of the arrows).

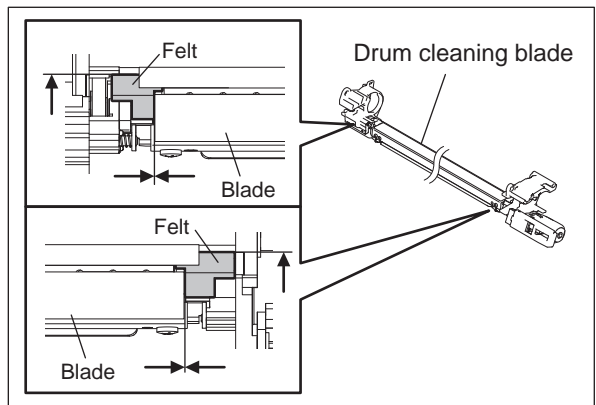


Fig. 4-210

4.6.10 Drum thermistor (THM1, THM2)

The drum thermistors are installed in the process units EPU (Y) and EPU(K).

- Process unit (EPU (Y)): Drum thermistor (THM1)
- Process unit (EPU (K)): Drum thermistor (THM2)

- (1) Take off the corresponding process unit, and then take off the developer unit.
📖 P. 4-66 "4.6.1 Process unit (EPU)"
📖 P. 4-68 "4.6.3 Cleaning unit/ Developer unit"
- (2) Remove 1 screw and take off the drum thermistor.

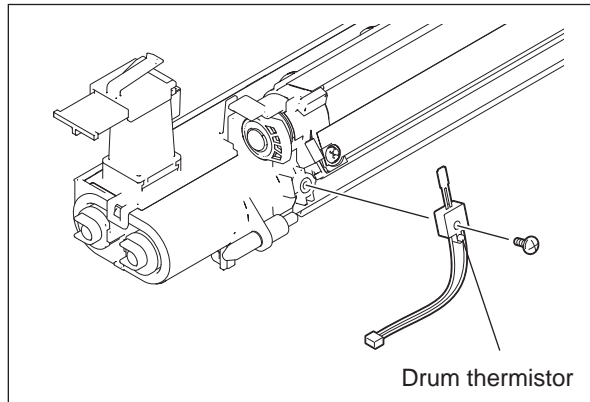


Fig. 4-211

4.6.11 Discharge LED (ERS-Y, ERS-M, ERS-C, ERS-K)

Dedicated discharge LEDs which correspond to the process units (EPU (Y, M, C, K)) respectively are installed.

- Process unit (EPU (Y)): Discharge LED (ERS-Y)
- Process unit (EPU (M)): Discharge LED (ERS-M)
- Process unit (EPU (C)): Discharge LED (ERS-C)
- Process unit (EPU (K)): Discharge LED (ERS-K)

Take off the corresponding the discharge LED.

- (1) Take off the process unit (EPU).

📖 P. 4-66 "4.6.1 Process unit (EPU)"

- (2) Disconnect 1 relay connector from the discharge LED. Remove 1 screw and take off the duct.

Notes:

- When installing the duct, hang the 1 hook of the duct on the hole of the frame.
 - When installing the duct, be sure to hold the harness between the duct and main frame in order not to have the duct lose contact with the main frame.
 - Since the actuator is installed on the duct for the discharge LED (ERS-K), be sure to install it in the correct position.
- (3) Lift the discharge LED slightly and slide it to take it off.

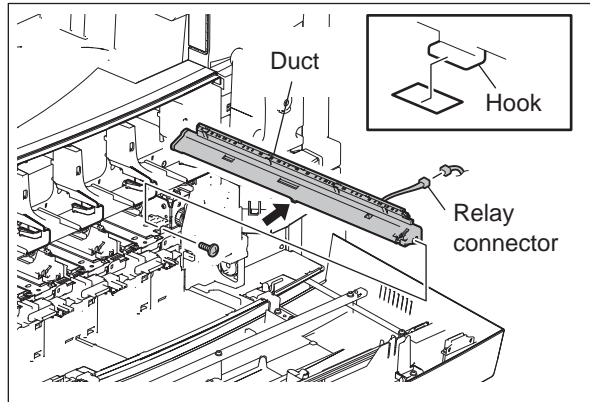


Fig. 4-212

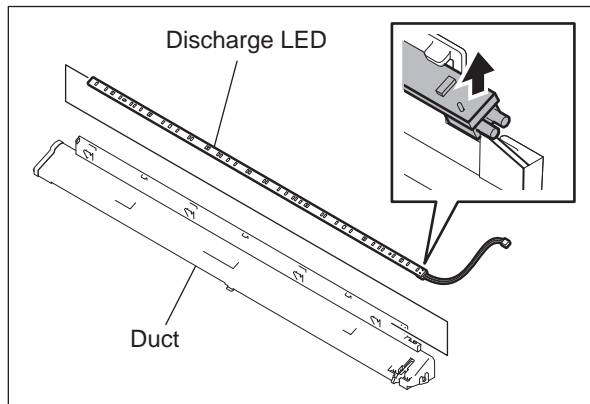


Fig. 4-213

4.6.12 Needle electrode cleaner detection sensor (S21)

- (1) Take off the shutter unit.

📖 P. 4-32 "4.4.2 Shutter unit"

- (2) Take off the duct of the discharge LED (ERS-K).

📖 P. 4-76 "4.6.11 Discharge LED (ERS-Y, ERS-M, ERS-C, ERS-K)"

- (3) Disconnect 1 connector. Release the latch, and take off the needle electrode cleaner detection sensor.

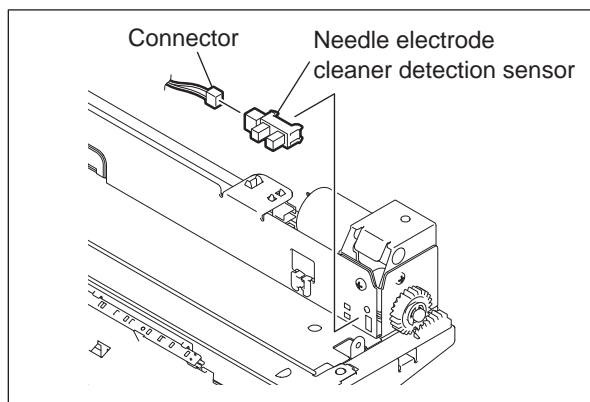


Fig. 4-214

4.6.13 Drum drive unit

- (1) Take off the ozone exhaust duct.
P. 4-104 "4.7.23 Ozone exhaust fan (M24)"
- (2) Remove 1 screw on the right side of the drum drive unit [1].

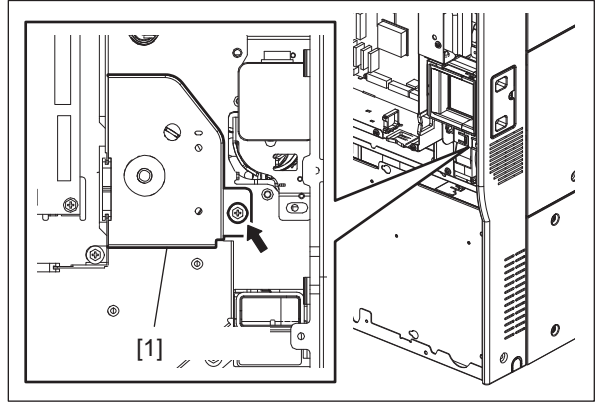


Fig. 4-215

- (3) Open the board case.
P. 9-10 "9.1.11 Board case"
- (4) Release the harness from the 3 harness clamps.
- (5) Disconnect the 1 connector and 2 relay connectors.
- (6) Remove 3 screws and take off the drum drive unit.

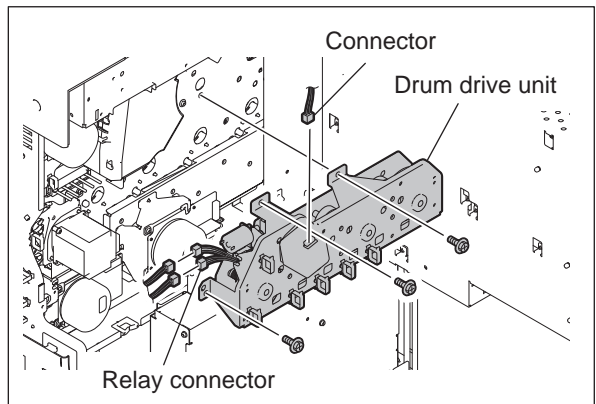


Fig. 4-216

4.6.14 Drum motor (M10)

Notes:

Never remove the damper fixed on the drum drive unit with 2 screws (red).

- (1) Take off the Drum drive unit.
📖 P. 4-77 "4.6.13 Drum drive unit"
- (2) Remove 2 screws and take off the drum motor.

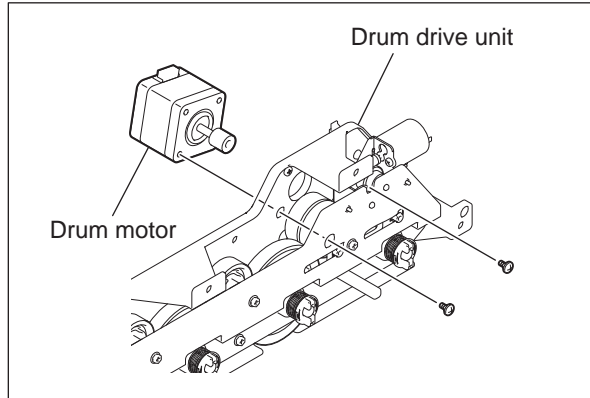


Fig. 4-217

Notes:

Never remove the damper[1] fixed on the drum drive unit with 2 screws (red).

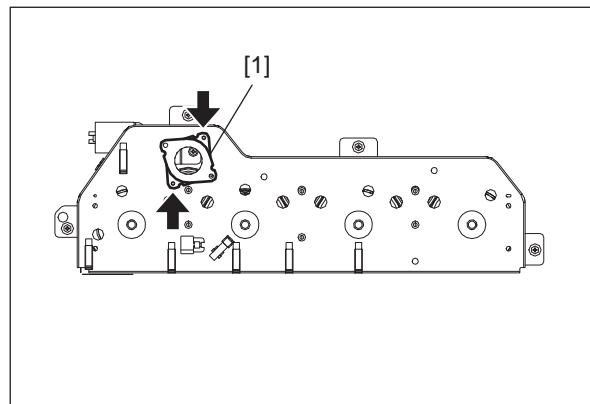



Fig. 4-218

4.6.15 Drum switching motor (M11)

- (1) Take off the Drum drive unit.
 P. 4-77 "4.6.13 Drum drive unit"
- (2) Remove 1 screw and take off the drum switching motor.

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

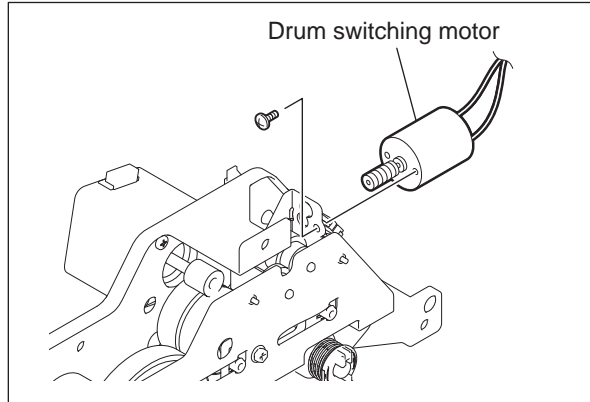


Fig. 4-219

Notes:

After assembling, if the rotation is not smooth when the motor gear is turned manually, carry out the following check.

- (1) Reinstall the motor while pushing it upward.

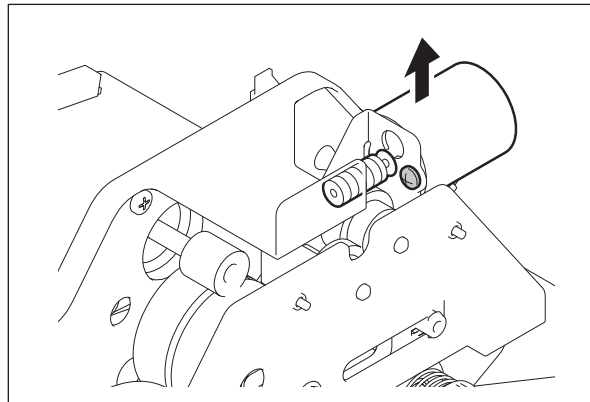


Fig. 4-220

- (2) If the rotation is still not smooth, remove the motor and try to move the guide.
If the guide does not move properly, check if there is anything wrong with the guide or the plate.

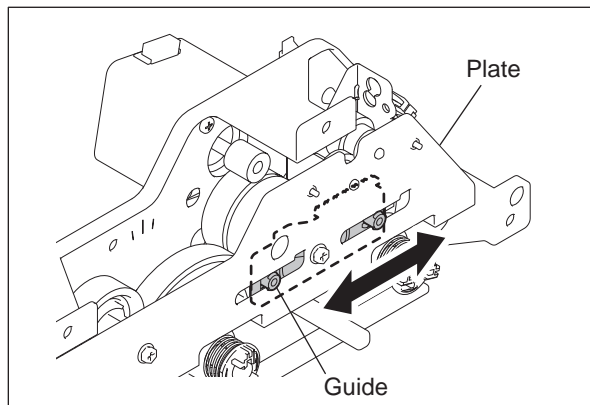


Fig. 4-221

4.6.16 Drum switching detection sensor (S19)

- (1) Take off the Drum drive unit.
P. 4-77 "4.6.13 Drum drive unit"
- (2) Push the 4 couplings to pull out the 4 pins.
- (3) Remove the 4 couplings and 4 springs.

Notes:

When installing, take care of the direction of the spring.

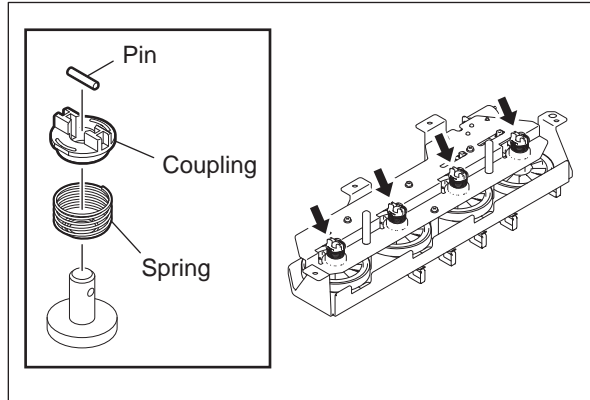


Fig. 4-222

Notes:

When installing the coupling, rotate the gear until the mark appears, and then align the mark with the narrower rib of the coupling.

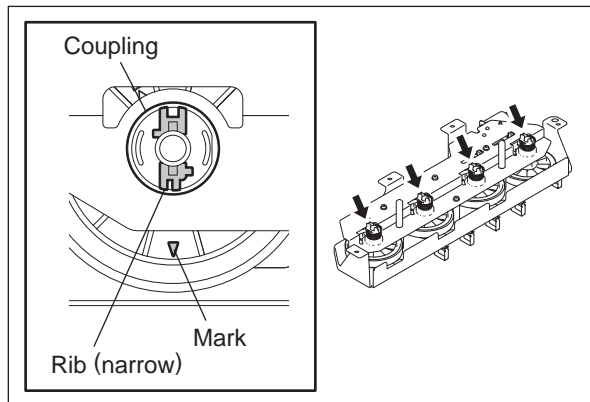


Fig. 4-223

- (4) Remove 4 screws, and then take off the plate.

Notes:

- Be sure not to lose the gear of the drum drive unit.
- Be careful not to damage the gear of the drum drive unit.

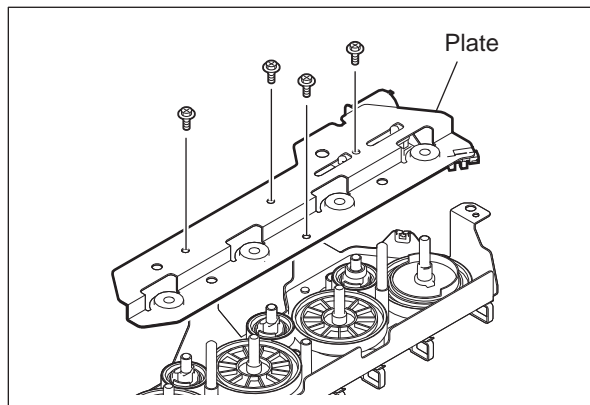


Fig. 4-224

Notes:

If the gear of the drum drive unit has been disassembled, install it with the mark on the gear aligned within the area of the punched mark on the frame.

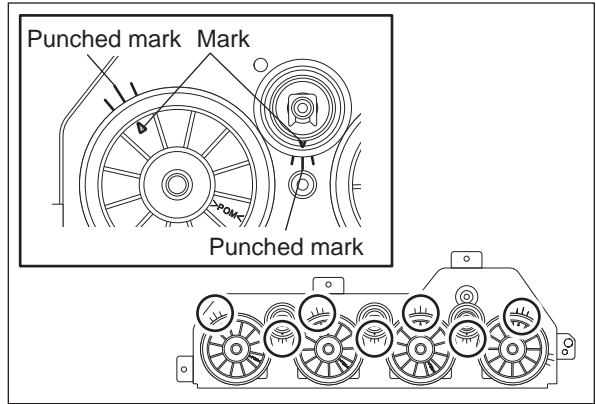


Fig. 4-225

- (5) Remove 2 screws, and then take off the sensor bracket.

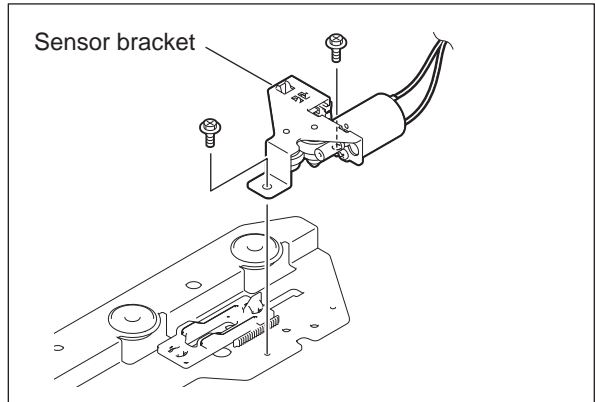


Fig. 4-226

- (6) Disconnect 1 connector, and then release the latch to take off the drum switching detection sensor.

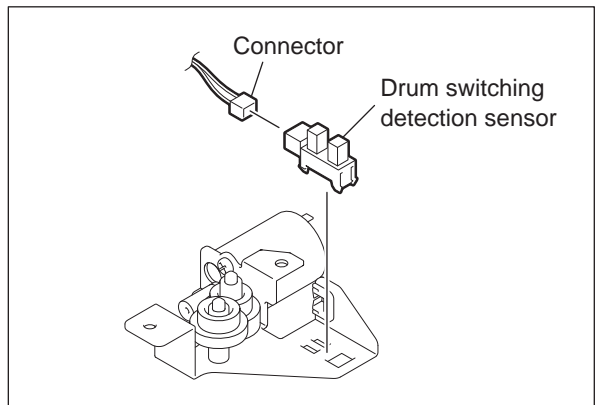


Fig. 4-227

4.6.17 K drum phase sensor (S44)

- (1) Take off the plate.
P. 4-80 "4.6.16 Drum switching detection sensor (S19)"
- (2) Disconnect 1 connector.
- (3) Release 3 latches, and take off the K drum phase sensor.

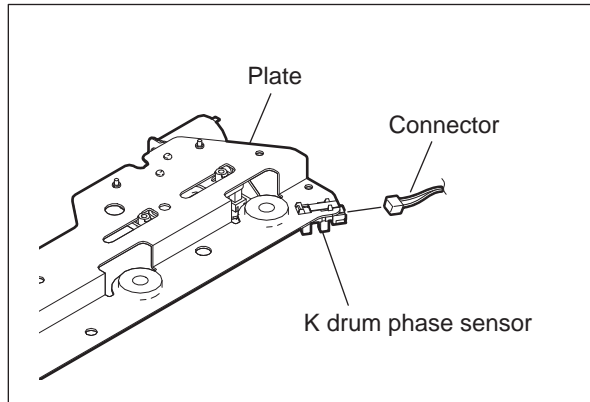


Fig. 4-228

4.6.18 Color drum phase sensor (S43)

- (1) Take off the plate.
P. 4-80 "4.6.16 Drum switching detection sensor (S19)"
- (2) Remove 1 gear and 1 pin of the C drum.
- (3) Disconnect 1 connector.
- (4) Release 3 latches, and take off the color drum phase sensor.

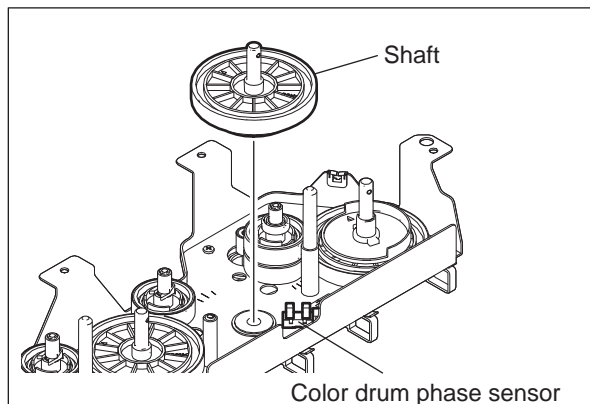


Fig. 4-229

Notes:

When installing the actuator (disk), make sure that its triangle mark is facing in the same direction as the concave indentation of the gear.

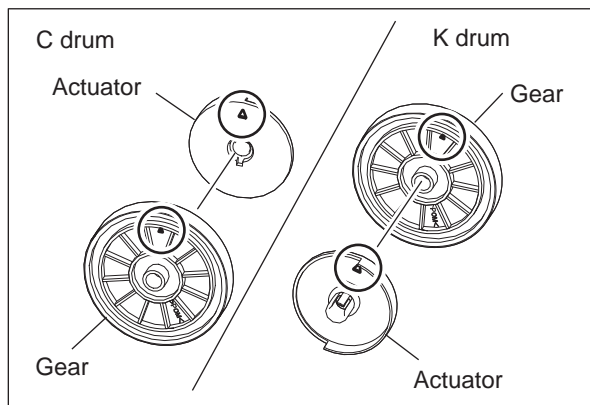


Fig. 4-230

4.7 Developer Unit

4.7.1 Waste toner box

- (1) Open the waste toner cover.
- (2) Pull out the waste toner box toward you until it comes to a stop.

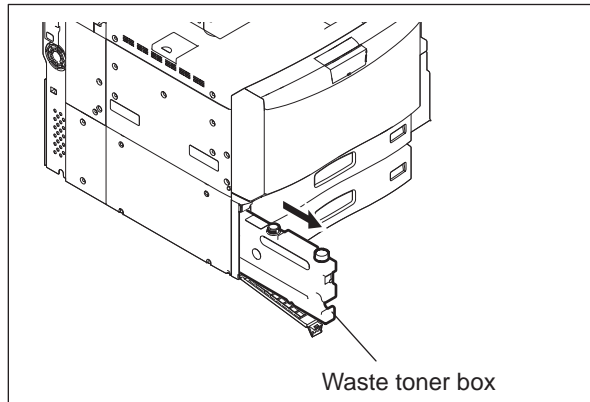


Fig. 4-231

- (3) Attach a cap onto the waste toner recovery opening of the box.
- (4) Hold the upper knob (A) of the waste toner box, and then take off the waste toner box.

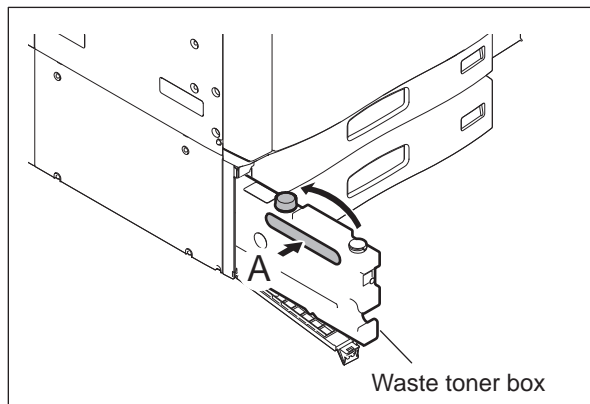



Fig. 4-232

4.7.2 Developer filter

- (1) Take off the Developer unit.
 P. 4-68 "4.6.3 Cleaning unit/ Developer unit"
- (2) Push the protrusions on the both edges of the developer filter in the direction of the arrow, and then take off the developer filter by sliding it.

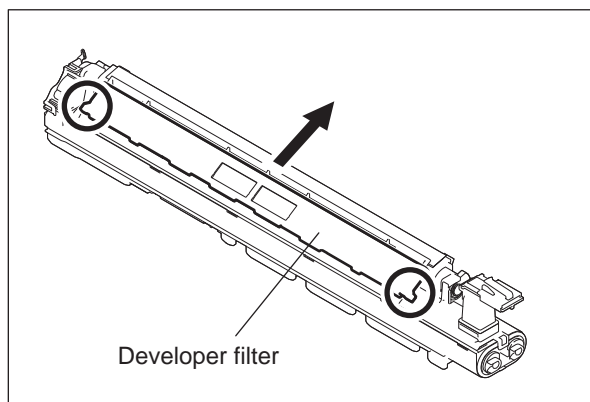



Fig. 4-233

4.7.3 Developer material

- (1) Take off the Developer unit.
 P. 4-68 "4.6.3 Cleaning unit/ Developer unit"
- (2) Lift up the latch on the front side of the upper cover as shown in the figure A, and release it by pulling the toner supply section in the direction shown in the figure B.

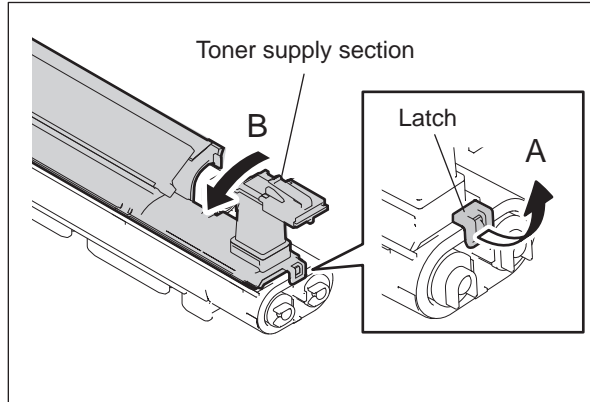


Fig. 4-234

- (3) Insert the flat head screwdriver between the latch and the frame on the front side of the upper cover, and pull the toner supply section toward the front while turning the screwdriver in the direction of the arrow shown in the figure C to release the latch shown in the figure D.

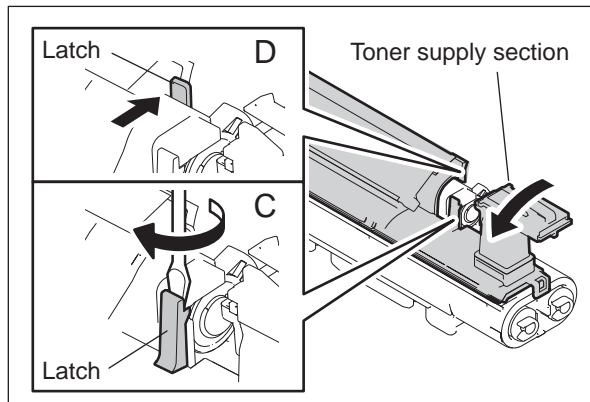


Fig. 4-235

- (4) Insert the flat head screwdriver between the latch and the frame on the rear side of the upper cover as shown in the figure E, and release it by pulling down the screwdriver in the direction of the arrow in the figure to make a gap between the latch and the frame. The latch shown in the figure F is also released accordingly.

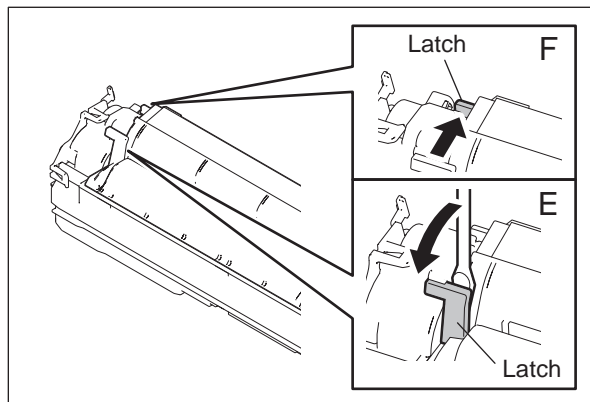


Fig. 4-236

(5) Take off the upper cover.

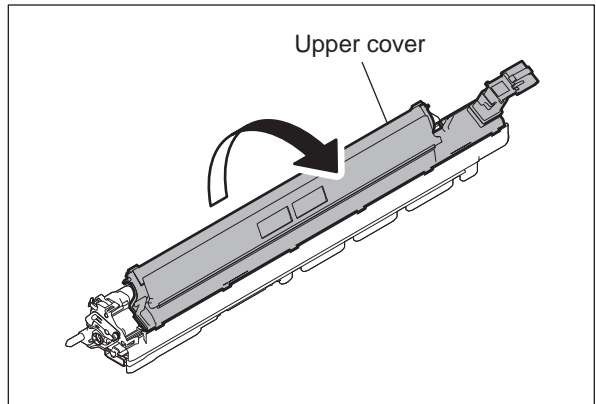


Fig. 4-237

(6) Discharge the developer material.

Notes:

- Make sure not to have developer material adhering to the drive gears or bushings.
- If the developer material on the developer sleeve is hard to come off, use a brush (jig) to clean it off.
4407915710 BRUSH-33

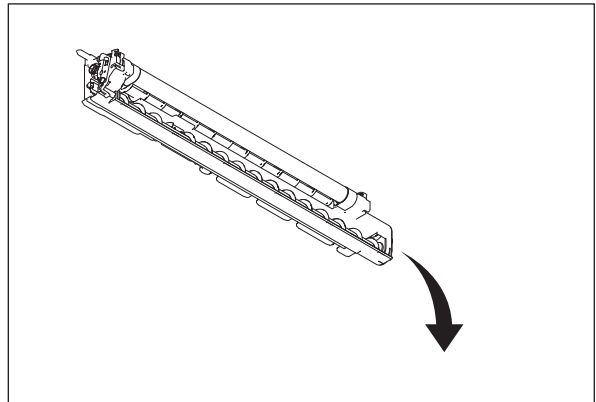


Fig. 4-238

- (7) Shake the developer bottle and attach the nozzle to it.
- (8) Fill up the mixer section under the developer sleeve with the developer.

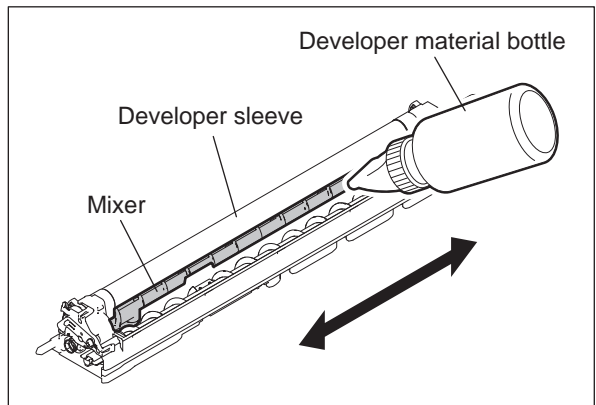


Fig. 4-239

(9) Rotate the knob in the direction described in the figure until the developer adheres on the surface of the developer sleeve evenly.

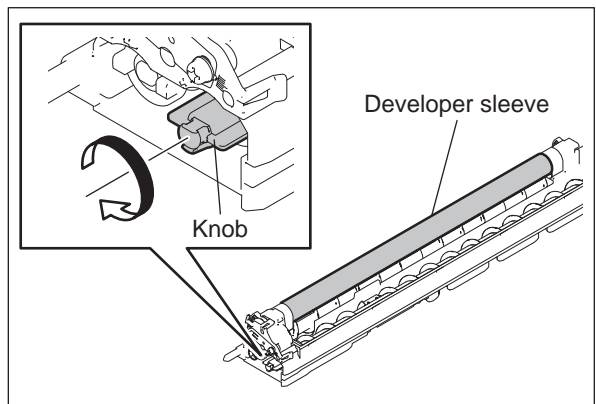


Fig. 4-240

- (10) Lift up the rear side of the developer unit so that the developer material is moved to the front side of the mixer section under the developer sleeve.

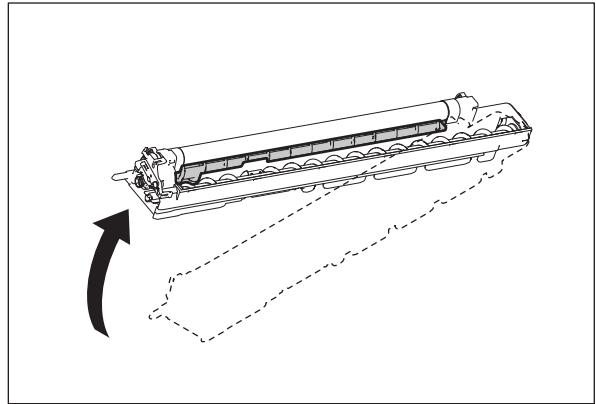


Fig. 4-241

- (11) Fill up the mixer section under the developer sleeve with the developer again.

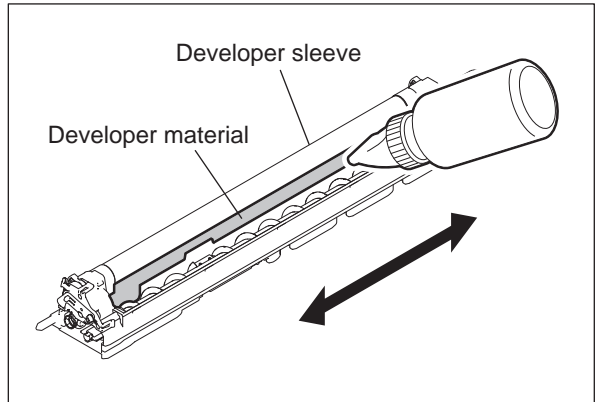


Fig. 4-242

- (12) Fill the other mixer section with all the remained toner.

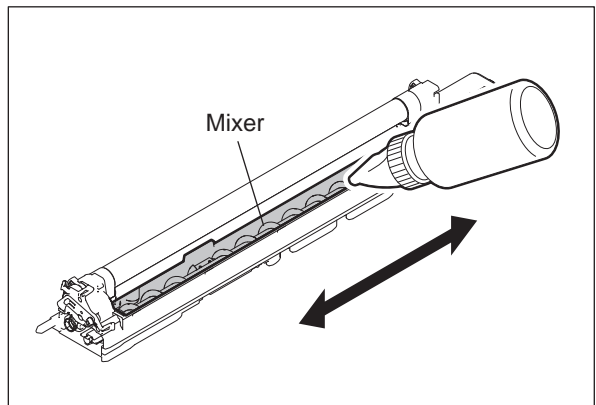


Fig. 4-243

Notes:

- Fill the developer material in the mixer section under the developer sleeve as much as possible.
- Check if the developer does not adhere to the joint of the upper cover indicated in the figure.

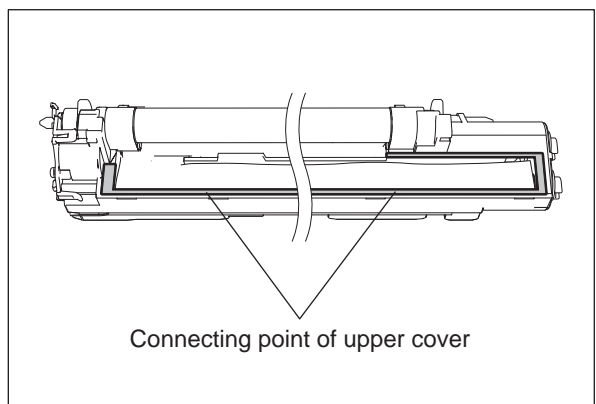


Fig. 4-244

- (13) Fit the protrusions on the upper cover in the 6 concaves on the developer unit. Press each 2 portions on the front and rear side indicated by arrows to lock 4 latches while pushing the protrusions on the upper cover to the 6 concaves to fit them securely.

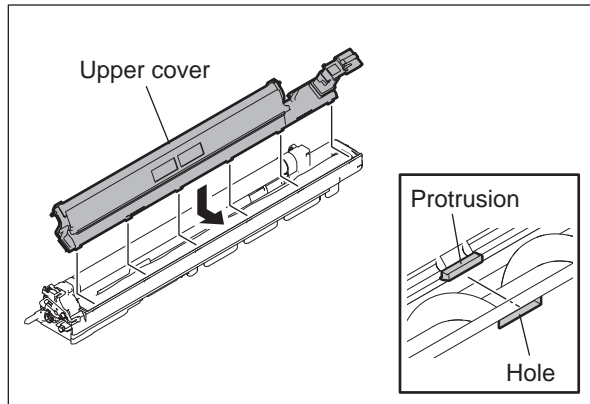


Fig. 4-245

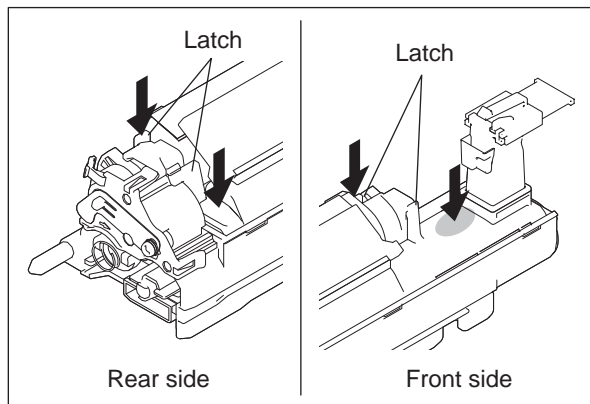


Fig. 4-246

- (14) Press the portion indicated by the arrow in the figure to lock the front side latch of the upper cover.

Notes:

After the installation, check that all the protrusions and latches are fitted and locked securely.

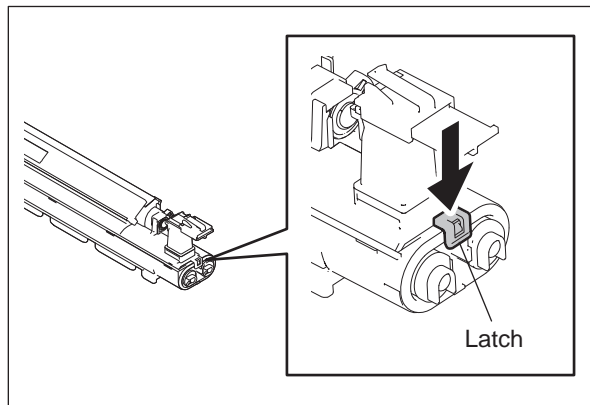


Fig. 4-247

4.7.4 Doctor blade

- (1) Discharge the developer material.
📖 P. 4-84 "4.7.3 Developer material"
- (2) Remove the side seal (both front and rear sides).

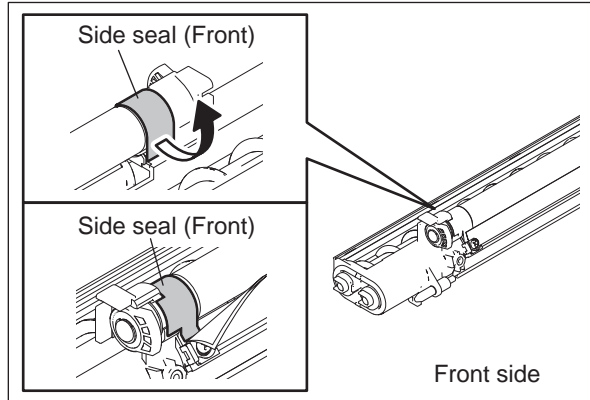


Fig. 4-248

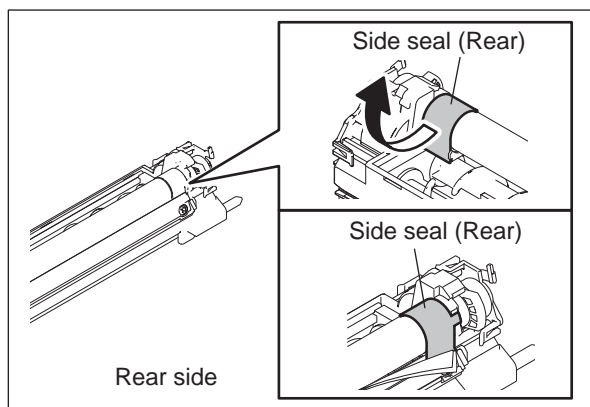


Fig. 4-249

- (3) Remove 2 screws and take off the doctor blade.

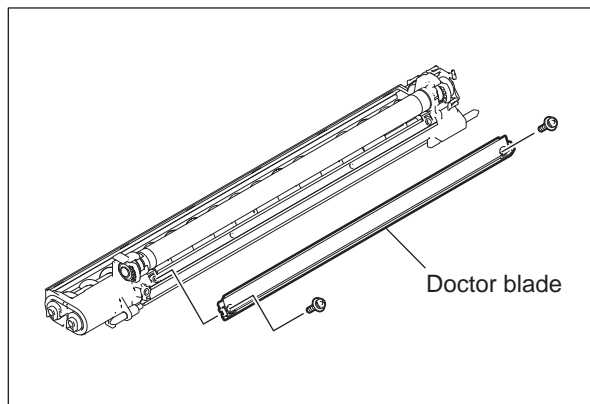


Fig. 4-250

Notes:

When the side seal are being attached, attach them on the position shown in the figure (by slightly pushing it to the direction of the arrow).

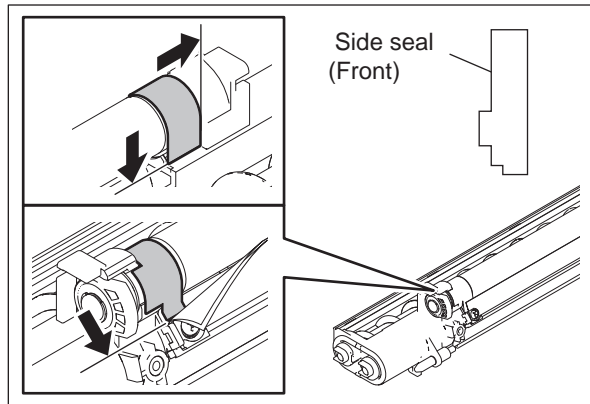


Fig. 4-251

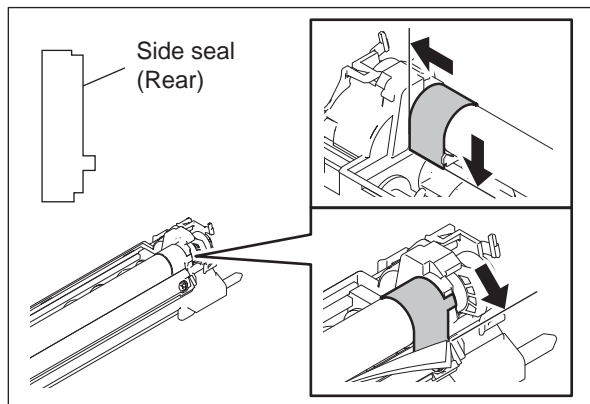


Fig. 4-252

4.7.5 Auto-toner sensor (S22, S23, S24, S25)

The auto-toner sensors are installed in the process units (EPU (Y, M, C, K)).

- Process unit (EPU (Y)): Auto-toner sensor (S22)
- Process unit (EPU (M)): Auto-toner sensor (S23)
- Process unit (EPU (C)): Auto-toner sensor (S24)
- Process unit (EPU (K)): Auto-toner sensor (S25)

- (1) Take off the corresponding the process unit (EPU), and then take off the developer unit to remove the developer material out of the unit.

📖 P. 4-66 "4.6.1 Process unit (EPU)"

📖 P. 4-68 "4.6.3 Cleaning unit/ Developer unit"

📖 P. 4-84 "4.7.3 Developer material"

- (2) Remove 2 screws, and take off the duct.

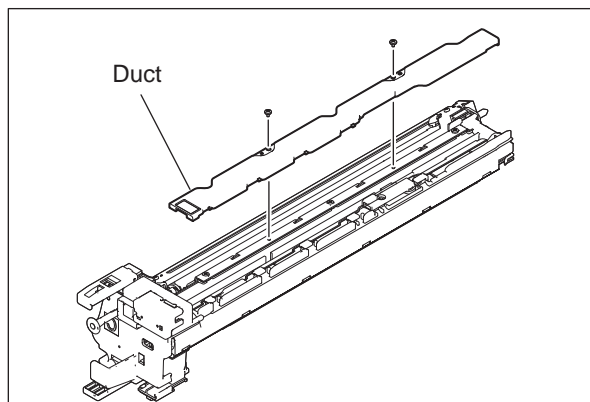


Fig. 4-253

- (3) Disconnect the connector.

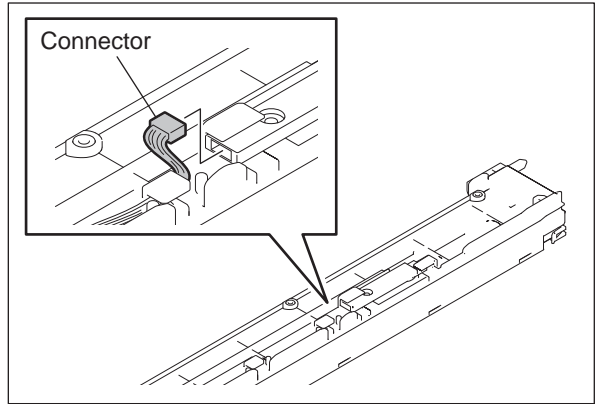


Fig. 4-254

- (4) Hold the locking part to lift it up, and then turn the auto-toner sensor counterclockwise for 90 degrees to take it off.

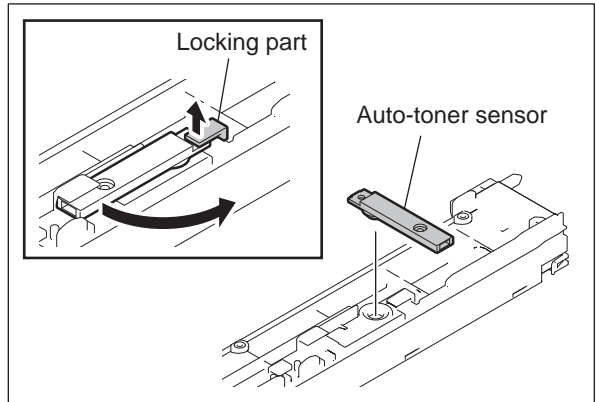


Fig. 4-255

4.7.6 Developer sleeve

- (1) Take off the doctor blade.
P. 4-88 "4.7.4 Doctor blade"
- (2) Rear side: Remove 1 screw and take off the polarity adjustment plate.

Notes:

Before disassembling, record (mark if any) the scale pointed by the polarity adjustment lever. Then match the polarity adjustment plate at the scale previously recorded when reassembling.

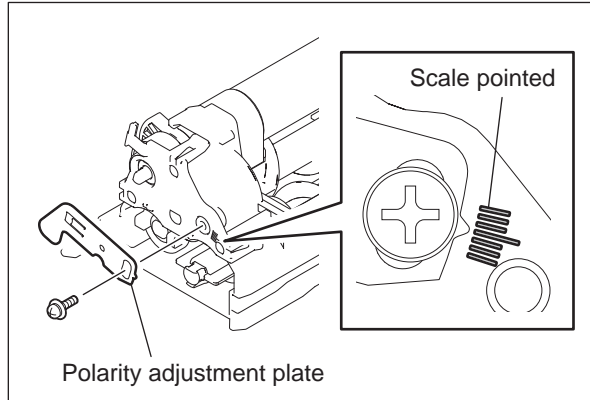


Fig. 4-256

- (3) Release the 3 latches and take off the gear holder.

Notes:

When installing the developer sleeve, match the positions of the idler gear shaft and the hole of the gear holder.

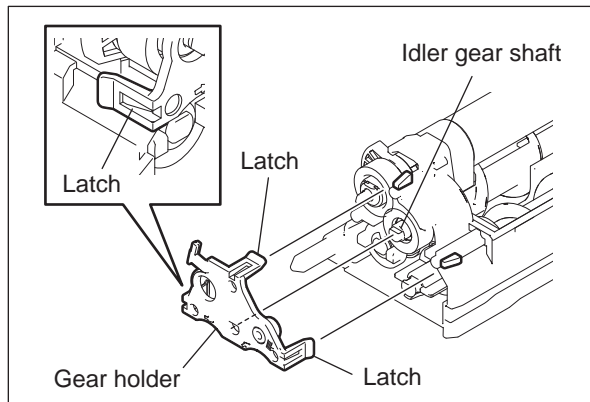


Fig. 4-257

- (4) Remove the idler shaft and 2 idler gears, and then remove the parts installed on the developer sleeve shaft (in order of the C-ring, gear, developer guide, and bearing).

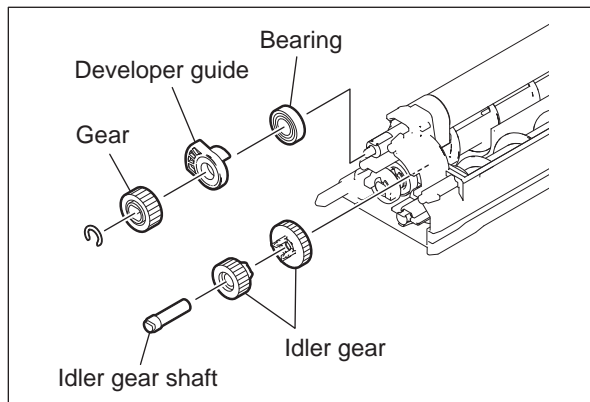


Fig. 4-258

- (5) Rear side: Remove the parts installed on the developer sleeve shaft (the C-ring, developer guide [1] and bearing [2]). Then take off the developer sleeve.

Notes:

When installing, adjust the gap between the developer sleeve and the doctor blade.

📖 P. 6-85 "6.10.2 Adjustment of the doctor-to-sleeve gap"

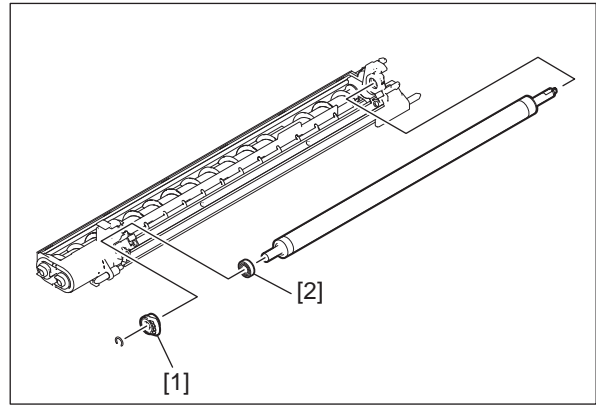


Fig. 4-259

4.7.7 Mixer

- (1) Discharge the developer material.
 📖 P. 4-84 "4.7.3 Developer material"
- (2) Rear side: Remove 1 screw and take off the polarity adjustment plate.

Notes:

Before disassembling, record (mark if any) the scale pointed by the polarity adjustment lever. Then match the polarity adjustment plate at the scale previously recorded when reassembling.

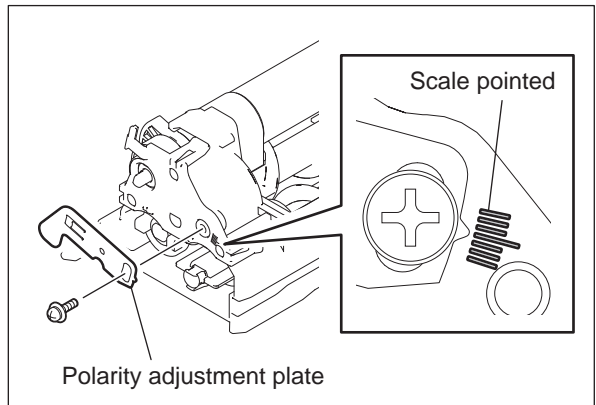


Fig. 4-260

- (3) Release the 3 latches and take off the gear holder.

Notes:

When installing the mixer, match the positions of the idler gear shaft and the hole of the gear holder.

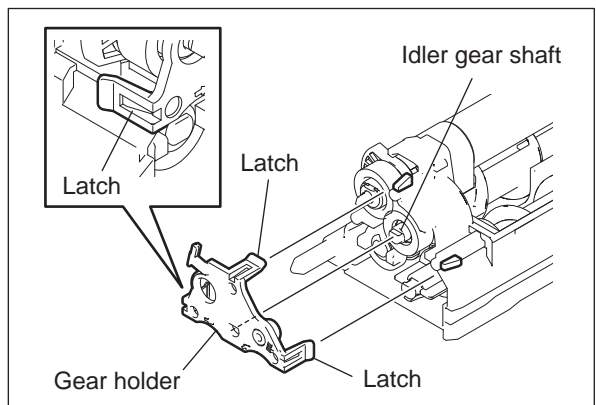


Fig. 4-261

- (4) Remove 1 clip and take off the bushing and the spring.
- (5) Remove 1 clip and take off the gear.
- (6) Release the 1 latch and take off the gear.

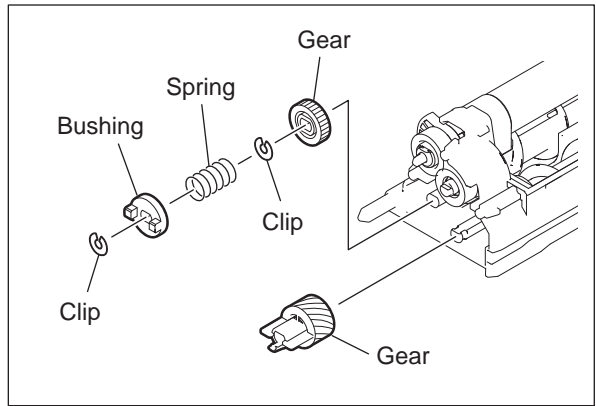


Fig. 4-262

- (7) Front side: Remove 2 clips [1] and take off the 2 bushings [2], the front bushing holder [3] and O-ring [4].

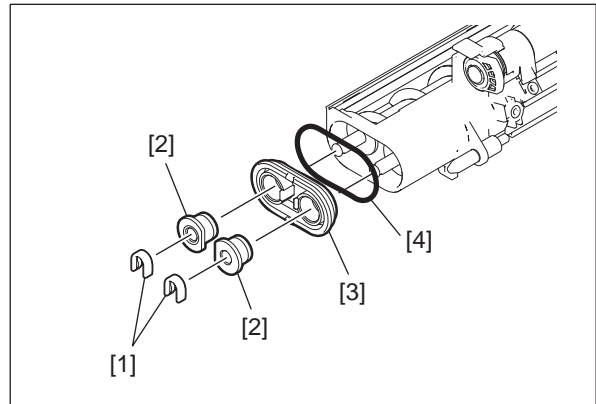


Fig. 4-263

- (8) Take off the mixer from the hole of front side.

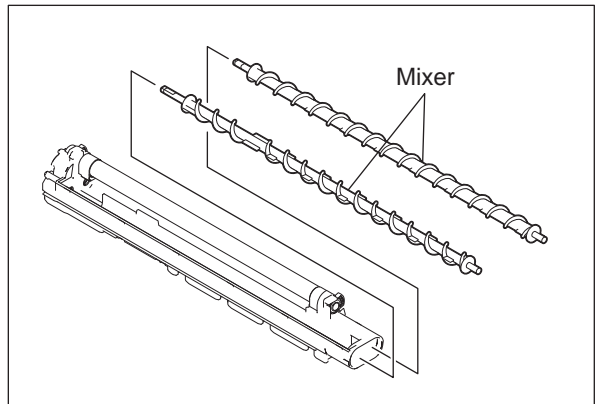


Fig. 4-264

4.7.8 Waste toner transport motor (M31)

- (1) Take off the inner cover.
P. 4-28 "4.4.1 Laser optical unit"
- (2) Disconnect 1 connector. Remove 2 screws, and take off the waste toner transport auger drive unit.

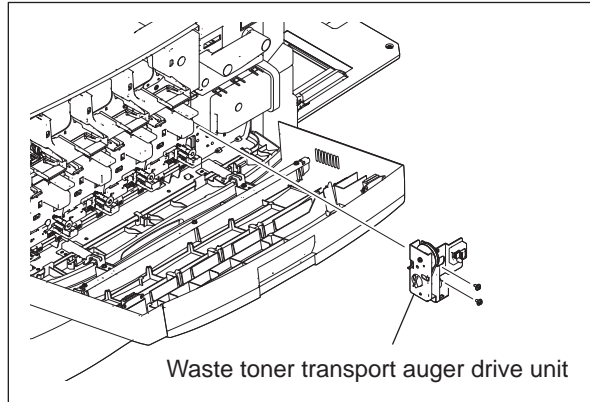


Fig. 4-265

- (3) Remove 2 screws, and take off the bracket.

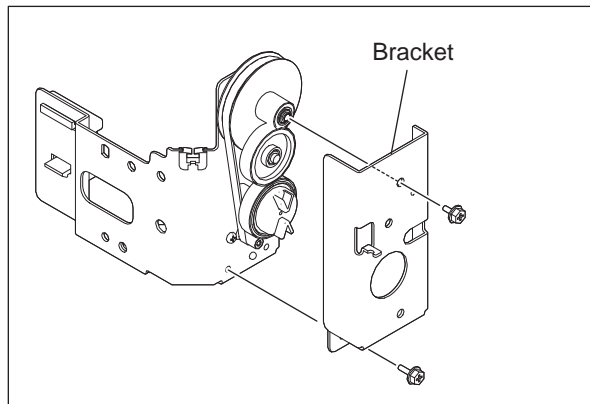


Fig. 4-266

- (4) Remove 2 screws, and take off the belt. Then take off the waste toner transport motor.

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

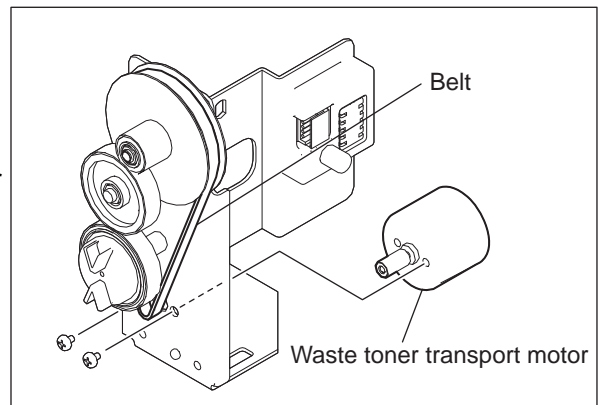


Fig. 4-267

4.7.9 Temperature / humidity sensor (S12)

- (1) Take off the waste toner transport auger drive unit.
P. 4-94 "4.7.8 Waste toner transport motor (M31)"
- (2) Disconnect 1 connector, release 1 hook and take off the sensor holder.
- (3) Remove 1 screw, and take off the temperature / humidity sensor.

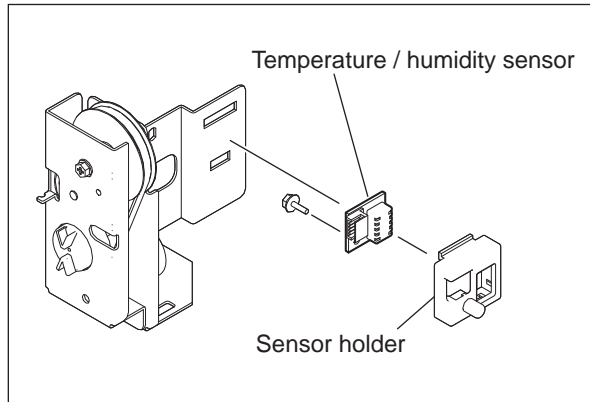


Fig. 4-268

4.7.10 Waste toner box full detection sensor (S13)

- (1) Take off the waste paddle toner motor drive unit.
P. 4-97 "4.7.12 Waste toner paddle motor (M6)"
- (2) Disconnect 1 connector.
- (3) Release 3 latches, and take off the waste toner box full detection sensor.

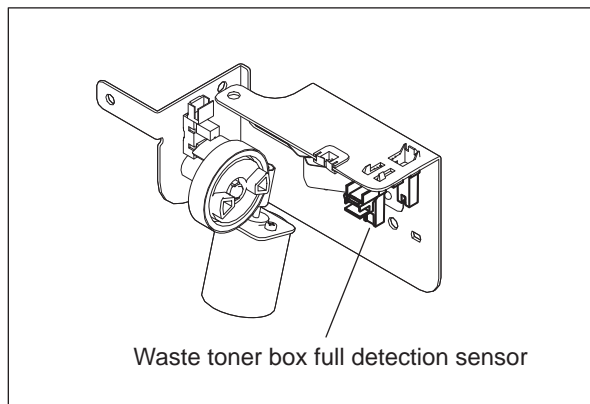


Fig. 4-269

4.7.11 Waste toner paddle motor lock detection sensor (S14)

- (1) Take off the waste toner paddle motor drive unit.
P. 4-97 "4.7.12 Waste toner paddle motor (M6)"
- (2) Release 2 latches, and take off the gear, coupling and spring.

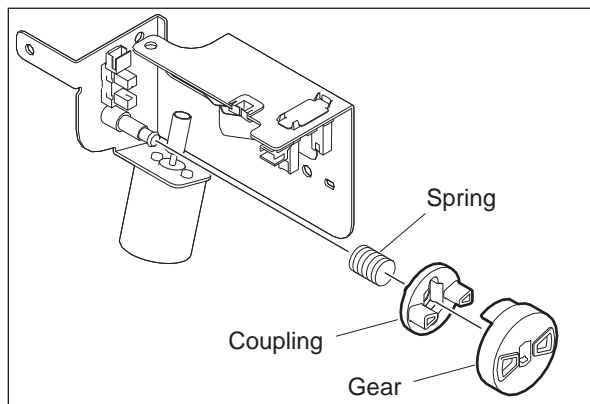


Fig. 4-270

- (3) Disconnect 1 connector. Release 3 latches, and take off the waste toner paddle motor lock detection sensor.

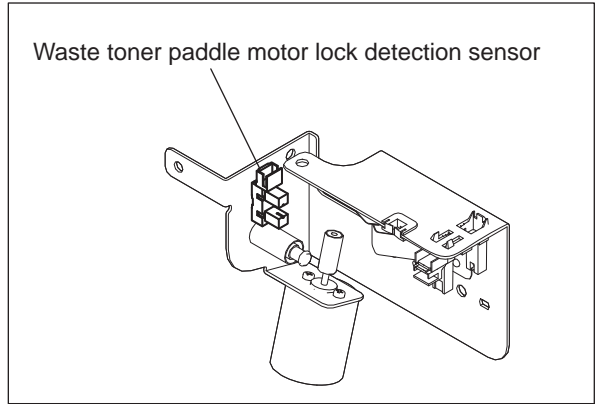


Fig. 4-271

4.7.12 Waste toner paddle motor (M6)

- (1) Take off the waste toner box.
📖 P. 4-83 "4.7.1 Waste toner box"
- (2) Take off the left lower cover.
📖 P. 4-94 "4.7.8 Waste toner transport motor (M31)"
- (3) Remove 6 screws, and take off the plate.

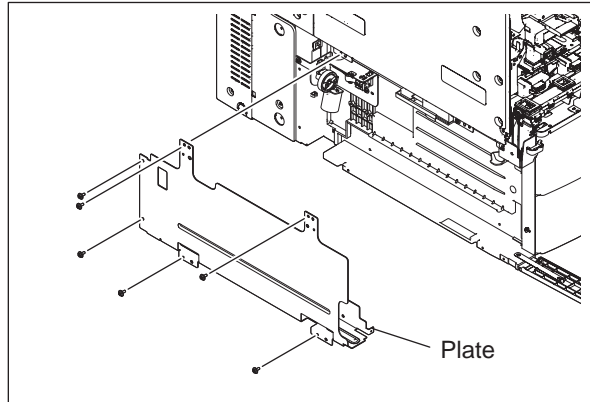


Fig. 4-272

- (4) Disconnect 1 connector and remove 3 screws. Then take off the waste toner paddle motor drive unit.

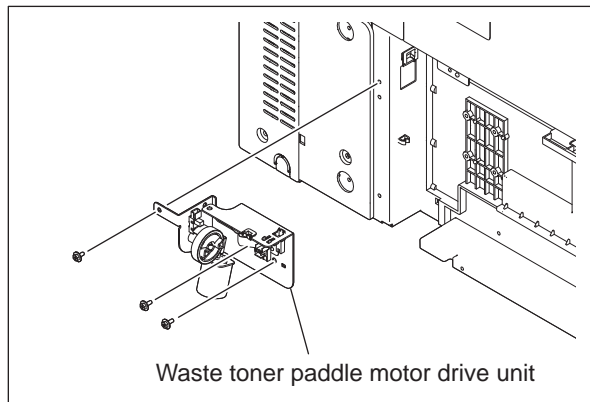


Fig. 4-273

- (5) Disconnect 1 connector and remove 2 screws. Then take off the waste toner paddle motor.

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

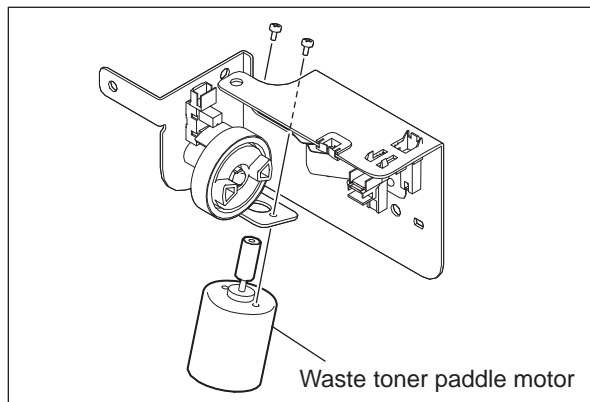


Fig. 4-274

4.7.13 Waste toner transport unit

- (1) Take off the inner cover.
P. 4-28 "4.4.1 Laser optical unit"
- (2) Take off the plate.
P. 4-97 "4.7.12 Waste toner paddle motor (M6)"
- (3) Disconnect 1 connector.
- (4) Remove 3 screws and release 6 hooks.
Then take off the waste toner transport unit.

Notes:

Be sure not to tilt the unit. This could make the toner spill out.

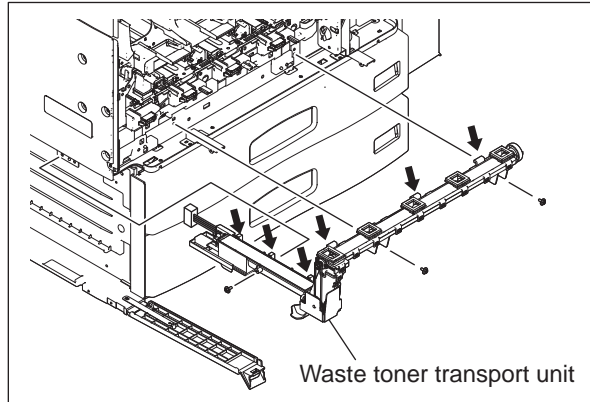


Fig. 4-275

4.7.14 Waste toner cover open/close detection switch (SW8)

- (1) Take off the waste toner transport unit.
P. 4-98 "4.7.13 Waste toner transport unit"
- (2) Disconnect 1 connector. Release 2 latches, and take off the waste toner cover open/close detection switch.

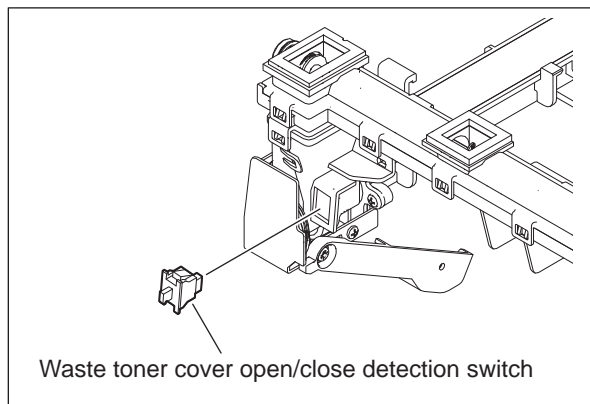


Fig. 4-276

4.7.15 Auger lock detection sensor (S42)

- (1) Take off the waste toner transport unit.
P. 4-98 "4.7.13 Waste toner transport unit"
- (2) Release 1 latch, and take off the actuator.

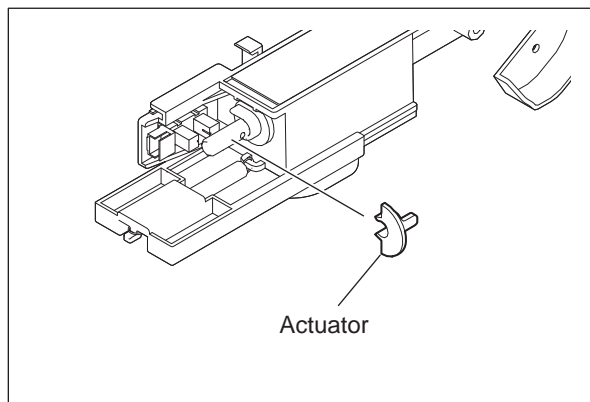


Fig. 4-277

- (3) Disconnect 1 connector. Release 3 latches, and take off the auger lock detection sensor.

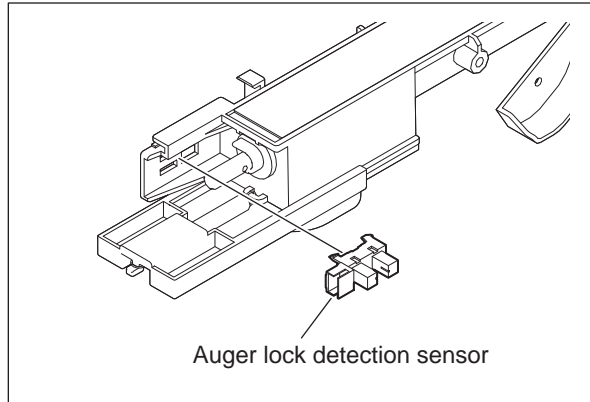


Fig. 4-278

4.7.16 Developer unit motor (M9)

- (1) Take off the switching regulator.
P. 9-6 "9.1.8 Switching regulator"
- (2) Open the board case.
P. 9-10 "9.1.11 Board case"
- (3) Remove 2 screws. Disconnect the 1 connector and take off the developer unit motor.

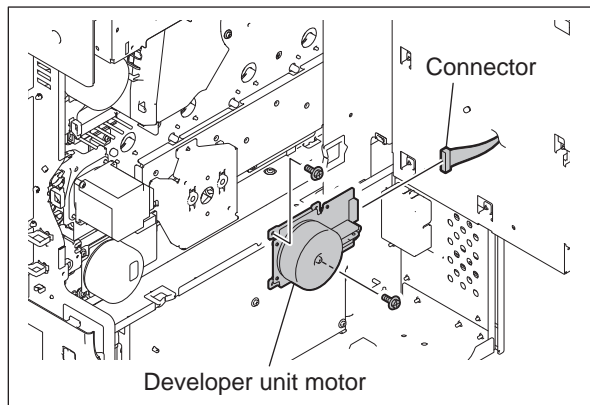


Fig. 4-279

4.7.17 Developer drive unit

- (1) Take off the switching regulator and drum drive unit [1].
P. 9-6 "9.1.8 Switching regulator"
P. 4-77 "4.6.13 Drum drive unit"
- (2) Remove 1 screw on the right side of the developer drive unit.

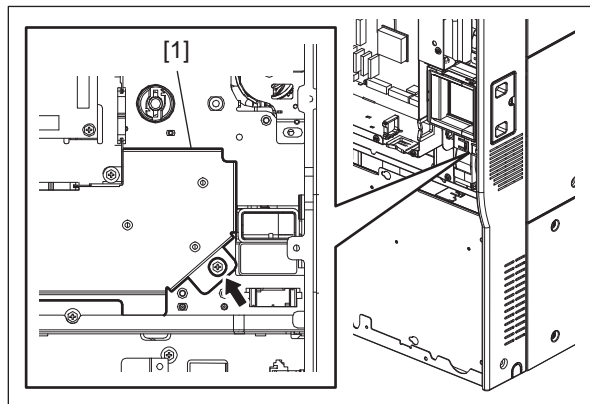


Fig. 4-280

- (3) Disconnect the 1 connector on the developer unit motor.
- (4) Remove 2 screws and take off the developer drive unit.

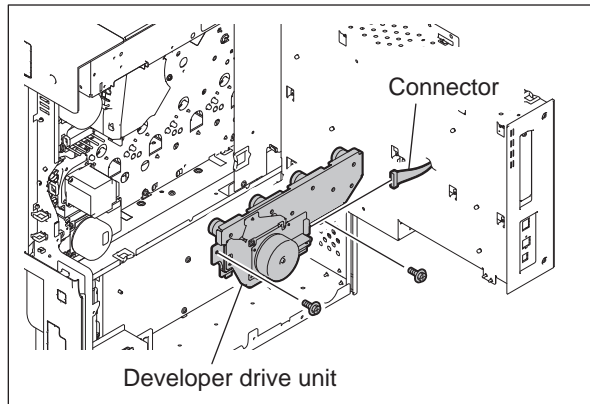


Fig. 4-281

4.7.18 Toner motor assembly

Dedicated toner motors and toner cartridge detection sensors which correspond to the process units (EPU (Y, M, C, K)) respectively are installed.

- Process unit (EPU (Y)): Toner motor (M2), Toner cartridge detection sensor (S8)
- Process unit (EPU (M)): Toner motor (M3), Toner cartridge detection sensor (S9)
- Process unit (EPU (C)): Toner motor (M4), Toner cartridge detection sensor (S10)
- Process unit (EPU (K)): Toner motor (M5), Toner cartridge detection sensor (S11)

Take off the corresponding toner motor assembly.

- (1) Take off the tray back cover and transfer belt cleaning unit.
 - 📖 P. 4-2 "4.1.3 Tray back cover"
 - 📖 P. 4-108 "4.8.1 Transfer belt cleaning unit"
- (2) Take off the front right cover.
 - 📖 P. 4-2 "4.1.5 Front right cover"
- (3) Remove 1 screw, and take off the holder [1].

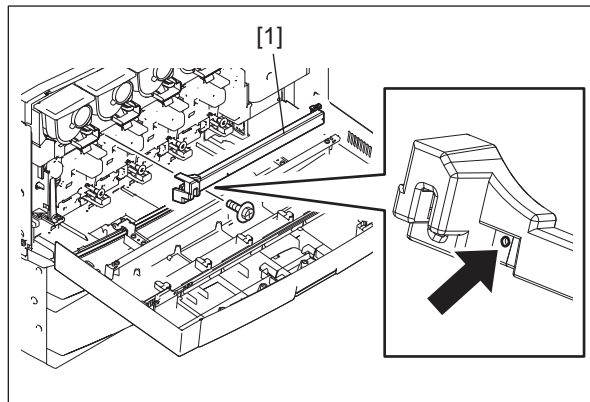


Fig. 4-282

- (4) Remove 2 screws and slide the toner cover to take it off.

Notes:

When installing, make sure that 4 hooks are secured.

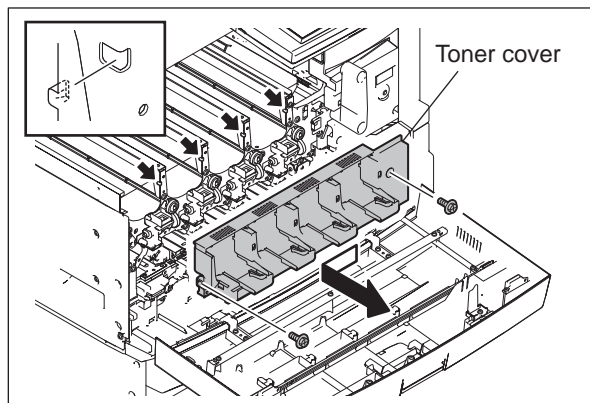


Fig. 4-283

- (5) Remove 2 screws and take off the toner supply section.

Notes:

Remove the toner supply section by turning it so that its notch and the rib of the toner transport gear are engaged. Be careful not to scatter the toner inside the toner supply section.

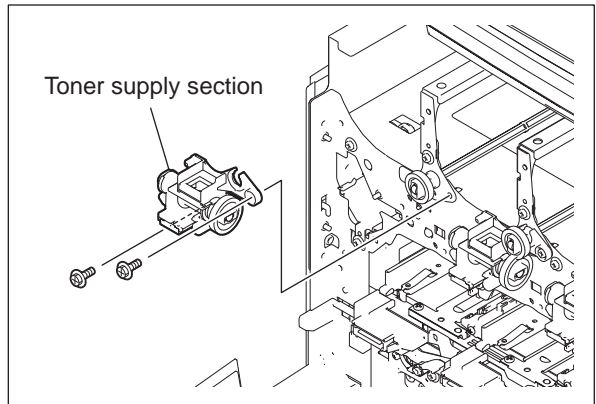


Fig. 4-284

- (6) Disconnect 1 connector [1].

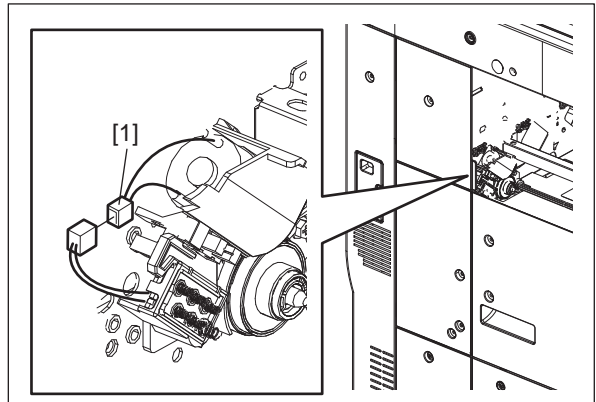


Fig. 4-285

- (7) Remove 1 screw.
(8) Pull out the toner rod [1] to the front of the equipment. Remove 1 clip [2] and take off the toner motor assembly [3] from the toner rod [1].

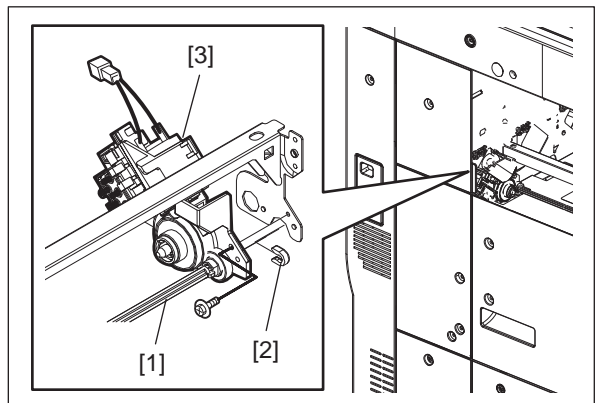


Fig. 4-286

4.7.19 Toner motor (M2, M3, M4, M5)

- (1) Take off the toner motor assembly.
P. 4-100 "4.7.18 Toner motor assembly"
- (2) Release the 2 latches and take off the gear [1].

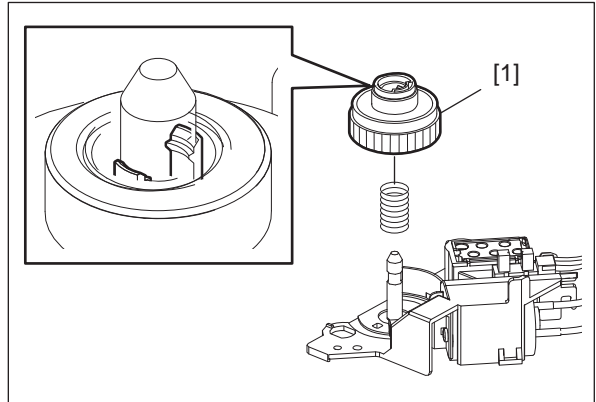


Fig. 4-287

- (3) Remove 2 screws and take off the toner motor [1].

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

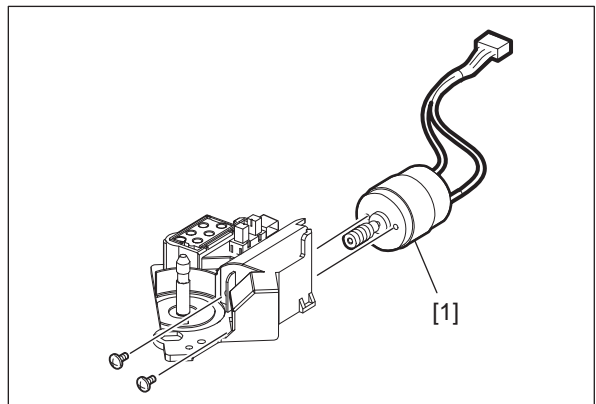


Fig. 4-288

4.7.20 Toner cartridge detection sensor (S8, S9, S10, S11)

- (1) Take off the toner motor assembly.
P. 4-100 "4.7.18 Toner motor assembly"
- (2) Disconnect 1 connector [1].
Remove the seal and then release the latch to take off the Toner cartridge detection sensor [3].

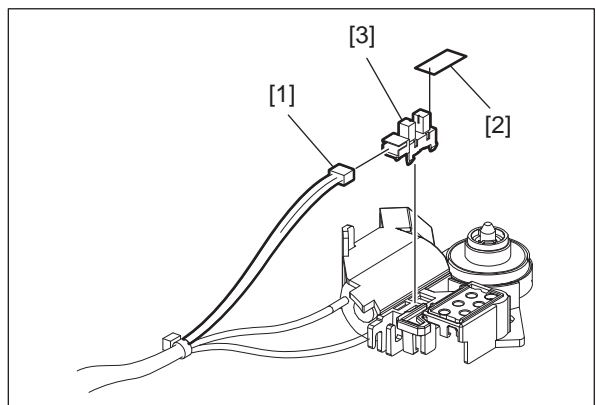


Fig. 4-289

4.7.21 Ozone filter-1

- (1) Remove 1 screw, and then take off the ozone filter-1.

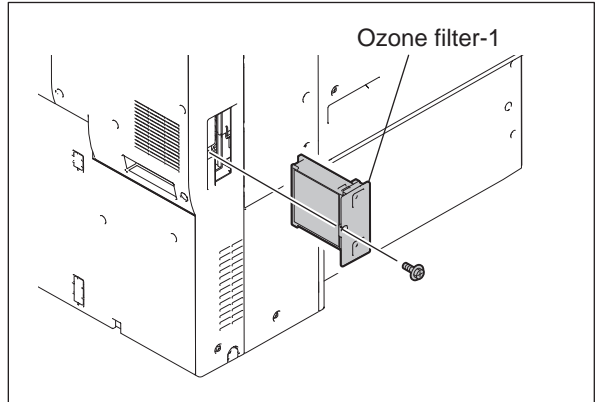


Fig. 4-290

4.7.22 EPU cooling fan (M33)

e-STUDIO4540C Only

- (1) Take off the rear cover-2.
P. 4-7 "4.1.19 Rear cover-2"
- (2) Disconnect 1 connector, remove 1 screw, and take off the duct.

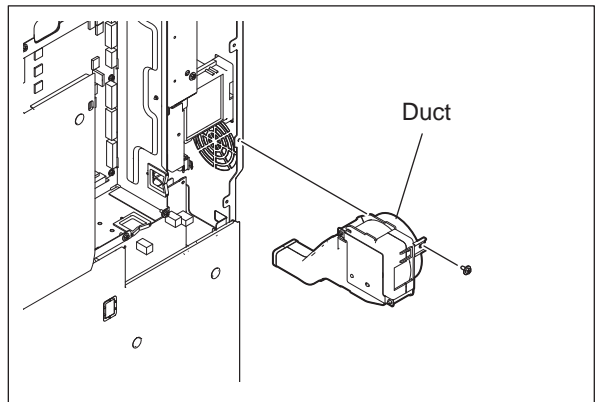


Fig. 4-291

- (3) Remove 2 screws. Release 5 latches, and take off the EPU cooling fan.

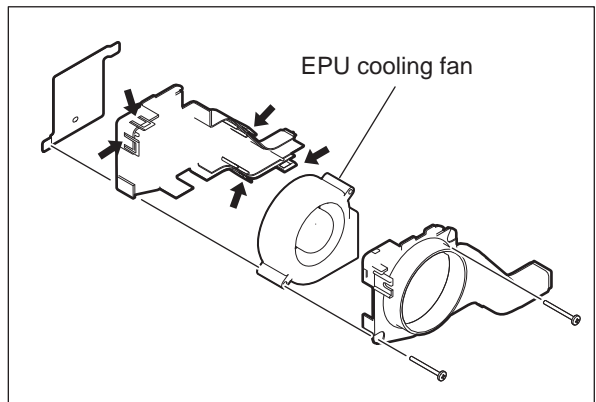



Fig. 4-292

4.7.23 Ozone exhaust fan (M24)

- (1) Take off the rear cover-2.
 P. 4-7 "4.1.19 Rear cover-2"
- (2) Disconnect 1 connector, remove 1 screw, and take off the duct.

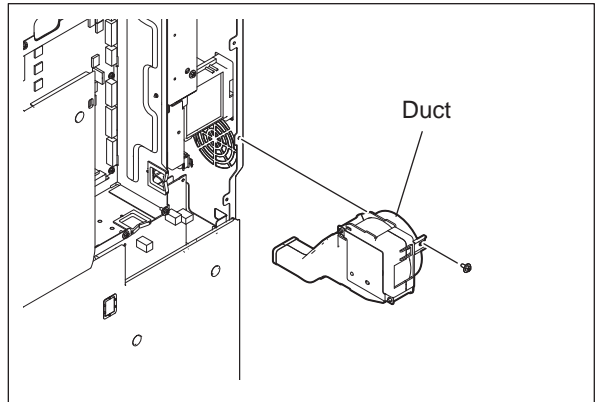



Fig. 4-293

- (3) Take off the ozone filter-1.
 P. 4-103 "4.7.21 Ozone filter-1"
- (4) Remove 1 screw. Disconnect the 1 relay connector, and then take off the ozone exhaust duct.

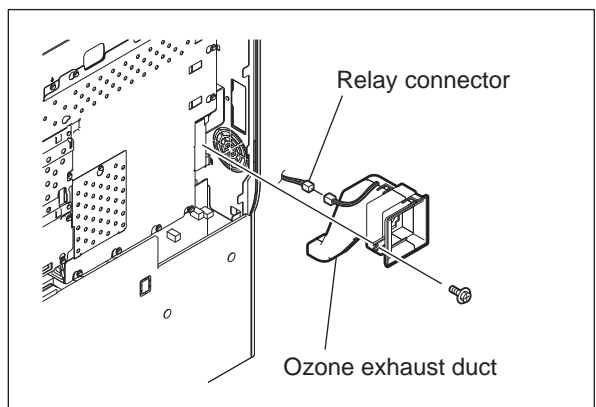


Fig. 4-294

- (5) Release the 6 latches and take off the ozone exhaust fan.

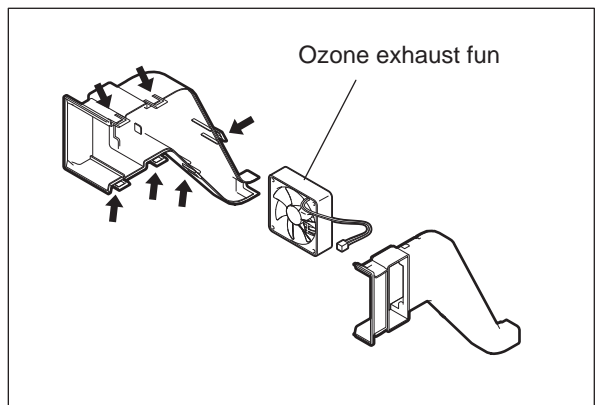


Fig. 4-295

4.7.24 Internal cooling fan (M23)

- (1) Open the board case.
P. 9-10 "9.1.11 Board case"
- (2) Remove 2 screws. Disconnect 1 relay connector, and take off the internal cooling duct.

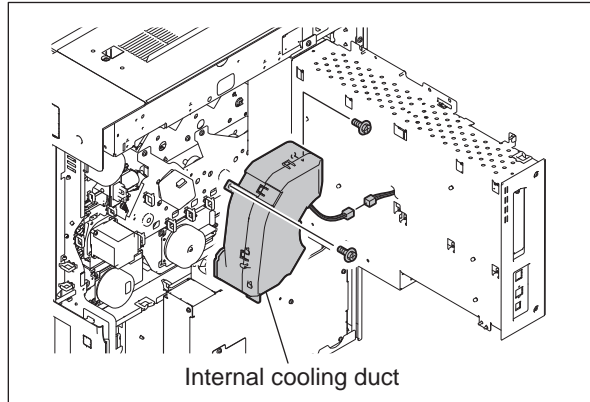


Fig. 4-296

- (3) Release the 7 latches and take off the internal cooling fan.

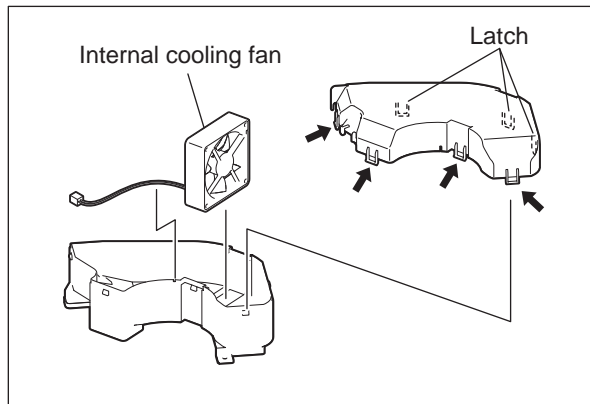


Fig. 4-297

4.7.25 Ozone filter-2

- (1) Remove 1 screw, and then take off the filter cover.

Notes:

When installing the filter cover, be sure to install it with 2 hooks on the cover inserted to respective holes on the frame.

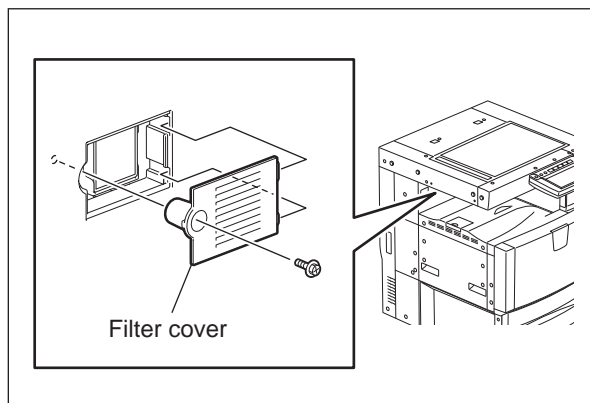


Fig. 4-298

- (2) Remove the ozone filter-2.

Notes:

When installing the ozone filter-2, be sure to insert it all the way in and be careful not to damage the mesh.

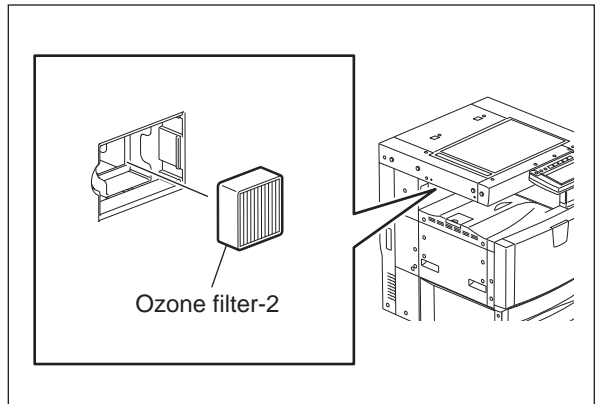


Fig. 4-299

4.7.26 Ozone filter-3

- (1) Take off the internal cooling fan.
P. 4-105 "4.7.24 Internal cooling fan (M23)"
- (2) Take off the ozone filter-3 [1].

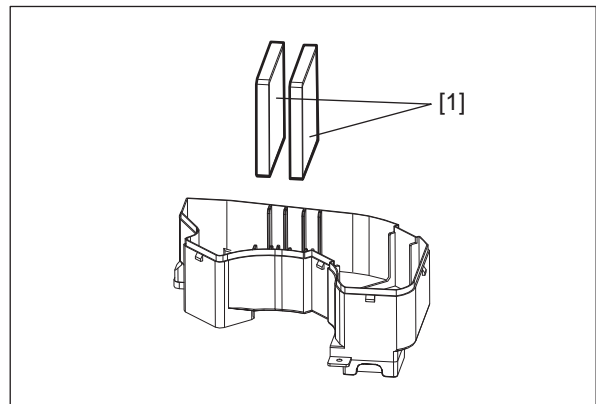


Fig. 4-300

4.7.27 Front cover opening/closing switch (SW10)

- (1) Take off the right front cover.
📖 P. 4-2 "4.1.5 Front right cover"
- (2) Remove 1 screw and take off the holder [1].

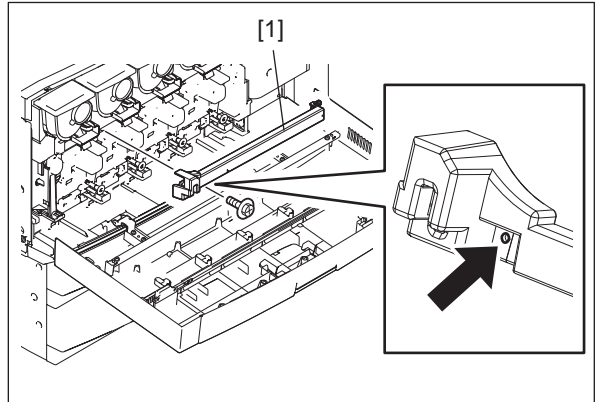


Fig. 4-301

- (3) Remove 1 connector and take off the seal [1].

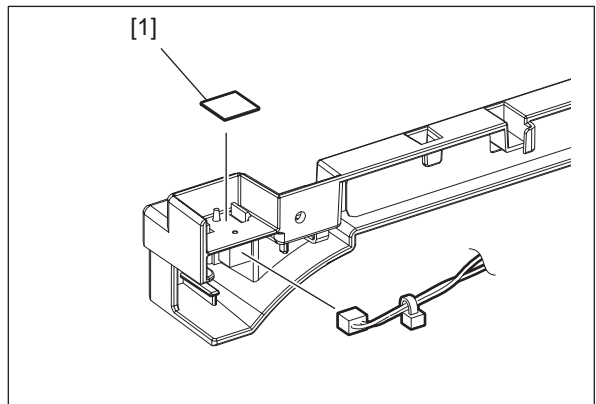


Fig. 4-302

- (4) Release 2 latches, and take off the front cover opening/closing switch [1].

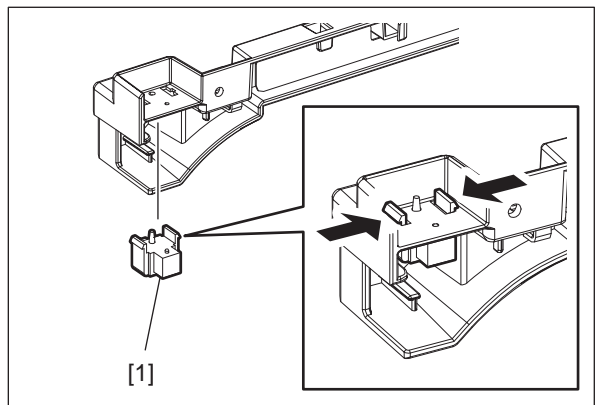


Fig. 4-303

4.8 Transfer Unit

4.8.1 Transfer belt cleaning unit

- (1) Open the front cover.
- (2) Remove 1 screw, and then pull the transfer belt cleaning duct [1] toward the front to take it off.

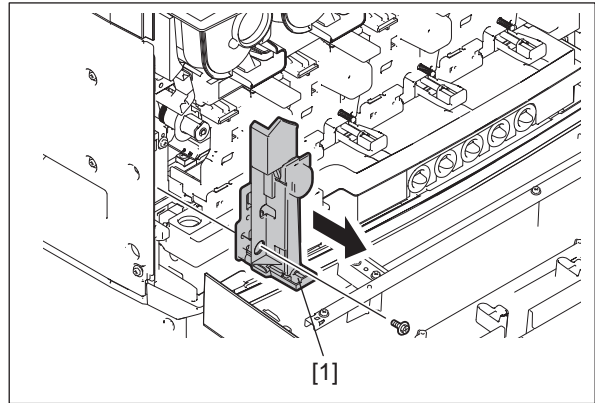


Fig. 4-304

- (3) Turn the TBU lifting lever clockwise for 90 degrees.

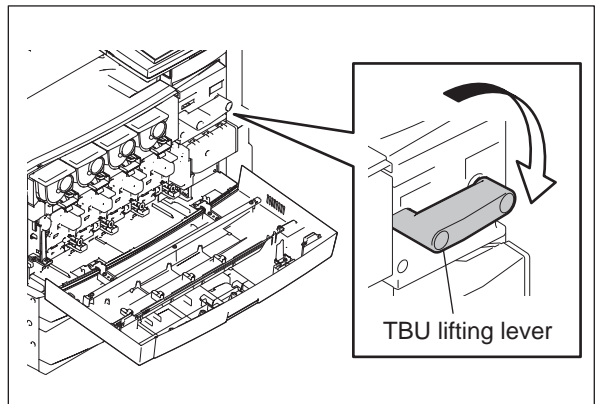


Fig. 4-305

- (4) Rotate the lever (sky blue) counterclockwise and pull it to the front to take it off.

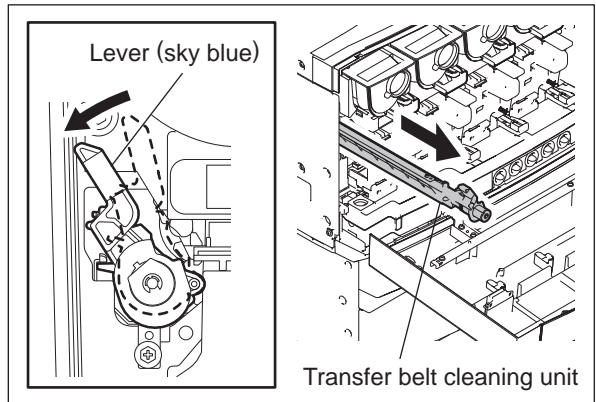


Fig. 4-306

Notes:

Follow the procedure below for the installation.

- (1) When installing, be sure to check if the TBU separation lever is at the fixed position (horizontal position) with the transfer belt installed.
- (2) Check if the TBU cleaner pressure hook is locked. If it is released, rotate the TBU cleaner pressure hook lever to lock it as shown in the figure, otherwise the transfer belt cleaning unit cannot be installed.

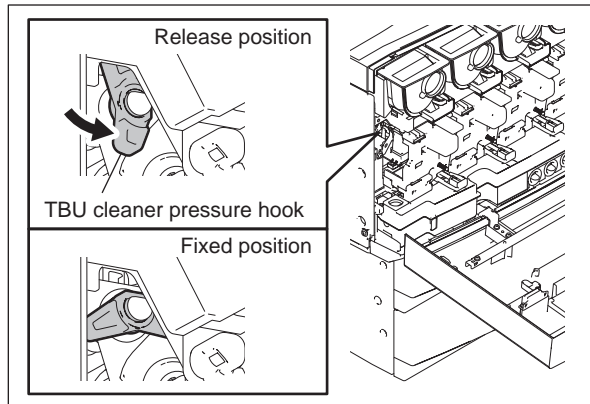


Fig. 4-307

- (3) Insert the A portion of the transfer belt cleaning unit beneath the stay (B) of the main frame.
- (4) Align the portion (C) of the transfer belt cleaning unit with the portion (D) of the main frame, then slide the transfer belt cleaning unit along the stay (B) of the main frame all the way in.
- (5) Rotate the lever E (sky blue) clockwise to lift it up until it clicks.

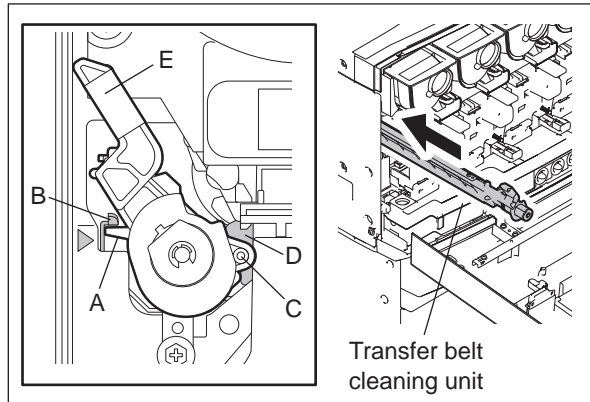



Fig. 4-308

4.8.2 Transfer belt cleaning blade / Blade seal

- (1) Take off the transfer belt cleaning unit.
 P. 4-108 "4.8.1 Transfer belt cleaning unit"
- (2) Remove 2 screws, and then take off the transfer belt cleaning blade.
- (3) Remove 2 screws, and then take off the recovery blade.

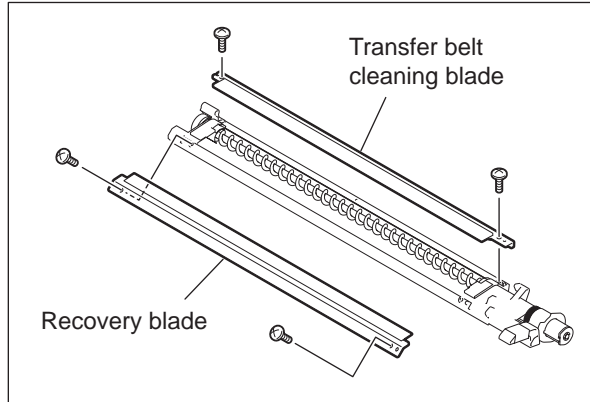


Fig. 4-309

- (4) Remove the blade seals (both front and rear sides).

Notes:

- When the blade seals are being attached, attach them on the position shown in the figure (by slightly pushing it to the direction of the arrow).
- After the blade seals have been attached, be sure that no gap is left between the blade seals and the edge of the transfer belt cleaning blade.

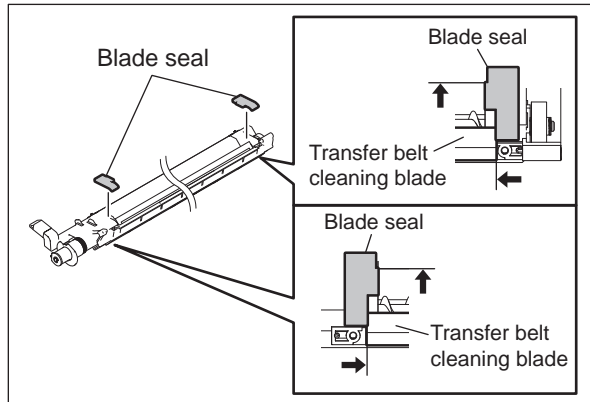


Fig. 4-310

4.8.3 Transfer belt unit (TBU)

Notes:

It is recommended to wear gloves to avoid a direct touch on the belt surface. When any of the following maintenance works has been done, be sure to adjust the axis gap of the TBU drive gear.

- Replacing the transfer belt.
- Disassembling the roller or frame of the transfer belt unit (except when only the transfer belt or drive roller is disassembled).

- (1) Take off the transfer belt cleaning unit.
P. 4-108 "4.8.1 Transfer belt cleaning unit"
- (2) Remove 1 screw, and then turn the TBU lifting lever counterclockwise for 90 degrees.

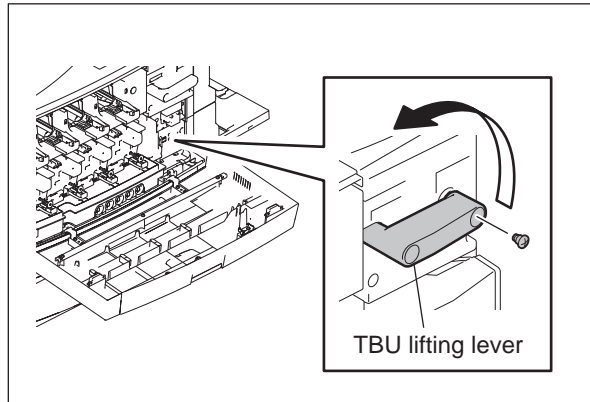


Fig. 4-311

- (3) Move the automatic duplexing unit to its maintenance position.
P. 4-164 "4.11.1 ADU maintenance position"
- (4) Open the 2nd transfer unit and ADU.
- (5) Open the middle guide by holding its knob.

Notes:

Do not hold the middle guide itself when opening and closing it.

- (6) Disconnect the 1 connector.

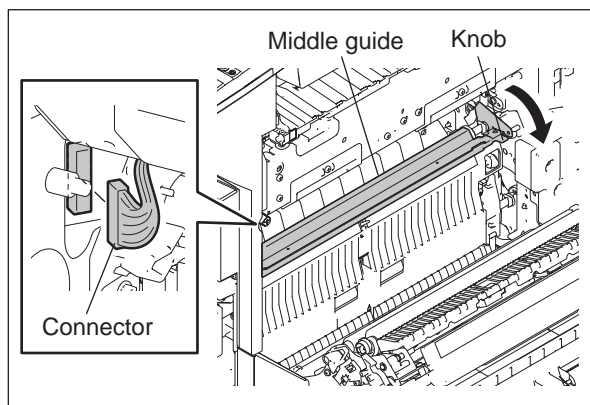


Fig. 4-312

- (7) Hold the holder, and then pull out the transfer belt unit toward you.

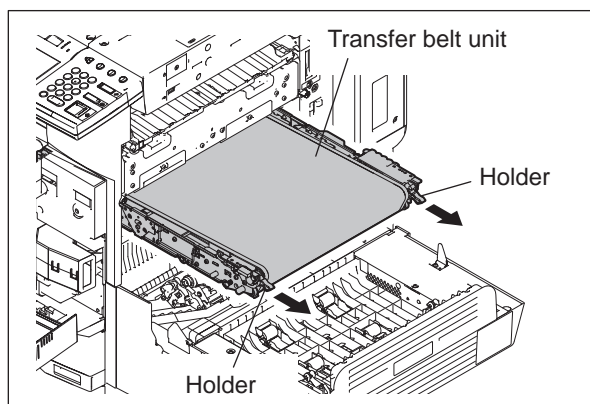


Fig. 4-313

- (8) Raise the front handle, and then hold it together with the rear handle (light blue) to take off the transfer belt unit.

Notes:

When taking off the transfer belt unit, be sure not to contact the bottom of this unit and the 2nd transfer unit to prevent the transfer belt from being scratched.

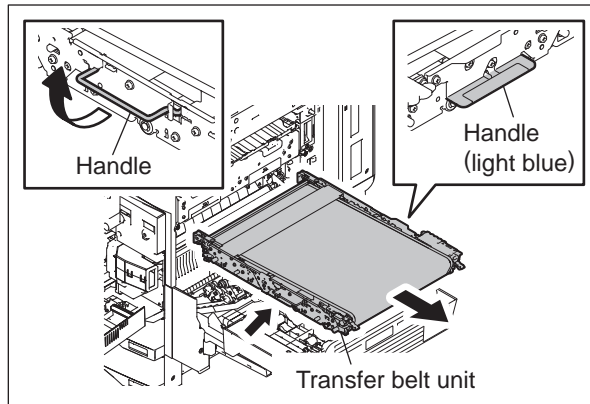


Fig. 4-314

Notes:

Be careful not to deform the spring when removing/installing the transfer belt unit.

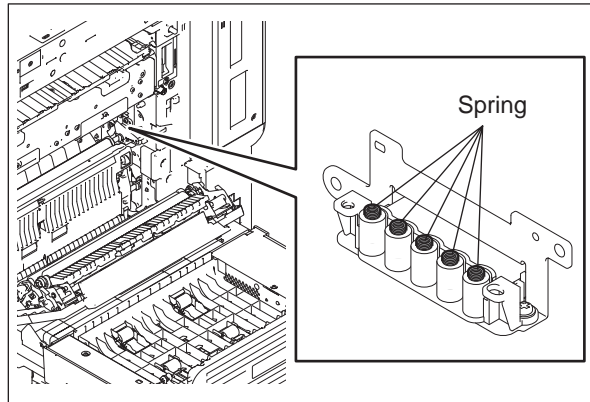


Fig. 4-315

Notes:

Follow the procedure below for the installation.

1. Rotate the TBU cleaner pressure hook lever on the transfer belt unit to lock the TBU cleaner pressure hook.
2. Check if the TBU release lever is at the release position (vertical position).
3. Check that the middle guide of the unit is opened.
4. Insert the transfer belt unit by sliding the unit along the rail.
5. Store the front handle, and then push the holder all the way in until it comes to a stop.
6. When the unit has been securely inserted, close the middle guide.

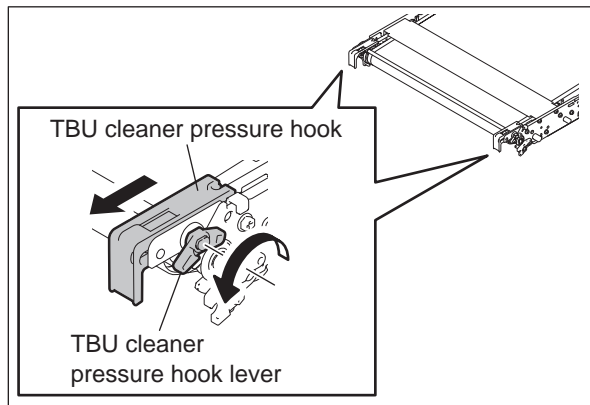


Fig. 4-316

4.8.4 Transfer belt

Notes:

It is recommended to wear gloves to avoid a direct touch on the belt surface.

- (1) Take off the transfer belt unit.
📖 P. 4-111 "4.8.3 Transfer belt unit (TBU)"
- (2) Remove 4 screws, and then take off the stay.

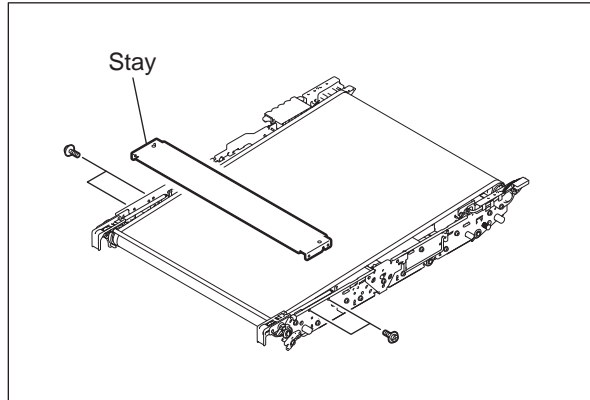


Fig. 4-317

- (3) Remove 2 screws, and then take off the TBU cleaner pressure hook assembly [2] and 2 springs [1].

Notes:

When removing the screw, ensure that the driver does not collide with the gear [3].

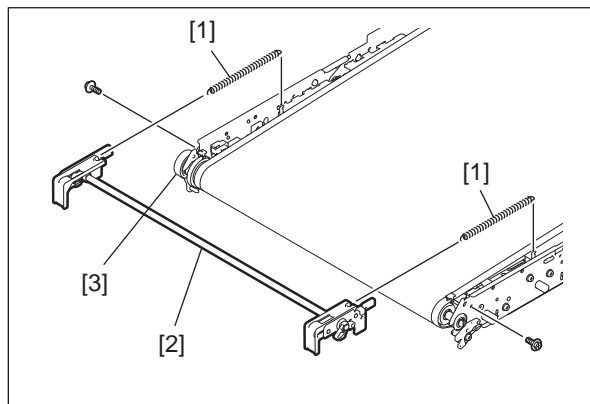


Fig. 4-318

Notes:

Check that the cams [1] on both the front and rear side (the latter is shown with the arrow in the right-hand figure) are attached to the link arms [2] securely when the TBU cleaner pressure hook assembly is installed.

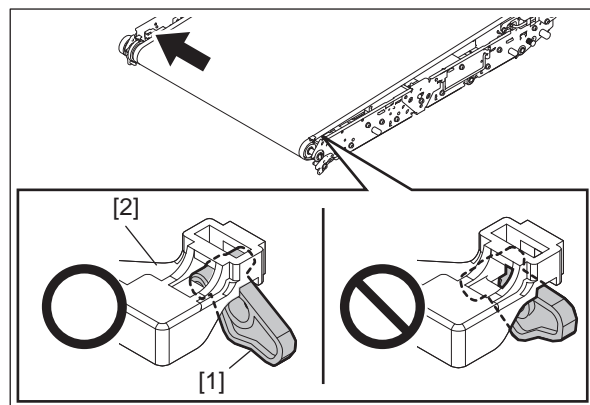


Fig. 4-319

- (4) Remove 1 screw, and then take off the front bracket and handle.

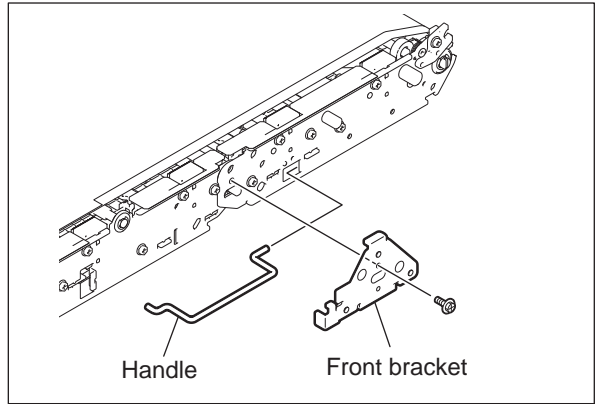


Fig. 4-320

- (5) Remove 2 screws, and then take off the rear bracket.

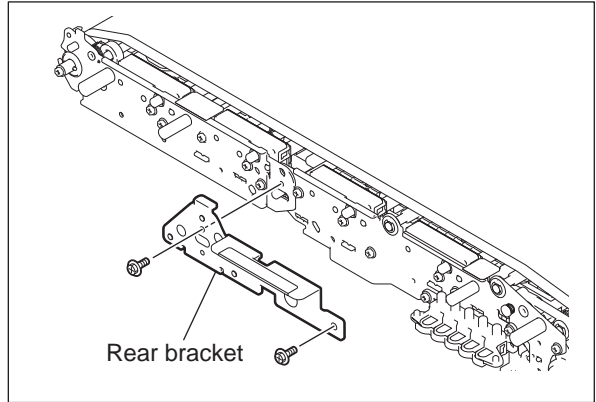


Fig. 4-321

- (6) Fold the frame with its rear side up.

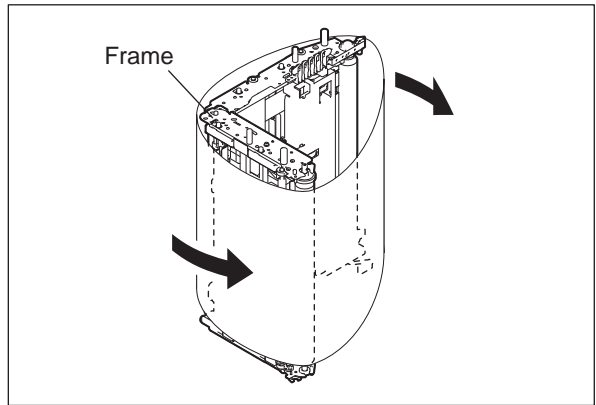


Fig. 4-322

(7) Pull out the transfer belt.

Notes:

- Install the transfer belt in the middle so that it does not move to one side.
- Install the transfer belt so that the serial number inside of the belt comes at the rear side.
- Do not touch the belt surface directly with bare hands.
- Ensure the gear's grease does not adhere to the transfer belt.
- Be sure not to scratch the belt surface.
- When the belt is being replaced, clean its drive roller, 2nd transfer facing roller, tension roller and idling roller with alcohol.
- Check if the rib on both ends of the transfer belt does not run on the rollers.

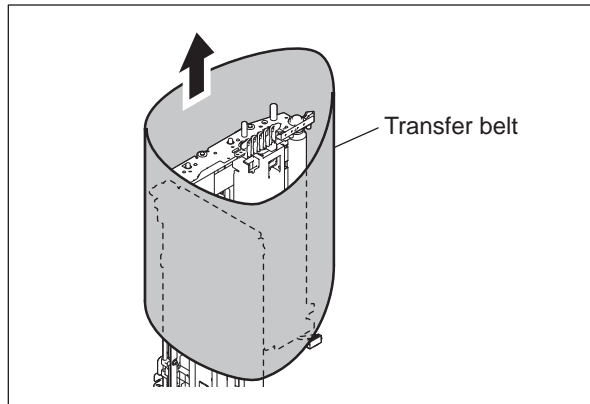



Fig. 4-323

4.8.5 Drive roller

(1) Take off the transfer belt.

 P. 4-113 "4.8.4 Transfer belt"

(2) Remove 1 E-ring, 1 bearing on the front side of the drive roller.

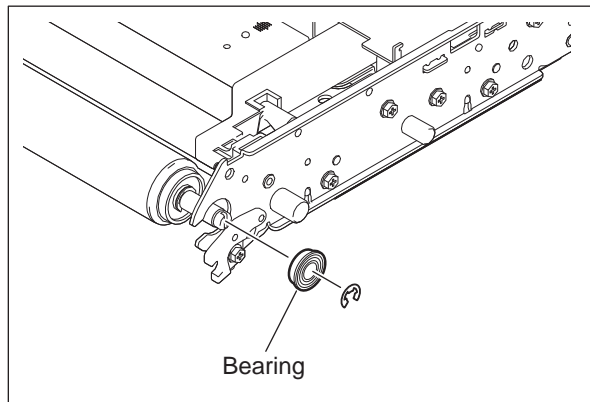


Fig. 4-324

(3) Take off the drive roller [1].

Notes:

Ensure the grease does not adhere to the hands.

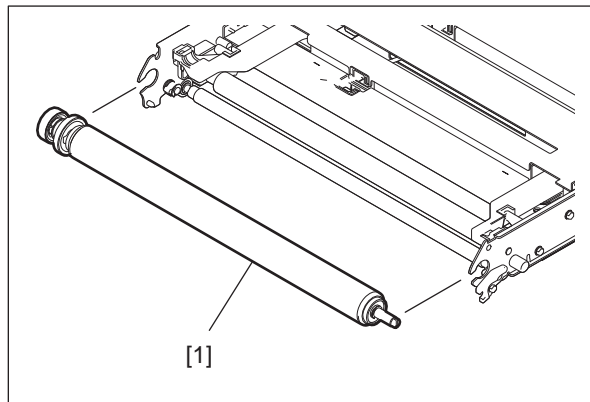


Fig. 4-325

- (4) Remove 1 screw, 2 gears [1], 2 pins [2] and 1 bearing [3] on the rear side of the drive roller.

Notes:

- When taking out the gear [1], ensure that the gear [1] does not get scratched.
- Be sure to use the 16 mm pin when the drive roller is reassembled.

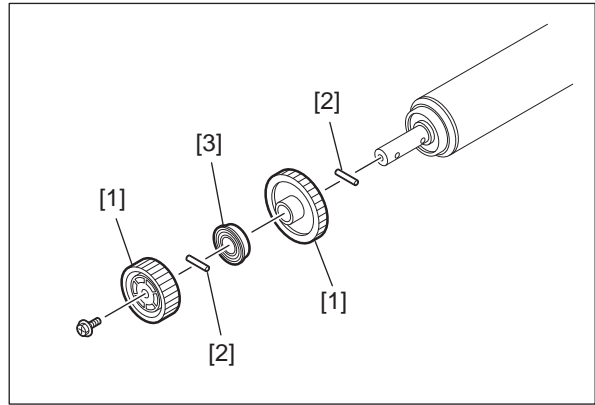


Fig. 4-326

4.8.6 1st transfer roller

- (1) Take off the transfer belt.
 P. 4-113 "4.8.4 Transfer belt"
- (2) Rotate the gear of the 1st transfer roller cam motor with your fingers to move 6 lift levers up.

Notes:

Do not touch the conducting grease (front/rear) applied on the shaft of 1st transfer roller cam motor.

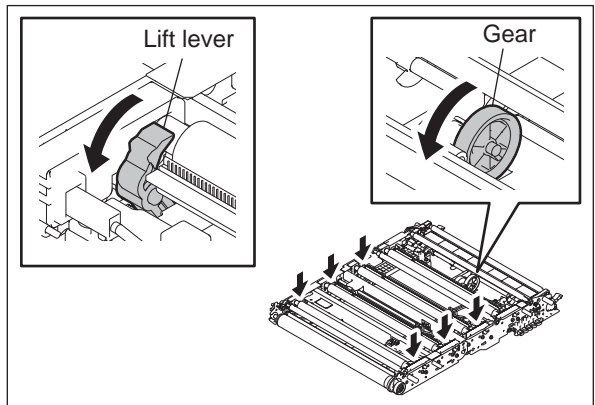


Fig. 4-327

- (3) Remove 4 screws.
- (4) Then remove 4 of the 1st transfer rollers and 4 front terminals.

Notes:

When fitting the front terminals, align with the positioning dowels.

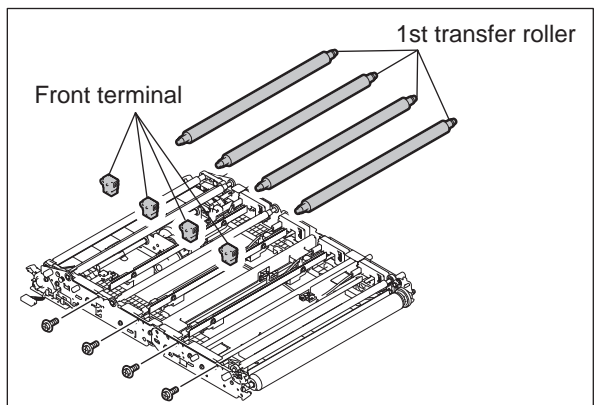


Fig. 4-328

4.8.7 2nd transfer facing roller / 2nd transfer facing roller cleaning film



- (1) Take off the transfer belt.
 P. 4-113 "4.8.4 Transfer belt"
- (2) Remove 2 screws, and then take off the 2nd transfer facing roller front holder [1]. Then take off the 2nd transfer facing roller [3] and 1 bearing [2].

Notes:

Be careful not to damage the earth plate [4] in the 2nd transfer facing roller [1].

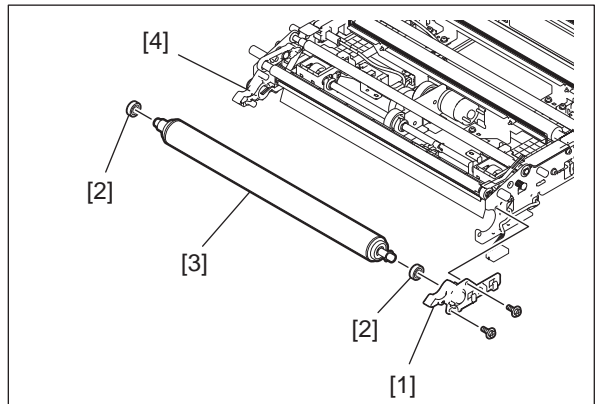


Fig. 4-329

- (3) Peel the 2nd transfer facing roller cleaning film [1].

Notes:

Attach the 2nd transfer facing roller cleaning film [1] to the position shown in the figure within the error of 0.5 mm or less (by slightly pushing it to the 2 edges of the 2nd transfer facing roller cleaning holder [2] in the direction of the arrow).

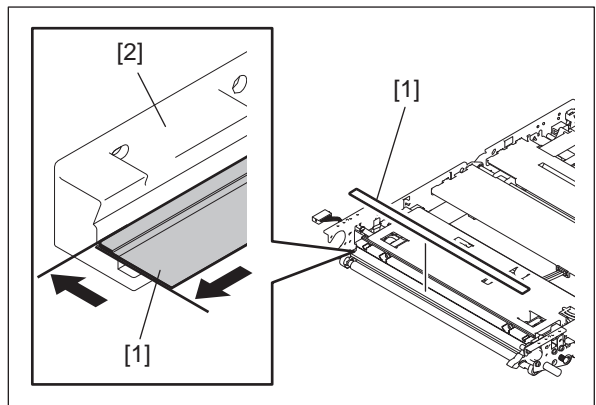


Fig. 4-330

Notes:

Never attempt to loosen the 2 red screws shown in the figure.

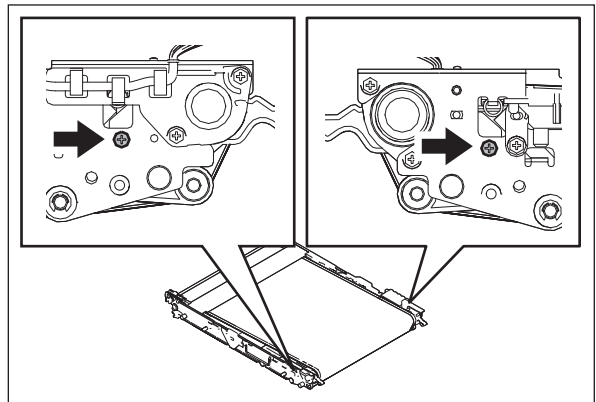



Fig. 4-331

4.8.8 Tension roller

- (1) Take off the transfer belt.
 P. 4-113 "4.8.4 Transfer belt"
- (2) Remove 1 E-ring, 2 bearings [1] and the bushing [2], and take off the tension roller [3].

Notes:

Be careful not to deform the earth plate of the tension roller arm on the front side.

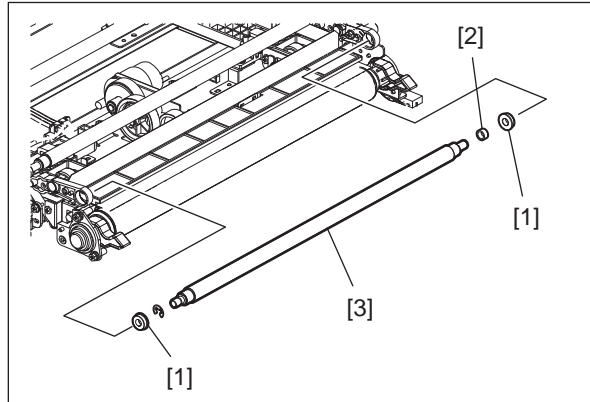



Fig. 4-332

4.8.9 1st transfer roller cam motor (M8)

- (1) Take off the transfer belt.
 P. 4-113 "4.8.4 Transfer belt"
- (2) Remove 2 E-rings, 2 bearings [1], and the idler roller [2].

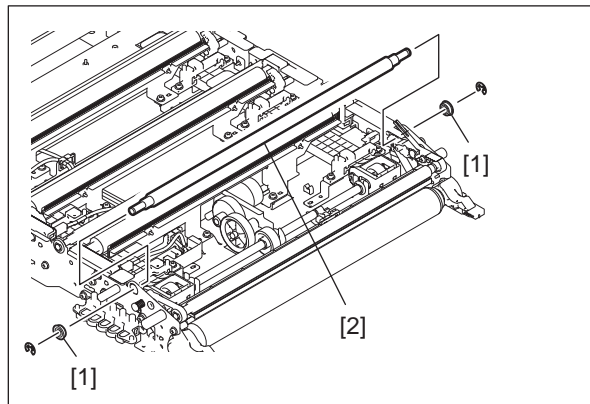


Fig. 4-333

- (3) Remove 3 E-rings, and then slide the 3 bushings of the cam shaft.

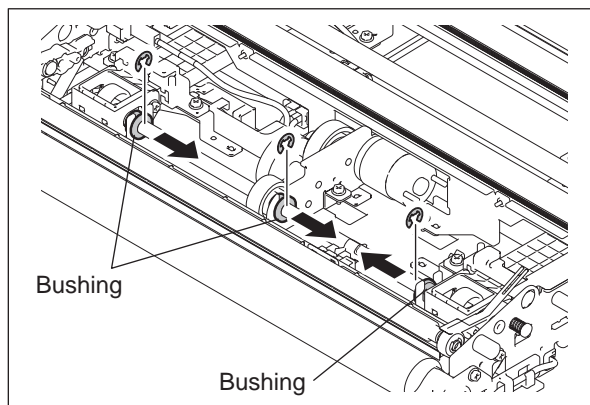


Fig. 4-334

- (4) Remove 1 screw and then disconnect 1 relay connector to take off the 1st transfer roller cam motor assembly.

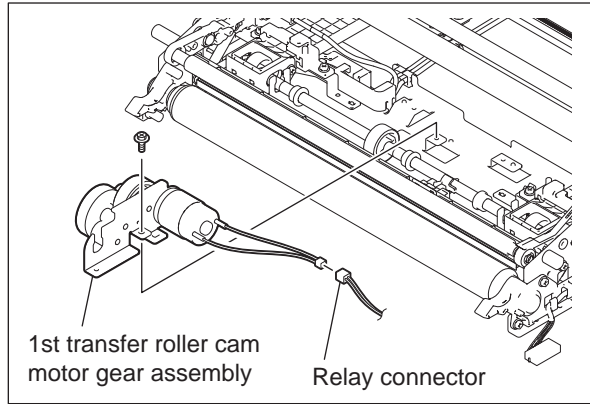


Fig. 4-335

- (5) Release 1 latch and remove 2 gears [1].

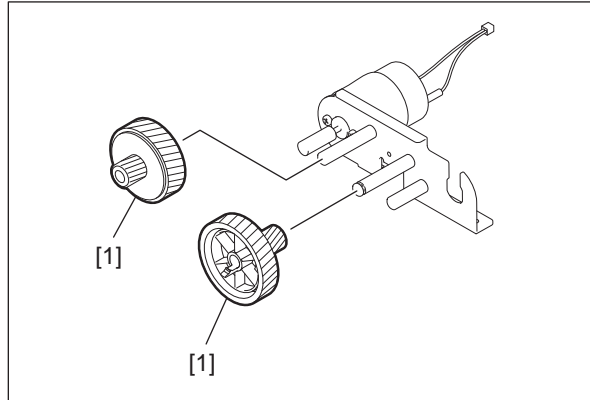


Fig. 4-336

- (6) Remove 2 screws, and then take off the 1st transfer roller cam motor.

Notes:

Pay attention to the size (length) of the screws. If incorrect ones are used, the motor could be damaged.

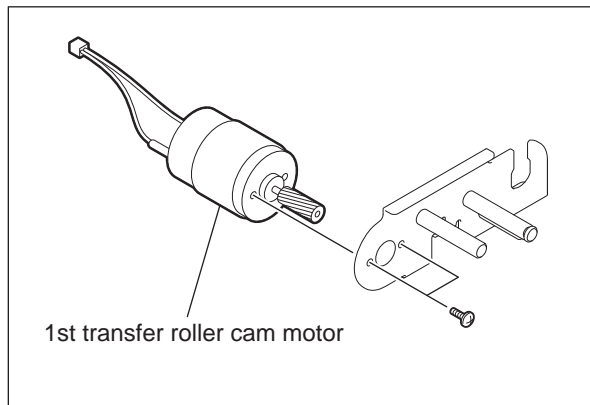


Fig. 4-337

4.8.10 1st transfer roller status detection sensor (S15)

- (1) Take off the 2nd transfer facing roller.
P. 4-117 "4.8.7 2nd transfer facing roller / 2nd transfer facing roller cleaning film"
- (2) Remove 2 screws, and then take off the 2nd transfer facing roller cleaning holder.

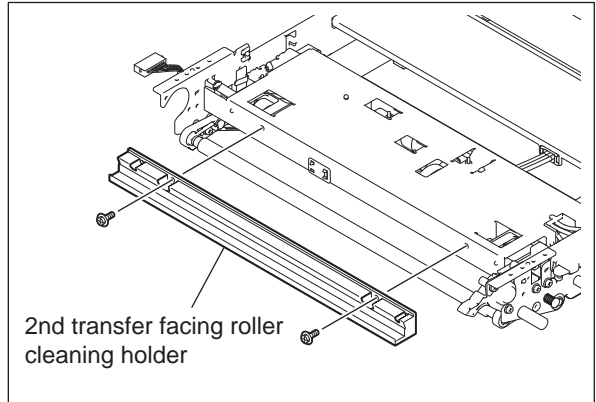


Fig. 4-338

- (3) Remove the seal.
- (4) Release the latch and disconnect the connector to take off the 1st transfer roller status detection sensor.

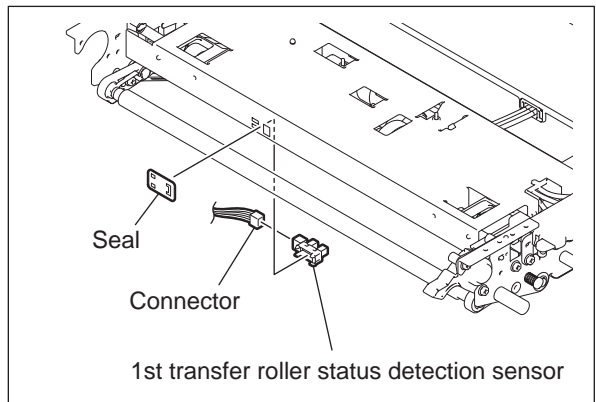


Fig. 4-339

4.8.11 2nd transfer unit (TRU)

- (1) Move the automatic duplexing unit to its maintenance position.
P. 4-164 "4.11.1 ADU maintenance position"
- (2) Take off the right front hinge cover.
P. 4-6 "4.1.14 Right front hinge cover"
- (3) Remove 1 screw and take off the connector cover.

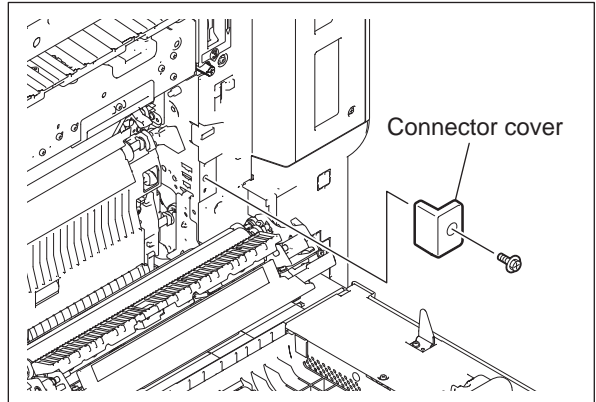


Fig. 4-340

- (4) Disconnect 1 connector, and then remove 2 clamps.

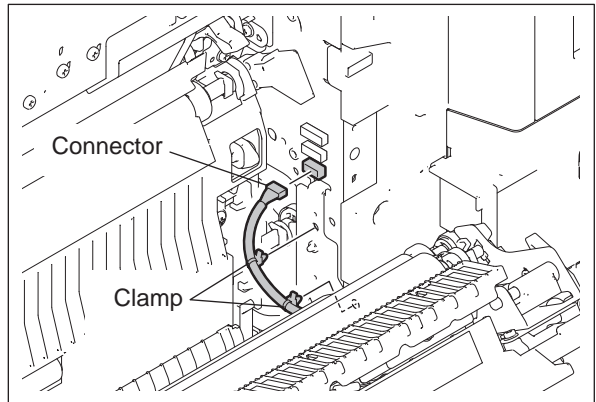


Fig. 4-341

- (5) Remove 1 screw, and then take off the 2nd transfer unit hinge stay.

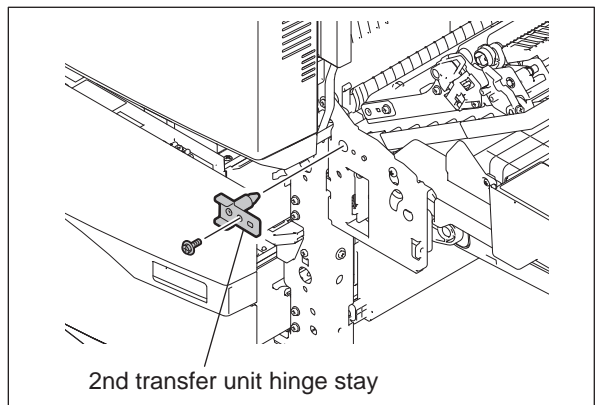


Fig. 4-342

- (6) Lift up the 2nd transfer unit slightly, and then take it off by sliding it to the front side.

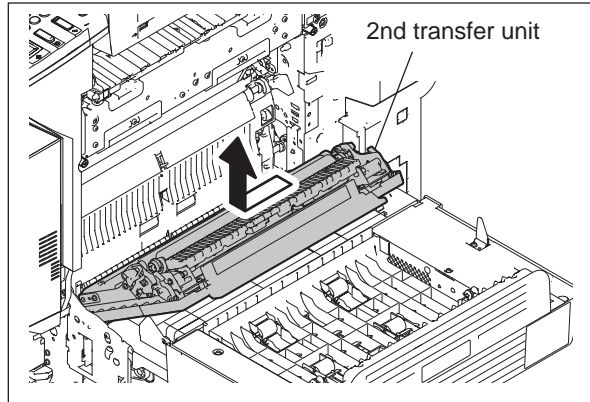


Fig. 4-343

4.8.12 2nd transfer roller

- (1) Open the 2nd transfer unit.
- (2) Remove 1 clip, 1 bearing and 1 bushing (with bearing) on the front side of the 2nd transfer roller.
- (3) Remove 1 clip, 1 bearing and 1 bushing (with bearing) on the rear side of the 2nd transfer roller.
- (4) Take off the 2nd transfer roller.

Notes:

Be careful not to drop the clip, bearing and bushing into the inside of the 2nd transfer unit.

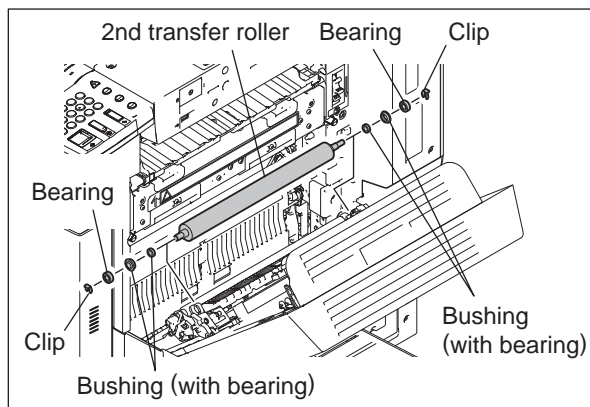



Fig. 4-344

4.8.13 TRU cover

- (1) Take off the 2nd transfer unit.
 P. 4-121 "4.8.11 2nd transfer unit (TRU)"
- (2) Remove 4 screws and take off the TRU cover.

Notes:

When installing the TRU cover, be sure not to damage the film.

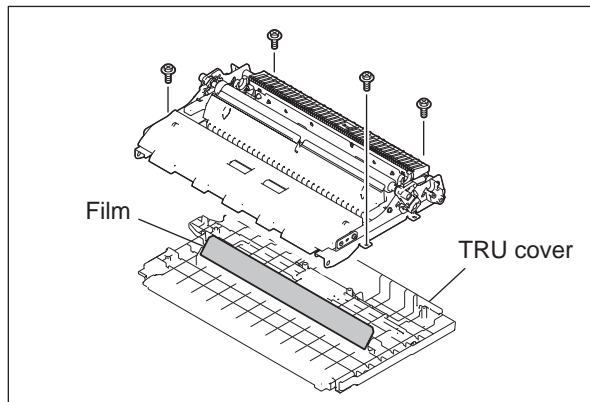


Fig. 4-345

4.8.14 Paper clinging detection sensor (S27)

- (1) Take off the TRU cover.
📖 P. 4-122 "4.8.13 TRU cover"
- (2) Disconnect 1 connector [1], release the harness from the edge saddle [2] and the harness clamps [3].

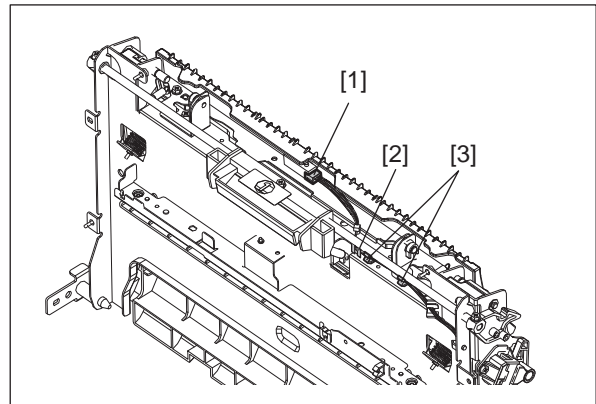


Fig. 4-346

- (3) Remove 2 screws, take off the guide unit [1].

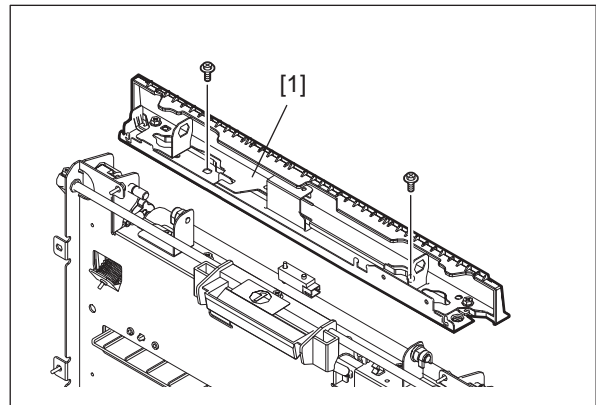


Fig. 4-347

Notes:

When the guide unit is reassembled, be sure to confirm that the bosses [1] are fixed firmly to avoid the paper transporting failure due to the part deformation.

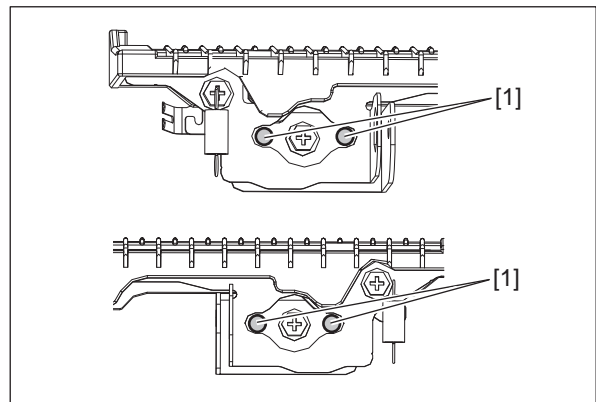


Fig. 4-348

- (4) Remove 2 screws and 2 springs [1], and take off the paper guide [2].

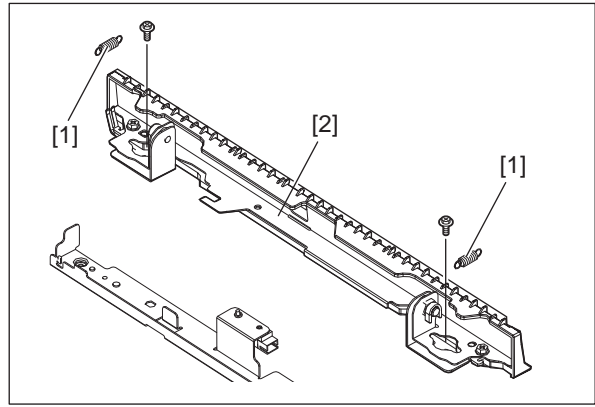


Fig. 4-349

- (5) Remove 1 screw and take off the paper clinging detection sensor [1].

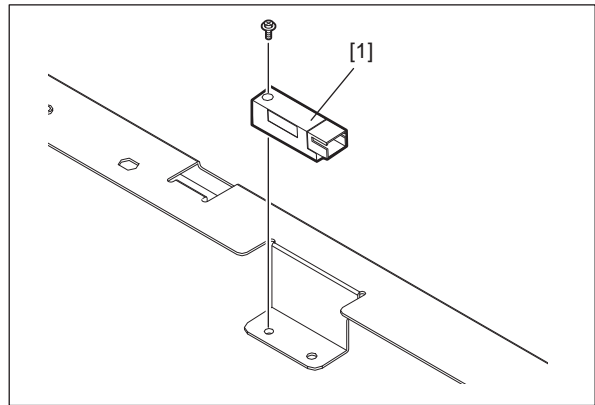


Fig. 4-350

Notes:

Since the guide unit is supplied as a service part, do not remove the 2 screws [1] for fixing the plastic guide and the metal plate.

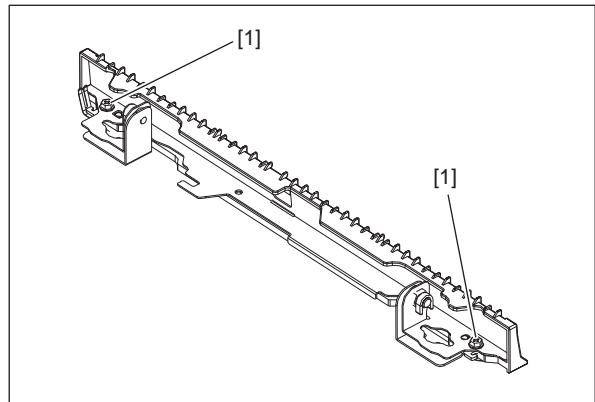


Fig. 4-351

4.8.15 2nd transfer roller position detection sensor (S29)

- (1) Take off the paper dust holder.
📖 P. 4-63 "4.5.36 Paper dust holder"
- (2) Disconnect the connector, release the latch and take off the 2nd transfer roller position detection sensor.

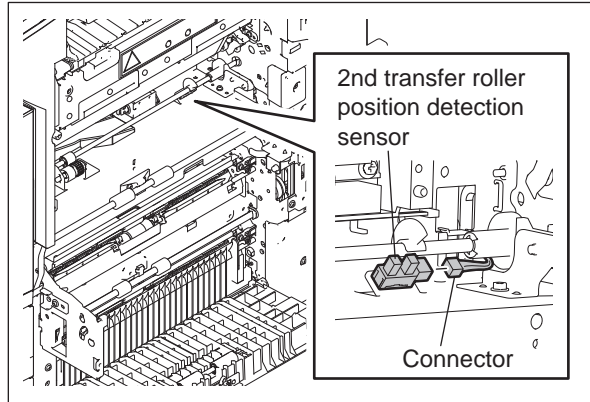



Fig. 4-352

4.8.16 Transfer belt motor unit

Notes:

Never remove the damper fixed on the transfer belt motor unit with 2 screws (red).

- (1) Open the front cover.
 P. 4-1 "4.1.1 Front cover"
- (2) Remove 1 screw, take off the TBU cleaner waste toner duct [1].

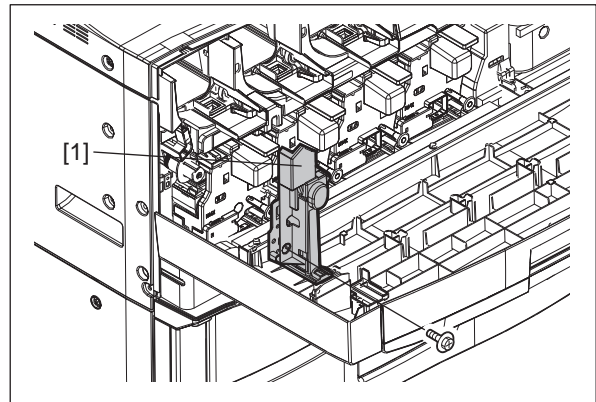



Fig. 4-353

- (3) Take off the transfer belt cleaning unit.
 P. 4-108 "4.8.1 Transfer belt cleaning unit"
- (4) Remove 1 screw, take off the TBU cleaner guide rail [1].

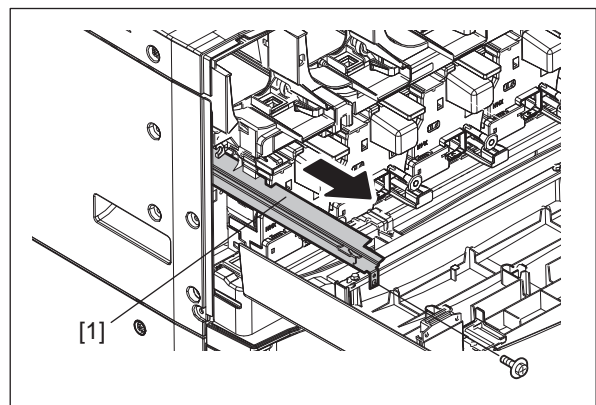


Fig. 4-354

- (5) Turn the TBU lifting lever [1] counterclockwise for 90 degrees.

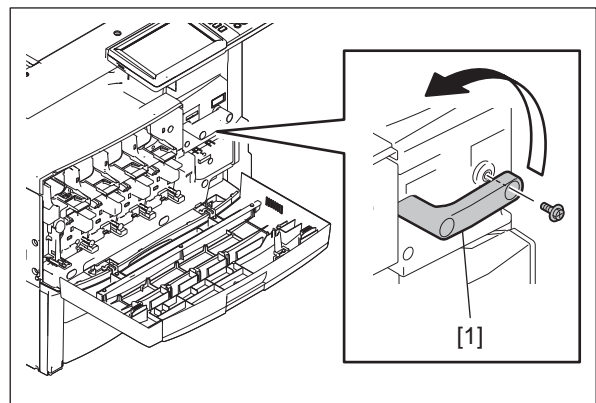


Fig. 4-355

- (6) Take off the ozone exhaust duct.
 P. 4-104 "4.7.23 Ozone exhaust fan (M24)"
- (7) Remove 1 spring [1].
- (8) Disconnect 1 connector [2].
- (9) Remove 3 screws and 1 shoulder screw [3].

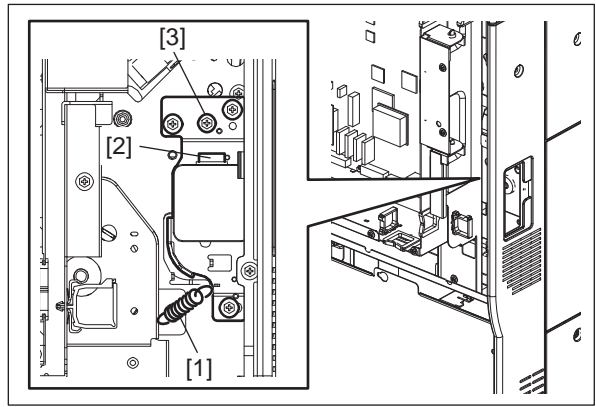


Fig. 4-356

- (10) Take off the transfer belt motor unit [1].

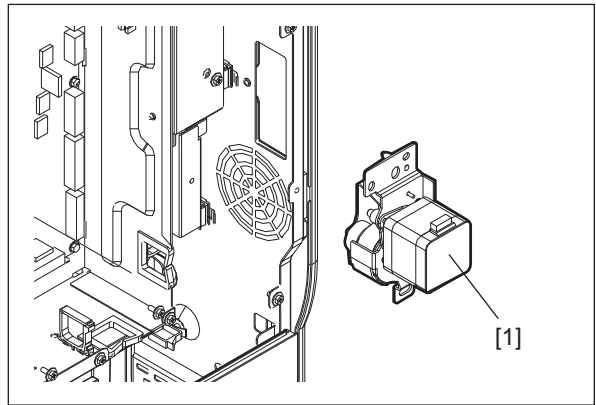


Fig. 4-357

Notes:

Follow the procedure below for the installation of the transfer belt motor unit.

1. Check that the transfer belt is installed and the TBU lifting lever is in the release position (vertical position).
2. Insert the transfer belt unit and then tighten it with 1 shoulder screw.
3. Attach the spring.
4. Install the TBU cleaner guide rail with 1 screw. (By removing the process unit (EPU (Y)) and (EPU(M)), the operation can be easily performed.)
5. Turn the TBU lifting lever to the fixed position (horizontal position) so that the transfer belt unit is contacted.
6. Install the TBU belt cleaner unit.
📖 P. 4-108 "4.8.1 Transfer belt cleaning unit"
7. Install the TBU cleaner waste toner duct with 1 screw.
8. Close the front cover.
9. Fix the transfer belt motor unit with 3 screws in order of A and B then C.
10. Install the ozone exhaust duct.
📖 P. 4-104 "4.7.23 Ozone exhaust fan (M24)"

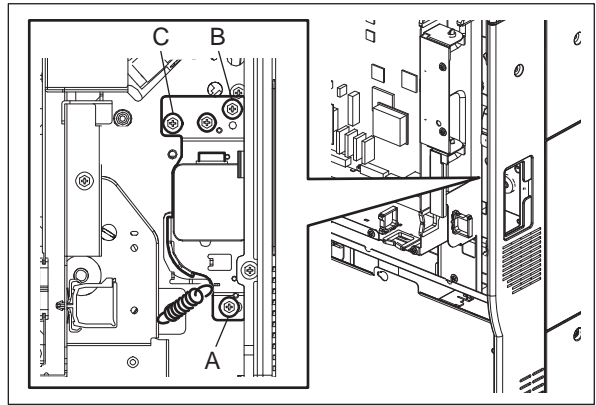


Fig. 4-358

4.8.17 Transfer cover switch (SW3)

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Take off the right inner cover.
📖 P. 4-6 "4.1.16 Right inner cover"
- (3) Release the 2 latches, and then disconnect the connector to take off the transfer cover switch.

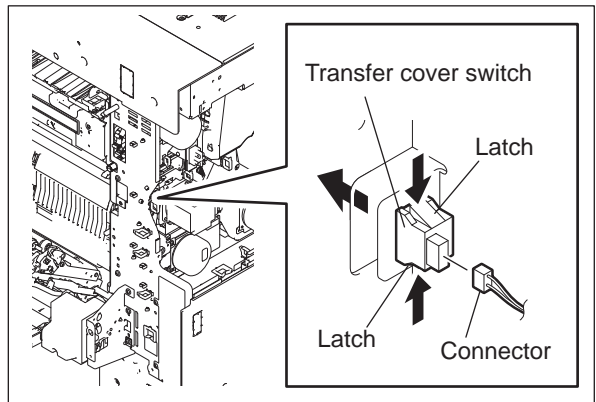


Fig. 4-359

4.9 Image Quality Control

4.9.1 Image quality control unit

- (4) Take off the paper dust holder.
📖 P. 4-63 "4.5.36 Paper dust holder"
- (5) Remove 3 screws.
- (6) Disconnect 3 connectors and 1 relay connector. Then take off the image quality control unit.

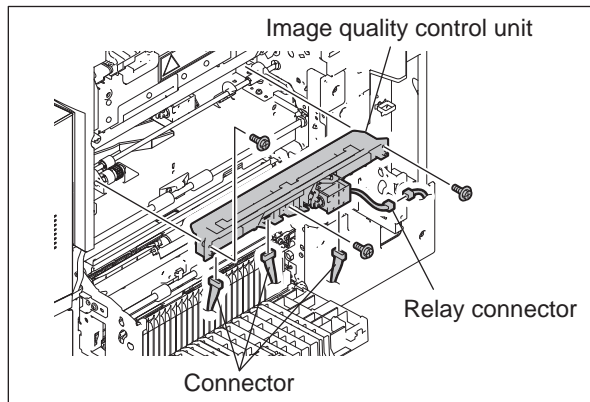


Fig. 4-360

4.9.2 Image position aligning sensor (front) (S16)

- (1) Take off the image quality control unit
📖 P. 4-129 "4.9.1 Image quality control unit"
- (2) Remove 2 screws and take off the image position aligning sensor (front).

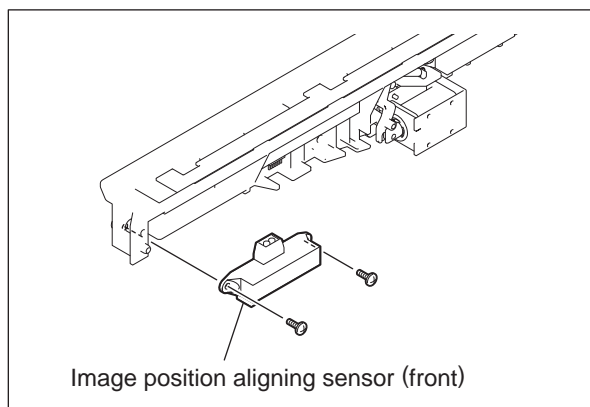


Fig. 4-361

4.9.3 Image position aligning sensor (rear) (S17)

- (1) Take off the image quality control unit
📖 P. 4-129 "4.9.1 Image quality control unit"
- (2) Remove 2 screws and take off the image position aligning sensor (rear).

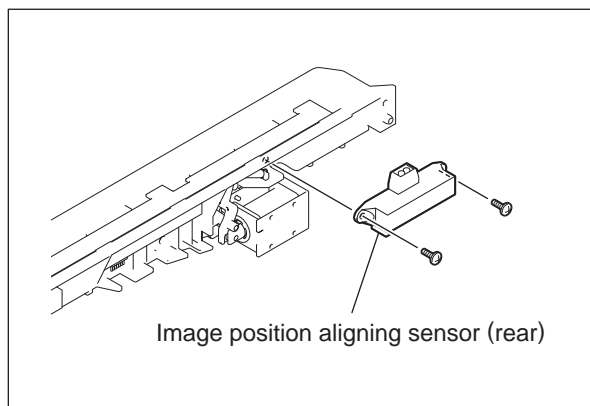


Fig. 4-362

4.9.4 Image quality sensor (S18)

- (1) Take off the image quality control unit
📖 P. 4-129 "4.9.1 Image quality control unit"
- (2) Remove 2 screws and take off the image quality sensor.

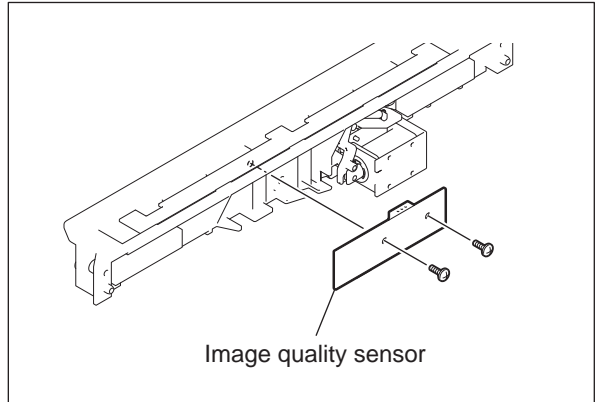


Fig. 4-363

4.9.5 Sensor shutter solenoid (SOL2)

- (1) Take off the image quality control unit
📖 P. 4-129 "4.9.1 Image quality control unit"
- (2) Remove 2 screws and take off the sensor shutter solenoid.

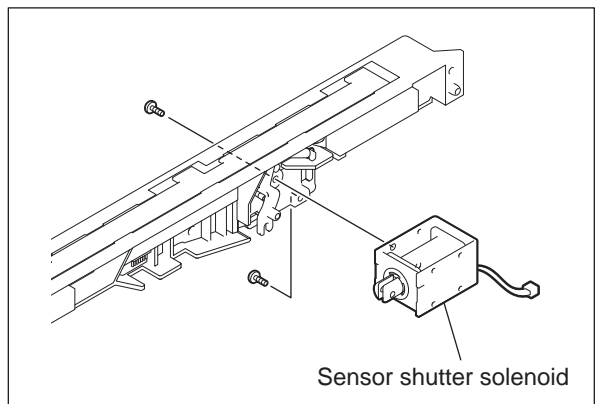


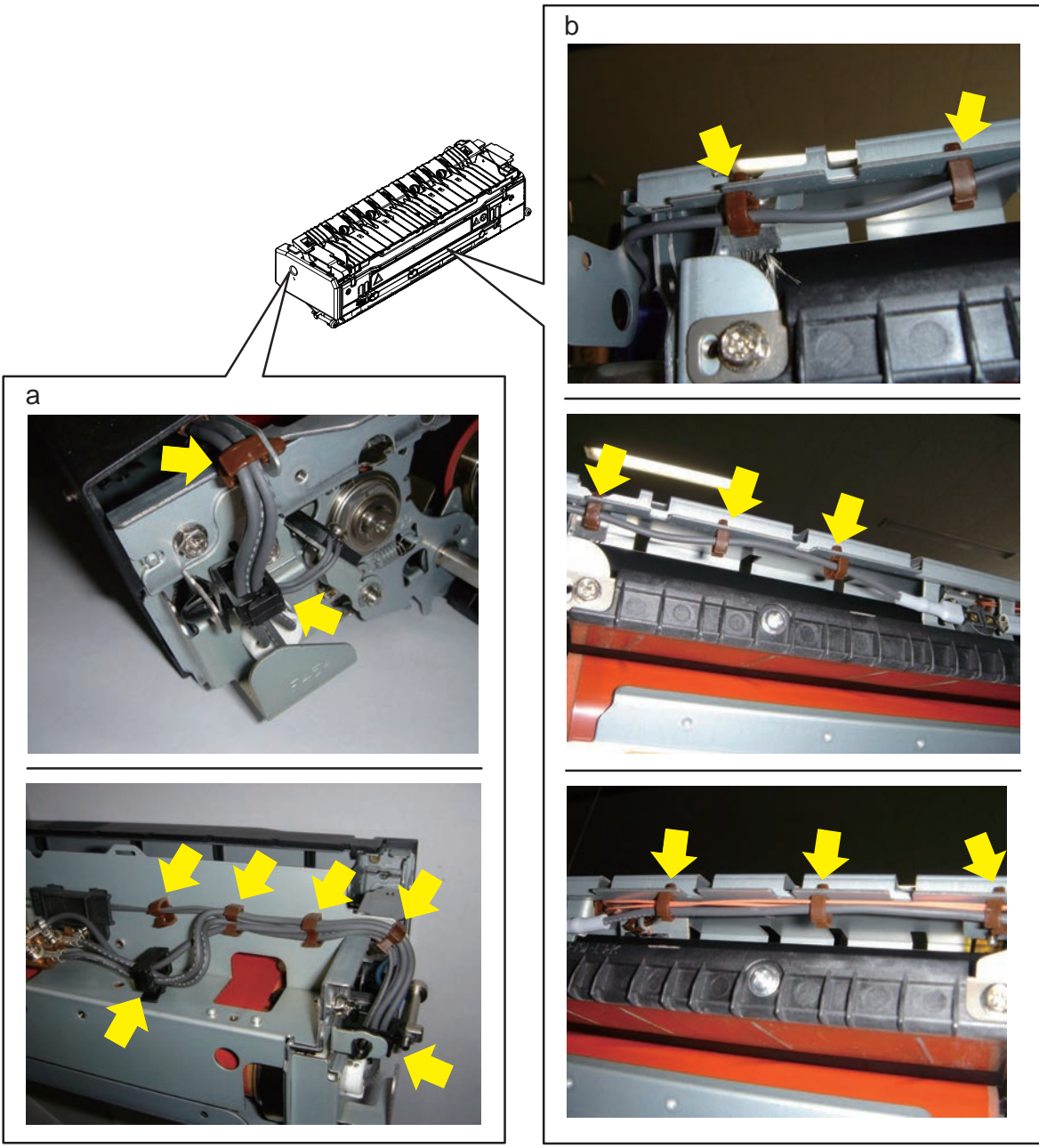
Fig. 4-364

4.10 Fuser unit / Paper Exit Section

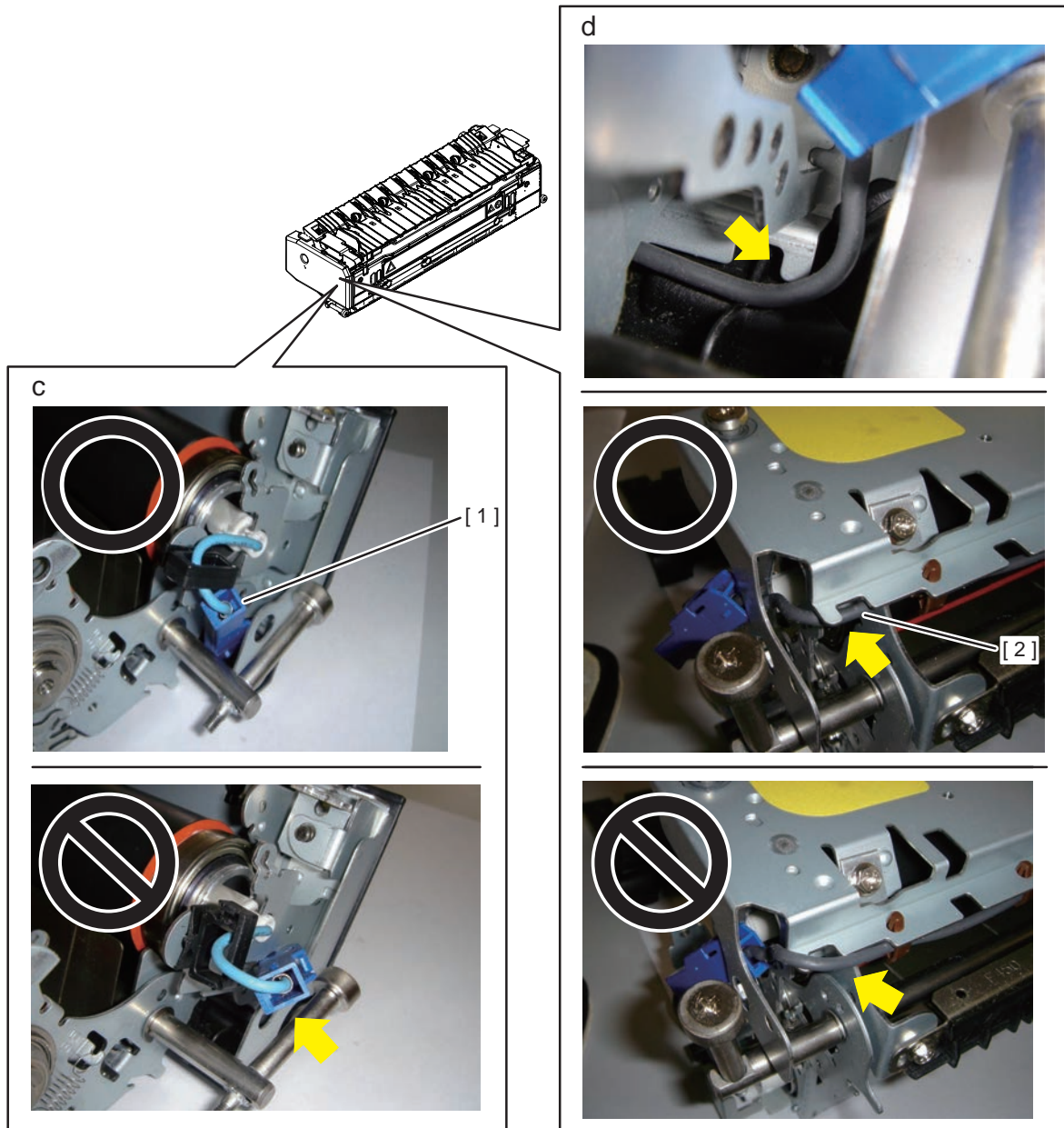
4.10.1 Fuser unit

Notes:

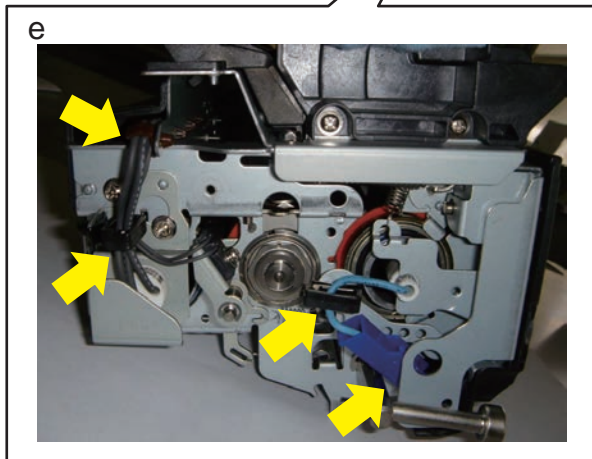
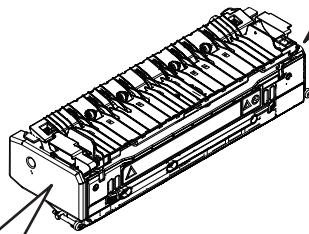
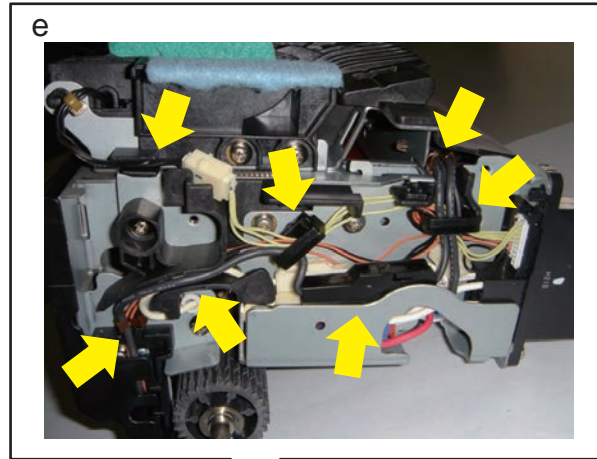
- Be sure that the temperature of the fuser unit has lowered enough before taking it off. If the unit still heated should be taken off, wear a pair of gloves before working.
- When a new fuser unit is installed, be sure to check whether the fuser-related life counter values have been cleared in the list printing mode, PM supporting mode or the setting mode (08).
- To prevent the harnesses from catching and getting scratched by contacting with such as a metal plate edge, pay attention to the following points when disassembling and assembling.
 - a. Be sure to pass the harnesses for the fuser belt front thermistor and the heater lamp through the black and brown clamps.
 - b. Be sure to pass the harnesses for the pressure roller thermostat and the pressure roller thermistor through the clamps.



- c. When wiring the harnesses, be sure not to touch the connector [1] of the harness for the pressure roller lamp at the front side with the metal plate edge. In addition, be sure to put the connector between the metal plates after connecting it.
- d. Be careful not to catch the harness [2] for the pressure roller lamp at the front side in the notch of the metal plate edge.



e. Check the harness wiring to prevent the cover from catching the harnesses.



- (1) Open the automatic duplexing unit (ADU) and 2nd transfer unit (TRU).
- (2) Loosen 2 screws, and then take off the fuser unit.

Notes:

The fuser unit is extremely hot. When taking off the fuser unit, hold the handles of the unit to avoid a direct touch on the unit.

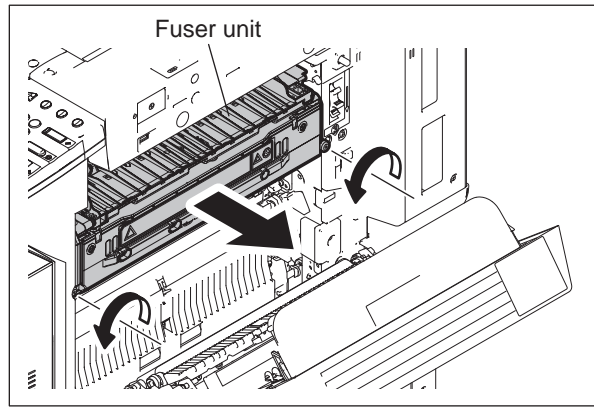


Fig. 4-365

Notes:

Follow the procedure below for the installation.

1. Insert the fuser unit into the equipment and tighten the screws. At this time, turn the handle to engage the gears of the equipment and the fuser unit.
2. Fix the 2 screws securely.
3. Check that they are engaged properly by turning the handle.

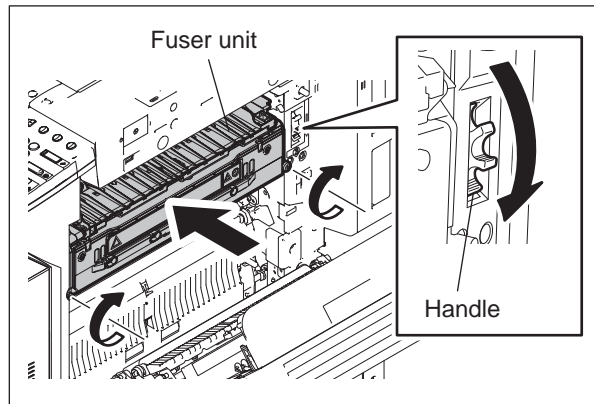


Fig. 4-366

4.10.2 Front side cover

- (1) Take off the fuser unit.
 P. 4-131 "4.10.1 Fuser unit"
- (2) Remove 2 screws, and then take off the front side cover.

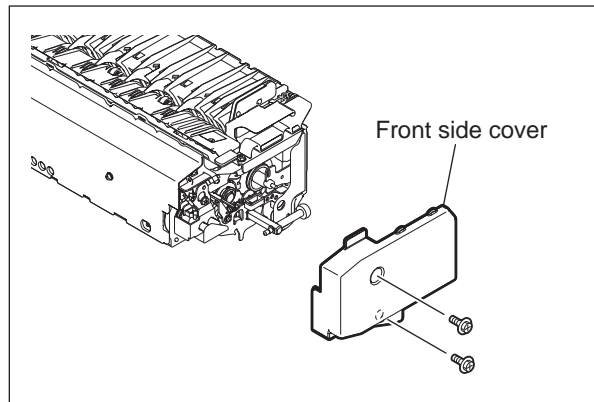


Fig. 4-367

4.10.3 Rear side cover

- (1) Take off the fuser unit.
P. 4-131 "4.10.1 Fuser unit"
- (2) Remove 2 screws, and then take off the rear side cover.

Notes:

When installing, put the harness into the harness guide so that it will not be caught by the cover.

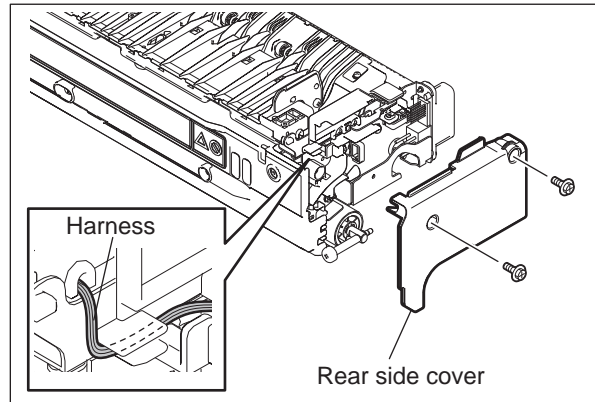


Fig. 4-368

4.10.4 Heat roller cover

- (1) Take off the fuser unit.
P. 4-131 "4.10.1 Fuser unit"
- (2) Remove 2 screws (one on the rear side is a shoulder screw) and take off the heat roller roller cover.

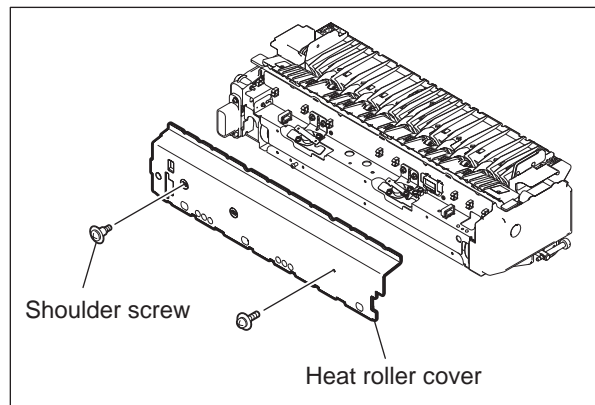


Fig. 4-369

4.10.5 Pressure roller cover

- (1) Take off the fuser unit.
P. 4-131 "4.10.1 Fuser unit"
- (2) Remove 3 screws (those on the center section and the rear section are shoulder screws), and then take off the pressure roller cover.

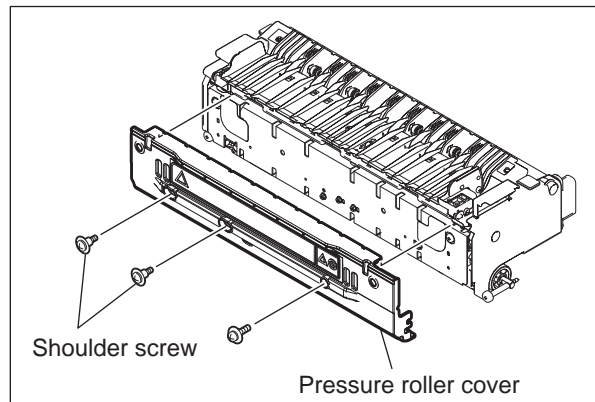


Fig. 4-370

Notes:

When installing, be sure to push the harnesses in the direction of the arrows so that they do not get caught in the pressure roller cover.

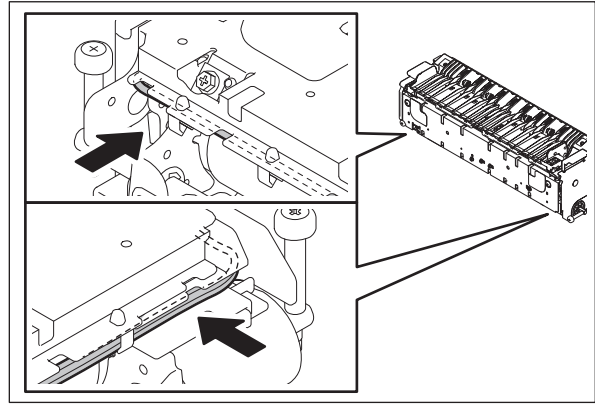


Fig. 4-371

4.10.6 Transport guide

- (1) Take off the rear side cover.
P. 4-136 "4.10.3 Rear side cover"
- (2) Release the harness out of the clamp, and then disconnect 1 relay connector.

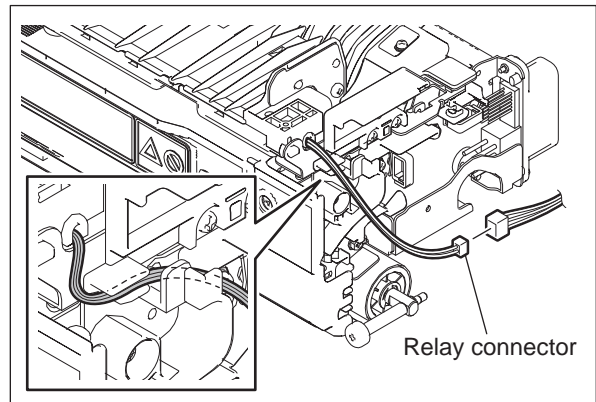


Fig. 4-372

- (3) Remove 2 screws and take off the transport guide.

Notes:

When installing the transport guide, hook the 3 latches of the transport guide onto the holes of the frame.

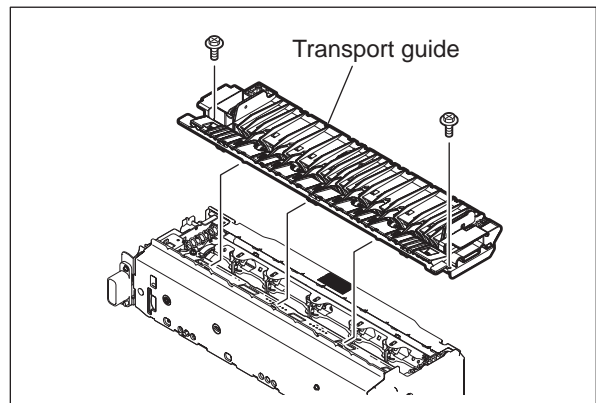




Fig. 4-373

4.10.7 Separation finger unit / Separation finger

- (1) Take off the front side cover and transport guide.
 P. 4-135 "4.10.2 Front side cover"
 P. 4-137 "4.10.6 Transport guide"
- (2) Remove 1 spring and then turn the separation finger unit upward.
- (3) Lift up the front section of the separation finger unit and then slide the unit to the front side. Then take off the separation finger unit.

Notes:

When installing the separation finger unit, slide the unit to the rear side of the equipment and fix it at that position.

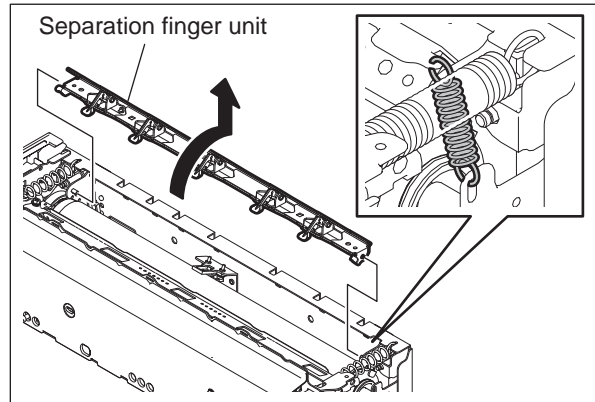


Fig. 4-374

- (4) Remove 2 screws, and then take off the separation finger cover.

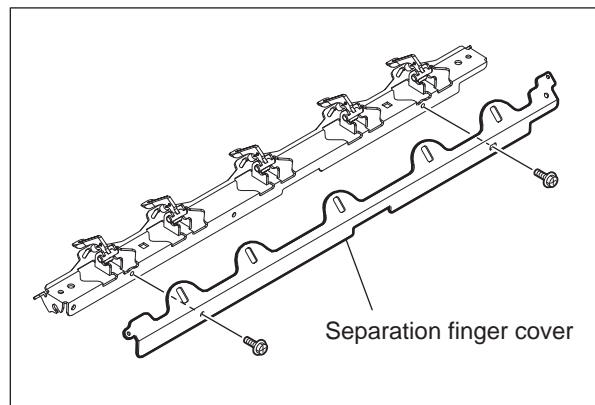


Fig. 4-375

- (5) Remove the spring, and then take off the separation fingers.

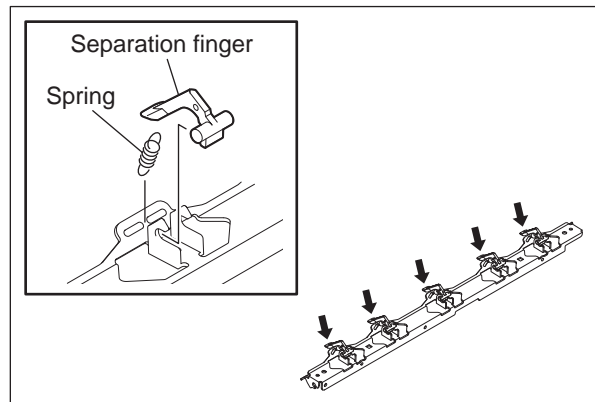




Fig. 4-376

4.10.8 Pressure roller / Pressure roller lamp (LAMP3)

- (1) Take off the front side cover.
 P. 4-135 "4.10.2 Front side cover"
- (2) Take off the separation finger unit.
 P. 4-138 "4.10.7 Separation finger unit / Separation finger"
- (3) Release the harness on the front side out of 1 clamp, and then disconnect 1 relay connector.

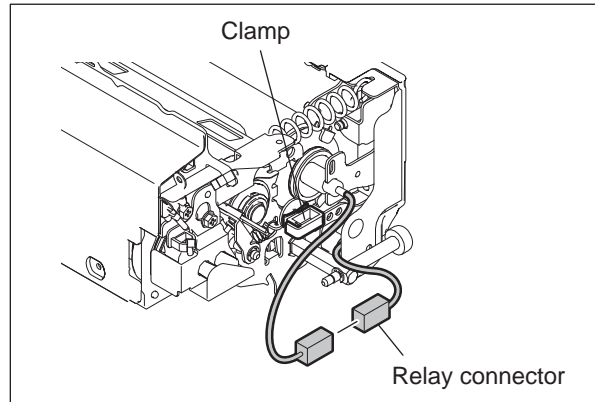


Fig. 4-377

- (4) Release 2 harnesses from the 2 clamps [1] indicated in the figure, and then disconnect the relay connector (black) [2].

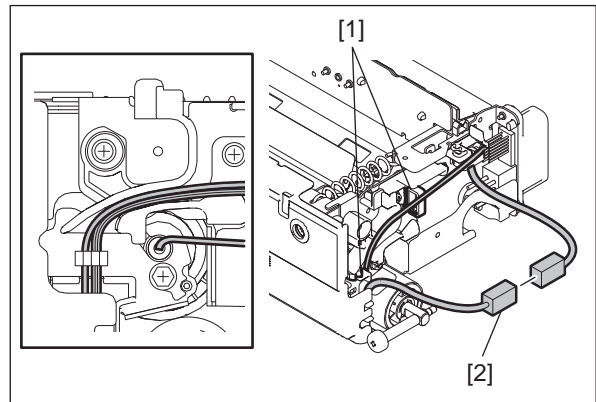


Fig. 4-378

- (5) Release the harness of the pressure roller lamp from the harness guide, and then disconnect the relay connector (white).

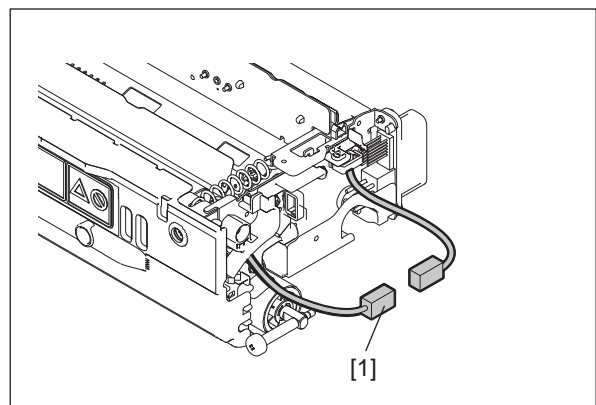


Fig. 4-379

- (6) Loosen 2 pressure screws [1], and remove 2 springs [2].

Notes:

When installing, tighten the 2 pressure screws [1] securely until they are no longer moved.

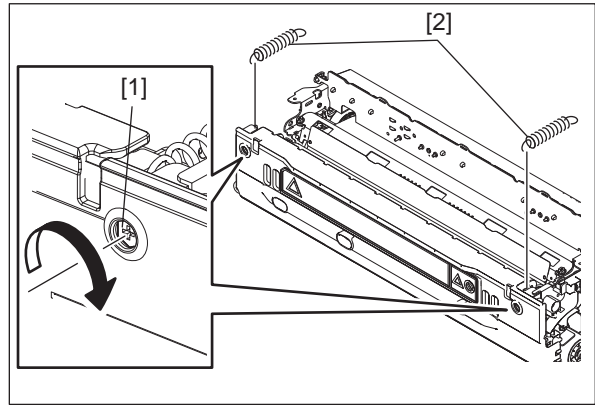


Fig. 4-380

- (7) Loosen 1 screw, and then slide the bracket to unfix the pressure roller lamp.

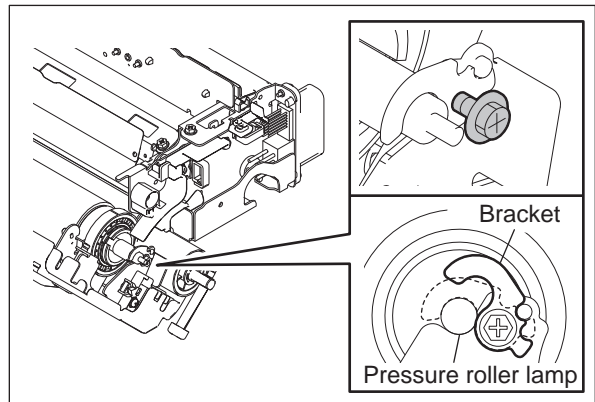


Fig. 4-381

- (8) Slide the pressure roller lamp [1] to the rear side to take it off from the front bracket [2]. Then take off the pressure roller [3] by lifting it up.

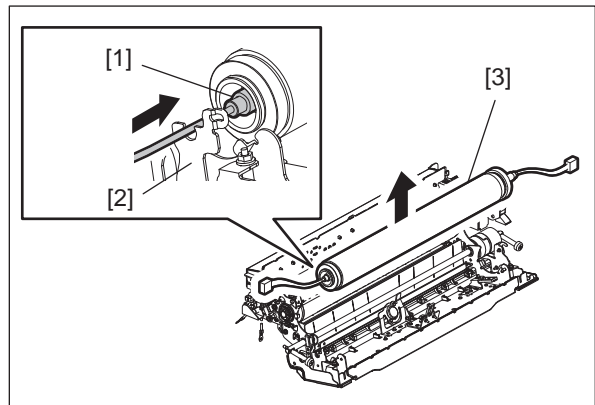


Fig. 4-382

- (9) Take off the pressure roller lamp [2] and the bearing [3] from the pressure roller [1].

Notes:

Follow the notes below to handle the pressure roller lamp.

- When holding the lamp, grasp the glass tube with gloved hands, but not the lead wire and the edge.
- When installing the lamp, be careful not to hit the protrusions on it or its edge against the pressure roller. Do not forcibly pull or move the lamp when its edge is fixed.
- Do not treat the lamp roughly, such as letting it fall on the floor.

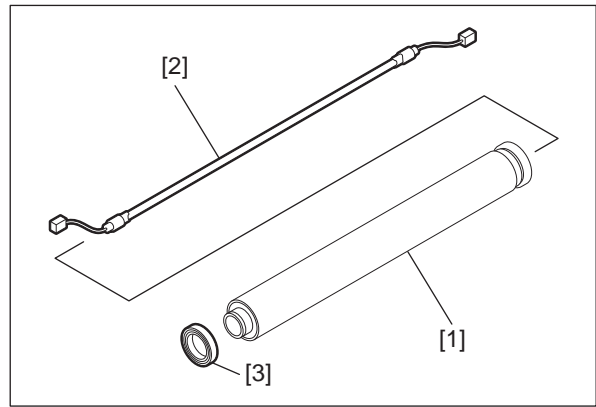


Fig. 4-383

- (10) Remove the C-ring [1], and then take off the gear [2] and the bearing [3] from the pressure roller [4].

Notes:

- When installing the pressure roller, check if the C-ring [1] is securely engaged into the groove of the pressure roller [4].
- Check that the bush [4] is attached to the groove of the pressure roller [4] and the bearing [3] is assembled to the end on top of it.

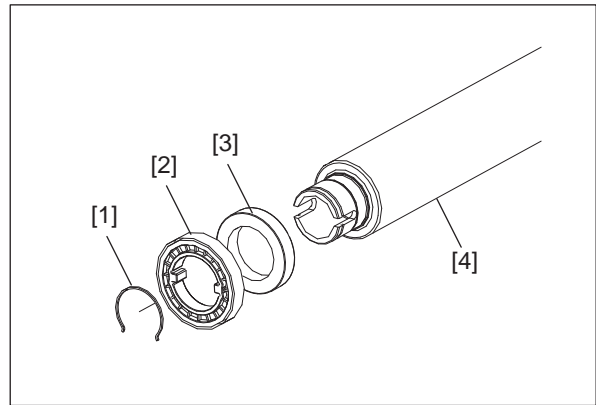


Fig. 4-384

Notes:

- When the pressure roller [2] is replaced, apply the white grease (size of a grain rice, Molykote HP-300) to 3 points of the bushing [1] on both ends of the pressure roller.

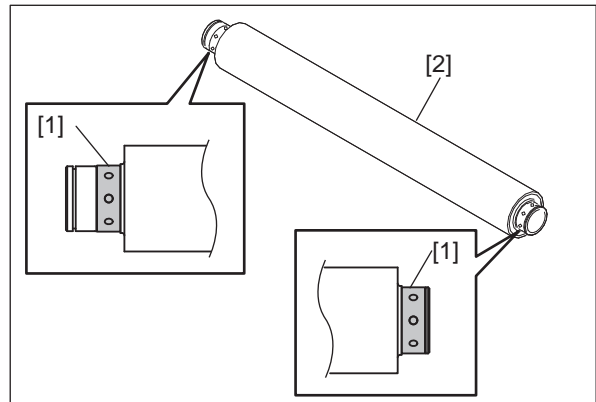


Fig. 4-385

Notes:

Do not apply grease to the gears in the figure.

[1] Gear (black)

[2] Gear (brown)

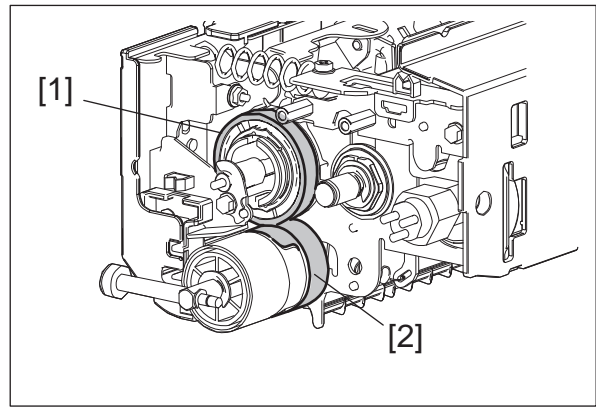


Fig. 4-386

4.10.9 Separation plate / Fuser belt unit / Heater lamp (center / side / sub)

- (1) Take off the front side cover, heat roller cover and transport guide.

📖 P. 4-135 "4.10.2 Front side cover"

📖 P. 4-136 "4.10.4 Heat roller cover"

📖 P. 4-137 "4.10.6 Transport guide"

- (2) Release the harness on the rear side out of 2 clamps and the harness guide, and then disconnect 1 relay connector.

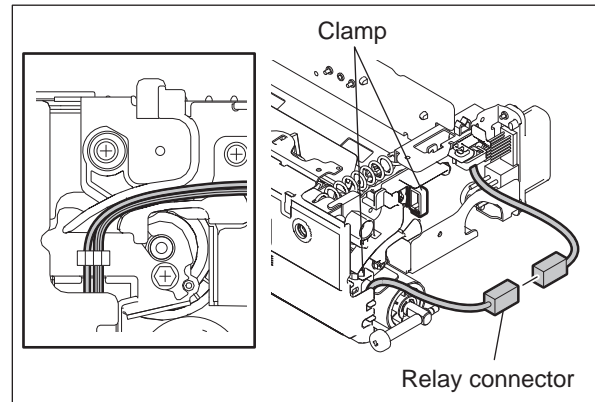


Fig. 4-387

- (3) Loosen 2 pressure screws [1], and then remove 2 springs [2].

Notes:

When installing, tighten the 2 pressure screws [1] securely until they are no longer moved.

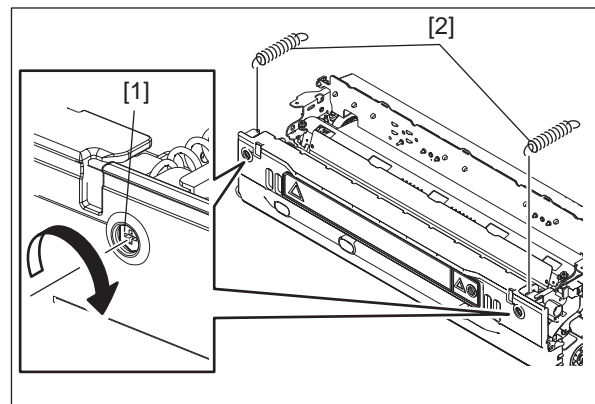


Fig. 4-388

- (4) Remove 2 screws and take off the 2 leaf springs [1].

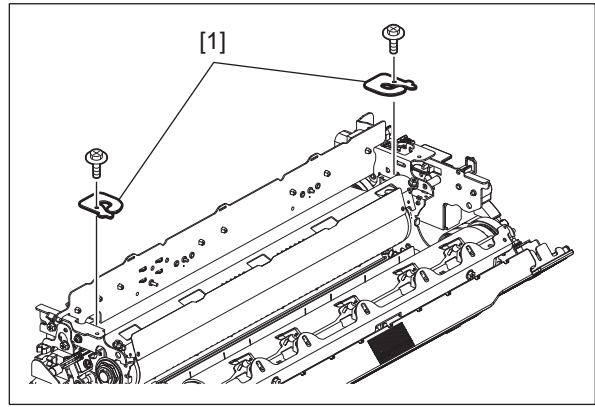


Fig. 4-389

- (5) Raise the separation plate, and then take it off upward.

Notes:

When installing, check that the gap between the pressure roller and separation plate is within the range of 0.6 mm to 0.8 mm when the fuser unit temperature is in the normal state. If the gap is out of the specified value, be sure to adjust it.

📖 P. 6-93 "6.13.1 Adjustment of the Separation Plate Gap"

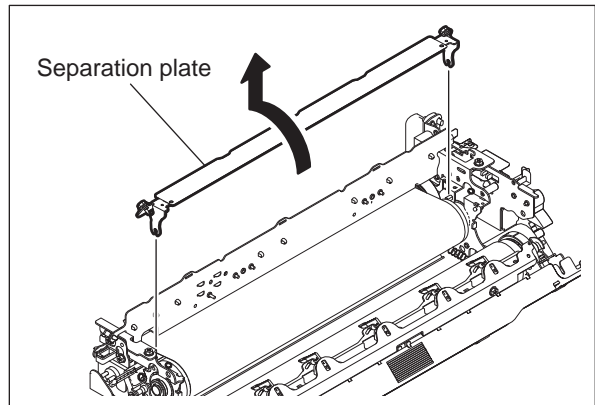


Fig. 4-390

- (6) Release the harness on the rear side out of 3 clamps, and then disconnect 4 relay connectors.

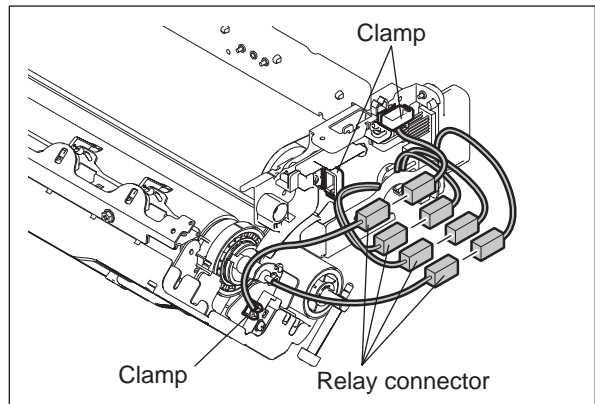


Fig. 4-391

Notes:

In e-STUDIO4540C, disconnect 5 relay connectors.

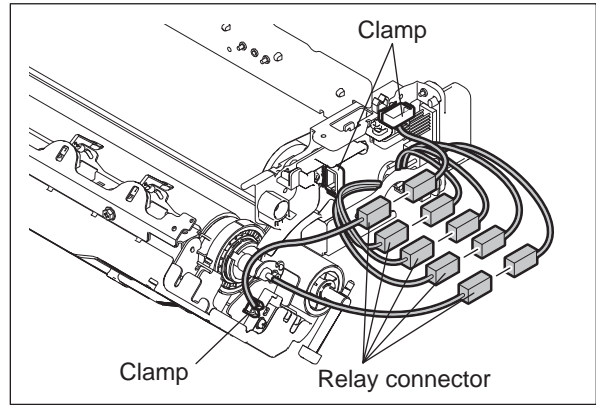


Fig. 4-392

- (7) Remove 2 screws, and then release the harness out of 4 clamps.

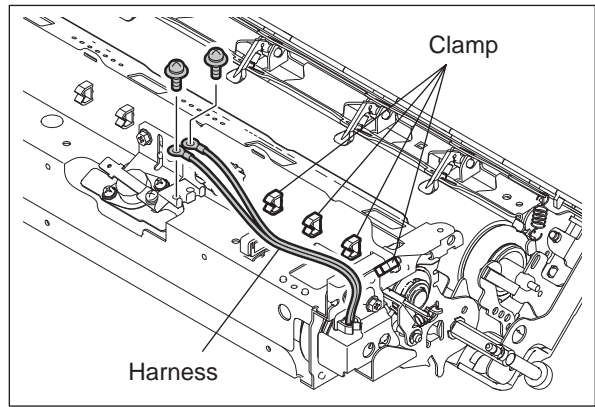


Fig. 4-393

Notes:

In e-STUDIO4540C, remove 3 screws.

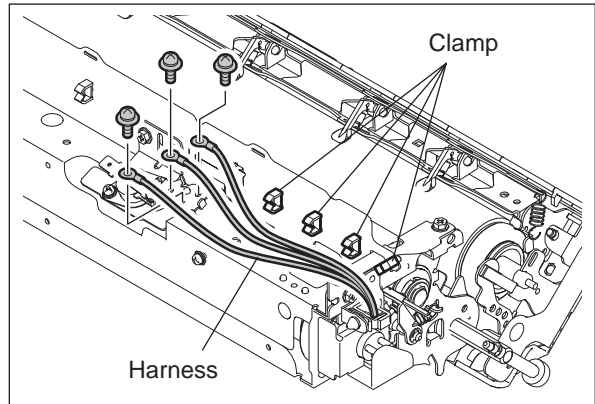


Fig. 4-394

- (8) Release 2 harnesses from the clamp [1], and then take off the lamp front bracket [2] by loosening 1 screw.

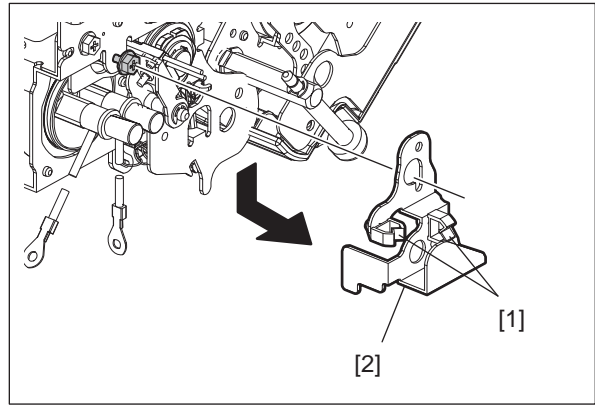


Fig. 4-395

Notes:

In e-STUDIO4540C, the shape of the bracket is different.

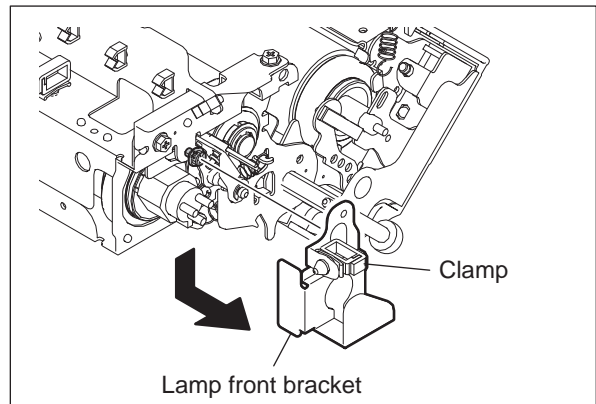


Fig. 4-396

- (9) Take off the center heater lamp and the side heater lamp.

Notes:

Follow the notes below to handle the heater roller lamp.

- When holding the lamp, grasp the glass tube with gloved hands, but not the lead wire and the edge.
- When installing the lamp, be careful not to hit the protrusions on it or its edge against the pressure roller. Do not forcibly pull or move the lamp when its edge is fixed.
- Do not treat the lamp roughly, such as letting it fall on the floor.

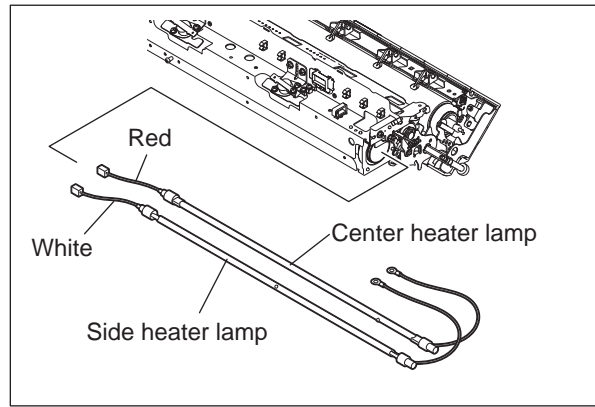


Fig. 4-397

Notes:

In e-STUDIO4540C, the center heater lamp, side heater lamp and sub heater lamp are unified.

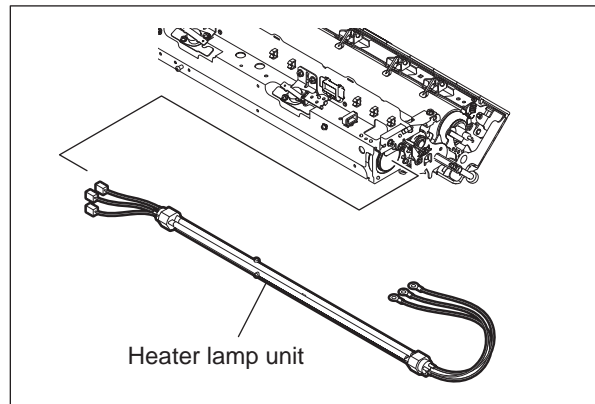


Fig. 4-398

- (10) Remove a spring and an E-ring, and then take off the fuser belt front thermistor bracket.

Notes:

Pay attention to the following points when installing the fuser belt front thermistor.

- The fuser belt and the temperature sensor in the fuser belt front thermistor are not damaged.
- The temperature sensor in the fuser belt front thermistor contacts with the heat roller.
- The fuser belt front thermistor bracket moves smoothly.

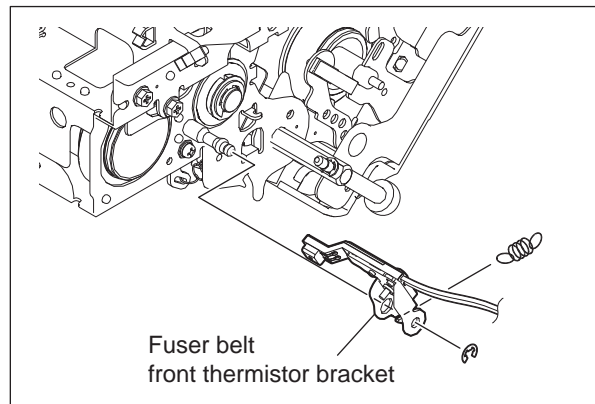


Fig. 4-399

(11) Disconnect 2 connectors.

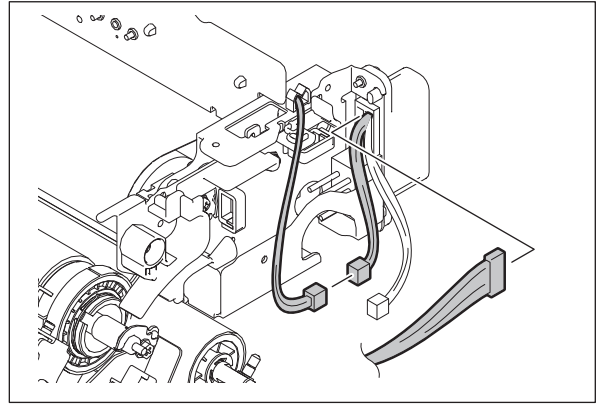


Fig. 4-400

(12) Release the harness out of 3 clamps [1].

(13) Remove the harness from the fuser belt rear thermostat.

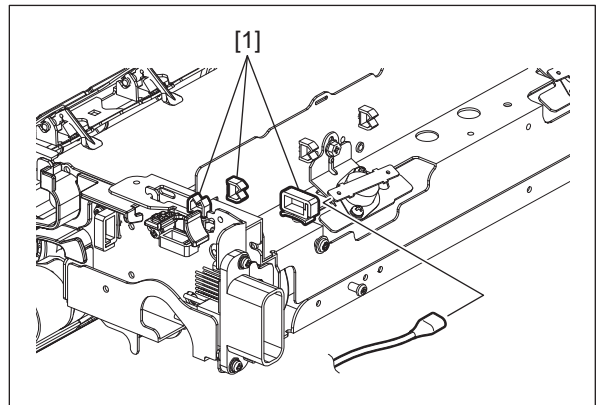


Fig. 4-401

(14) Remove 4 screws, and then release the harness out of 1 clamp [1] to take off the fuser belt sensor bracket [2] and the lamp rear bracket [3].

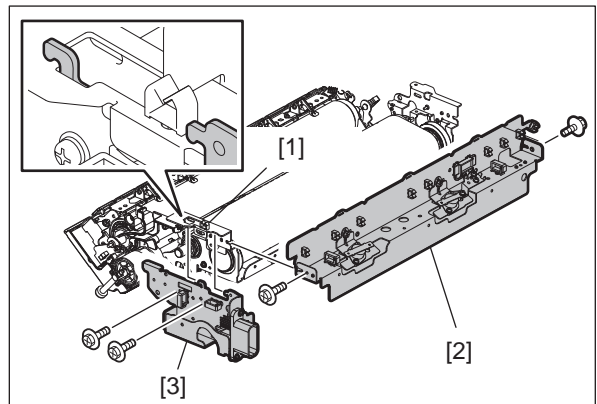


Fig. 4-402

- (15) Remove 2 E-rings from the fuser roller [1]. Then remove 2 washers [2], 2 bushings [3] and 2 bearings [4].

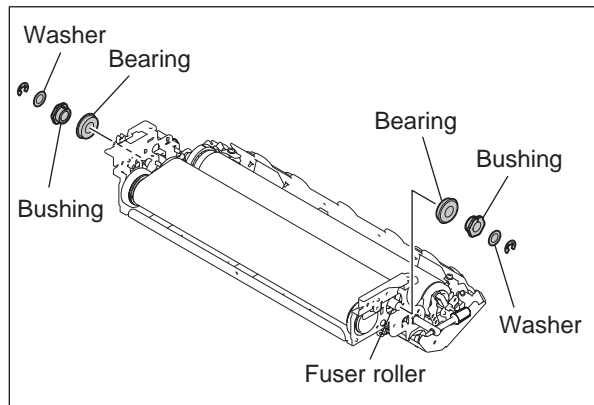


Fig. 4-403

- (16) Raise the fuser roller, and then take off the fuser belt unit by lifting it up.

Notes:

- Be careful not to scratch the fuser belt unit. Lay the fuser belt on the clean place to prevent the belt from the dust.
- When installing the fuser belt unit, place the longer shaft of the fuser roller on the rear side.

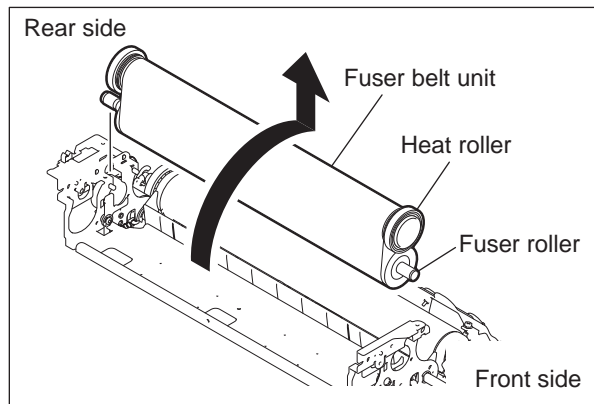



Fig. 4-404

4.10.10 Fuser belt / Heat roller / Fuser belt guide / Fuser roller

- (1) Take off the fuser belt unit.
 P. 4-142 "4.10.9 Separation plate / Fuser belt unit / Heater lamp (center / side / sub)"
- (2) Remove 2 C-rings [2] and 2 bearings [3] from each side of the heat roller [1].

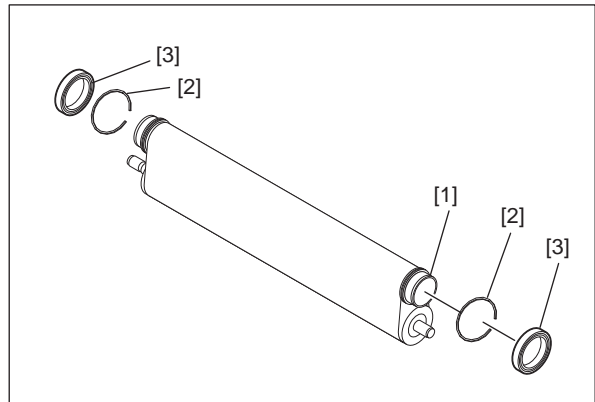


Fig. 4-405

- (3) Take off the heat roller and fuser roller from the fuser belt.

Notes:

Be careful not to scratch the fuser belt. Lay the fuser belt on the clean place to prevent the belt from the dust.

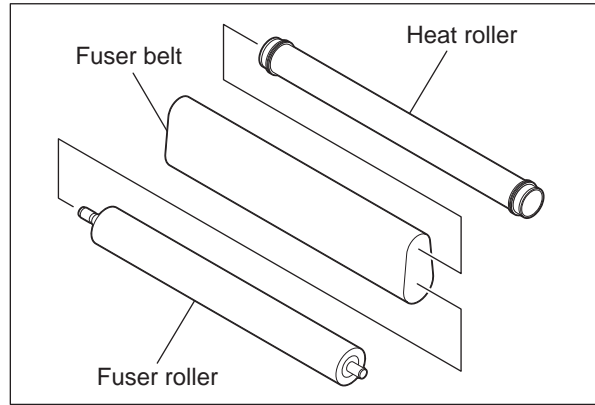


Fig. 4-406

- (4) Remove 2 C-rings and 2 fuser belt guides from the heat roller.

Notes:

When installing the fuser belt guide and C-ring, be sure of the following.

- Be sure that the fuser belt guide is placed with its flat face inside contacting the fuser belt (with the mold mark outside).
- Check that the fuser belt guide is securely fitted in the groove of the heat roller.
- Check that the C-ring is also securely fitted in the groove of the fuser belt guide and avoid the convex portion.

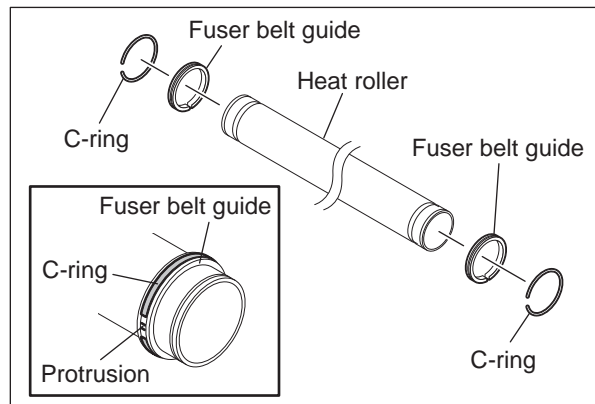


Fig. 4-407

4.10.11 Pressure roller thermostat (THMO3)

- (1) Take off the pressure roller cover and pressure roller.
 - 📖 P. 4-136 "4.10.5 Pressure roller cover"
 - 📖 P. 4-139 "4.10.8 Pressure roller / Pressure roller lamp (LAMP3)"
- (2) Remove 1 screw and release the harness out of 7 clamps. Then take off the pressure roller thermostat bracket.

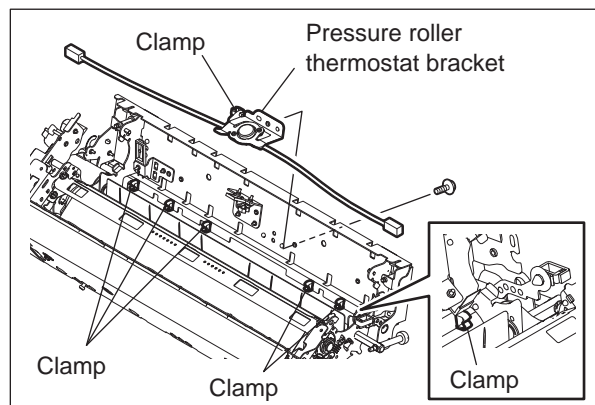


Fig. 4-408

- (3) Remove 2 screws, and then take off the pressure roller thermostat from its bracket by releasing the harness out of the 2 terminals.

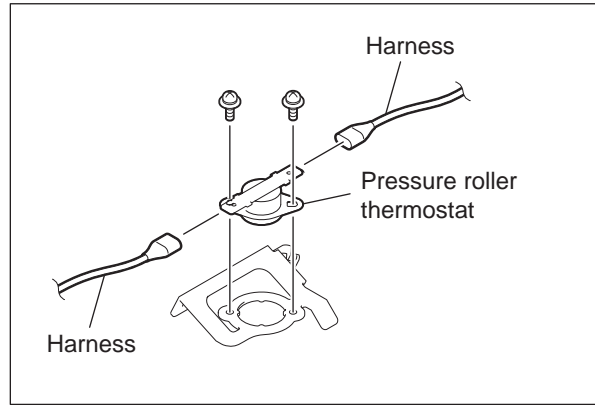


Fig. 4-409

Notes:

When installing the pressure roller thermostat, check the gap between the pressure roller thermostat and the pressure roller while they are being pushed each other.

- (1) Remove 2 screws, and take off the entry guide [1].

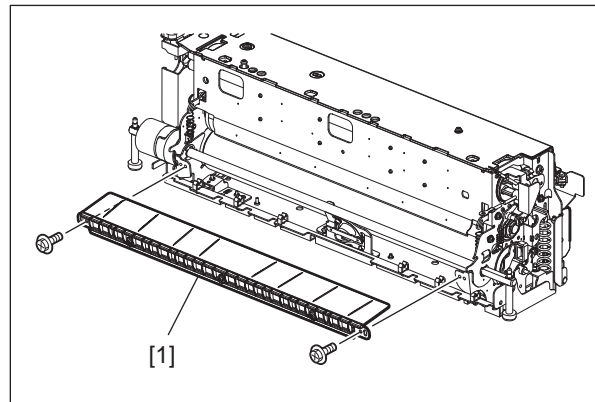
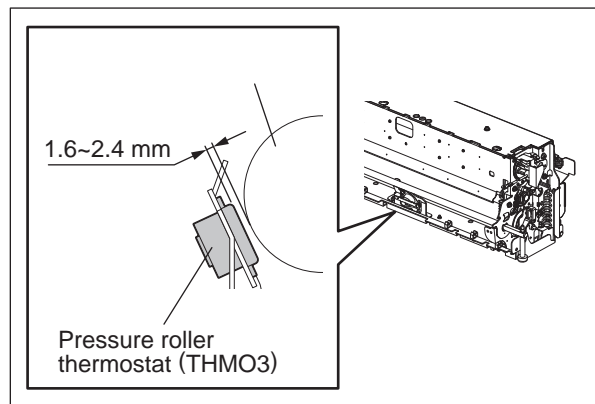


Fig. 4-410

- (2) Check that the gap between the pressure roller thermostat and the pressure roller is 1.6 - 2.4 mm through the opening.



Notes:

When installing, be careful not to insert the tab terminal between the insulating tube and the terminal.

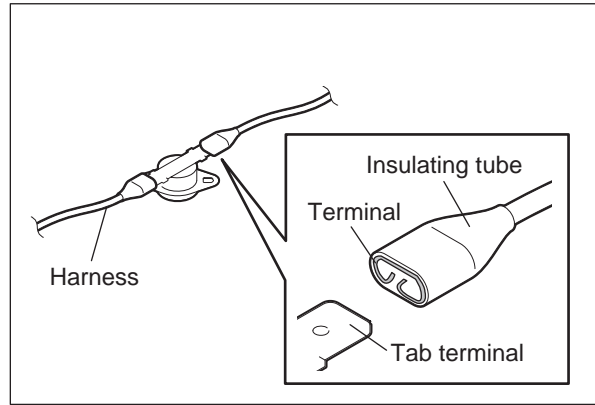


Fig. 4-411

4.10.12 Pressure roller center thermistor (THM4) / Pressure roller rear thermistor (THM5)

- (1) Take off the pressure roller and pressure roller.
📖 P. 4-136 "4.10.5 Pressure roller cover"
📖 P. 4-139 "4.10.8 Pressure roller / Pressure roller lamp (LAMP3)"
- (2) Release the harness out of the 4 clamps.
- (3) Remove 1 screw and then take off the pressure roller rear thermistor bracket.
- (4) Remove 2 screws and then take off the pressure roller center thermistor bracket.

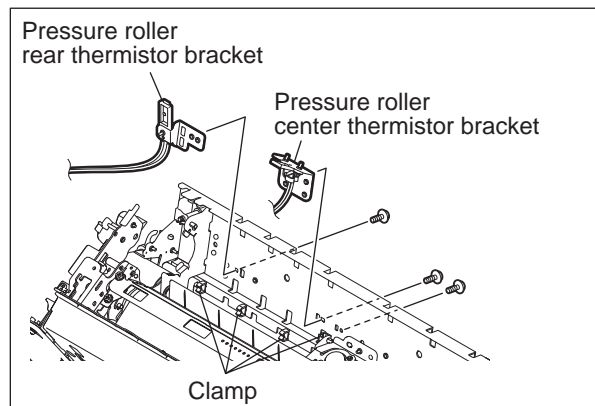


Fig. 4-412

- (5) Remove 1 screw and take off the pressure roller rear thermistor.
- (6) Remove 2 screws, and then release the harness out of 1 clamp to take off the pressure roller center thermistor.

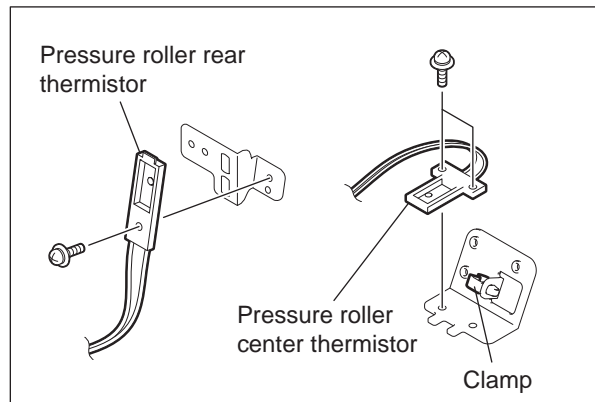



Fig. 4-413

Notes:

When installing the thermistors, be sure not to deform them. Check the gap between the thermistors and the pressure roller while they are being pushed each other in the following procedure:

1. Take off the separation finger unit.  P. 4-138 "4.10.7 Separation finger unit / Separation finger"
2. Check that the gap between the pressure roller rear thermistor and the pressure roller is 1.5 - 2.1 mm through the opening.

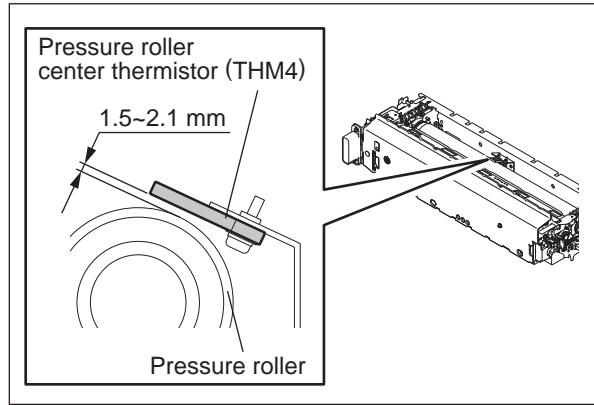


Fig. 4-414

3. Check that the gap between the pressure roller rear thermistor and the pressure roller is 1.5 - 2.5 mm through the opening.

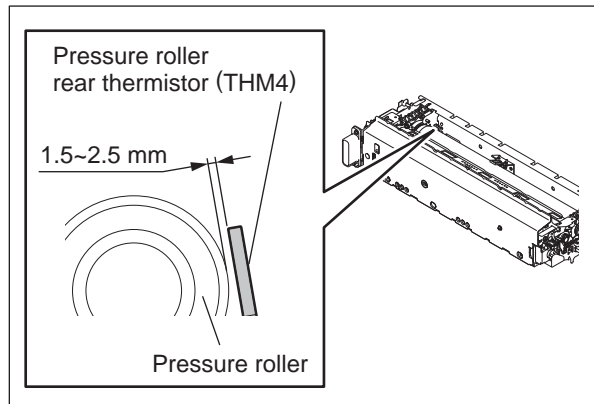



Fig. 4-415

4.10.13 Fuser belt center thermostat (THMO1)

- (1) Take off the heat roller cover.
 P. 4-136 "4.10.4 Heat roller cover"
- (2) Release the harness [2] out of 1 terminals of the fuser belt center thermostat [1].

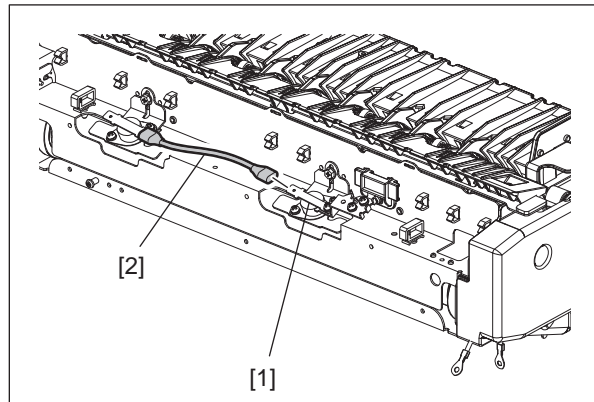


Fig. 4-416

- (3) Remove 3 screws and take off the fuser belt center thermostat [1].

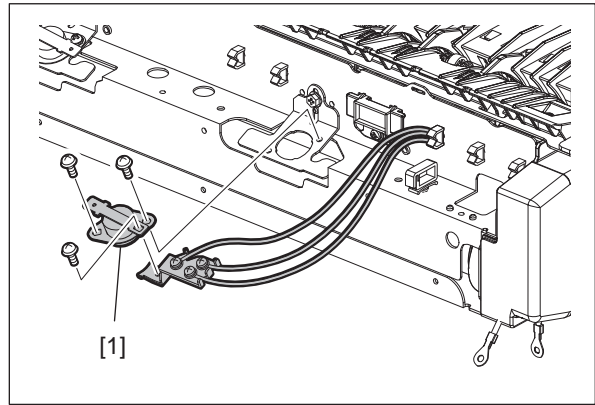


Fig. 4-417

Notes:

- When installing them, fix the thermostat, and then fix the terminal of the harness.
- Check that the gap between the fuser belt center thermostat and the fuser belt is 1.6 - 2.2 mm while they are being pushed each other, through the opening.

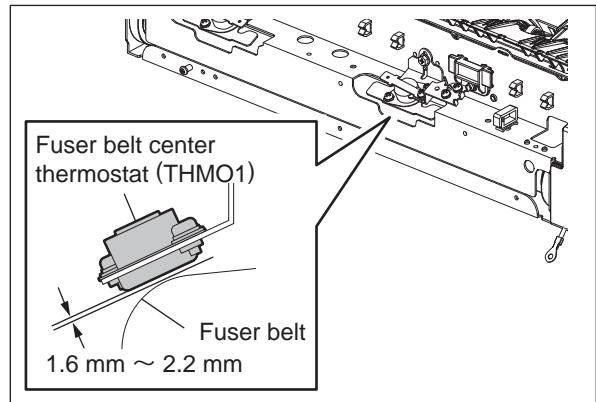


Fig. 4-418

Notes:

When installing, be careful not to insert the tab terminal between the insulating tube and the terminal.

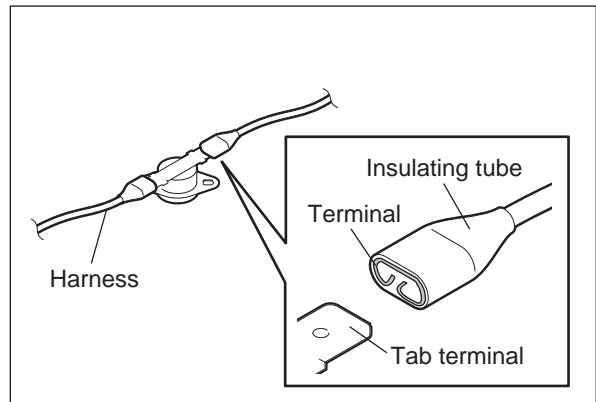



Fig. 4-419

4.10.14 Fuser belt rear thermostat (THMO2)

- (1) Take off the heat roller cover.
 P. 4-136 "4.10.4 Heat roller cover"
- (2) Release the harness [1] out of 2 clamps, and then remove the harness from 2 terminals of the fuser belt rear thermostat [2].

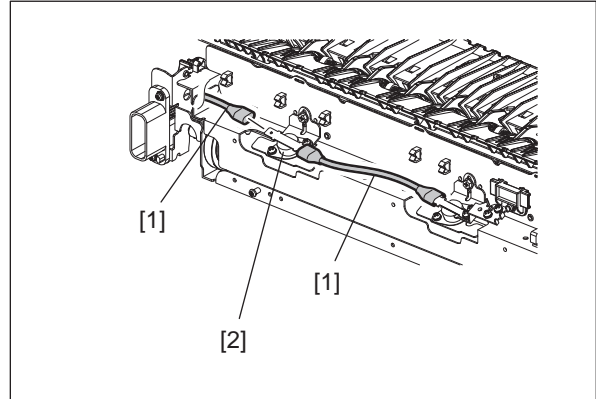


Fig. 4-420

- (3) Remove 2 screws and take off the fuser belt rear thermostat [1].

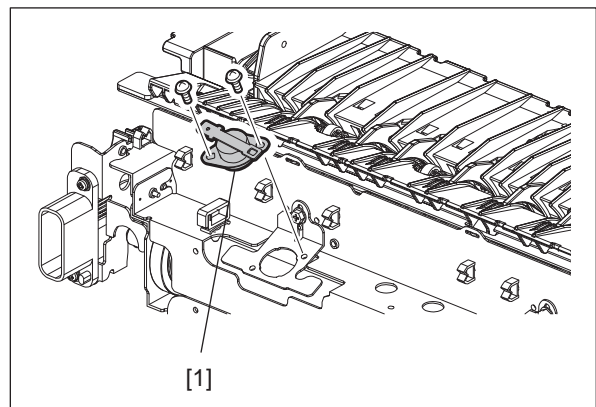


Fig. 4-421

Notes:

- When installing them, fix the thermostat, and then fix the terminal of the harness.
- Check that the gap between the fuser belt rear thermostat and the fuser belt is 1.6 mm - 2.2 mm while they are being pushed each other, through the opening.

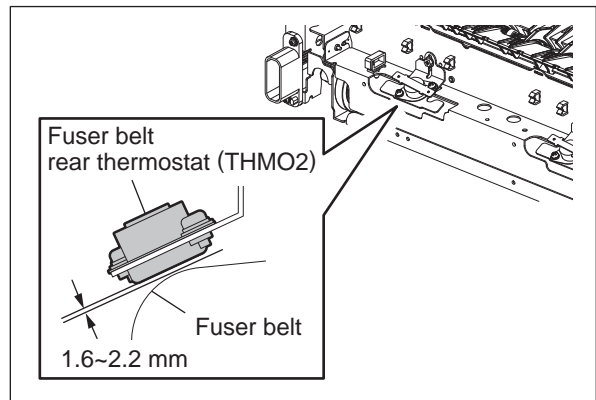


Fig. 4-422

Notes:

When installing, be careful not to insert the tab terminal between the insulating tube and the terminal.

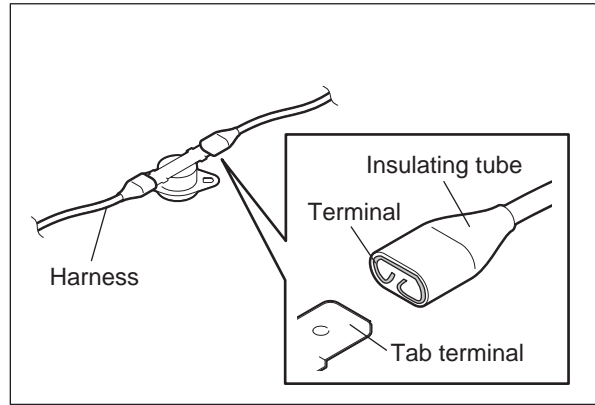


Fig. 4-423

4.10.15 Fuser belt front thermistor (THM3)

- (1) Take off the front side cover, rear side cover and heat roller cover.
 - 📖 P. 4-135 "4.10.2 Front side cover"
 - 📖 P. 4-136 "4.10.3 Rear side cover"
 - 📖 P. 4-136 "4.10.4 Heat roller cover"
- (2) Release the harness out of clamps, and then disconnect the relay connector.

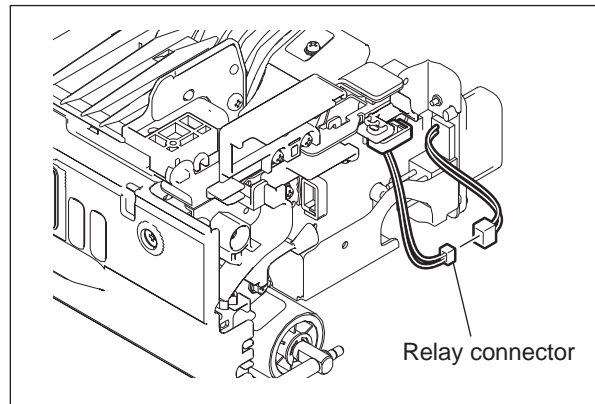


Fig. 4-424

- (3) Remove 1 screw and take off the harness cover [1].
- (4) Release the harness out of 10 clamps [2].

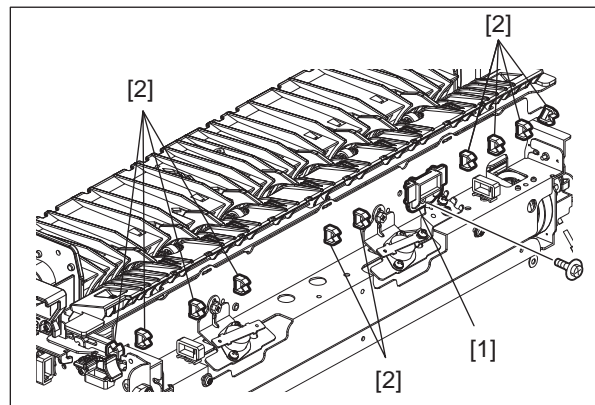


Fig. 4-425

- (5) Remove a spring and an E-ring, and then take off the fuser belt front thermistor bracket [1].

Notes:

Pay attention to the following points when installing the fuser belt front thermistor bracket.

- The fuser belt and the temperature sensor in the fuser belt front thermistor are not damaged.
 - The temperature sensor in the fuser belt front thermistor contacts with the heat roller.
 - The fuser belt front thermistor bracket [1] moves smoothly.
- (6) Remove 1 screw and take off the fuser belt front thermistor.

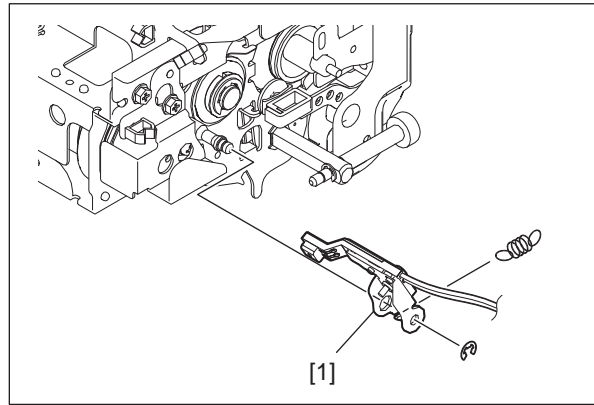


Fig. 4-426

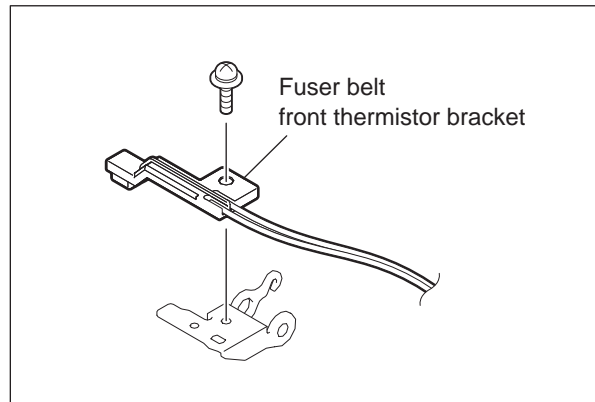


Fig. 4-427

4.10.16 Exit sensor (S26)

- (1) Take off the fuser unit.
P. 4-131 "4.10.1 Fuser unit"
- (2) Open the jam access cover.

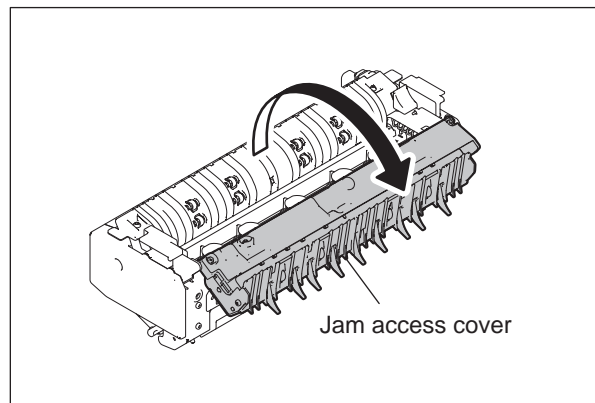


Fig. 4-428

- (3) Remove 3 screws and take off the cover (A).

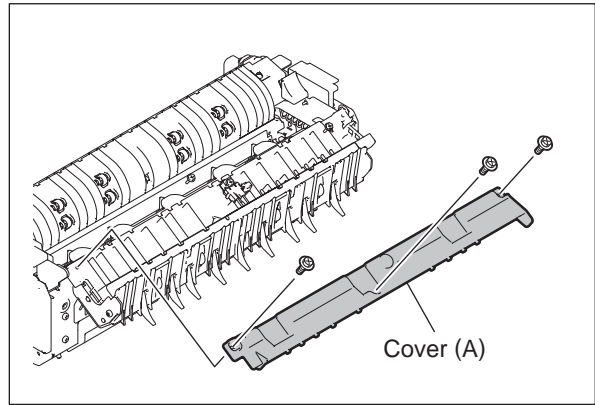


Fig. 4-429

- (4) Remove 1 screw and bracket [1].
- (5) Disconnect 1 connector [2] and take off the exit sensor [3].

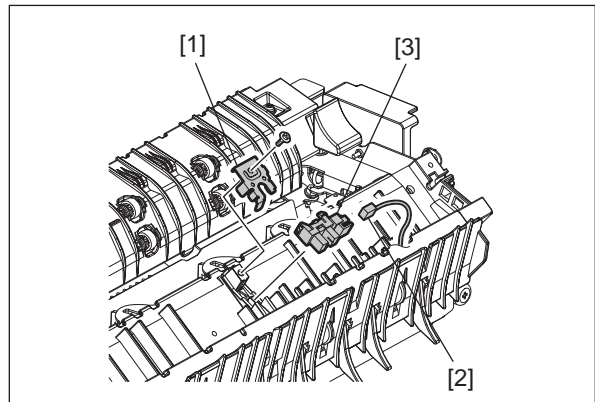


Fig. 4-430

4.10.17 Exit unit

- (1) Take off the fuser unit.
P. 4-131 "4.10.1 Fuser unit"
- (2) Remove 2 screws and take off the exit duct.

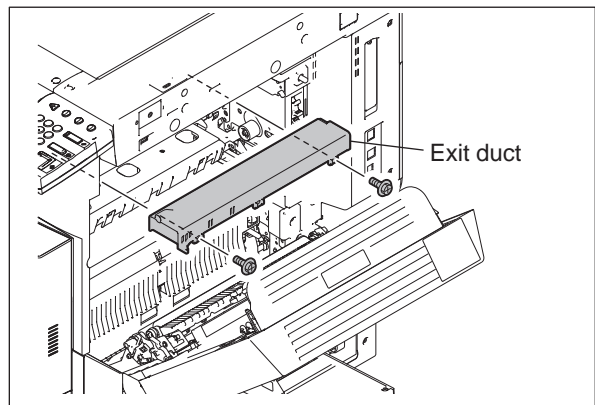


Fig. 4-431

- (3) Loosen 2 screws and take off the exit unit.

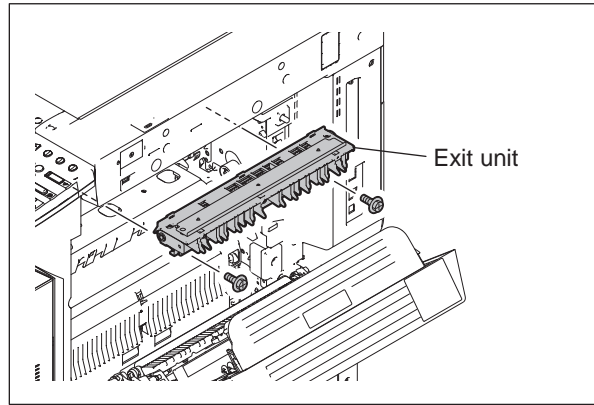


Fig. 4-432

4.10.18 Upper exit roller / Lower exit roller

- (1) Take off the exit unit.
P. 4-158 "4.10.17 Exit unit"
- (2) Remove 2 screws.
- (3) Remove the exit flame from the exit duct base.

Notes:

When installing the exit flame, hook the flame of the exit flame onto the 2 hooks of the exit duct base.

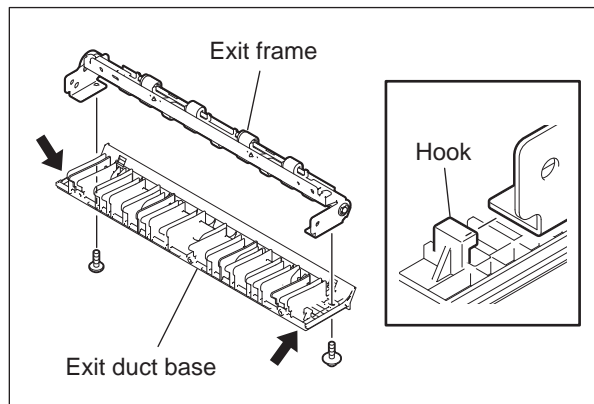


Fig. 4-433

- (4) Remove 2 screws and take off the 2 leaf springs.

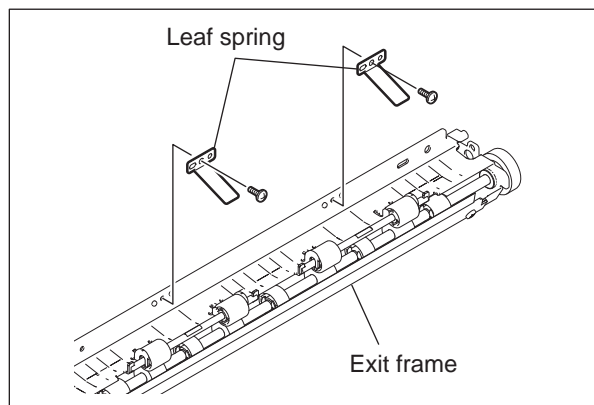


Fig. 4-434

- (5) Remove 1 E-ring and take off the gear.
- (6) Remove 2 E-rings and take off the 2 bushing and upper exit roller.

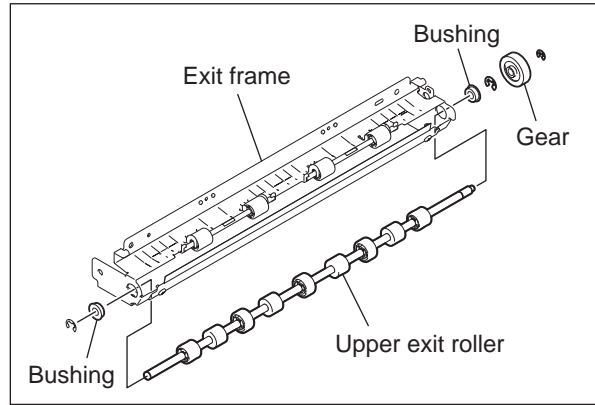


Fig. 4-435

- (7) Remove the lower exit roller from the exit frame. Slide the 4 lower exit rollers to separate it from the 2 shafts.

Notes:

When installing, be sure that the groove of the shaft comes to the top.

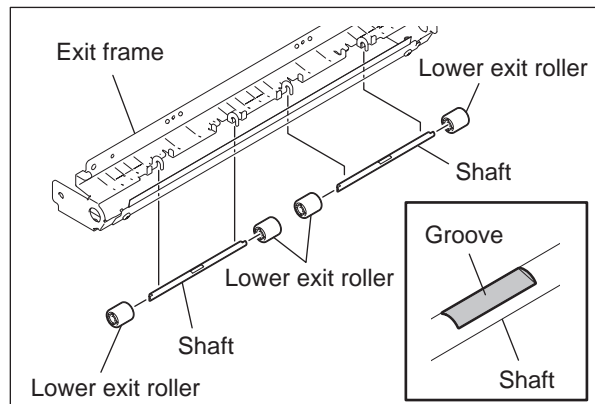


Fig. 4-436

4.10.19 Fuser belt center thermopile(THMP1) / Fuser belt rear thermopile(THMP2)

Notes:

Be sure not to touch the lens of the thermopile. If it is dirty, use a cloth with a small amount of alcohol to clean it.

- (1) Take off the fuser unit.
 P. 4-131 "4.10.1 Fuser unit"
- (2) Loosen 2 screws and take off the Fuser belt thermopile cover.

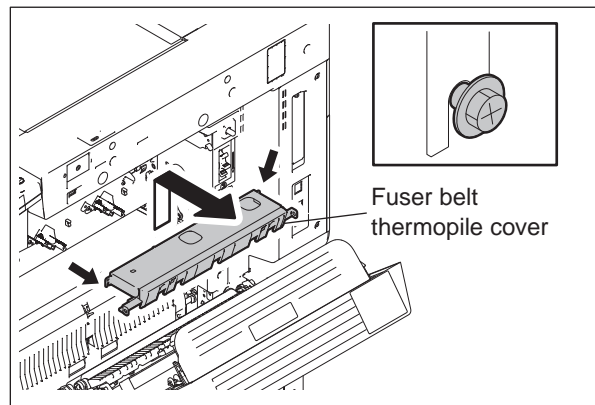


Fig. 4-437

- (3) Loosen 1 screw of each thermopile. Then disconnect the connector to take off the thermopile bracket.

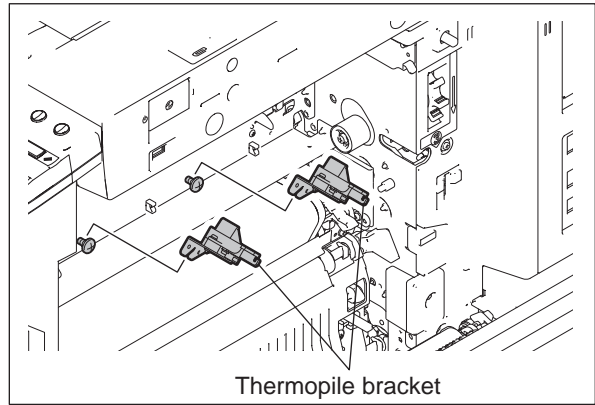


Fig. 4-438

- (4) Remove 1 screw of each thermopile. Then take off the thermopiles from their brackets and covers.

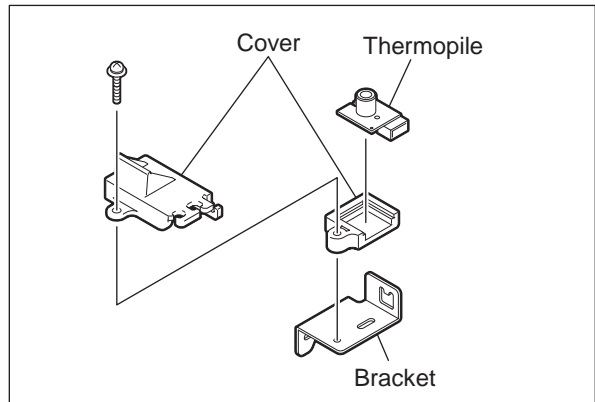


Fig. 4-439

4.10.20 Fuser motor (M17)

- (1) Take off the fuser unit.
 P. 4-131 "4.10.1 Fuser unit"
- (2) Open the board case.
 P. 9-10 "9.1.11 Board case"
- (3) Disconnect the connector.
- (4) Remove 2 screws and take off the fuser motor.

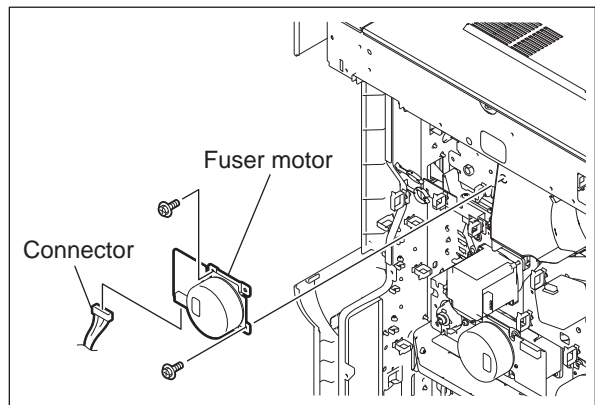


Fig. 4-440

4.10.21 Exit section drive unit

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Release the harness out of the clamp, and then disconnect the 2 connectors.
- (3) Remove 2 screws and take off the exit section drive unit.

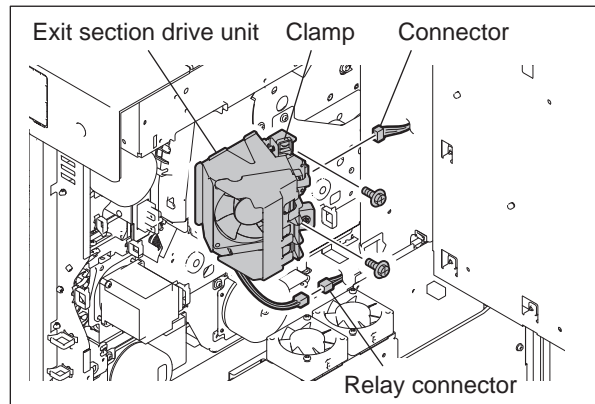


Fig. 4-441

4.10.22 Fuser drive unit

- (1) Take off the fuser unit, exit section drive unit, fuser motor and internal cooling fan.
📖 P. 4-131 "4.10.1 Fuser unit"
📖 P. 4-162 "4.10.21 Exit section drive unit"
📖 P. 4-161 "4.10.20 Fuser motor (M17)"
📖 P. 4-105 "4.7.24 Internal cooling fan (M23)"
- (2) Remove 3 screws and take off the harness from 3 harness clamps. Slide the fuser drive unit in the upper right direction to take it off.

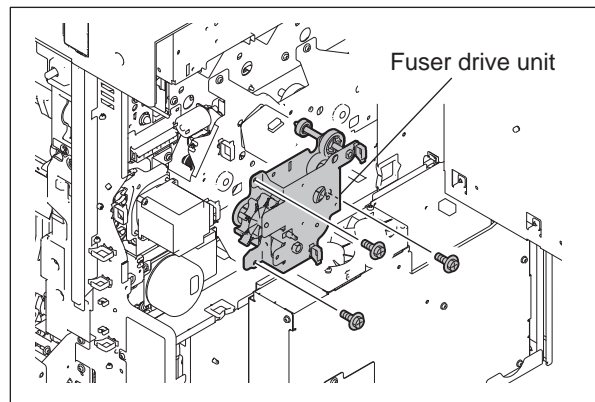


Fig. 4-442

4.10.23 Fuser/exit section cooling fan (M25) / Exit motor (M18)

- (1) Take off the exit section drive unit.
📖 P. 4-162 "4.10.21 Exit section drive unit"
- (2) Remove 1 screw and take off the cover.
- (3) Remove 2 screws and take off the fuser/exit section cooling fan.

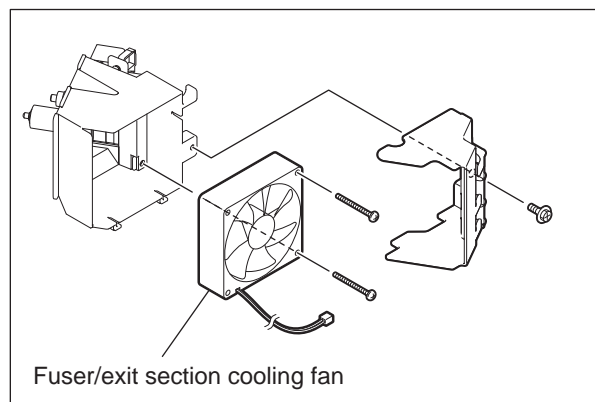


Fig. 4-443

- (4) Remove 2 E-rings 1 pulley and 1 belt and take off the exit motor.

Notes:

- Replace the exit motor with the bracket installed.
- Never attempt to loosen 2 screws fixing exit motor.

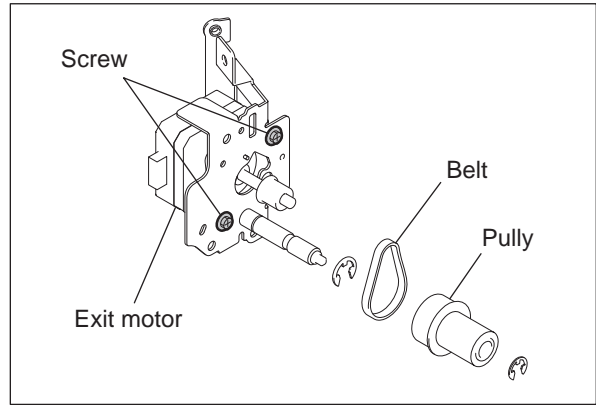


Fig. 4-444

4.11 Automatic Duplexing Unit (ADU)

4.11.1 ADU maintenance position

Notes:

The removal of the transfer belt unit or the 2nd transfer unit can be easily performed at the ADU maintenance position without taking off the automatic duplexing unit (ADU). When the ADU is at its maintenance position, do not close the ADU because it may be damaged.

- (1) Open the automatic duplexing unit.
- (2) Remove 1 screw of the front hinge, and then take off the automatic duplexing unit by lifting it up slightly and sliding it to the rear side.

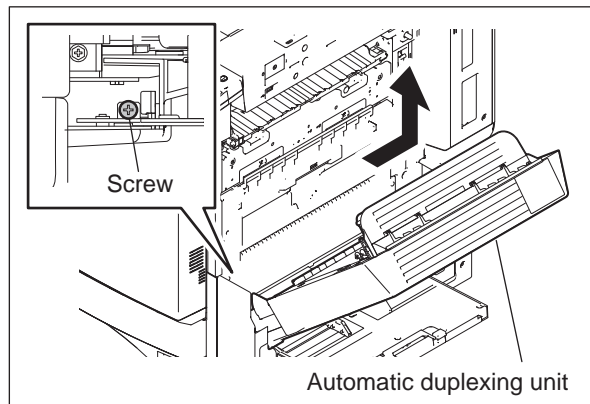


Fig. 4-445

- (3) When installing, match the front and rear hinge holes of the equipment and the right and left hinge bosses of the ADU.

Notes:

Be sure to check the following points after moving the ADU to its maintenance position.

- Check that the connector is not disconnected.
- Check that duplex printing on A4 or LT sized paper is performed properly.

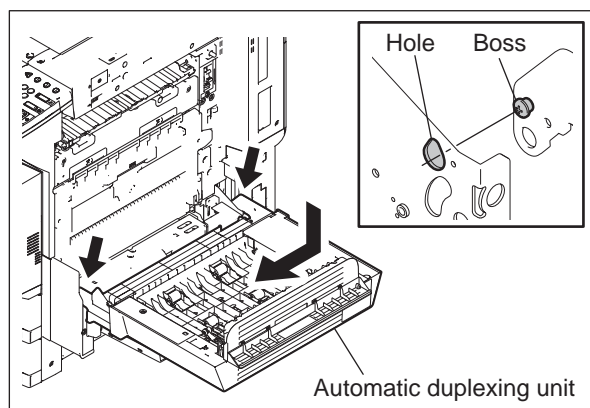


Fig. 4-446

4.11.2 Automatic Duplexing Unit (ADU)

- (1) Take off the right rear hinge cover.
P. 4-5 "4.1.12 Right rear hinge cover"
- (2) Disconnect 1 connector and remove 1 screw fixing the ground wires.

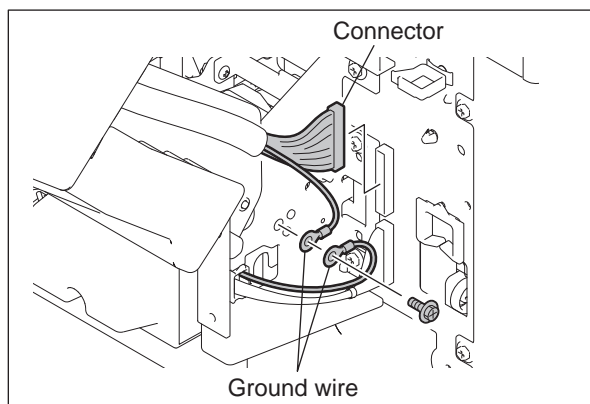


Fig. 4-447

- (3) Remove 1 screw of the front hinge, and then take off the automatic duplexing unit by lifting it up slightly and sliding it to the rear side.

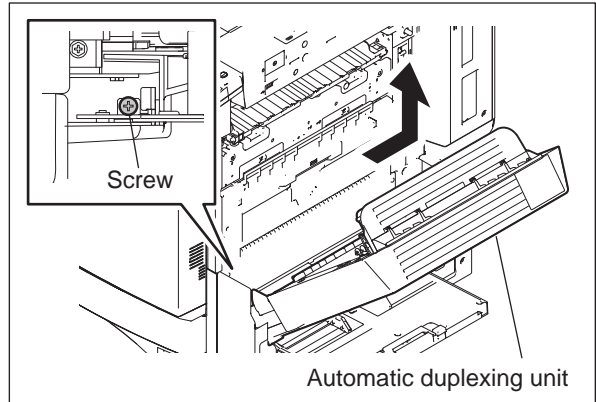


Fig. 4-448

Notes:

When installing the ADU, match the front and rear hinge bosses of the equipment and the hinge holes of the ADU.

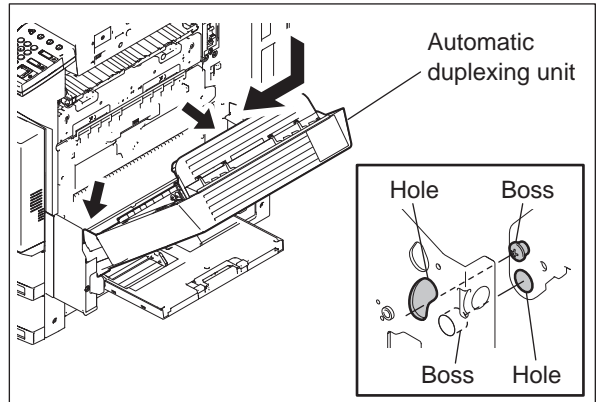


Fig. 4-449

4.11.3 ADU inside rear cover

- (1) Open the automatic duplexing unit.
- (2) Remove 2 screws and take off the ADU inside rear cover.

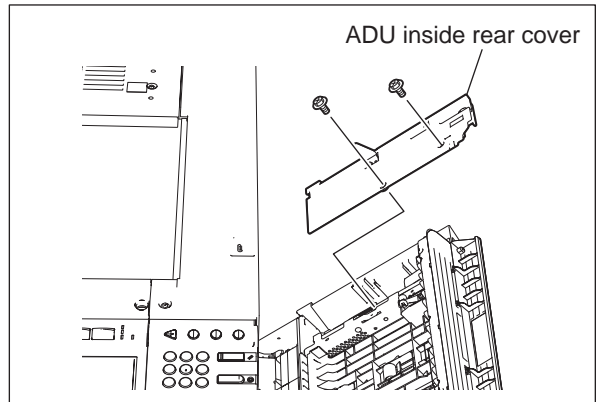



Fig. 4-450

4.11.4 ADU opening/closing switch (SW7)

- (1) Take off the ADU inside rear cover.
 P. 4-165 "4.11.3 ADU inside rear cover"
- (2) Disconnect the connector and release the latch to take off the ADU opening/closing switch.

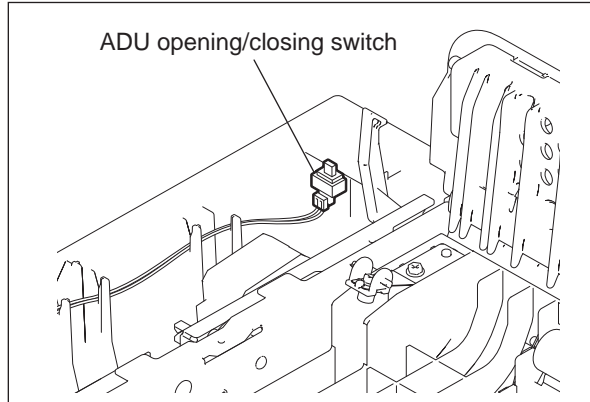




Fig. 4-451

4.11.5 ADU board (ADU)

- (1) Take off the automatic duplexing unit and ADU inside rear cover.
 P. 4-164 "4.11.2 Automatic Duplexing Unit (ADU)"
 P. 4-165 "4.11.3 ADU inside rear cover"
- (2) Disconnect 5 connectors from the ADU board. Release 3 lock supports [1] and take off the ADU board [4.11.5].

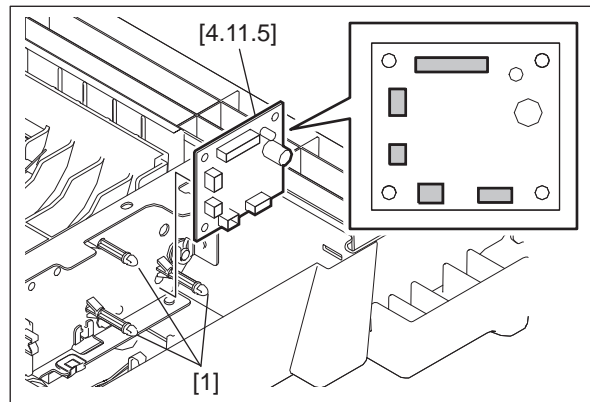



Fig. 4-452

4.11.6 ADU cover

- (1) Take off the ADU opening/closing switch.
 P. 4-166 "4.11.4 ADU opening/closing switch (SW7)"
- (2) Remove 4 screws and take off the ADU cover.

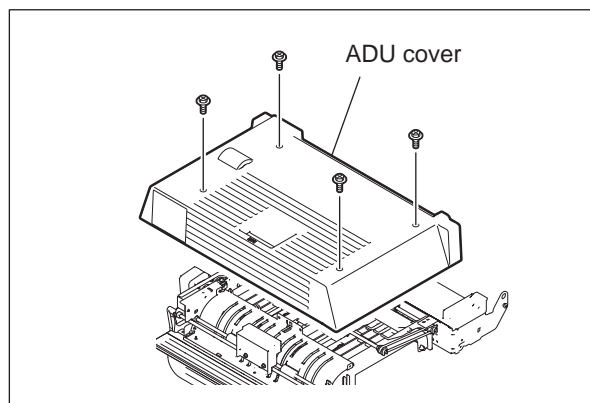


Fig. 4-453

4.11.7 Paper guide

- (1) Open the automatic duplexing unit.
- (2) Open the paper guide.
- (3) Release the fulcrum on the front side and take off the paper guide.

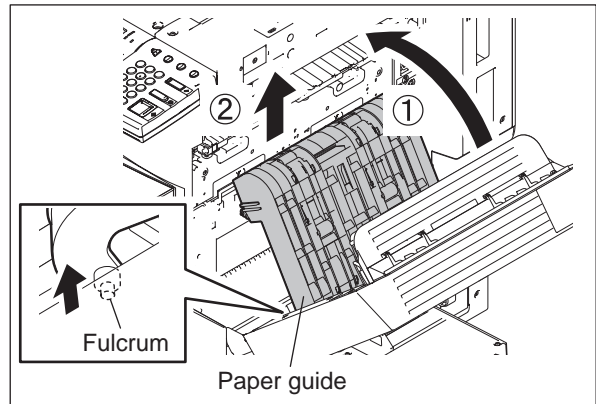


Fig. 4-454

4.11.8 ADU clutch (CLT7)

- (1) Take off the automatic duplexing unit, ADU inside rear cover and ADU cover.
P. 4-164 "4.11.2 Automatic Duplexing Unit (ADU)"
P. 4-165 "4.11.3 ADU inside rear cover"
P. 4-166 "4.11.6 ADU cover"
- (2) Remove 1 E-ring [1] and disconnect 1 connector. Then take off the ADU clutch [4.11.8].

Notes:

- When installing the ADU clutch, attach a rotation protection [2].
- When installing the E-ring, make sure that the latches of both ends of E-ring are on the flat part of the shaft [3].

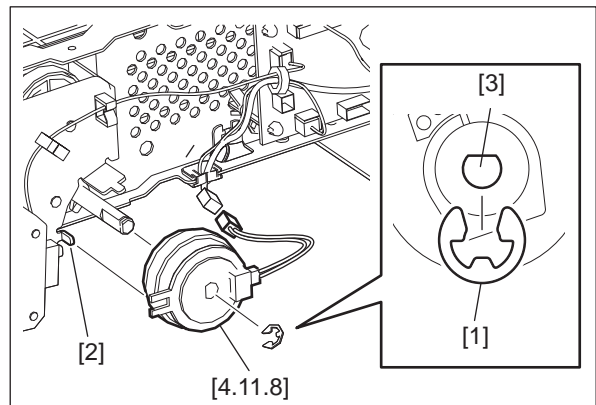


Fig. 4-455

4.11.9 ADU drive unit / ADU motor (M22)

- (1) Take off the ADU clutch.
P. 4-167 "4.11.8 ADU clutch (CLT7)"
- (2) Remove the spring.

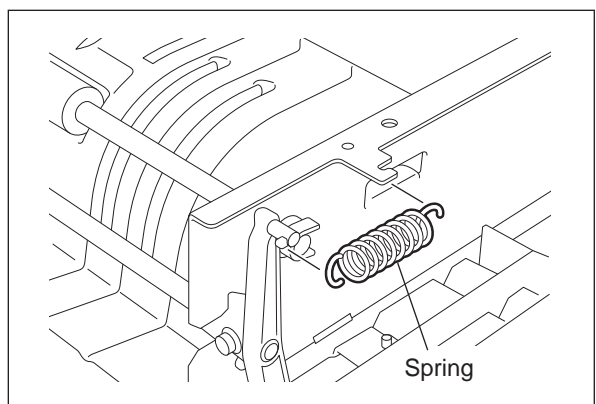


Fig. 4-456

- (3) Remove 1 screw and take off the ADU rear latch.

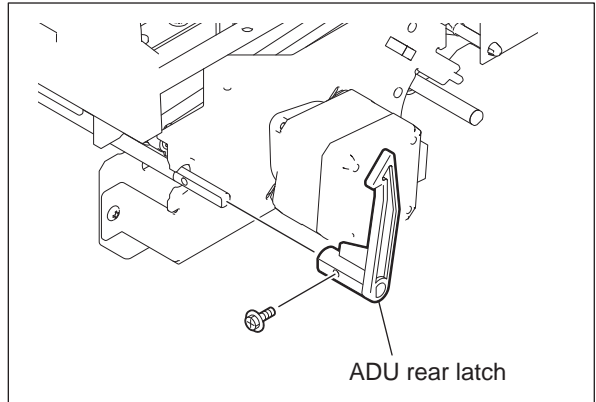


Fig. 4-457

- (4) Disconnect 1 connector. Release the harness from 2 harness clamps. Remove 2 screws and take off the ADU drive unit.

Notes:

Be sure not to lose the belt.

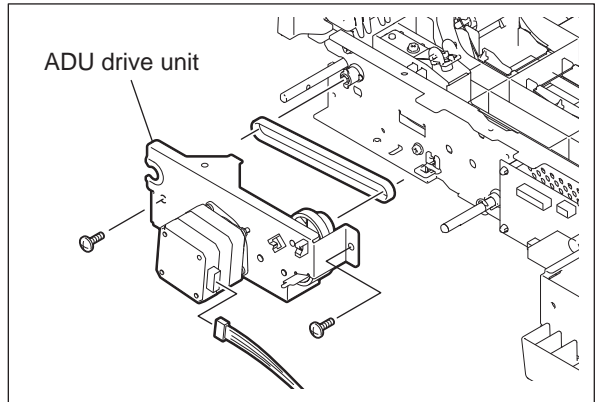


Fig. 4-458

- (5) Remove 2 screws and take off the ADU motor.

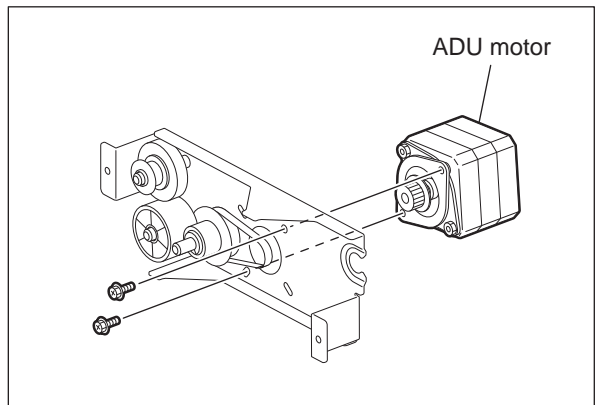


Fig. 4-459

- (6) Take off the 1 E-ring. Then take off the 3 gears and timing belt from the ADU drive unit.

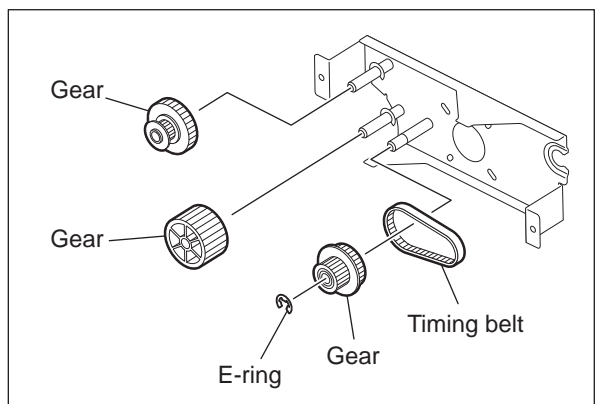


Fig. 4-460

4.11.10 Upper transport roller

- (1) Take off the ADU drive unit.
P. 4-167 "4.11.9 ADU drive unit / ADU motor (M22)"
- (2) Remove 1 E-ring on the rear side. Then take off 1 pulley.

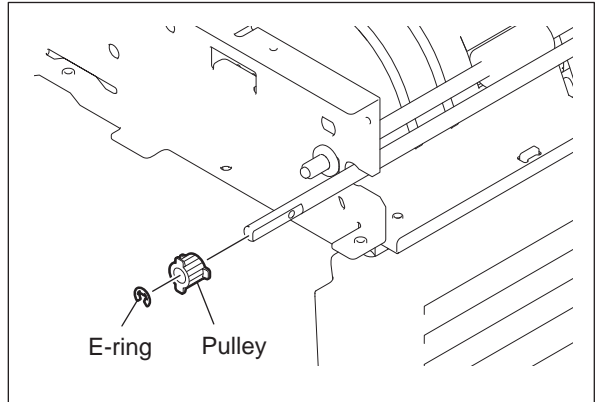


Fig. 4-461

- (3) Remove 1 clip on the front side.
- (4) Remove 2 bushings and take off the upper transport roller.

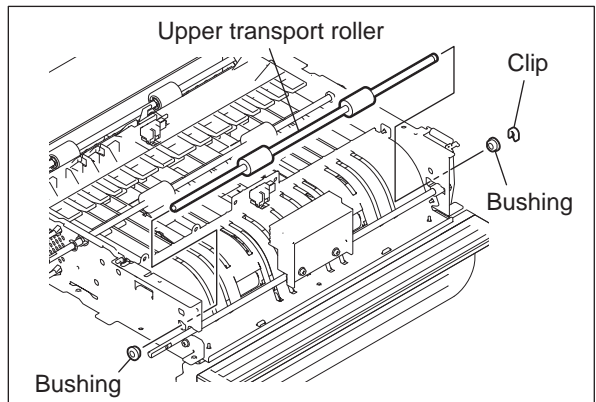


Fig. 4-462

4.11.11 Middle transport roller

- (1) Take off the ADU drive unit.
P. 4-167 "4.11.9 ADU drive unit / ADU motor (M22)"
- (2) Remove 2 clips, 2 pulleys and 2 pins on the front side. Then take off the belt.

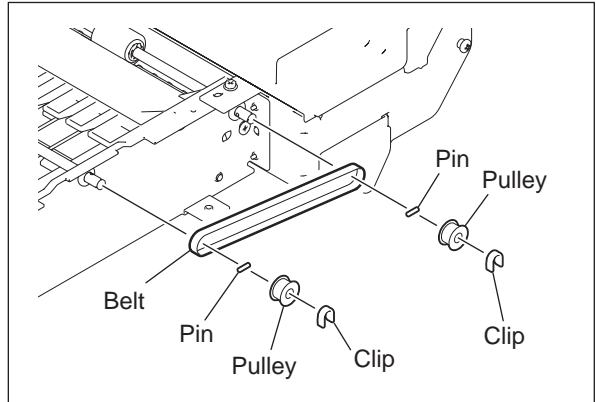


Fig. 4-463

- (3) Remove 1 E-ring, 1 clip and 1 bushing on the rear side.
- (4) Take off 1 bushing on the front side. Then take off the middle transport roller.

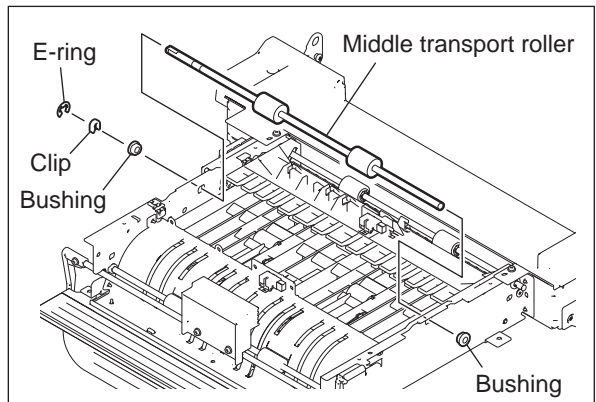


Fig. 4-464

4.11.12 Lower transport roller

- (1) Take off the ADU board and ADU cover.
P. 4-164 "4.11.2 Automatic Duplexing Unit (ADU)"
P. 4-166 "4.11.6 ADU cover"
- (2) Remove 2 clips, 2 pulleys and 2 pins on the front side. Then take off the belt.

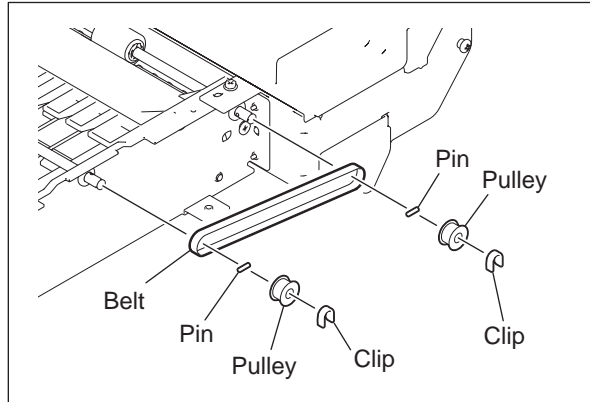


Fig. 4-465

- (3) Remove 1 clip and 1 bushing on the rear side.
- (4) Remove 1 bushing on the front side. Then take off the lower transport roller.

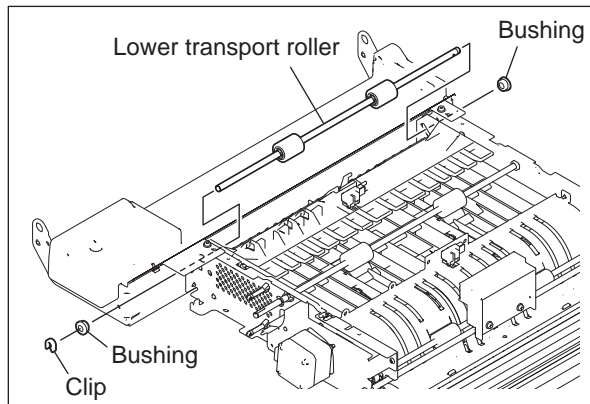


Fig. 4-466

4.11.13 ADU entrance sensor (S38)

- (1) Take off the ADU cover.
P. 4-166 "4.11.6 ADU cover"
- (2) Disconnect 1 connector. Release the latches and take off the ADU entrance sensor.

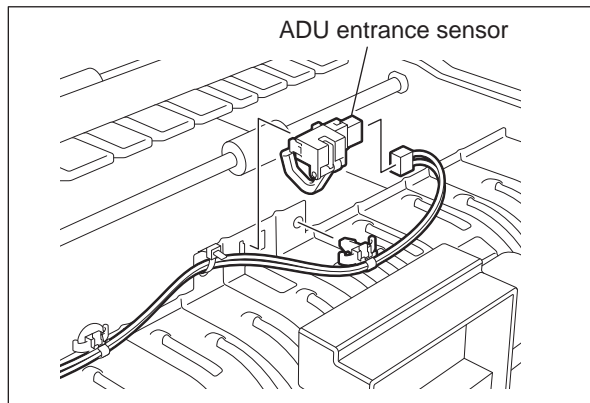


Fig. 4-467

4.11.14 ADU exit sensor (S39)

- (1) Take off the ADU cover.
P. 4-166 "4.11.6 ADU cover"
- (2) Disconnect 1 connector. Release the latches and take off the ADU exit sensor.

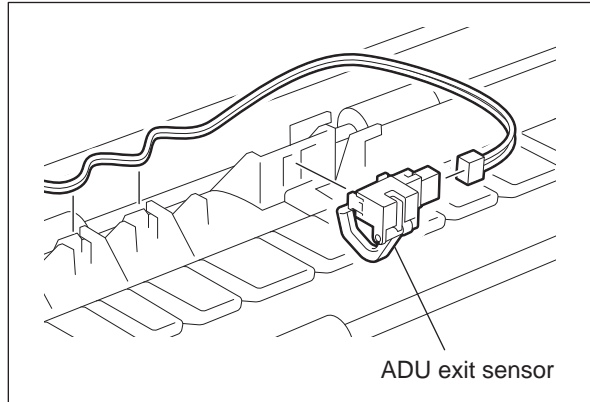


Fig. 4-468

4.11.15 ADU lower cover

- (1) Open the bypass unit.
- (2) Remove 2 screws and take off the ADU lower cover.

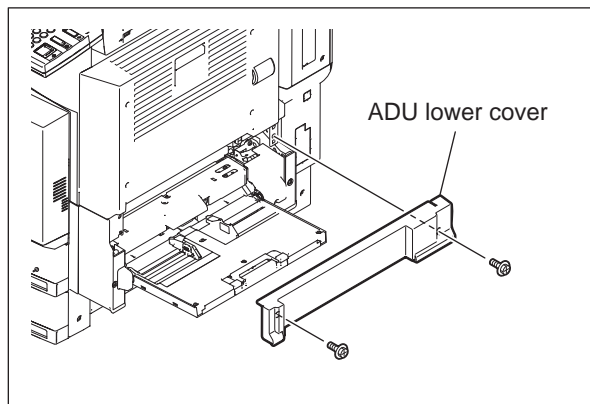


Fig. 4-469

4.11.16 ADU upper cover assembly

- (1) Open the automatic duplexing unit.
- (2) Remove 2 screws and take off the ADU upper cover assembly.

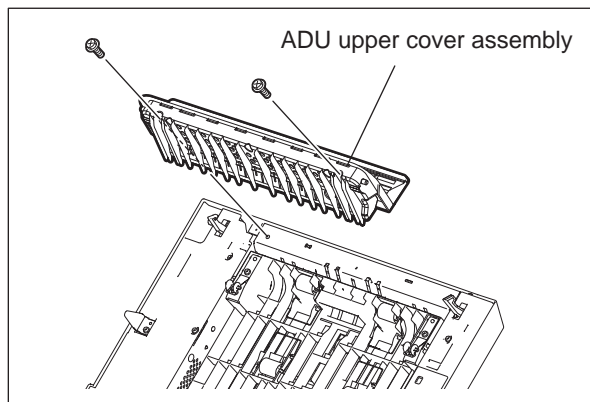


Fig. 4-470

4.11.17 Cover interlock switch (SW2)

- (1) Open the board case.
📖 P. 9-10 "9.1.11 Board case"
- (2) Take off the right inner cover.
📖 P. 4-172 "4.11.16 ADU upper cover assembly"
- (3) Release the harness out of the 2 clamps, and then disconnect 1 connector.
- (4) Remove 1 clamp.
- (5) Remove 3 screws, and then take off the bracket.

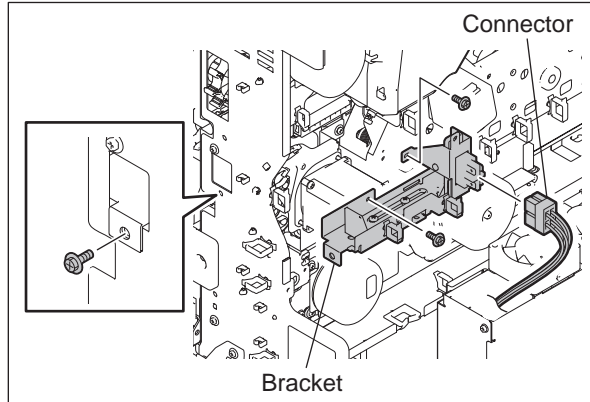


Fig. 4-471

- (6) Remove 1 E-ring, and take off the shaft [1] and switch guide [2].

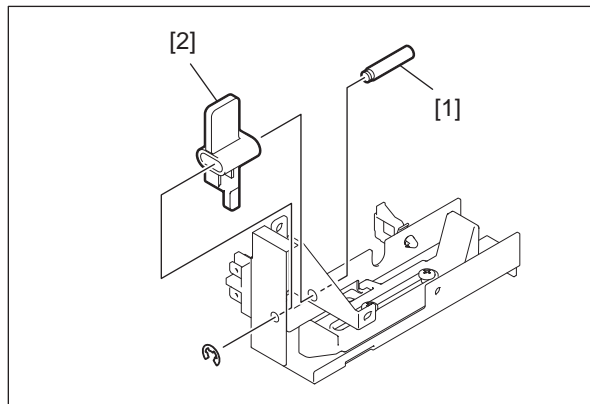


Fig. 4-472

- (7) Release the latch, and then take off the Cover interlock switch [1].

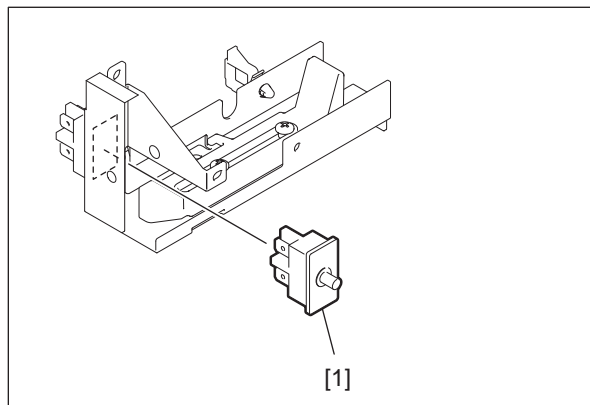


Fig. 4-473

4.12 Removal and Installation of Options

4.12.1 MR-3021/3022 (Reversing Automatic Document Feeder (RADF))

- (1) Turn OFF the power and unplug the power cable.
- (2) Take off the connector cover.

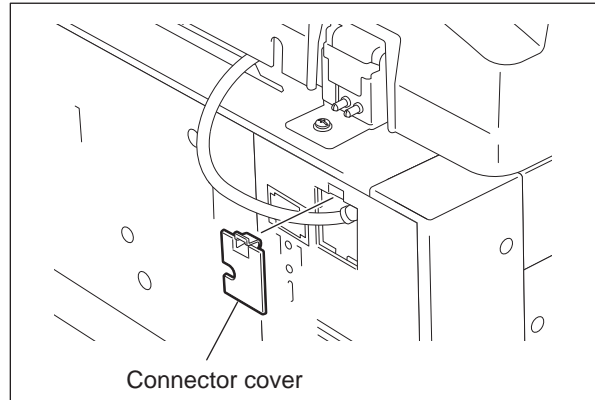


Fig. 4-474

- (3) Disconnect the connector.

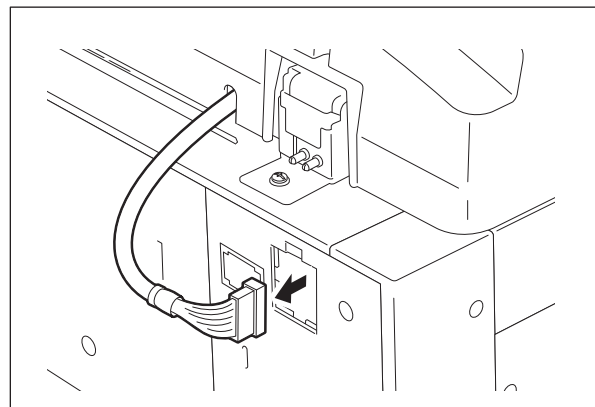


Fig. 4-475

- (4) Remove 1 screw and 1 washer on the rear side.

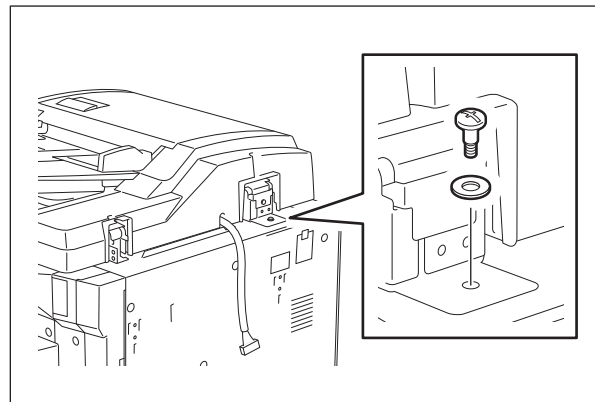


Fig. 4-476

- (5) Remove 1 screw on the rear side.

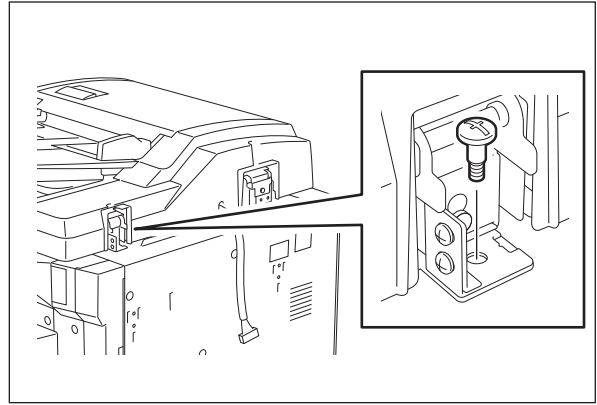


Fig. 4-477

- (6) Open the RADF.

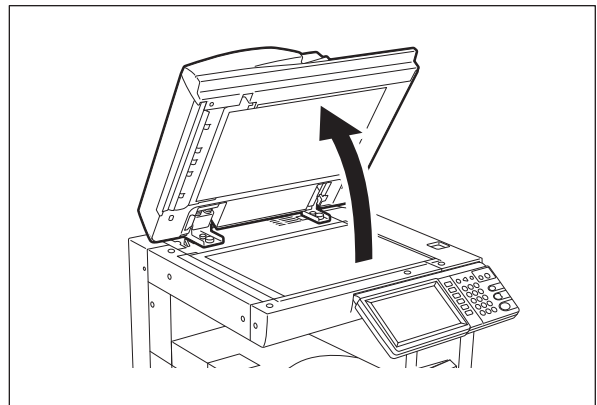


Fig. 4-478

- (7) Loosen 2 screws at the rear, and take off 2 screws at the front.

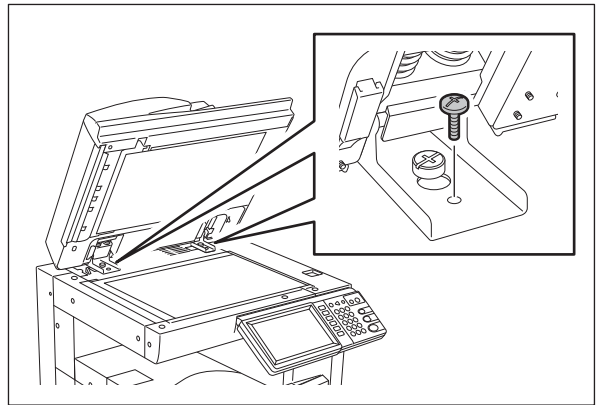


Fig. 4-479

- (8) Slide the RADF backward and lift it up to take it off.

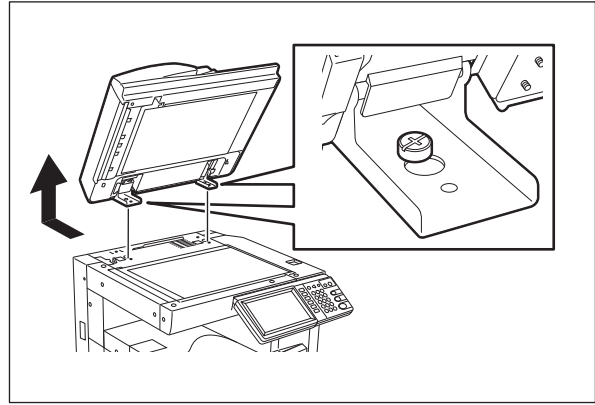


Fig. 4-480

Notes:

When taking off the RADF and installing the platen cover, or taking off the platen cover and installing the RADF, the position of the installing screw for the damper holding bracket of the scanner should be as follows.

1. Remove 1 screw and take off the gel cover.

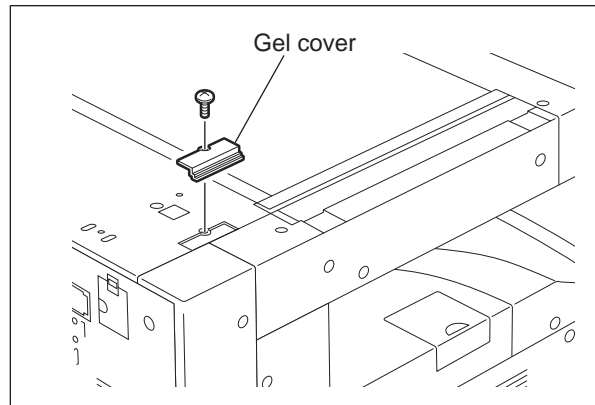


Fig. 4-481

2. Change the position of the installing screw for the damper holding bracket.
Installing the RADF: A
Installing the platen cover: B

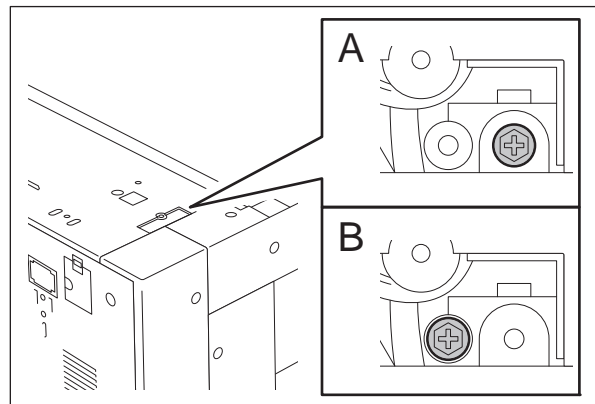


Fig. 4-482

4.12.2 KD-1027 (Paper Feed Pedestal (PFP))

Notes:

When installing the paper feed pedestal (PFP), be sure to adjust the center of the paper placed in each drawer so that it becomes the same as the 2nd drawer of the equipment.

📖 P. 6-74 "6.8.1 Sheet sideways deviation caused by paper feeding"

- (1) Turn OFF the power and unplug the power cable.
- (2) Remove 2 screws and take off the rear cover-1.

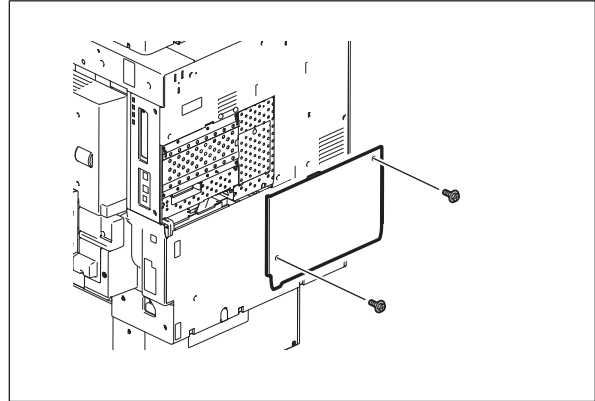


Fig. 4-483

- (3) Remove 8 screws and take off the rear cover-2.

Notes:

Disconnect the connector of the RADF first when the RADF is installed.

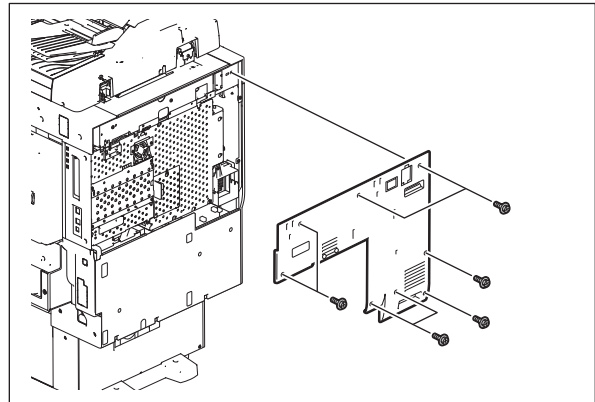


Fig. 4-484

- (4) Remove 3 screws and take off the rear cover-3.

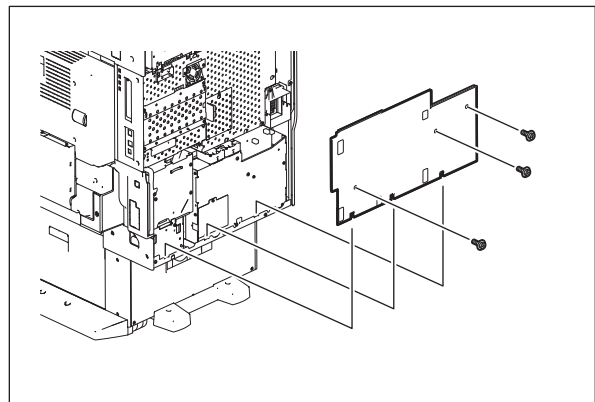


Fig. 4-485

- (5) Remove 1 screw and the ground wire, and then disconnect 1 connector.

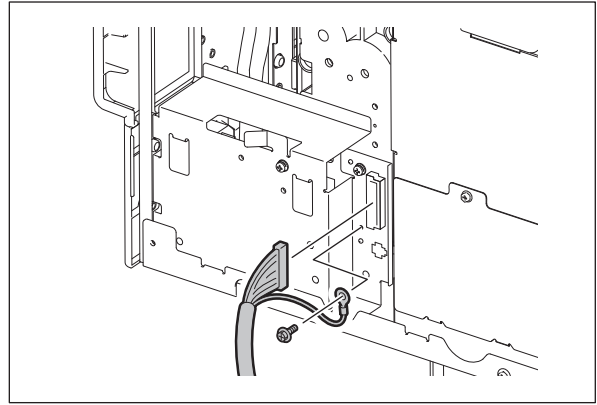


Fig. 4-486

- (6) Remove 2 screws and take off 2 fixing brackets on the rear side.

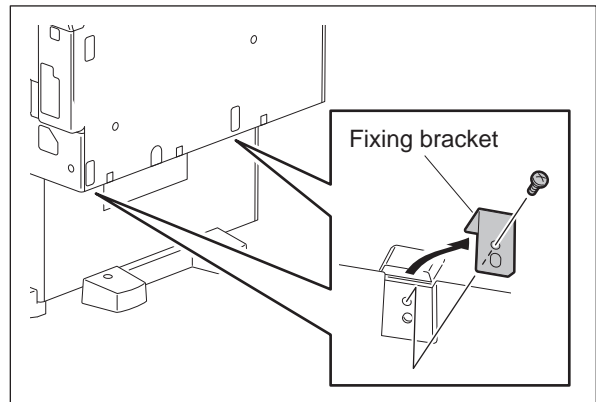


Fig. 4-487

- (7) Take off the 2nd drawer of the equipment and PFP 1st drawer.

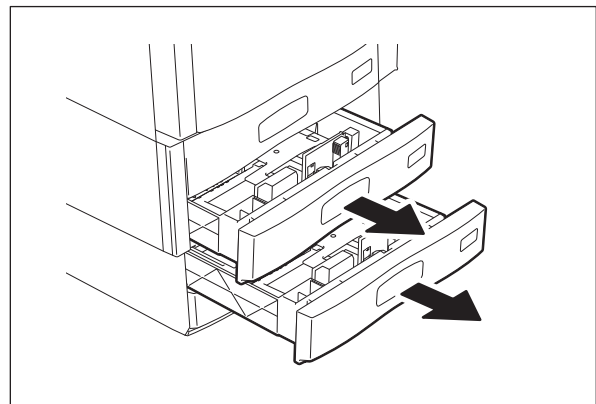


Fig. 4-488

- (8) Remove 4 screws and take off 2 fixing brackets on the front side.

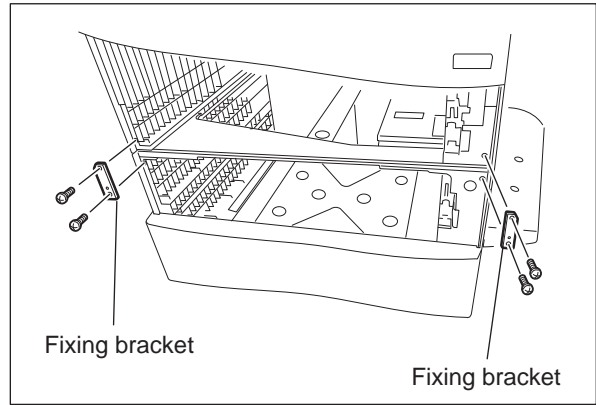


Fig. 4-489

- (9) Lift up the equipment and take off the PFP.

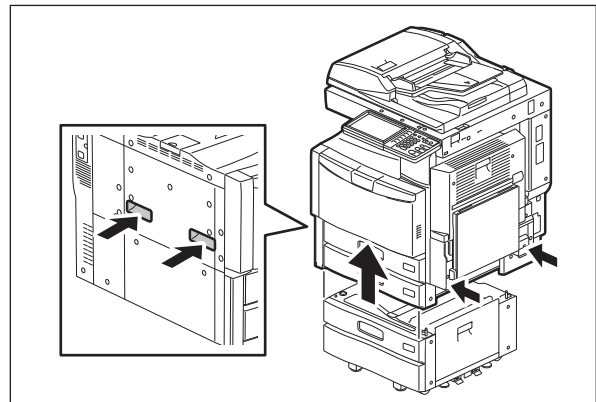


Fig. 4-490

4.12.3 KD-1028 (Large Capacity Feeder (LCF))

- (1) Turn OFF the power and unplug the power cable.
- (2) Remove 2 screws and take off the rear cover-1.

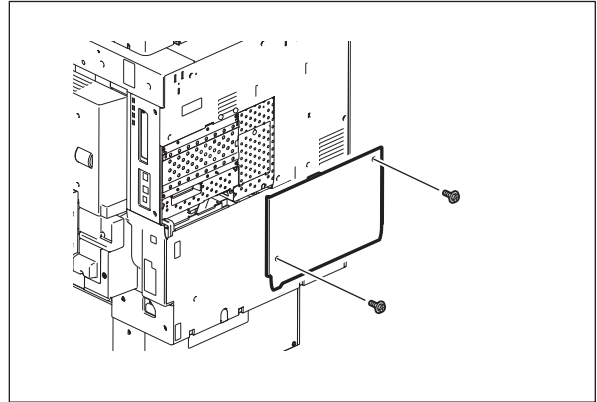


Fig. 4-491

- (3) Remove 8 screws and take off the rear cover-2.

Notes:

Disconnect the connector of the RADF first when the RADF is installed.

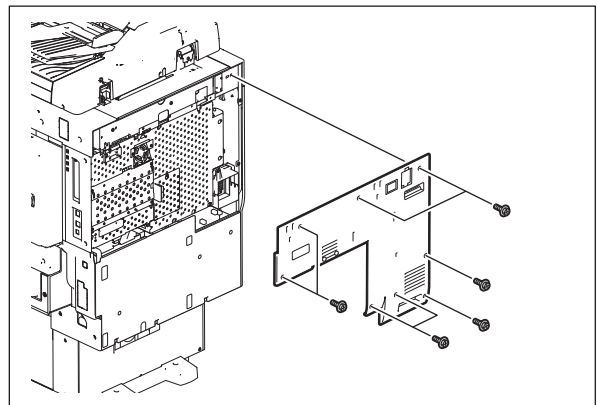


Fig. 4-492

- (4) Remove 3 screws and take off the rear cover-3.

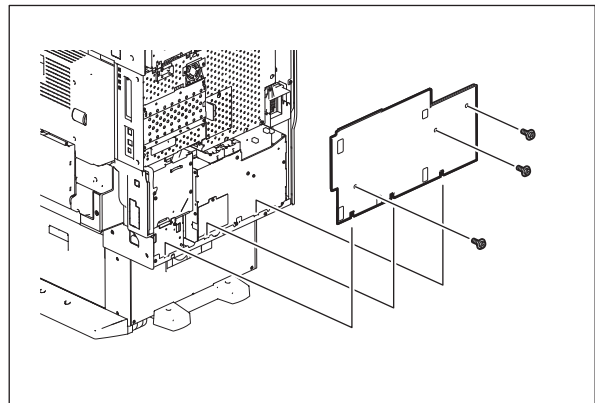


Fig. 4-493

- (5) Remove 1 screw and the ground wire, and then disconnect 1 connector.

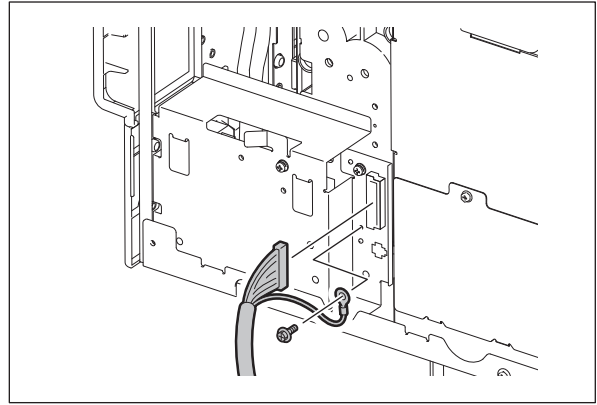


Fig. 4-494

- (6) Remove 2 screws and take off 2 fixing brackets on the rear side.

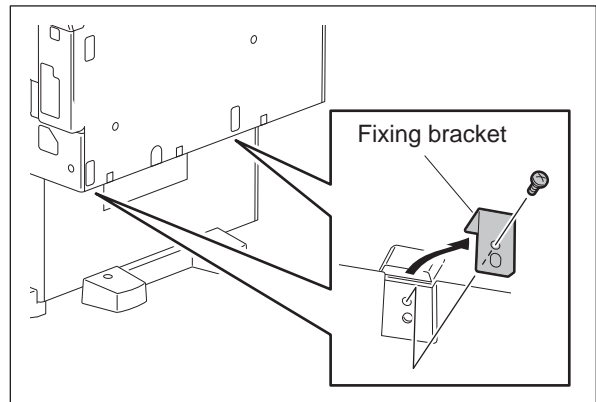


Fig. 4-495

- (7) Take off the 2nd drawer of the equipment.

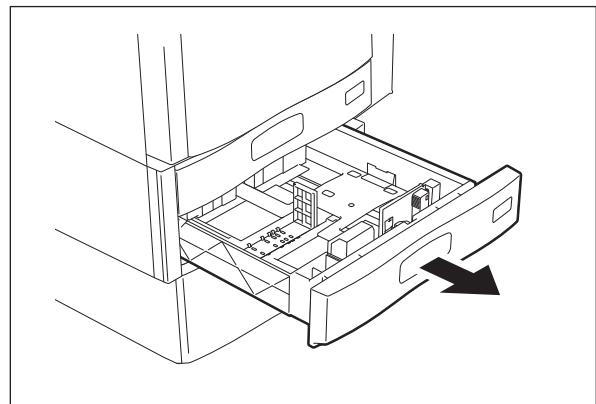


Fig. 4-496

(8) Pull out the LCF drawer.

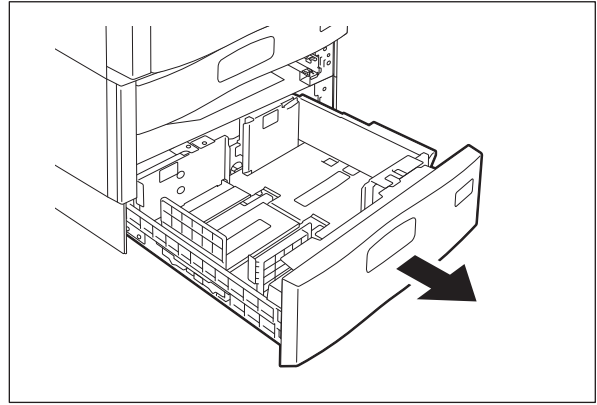


Fig. 4-497

(9) Remove 4 screws and take off 2 fixing brackets on the front side.

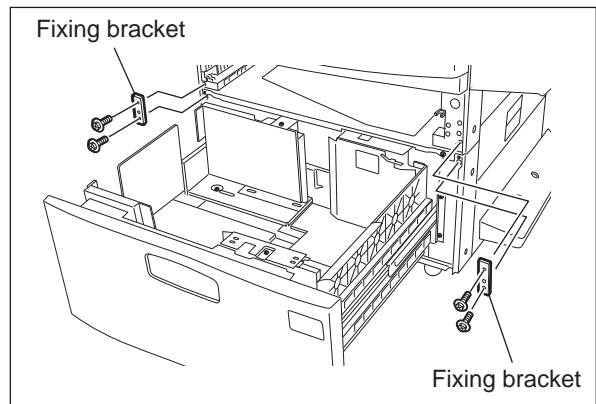


Fig. 4-498

(10) Lift up the equipment and take off the LCF.

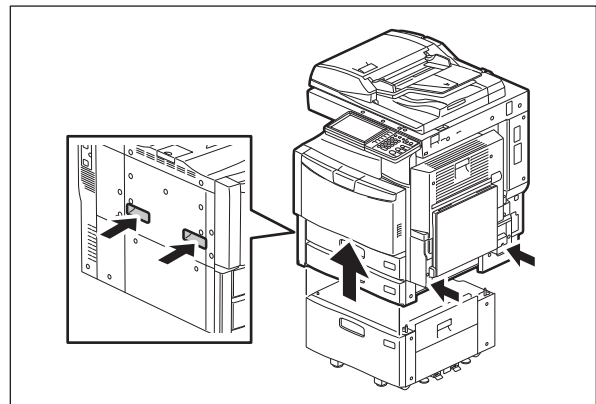


Fig. 4-499

4.12.4 MJ-1101 (Finisher)

- (1) Turn OFF the power and unplug the power cable.
- (2) Take off the connector cover and disconnect the connector.

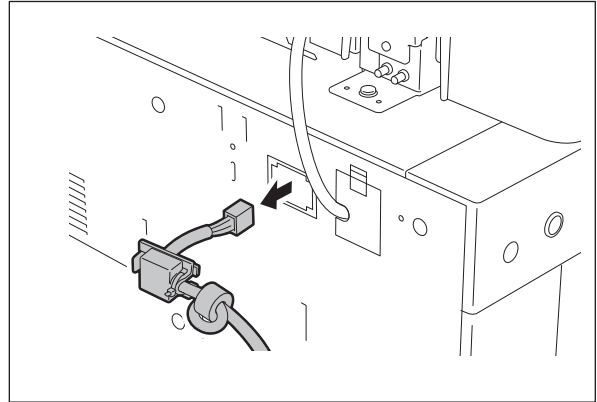


Fig. 4-500

- (3) Remove 1 screw and the ground wire.

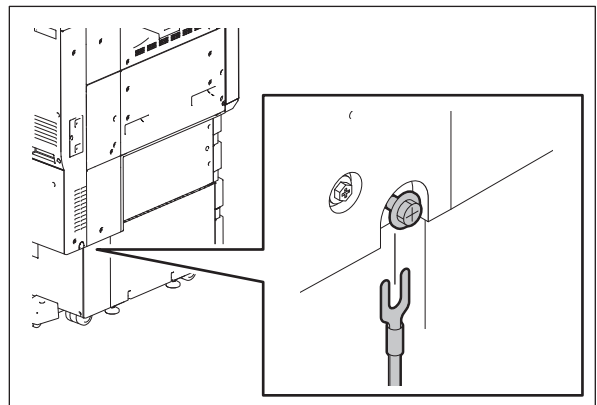


Fig. 4-501

- (4) Remove 1 screw and take off the fixing plate.

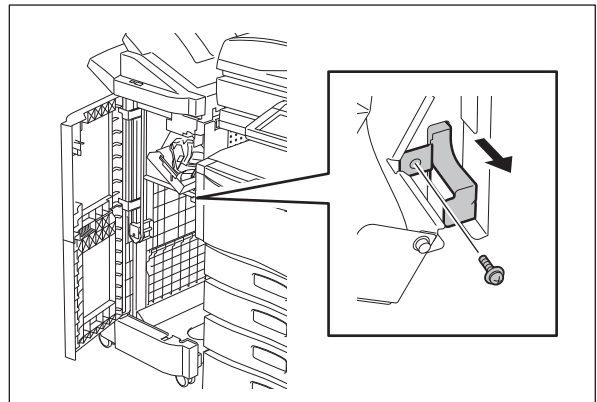


Fig. 4-502

- (5) Take off the finisher.

Notes:

Be careful not to fell the finisher when moving only the finisher unit.

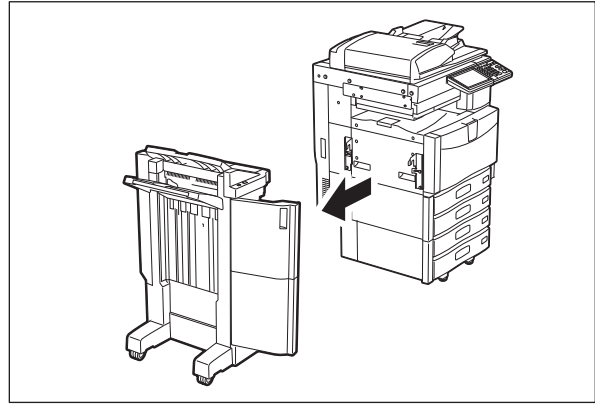


Fig. 4-503

4.12.5 MJ-1106 (Saddle Stitch Finisher)

- (1) Turn OFF the power and unplug the power cable.
- (2) Take off the connector cover and disconnect the connector.

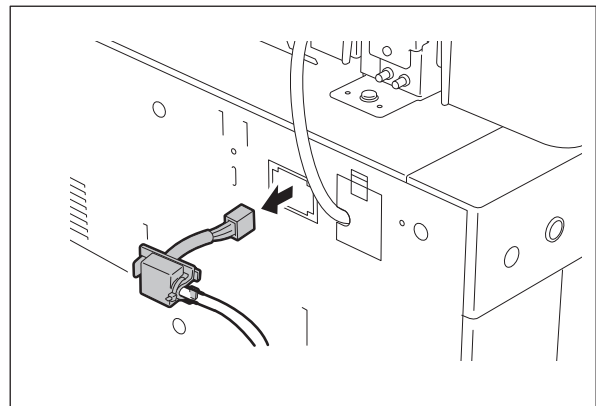


Fig. 4-504

- (3) Open the finisher front cover.

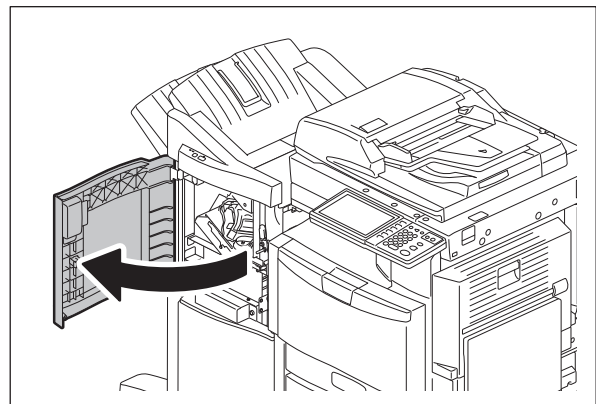


Fig. 4-505

- (4) Pull put the rail.

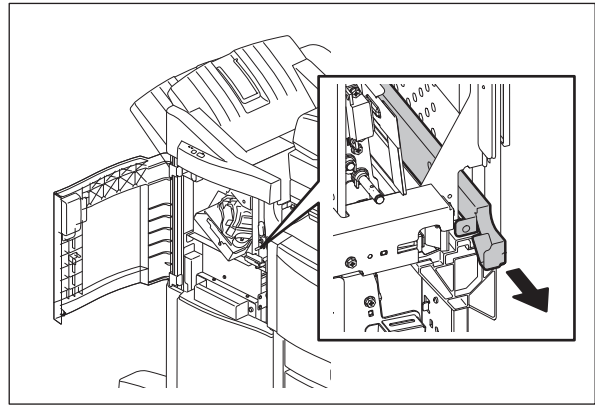


Fig. 4-506

- (5) Attach the caster (front side) with 2 screws and fix it.

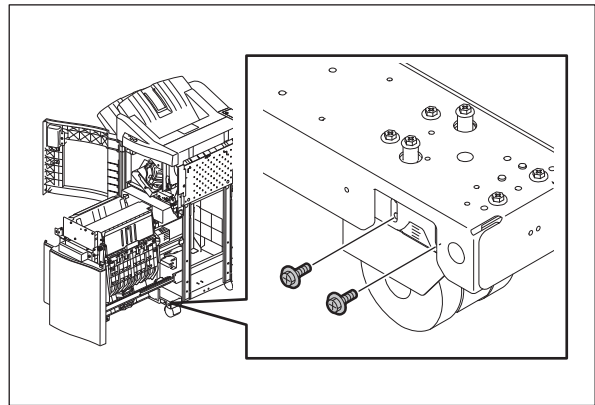


Fig. 4-507

- (6) Take off the finisher.

Notes:

Be careful not to fell the finisher when moving only the finisher unit.

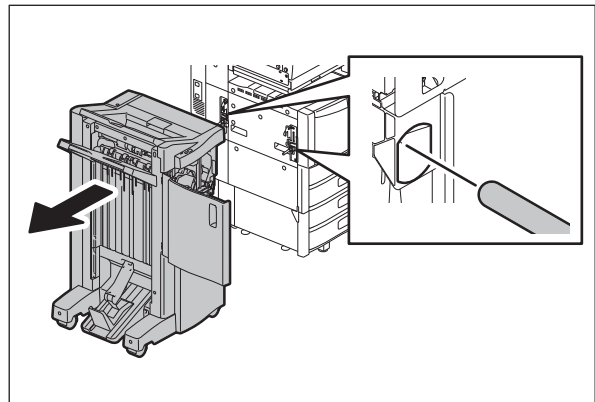


Fig. 4-508

4.12.6 MJ-1031 (Hanging Finisher)

- (1) Turn OFF the power and unplug the power cable.
- (2) Take off the connector cover and disconnect the connector.

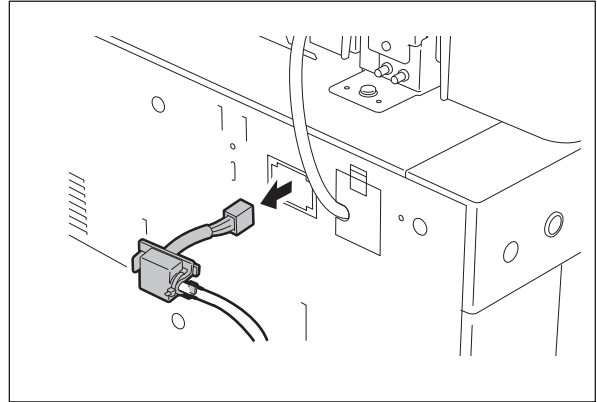


Fig. 4-509

- (3) Remove 2 screws and take off 2 fixing brackets.

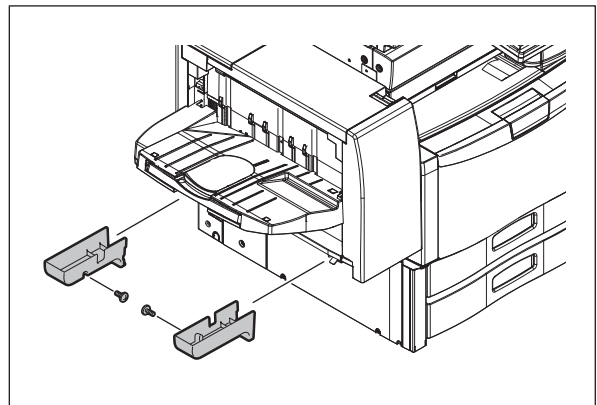


Fig. 4-510

- (4) Remove 2 screws and take off 2 fixing brackets.

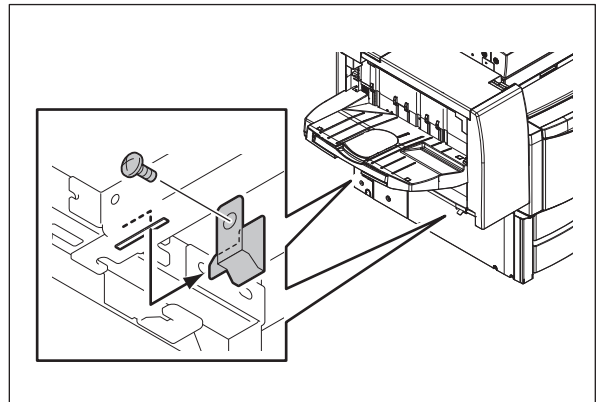


Fig. 4-511

(5) Take off the finisher.

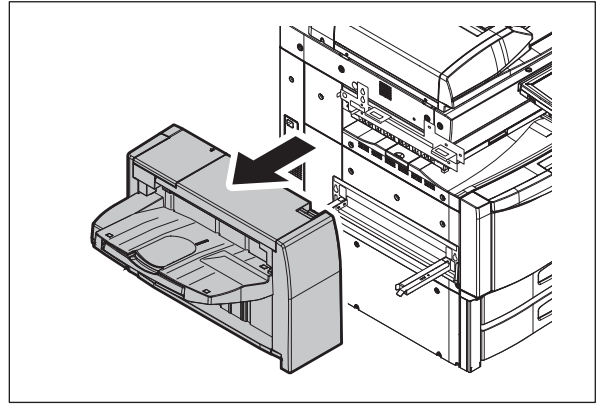


Fig. 4-512

4.12.7 MJ-6103 (Hole punch unit)

- (1) Turn OFF the power and unplug the power cable.
- (2) Take off the connector cover and disconnect connector.

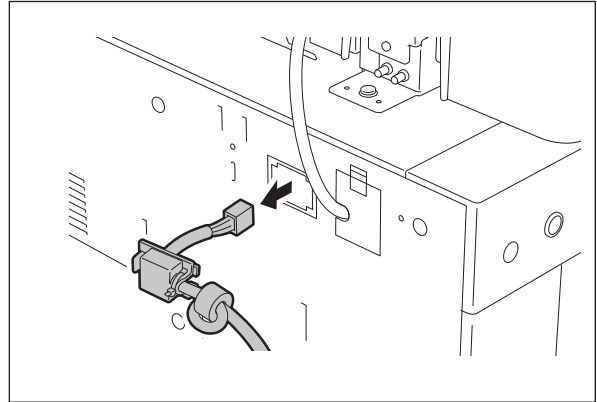


Fig. 4-513

- (3) Remove 1 screw and the ground wire.

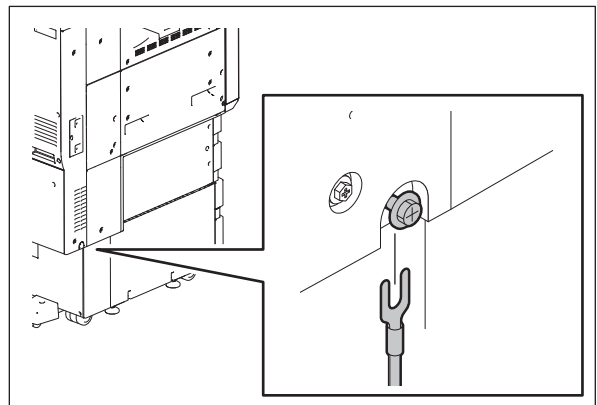


Fig. 4-514

- (4) Take off the cover of the hole punch unit lower side.

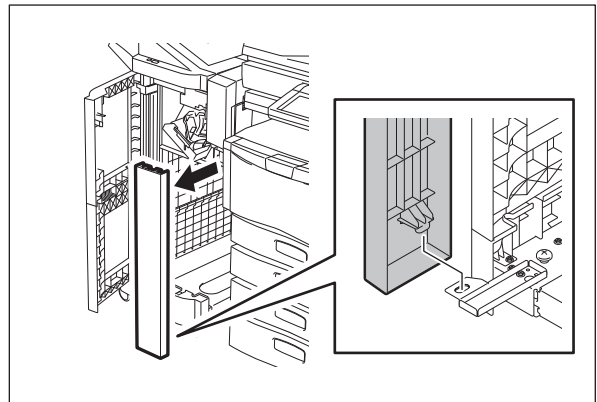


Fig. 4-515

- (5) Remove 1 screw and take off the fixing plate.

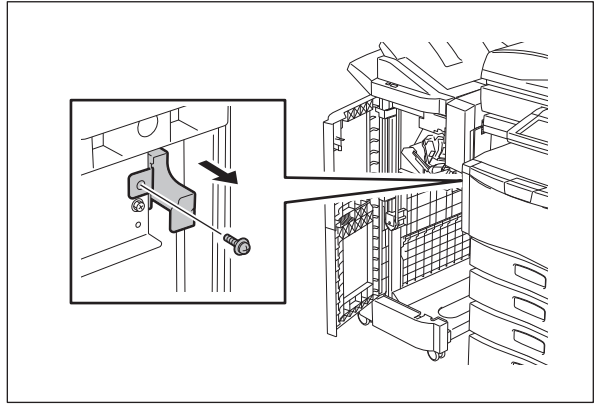


Fig. 4-516

- (6) Take off the finisher with the hole punch unit.

Notes:

Be careful not to fell the finisher when moving only the finisher unit.

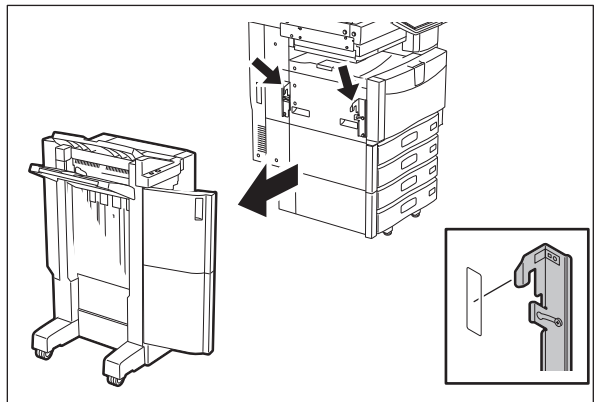


Fig. 4-517

- (7) Remove 1 screw and take off the connector cover.

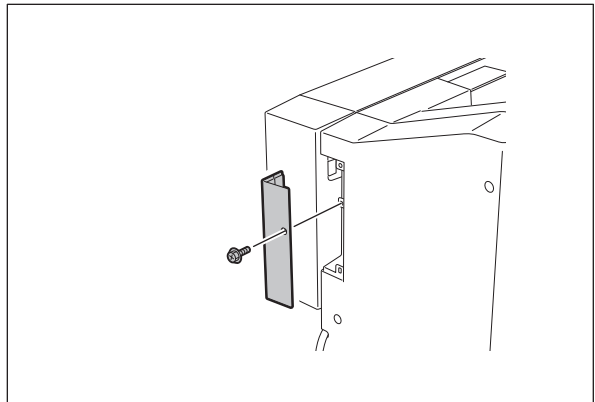


Fig. 4-518

(8) Disconnect 1 connector.

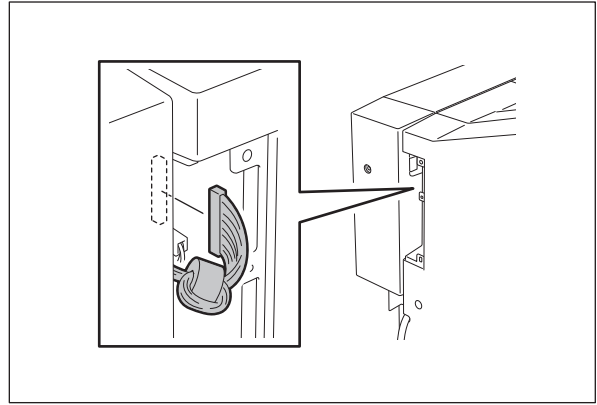


Fig. 4-519

(9) Take off the cover of the hole punch unit lower side.

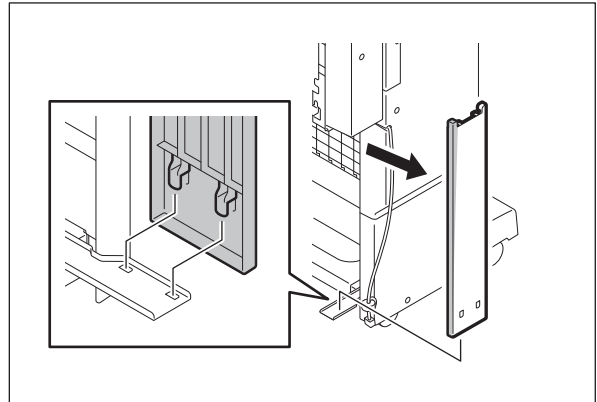


Fig. 4-520

(10) Remove 4 screws. Lift up the hole punch unit and take it off.

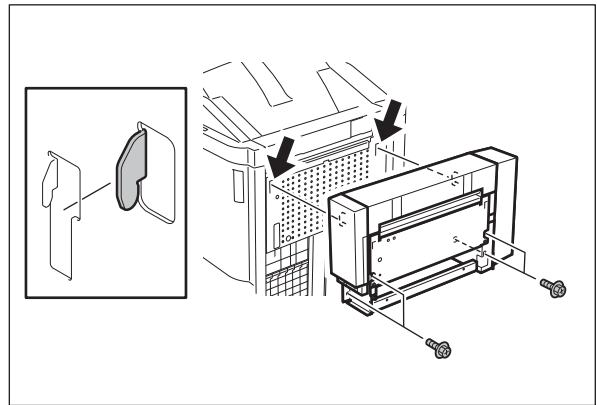


Fig. 4-521

4.12.8 KN-4530 (Bridge unit)

- (1) Turn OFF the power and unplug the power cable.
- (2) Open the bridge unit. Remove 1 screw.

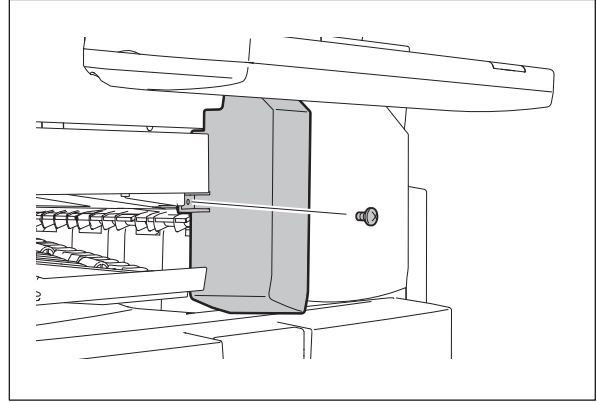


Fig. 4-522

- (3) Take off the cover.

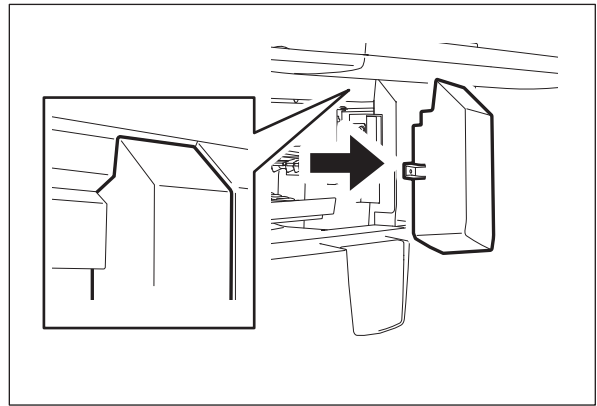


Fig. 4-523

- (4) Remove 1 screw.

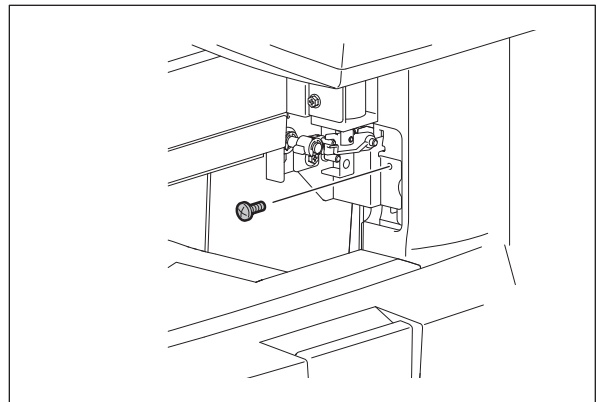


Fig. 4-524

- (5) Remove 4 screws and take off the plate.

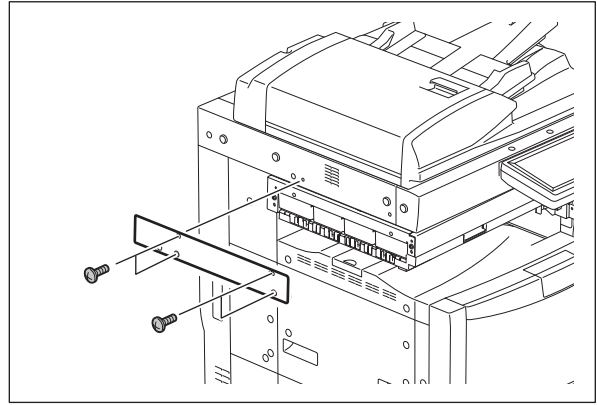


Fig. 4-525

- (6) Disconnect 1 connector.

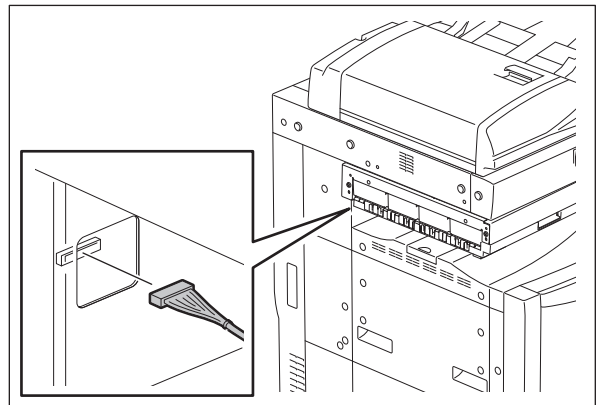


Fig. 4-526

- (7) Lift up the bridge unit and release the hook.
Take off the bridge unit toward the front.

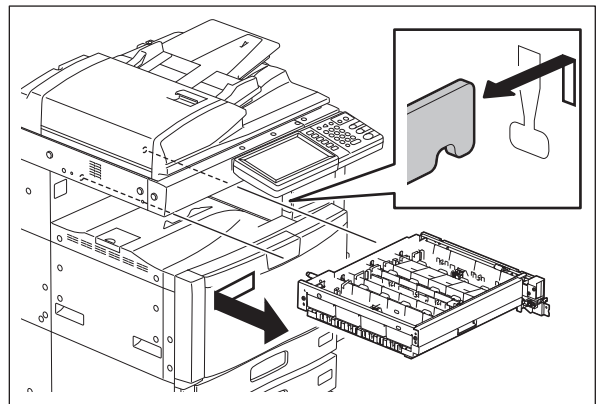


Fig. 4-527

4.12.9 MF-3500 (Damp Heater Kit)

[A] Preparation

Damp Heater Kit (check if all of the following parts are in it), tools

1. Scanner Damp Heater (Left)
2. Scanner Damp Heater (Right)
3. Bracket
4. Edge support
5. Drum Damp Heater (Right)
6. Drum Damp Heater (Left)
7. Fixing screw (for the scanner)
8. Fixing screw (for the drum: right)
9. Fixing screw (for the drum: left)

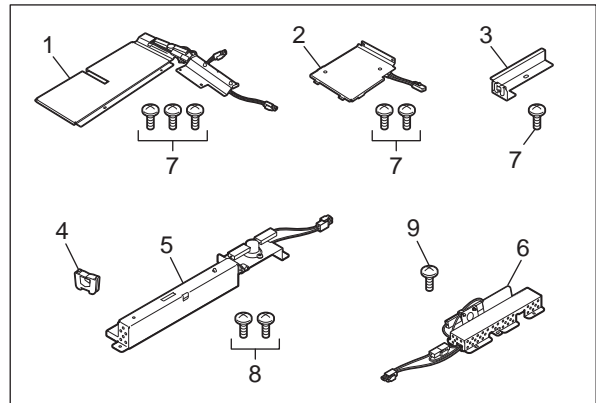
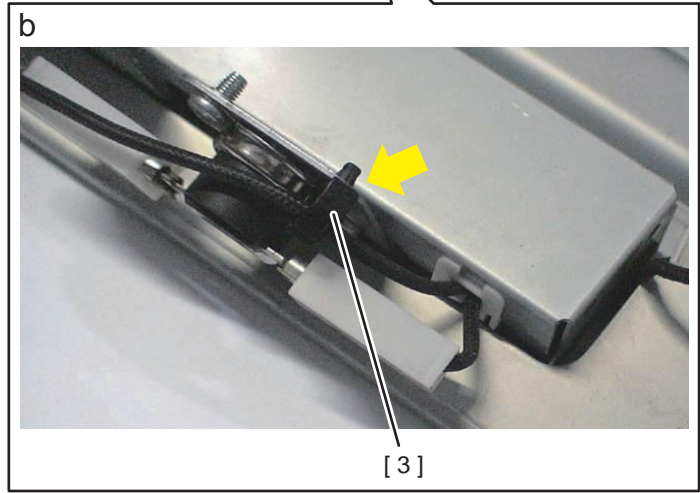
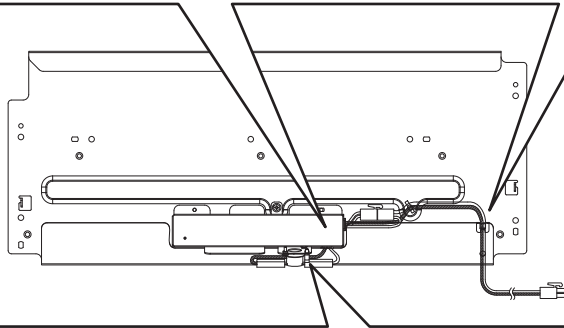
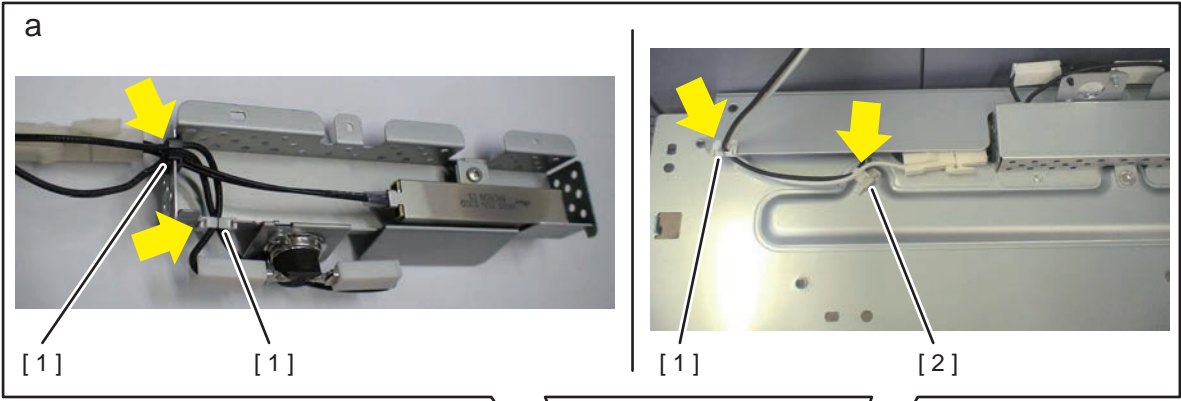


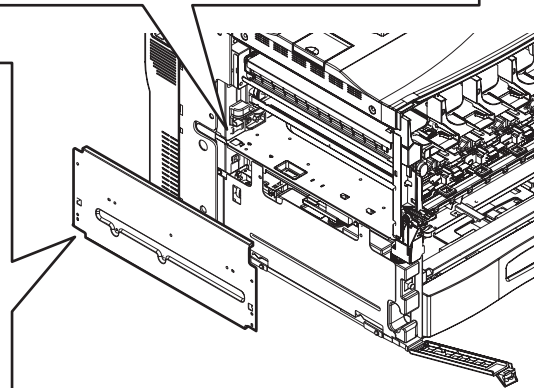
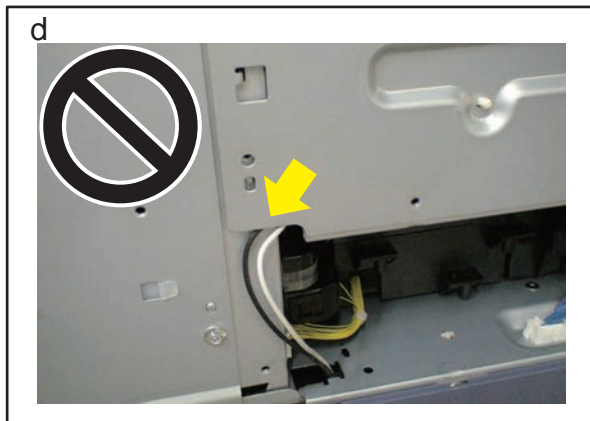
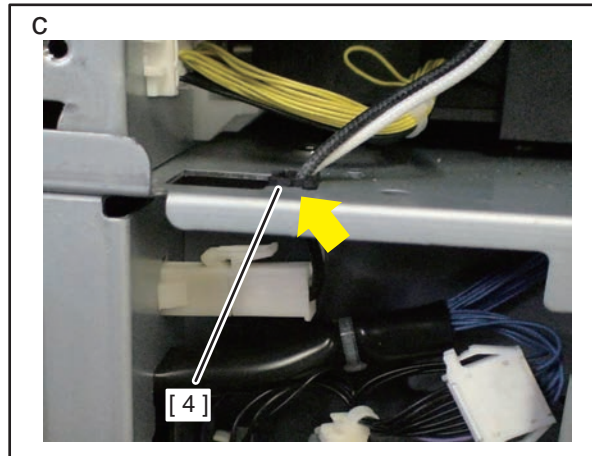
Fig. 4-528

Notes:

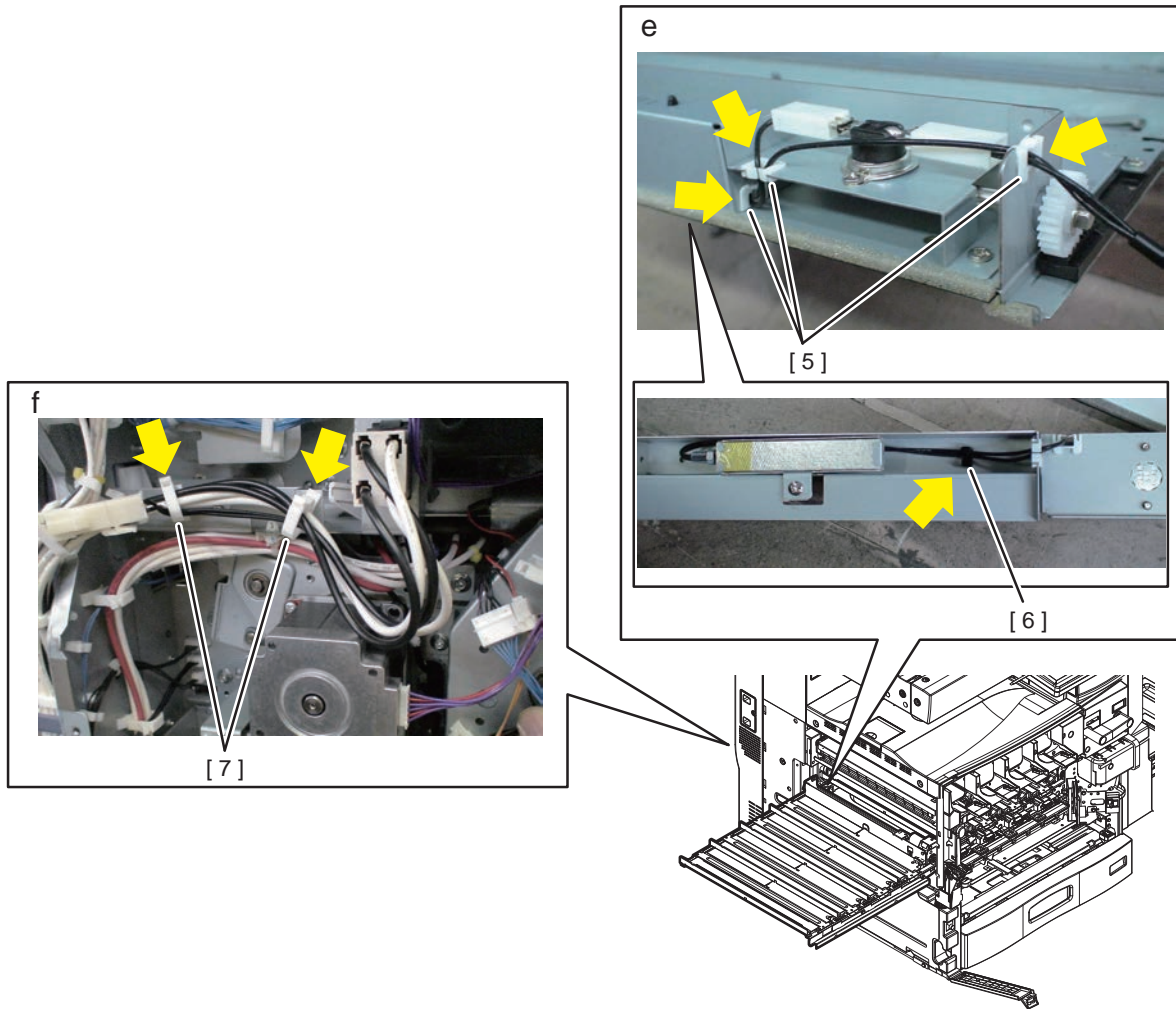
1. When installing the Damp Heater, ensure sufficient work space for disassembling the equipment.
2. Turn the power of the equipment OFF and unplug the power cable before the installation.
3. Take off the RADF (optional), the Finisher (optional), or the Hole Punch Unit (optional) before starting the installation, if installed.
4. Be sure not to drop small parts such as screws into the equipment.
5. When replacing or installing the drum damp heater, be sure that the wire harness is correctly set, and also be careful not to catch it between other parts.
 - a. Be sure to pass the harness for the drum damp heater (Left) through the edge supports [1] and fix the binding band [2] into the metal plate.
 - b. Be sure to pass the harness for the drum damp heater (Left) through the clamp [3].



- c. Be sure to pass the harness for the drum damp heater (Left) through the edge support [4].
- d. When attaching the metal plate, be careful not to catch the harnesses as shown below.



- e. Be sure to pass the harness for the drum damp heater (Right) through the edge supports [5] and the clamp [6].
- f. Be sure to pass the harness for the drum damp heater (Right) through the clamps [7].



[B] Procedure

- (1) Remove 4 screws and take off the right upper cover.

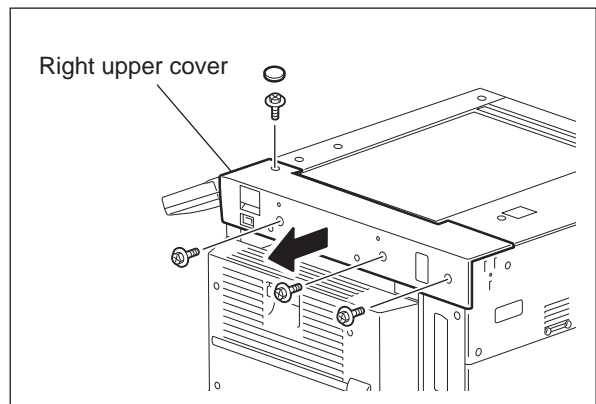


Fig. 4-529

- (2) Remove 2 screws and take off the fixing bracket.

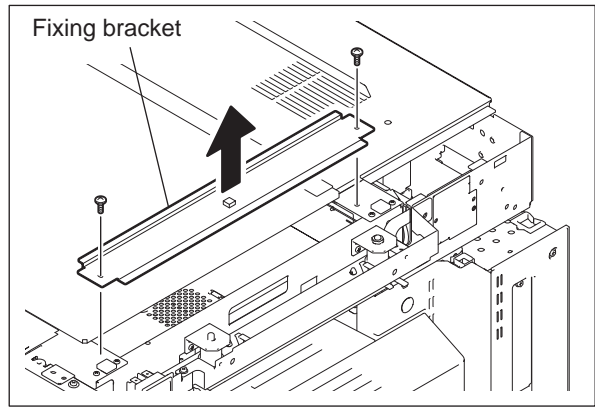


Fig. 4-530

- (3) Take off the original glass.

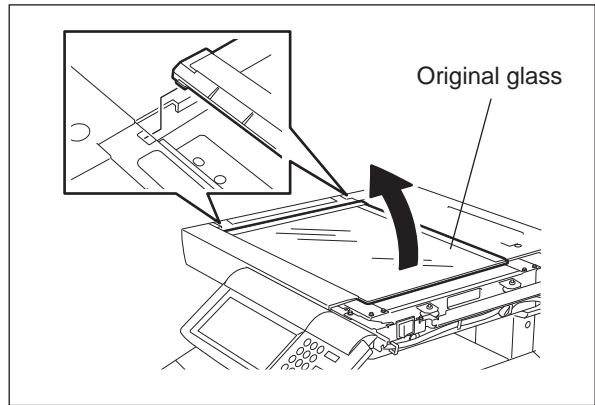


Fig. 4-531

- (4) Remove 6 screws and take off the lens cover.

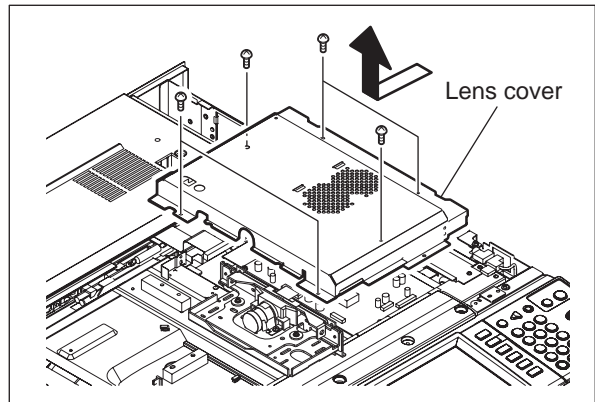


Fig. 4-532

- (5) Install the edge support on the lens cover.

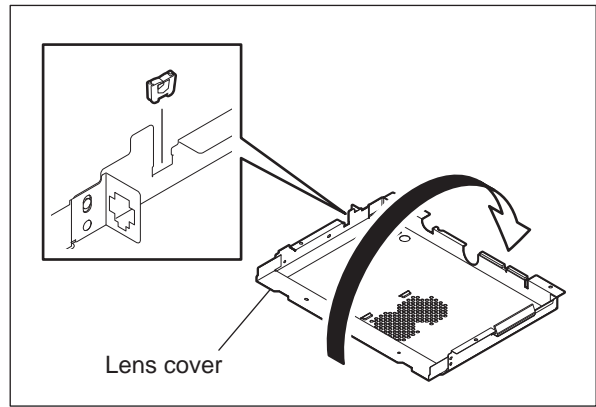


Fig. 4-533

- (6) Install the Scanner Damp Heater (Right) on the lens cover with 2 screws and then insert the connector.

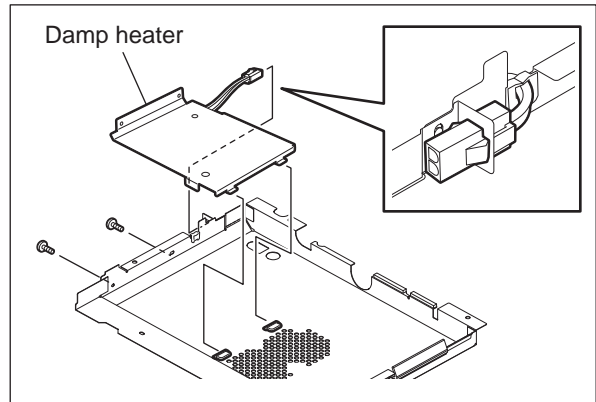


Fig. 4-534

- (7) Install the lens cover with 6 screws.

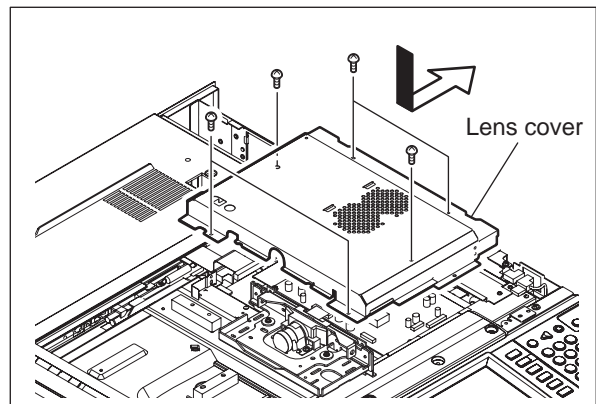


Fig. 4-535

- (8) Install the bracket with 1 screw.

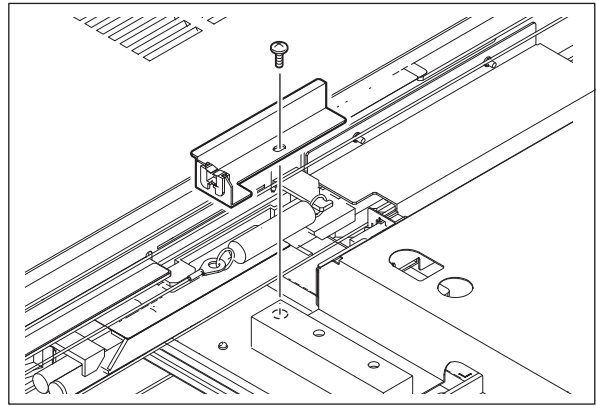


Fig. 4-536

- (9) Rotate the pulley to move the carriage to the paper exit side.

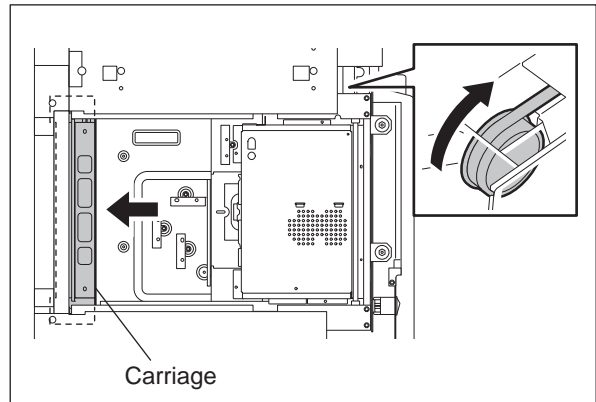


Fig. 4-537

- (10) Install the Scanner Damp Heater (Left) with 2 screws.

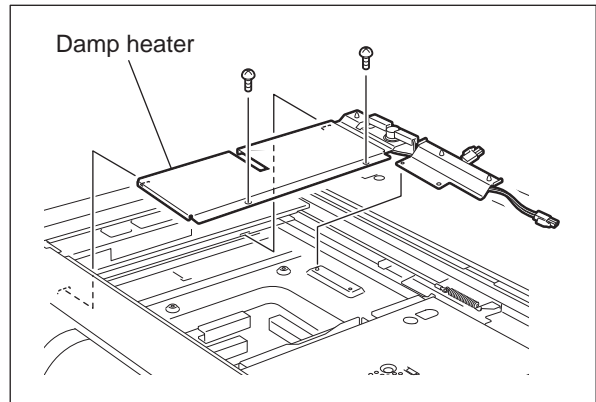


Fig. 4-538

- (11) Fix the bracket with 1 screw and then insert 2 connectors.

Note:

Check that no harnesses will be caught by moving the carriage.

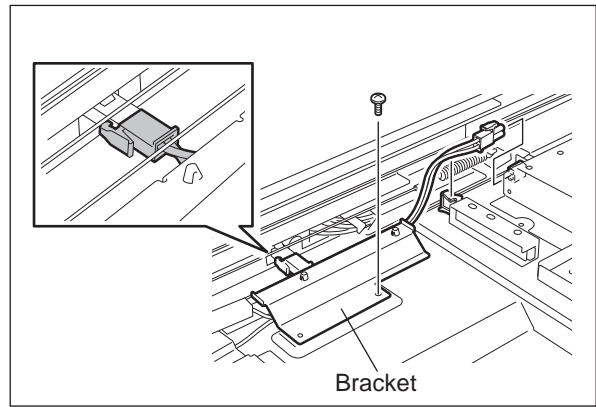


Fig. 4-539

- (12) Install the original glass.

Note:

When installing, fit 2 small protrusions of the original glass in the groove of the equipment and fix the original glass with the fixing bracket by pushing it to the left rear direction.

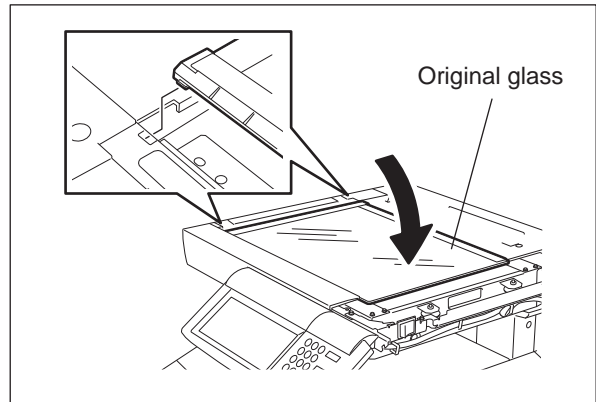


Fig. 4-540

- (13) Install the fixing bracket with 2 screws.

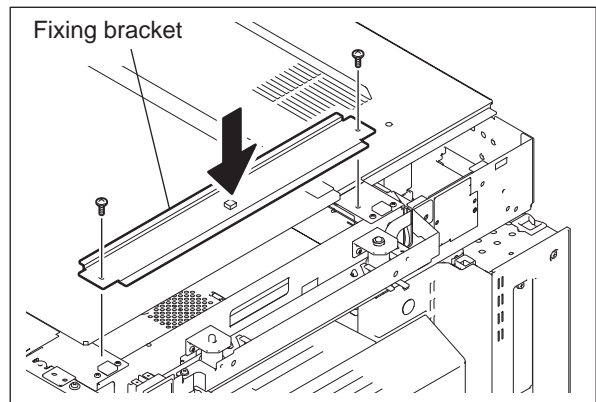


Fig. 4-541

(14) Install the right upper cover with 4 screws.

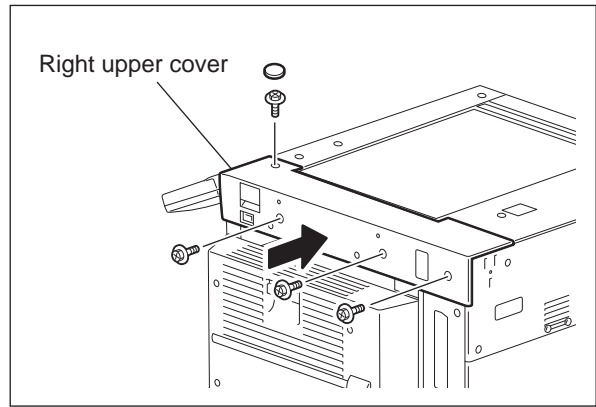


Fig. 4-542

(15) Open the front cover.

(16) Remove 1 screw, and then turn the TBU lifting lever counterclockwise for 90 degrees.

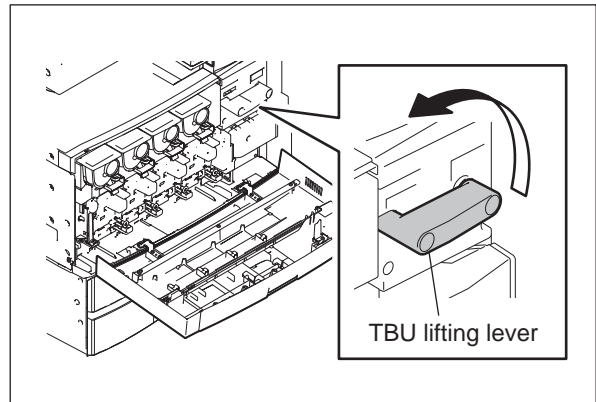


Fig. 4-543

(17) Remove the toner cartridge (Y).

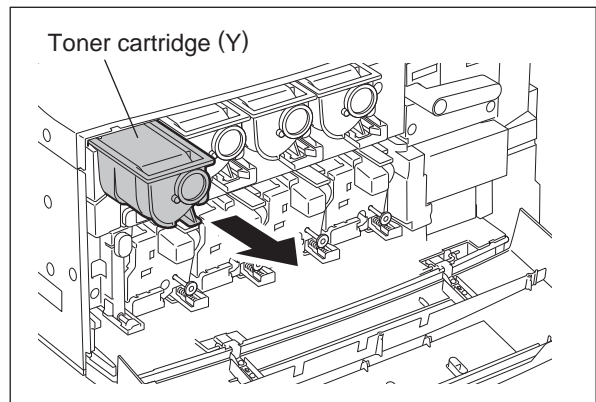


Fig. 4-544

(18) Remove all of the 4 process units (EPUs).

Note:

Hold the A part and B part of the process unit (EPU).

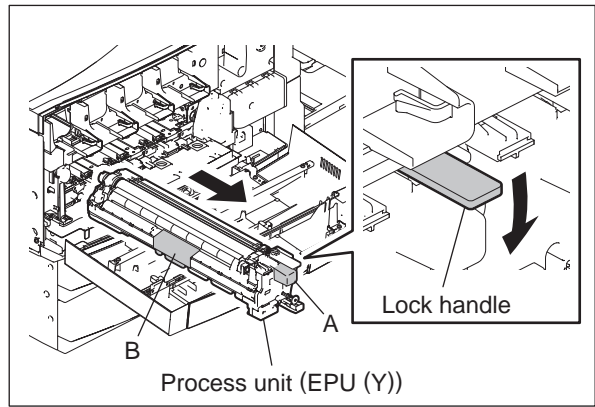


Fig. 4-545

(19) Remove 1 screw, and then pull the transfer belt cleaning duct toward the front to take it off.

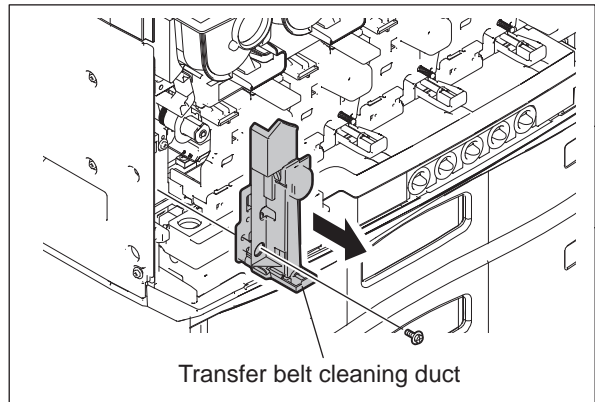


Fig. 4-546

(20) Turn the TBU lifting lever clockwise for 90 degrees.

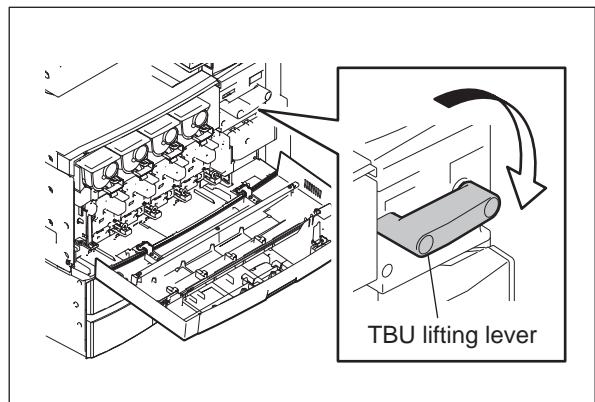


Fig. 4-547

- (21) Turn the lever (sky blue) of the transfer belt cleaning unit counterclockwise and pull it out toward you.

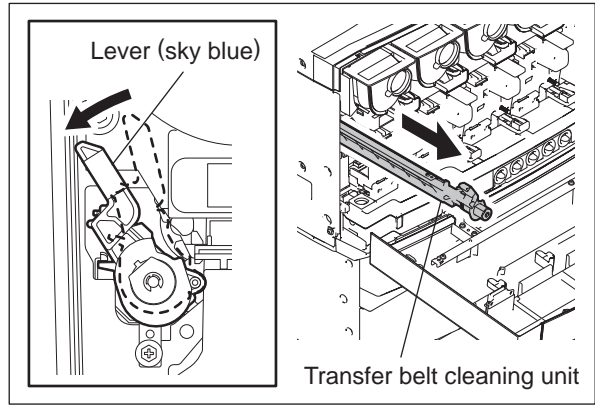


Fig. 4-548

- (22) Remove 1 screw and take off the duct.
(23) Release 1 clamp.
(24) Disconnect 1 relay connector from the discharge LED.

Remark:

The right-hand figure shows the duct removed from the discharge LED (K).
Take off the ducts from each color of the discharge LED (Y, M, C and K).

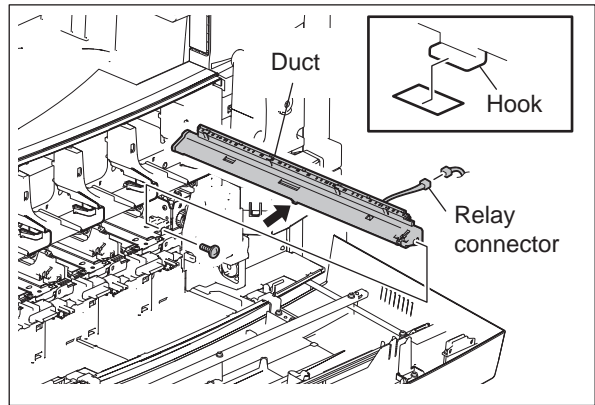


Fig. 4-549

- (25) Remove 2 screws and take off the inner cover.

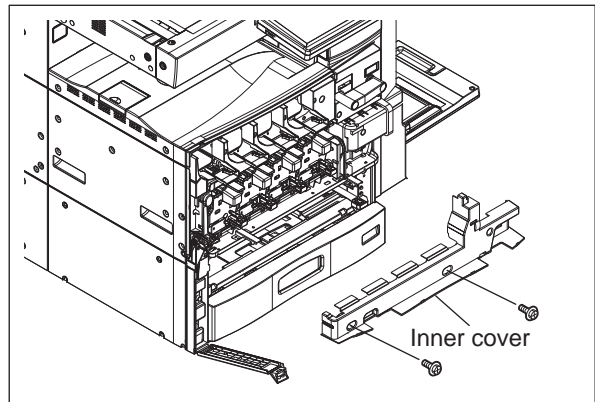


Fig. 4-550

- (26) Open the automatic duplexing unit (ADU) and 2nd transfer unit (TRU).

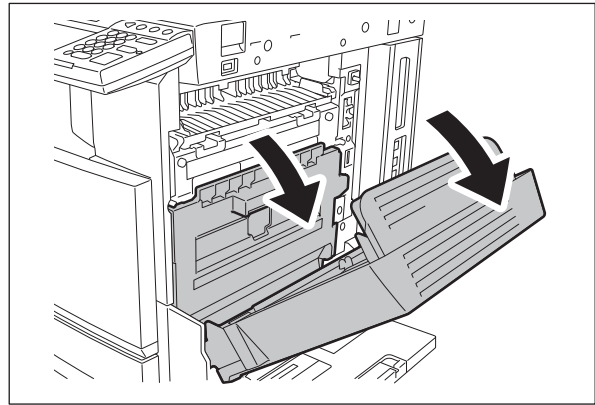


Fig. 4-551

- (27) Remove 1 screw of the front hinge, and then take off the automatic duplexing unit (ADU) by lifting it up slightly and sliding it to the rear side.

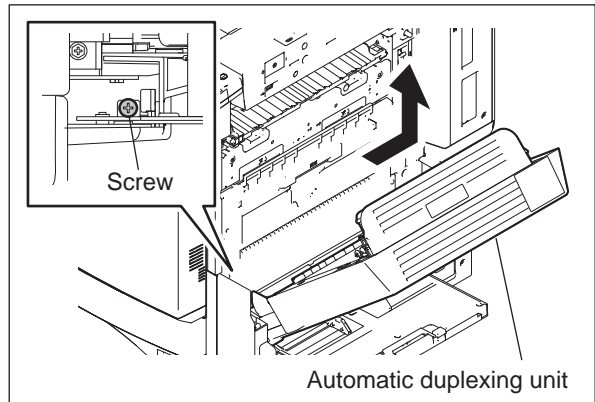


Fig. 4-552

- (28) When installing, match the front and rear hinge holes of the equipment and the right and left hinge bosses of the ADU.

Notes:

Be sure to check the following points after moving the ADU to its maintenance position.

- Check that the connector is not disconnected.
- Check that duplex printing on A4 or LT sized paper is performed properly.

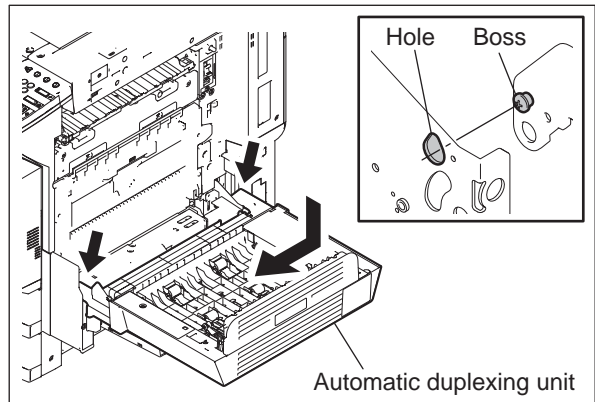


Fig. 4-553

- (29) Open the middle guide by holding its knob.
Disconnect 1 connector.

Note:

Do not hold the middle guide itself when opening and closing it.

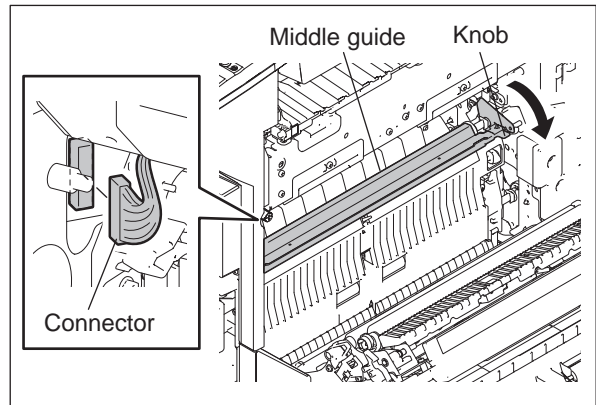


Fig. 4-554

- (30) Then turn the TBU lifting lever
counterclockwise for 90 degrees.

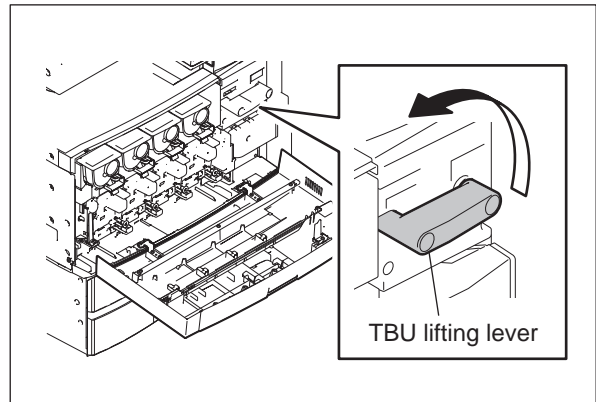


Fig. 4-555

- (31) Hold the holder, and then pull out the transfer
belt unit (TBU) toward you.

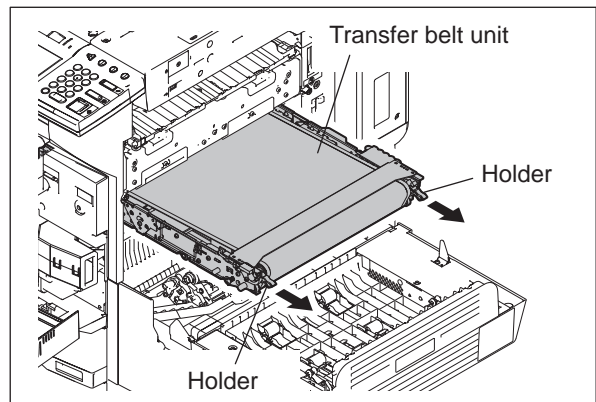


Fig. 4-556

- (32) Raise the front handle, and then hold it together with the rear handle (light blue) to take off the transfer belt unit.

Note:

When taking off the transfer belt unit, be sure not to contact the bottom of this unit and the 2nd transfer unit to prevent the transfer belt from being scratched.

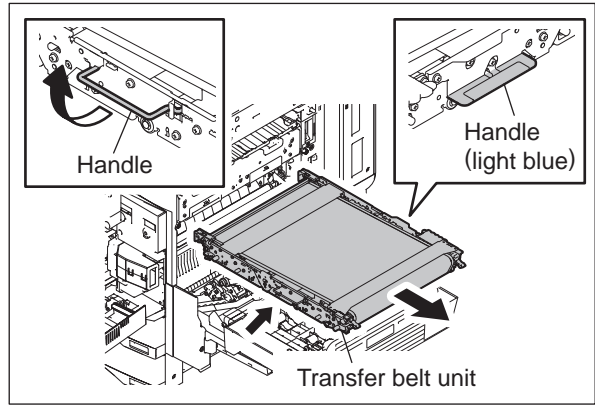


Fig. 4-557

- (33) Remove 1 screw, and then take off the ozone filter-1.

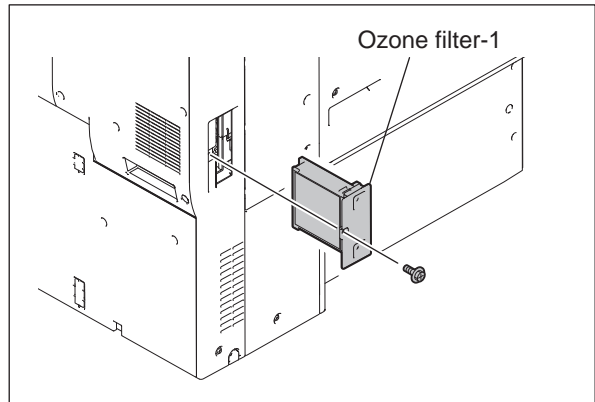


Fig. 4-558

- (34) Remove 7 screws and take off the left cover.

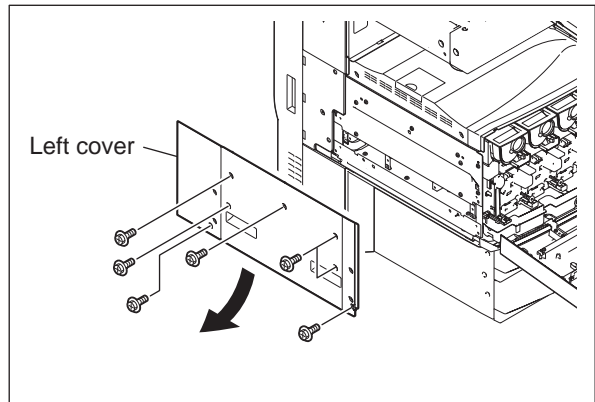


Fig. 4-559

(35) Remove 2 screws and take off the inner tray.

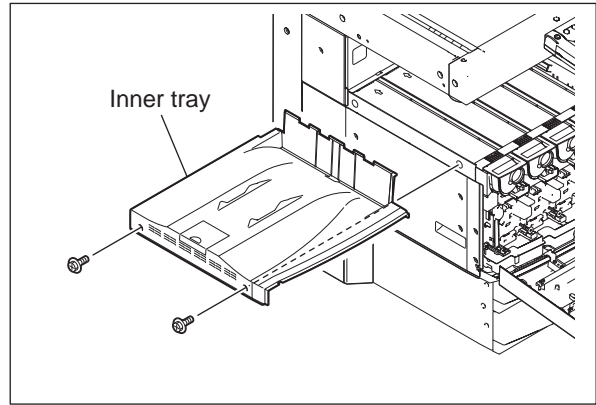


Fig. 4-560

(36) Remove 5 screws and take off the left rear cover.

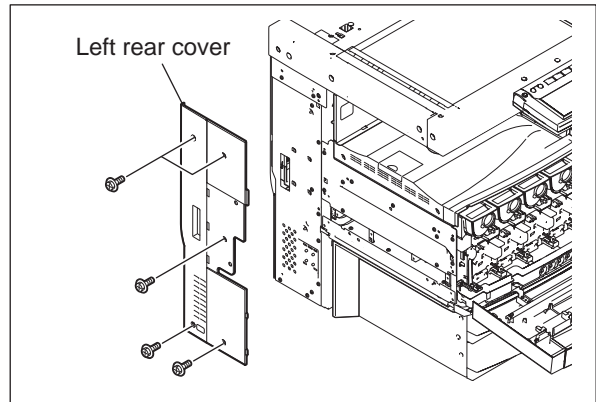


Fig. 4-561

(37) Remove 2 screws and take off the waste toner transport motor.

(38) Release 1 clamp and disconnect 1 connector.

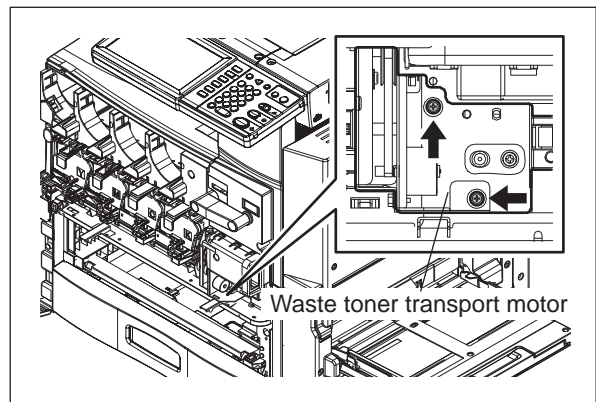


Fig. 4-562

(39) Disconnect 2 connectors.

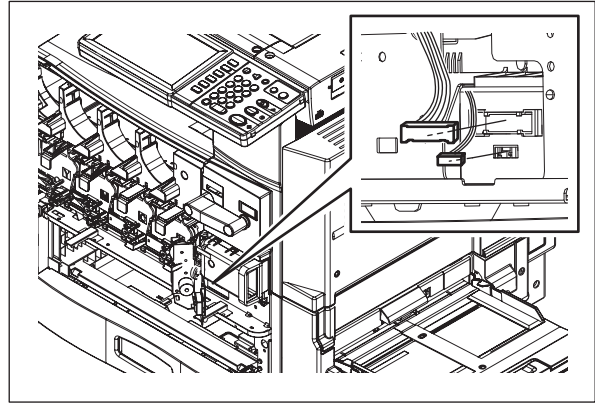


Fig. 4-563

(40) Remove 2 screws fixing the laser optical unit.

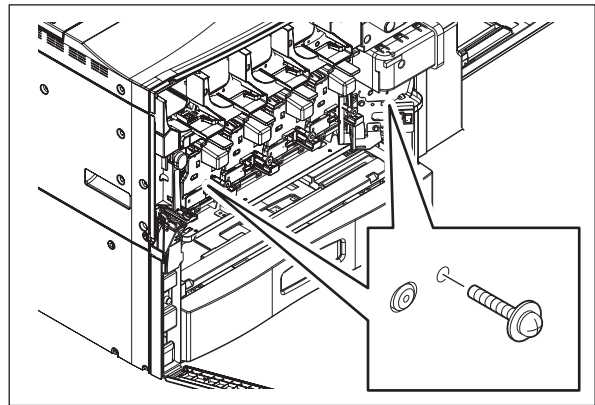


Fig. 4-564

(41) Disconnect 2 connectors and release 2 harness clamps.

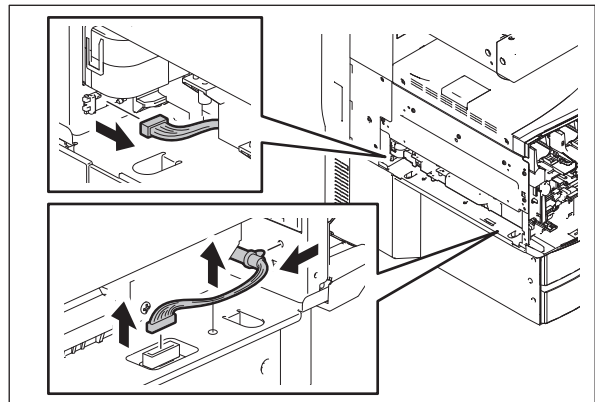


Fig. 4-565

(42) Pull out the laser optical unit.

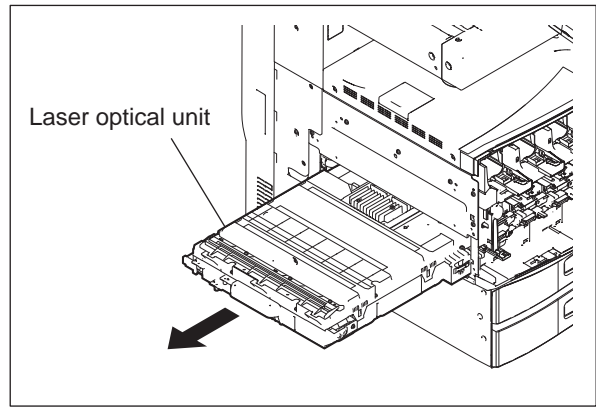


Fig. 4-566

Notes:

1. Do not leave fingerprints or stain on the slit glass of the laser optical unit.
2. Pay close attention not to make an impact or vibration on the laser optical unit because it is a precise apparatus.
3. Place the removed laser optical unit so as not to load on the polygonal motor.
4. Do not disassemble the laser optical unit in the field because it is precisely adjusted and very sensitive to dust and stain.
5. Hold the laser optical unit vertically. Do not press the top of the unit (the cover) where the slit glass and the polygonal motor are installed with your hands or other things.

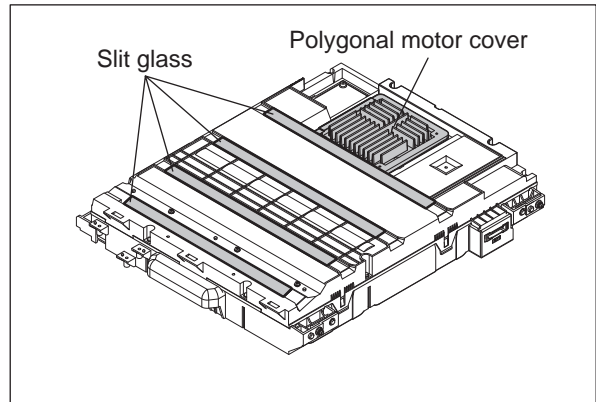


Fig. 4-567

(43) Remove 7 screws and take off the metal plate on the left side.

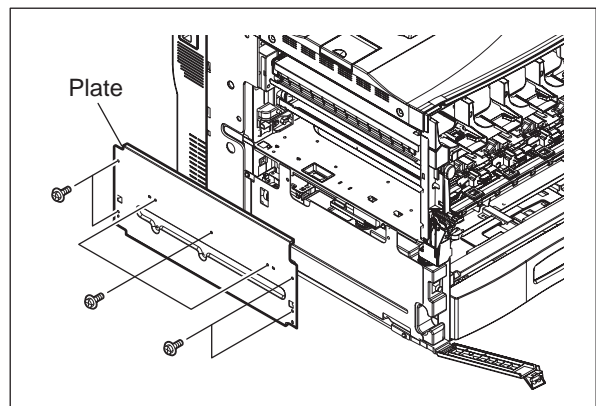


Fig. 4-568

(44) Remove 1 screw and take off the bracket.

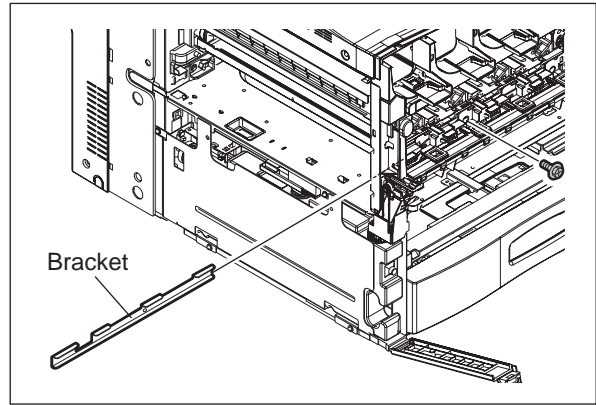


Fig. 4-569

(45) Remove 1 screw, slide the shutter unit to the front, and then pull it out to the exit side.

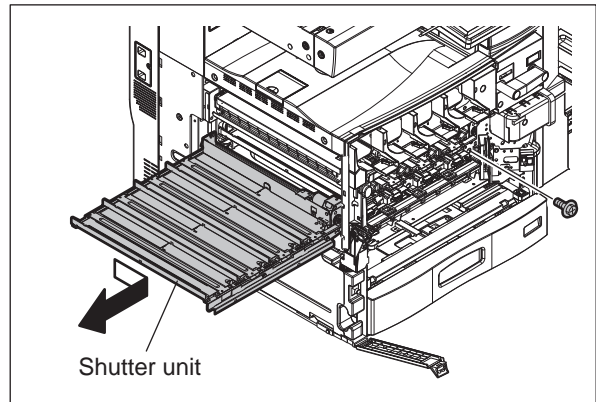


Fig. 4-570

(46) Remove 2 screws and take off the rear cover-1.

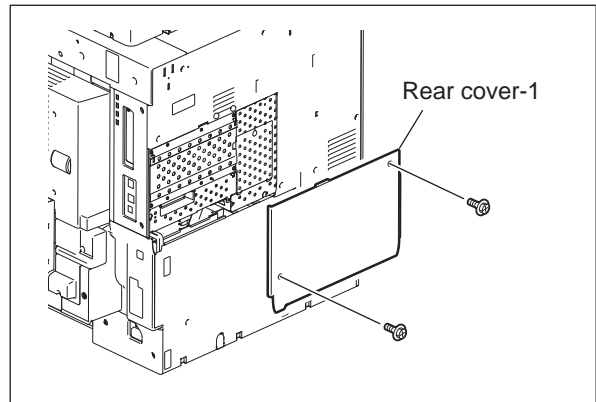


Fig. 4-571

- (47) Remove 8 screws and take off the rear cover-2.

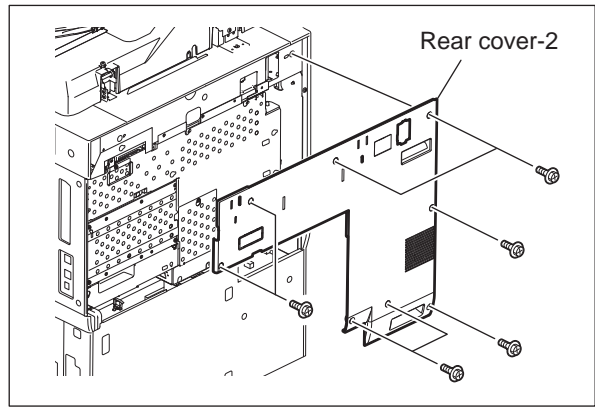


Fig. 4-572

- (48) Remove 1 screw of the board cover and then loosen 11 screws.

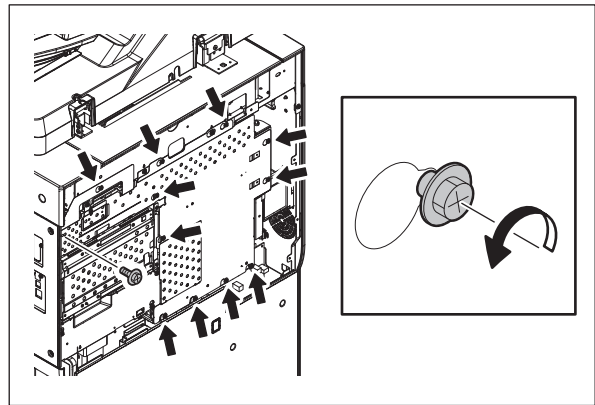


Fig. 4-573

- (49) Slide the board cover to take it off.

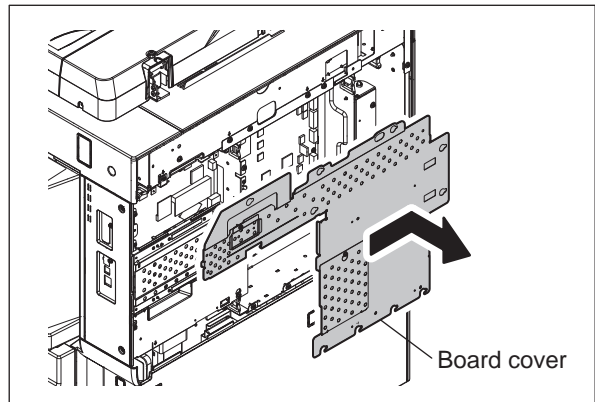


Fig. 4-574

(50) Remove 5 screws.

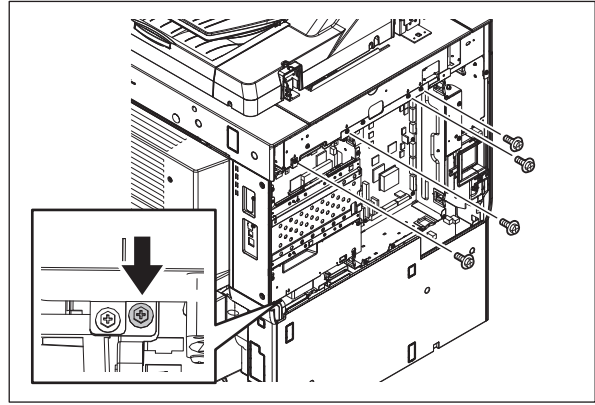


Fig. 4-575

- (51) Disconnect the USB terminal and 1 connector from the SYS board.
- (52) Disconnect the 1 connector from the IMG board.

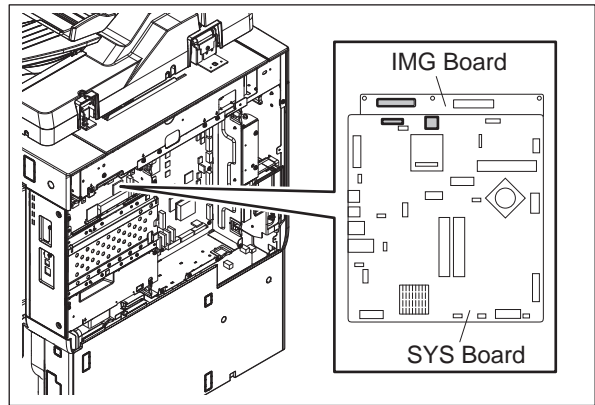


Fig. 4-576

- (53) Disconnect 2 connectors from the LGC board.

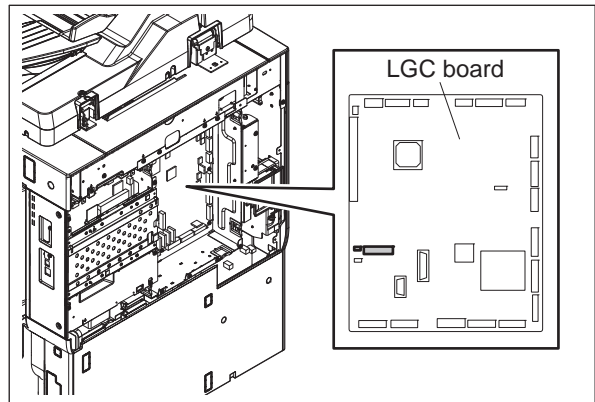


Fig. 4-577

(54) Release harnesses from 4 clamps.

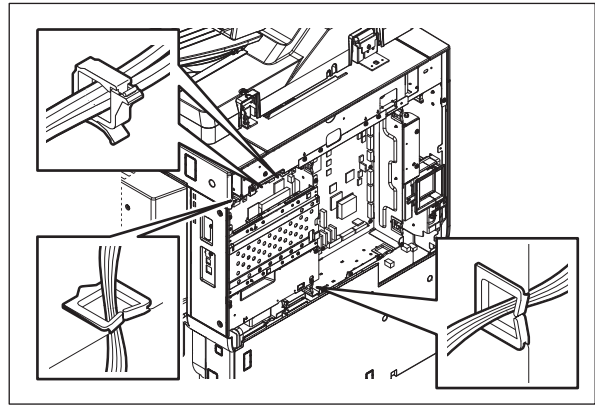


Fig. 4-578

(55) Open the board case.

Note:

Open the board case gently during maintenance work or similar.

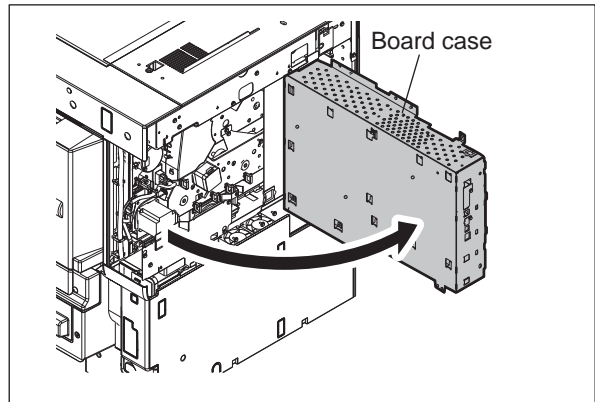


Fig. 4-579

(56) Install the Drum Damp Heater (Right) on the shutter unit with 2 screws.

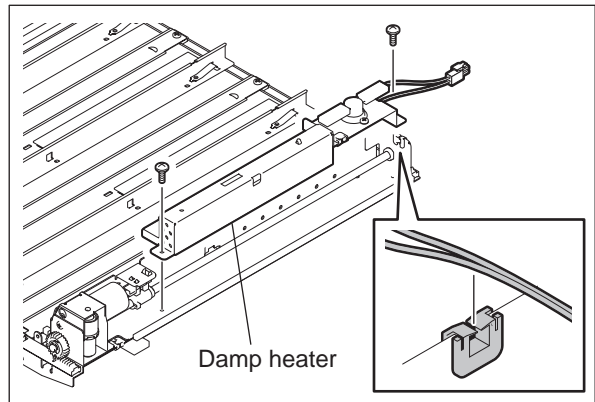


Fig. 4-580

- (57) Insert the shutter unit halfway, and then insert the connector of the Drum Damp Heater (Right) into the hole.

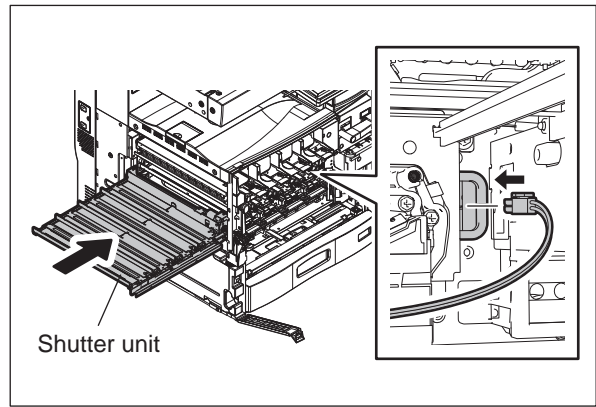


Fig. 4-581

- (58) Pull out the connector of the Drum Damp Heater (Right) from the rear side of the equipment.

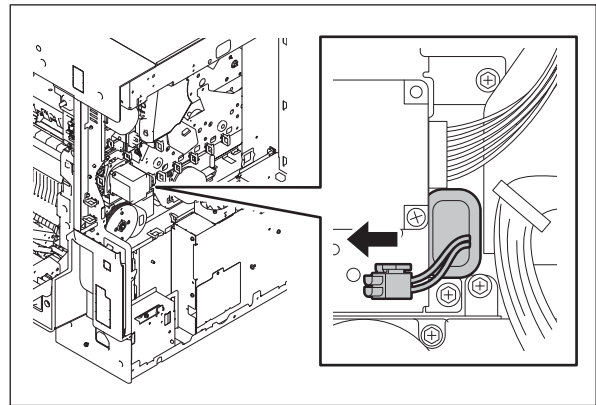


Fig. 4-582

- (59) Install the shutter unit with 1 screw.

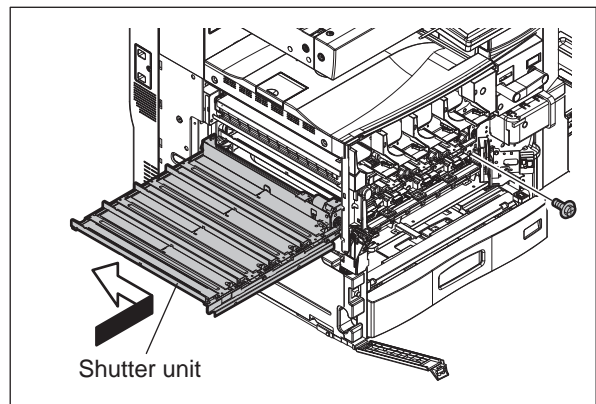


Fig. 4-583

(60) Install the bracket with 1 screw.

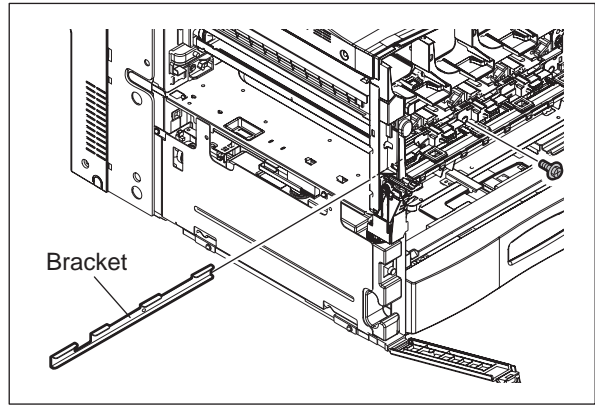


Fig. 4-584

(61) Connect the harness of the Drum Damp Heater (Right) to the connector on the rear side of the equipment. Then hold the harness with the clamps.

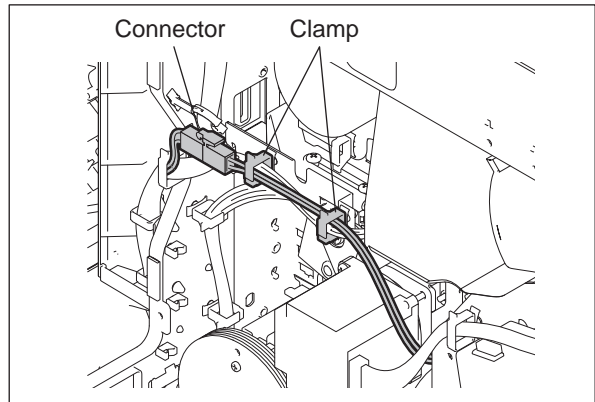


Fig. 4-585

(62) Close the board case.

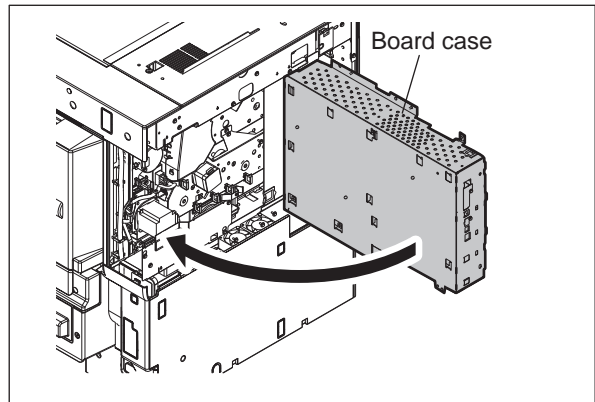


Fig. 4-586

(63) Install 4 clamps.

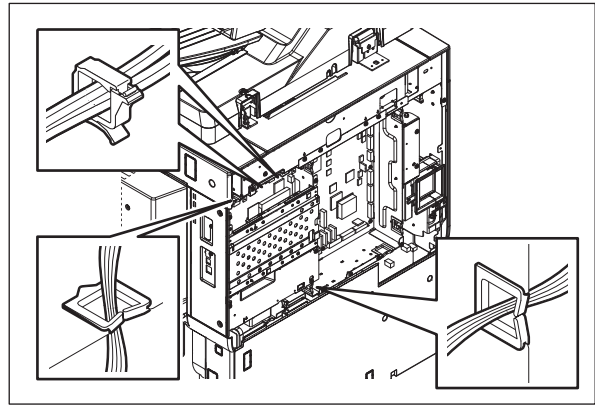


Fig. 4-587

(64) Connect 2 connectors of the LGC board.

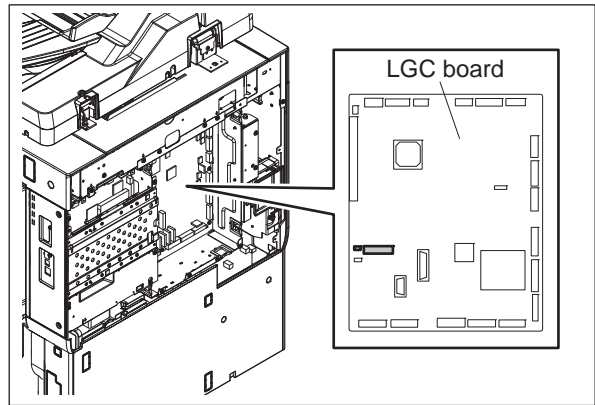


Fig. 4-588

(65) Connect the USB terminal and 1 connector of the SYS board.

(66) Connect 1 connector of the IMG board.

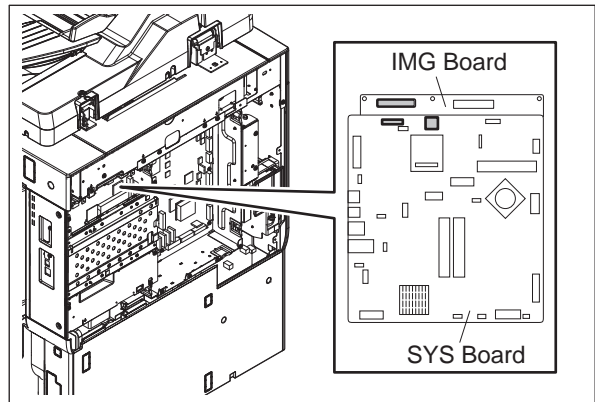


Fig. 4-589

(67) Fix the board case with 5 screws.

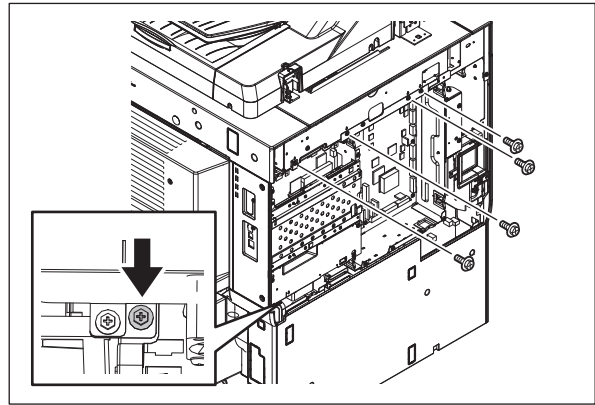


Fig. 4-590

(68) Slide the board cover to install it.

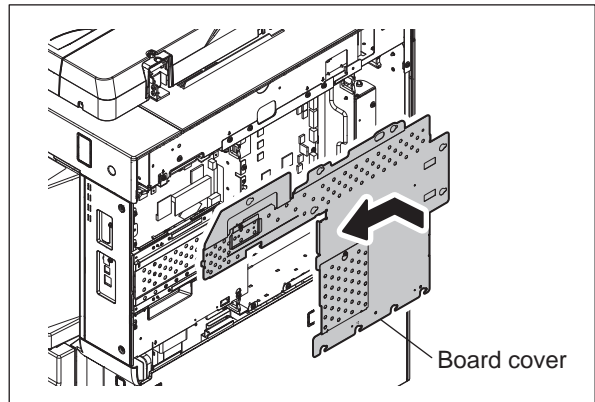


Fig. 4-591

(69) Install 1 screw and tighten 11 screws to fix the board cover.

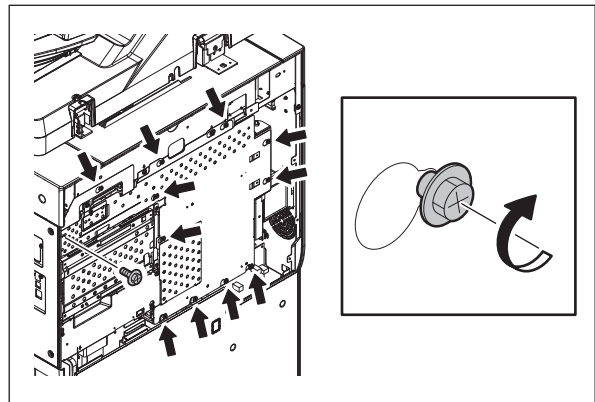


Fig. 4-592

(70) Install rear cover-2 with 8 screws.

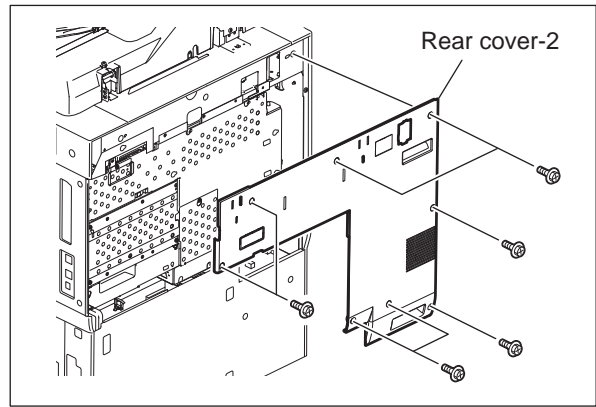


Fig. 4-593

(71) Install rear cover-1 with 2 screws.

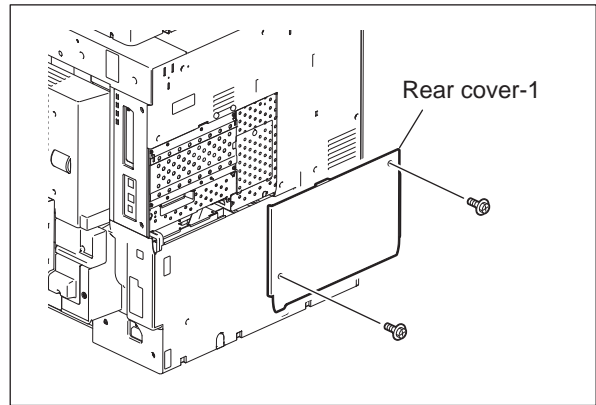


Fig. 4-594

(72) Install the laser optical unit.

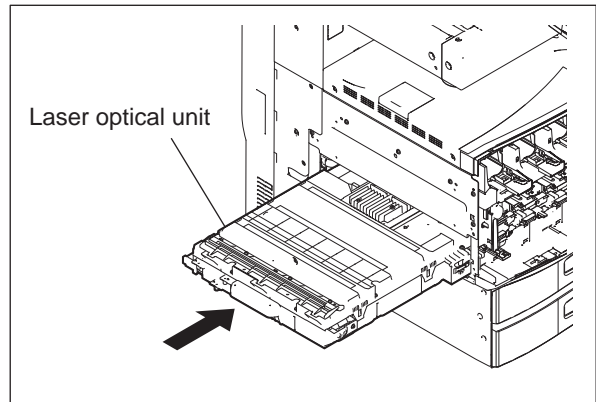


Fig. 4-595

Notes:

1. Do not leave fingerprints or stain on the slit glass of the laser optical unit.
2. Pay close attention not to make an impact or vibration on the laser optical unit because it is a precise apparatus.
3. Place the removed laser optical unit so as not to load on the polygonal motor.
4. Do not disassemble the laser optical unit in the field because it is precisely adjusted and very sensitive to dust and stain.
5. Hold the laser optical unit vertically. Do not press the top of the unit (the cover) where the slit glass and the polygonal motor are installed with your hands or other things.

(73) Install 2 connectors and 2 harness clamps.

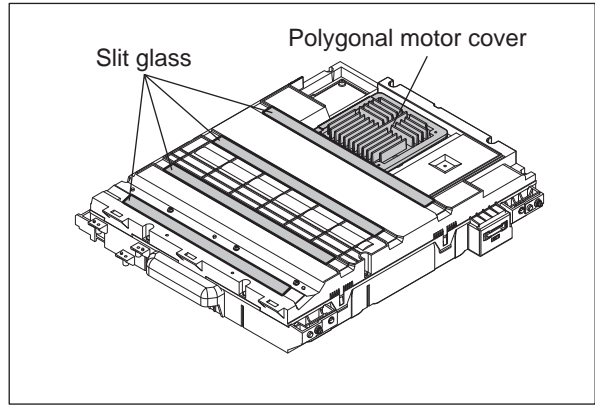


Fig. 4-596

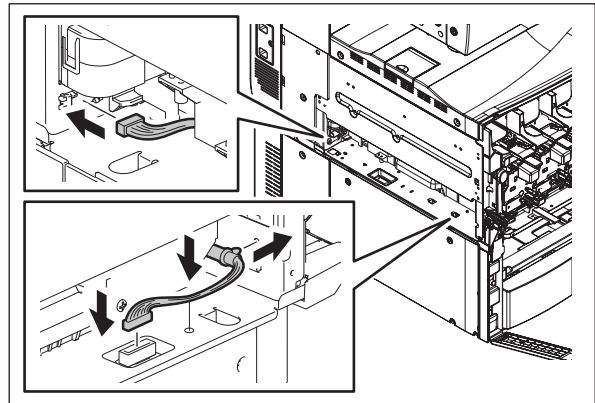


Fig. 4-597

(74) Fix the laser optical unit with 2 screws.

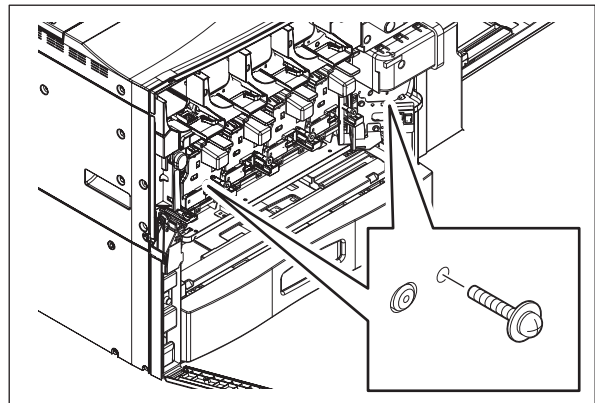


Fig. 4-598

- (75) Install the Drum Damp Heater (Left) on the left metal plate with 1 screw.

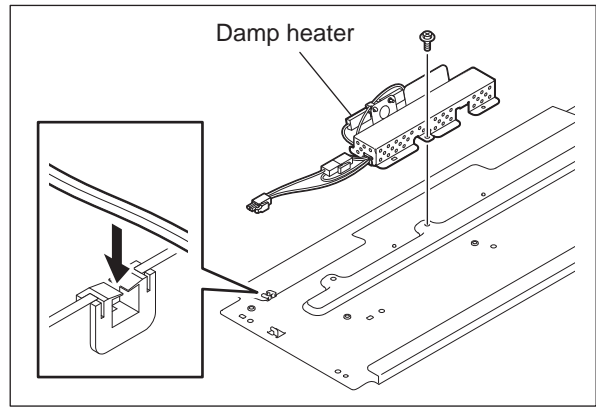


Fig. 4-599

- (76) Install the left metal plate on the equipment with 7 screws.

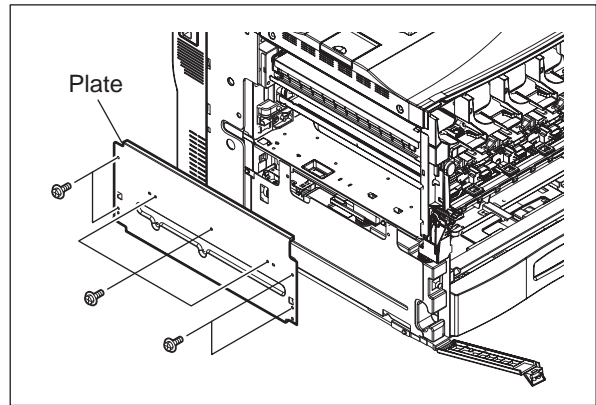


Fig. 4-600

- (77) Insert the connector of the Drum Damp Heater (Left) into the connector on the left-hand side of the equipment.

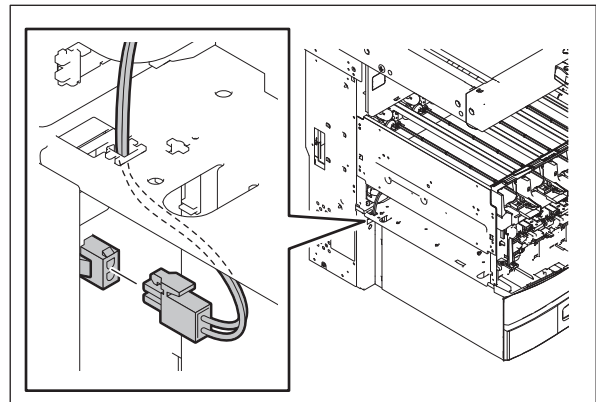


Fig. 4-601

(78) Connect 2 connectors.

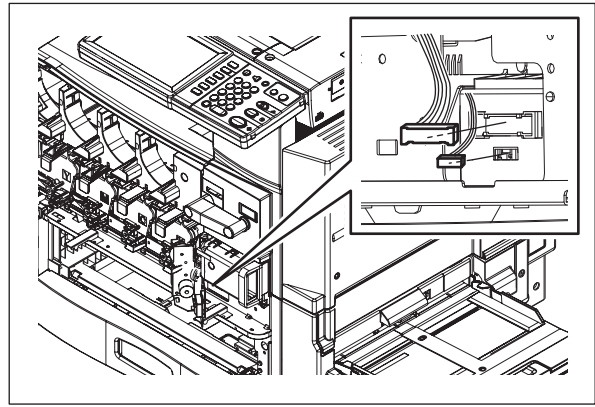


Fig. 4-602

(79) Connect 1 connector and install 1 clamp.

(80) Install the waste toner transport motor with 2 screws.

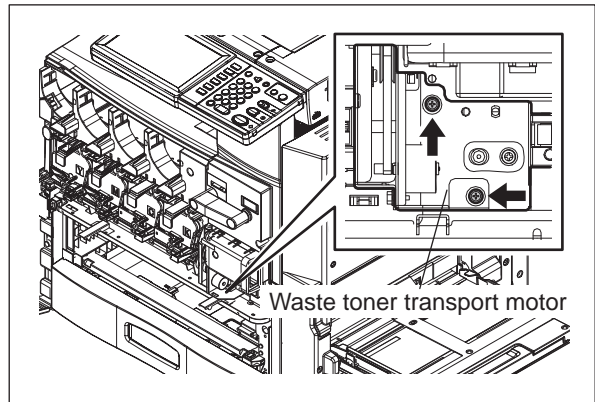


Fig. 4-603

(81) Install the left rear cover with 5 screws.

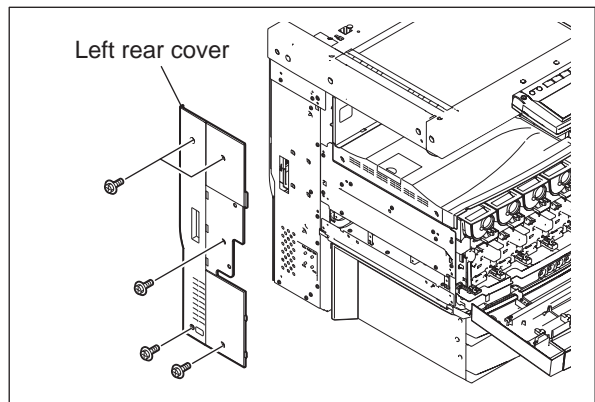


Fig. 4-604

(82) Install the inner tray with 2 screws.

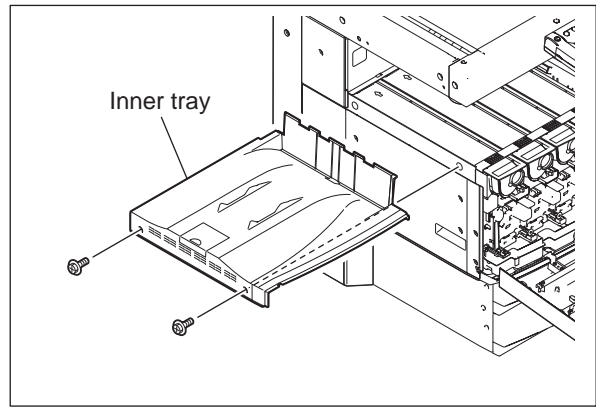


Fig. 4-605

(83) Install the left cover with 7 screws.

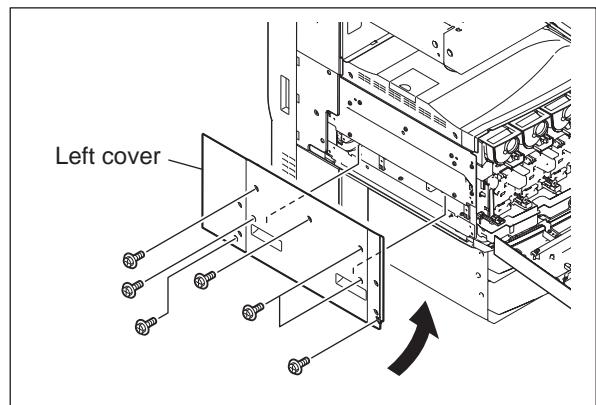


Fig. 4-606

(84) Install the ozone filter-1 with 1 screw.

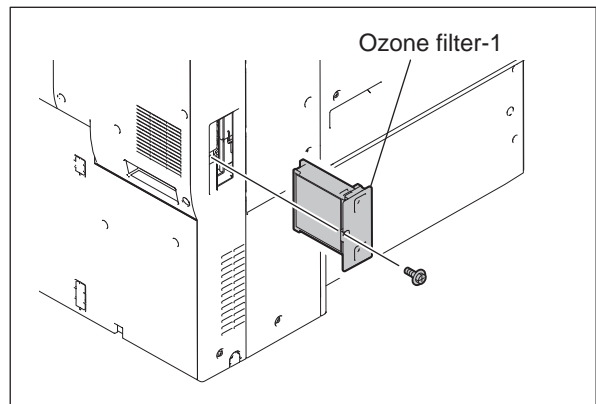


Fig. 4-607

(85) Install the inner cover with 2 screws.

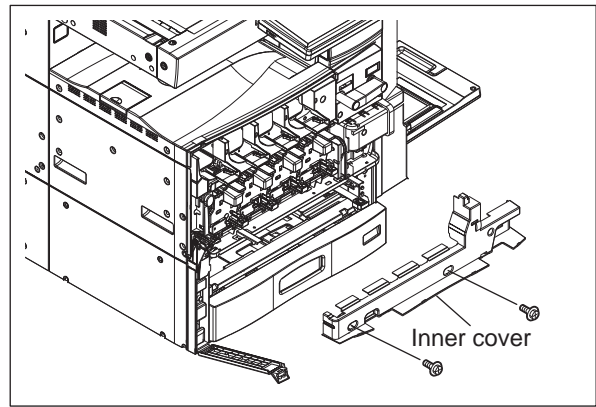


Fig. 4-608

(86) Install 4 ducts with the discharge LEDs (use 1 screw, 1 clamp and 1 relay connector for each duct).

Notes:

1. When installing the duct, hang the 1 hook of the duct on the hole of the frame.
2. When installing the duct, be sure to hold the harness between the duct and main frame in order not to have the duct lose contact with the main frame.
3. Since the actuator is installed on the duct for the discharge LED (ERS-K), be sure to install it in the correct position.

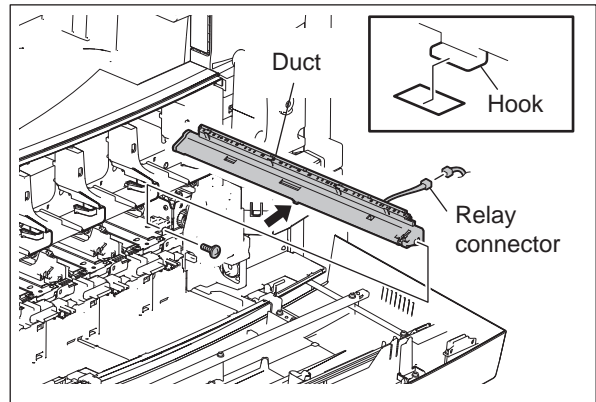


Fig. 4-609

(87) Turn the TBU cleaner pressure hook lever on the TBU to lock the TBU cleaner pressure hook.

Notes:

Follow the procedure below for the installation.

1. Rotate the TBU cleaner pressure hook lever on the transfer belt unit to lock the TBU cleaner pressure hook.
2. Check if the TBU release lever is at the release position (vertical position).
3. Check that the middle guide of the unit is opened.
4. Insert the transfer belt unit by sliding the unit along the rail.
5. Store the front handle, and then push the holder all the way in until it comes to a stop.
6. When the unit has been securely inserted, close the middle guide.

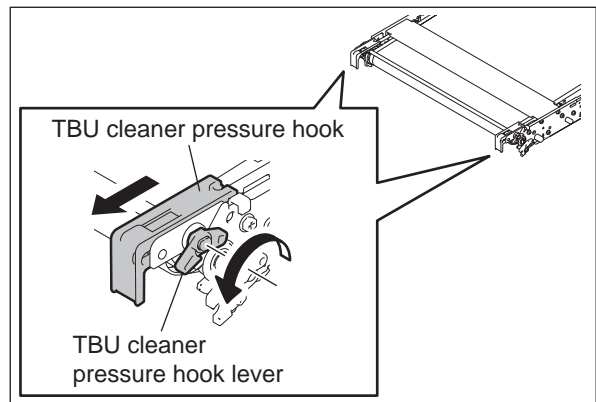


Fig. 4-610

Note:

Be careful not to deform the spring when removing/installing the transfer belt unit.

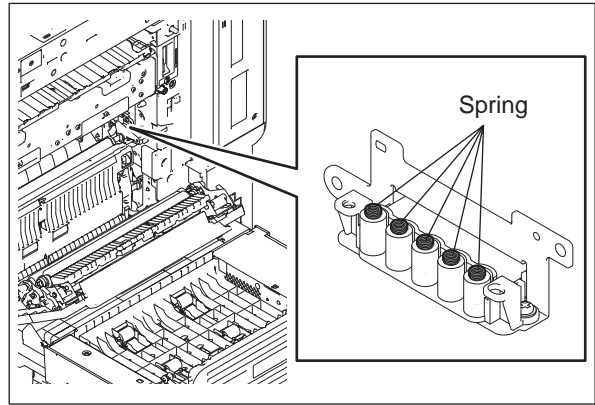


Fig. 4-611

- (88) Insert the transfer belt unit (TBU) along the rail and check that the front handle returns to the original position.

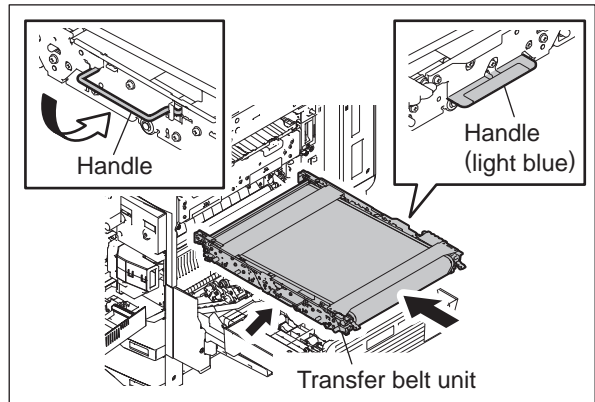


Fig. 4-612

- (89) Push the holder until the TBU contacts the end.

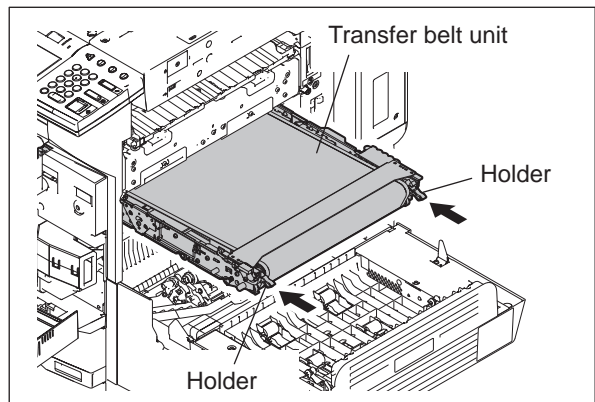


Fig. 4-613

(90) Close the middle guide, and then connect the connector.

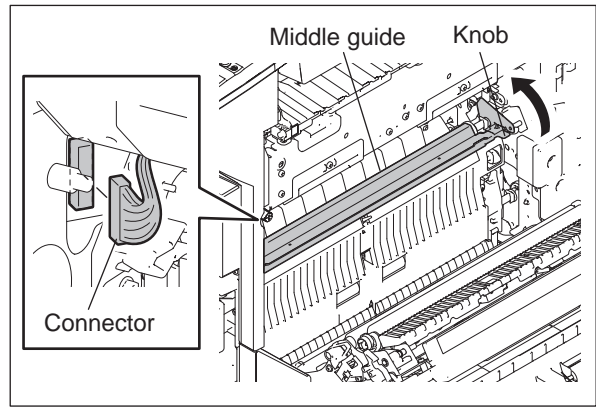


Fig. 4-614

(91) Turn the TBU lifting lever clockwise for 90 degrees.

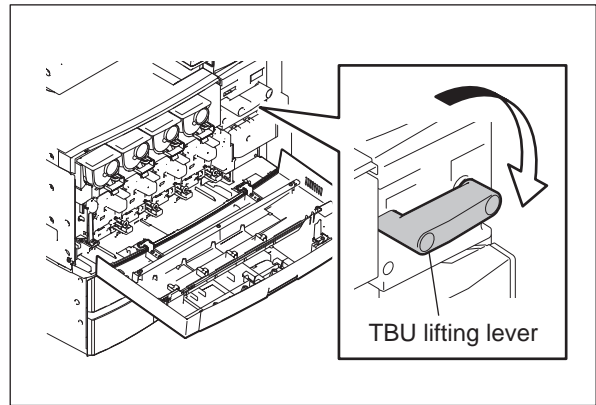


Fig. 4-615

Notes:

Follow the procedure below for the installation.

1. When installing, be sure to check if the TBU separation lever is at the fixed position (horizontal position) with the transfer belt installed.
2. Check if the TBU cleaner pressure hook is locked. If it is released, rotate the TBU cleaner pressure hook lever to lock it as shown in the figure, otherwise the transfer belt cleaning unit cannot be installed.

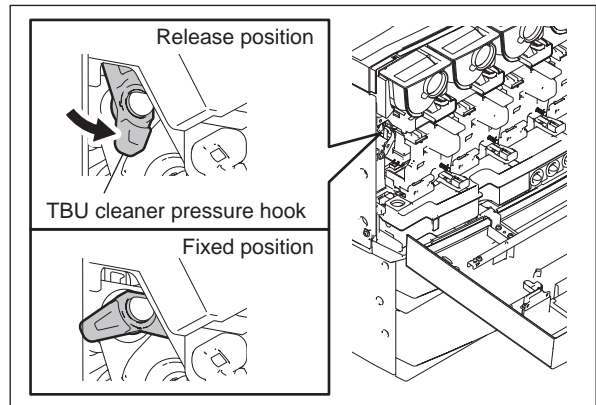


Fig. 4-616

3. Insert the A portion of the transfer belt cleaning unit beneath the stay (B) of the main frame.
4. Align the portion (C) of the transfer belt cleaning unit with the portion (D) of the main frame, then slide the transfer belt cleaning unit along the stay (B) of the main frame all the way in.
5. Rotate the lever E (sky blue) clockwise to lift it up until it clicks.

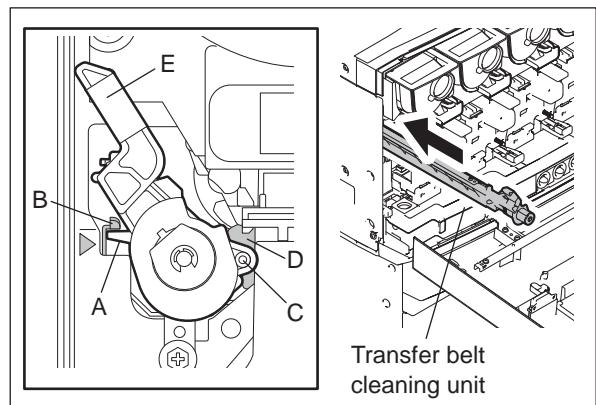


Fig. 4-617

(92) Install the transfer belt cleaning duct.

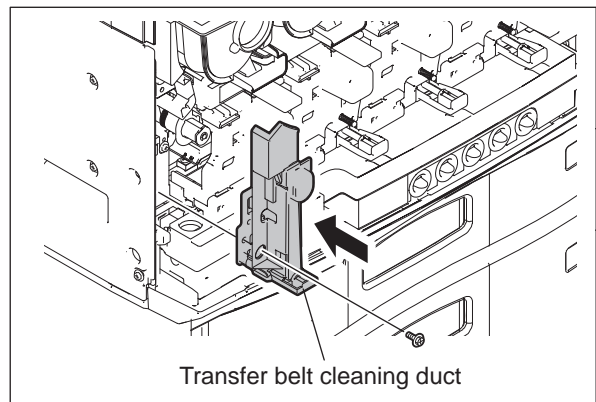


Fig. 4-618

- (93) Then turn the TBU lifting lever counterclockwise for 90 degrees.

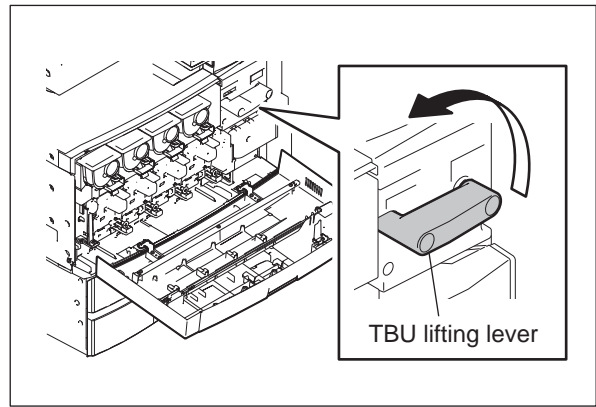


Fig. 4-619

- (94) Install the 4 process units (EPUs).

Note:

Hold the A part and B part of the process unit (EPU).

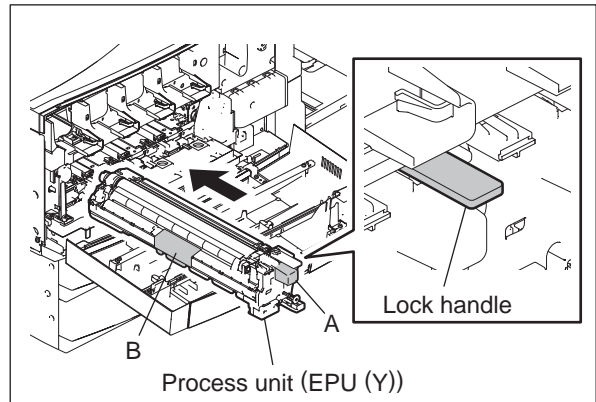


Fig. 4-620

Note:

When installing, wipe out toner on the drawer connector of the equipment because toner attached on the contacts of the connector will cause conduction blockage.

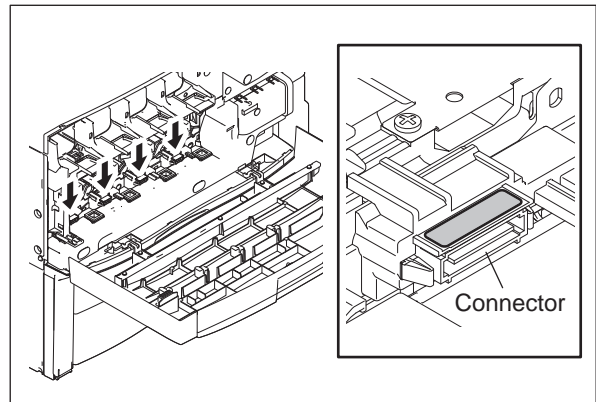


Fig. 4-621

(95) Install the toner cartridge (Y).

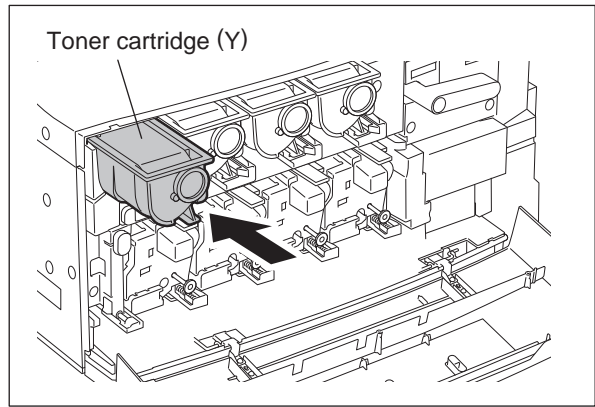


Fig. 4-622

(96) Close the 2nd transfer unit (TRU).

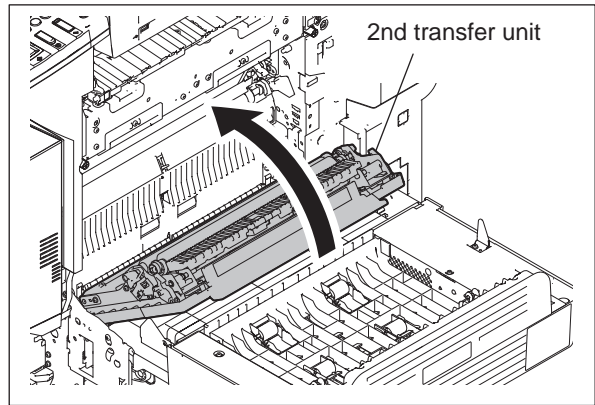


Fig. 4-623

(97) Reinstall the automatic duplexing unit (ADU) on the normal position.

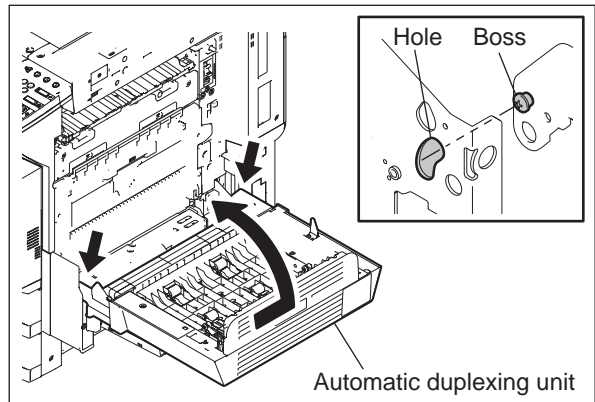


Fig. 4-624

Notes:

- When installing, match the front and rear hinge holes of the equipment and the right and left hinge bosses of the automatic duplexing unit (ADU).
- Be sure to check the following points after moving the ADU to its maintenance position
 - Check that the connector is not disconnected.
 - Check that duplex printing on A4 or LT sized paper is performed properly.

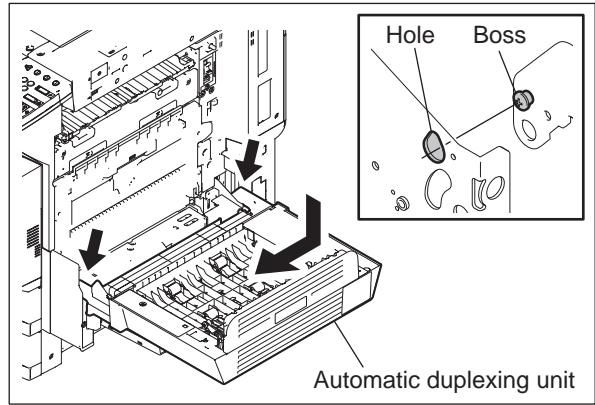


Fig. 4-625

(98) Install 1 screw and close the automatic duplexing unit (ADU).

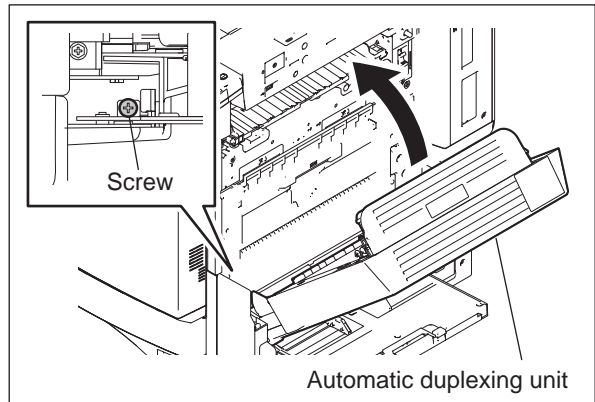


Fig. 4-626

(99) Turn the TBU lifting lever clockwise for 90 degrees and fix it with 1 screw.

(100) Close the front cover.

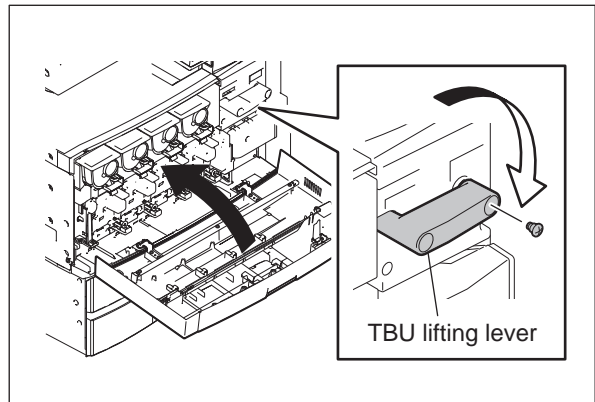


Fig. 4-627

[C] Check the followings after the installation of the Damp Heater

1. Image quality
2. Abnormal heating
3. Any screws not installed

5. SELF-DIAGNOSTIC MODE

5.1 Overview

[A] Starting each mode

To enter the desired mode, turn the power ON while pressing two digital keys designated to each mode (e.g. [0] and [5]) simultaneously. Hold the two keys until the [COPY] [e-FILING] [SCAN] [PRINT] [FAX] buttons are lit.

On the authentication screen displayed after starting up each mode, enter the service password, and then press [OK]. The password is not set by default.

Refer to Chapter 15 for the codes in Test mode (03), Test print mode (04), Adjustment mode (05), and Setting mode (08).

[B] Exiting from each mode

Shut down the equipment. When the power should be turned OFF, be sure to shut down the equipment by pressing the [ON/OFF] button for a few seconds.

[C] List of modes

Mode	For start	Contents	For exit	Display
Control panel check mode	[0] + [1] + [POWER]	All LEDs on the control panel are lit, and all the LCD pixels blink.	[POWER] OFF/ON	-
Test mode	[0] + [3] + [POWER]	Checks the status of input/output signals.	[POWER] OFF/ON	100% C TEST MODE
Test print mode	[0] + [4] + [POWER]	Outputs the test patterns.	[POWER] OFF/ON	100% P A4 TEST PRINT
Adjustment mode	[0] + [5] + [POWER]	Adjusts various items.	[POWER] OFF/ON	100% A A4 TEST MODE
Setting mode	[0] + [8] + [POWER]	Sets various items.	[POWER] OFF/ON	100% D TEST MODE
Assist mode	[3]+[C]+ [POWER]	Clears error flags or SRAM, or safely deletes data in the HDD or SRAM to support the replacement of the SYS board, SRAM or HDD.	[POWER] OFF/ON	-
HDD assist mode	[4]+[CLEAR]+ [POWER]	Assists the ADI-HDD by checking the type of the mounted HDD, reverting the HDD to a factory default or removing keys.	[POWER] OFF/ON	-
File system recovery mode	[5] + [C] + [POWER]	Checks, recovers or initializes the file system (HDD).	[POWER] OFF/ON	-
SRAM clear mode	[6]+[CLEAR]+ [POWER]	Recovers the equipment from particular errors such as F800 or F900.	[POWER] OFF/ON	-
List print mode	[9] + [START] + [POWER]	Prints various lists or outputs them in a CSV format.	[POWER] OFF/ON	100% L A4 LIST PRINT
PM support mode	[6] + [START] + [POWER]	Clears each counter.	[POWER] OFF/ON	100% 2 TEST MODE
Firmware update mode	[4] + [9] + [POWER]	Performs firmware update with USB media.	[POWER] OFF/ON	-
	[8] + [9] + [POWER]	Performs firmware update with download jig.	[POWER] OFF/ON	-
Password reset mode	[4] + [8] + [9] + [POWER]	Resets the administrator password and service password.	[POWER] OFF/ON	-

Note:

Do not enter any of the modes shown below since they are provided only for production. If you do so, the equipment may not be restarted.

- [2]+[CLEAR]+[POWER]
- [7]+[CLEAR]+[POWER]
- [8]+[CLEAR]+[POWER]
- [9]+[CLEAR]+[POWER]

[D] State transition diagram of self-diagnosis modes

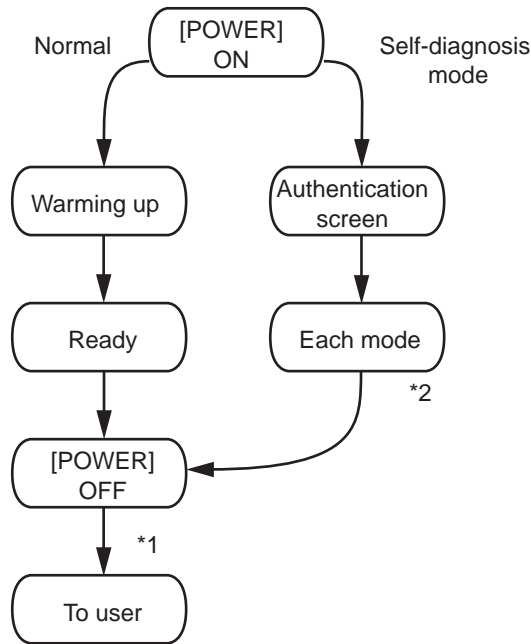


Fig.5-1

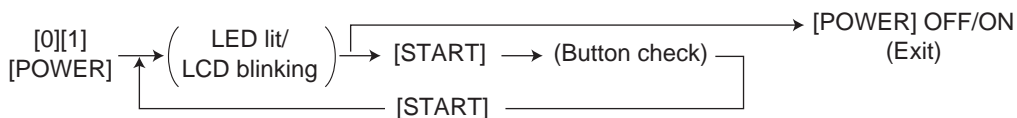
*1 If you have used a self-diagnostic mode, turn the power OFF before the customer starts using the equipment

*2 Mode shown in the table "[C] List of modes"

[E] About each mode

- Control panel check mode (01)

Operation procedure






Notes:

- A mode can be cancelled by [POWER] OFF/ON when the LED is lit and the LCD is blinking.
- Button Check
 - Buttons with LED: Press to turn OFF the LED.
 - Buttons without LED: Press to display the message on the control panel.
 - Button on touch panel: Press to display the initial screen displayed at power-ON. Press [execution] on the touch panel and then the [CLEAR] button on the control panel. The screen then returns to the Button Check menu.

- Test mode (03)


Refer to [P. 5-8](#) "5.3 Input check (Test mode 03)" and [P. 5-9](#) "5.4 Output check (test mode 03)".

- Test print mode (04)
Refer to  P. 5-10 "5.5 Test print mode (test mode 04)".
- Adjustment mode (05)
Refer to  P. 5-11 "5.6 Operation Procedure in Adjustment Mode (05)",  P. 5-14 "5.7 Test print pattern in Adjustment Mode (05)", and Chapter 15 - "Adjustment Mode (05) Codes".

Notes:

When the power should be turned OFF, be sure to shut down the equipment by pressing the [ON/OFF] button for a few seconds.






Remarks:

- In "RAM", the SRAM of the board in which the data of each code is stored is indicated. "M" stands for the LGC board and "SYS" stands for the SYS board.
- Setting mode (08)
Refer to  P. 5-17 "5.8 Operation Procedure in Setting Mode (08)" and Chapter 15 - "Setting Mode (08) Codes".

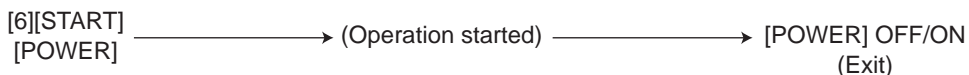
Notes:

When the power should be turned OFF, be sure to shut down the equipment by pressing the [ON/OFF] button for a few seconds.

Remarks:

- In "RAM", the SRAM of the board in which the data of each code is stored is indicated. "M" stands for the LGC board, "SYS", "NIC" and "UTY" stands for the SYS board.
- Assist mode (3C)
Refer to  P. 5-19 "5.9 Assist Mode (3C)".
- HDD assist mode (4C)
Refer to  P. 5-22 "5.10 HDD Assist Mode (4C)".
- File system recovery mode (5C)
Refer to  P. 5-26 "5.11 File System Recovery Mode (5C)".
- SRAM clear mode (6C)
Refer to  P. 5-31 "5.12 SRAM Clear Mode (6C)".
- List print mode (9S)
Refer to  P. 5-33 "5.13 List print mode (9S)".
- PM support mode (6S)

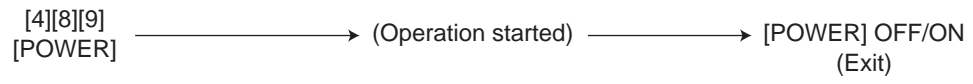
Operation procedure



- Firmware update mode (49/89)
Refer to "11.FIRMWARE UPDATING".
- Password reset mode (489)

This mode resets the administrator password and service password. The user data is erased when resetting the passwords.

Operation procedure



5.2 Service UI

5.2.1 Overview

The following self-diagnostic modes can be used with Service UI on the touch panel of the control panel.

- 04 TEST PRINT MODE
- 05 ADJUSTMENT MODE
- 08 SETTING MODE
- 6S PM SUPPORT MODE
- 9S LIST PRINT MODE
- FAX LIST PRINT MODE
- CHART PRINT MODE

Notes:

Not all codes of the self-diagnostic mode can be used with Service UI. Refer to Chapter 15 for the codes available with Service UI.

5.2.2 Login procedure

[1] In the normal mode

- (1) Turn the power ON.
- (2) Press the [USER FUNCTIONS] button.
- (3) With the [USER FUNCTIONS] menu displayed, enter the Service Mode password provided during product training.

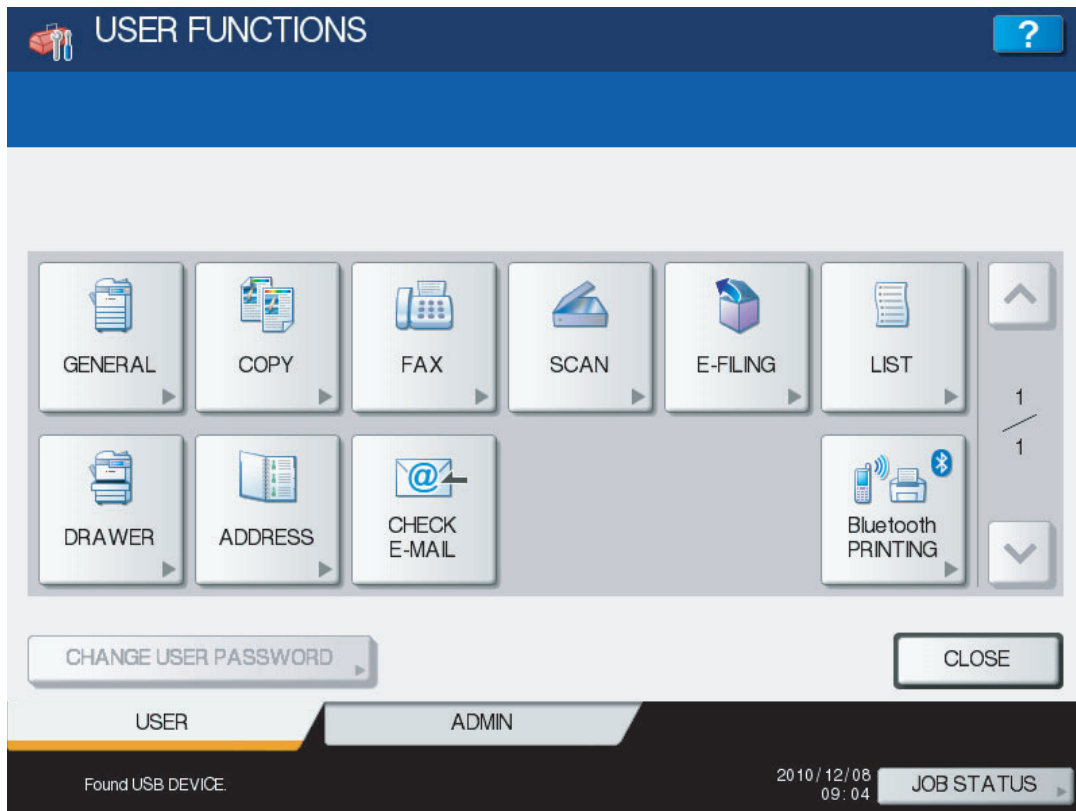


Fig.5-2

- (4) Enter the user name and password on the SERVICE TECHNICIAN PASSWORD screen, then press [OK]. They are set by default as follows:

User Name	Service
Password	None

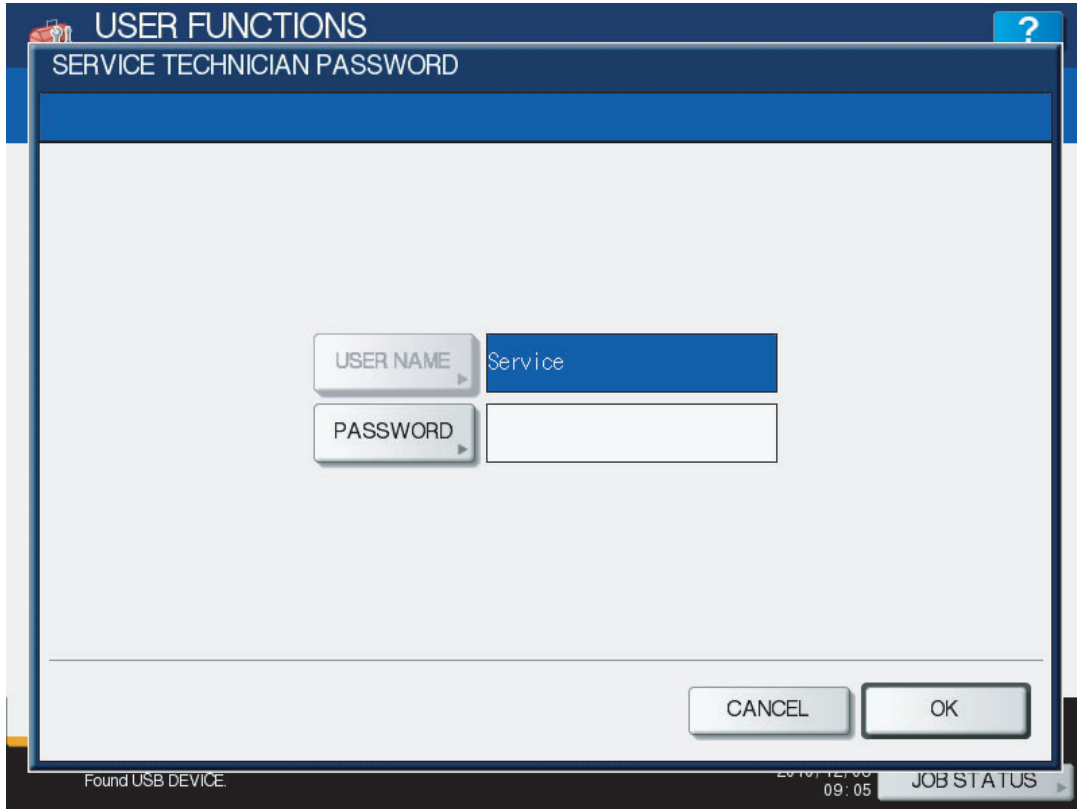


Fig.5-3

The SERVICE MODE screen is displayed.

[2] In the security mode

If the security mode (the value of 08-8911 is "3") is set, log into Service UI following the steps below.

- (1) Turn the power ON.
- (2) Enter the user name and password on the USER AUTHENTICATION screen. The password needs to be changed to log in for the first time.

Notes:

In case the password is forgotten, ask the administrator to reset the service password. In case both the service password and administrator password are forgotten, the passwords can be reset in the password reset mode. Note that the user data are deleted at that time.

- (3) Press the [USER FUNCTIONS] button.
- (4) Enter the password for Service UI on the USER FUNCTIONS screen. The SERVICE MODE screen is displayed.

5.2.3 [SERVICE MODE] Screen

After selecting the mode and pressing the [NEXT] button, the screen is switched to the selected mode.

- When the 05/08 mode is selected
The codes are displayed in one of the levels from the first to fifth.

You can proceed to the next level by selecting the item and pressing the [NEXT] button until the code appears up to the fifth level. Then if you select the code and press the [NEXT] button, the screen is switched to the adjustment mode or setting mode.

If you press the [CLASSIC] button on the screen in the first level, the screen is switched to the adjustment mode or setting mode, so that you can enter the code number.

- When the modes other than 05/08 mode are selected
The screen is switched to the selected mode.

5.2.4 Setting/Changing password

- (1) Press the [SETTINGS] button on the SERVICE MODE screen to display the SETTINGS screen.

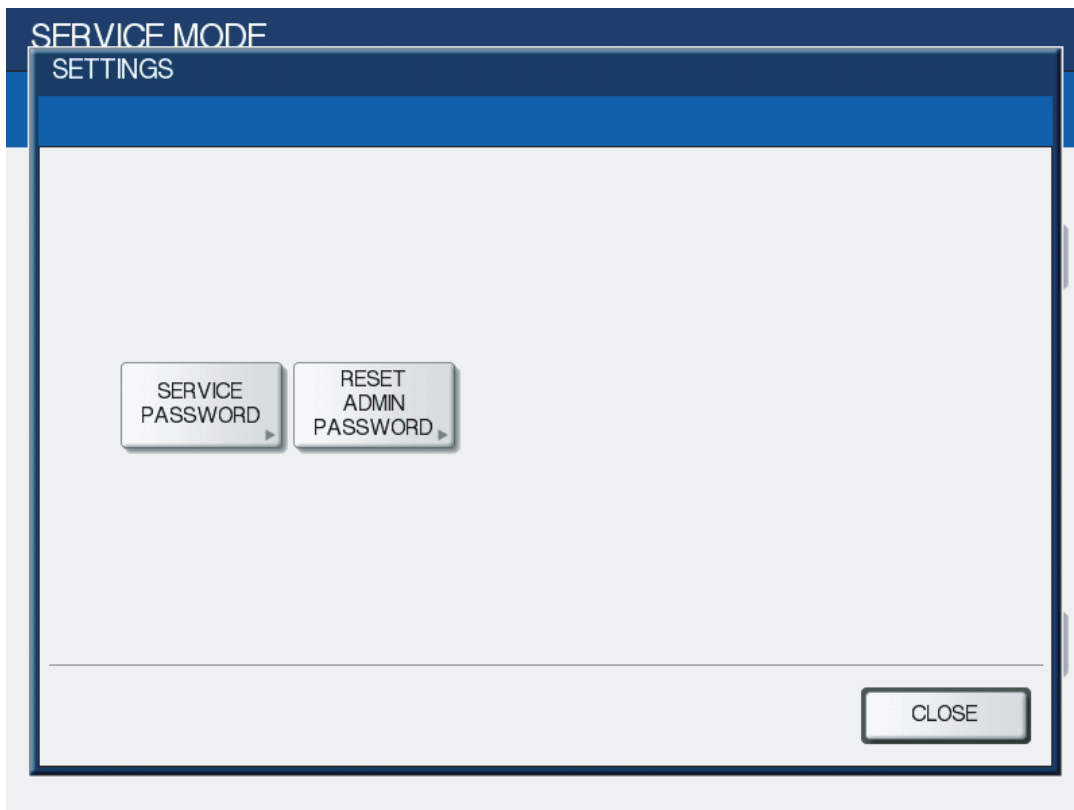


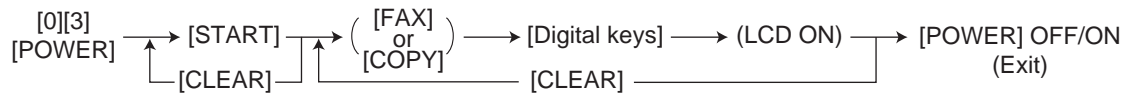
Fig.5-4

- (2) Press the [SERVICE PASSWORD] button to change the service password, or [RESET ADMIN PASSWORD] to reset the administrator password.

5.3 Input check (Test mode 03)

The status of each input signal can be checked by pressing the [FAX] button, [COPY] button and the digital keys in the test mode (03).

<Operation procedure>



Notes:

- Initialization is performed before the equipment enters the test mode.
- The PRINT DATA lamp blinks when the input check is running.

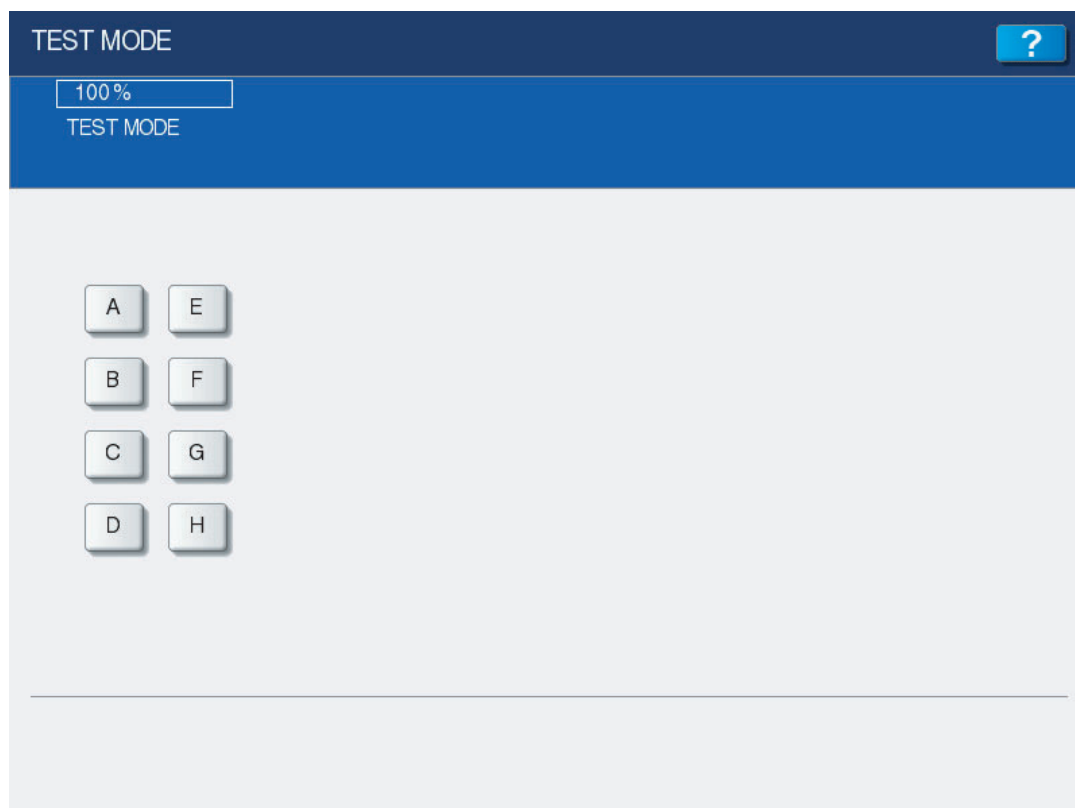


Fig.5-5 Example of display during input check

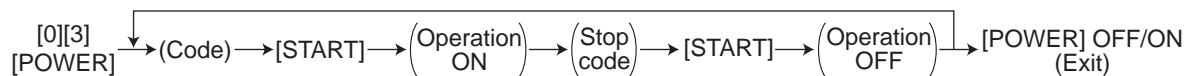
Refer to Chapter 15 in this manual for the items to be checked and the condition of the equipment when the buttons [A] to [H] are highlighted.

5.4 Output check (test mode 03)

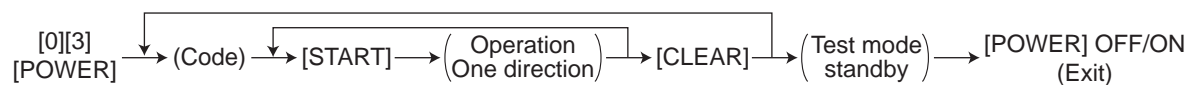
Status of the output signals can be checked in the test mode 03.

<Operation procedure>

Procedure 1



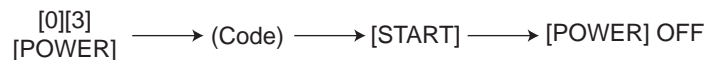
Procedure 2



Procedure 3



Procedure 4



Refer to Chapter 15 in this manual for the codes available in the test mode 03.

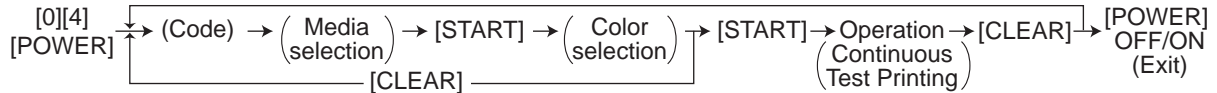
5.5 Test print mode (test mode 04)

The embedded test pattern can be printed out in the test print mode (04).

<Procedure 1>



<Procedure 2>

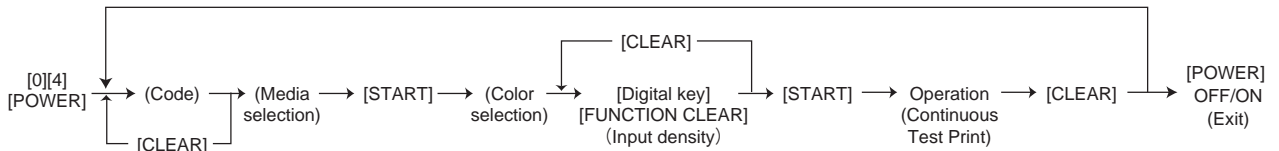


Remarks:

In the (Color selection) of <Procedure 2> and <Procedure 5>, the printing method is different between [K(1)] and [K(4)] as follows.

- [K(1)]: Printing by bringing one K color developer unit into contact with the transfer belt
 - [K(4)]: The developer units of four (YMCK) colors are brought into contact with the transfer belt, but the test pattern is printed in K color only.
- * The number in parentheses indicates the contact of the developer unit and the transfer belt.

<Procedure 5>



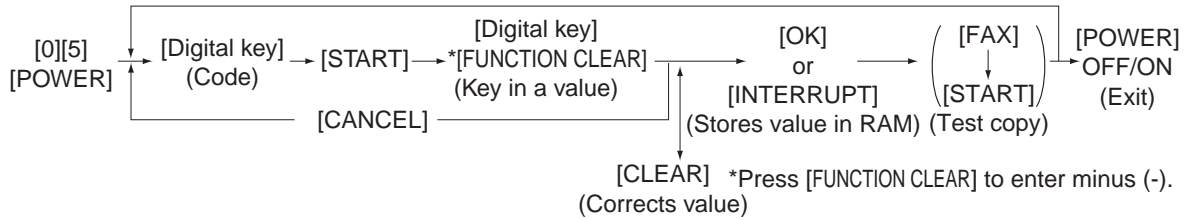
Notes:

- When an error occurs, it is indicated on the panel, but the recovery operation is not performed. Turn OFF the power and then back ON to clear the error.
- During test printing, the [CLEAR] button is disabled when "Wait adding toner" is displayed.

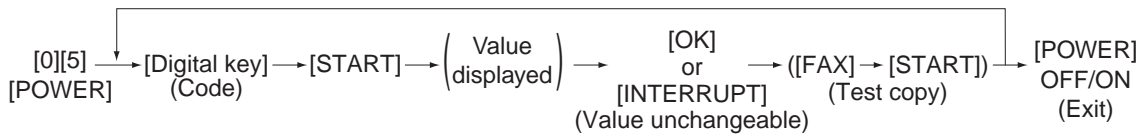
Refer to Chapter 15 in this manual for the codes available in the test print mode.

5.6 Operation Procedure in Adjustment Mode (05)

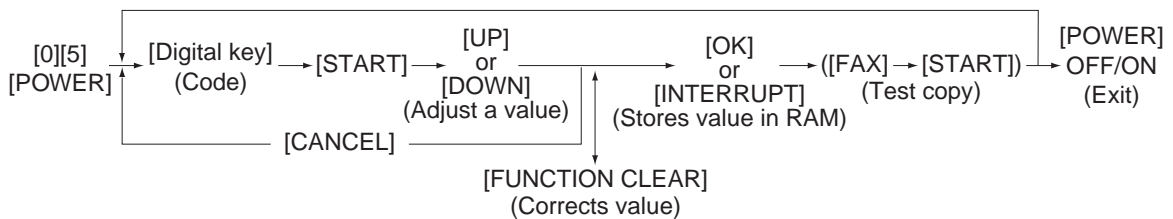
Procedure 1



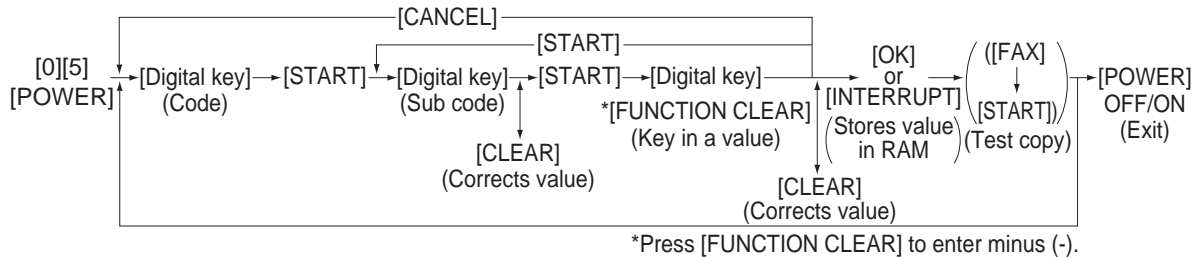
Procedure 2



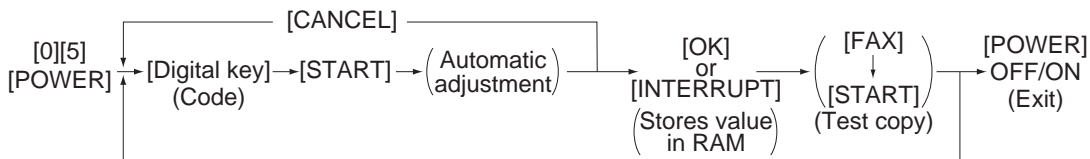
Procedure 3



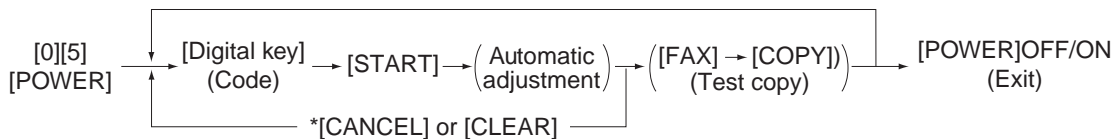
Procedure 4



Procedure 5



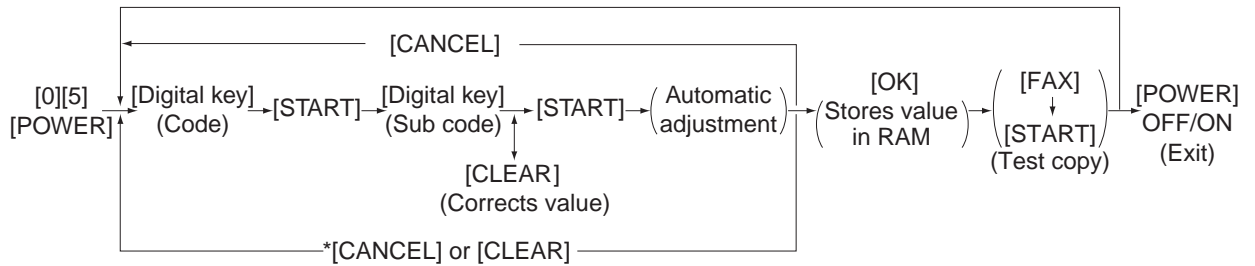
Procedure 6



* When the automatic adjustment ends abnormally, an error message is displayed.

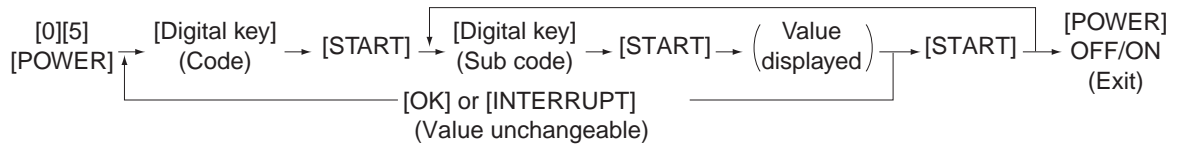
* Return to standby screen by pressing the [CANCEL] or [CLEAR] button.

Procedure 7

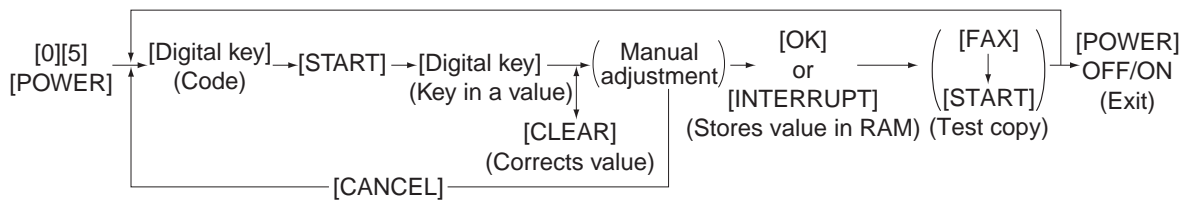


- * When the automatic adjustment ends abnormally, an error message is displayed.
- * Return to standby screen by pressing the [CANCEL] or [CLEAR] button.

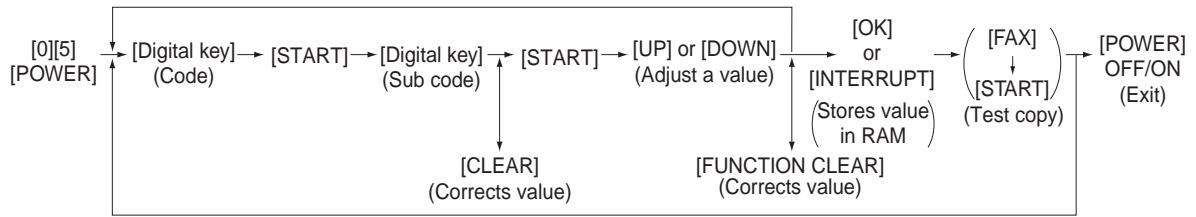
Procedure 10



Procedure 12



Procedure 14



Notes:

The fuser roller temperature control at the adjustment mode is different from that at the normal state. Therefore, the problem of fusing efficiency may be occurred in the test copy at the adjustment mode. In that case, turn ON the power normally, leave the equipment for approx. 3 minutes after it has become ready state and then start up the adjustment mode again.

5.7 Test print pattern in Adjustment Mode (05)

Operation:

One test print is printed out when the [FAX] button is pressed after the code is keyed in at Standby Screen.

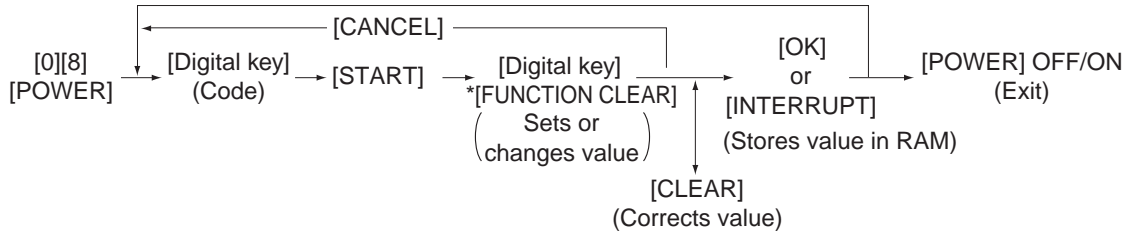
Code	Types of test pattern	Remarks
1	Grid pattern (Black)	For printer related adjustment
3	Grid pattern (Black/Duplex printing)	Refer to 6.1.8Image dimensional adjustment at the printing section
4	Copier gamma adjustment pattern (Color & black integrated / All media types)	Refer to 6.2.1Automatic gamma adjustment
5	Copier gamma adjustment pattern (Color / All media types)	Refer to 6.2.1Automatic gamma adjustment
6	Copier gamma confirmation pattern (Black / All media types)	Refer to 6.2.1Automatic gamma adjustment
7	Copier gamma confirmation pattern (Color / All media types)	Refer to 6.2.1Automatic gamma adjustment
8	Grid pattern (Color)	
10	Copier gamma adjustment pattern (Black / All media types)	Refer to 6.2.1Automatic gamma adjustment
12	Secondary scanning direction 33 gradation steps (Y)	For checking the image of printer section
13	Secondary scanning direction 33 gradation steps (M)	For checking the image of printer section
14	Secondary scanning direction 33 gradation steps (C)	For checking the image of printer section
15	Secondary scanning direction 33 gradation steps (K)	For checking the image of printer section
55	Grid pattern (Full Color / Thick paper 2)	Refer to 6.1.7Paper alignment at the registration roller
56	Grid pattern (Full Color / Thick paper 3)	Refer to 6.1.7Paper alignment at the registration roller
57	Grid pattern (Full Color / OHP)	Refer to 6.1.7Paper alignment at the registration roller
58	Grid pattern (Black / Thick paper 2)	Refer to 6.1.7Paper alignment at the registration roller
59	Grid pattern (Black / Thick paper 3)	Refer to 6.1.7Paper alignment at the registration roller
60	Grid pattern (Black / OHP)	Refer to 6.1.7Paper alignment at the registration roller
63	For color deviation correction (Full Color)	Only for A3/LD size
70	Printer gamma correction table creation pattern (Plain paper)	Refer to 6.3.1Automatic gamma adjustment
71	Printer gamma correction table confirmation pattern (Plain paper)	Refer to 6.3.1Automatic gamma adjustment
74	Printer gamma correction table creation pattern	Refer to 6.3.1Automatic gamma adjustment

Code	Types of test pattern	Remarks
75	Printer gamma correction table confirmation pattern (Recycled paper)	Refer to 6.3.1 Automatic gamma adjustment
76	Printer gamma correction table creation pattern (Thick paper 1)	Refer to 6.3.1 Automatic gamma adjustment
77	Printer gamma correction table confirmation pattern (Thick paper 1)	Refer to 6.3.1 Automatic gamma adjustment
78	Printer gamma correction table creation pattern (Thick paper 2)	Refer to 6.3.1 Automatic gamma adjustment
79	Printer gamma correction table confirmation pattern (Thick paper 2)	Refer to 6.3.1 Automatic gamma adjustment
80	Printer gamma correction table creation pattern (Thick paper 3)	Refer to 6.3.1 Automatic gamma adjustment
81	Printer gamma correction table confirmation pattern (Thick paper 3)	Refer to 6.3.1 Automatic gamma adjustment
82	Printer gamma correction table creation pattern (Thick paper 4)	Refer to 6.3.1 Automatic gamma adjustment
83	Printer gamma correction table confirmation pattern (Thick paper 4)	Refer to 6.3.1 Automatic gamma adjustment
84	Printer gamma correction table creation pattern (Special paper 1)	Refer to 6.3.1 Automatic gamma adjustment
85	Printer gamma correction table confirmation pattern (Special paper 1)	Refer to 6.3.1 Automatic gamma adjustment
86	Printer gamma correction table creation pattern (Special paper 2)	Refer to 6.3.1 Automatic gamma adjustment
87	Printer gamma correction table confirmation pattern (Special paper 2)	Refer to 6.3.1 Automatic gamma adjustment
98	Grid pattern -2 (For printing K(4) / Plain paper)	Refer to 6.1.8 Image dimensional adjustment at the printing section
99	Grid pattern -2 (For printing K(4) / Thick paper 1)	
100	Grid pattern - 1 (Full color / Thick paper 1)	
101	Grid pattern - 1 (Black / Thick paper 1)	
104	Color deviation confirmation pattern (A3/LD)	
111	Field curvature deviation confirmation pattern	For secondary scanning position fine adjustment
200	Copier gamma adjustment pattern (Color & black integrated / Plain paper)	Refer to 6.2.1 Automatic gamma adjustment

Code	Types of test pattern	Remarks
201	Copier gamma confirmation pattern (Color / Plain paper)	Refer to 6.2.1 Automatic gamma adjustment
204	Copier gamma adjustment pattern (Color & black integrated / Recycled paper)	Refer to 6.2.1 Automatic gamma adjustment
205	Copier gamma confirmation pattern (Color / Recycled paper)	Refer to 6.2.1 Automatic gamma adjustment
206	Copier gamma adjustment pattern (Color & black integrated / Thick paper 1)	Refer to 6.2.1 Automatic gamma adjustment
207	Copier gamma confirmation pattern (Color / Thick paper 1)	Refer to 6.2.1 Automatic gamma adjustment
208	Copier gamma adjustment pattern (Color & black integrated / Thick paper 2)	Refer to 6.2.1 Automatic gamma adjustment
209	Copier gamma confirmation pattern (Color / Thick paper 2)	Refer to 6.2.1 Automatic gamma adjustment
210	Copier gamma adjustment pattern (Color & black integrated / Thick paper 3)	Refer to 6.2.1 Automatic gamma adjustment
211	Copier gamma confirmation pattern (Color / Thick paper 3)	Refer to 6.2.1 Automatic gamma adjustment
212	Copier gamma adjustment pattern (Color & black integrated / Thick paper 4)	Refer to 6.2.1 Automatic gamma adjustment
213	Copier gamma confirmation pattern (Color / Thick paper 4)	Refer to 6.2.1 Automatic gamma adjustment
214	Copier gamma adjustment pattern (Color & black integrated / Special paper 1)	Refer to 6.2.1 Automatic gamma adjustment
215	Copier gamma confirmation pattern (Color / Special paper 1)	Refer to 6.2.1 Automatic gamma adjustment
216	Copier gamma adjustment pattern (Color & black integrated / Special paper 2)	Refer to 6.2.1 Automatic gamma adjustment
217	Copier gamma confirmation pattern (Color / Special paper 2)	Refer to 6.2.1 Automatic gamma adjustment

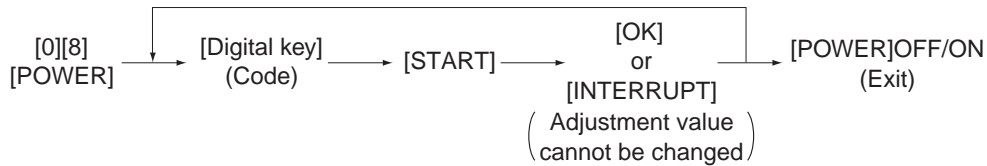
5.8 Operation Procedure in Setting Mode (08)

Procedure 1

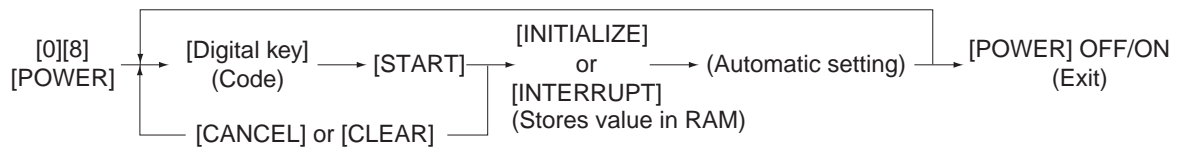


* Press [FUNCTION CLEAR] to enter minus (-).

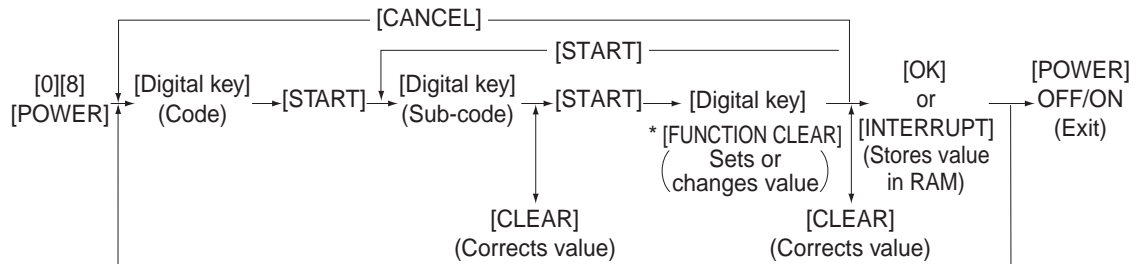
Procedure 2



Procedure 3

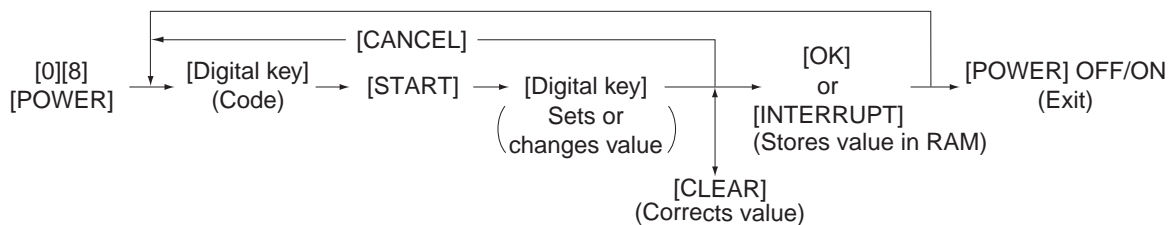


Procedure 4

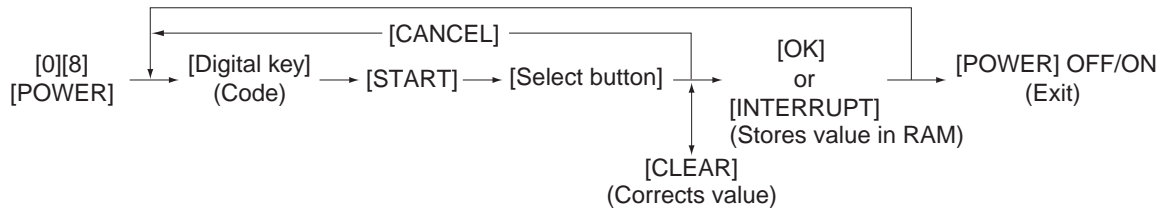


* Press [FUNCTION CLEAR] to enter minus (-).

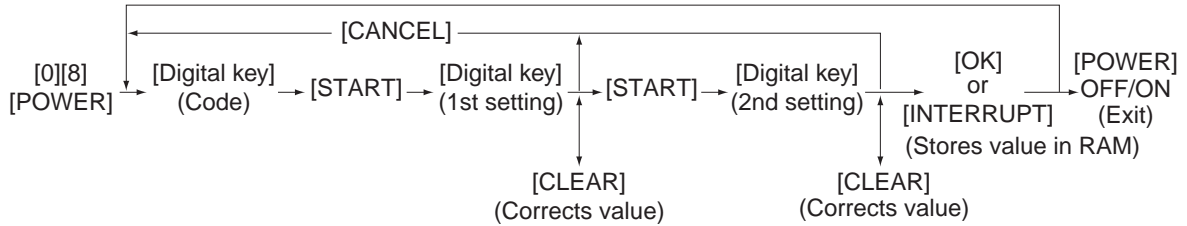
Procedure 5



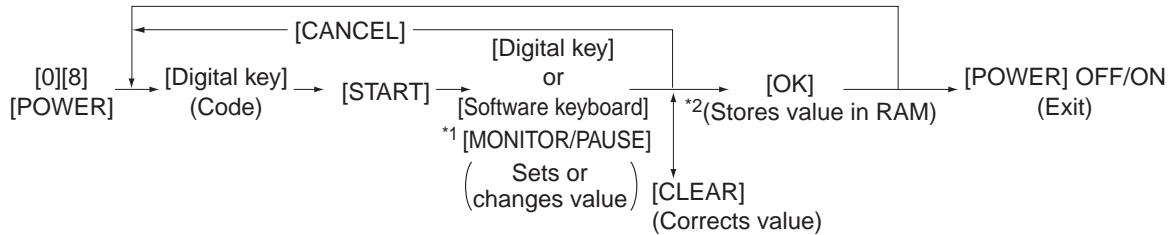
Procedure 9



Procedure 10



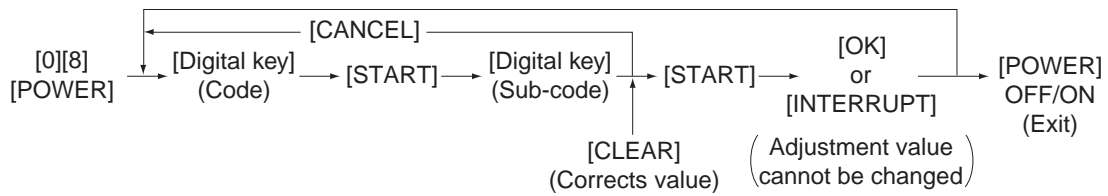
Procedure 11 and 12



* Press [MONITOR/PAUSE] to enter "-", when entering telephone number.

* The data are stored in SYS-RAM in procedure 11 and stored in NIC-RAM in procedure 12.

Procedure 14



5.9 Assist Mode (3C)

5.9.1 Assist Mode

This equipment has the Assist Mode to enable the following functions.

- (1) Update error flag clearing (Clear Error Flag in Software Installation)
Even if the firmware downloading has been completed normally, the Recovery Mode may accidentally start up when the power is turned ON again. In this case, clear the Update Error flags used in the download process with this function. (Normally, the flags are automatically cleared in the download process.)
Also in the case the Recovery Mode accidentally starts up after the replacement of SRAM on the SYS board, the flags are cleared with this function.
- (2) Data storage partition formatting (Format Root Partition)
When a defect occurs on the UI data, etc. which are stored in the HDD, the partition with the stored UI data, etc. is formatted with this function.
Do not use this function since it is not normally necessary.
HDD data must be installed after performing this function.
- (3) HDD partition creation (Format HDD)
When the HDD is replaced or UI data, etc. are downloaded using the USB storage, it is necessary to format a partition in the HDD before downloading. In this case, the partition is created in the HDD with this function.

Notes:

- When downloading with a download jig, it is not necessary to format a partition in advance.
- Perform the HDD partition formatting only when a new HDD is installed since all data in the current HDD are erased by this operation.
- When this operation has been done, do not perform SRAM data formatting (Clear SRAM) before the normal start-up.

- (4) SRAM data format (Clear SRAM)
When SRAM is replaced with a new one, abnormal values may be written in the new SRAM. SRAM data must be formatted with this function for such case.

Notes:

- This function is required only when a new SRAM is installed.
- Do not perform this function in cases other than the installation of a new SRAM because all data in the SRAM will be deleted with this function.
- When this operation has been done, do not perform HDD partition creation (Format HDD) before the normal start-up.

- (5) Encryption key / license backup/restoring (Key Backup Restore)
When the SRAM board (for the SYS board) or the SYS board is replaced or initialized, the encryption key and license are erased. Therefore, they need to be backed up or restored with this function.

Configurations and functions of the "5.Key Backup Restore" menu.

1. Key SRAM to FROM
Restore the encryption key from SRAM to FROM.
2. Key FROM to SRAM
Back up the encryption key from FROM to SRAM.
3. License SRAM to FROM
Restore the license from SRAM to FROM.

4. License FROM to SRAM
Back up the license from FROM to SRAM.
 5. ADIKey SRAM to FROM
Restore the ADIKey from SRAM to FROM.
 6. ADIKey FROM to SRAM
Back up the ADIKey from FROM to SRAM.
- (6) HDD securely erasing (Erase HDD Securely)
This function is used before discarding the HDD.
It overwrites all the used areas on the HDD with the selected data, and makes it unusable.
After selecting this function, specify the level below to be overwritten.
- 1: LOW
This is the standard overwriting method.
- 2: MEDIUM
This overwriting method is more secure than LOW. The erasing time is between LOW and HIGH.
- 3: HIGH
This is the most secure overwriting method. It takes the longest time to erase data.
- 4: SIMPLE
This is the simple overwriting method. It takes the shortest time to erase data.

Key in the level number to display "<" next to it.

(At this time, if "0" is entered, the screen returns to the initial one of the Assist Mode.)

Press the [START] button to display the reconfirmation screen, and then press the [START] button again to start overwriting.

Notes:

When this operation has been done, do not perform SRAM data formatting (Clear SRAM) before the normal start-up.

- (7) SRAM securely erasing (Erase SRAM Securely)
This function is used before discarding the SRAM board (for the SYS board).
It overwrites all the used areas on the SRAM board with the selected data, and makes it unusable.
Immediately after selecting this function, the processing starts and is completed.
- (8) SRAM service tech password formatting (Clear Service Tech Password)
This function is needed after the HDD is replaced.
When the HDD is replaced, the service tech password stored in the new one is set as a blank.
Therefore, its password is copied to the SRAM board so that both passwords become the same with this function.

5.9.2 Operating Procedure

- (1) Turn ON the power while [3] button and [CLEAR] button are pressed simultaneously. The following screen is displayed.

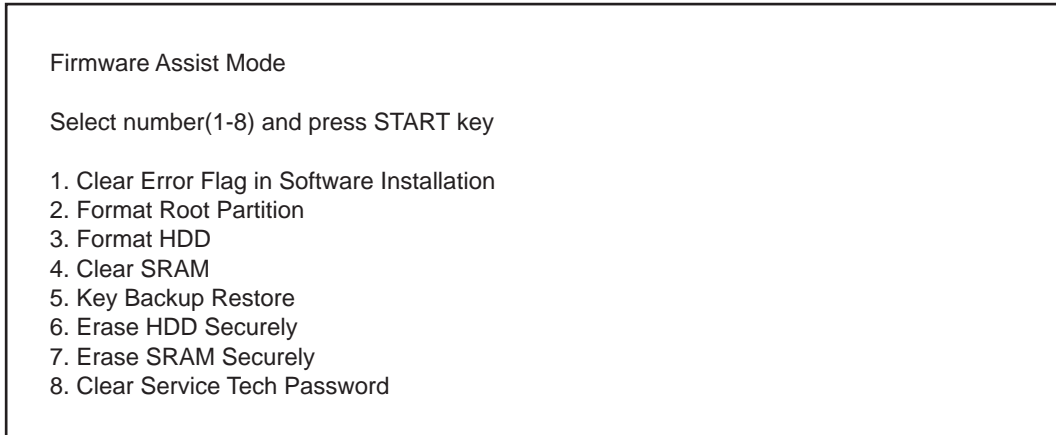


Fig.5-6

- (2) Select the item with the digital keys and press the [START] button.

5.10 HDD Assist Mode (4C)

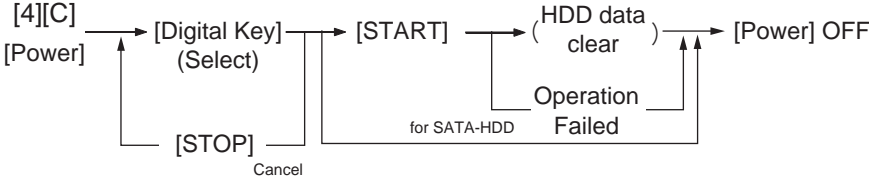
5.10.1 General description

This mode is available only when the security HDD (ADI-HDD) is mounted in the equipment. It enables you to check the type of the mounted HDD, revert the HDD to the factory default or remove keys.

Functions

- Checks the type (ADI or SATA) of the mounted HDD.
- Disposes of ADI-HDD data safely without any of leakage.
- Deletes image data when reusing a used ADI-HDD.

5.10.2 Operation procedure



Turn the power ON while pressing the [4] and the [CLEAR] button simultaneously. Then the type of the mounted HDD is checked and either of the following screens is displayed.

- When the security HDD is mounted

HDD Assist Mode Current HDD type: ADI HDD	System Firmware Version : xxxx(x.x.x.x) Update Mode : 4c Mode
Select number (1-2) and press START key 1. Revert factory initial status HDD 2. Remove key	

Fig.5-7

- When a normal HDD is mounted

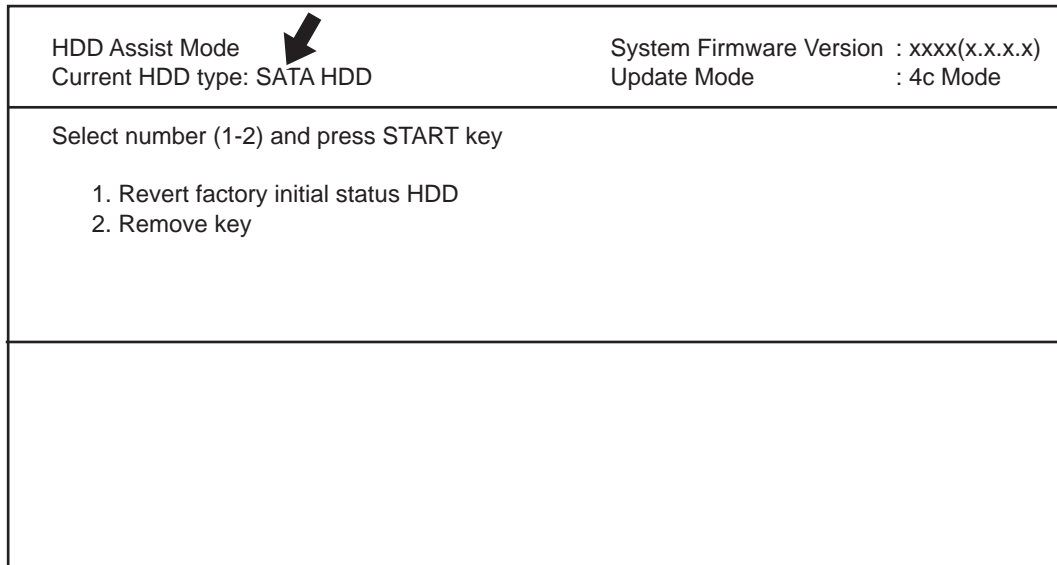


Fig.5-8

Remarks:

If the HDD type cannot be identified, "Unknown HDD" may appear on the screen.
Refer to P. 8-192 " [F106_1] ADI-HDD error: HDD type detection error"

Note:

When "SATA HDD" (normal HDD) is displayed, items 1 and 2 are not selectable.
If you select any of 1 and 2 and press the [START] button, the error message below appears.

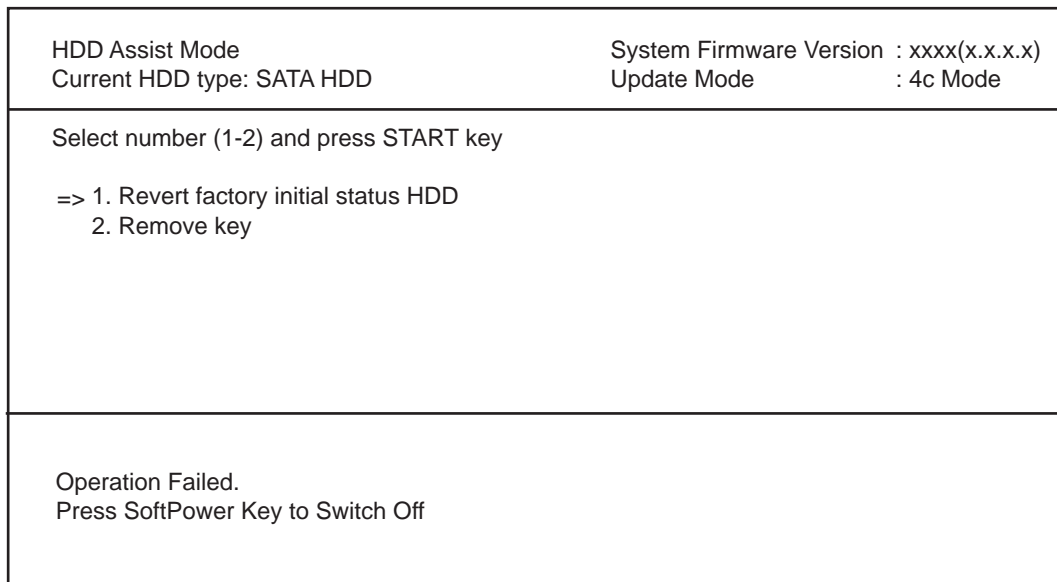


Fig.5-9

5.10.3 Functions

[A] 1. Revert factory initial status HDD

Select this to dispose of the HDD as well as the equipment.

When this item is selected, all data in the HDD are deleted and the HDD is reverted to its initial status at the factory shipment.

This operation requires only a few seconds; however, you must create the partition in the HDD in the 3C mode (Format HDD) and reinstall the HDD data in the 49 mode to make the HDD reusable.

When "1" is selected, the menu below appears.
To start, press the [START] button.

HDD Assist Mode Current HDD type: ADI HDD	System Firmware Version : xxxx(x.x.x.x) Update Mode : 4c Mode			
Select number (1-2) and press START key => 1. Revert factory initial status HDD 2. Remove key				
<table border="1"><tr><td>Confirmation Screen</td></tr><tr><td>Are you sure ???</td></tr><tr><td>Press START to continue Press STOP to cancel</td></tr></table>		Confirmation Screen	Are you sure ???	Press START to continue Press STOP to cancel
Confirmation Screen				
Are you sure ???				
Press START to continue Press STOP to cancel				

Fig.5-10

When the operation is finished, the result appears on the menu.

HDD Assist Mode Current HDD type: ADI HDD	System Firmware Version : xxxx(x.x.x.x) Update Mode : 4c Mode
Select number (1-2) and press START key => 1. Revert factory initial status HDD 2. Remove key	
Data in the HDD has been completely erased. Press SoftPower Key to Switch Off	

Fig.5-11

Note:

If the equipment is started in the normal mode with this condition, an HDD mounting error occurs.

[B] 2. Remove Key

Select this to reuse the HDD as well as the equipment.

When this item is selected, image data in the HDD are deleted.

This operation requires approx. 20 minutes since the partition must be rebuilt.

When "2" is selected, the menu below appears.
To start, press the [START] button.

HDD Assist Mode Current HDD type: ADI HDD	System Firmware Version : xxxx(x.x.x.x) Update Mode : 4c Mode				
Select number (1-2) and press START key					
1. Revert factory initial status HDD => 2. Remove key					
<table border="1"><tr><td>Confirmation Screen</td></tr><tr><td>Are you sure ???</td></tr><tr><td>Press START to continue</td></tr><tr><td>Press STOP to cancel</td></tr></table>		Confirmation Screen	Are you sure ???	Press START to continue	Press STOP to cancel
Confirmation Screen					
Are you sure ???					
Press START to continue					
Press STOP to cancel					

Fig.5-12

When the operation is finished, the result appears on the menu.

HDD Assist Mode Current HDD type: ADI HDD	System Firmware Version : xxxx(x.x.x.x) Update Mode : 4c Mode
Select number (1-2) and press START key	
1. Revert factory initial status HDD => 2. Remove key	
Data in the HDD has been erased. Press SoftPower Key to Switch Off	

Fig.5-13

Note:

After this operation, the equipment becomes reusable without reinstalling the firmware.

5.11 File System Recovery Mode (5C)

5.11.1 Overview

This is a mode to check if there is any damage to the file system (HDD) and recover it if necessary. Use this mode only in the following cases:

- There is a possibility of damage to the file system (HDD).
- There is an apparent damage to the file system (HDD), requiring recovery or initialization.

This mode enables you to have the following functions:

- Check F/S: Checks the file system.
- Recovery F/S: Recovers the file system.
- Initialize HDD: Initializes HDD.
- Initialize DB: Initializes database such as log data.
- SMART Info: Displays the various information in the HDD.
- DISK Info: Displays the usage rate of HDD.

5.11.2 Operation procedure

[5][C] → [Digital key] → [START] → [Digital key] → [START] → (HDD formatting) → [POWER] OFF/ON
[POWER] → (Selection) → (Selection) → (DB formatting such as log data) (Exit)

Notes:

- Do not turn the main power switch OFF after you select a menu and processing has started (during processing).
- After the processing is completed, a beep sounds 4 times and either "Completed" or "Failed" appears on the screen.

Turn ON the power while pressing the [5] and [CLEAR] button simultaneously. The following screen is displayed.

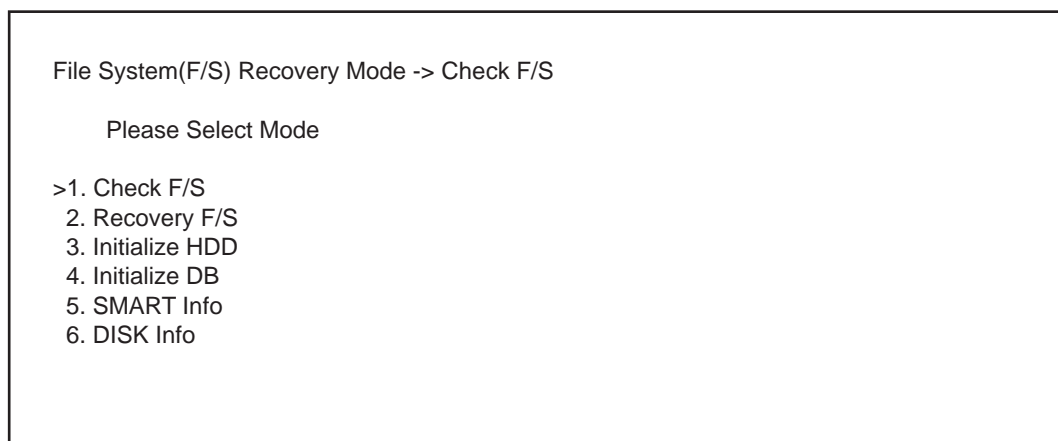


Fig.5-14

Remark:

When the mode is started, "1. Check F/S" is selected by default. ("<>" is displayed on the left of the selected number.)

5.11.3 Functions

[A] Check of the File System (Check F/S)

In case that particular service calls occur or there is a possibility of damage to the file system, the status of each partition in the HDD can be checked.

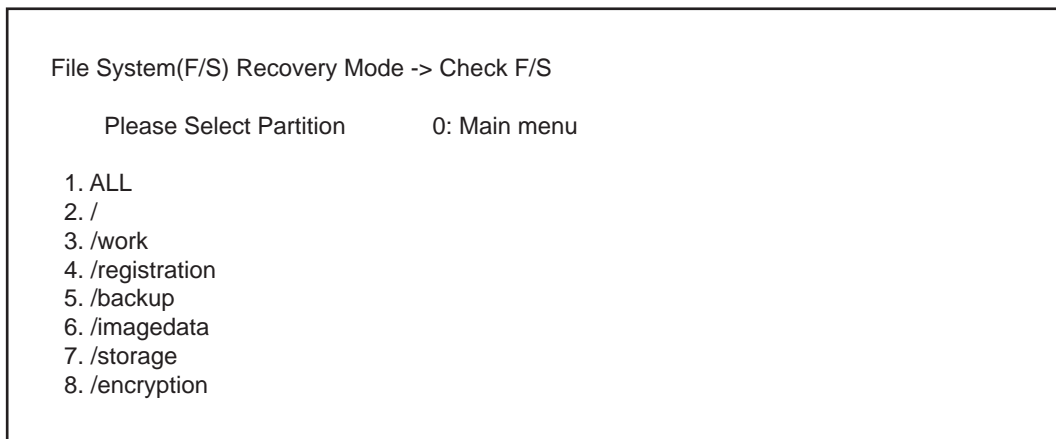


Fig.5-15

Explanation for each item

- 1: Checks all partitions.
- 2: Checks root partition only.
- 3-8: Checks each partition shown above.

Note:

More than one partition can be selected. (">" is displayed on the left of the selected number.)

- If damage is discovered, recover or initialize the file system (HDD).

[B] Recovery of the File System (Recovery F/S)

In case that an error occurs during the file system check, each partition can be recovered.

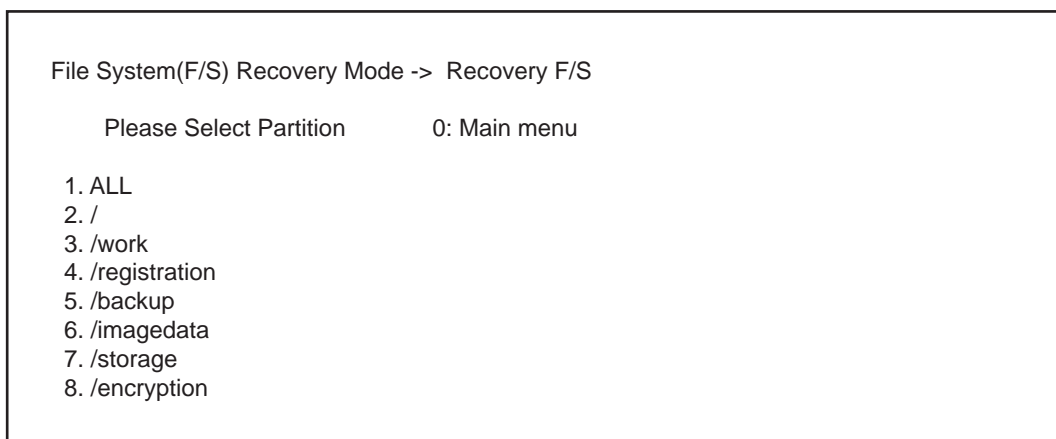


Fig.5-16

Explanation for each item

- 1: Recovers all partitions.
- 2: Recovers root partition only.
- 3-8: Recovers each partition shown above.

Note:

More than one partition can be selected. (">" is displayed on the left of the selected number.)

- If an error occurs during recovery, initialize the file system (HDD).

[C] Initialize the File System (Initialize HDD)

In case that an error occurs during the file system check and the partition cannot be recovered with the recovery, each partition can be initialized.

It is recommended to export the user information such as address book before performing this function.

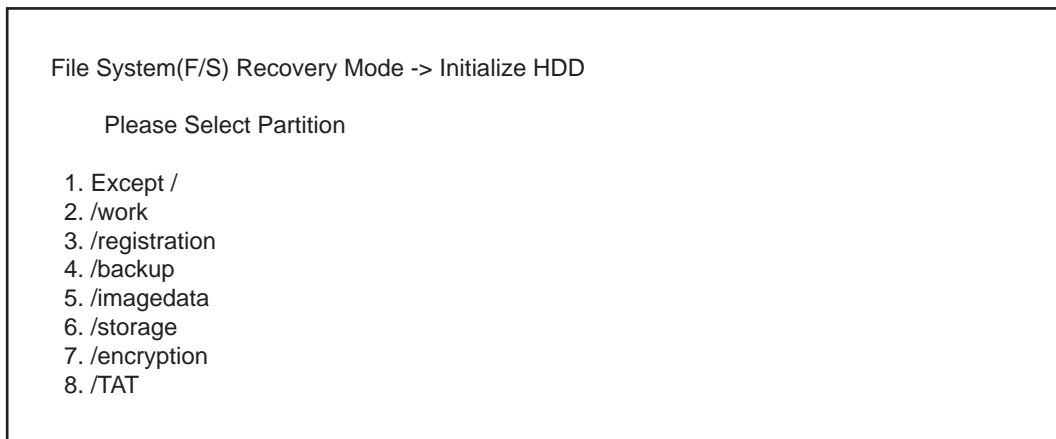


Fig.5-17

Explanation for each item

- 1: Initializes partitions other than root one and creates initial files.
- 2: Initializes a partition (/work) and creates an initial file.
- 3: Initializes a partition (/registration) and creates an initial file.
- 4: Initializes a partition (/backup) and creates an initial file.
- 5: Initializes a partition (/imagedata) and creates an initial file.
- 6: Initializes a partition (/storage) and creates an initial file.
- 7: Initializes a partition (/encryption) and creates an initial file.
- 8: Initializes a partition (/TAT) and creates an initial file.

Remark:

More than one partition can be selected. (“>” is displayed on the left of the selected number.)

Notes:

- If [1. Except /] or [7. /encryption] is selected, applications and OS data in the equipment are also initialized. In this case, the applications and the file system must be reinstalled. Install the system software (HD Data) by performing [49] -> [4] after initialization.
- If [1. Except /] is selected, minimal data necessary for normal startup are automatically recovered.
- If [1. Except /] is selected, log database is also initialized. Back up the data before initializing if necessary.
- If [1. Except/] is selected, do not perform SRAM data formatting (Clear SRAM) before the normal start-up.

[D] Initialize the DB (Initialize DB)

In case that particular service calls occur or there is a possibility of damage to the databases, each one can be initialized.

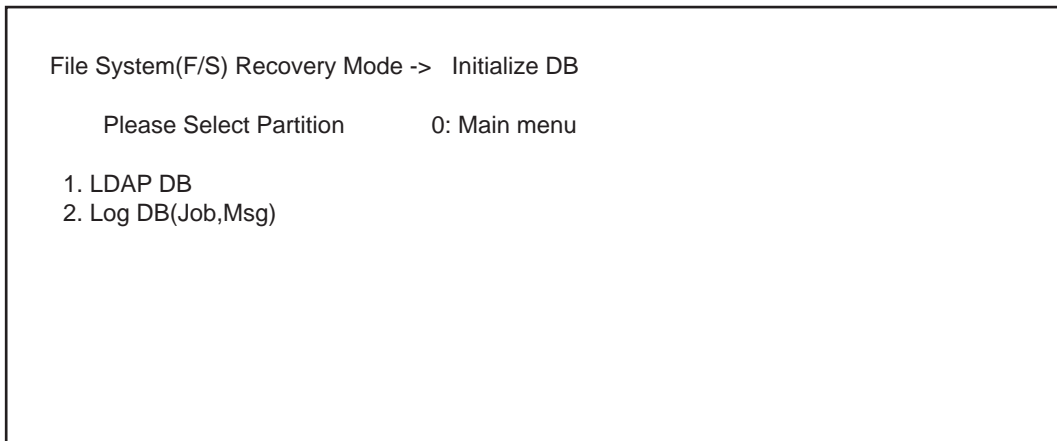


Fig.5-18

Explanation for each item

- 1: Initializes address book data and the user information database.
- 2: Initializes job log data and the message database.

Remark:

The selected databases are initialized and recreated in the next normal startup.

[E] Displaying various data in the HDD (SMART Info)

Various data in the HDD can be displayed. (Data equivalent to the setting contents of 08-9065 are displayed.)

When this item is selected, data in the HDD embedded in the equipment are displayed.

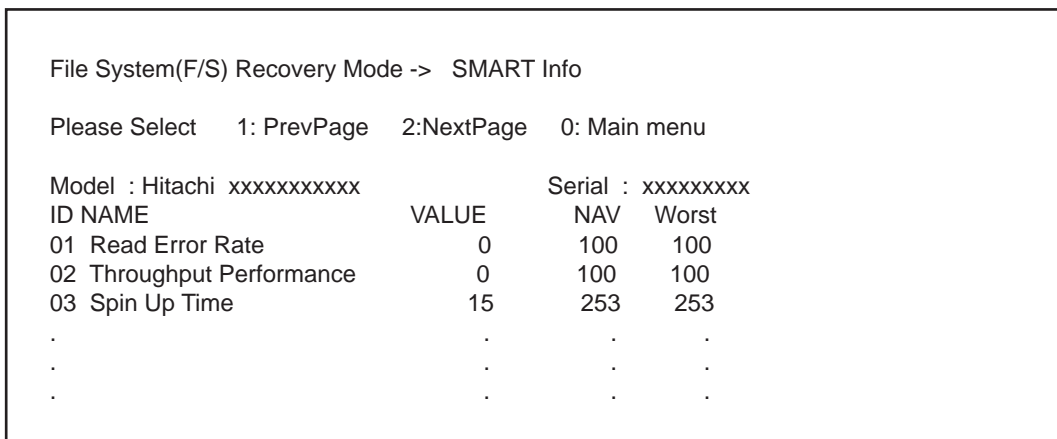


Fig.5-19

Remark:

- NAV: Normalized Attribute Value
Indicates the value of the specified HDD condition as compared to the manufacturer's optimum value.
- Worst: Worst Ever Normalized Attribute Value
Indicates the worst value of NAV permitted by the manufacturer.

Notes:

The values of NAV and Worst should be treated as a rough reference since their basis may differ depending on the specification of HDD manufacturers.

[F] Displaying usage rate of each partition (DISK Info)

The usage rate of each partition can be checked.

When this item is selected, the usage rate of each partition is displayed.

```
File System(F/S) Recovery Mode -> DISK Info

                                0: Main menu

Partition name      ALL(Mbyte)  FREE(Mbyte)  USE(%)
/                   8737        5401         33.1%
/work               10326       9563         2.3%
/registration       3099        2861         2.6%
/backup             1036        949          3.3%
/imagedata          24778       23343        0.7%
/storage            26873       25332        0.7%
/encryption         --- encrypted partition ---
```

Fig.5-20

Remark:

The disk information of a partition indicated as "Encrypted Partition" is not displayed as it is encrypted.

5.12 SRAM Clear Mode (6C)

5.12.1 General description

This is a mode in which you can clear particular errors such as F800 or F900 without entering a Service Technician password.

For example, when SYS-SRAM is in an abnormal status or needs replacement but service technicians cannot log into the 3C mode, SRAM can be initialized by entering the SRAM clear mode (6C) and selecting item 1 below.

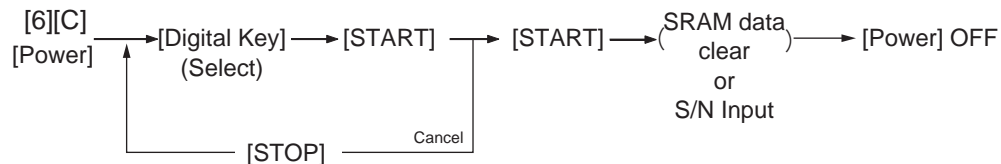
The content of item 1 in this mode is the same as that of item 4 in the 3C mode (Clear SRAM).

Use this mode to clear the SRAM data when a particular error occurs or service technicians cannot log in with their password and therefore cannot use the 3C mode.

Functions

- Sets the serial number of this equipment.
- Clears SRAM data when the 3C mode cannot be used.
- Clears F800 error.
- Clears F900 error.

5.12.2 Operation procedure



Turn the power ON while pressing the [6] and the [CLEAR] button simultaneously. Then the following screen is displayed.

Key in the desired item number and then press the [START] button.

SRAM Clear Mode	System Firmware Version : xxxx(x.x.x.x) Update Mode : 6c Mode
0. Set Serial Number 1. Clear SRAM 2. Reset Date and Time 3. SRAM Re-Initialize Support	

Fig.5-21

Notes:


- When "0" is keyed in and the [START] button is pressed, the menu to key in the serial number appears. Key in the serial number of this equipment and then press [OK] to determine the setting.
- Items 1 and 2 can be canceled while 0 and 3 cannot.
- When "3" is keyed in and the [START] button is pressed, the operation starts.

5.12.3 Functions

[A] 0. Set Serial Number

When replacing SYS-SRAM, select this to set the serial number of the equipment since it must be done in advance of recovery from SRAM backup data.

- Clear SRAM first and then set the serial number in this mode.
- Recover from SRAM backup data after setting the serial number.

Refer to  P. 12-2 "12.1.4 Cloning procedure"

Select "0" and then press the [START] button. Then key in the serial number of this equipment. The keyed in serial number appears on the menu.

SRAM Clear Mode	System Firmware Version : xxxx(x.x.x.x) Update Mode : 6c Mode
> 0. Set Serial Number 1. Clear SRAM 2. Reset Date and Time 3. SRAM Re-Initialize Support	Serial Number Setting Completed.. xxxxxxxxxx

Fig.5-22

[B] 1. Clear SRAM

Select this to clear all SRAM data when replacing SYS-SRAM.

- Replace the SRAM board and then clear the SRAM data.
- After clearing the SRAM data, initialize SRAM following its replacement procedure.

Notes:

When this operation has been done, do not perform HDD partition creation (Format HDD) before the normal start-up.

[C] 2. Reset Date and Time

Select this to clear an F800 error which occurred when the date and time were set as after the end of the year 2037 or when the actual end of the year 2037 has come.

- After selecting this, start the equipment in the normal mode to reset the date and time.

[D] 3. SRAM Re-Initialize Support

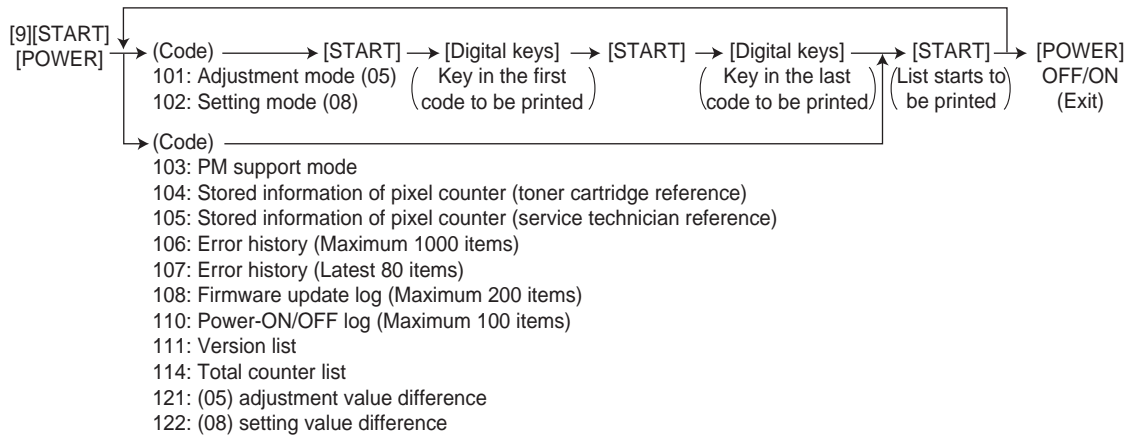
Select this to clear an F900 error which occurred when SYS-SRAM and the SYS board are replaced at the same time, since this error cannot be cleared in the 3C mode.

- After updating with a download jig and clearing the SRAM data, select this item.
- After selecting this, initialize SRAM following its replacement procedure.

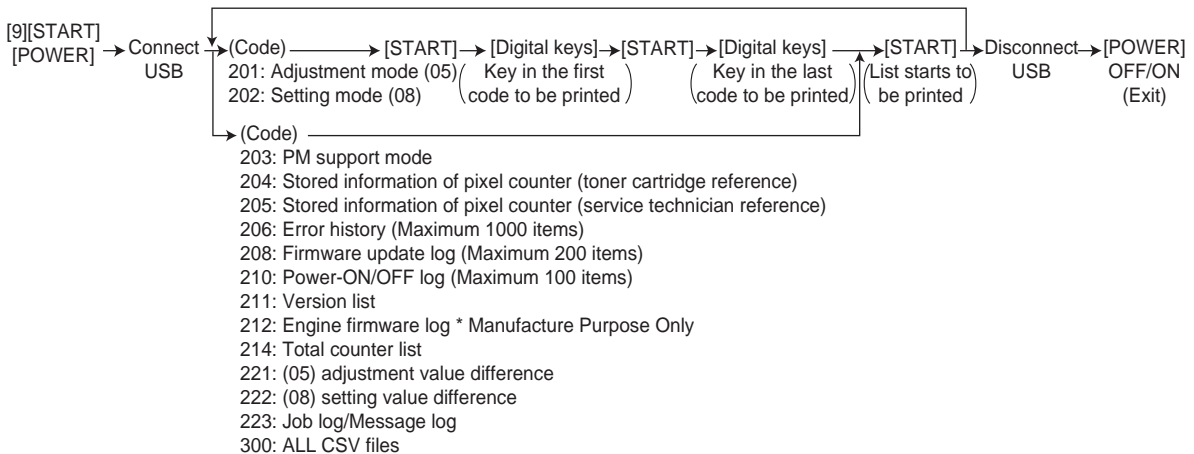
5.13 List print mode (9S)

5.13.1 Operation procedure

[1] Print out



[2] CSV output (USB)



Notes:

Precautions when storing information into USB media

- When storing the setting information of the equipment into a USB media, be sure to obtain permission from a user in advance.
- When storing the setting information of the equipment into a USB media, the information is printed out in a CSV format. Handle and manage the information with extra care.
- Do not lose or leak the setting information of the equipment.
- Do not use the setting information of the equipment for purposes other than maintenance or product services.
- Provide the information promptly if a user requires so.
- The buttons on the control panel keep blinking while data are being stored in the USB media. Do not disconnect the USB media while data are being stored.

Remarks:

In the USB storage procedure above, lists are stored in a CSV format. The names of the CSV files are shown below.

- 201: ADJUSTMENT_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 202: SETTING_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 203: PM_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 204: PIXEL_TONER_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 205: PIXEL_SERVICE_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 206: ERROR_LOG_serial_date and time(YYYYMMDDHHMMSS).csv
- 208: FW_UPGRADE_LOG_serial_date and time(YYYYMMDDHHMMSS).csv
- 210: POWER_ONOFF_LOG_serial_date and time(YYYYMMDDHHMMSS).csv
- 211: VERSION_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 212: ENG_FW_LOG_serial_date and time(YYYYMMDDHHMMSS).csv
- 214: TOTAL_COUNTER_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 221: 05DIFFERENCE_CODE_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 222: 08DIFFERENCE_CODE_LIST_serial_date and time(YYYYMMDDHHMMSS).csv
- 223: JOB_LOG_serial_date and time(YYYYMMDDHHMMSS).tar.gz (encrypted file)/
MESSAGE_LOG_serial_date and time(YYYYMMDDHHMMSS).tar.gz (encrypted file)

5.13.2 List Printing

Lists below are output in the list print mode.

List data are printed out or output in a CSV format by storing them in a USB media. Paper sizes available for this printing are A4 or LT or larger. This section introduces a sample of each list.

To start the list print mode, turn the power on while pressing [9] + [START] button.

Lists	List code	
	Printout	CSV file output
Adjustment mode (05) data list	101	201
Setting mode (08) data list	102	202
PM support mode data list	103	203
Pixel counter list (toner cartridge reference)	104	204
Pixel counter list (service call reference)	105	205
Error history list	106 (Maximum 1000 items)	206 (Maximum 1000 items)
Error history list	107 (Latest 80 items)	-
Firmware upgrade log	108 (Maximum 200 items)	208 (Maximum 200 items)
Power ON/OFF log	110 (Maximum 100 items)	210 (Maximum 100 items)
Version list	111	211
Engine firmware log	-	212
Total counter list	114	214
05 adjustment difference list (factory default and current values)	121	221
08 adjustment difference list (factory default and current values)	122	222
Job log/Message log	-	223
Output all CSV files	-	300

- Adjustment mode (05)

05 ADJUSTMENT MODE DATA LIST				S/N: xxxxxxxx		TOTAL: 9999999	
20xx-xx-xx xx:xx				TOSHIBA e-STUDIOxxx		DF TOTAL: 9999999	
CODE	DATA	CODE	DATA	CODE	DATA	CODE	DATA
2000	128	3860	88	4830	128	5920	128
.
.
.
.
.
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.
.

Fig.5-23

The selected adjustment codes and the current adjustment value for each code are output in a list. See the following page for the adjustment code (05): Refer to Chapter 15 - "Adjustment Mode (05) Codes".

- Setting mode (08)

08 SETTING MODE DATA LIST				S/N: xxxxxxxx		TOTAL: 9999999	
20xx-xx-xx xx:xx				TOSHIBA e-STUDIOxxx		DF TOTAL: 9999999	
CODE	DATA	CODE	DATA	CODE	DATA	CODE	DATA
2010	2	2880	12	3040	0	3070	0
.
.
.
.
.
.
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.
.
.
.

Fig.5-24

The selected setting codes and the current setting value for each code are output in a list. See the following page for the setting code (08):
 Refer to Chapter 15 - "Setting Mode (08) Codes".

- PM support mode

PM SUPPORT CODE LIST				
		S/N: xxxxxxxx	TOTAL:	9999999
20xx-xx-xx xx:xx		TOSHIBA e-STUDIOxxx	DF TOTAL:	9999999
UNIT	OUTPUT PAGES/ DEVELOP COUNTS	PM OUTPUT PAGE/ DEVELOP COUNTS	DRIVE COUNTS	PM DRIVE COUNTS
DRUM (K)	2516	70000	11735	170000
DRUM BLADE (K)	2516	70000	11735	170000
GRID (K)	2516	70000	11735	170000
MAIN CHARGER NEEDLE (K)	2516	70000	11735	170000
CHARGER CLEANING PAD (K)	2516	70000	11735	170000
DRUM (Y)	411	70000	8625	170000
DRUM BLADE (Y)	411	70000	8625	170000
GRID (Y)	411	70000	8625	170000
MAIN CHARGER NEEDLE (Y)	411	70000	8625	170000
CHARGER CLEANING PAD (Y)	411	70000	8625	170000
DRUM (M)	411	70000	8625	170000
DRUM BLADE (M)	411	70000	8625	170000
GRID (M)	411	70000	8625	170000
MAIN CHARGER NEEDLE (M)	411	70000	8625	170000
CHARGER CLEANING PAD (M)	411	70000	8625	170000
.
.
.

Fig.5-25

The number of pages currently output (OUTPUT PAGES/DEVELOP COUNTS), the recommended number of output pages for PM (PM OUTPUT PAGES/DEVELOP COUNTS), the current drive count (DRIVE COUNTS) and the recommended drive count for PM (PM DRIVE COUNTS) are output together with PM units. Use this list for confirming the PM units to be replaced at each PM. See the following page for PM:


 P. 7-1 "7. PREVENTIVE MAINTENANCE (PM)"

- Stored information of pixel counter (toner cartridge reference)

PIXEL COUNTER CODE LIST							
				S/N: xxxxxxxx	TOTAL:	9999999	
				TOSHIBA e-STUDIOxxx	DF TOTAL:	9999999	
20xx-xx-xx xx:xx							
TONERCARTRIDGE							
No	DATE	COLOR		PPC	PRN	FAX	TOTAL
0	20xx-xx-xx	Y	Print Count[LT/A4]	181	45	---	226
1	20xx-xx-xx	Y	Average Pixel Count[%]	2.70	1.74	---	2.51
2	20xx-xx-xx	Y	Latest Pixel Count[%]	6.15	0.39	---	0.39
3	20xx-xx-xx	M	Print Count[LT/A4]	181	45	---	226
4	20xx-xx-xx	M	Average Pixel Count[%]	6.11	2	---	5.29
5	20xx-xx-xx	M	Latest Pixel Count[%]	6.82	2.15	---	2.15
6	20xx-xx-xx	C	Print Count[LT/A4]	181	45	---	226
7	20xx-xx-xx	C	Average Pixel Count[%]	5.46	2	---	4.81
8	20xx-xx-xx	C	Latest Pixel Count[%]	6.42	2.73	---	2.73
9	20xx-xx-xx	K	Print Count[LT/A4]	278	145	9	432
10	20xx-xx-xx	K	Average Pixel Count[%]	6.15	3.86	23.25	5.74
11	20xx-xx-xx	K	Latest Pixel Count[%]	7.32	2.19	6.25	2.19

Fig.5-26

Pixel counter data (toner cartridge reference) are output in a list. See the following page for the pixel counter:


 P. 5-47 "5.14 Pixel counter"

- Stored information of pixel counter (service technician reference)

PIXEL COUNTER CODE LIST		S/N: xxxxxxxx	TOTAL:	9999999		
		TOSHIBA e-STUDIOxxx	DF TOTAL:	9999999		
20xx-xx-xx xx:xx						
SERVICEMAN						
No	DATE	COLOR	PPC	PRN	FAX	TOTAL
0	20xx-xx-xx	F Print Count[LT/A4]	181	45	---	226
1	20xx-xx-xx	F Average Pixel Count[%]	4.95	2.34	---	4.43
2	20xx-xx-xx	F Latest Pixel Count[%]	8.36	2.34	---	2.34
3	20xx-xx-xx	Y Print Count[LT/A4]	181	45	---	226
4	20xx-xx-xx	Y Average Pixel Count[%]	2.7	1.74	---	2.51
5	20xx-xx-xx	Y Latest Pixel Count[%]	6.15	0.39	---	0.39
6	20xx-xx-xx	M Print Count[LT/A4]	181	45	---	226
7	20xx-xx-xx	M Average Pixel Count[%]	6.11	2	---	5.29
8	20xx-xx-xx	M Latest Pixel Count[%]	6.82	2.15	---	2.15
9	20xx-xx-xx	C Print Count[LT/A4]	181	45	---	226
10	20xx-xx-xx	C Average Pixel Count[%]	5.46	2.18	---	4.81
11	20xx-xx-xx	C Latest Pixel Count[%]	6.42	2.73	---	2.73
12	20xx-xx-xx	K Print Count[LT/A4]	181	45	---	226
13	20xx-xx-xx	K Average Pixel Count[%]	5.51	3.43	---	5.10
14	20xx-xx-xx	K Latest Pixel Count[%]	14.05	4.10	---	4.10
15	20xx-xx-xx	K Print Count[LT/A4]	97	100	9	206
16	20xx-xx-xx	K Average Pixel Count[%]	7.36	4.06	23.25	6.45
17	20xx-xx-xx	K Latest Pixel Count[%]	7.32	2.19	6.25	2.19

Fig.5-27

Pixel counter data (service call reference) are output in a list. See the following page for the pixel counter:

 P. 5-47 "5.14 Pixel counter"

- Error history

ERROR HISTORY LIST						S/N: xxxxxxxx	TOTAL:	9999999
						TOSHIBA e-STUDIOxxx	DF TOTAL:	9999999
20xx-xx-xx xx:xx								
CODE	COUNTER	DATE	TIME	ZOOM_XY	ABCD EFHI JLOP Q R			
F110	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
F110	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
F110	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
F110	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
F110	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
EAD0	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
E860	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
E731	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
E090	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
E870	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			
E724	00000000	xxx-xx-xx	xx:xx:xx	000 000	0000_0000_0000_0_0000000000			

Fig.5-28

The error history is output. See the following page for the parameters for each error:

 P. 8-32 "8.2.4 Printer function error"

- Firmware update log

```

FW UPGRADE LOG

S/N: xxxxxxxx          TOTAL:    9999999
TOSHIBA e-STUDIOxxx   DF TOTAL: 9999999

20xx-xx-xx xx:xx

MANUFACTURE DATE 20xx-xx-xx
UNPACKING DATE   20xx-xx-xx

USER  ROM/VERSION  DATE    TOTAL  COPY(B) COPY(2) COPY(C) PRINT(B) PRINT(2) PRINT(C) LIST  FAX    STATUS
Service Txxxxxx-xxxx 20xx-xx-xx 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 OK
Service Txxxxxx-xxxx 20xx-xx-xx 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 OK
Service Txxxxxx-xxxx 20xx-xx-xx 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 99999999 OK
.      .      .      .      .      .      .      .      .      .      .      .      .
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.      .      .      .      .      .      .      .      .      .      .      .      .
.      .      .      .      .      .      .      .      .      .      .      .      .

```

Fig.5-29

Firmware update logs are output.

- MANUFACTURE DATE: the date of manufacture / UNPACKING DATE: the date that the equipment was unpacked.
- Only the versions of ROMs updated with USB media are output.

Item	Content
USER	User who updated firmware
ROM/VERSION	Version of firmware
DATE	Date that firmware was updated
TOTAL	Total counter data when firmware was updated
COPY (B)	Copier counter data (black) when firmware was updated
COPY (2)	Copier counter data (twin color) when firmware was updated
COPY (C)	Copier counter data (full color) when firmware was updated
PRINT (B)	Printer counter data (black) when firmware was updated
PRINT (2)	Printer counter data (twin color) when firmware was updated
PRINT (C)	Printer counter data (full color) when firmware was updated
LIST	List print counter data when firmware was updated
FAX	Fax print counter data when firmware was updated
STATUS	Result of update

- Power-ON/OFF log

```

POWER ON_OFF LOG

S/N: xxxxxxxx          TOTAL:    9999999
TOSHIBA e-STUDIOxxx   DF TOTAL:  9999999

20xx-xx-xx xx:xx

DATE   TIME   FUNCTION   TOTAL   DATE   TIME   FUNCTION   TOTAL
xxxx-xx-xx  xx:xx:xx  ON        99999999  xxxx-xx-xx  xx:xx:xx  ON        99999999
xxxx-xx-xx  xx:xx:xx  OFF       99999999  xxxx-xx-xx  xx:xx:xx  OFF       99999999
xxxx-xx-xx  xx:xx:xx  ON        99999999  xxxx-xx-xx  xx:xx:xx  ON        99999999
xxxx-xx-xx  xx:xx:xx  OFF       99999999  xxxx-xx-xx  xx:xx:xx  OFF       99999999
xxxx-xx-xx  xx:xx:xx  ON        99999999  xxxx-xx-xx  xx:xx:xx  RMT_OFF   99999999
xxxx-xx-xx  xx:xx:xx  OFF       99999999
xxxx-xx-xx  xx:xx:xx  ON        99999999
xxxx-xx-xx  xx:xx:xx  OFF       99999999
xxxx-xx-xx  xx:xx:xx  RMT_OFF   99999999
xxxx-xx-xx  xx:xx:xx  OFF       99999999
.         .         .         .
.         .         .         .
.         .         .         .

```

Fig.5-30

Power ON/OFF logs are output.

- Note that cases that the power was turned OFF with the main switch (not with the [ON/OFF] button on the control panel) will not be displayed.

Item	Content
DATE	Date that the power was turned ON or OFF
TIME	Time that the power was turned ON or OFF
FUNCTION	Whether the power was turned ON or OFF, or if it was turned ON or OFF with a remote reset function
TOTAL	Total counter data when the power was turned OFF and then back ON

- Version list

```

VERSION LIST
S/N: xxxxxxxx          TOTAL:      9999999
TOSHIBA e-STUDIOxxx   DF TOTAL:   9999999

20xx-xx-xx xx:xx

SYSTEM FIRMWARE ROM VERSION      : Txxxxxxxxxxxx
SYSTEM FIRMWARE INTERNAL ROM VERSION: Vx.x.x.xx.xx
PRINTER ROM VERSION              : xxxM-xxx
SCANNER ROM VERSION              : xxxS-xxx
RADF ROM VERSION                 : DF-xxx
FINISHER STACKER ROM VERSION     : FIN-
FINISHER SADDLE ROM VERSION      : SDL-
FINISHER PUNCH ROM VERSION       : PUN-
CONVERTER ROM VERSION            : CNV-xxx
FAX BOARD FIRMWARE ROM VERSION   : Fxx-xxx
SYSTEM FIRMWARE OS VERSION       : Vx.xxx.x.x
HDD DATA VERSION                : Txxxxxxxxxxxx
LANGUAGE VERSION
  English(US)                   : xxx.xxx  xxx xxx xx xx:xx:xx xxxx
  .
  .
  .
CAPACITY OF HDD                  : xx.x GB
DEVICE INFORMATION OF HDD        : xxx xxxxxxxx-xxxxxx
SERIAL NUMBER OF HDD             : xx-xxxxxxxxxxxxxx
MEMORY SIZE                      : xxxx MB / xxxx MB
INSTALLED ELK NAME              : Data overwrite enabler
                                IPsec enabler
                                Meta scan enabler
                                External interface enabler
                                .
                                .
                                .

```

Fig.5-31

The list of versions is output.

Notes:

Some of the characters in the fonts that are used to print the version list are not supported. As a result, the language names under LANGUAGE VERSION may not be printed correctly when printing the version list.

- Engine firmware log

```
ENGINE FW LOG
20xx/xx/xx xx:xx
TOSHIBA e-STUDIOxxxx
Cxxxxxxxxx
FIN S/N-xxxxxxxx
TOTAL, 9999999, DF TOTAL, 9999999

CODE      SUB   DATA
4624      0     0
4624      1     0
4624      2    58
4624      3     3
4624      4    58
4624      5     3
4624      6     0
4624      7    56
4624      8     3
4624      9     0
4624     10    41
4624     11     1
4624     12    29
4624     13     7
4624     14     0
4624     15     0
4624     16     0
4624     17     0
4624     18     0
4624     19     0
4624     20     0
.         .     .
.         .     .
.         .     .
.         .     .
.         .     .
```

Fig.5-32

The log of engine firmware is output.

- Total counter list

TOTAL COUNTER LIST		S/N: xxxxxxxx	TOTAL:	9999999	
20xx-xx-xx xx:xx		TOSHIBA e-STUDIOxxx	DFTOTAL:	9999999	
PRINT COUNTER					
TOTAL					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
COPY	37	0	1	0	38
FAX	0	0	0	0	0
PRINTER	122	0	60	0	182
LIST	0	0	0	0	0
TOTAL	159	0	61	0	220
COPY					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	37	0	1	0	38
LARGE	0	0	0	0	0
TOTAL	37	0	1	0	38
FAX					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	0	0	0	0	0
LARGE	0	0	0	0	0
TOTAL	0	0	0	0	0
PRINTER					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	118	0	60	0	178
LARGE	4	0	0	0	4
TOTAL	122	0	60	0	182
LIST					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	0	0	0	0	0
LARGE	0	0	0	0	0
TOTAL	0	0	0	0	0
CALIBRATION COUNTER : 0					
SCAN COUNTER					
TOTAL					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
COPY	7	0	1	0	8
FAX	0	0	0	0	0
NETWOR	0	0	0	0	0
TOTAL	7	0	1	0	8
COPY					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	7	0	1	0	8
LARGE	0	0	0	0	0
TOTAL	7	0	1	0	8
FAX					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	0	0	0	0	0
LARGE	0	0	0	0	0
TOTAL	0	0	0	0	0
NETWORK					
		FULL COLOR	TWIN/MONO	COLOR BLACK	TOTAL
SMALL	0	0	0	0	0
LARGE	0	0	0	0	0
TOTAL	0	0	0	0	0

Fig.5-33

The list of total counter is output.

- (05) adjustment value/(08) setting value difference

05 DIFFERENCE LIST			S/N: xxxxxxxx TOTAL: 9999999		
xx-xx-xx xx:xx			TOSHIBA e-STUDIOxxxx DF TOTAL: 9999999		
CODE	BACKUP	CURRENT	CODE	BACKUP	CURRENT
* 2400	128	160			
.	.	.			
.	.	.			
.	.	.			
.	.	.			
.	.	.			
.	.	.			
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.	.	.			
.	.	.			

Fig.5-34

The function in which the 05/08 setting value differences between the factory default and the current value can be printed or output with a CSV file.

The list of differences between the current and the backed-up values of the (05) adjustment and the (08) setting values is output. "*" is marked on the left side of the code if there is a difference, and "+" is marked on the left side of the code if there is no backed-up value.

Notes:

- Back-up data of the factory default are automatically created when the automatic gamma adjustment of the easy set-up mode has been completed during the unpacking and setting up of the equipment. The back-up file is retained even if the firmware is upgraded. However, the file is deleted when 3C-3 (Format HDD) is performed or HDD/SSD is replaced.
- A back-up file does not exist for equipment to which the easy set-up mode has been performed before this function is applied.
- When the easy set-up mode is restarted while a specified value such as 4 through 7 is set for 08-9022 (Production process management status for easy setup), the back-up file stored during unpacking and setting up after the completion of the automatic gamma adjustment is deleted, and another file as of then is newly created.
- When no back-up file exists

When 9S-121 (122) is performed, the equipment returns to the ready state of the 9S mode without performing printing.

When 9S-221 (222) is performed, the equipment returns to the ready state of the 9S mode and the error message "The file cannot be saved." appears on the panel.

- When you want to create a back-up file if one does not exist

A back-up file can be automatically created after the completion of the automatic gamma adjustment when the easy set-up mode is restarted while a specified value such as 4 through 7 is set for 08-9022 (Production process management status for easy setup).

In this case, the current values are stored in the file, but not the ones for unpacking and setting up.

5.14 Pixel counter

5.14.1 Outline

[1] Outline

Pixel counter is a function that counts the number of dots emitted by the laser and converts it into the print ratio (%) per standard paper size. This “Print ratio (%) per standard paper size” is called Pixel count (%).

This function enables you to know how each user uses the equipment and to grasp the tendency of toner consumption (number of output pages per cartridge).

[2] Factors affecting toner consumption

Standard number of output pages per cartridge shows the average number of output pages under the condition that the data of print ratio 6% is printed on the standard paper size (A4/LT) at a normal temperature and humidity.

However, users do not always print under the above condition. As for the type of original, copy/print mode and environment, each user has different tendency, and as a result, the number of output pages per cartridge becomes different depending on the user.

The major factors affecting toner consumption are as follows:

- Original/Data coverage
- Original/Data density
- Original/Print mode
- Density setting

Also there are other factors in addition to the above, such as environment, individual difference of equipment, difference in lot quality of materials, toner density and drum surface potential.

The general relations between the above 4 factors and toner consumption per output page in the copy function are as follows:

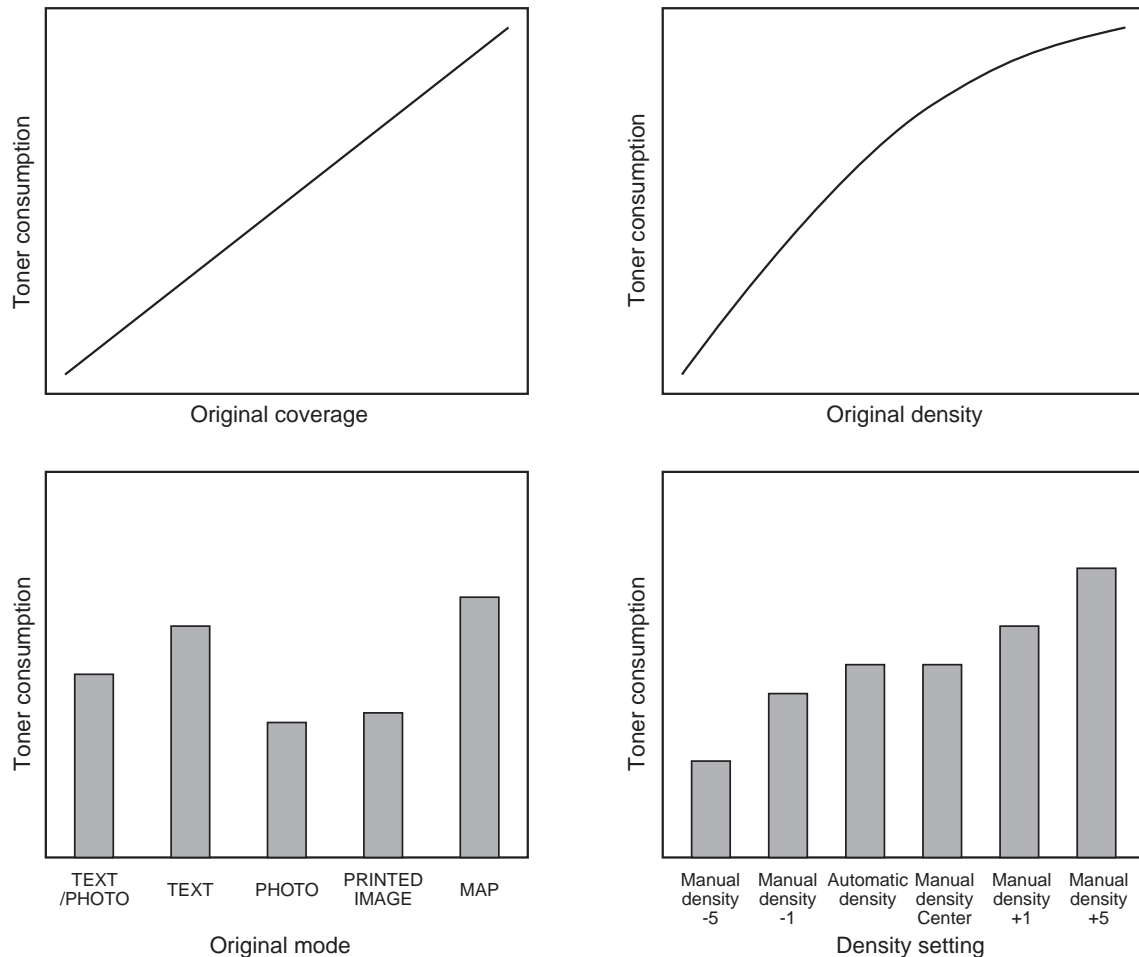


Fig.5-1 Factors affecting toner consumption and the tendency

[3] Details of pixel counter

- Toner cartridge reference and service technician reference
The pixel counter function in this equipment has 2 references, toner cartridge reference and service technician reference.

Toner cartridge reference

This is a system that accumulates data between the installation of a new toner cartridge and next installation.

The installation of new toner cartridge is judged when the total number of pixel count or output pages after the detection of toner cartridge empty has exceeded the threshold.

The threshold to be used is selectable in the setting mode (08-6506) between the pixel count and output pages (0: Output pages 1: Pixel counter). The threshold of pixel count is set in the setting mode (08-6508) and that of output pages is set in the setting mode (08-6507). When the new toner cartridge is judged as installed, the data related with the previous cartridge is cleared and replaced with the data after the installation of new cartridge. Clearing of the counter of the toner cartridge reference is performed in the setting mode (08-6503).

Service technician reference

This is a system that accumulates data between clearing the counter of the service technician reference by service technician and subsequently clearing the same counter.

Clearing of the counter of the service technician reference is performed in the setting mode (08-6502).

- Print count (number of output pages)

The number of output pages shown at the pixel counter is counted after converting all paper sizes to the standard paper size (A4/LT). Printing on other than the standard size is converted by paper area ratio. The standard paper size is set in the setting mode (08-6500).

The examples of conversion are as follows:

Ex.)

“1” is added to the print count when printing on A4/LT size.

“2” is added to the print count when printing on A3/LD size. (area ratio to A4/LT: 200%)

“1.49” is added to the print count when printing on B4 size. (area ratio to A4: 149%)

“1.27” is added to the print count when printing on LG size. (area ratio to LT: 127%)

- Pixel count (%)

Pixel count (%) shows the ratio of laser emitting pixels to all pixels on standard paper.

The examples of pixel count are as follows:

Notes:

In the following examples, ‘solid copy’ is considered to be 100%. But since the image has 4 margins, it never becomes 100% actually.

Ex.)

Printing 5 pages on A4/LT size with solid copy (Laser emits to all pixels.)

→ Pixel count: 100%, Print count: 5

Printing 5 pages on A4/LT size with blank copy (Laser never emits.)

→ Pixel count: 0%, Print count: 5

Printing 2 pages on A4/LT size with solid copy (Laser emits to all pixels.)

Printing 2 pages on A4/LT size with blank copy (Laser never emits.)

→ Pixel count: 50%, Print count: 4

Printing 3 pages on A4/LT size with 6% of laser emission

Printing 1 page on A4/LT size with 2% of laser emission

→ Pixel count: 5%, Print count: 4

Printing 2 pages on A3/LD size with solid copy (Laser emits to all pixels.)

→ Pixel count: 100%, Print count: 4

Printing 2 pages on A3/LD size with 6% of laser emission

→ Pixel count: 6%, Print count: 4

- Average pixel count (%) and latest pixel count (%)

There are 2 types of the value calculated as the pixel count, average pixel count (%) and latest pixel count (%).

Average pixel count (%)

The average value of all pixel count data after each reference data is cleared is calculated and displayed.

Latest pixel count (%)

The value is displayed for printing just before the pixel counter is confirmed.

- Type of calculated data

Since this is multifunctional and color equipment, the data of pixel count is calculated for each function and color.

The following list is the information that can be confirmed by LCD screen. But actually, more information can be confirmed by the setting mode (08).

See after-mentioned “5)-Display in the setting mode (08)” for details.

Table 2-201 Type of calculated data

	Toner cartridge reference				Service technician reference					
	Yellow	Magenta	Cyan	Black	Full color/Twin color					Black
					Total	Yellow	Magenta	Cyan	Black	
Copier function	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Printer function	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FAX function	No	No	No	Yes	No	No	No	No	No	Yes
Total	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Yes: With data

No: Without data

- Setting related with the pixel counter function

Standard paper size setting

The standard paper size (A4 or LT) to convert it into the pixel count is selected (08-6500).

Pixel counter display setting

Whether or not to display the pixel counter on the LCD screen is selected (08-6504).

Display reference setting

The reference when displaying the pixel counter on the LCD screen (toner cartridge reference or service technician reference) is selected (08-6505).

Determination counter of toner empty

This is the counter to determine the replacement of new toner cartridge after the toner empty is detected.

After the toner empty is detected by the auto-toner sensor, this counter checks if toner empty is not detected one more time while the specified number of pixel count or output pages is counted.

Pixel counter clearing

There are 3 types for the pixel count clear as follows:

08-6501: All information related to the pixel count is cleared.

08-6502: All information related to the service technician reference pixel count is cleared.

08-6503: All information related to the toner cartridge reference pixel count is cleared.

[4] Relation between pixel count and toner consumption

The user's printing out the image with large coverage or high density may cause the large value of pixel count. And the setting that toner consumption becomes high in the original mode or density setting may cause it as well.

In this case, the replacement cycle of toner cartridge is faster than the standard number of output pages. Therefore, this trend needs to be grasped for the service.

The relation between pixel count and number of output pages per cartridge is as follows:

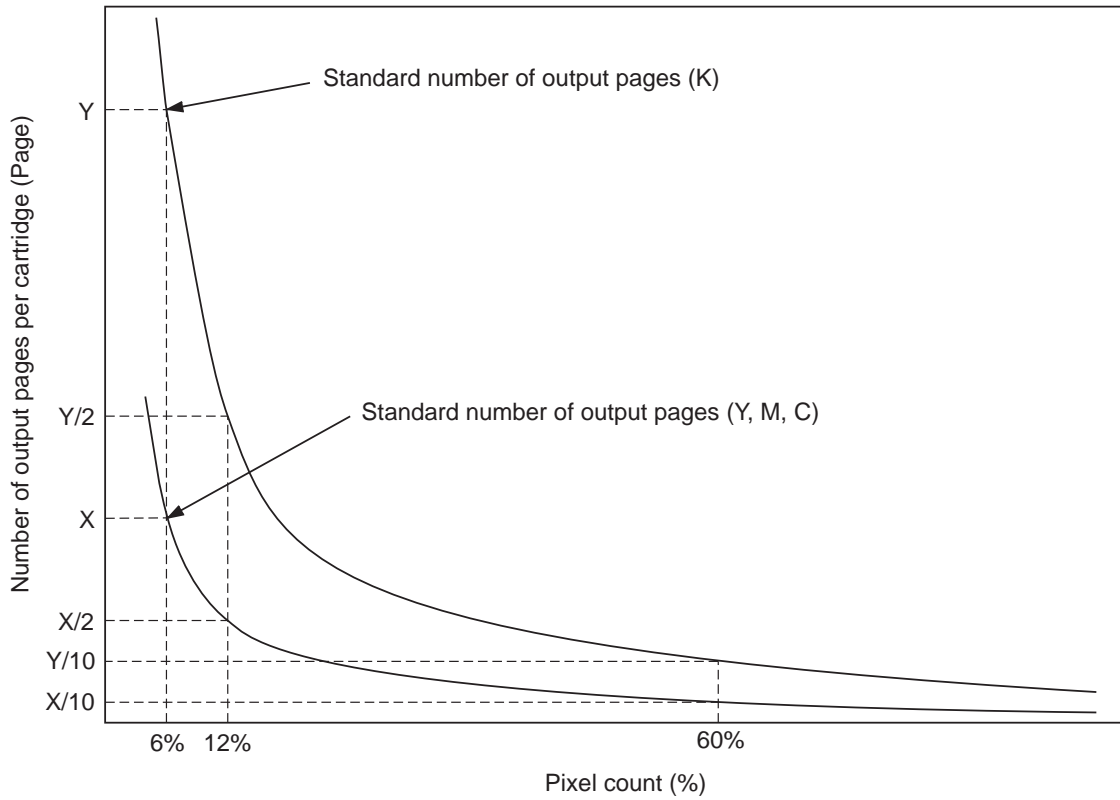


Fig.5-2 Pixel count and number of output pages per cartridge

[5] Pixel counter confirmation

- Display on LCD screen

Whether or not to display the pixel counter on the LCD screen is selected (0: Displayed, 1: Not displayed) in the setting mode (08-6504), and whether or not to display it at the service technician reference or toner cartridge reference is selected (0: Service technician reference, 1: Toner cartridge reference) in the setting mode (08-6505).

The following screen is displayed when the buttons, [COUNTER] and [PIXEL COUNTER] are pressed in this order after "Displayed" is selected with the code above and the power is, as usual, turned ON. (The displayed buttons are depending on the setting of 08-6505.)

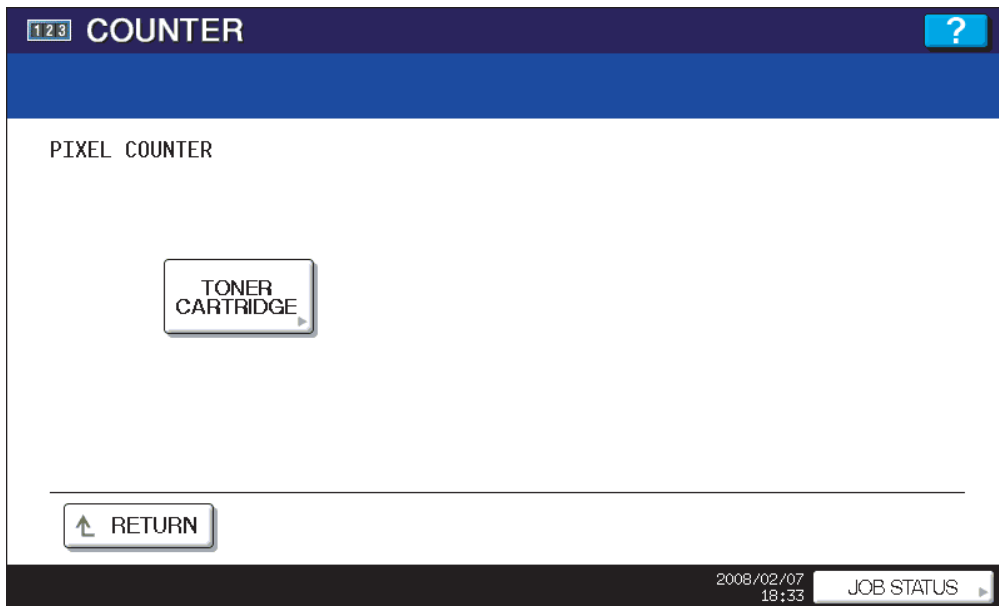


Fig.5-3

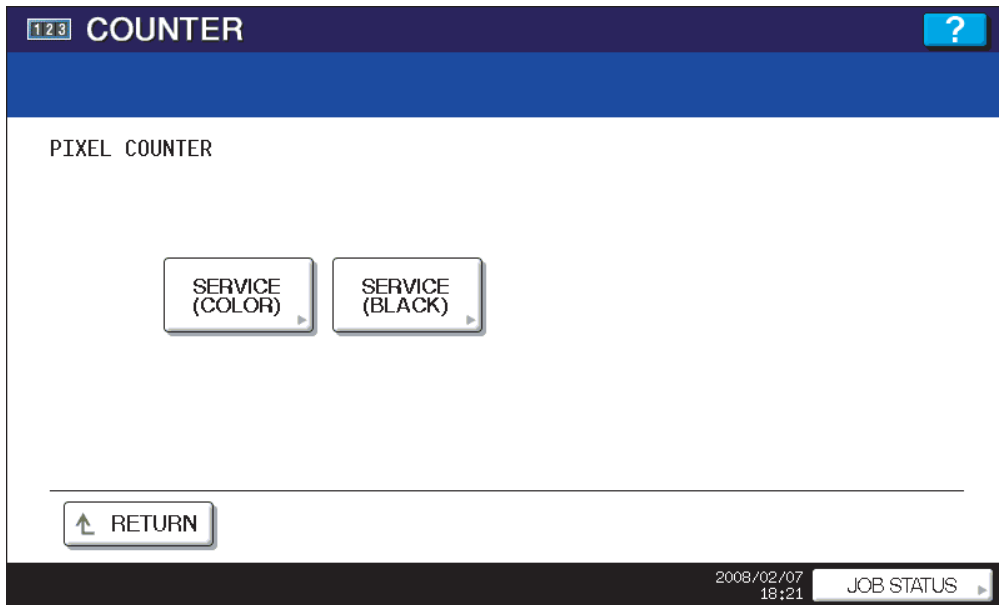


Fig.5-4 Reference selection screen

When selecting and pressing the button in the above screen, each pixel counter screen is displayed.
 [TONER CARTRIDGE] button: Information screen of toner cartridge reference is displayed.
 [SERVICE (COLOR)] button: Information screen of service technician reference (full color) is displayed.
 [SERVICE (BLACK)] button: Information screen of service technician reference (black) is displayed.

The following screen is displayed when pressing the [TONER CARTRIDGE] button.

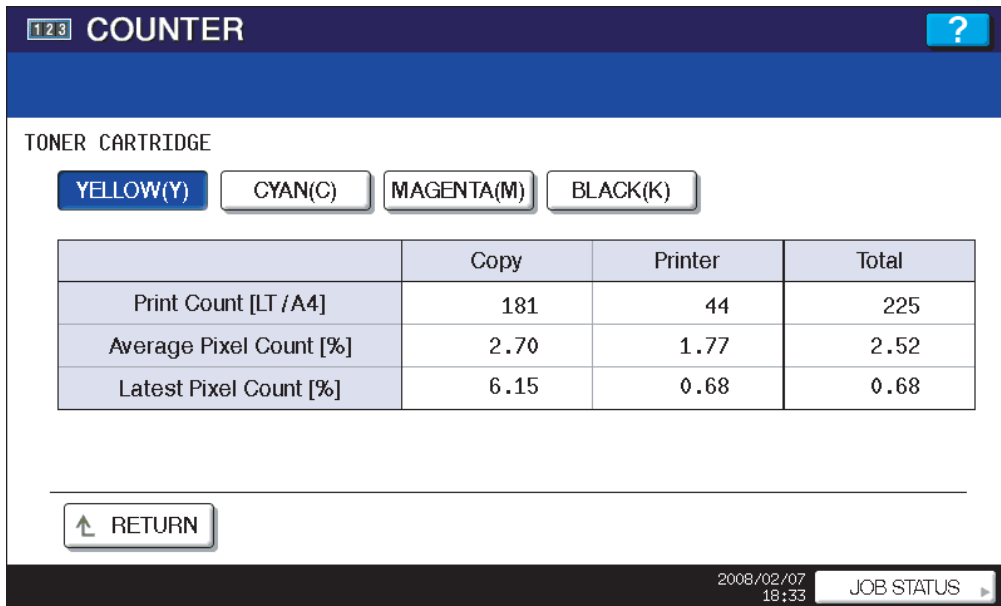


Fig.5-5 Information screen of toner cartridge reference

The following screen is displayed when pressing the [SERVICE (COLOR)] button.

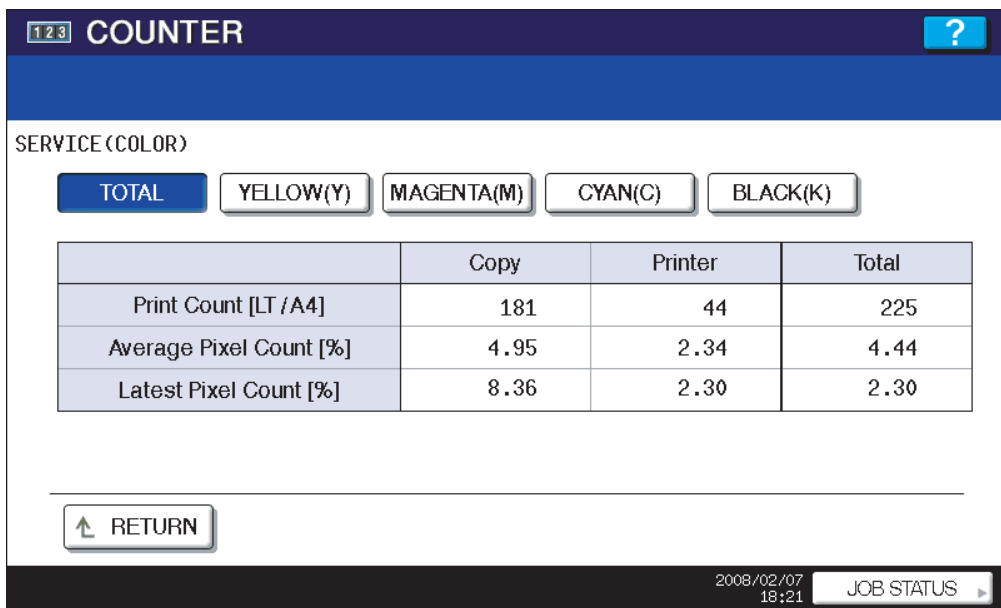


Fig.5-6 Information screen of service technician reference (full color)

The following screen is displayed when pressing the [SERVICE (BLACK)] button.

123 COUNTER ?

SERVICE (BLACK)

	Copy	Printer	Fax	Total
Print Count [LT / A4]	91	91	8	190
Average Pixel Count [%]	7.29	4.09	25.38	6.52
Latest Pixel Count [%]	0.15	0.96	29.98	0.15

↑ RETURN

2008/02/07 18:23 JOB STATUS ▶

Fig.5-7 Information screen of service technician reference (black)

- Data list printing

The data for pixel counter can be printed in the list print mode (9S).

9S-104: The data of the toner cartridge reference is printed.

9S-105: The data of service technician reference is printed.

PIXEL COUNTER CODE LIST							
		S/N: xxxxxxxx	FIN S/N: FIN S/N-xxxxxxx	TOTAL:	9999999		
		TOSHIBA e-STUDIOxxx		DF TOTAL:	9999999		
20xx-02-08 20:13							
TONERCARTRIDGE							
NO.	DATE	COLOR	PPC	PRN	FAX	TOTAL	
0	20xx-02-08	Y	Print Count[LT/A4]	181	45	---	226
1	20xx-02-08	Y	Average Pixel Count[%]	2.70	1.74	---	2.51
2	20xx-02-08	Y	Latest Pixel Count[%]	6.15	0.39	---	0.39
3	20xx-02-08	M	Print Count[LT/A4]	181	45	---	226
4	20xx-02-08	M	Average Pixel Count[%]	6.11	2	---	5.29
5	20xx-02-08	M	Latest Pixel Count[%]	6.82	2.15	---	2.15
6	20xx-02-08	C	Print Count[LT/A4]	181	45	---	226
7	20xx-02-08	C	Average Pixel Count[%]	5.46	2	---	4.81
8	20xx-02-08	C	Latest Pixel Count[%]	6.42	2.73	---	2.73
9	20xx-02-08	K	Print Count[LT/A4]	278	145	9	432
10	20xx-02-08	K	Average Pixel Count[%]	6.15	3.86	23.25	5.74
11	20xx-02-08	K	Latest Pixel Count[%]	7.32	2.19	6.25	2.19

Fig.5-8 Data list of toner cartridge reference

PIXEL COUNTER CODE LIST S/N: xxxxxxxx FIN S/N: FIN S/N-xxxxxxx TOTAL: 9999999
TOSHIBA e-STUDIOxxx DFTOTAL: 9999999

20xx-02-08 20:13

SERVICEMAN

NO.	DATE	COLOR		PPC	PRN	FAX	TOTAL
0	20xx-02-08	F	Print Count[LT/A4]	181	45	---	226
1	20xx-02-08	F	Average Pixel Count[%]	4.95	2.34	---	4.43
2	20xx-02-08	F	Latest Pixel Count[%]	8.36	2.34	---	2.34
3	20xx-02-08	Y	Print Count[LT/A4]	181	45	---	226
4	20xx-02-08	Y	Average Pixel Count[%]	2.7	1.74	---	2.51
5	20xx-02-08	Y	Latest Pixel Count[%]	6.15	0.39	---	0.39
6	20xx-02-08	M	Print Count[LT/A4]	181	45	---	226
7	20xx-02-08	M	Average Pixel Count[%]	6.11	2	---	5.29
8	20xx-02-08	M	Latest Pixel Count[%]	6.82	2.15	---	2.15
9	20xx-02-08	C	Print Count[LT/A4]	181	45	---	226
10	20xx-02-08	C	Average Pixel Count[%]	5.46	2.18	---	4.81
11	20xx-02-08	C	Latest Pixel Count[%]	6.42	2.73	---	2.73
12	20xx-02-08	K	Print Count[LT/A4]	181	45	---	226
13	20xx-02-08	K	Average Pixel Count[%]	5.51	3.43	---	5.10
14	20xx-02-08	K	Latest Pixel Count[%]	14.05	4.10	---	4.10
15	20xx-02-08	K	Print Count[LT/A4]	97	100	9	206
16	20xx-02-08	K	Average Pixel Count[%]	7.36	4.06	23.25	6.45
17	20xx-02-08	K	Latest Pixel Count[%]	7.32	2.19	6.25	2.19

Fig.5-9 Data list of service technician reference

- Display in the setting mode (08)
Information of pixel count can be also checked in the setting mode (08).
For details, see Chapter 15 - "Setting Mode (08) Codes".

Print count, pixel count

Table 2-202 Pixel count code table (toner cartridge reference)

		Full color/Twin color				Black	Black (at color) + Black
		Yellow	Magenta	Cyan	Black		
Copier function	Print count (page)	6567	6569	6571	6562	6563	-
	Average pixel count (%)	6619	6620	6621	6622	6623	6624
	Latest pixel count (%)	6636	6637	6638	6639	6724	-
Printer function	Print count (page)	6568	6570	6572	6564	6565	-
	Average pixel count (%)	6625	6626	6627	6628	6629	6630
	Latest pixel count (%)	6640	6641	6642	6643	6725	-
FAX function	Print count (page)	-	-	-	-	6566	-
	Average pixel count (%)	-	-	-	-	6635	-
	Latest pixel count (%)	-	-	-	-	6644	-
Total	Average pixel count (%)	6631	6632	6633	-	-	6634

Table 2-203 Pixel count code table (service technician reference)

		Full color/Twin color					Black
		Total	Yellow	Magenta	Cyan	Black	
Copier function	Print count (page)	6557	-	-	-	-	6558
	Average pixel count (%)	6587	6588	6589	6590	6591	6602
	Latest pixel count (%)	6606	6607	6608	6609	6610	6616
Printer function	Print count (page)	6559	-	-	-	-	6560
	Average pixel count (%)	6592	6593	6594	6595	6596	6603
	Latest pixel count (%)	6611	6612	6613	6614	6615	6617
FAX function	Print count (page)	-	-	-	-	-	6561
	Average pixel count (%)	-	-	-	-	-	6604
	Latest pixel count (%)	-	-	-	-	-	6618

		Full color/Twin color					Black
		Total	Yellow	Magenta	Cyan	Black	
Total	Average pixel count (%)	6597	6598	6599	6600	6601	6605

Pixel count distribution

Table 2-204 Pixel count code table

		Full color/Twin color				Black
		Yellow	Magenta	Cyan	Black	
Copier function	Print count distribution (page)	6713	6714	6715	6716	6721
Printer function	Print count distribution (page)	6717	6718	6719	6720	6722
FAX function	Print count distribution (page)	-	-	-	-	6723

Notes:

By entering the sub code at the above code, the pixel count distribution can be displayed dividing into 10 ranges. The sub codes are as follows.

0: 0 - 5% 1: 5.1 - 10% 2: 10.1 - 15% 3: 15.1 - 20% 4: 20.1 - 25%
5: 25.1 - 30% 6: 30.1 - 40% 7: 40.1 - 60% 8: 60.1 - 80% 9: 80.1 - 100%

Other information

Toner cartridge replacement counter.

The toner cartridge replacement count is displayed.

08-6573: Toner cartridge Y

08-6574: Toner cartridge M

08-6575: Toner cartridge C

08-6576: Toner cartridge K

Toner cartridge reference count started date

The toner cartridge reference count started date is displayed.

08-6519: Toner cartridge Y

08-6520: Toner cartridge M

08-6521: Toner cartridge C

08-6522: Toner cartridge K

Service technician reference cleared date

The service technician reference cleared date (08-6510) is displayed.

The date (08-6502 was performed) is stored.

Toner cartridge reference cleared date

The toner cartridge reference cleared date is displayed.

The date (08-6503 was performed) is stored.

08-6511: Toner cartridge Y

08-6512: Toner cartridge M

08-6513: Toner cartridge C

08-6514: Toner cartridge K

5.15 Default setting / restore setting of the EFI Printer Board

The codes whose value can be changed by performing “Default setting of the EFI Printer Board (08-9951)” or “Restore setting of the EFI Printer Board (08-9952)” are listed below.

Code	Item	Default value when 08-9951 is performed	Default value when 08-9952 is performed
05-2662-0	Target value of high density control (Y)	345	310
05-2662-1	Target value of high density control (M)	345	310
05-2662-2	Target value of high density control (C)	330	300
05-2662-3	Target value of high density control (K)	410	318
08-3754	Switching DPWS printer setting	2	1
08-3755	Switching DPWS Scanner setting	2	1
08-3767	Switching IPv6 setting	2	2
08-4131	Feeding retry setting	1	0
08-4621	Bypass feed paper size detection setting	1	0
08-4675	Paper ejection setting for wrong bypass paper size	0	2
08-8508	Controlling method for print image position adjustment in secondary scanning direction	0	2
08-8509	Controlling amount for print image position adjustment in secondary scanning direction	0	12
08-8510	Menu display for controlling print image position adjustment in secondary scanning direction	0	0
08-8735	Sending setting of ScanToURL	0	0
08-8800	Enabling / Disabling of 802.1X	2	2
08-8802	Enabling / Disabling of IPsec	2	2
08-8804	Enabling / Disabling of IP filtering	2	2
08-8805	Enabling / Disabling of MAC address filtering	2	2
08-8904	Enabling / Disabling of job jump instruction setting	0	0
08-8915	Enabling / Disabling of automatic output of jobs at login	0	0
08-8967	Rotation printing by guides width of bypass feed tray	0	1
08-9236	Default setting of print screen	2	1
08-9406	Address Mode	1	2
08-9408	IP address	10.250.250.249	0.0.0.0
08-9409	Subnet mask	255.255.255.252	0.0.0.0
08-9410	Gateway	10.250.250.250	0.0.0.0
08-9411	Availability of IPX/SPX	2	2
08-9414	Availability of AppleTalk	2	2
08-9473	Availability of Raw/TCP	2	1
08-9475	Availability of LPD client	2	1
08-9478	Availability of IPP	2	1
08-9489	Availability of FTP print	2	1
08-9505	Bonjour setting	2	1
08-9599	Samba server ON/OFF setting	2	1
08-9709	Default data saving directory of "Scan to File"	0	0

6. SETTING / ADJUSTMENT

6.1 Image Related Adjustment

6.1.1 Adjustment Order

This chapter mainly explains the procedures for image related adjustment. When replacing components which have other specified instructions for adjustment, those specified instructions are to be obeyed in priority.

In the following diagram, the solid lines with arrow lead to essential adjustments, while the dotted lines lead to adjustments to be performed if necessary.

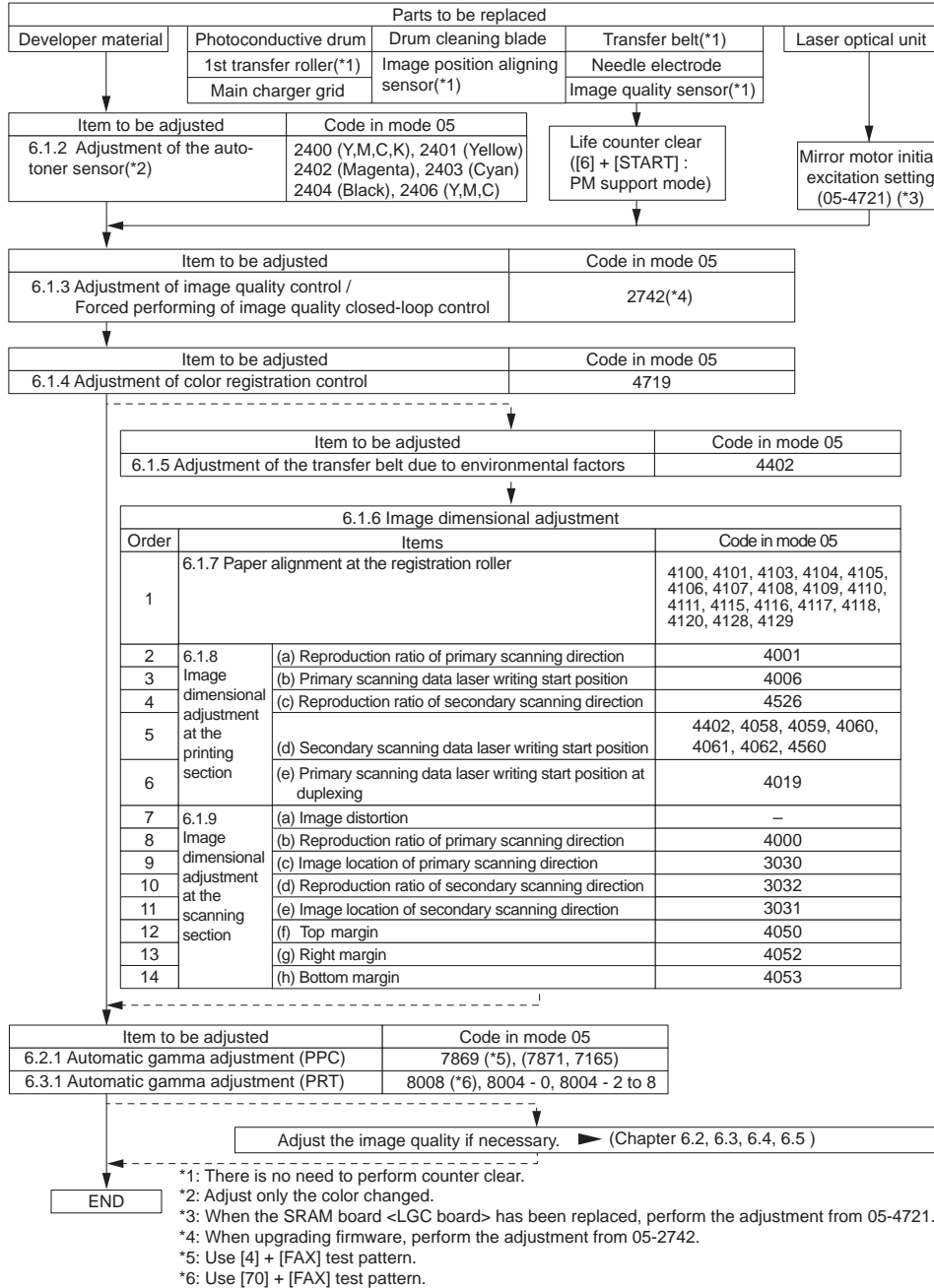


Fig.6-1

6.1.2 Adjustment of the Auto-Toner Sensor

When the developer material is replaced, adjust the auto-toner sensor in the following procedure.

- (1) Install the cleaner unit and developer unit.

Notes:

Do not install the toner cartridge.

- (2) While pressing [0] and [5] simultaneously, turn the power ON. The following message will be displayed.

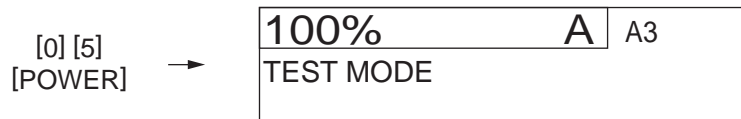


Fig.6-2

- (3) Key in a code and press the [START] button.

Code	2400: All developer materials	2401: Developer material Y	2402: Developer material M
	2403: Developer material C	2404: Developer material K	2406: Developer material YMC

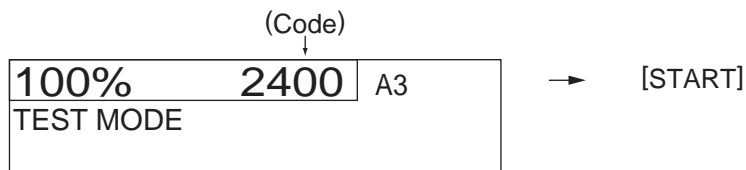
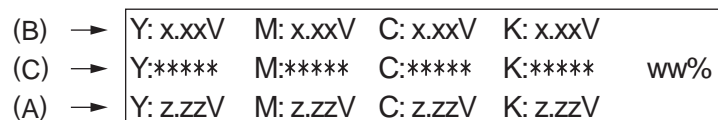


Fig.6-3

- (4) The message below will be displayed approx. 2 minutes later and the adjustment starts:
 - During the adjustment, “Current sensor voltage (V)” shown in (B) automatically changes and gradually approaches to “Target value (V) for adjustment reference voltage” shown in (A).



(B): Current sensor voltage (V)

(C): Adjustment value, Humidity (%)

(A): Target value (V) for adjustment reference voltage

Fig.6-4

- (5) When the “Current sensor voltage (V)” in (B) is converged and the “Sensor output control value (bit value)” corresponding to the value for initial developer material is displayed in (C), the adjustment is completed.
- When the adjustment is completed, the [OK] button is displayed on the screen.

(B) →	Y: x.xxV	M: x.xxV	C: x.xxV	K: x.xxV
(C) →	Y: yyy	M: yyy	C: yyy	K: yyy
(A) →	Y: z.zzV	M: z.zzV	C: z.zzV	K: z.zzV

(B): Current sensor voltage (V)
(C): Sensor output control value (bit value)
(A): Target value (V) for adjustment reference voltage

Fig.6-5

Notes:

The values in (A), (B) and (C) vary with humidity.




- (6) Press the [OK] button to store the adjustment result in the memory.
- (7) Turn the power OFF and install the toner cartridges.

6.1.3 Performing Image Quality Control

- (1) When unpacking
Prior to image dimensional adjustment, perform the “Forced performing of image quality closed-loop control (05-2742)” procedure.
- (2) When any of the following parts is replaced, be sure to perform the “Forced performing of image quality closed-loop control (05-2742)” procedure.
 - Photoconductive drum
 - Developer material
 - Laser optical unit
 - Transfer belt
 - 1st transfer roller
 - Drum cleaning blade
 - Needle electrode
 - Main charger grid
 - Image position aligning sensor
 - Image quality sensor




Notes:

- When performing “Automatic gamma adjustment” in addition, “Forced performing of image quality closed-loop control (05-2742)” should be done first.
- (3) When performing “Automatic gamma adjustment” in cases no parts written above are replaced, do the “Forced performing of image quality closed-loop control (05-2742)” procedure before “Automatic gamma adjustment”.

Code	Item to be adjusted	Contents
2742	Forced performing of image quality closed-loop control	<p><Procedure></p> <ol style="list-style-type: none"> 1. While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment Mode 2. Key in [2742] and press the [START] button. 3. “WAIT” is displayed. 4. When the adjustment finishes normally, the equipment returns to the initial state of Adjustment Mode. <p>When an error occurs</p> <p><When “Waste toner box replacement” is displayed></p> <p> Basic Manual “[E] Waste toner box replacement”</p> <ol style="list-style-type: none"> 1. Replace the waste toner box with a new one and close the waste toner cover. 2. Press and hold the [MAIN POWER] button for a few seconds to shut down the equipment. 3. Turn the power ON. 4. Release the waste toner box full status by the warming-up operation. 5. Check that “WAIT” is displayed. <p><When an adjustment error is displayed></p> <p> Basic Manual “[C] No toner in the cartridge”</p> <ol style="list-style-type: none"> 1. Press and hold the [ON/OFF] button for a few seconds to shut down the equipment in order to check the toner empty status. 2. Turn the power ON. 3. Check the toner supply operation in warming-up. When a message prompts you to replace the toner cartridge, open the front cover and replace the cartridge with a new one. 4. Check that “WAIT” is displayed. <p><Other abnormalities></p> <p>Take the appropriate action described in Troubleshooting.</p> <p> P. 8-1 "8. ERROR CODE AND TROUBLESHOOTING"</p>


6.1.4 Adjustment of Color Registration Control

After having finished the “Forced performing of image quality closed-loop control (05-2742)” procedure, perform the “Forced performing of color registration control adjustment (05-4719)” procedure.

Code	Item to be adjusted	Contents
4719	Forced performing of color registration control	<p><Procedure></p> <ol style="list-style-type: none"> While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment mode Key in [4719] and press the [START] button. When the adjustment finishes normally, the equipment returns to the initial state of Adjustment Mode. <p>When an error occurs</p> <p><When “Waste toner box replacement” is displayed></p> <p> Basic Manual “[E] Waste toner box replacement”</p> <ol style="list-style-type: none"> Replace the waste toner box with a new one and close the waste toner cover. Press and hold the [MAIN POWER] button for a few seconds to shut down the equipment. Turn the power ON. Release the waste toner box full status by the warming-up operation. Check that “WAIT” is displayed. <p><When an adjustment error is displayed></p> <p> Basic Manual “[C] No toner in the cartridge”</p> <ol style="list-style-type: none"> Press and hold the [ON/OFF] button for a few seconds to shut down the equipment in order to check the toner empty status. Turn the power ON. Check the toner supply operation in warming-up. When a message prompts you to replace the toner cartridge, open the front cover and replace the cartridge with a new one. Check that “WAIT” is displayed. <p><Other abnormalities></p> <p>Take the appropriate action described in Troubleshooting.  P. 8-1 “8. ERROR CODE AND TROUBLESHOOTING”</p>

6.1.5 Adjustment of the transfer belt due to environmental factors

The length of the transfer belt may vary depending on environments such as temperature or humidity. When the belt length varies, the leading position of an image also varies. Therefore, check image position in the secondary scanning direction after installation or parts replacement because there is difference between the environments of an installation site and a factory where the equipment was shipped. (Although image adjustment is already performed at the shipment from the factory, this adjustment must be performed again in the installation site.) If required, perform “Leading edge position adjustment / Common items (05-4402)”.

 P. 6-87 “6.11.1 Adjustment of the transfer belt due to environmental factors”

6.1.6 Image Dimensional Adjustment

There are several adjustment items in the image dimensional adjustment, as listed below. Prior to this image dimensional adjustment, perform “Forced performing of image quality closed-loop control (05-2742)” and “Forced performing of color registration control (05-4719)”.

When adjusting these items, the following adjustment order should strictly be observed.

Item to be adjusted		Code in mode 05
1. Paper alignment at the registration roller		4100, 4101, 4103, 4104, 4105, 4106, 4107, 4108, 4109, 4110, 4111, 4115, 4116, 4117, 4118, 4120, 4128, 4129
2. Printer-related image dimensional adjustment	Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed)	4001
	Primary scanning data laser writing start position	4006
	Reproduction ratio of secondary scanning direction (Fine adjustment of transfer belt motor rotation speed)	4526
	Secondary scanning data laser writing start position	4402, 4058, 4059, 4060, 4560, 4061, 4062
	Primary scanning data laser writing start position at duplexing	4019
3. Scanner-related image dimensional adjustment	Image distortion	-
	Reproduction ratio of primary scanning direction	4000
	Image location of primary scanning direction	3030
	Reproduction ratio of secondary scanning direction	3032
	Image location of secondary scanning direction	3031
	Top margin	4050
	Right margin	4052
	Bottom margin	4053

[Procedure to key in adjustment values]

In accordance with the procedure described below, make adjustment of each adjustment item so that the measured values obtained from test copies satisfy the specification. By pressing the [FAX] button, immediately after starting the Adjustment Mode (05), single-sided test copying can be performed (normal copy mode).

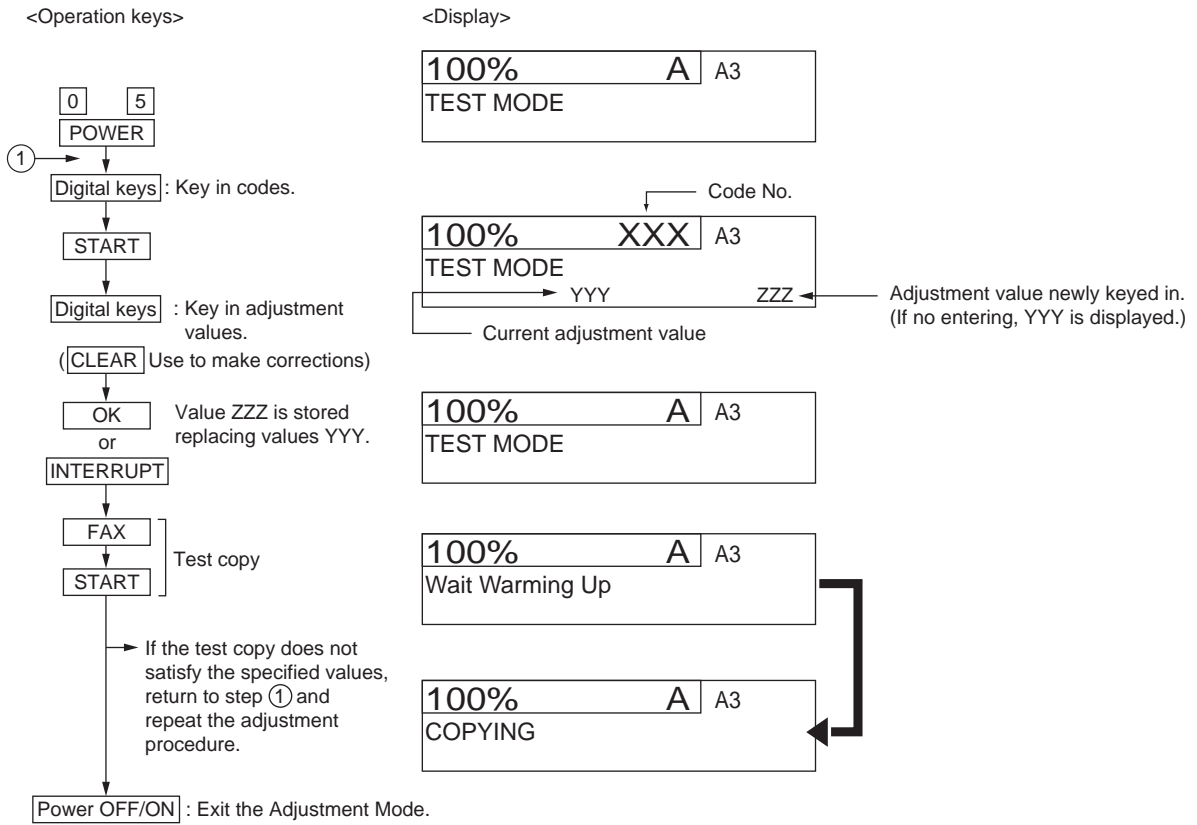


Fig.6-6

6.1.7 Paper alignment at the registration roller

[A] Adjustment with touch panel

Paper alignment at the registration roller can be adjusted in the following procedure by performing the code 05-4579.

1. Select the drawer.

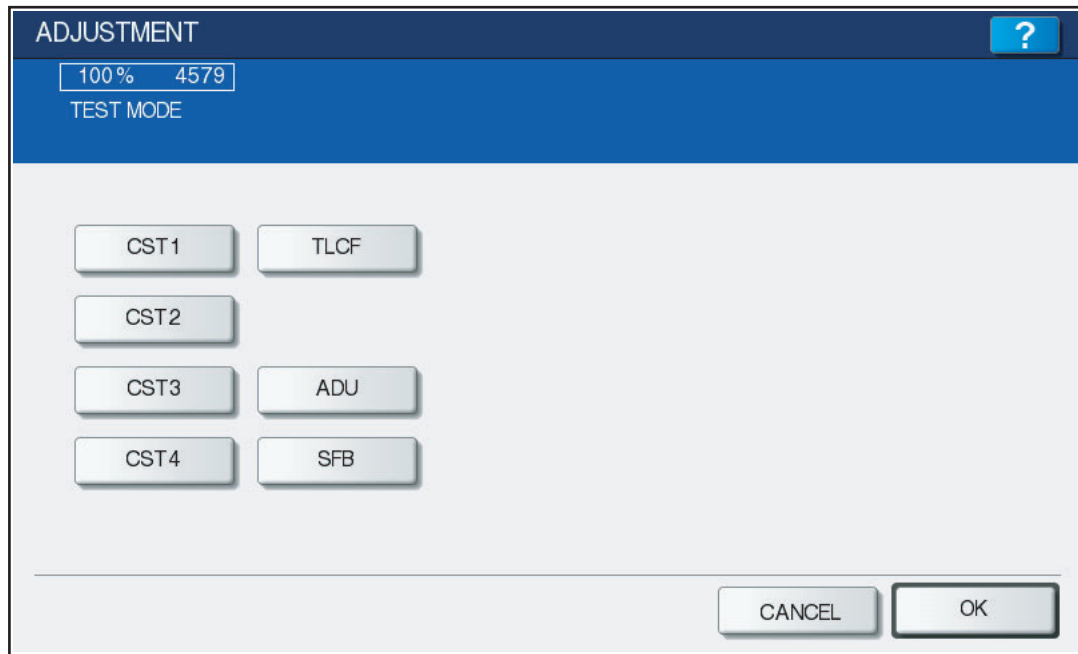


Fig.6-7

2. Select the paper size.

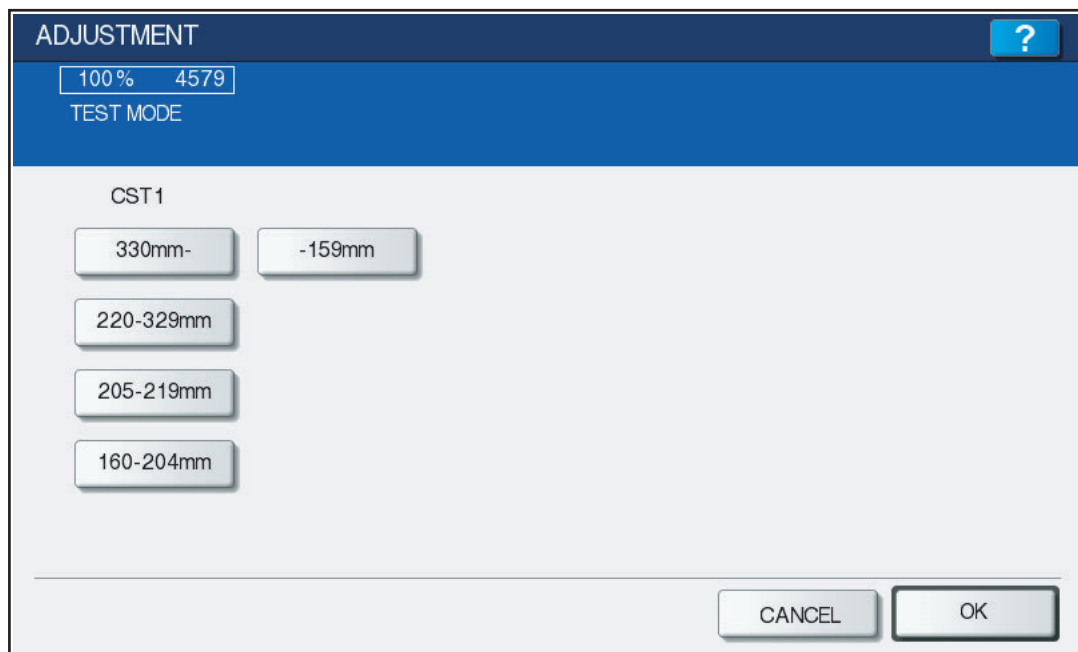


Fig.6-8

3. Select the media type.

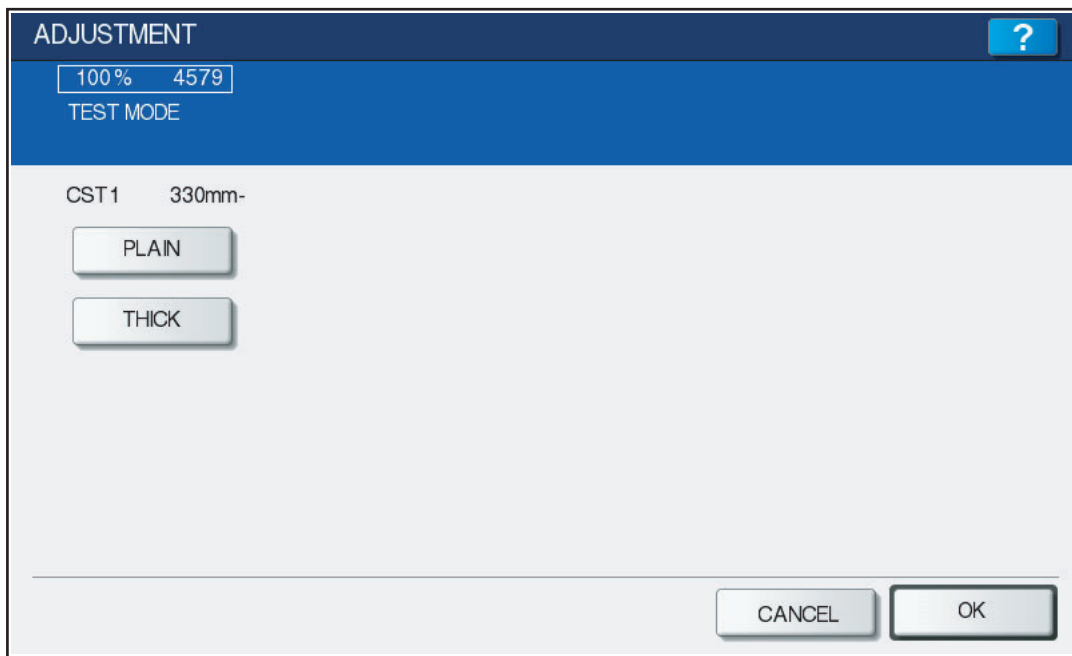


Fig.6-9

4. Key in the adjustment value.

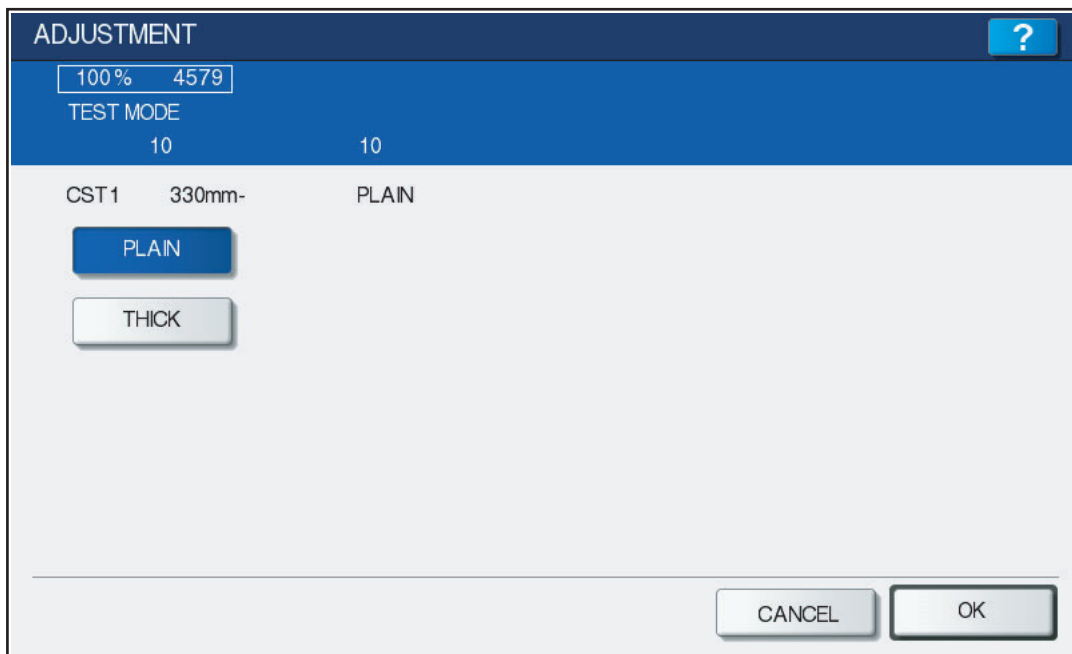


Fig.6-10

5. Press the [OK] button to finish the adjustment.

* Press the [FUNCTION CLEAR] or [CANCEL] button to return to the previous menu.

[B] Adjustment by direct code entry

The aligning amount is adjusted by using the following codes in Adjustment Mode (05).

Drawer	Code	Sub code	Paper size (Select the paper size with the sub code.)	Paper type*
1st drawer (CST1)	4100	0,1,2,3,4	0: 330 mm or longer (13.0 inches or longer) 1: 220–329 mm (8.7–12.9 inches) 2: 205–219 mm (8.1–8.6 inches) 3: 160-204 mm (6.3–8.0 inches) 4: 159 mm or shorter (6.26 inches or shorter)	Plain paper
	4115	0,1,2,3,4		Thick paper 1/Thick paper 2/Thick paper 3
2nd drawer (CST2)	4101	0,1,2,3,4		Plain paper
	4116	0,1,2,3,4		Thick paper 1/Thick paper 2/Thick paper 3
3rd drawer (CST3)	4108	0,1,2,3,4		Plain paper
	4117	0,1,2,3,4		Thick paper 1/Thick paper 2/Thick paper 3
4th drawer (CST4)	4109	0,1,2,3,4		Plain paper
	4118	0,1,2,3,4		Thick paper 1/Thick paper 2/Thick paper 3
Bypass feed	4103	0,1,2,3,4		Plain paper
	4104	0,1,2,3,4		Thick paper 1
	4105	0,1,2,3,4	Thick paper 2	
	4106	0,1,2,3,4	Thick paper 3/Thick paper 4	
	4107	0,1,2,3,4	OHP	
	4128	0,1,2,3,4	Special paper 1	
	4129	0,1,2,3,4	Special paper 2	
LCF	4111		-	Plain paper
ADU	4110	0,1,2,3,4	0: 330 mm or longer (13.0 inches or longer) 1: 220–329 mm (8.7–12.9 inches) 2: 205–219 mm (8.1–8.6 inches) 3: 160-204 mm (6.3–8.0 inches) 4: 159 mm or shorter (6.26 inches or shorter)	Plain paper
	4120	0,1,2,3,4		Thick paper 1/Thick paper 2/Thick paper 3/Thick paper 4/Special paper 1/Special paper 2

*Weight:

Plain paper: 64 to 105 g/m² (17 lb. Bond to 28 lb. Bond)

Thick paper 1: 106 to 163 g/m² (28 lb. Bond to 60 lb. Cover (90 lb. Index))

Thick paper 2: 164 to 209 g/m² (61 lb. Cover to 77.3 lb. Cover (115.7 lb. Index))

Thick paper 3: 210 to 256 g/m² (77.3 lb. Cover to 94.5 lb. Cover (141.4 lb. Index))

Thick paper 4: 257 to 280 g/m² (94.5 lb. Cover to 100 lb. Cover (150 lb. Index))

<Procedure>

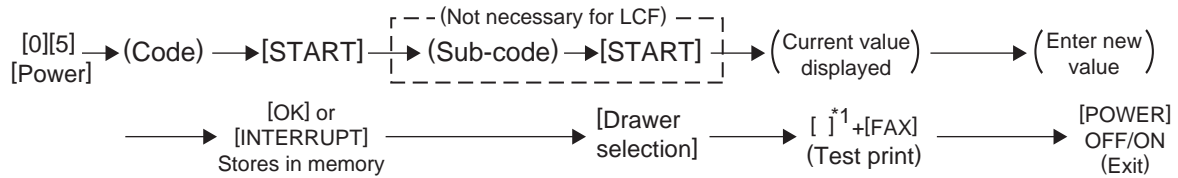


Fig.6-11

- (*1)
- 1: Single-sided grid pattern in Black Mode
 - 3: Double-sided grid pattern in Black Mode
 - 55: Grid pattern of thick paper 2 in Full Color Mode
 - 56: Grid pattern of thick paper 3/thick paper 4 in Full Color Mode
 - 57: Grid pattern of OHP film in Full Color Mode
 - 58: Single-sided grid pattern of thick paper 2 in Black Mode
 - 59: Single-sided grid pattern of thick paper 3/thick paper 4 in Black Mode
 - 60: Single-sided grid pattern of OHP film in Black Mode
 - 98: Single-sided grid pattern in K(4)* Mode

K(4)*: System in which the test pattern is printed only in the black mode, though the four color developers (Y, M, C, K) are contacted to the transfer belt.

Notes:

If the aligning amount is too large, abnormal noise (paper-folding noise) or actual paper folding may occur during paper feeding. If the aligning amount is too small, on the other hand, a skew, an image dislocation in feeding direction or a paper exit jam (E010) may occur. Pay attention to the above and select the appropriate value.

6.1.8 Image dimensional adjustment at the printing section

The printer related adjustment is performed by using the printed out grid pattern.

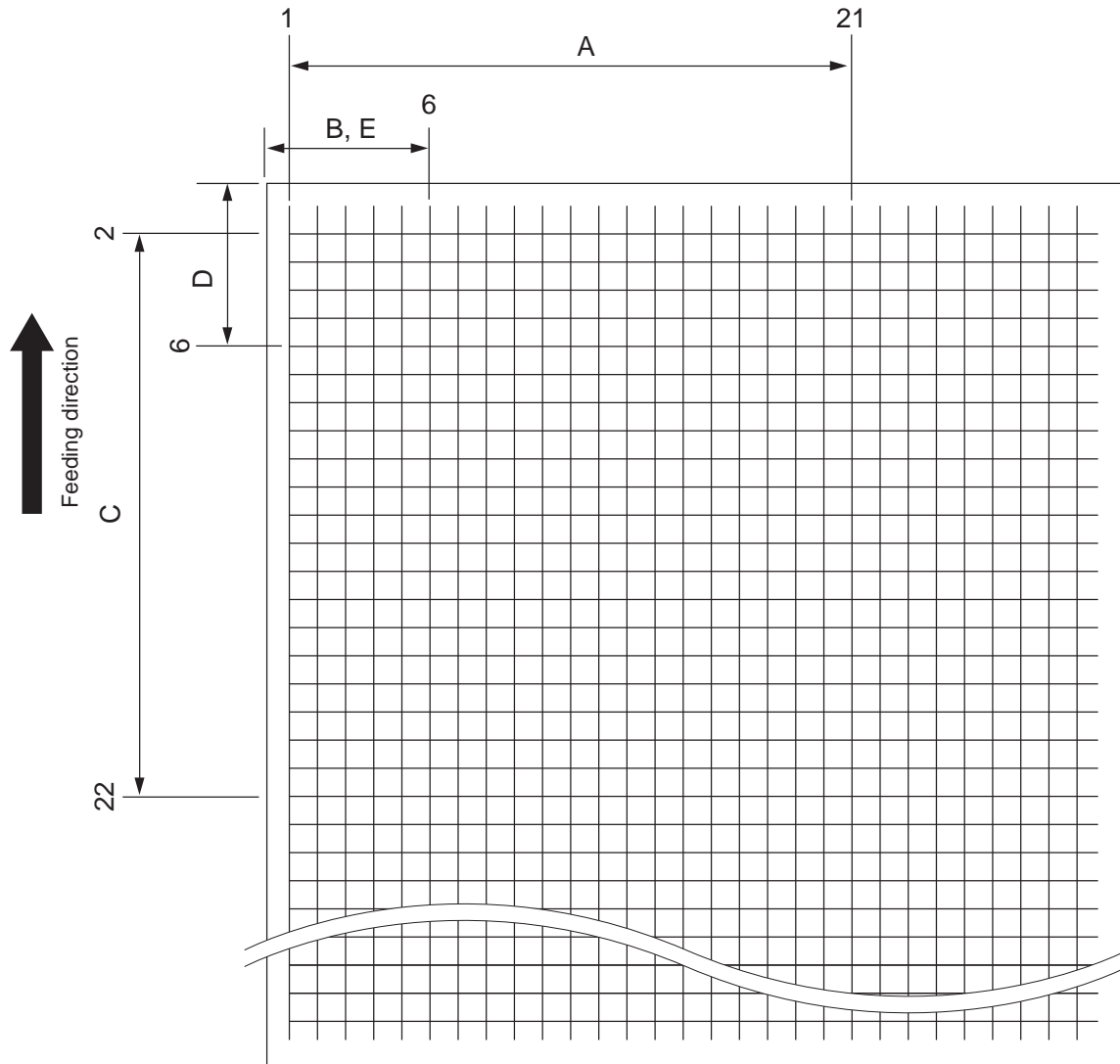


Fig.6-12

	Adjustment Tolerance	Detail of adjustment
A	200 ± 0.5mm	📖 P. 6-13 "[A] Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed (Printer))"
B	52 ± 0.5mm	📖 P. 6-13 "[B] Primary scanning data laser writing start position (Printer)"
C	200 ± 0.5mm	📖 P. 6-14 "[C] Reproduction ratio of secondary scanning direction (Fine adjustment of transfer belt motor rotation speed)"
D	52 ± 0.5mm	📖 P. 6-15 "[D] Secondary scanning data laser writing start position"
E	52 ± 0.5mm	📖 P. 6-16 "[E] Primary scanning data laser writing start position at duplexing"

[A] Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed (Printer))

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [98] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the 2nd drawer.)
- (3) Measure the distance A from the 1st line to the 21st line of the grid pattern.
- (4) Check if the distance A is within 200 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance A again.

<Procedure>

(Adjustment Mode) → (Key in the code [4001]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed.

→ Press [98] → [FAX] → (A grid pattern is printed out.)

* The larger the adjustment value is, the longer the distance A becomes (approx. 0.1 mm/step).

[B] Primary scanning data laser writing start position (Printer)

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [98] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the 2nd drawer.)
- (3) Measure the distance B from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance B is within 52 ± 0.5 mm.

If not, use the following procedure to change values and measure the distance B again.

<Procedure>

(Adjustment Mode) → (Key in the code [4006]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [98] → [FAX] → (A grid pattern is printed out.)

* The larger the adjustment value is, the longer the distance B becomes (approx. 0.04 mm/step).

Notes:

Make sure the first line of the grid pattern is printed out since the line is occasionally vanished.

[C] Reproduction ratio of secondary scanning direction (Fine adjustment of transfer belt motor rotation speed)

Code	Sub code	Function	Remarks
4526	0	PRT (Normal speed)	When the value increases, the reproduction ratio in the secondary scanning direction becomes larger. (Approx. 0.1 mm/1steps)
	1	FAX (Normal speed)	
	2	PPC (Normal speed)	
	3	PRT (Reduced speed)	
	4	FAX (Reduced speed)	
	5	PPC (Reduced speed)	

If the sub code "0" of 05-4526 is adjusted, the adjustment values of sub codes 1 to 8 are also changed automatically, being operated with the adjusted value, according to the proper parameter. Basically, adjusting only the sub code "0" completes all the adjustment of PRT, PPC and FAX.

[C-1] Confirmation of 05-4526-0

1. While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
2. Press [98] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the 2nd drawer.)
3. Measure the distance C from the 2nd line at the leading edge of the paper to the 22nd line of the grid pattern.
 - * Normally, the 1st line of the grid pattern is not printed.
4. Check if the distance C is within 200 ± 0.5 mm.
5. If not, perform the procedure in "[C-2] Adjustment of 05-4526-0" to change the values and measure the distance C again.
6. Perform the color registration (4719) after the adjustment.

[C-2] Adjustment of 05-4526-0

(Adjustment Mode) → (Key in the code [4526]) → [START] → (Key in the sub-code [0])
 → [START] → (Key in a value (acceptable values: 0 to 255))
 → [OK] or [INTERRUPT] (Stored in memory)

- * When the value is not within the recommended values, the trailing edge area of the image may be out of position for the paper length or the density at the trailing edge area of the image may become lower. Perform the adjustment confirming the image.
 - "100% A" is displayed
 - Press [98] → [FAX] → (A grid pattern is printed out.)
- * The larger the adjustment value is, the longer the distance C becomes (approx. 0.1 mm/ step).
 - (Key in the code [4719]) → [START] → (Enforced color registration)

Notes:

- The grid pattern outputted by pressing [0][5] → [98] → [FAX] is the one of PRT (05-4526-0). Even though the sub codes "1" to "8" are adjusted, the result cannot be confirmed in the grid pattern outputted by pressing [0][5] → [98] → [FAX].
- When "05-4526-0" is performed, a proper value is automatically calculated for the size of an image in each function mode (copy/printer/Fax) or at each speed (normal speed/reduced speed/high speed). The speed of the transfer belt motor is also adjusted. Therefore, use the above default value other than the sub code "0," unless otherwise required.

Remarks:

For long paper (length: 484 mm to 1,200 mm) and A3/LD, it is recommended to adjust the distance C above within the range of 199.5 mm and 200 mm otherwise the margin of the trailing edge may be deleted.

[D] Secondary scanning data laser writing start position

Performing the code 05-4402 covers this adjustment for all paper sources.

The adjustment for each paper source is also available.

For all paper sources

Code	Paper size	Acceptable value	Remarks
4402	A3/LD	0 to 200	Performs the adjustment for all paper sources.

For each paper source

Order for adjustment	Paper source	Code	Paper size	Acceptable value	Remarks
1	1st drawer	4058	A4/LT	0 to 100	
2	2nd drawer	4059	A3/LD	0 to 100	
3	3rd drawer	4060	A4/LT	0 to 100	
4	4th drawer	4560	A4/LT	0 to 100	
5	Bypass feed	4061	A4/LT	0 to 100	
6	Duplexing	4062	A3/LD	0 to 100	Paper fed from the 2nd drawer

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [98] ([3] for duplexing) → [FAX]. (A grid pattern with 10 mm squares is printed out.)
- (3) Measure the distance D from the leading edge of the paper to the 6th line of the grid pattern.
 - * Normally, the 1st line of the grid pattern is not printed.
 - * At the duplexing, measure it on the top side of the grid pattern.
- (4) Check if the distance D is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance D again.
<Procedure>
(Adjustment Mode) → (Key in the code shown above) → [START]
→ (Key in an acceptable value shown above)
→ [OK] or [INTERRUPT] (Stored in memory)
→ "100% A" is displayed
→ Press [98] ([3] for duplexing)
→ [FAX] → (A grid pattern is printed out.)
 - * The larger the adjustment value is, the longer the distance D becomes (approx. 0.10 mm/step).

[E] Primary scanning data laser writing start position at duplexing

Notes:

Make sure the first line of the grid pattern is printed out since the line is occasionally vanished.

[E-1] Adjustment for long-sized paper

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A3/LD from the 2nd drawer.)
- (3) Check the grid pattern on the test print and measure the distance E from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance E is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance E again.

<Procedure>

(Adjustment Mode) → (Key in the code [4019]) → [START] → [0] → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed.

→ Press [3] → [FAX] → (A grid pattern is printed out.)

* The larger the adjustment value is, the longer the distance E becomes (approx. 0.04 mm/step).

[E-2] Adjustment for short-sized paper

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A4/LT from the 1st drawer.)
- (3) Check the grid pattern on the test print and measure the distance E from the left edge of the paper to the 6th line of the grid pattern.
- (4) Check if the distance E is within 52 ± 0.5 mm.
- (5) If not, use the following procedure to change values and measure the distance E again.

<Procedure>

(Adjustment Mode) → (Key in the code [4019]) → [START] → [1] → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [3] → [FAX] → (A grid pattern is printed out.)

* The larger the adjustment value is, the longer the distance E becomes (approx. 0.04 mm/step).

[E-3] Adjustment for medium-sized paper (Length: 220 mm to 329 mm)

1. While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
2. Press [3] → [FAX]. (A grid pattern with 10 mm squares is printed out. Use A4-R/LT-R from the 1st drawer.)
3. Check the grid pattern on the test print and measure the distance E from the left edge of the paper to the 6th line of the grid pattern.
4. Check if the distance E is within 52 ± 0.5 mm.
5. If not, use the following procedure to change values and measure the distance E again.

<Procedure>

(Adjustment Mode) → (Key in the code [4019]) → [START] → [2] → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ "100% A" is displayed

→ Press [3] → [FAX] → (A grid pattern is printed out.)

* The larger the adjustment value is, the longer the distance E becomes (approx. 0.04 mm/step).

Notes:

When the laser writing start position (05-4019-0) for long-sized paper is changed, the one for medium-sized paper is also altered. (However, the value of 05-4019-2 is not changed.)

If 05-4019-0 is changed, check it with A4-R/LT-R paper and adjust the value of 05-4019-2 again as required.

<Adjustment procedure summarization for A to E>

	[0] [5] [Power ON] → [98] ([3](05-4062, 4019) for duplexing) → [FAX]	
A:	05-4001 (2nd drawer, A3/LD)	→ 200±0.5 mm (0.1 mm/step)
B:	05-4006 (2nd drawer, A3/LD)	→ 52±0.5 mm (0.04 mm/step)
C:	05-4526-0 (2nd drawer, A3/LD)	→ 200±0.5 mm (0.1 mm/step)
D:	05-4402 (2nd drawer, A3/LD)	→ 52±0.5 mm (0.1 mm/step)
	05-4058 (1st drawer, A4/LT)	
	05-4059 (2nd drawer, A3/LD)	
	05-4060 (3rd drawer, A4/LT)	
	05-4560 (4th drawer, A4/LT)	
	05-4061 (Bypass feed, A4/LT)	
	05-4062 (Duplexing, A3/LD)	
E:	05-4019-0 (2nd drawer, A3/LD),	→ 52±0.5 mm (0.04 mm/step)
	05-4019-1 (1st drawer, A4/LT)	
	05-4019-2 (A4-R/LT-R)	

6.1.9 Image dimensional adjustment at the scanning section

[A] Image distortion

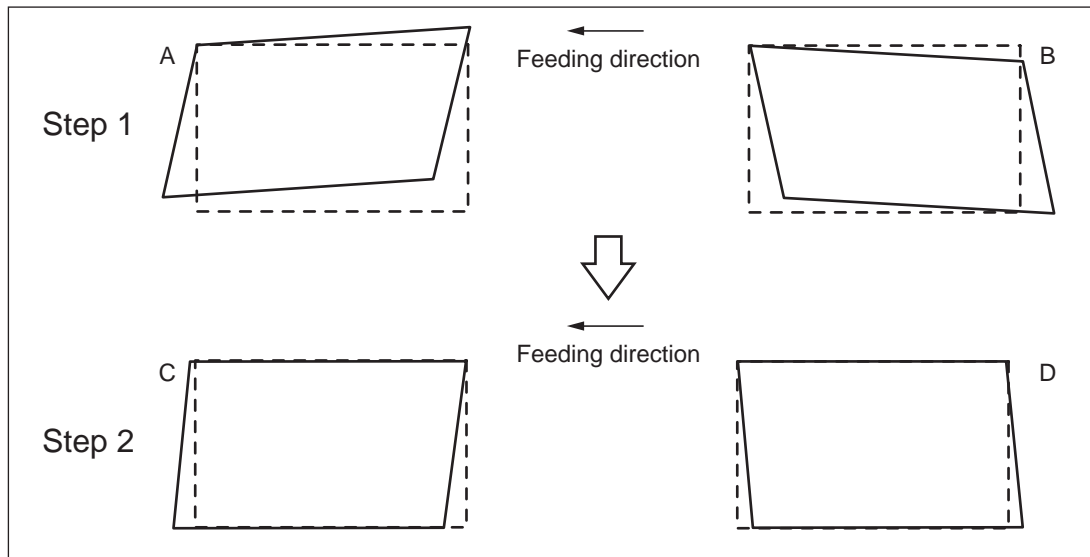


Fig.6-13

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Press [FAX] to make a copy of any image on a sheet of A3/LD paper.
- (3) Key in [3033] and press the [START] button to move the carriage to the adjustment position.
- (4) Make an adjustment in the order of step 1 and 2.

Step 1

In case of A:

Tighten the mirror-3 adjustment screw (CW).

In case of B:

Loosen the mirror-3 adjustment screw (CCW).

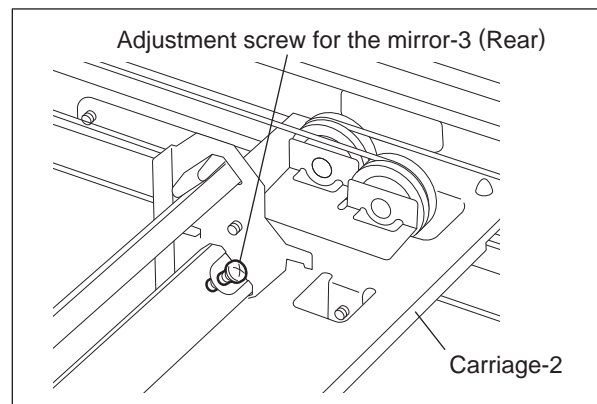


Fig.6-14

Step 2

In case of C:

Tighten the mirror-1 adjustment screw (CW).

In case of D:

Loosen the mirror-1 adjustment screw (CCW).

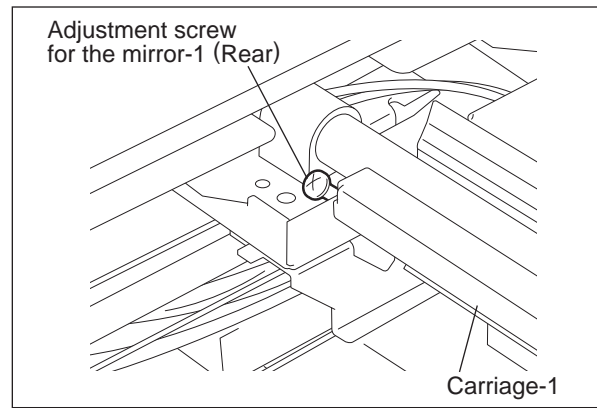


Fig.6-15

(5) Apply the screw locking agents to the adjustment screws. (2 areas)

- Recommended screw lock agent
Manufacturer: Three Bond
Product name: 1401E

The following adjustments (b) to (e) should be performed with Test Chart No. TCC-1.

📖 P. 6-25 " Adjustments and Checks using Test Chart No. TCC-1"

[B] Reproduction ratio adjustment of primary scanning direction

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
- (3) Press [FAX] → [START] to make a copy at the mode of A3/LD, 100%, Full color and Text/Photo.
- (4) Measure the distance A between M1 and M2 on the copy with a ruler.
- (5) Check if the distance A is within 200 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure>
(Adjustment Mode) → (Key in the code [4000]) → [START]
→ (Key in a value (acceptable values: 0 to 255) with digital keys)
→ [OK] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance A becomes (approx. 0.1 mm/step).

[C] Image location of primary scanning direction

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
- (3) Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, Full color and Text/Photo.
- (4) Measure the distance B from the left paper edge to the 5 mm line of left grid pattern on the copy with a ruler.
- (5) Check if the distance B is within 5 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure>
(Adjustment Mode) → (Key in code [3030]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ [OK] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance B becomes (approx. 0.04 mm/step).

[D] Reproduction ratio of secondary scanning direction

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
- (3) Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, Full color and Text/Photo.
- (4) Measure the distance C between M3 and M4 on the copy with a ruler.
- (5) Check if the distance C is within 150 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat step 3. to 5. above.
<Procedure>
(Adjustment Mode) → (Key in the code [3032]) → [START]
→ (Key in a value (acceptable values: 0 to 255))
→ [OK] or [INTERRUPT] (Stored in memory)
* The larger the adjustment value is, the longer the distance C becomes (approx. 0.03 mm/step).

[E] Image location of secondary scanning direction

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Place Test Chart No. TCC-1 on the original glass (with the arrow positioned at the left rear side).
- (3) Press [FAX] → [START] to make a copy at the mode of A4/LT, 100%, Full color and Text/Photo.
- (4) Measure the distance D from the top paper edge to the 10 mm line of top grid pattern on the copy with a ruler.
- (5) Check if the distance D is within 10 ± 0.5 mm.
- (6) If not, use the following procedure to change values and repeat step 3. to 5. above.

<Procedure>

(Adjustment Mode) → (Key in the code [3031]) → [START]

→ (Key in a value (acceptable values: 68 to 188))

→ [OK] or [INTERRUPT] (Stored in memory)

* The larger the adjustment value is, the longer the distance D becomes (approx. 0.08 mm/step).

[F] Top margin

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open the platen cover or RADF.
- (3) Press [FAX] → [START] to make a copy at the mode of A3/LD, 100%, Full color, Text/Photo and 2nd drawer.
- (4) Measure the blank area E at the leading edge of the copied image.
- (5) Check if the blank area E is within the range.

Function	Black	Color
Copy	4.2 mm + 2.8 mm / -1.2 mm	5 - 1.0 mm, 5 + 2.0 mm (4.0 to 7.0 mm)

- (6) If not, use the following procedure to change values and repeat the steps 3. to 5. above.

<Procedure>

(Adjustment Mode) → (Key in the code [4050]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory)

→ (“100% A” is displayed.)

* The larger the adjustment value is, the wider the blank area becomes (approx. 0.04 mm/step).

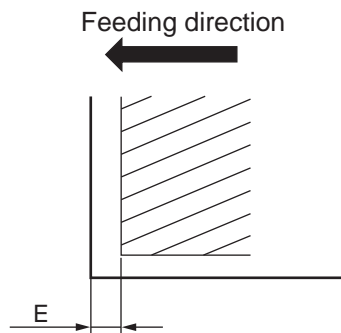


Fig.6-16

Notes:

Paper jams tend to occur in equipment in which thin paper such as 64g/m² (17lb. Bond) paper is used or a large amount of high density images such as pictures are output. For this equipment, we recommend that you adjust the top margin “in the plus direction” in order to prevent paper jamming.

Range of top margin adjustment (e.g.)

Function	Black	Color
Copy	4.2 - 7.0 mm	5.0 - 7.0 mm

[G] Right margin

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open the platen cover or RADF.
- (3) Press [FAX] → [START] to make a copy at the mode of A3/LD, 100%, Full color, Text/Photo and 2nd drawer.
- (4) Measure the blank area F at the right side of the copied image.
- (5) Check if the blank area F is within the range.

Function	Black	Color
Copy	2±2.0 mm	2±2.0 mm

- (6) If not, use the following procedure to change values and repeat the steps 3. to 5. above.

<Procedure>

(Adjustment Mode) → (Key in the code [4052]) → [START]

→ (Key in a value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (Stored in memory).

→ ("100% A" is displayed.)

* The larger the adjustment value is, the wider the blank area at the right side becomes (approx. 0.04 mm/step).

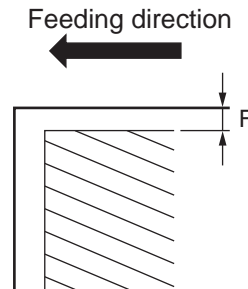


Fig.6-17

[H] Bottom margin

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → (Adjustment Mode)
- (2) Open platen cover or RADF.
- (3) Press the [FAX] → [START] to make a copy at the mode of A3/LD, 100%, Full color, Text/Photo and 2nd drawer.
- (4) Measure the blank area G at the trailing edge of the copied image.
- (5) Check if the blank area G is within the range.

Function	Black	Color
Copy	3±2.0 mm	3±2.0 mm

- (6) If not, use the following procedure to change values and repeat the steps 3. to 5. above.

<Procedure>

(Adjustment Mode) → (Key in the code [4053]) → [START]

→ (Key in value (acceptable values: 0 to 255))

→ [OK] or [INTERRUPT] (stored in memory)

→ ("100% A" is displayed.)

* The larger the adjustment value is, the wider the blank area at the trailing edge becomes (approx. 0.04 mm/step).

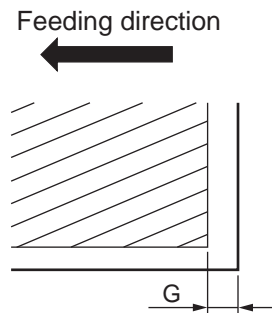


Fig.6-18

Adjustments and Checks using Test Chart No. TCC-1

Following items can be checked with the Test Chart No. TCC-1.

1. Points to be measured in the chart

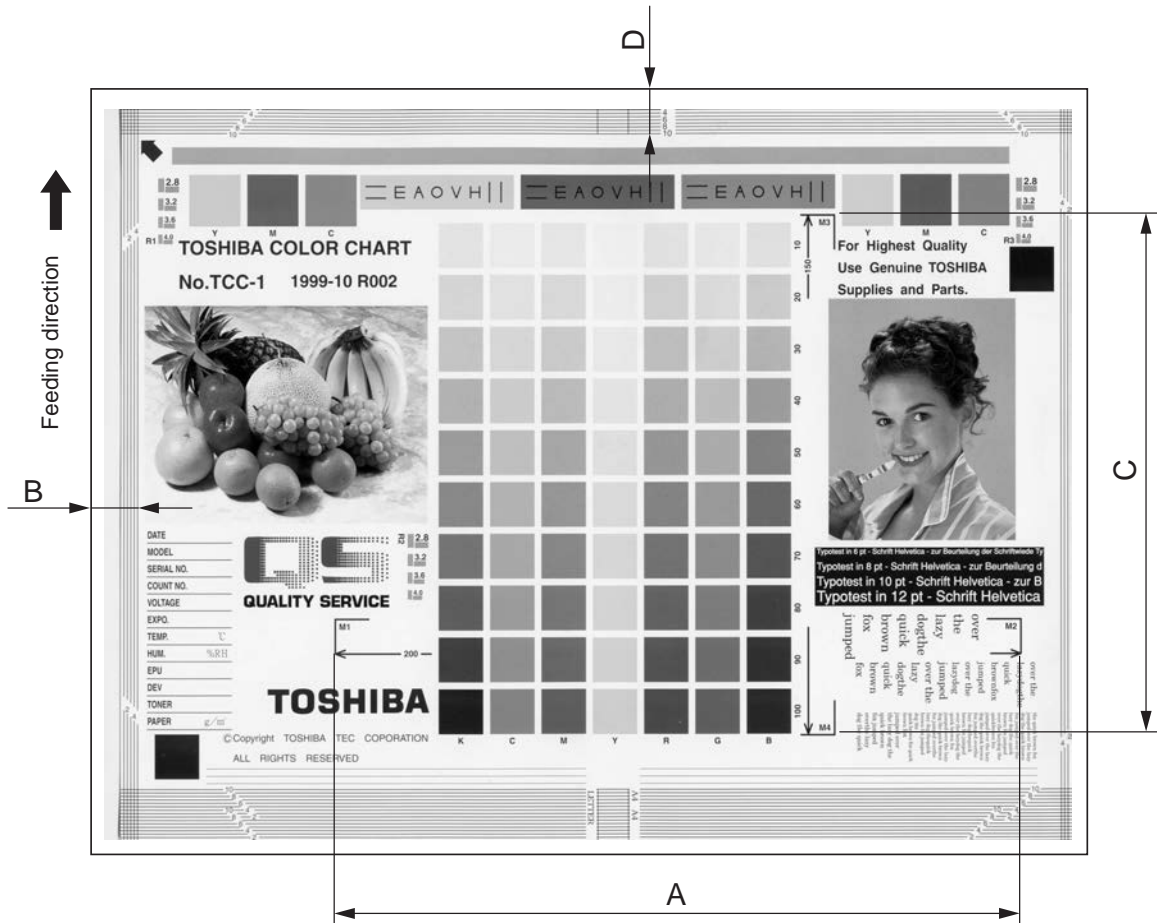


Fig.6-19

<Adjustment order>

[0] [5] [Power ON] → (Chart TCC-1) → [FAX] → [START] (A3/LD, 100%, Full color and Text/Photo)

- A: 05-4000 → 200 ± 0.5 mm (0.1 mm/step)
- B: 05-3030 → 5 ± 0.5 mm (0.04 mm/step)
- C: 05-3032 → 150 ± 0.5 mm (0.03 mm/step)
- D: 05-3031 → 10 ± 0.5 mm (0.08 mm/step)

2. Checking areas of the chart and their descriptions

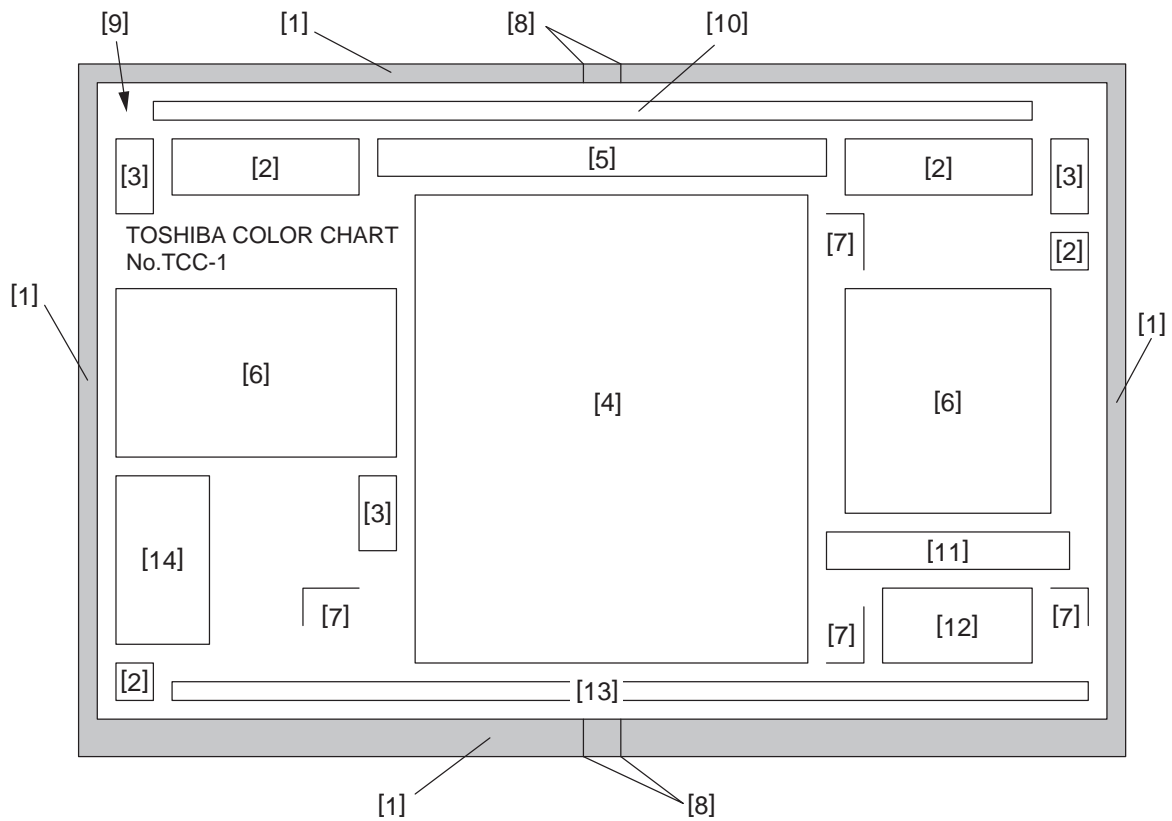


Fig.6-20

- | | | |
|------|-------------------------------|---|
| [1] | Grid patterns | : For adjusting margin (void) and scanner section |
| [2] | YMCK patches | : For checking uniformity |
| [3] | Resolution patterns | : For checking resolution |
| [4] | Gradation pattern | : Gradation pattern of seven colors (Y, M, C, R, G, B and K)
Coverage: 10-100%
For adjusting the halftone reproduction and gray balance |
| [5] | Color registration pattern | : For checking color registration |
| [6] | Pictures | : For checking color reproduction and moire |
| [7] | Magnification lines | : For checking the magnification error of primary and secondary scanning directions |
| [8] | Center lines | : Center lines for A4/LT sizes |
| [9] | Arrow | : A mark for placing the chart properly onto the original glass (place it to the left rear corner of the original glass.) |
| [10] | Halftone band | : For checking uniformity |
| [11] | White text on the black solid | : For checking the reproduction of white text on black solid |
| [12] | Text | : For checking reproduction of text |
| [13] | Thin lines | : For checking reproduction of the thin lines (line width: 100µm) |
| [14] | Note area | : For recording the date, conditions, etc. |




6.2 Image Quality Adjustment (Copying Function)

6.2.1 Automatic gamma adjustment

When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment. In case the gradation reproduction of the image checked is not satisfactory, make this adjustment as described below at parts replacement.

- (1) When unpacking or any of the following parts has been replaced, be sure to make this adjustment:
 - Photoconductive drum
 - Developer material
 - Laser optical unit
 - Transfer belt
 - 1st transfer roller
 - Drum cleaning blade
 - Needle electrode
 - Main charger grid
 - Image position aligning sensor
 - Image quality sensor
 - SRAM board (LGC board, SYS board)
- (2) When any of the following parts are replaced or adjusted, make a copy and check the image to determine if adjustment is necessary:
 - 2nd transfer roller

Notes:

- Be sure that this adjustment be made after performing the image adjustment in  P. 6-4 "6.1.3 Performing Image Quality Control" and  P. 6-6 "6.1.6 Image Dimensional Adjustment".
- Normally, only the adjustment of color/black integrated pattern is needed. When the adjustment of  P. 6-37 "6.2.11 Beam level conversion setting" is made, color pattern and black pattern need to be adjusted individually.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment Mode
- (2) Select the A4/LT drawer. Key in the pattern number and press the [FAX] button to output a "Patch chart for gamma adjustment".

Pattern No.	Pattern No.	Remark	Paper type
4	Color/black integrated	When performing code 05-7869	All paper types
200	Color/black integrated	When performing code 05-7871-0	Plain paper
204	Color/black integrated	When performing code 05-7871-2	Recycled paper
206	Color/black integrated	When performing code 05-7871-3	Thick paper1
208	Color/black integrated	When performing code 05-7871-4	Thick paper2
210	Color/black integrated	When performing code 05-7871-5	Thick paper3
212	Color/black integrated	When performing code 05-7871-6	Thick paper4
214	Color/black integrated	When performing code 05-7871-7	Special paper 1
216	Color/black integrated	When performing code 05-7871-8	Special paper 2

- (3) Place the patch chart for adjustment printed in step (2) face down on the original glass. Place the chart aligning its side with 2 black squares against the original scale.

- (4) Key in a code and press the [START] button.
 → The scanner reads the chart automatically and performs automatic gamma adjustment calculation (approx.30 sec.).

Code	Item to be adjusted	Contents
7869 (7871) (7165)	Automatic gamma adjustment	When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment. The result will be applied to all paper sizes.

- (5) When the adjustment has finished normally, press the [OK] button to have the adjustment results reflected.
 (To cancel the reflection of adjustment results, press the [CANCEL] button.)
 In the case of an abnormal ending, "ADJUSTMENT ERROR" is shown.
 Press the [CANCEL] button to clear the error display. When it is cleared, the control panel display will return to the ready state. Then, check if the patch chart on the original glass is placed in the wrong direction or if it is placed inclined on the original glass, and then repeat step (3) and afterward.

Remarks:

To select the paper type for the automatic gamma adjustment in user calibration, change the code below to "1". (copy/print)

Code	Remarks
08-9059	0: No paper selecting buttons displayed 1: Paper selecting buttons displayed. (For both Copy and Printer)

6.2.2 Density adjustment

The center density and the density variation controlled by density adjustment keys can be adjusted as follows.

<Adjustment Mode (05)>

Mono color mode	Original mode					Item to be adjusted	Remarks
	Text/Photo (*1)	Text	Printed Image (*2)	Photo	Map		
Black mode	Gray scale	-	Photo	-	-		
Adjustment Code	7727	7728	7729	7730	7731	center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)

*1: If Text/Photo is set in the mono color, the density levels of "Image smoothing" in the black mode will be affected.


*2: If Printed Image is set in the mono color, the density levels of "Photo" in the black mode will be affected.

<Adjustment Mode (05)>

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Custom Mode		
Black	7114	7115	7258	Manual density mode center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)
	7120	7121	7264	Manual density mode dark step value	The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255 (Default: 20)
	7117	7118	7261	Manual density mode light step value	The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255 (Default: 20)
	7123	7124	7267	Automatic density mode	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

Notes:

Be sure that this adjustment is made after performing  P. 6-27 "6.2.1 Automatic gamma adjustment".

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value.
(To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (5) Press the [FAX] button and then press the [START] button to make a test copy.
- (6) If the desired image quality has not been attained, repeat step (2) to (5).

6.2.3 Color balance adjustment


The color balance is adjusted by adjusting the density of each color at the Full Color Mode. The adjustment is performed by selecting its density area from the following: low density, medium density and high density.

<Adjustment Mode (05)>

Color	Original mode						Item to be adjusted	Remarks
	Text/Photo	Text	Printed Image	Photo	Map	Custom mode		
Yellow	7960-0	7961-0	7962-0	7963-0	7964-0	7980-0	Low density	The larger the value is, the darker the color to be adjusted becomes. Acceptable values: 0 to 255 (Default: 128)
	7960-1	7961-1	7962-1	7963-1	7964-1	7980-1	Medium density	
	7960-2	7961-2	7962-2	7963-2	7964-2	7980-2	High density	
Magenta	7965-0	7966-0	7967-0	7968-0	7969-0	7981-0	Low density	
	7965-1	7966-1	7967-1	7968-1	7969-1	7981-1	Medium density	
	7965-2	7966-2	7967-2	7968-2	7969-2	7981-2	High density	
Cyan	7970-0	7971-0	7972-0	7973-0	7974-0	7982-0	Low density	
	7970-1	7971-1	7972-1	7973-1	7974-1	7982-1	Medium density	
	7970-2	7971-2	7972-2	7973-2	7974-2	7982-2	High density	
Black	7975-0	7976-0	7977-0	7978-0	7979-0	7983-0	Low density	
	7975-1	7976-1	7977-1	7978-1	7979-1	7983-1	Medium density	
	7975-2	7976-2	7977-2	7978-2	7979-2	7983-2	High density	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

Notes:

Be sure that this adjustment is made after performing  P. 6-27 "6.2.1 Automatic gamma adjustment".

Changing the adjustment setting influences the adjacent density area slightly.

E.g.: When the value of the medium density is larger, the adjacent areas in the low density and high density range will become slightly darker.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code of the mode to be adjusted (color and original mode) and press the [START] button.
- (3) Select the density area to be adjusted with digital keys (0, 1 or 2), and press the [START] button.
0: Low density
1: Medium density
2: High density
- (4) Key in an adjustment value. (To correct the value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value in memory.
→ The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Press the [FAX] button and then press the [START] button to make a test copy.
- (8) If the desired image quality has not been attained, repeat step (2) to (7).

<Range of the density area (low density, medium density, high density)>

The color from 10 to 30 (low density), from 40 to 70 (medium density) and from 80 to 100 (high density) in No. TCC-1 chart can be used as a guide for the range of the density area influenced by the change of the adjustment value (low density, medium density, high density).

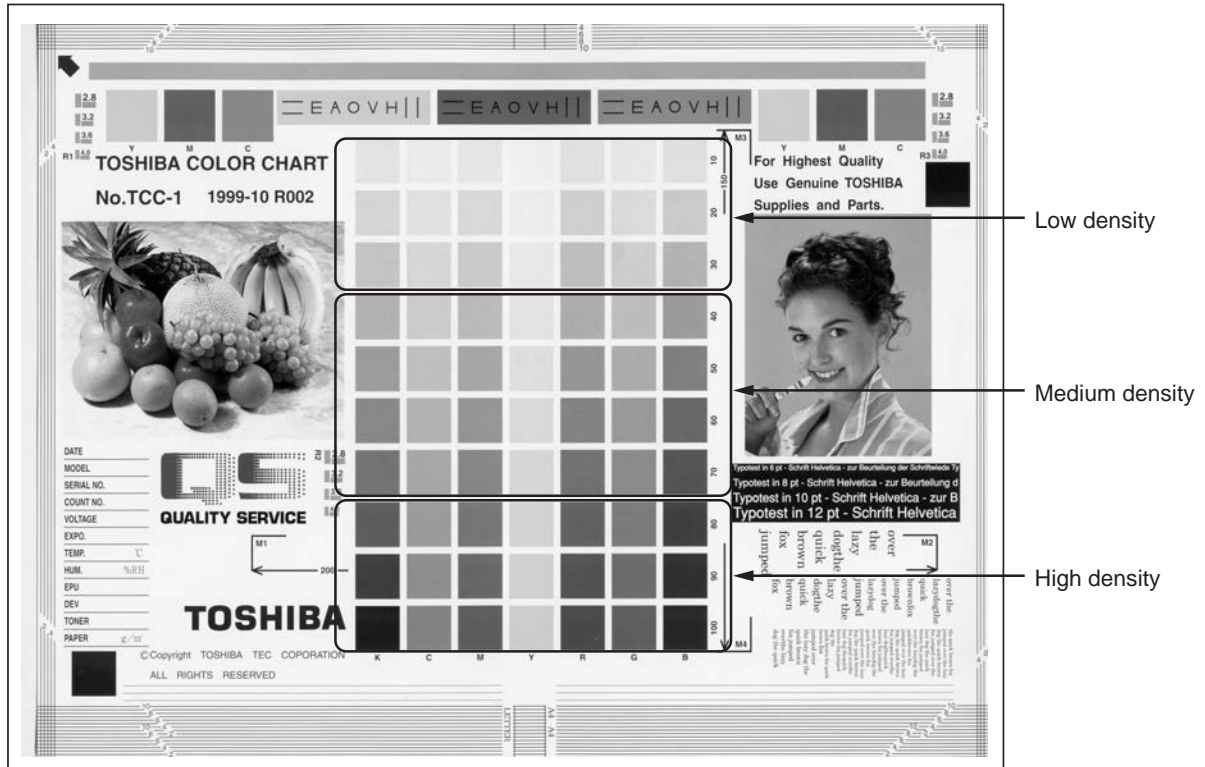


Fig.6-21

6.2.4 Gamma balance adjustment


The density adjustment at the Black Mode is performed by selecting its density area from the following: low density, medium density and high density.

<Adjustment Mode (05)>

Color mode	Original mode								Item to be adjusted	Remarks
	Text/ Photo	Text	Photo	Gray scale	ACS/ Black/ Text/ Photo	ACS/ Black/ Text	ACS/ Black/ Photo	Custom mode		
Black	7190-0	7191-0	7192-0	7956-0	7957-0	7958-0	7959-0	7276-0	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255 (Default: 128)
	7190-1	7191-1	7192-1	7956-1	7957-1	7958-1	7959-1	7276-1	Medium density	
	7190-2	7191-2	7192-2	7956-2	7957-2	7958-2	7959-2	7276-2	High density	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

Notes:

Be sure that this adjustment is made after performing  P. 6-27 "6.2.1 Automatic gamma adjustment".

<Procedure>

The procedure is the same as that of  P. 6-30 "6.2.3 Color balance adjustment".

6.2.5 Background adjustment

The density of the background can be adjusted as follows.

<Adjustment Mode (05)>

Color mode	Original mode							Item to be adjusted	Remarks
	Text/Photo	Text	Printed Image	Photo	Map	Custom mode	Gray scale		
Full color	7656	7657	7658	7659	7660	7661	---	Automatic density mode/ Manual density mode	The smaller the value is, the lighter the background becomes. Acceptable values: 0 to 255 (Default: 128)
Mono Color	7754	7755	7756	7757	7758	---	---	Automatic density mode	
Twin color mode	7759	7760	7761	---	---	---	---	Manual density mode	
ACS black	7676	7677	---	---	---	---	---	Automatic density mode	
	7678	7679	---	---	---	---	---	Manual density mode	
Black	7033	7034	---	7043	---	7279	7044	Automatic density mode	
	7041	7042	---	7048	---	7280	7049	Manual density mode	

For the full color or auto color mode, when you want to adjust the background in a more detailed manner than the adjustment with the codes given in the above table, use the codes in the following table. Since the color after the adjustment may differ from the original, check the color while making it.

Color mode	Original mode							Item to be adjusted	Remarks
	Text/Photo	Text	Printed Image	Photo	Map	Custom mode	Gray scale		
Full color / Auto color (color)	7744	7745	7746	7747	7748	7762	---	Automatic density mode	The smaller the value is, the lighter the background becomes. Acceptable values: 0 to 255 (Default: 128)
	7749	7750	7751	7752	7753	7763	---	Manual density mode	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment using the following procedure.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.6 Judgment threshold for ACS (common for copy and scan)

Judgment levels for automatically identifying whether an original is color or black are adjusted. This adjustment is for judgment levels when "Auto Color" is selected as a color mode. The same adjustment value is simultaneously applied to all cases of originals on the original glass for copier functions and network scanning functions, and those placed on the RADF.

<Adjustment Mode (05)>

Code	Item to be adjusted	Contents
7630	Judgment threshold for ACS	The larger the value is, the more an original tends to be judged as black even at the Auto Color Mode. The smaller value is, the more it tends to be judged as color. Acceptable values: 0 to 255 (Default: 70)

Make a test copy and compare the image obtained with the current settings; if necessary and make adjustment.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.7 Sharpness adjustment

If you want to make copy images look softer or sharper, perform the following adjustment. The adjustment can be made for each of the color modes and original modes independently.

<Adjustment Mode (05)>

Code	Color mode	Original mode	Contents
7796	Full Color	Text/Photo	The larger the value is, the sharper the image becomes; while the smaller the value is, the softer the image becomes. The smaller the value is, the less moire tends to appear. Acceptable values: 0 to 255 (Default: 128)
7797		Text	
7798		Printed Image	
7799		Photo	
7800		Map	
7795		Custom mode	
7056	Black	Text/Photo	
7057		Text	
7058		Photo	
7249		Custom mode	
7809		Gray scale	
7806	ACS black	Text/Photo	
7807		Text	
7808		Photo	

* Any change in these settings affects the settings of "Image smoothing" and "Photo" in the black mode, and "Text/Photo", "Text" and "Printed Image" in the twin color mode.

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment.

Notes:

You have to make adjustment by balancing between moire and sharpness.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.8 Setting range correction

The values of the background peak/text peak in the range correction at the Black Mode can be switched to "varied" or "fixed" in the following codes.

If they are fixed, the range correction is performed with standard values.

The values of the background peak affects the reproduction of the background density, and the values of the text peak affects that of the text density.

<Adjustment Mode (05)>

Original mode	Original mode							Item to be adjusted	Remarks
	Text/Photo	Text	Printed Image	Photo	Map	User Custom	Gray Scale		
Full color	7767	7768	7769	7770	7771	7777	---	Automatic density mode	0: Background peak / fixed 1: Background peak / varied
	7772	7773	7774	7775	7776	7778	---	Manual density mode	
ACS black mode	7667	7668	---	---	---	---	---	Automatic density mode	
	7669	7670	---	---	---	---	---	Manual density mode	
Black	7283	7284	---	---	---	7236	7295	Automatic density mode	
	7286	7287	---	---	---	7237	7296	Manual density mode	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.9 Adjustment of smudged/faint text

The smudge/faint text at a Black Mode can be set at the following codes.

<Adjustment Mode (05)>

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Custom mode		
Black	7097	7098	7252	Adjustment of smudged/ faint text	When the value decreases, the faint text is improved. When the value increases, the smudged text is improved. Acceptable values: 0 to 4 (Default: 2)
ACS Black	7102	7103	---		

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment.

Notes:

Remember the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.10 Color Adjustment of Marker

The color of the one touch adjustment "MARKER" can be adjusted so that any marker colors already on the original can be distinguished.

<Adjustment Mode (05)>

Code	Item to be adjusted	Relation between the adjustment value and the color (Acceptable values: 0 to 6)		
		0 to 2	3 (Default)	4 to 6
7850-0	Yellow	The smaller the value is, the more reddish the color becomes.	Yellow	The larger the value is, the more greenish the color becomes.
7850-1	Magenta	The smaller the value is, the more bluish the color becomes.	Magenta	The larger the value is, the more reddish the color becomes.
7850-2	Cyan	The smaller the value is, the more greenish the color becomes.	Cyan	The larger the value is, the more bluish the color becomes.
7850-3	Red	The smaller the value is, the closer to Magenta the color becomes.	Red	The larger the value is, the more yellowish the color becomes.
7850-4	Green	The smaller the value is, the more yellowish the color becomes.	Green	The larger the value is, the closer to Cyan the color becomes.
7850-5	Blue	The smaller the value is, the closer to Cyan the color becomes.	Blue	The larger the value is, the closer to Magenta the color becomes.

Notes:

The color may not always be reproduced precisely due to the characteristics of the fluorescent ink.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in a sub-code and press the [START] button.
- (4) Key in an adjustment value.
(To correct a value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (6) Turn the power OFF and back ON in the normal mode. Then make a copy in the one touch adjustment "MARKER" mode.
- (7) If the desired image quality has not been attained, repeat step (1) to (6).

6.2.11 Beam level conversion setting

The beam level for 4 divided smoothing is set at the Black Mode.
This adjustment enables to adjust the dot size.

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
7212-0	Beam level 0/4	The smaller the value is, the smaller the beam width becomes. Therefore, the smaller dot is reproduced accordingly. Acceptable values: 0 to 255 (Default: Level 0/4: 0, Level 1/4: 63, Level 2/4: 127, Level 3/4: 191, Level 4/4: 255)
7212-1	Beam level 1/4	
7212-2	Beam level 2/4	
7212-3	Beam level 3/4	
7212-4	Beam level 4/4	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in a sub-code and press the [START] button.
- (4) Key in an adjustment value.
(To correct a value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (6) Press the [FAX] button and then press the [START] button to make a test copy.
- (7) If the desired image quality has not been attained, repeat step (2) to (6).

Notes:

1. When this adjustment was performed, perform "Automatic gamma adjustment (black) (05-7165)" as well because the density reproduction level in the black mode will vary. In addition to performing the code 05-7165, perform the code 05-7869 or 05-7871 individually because the result of this adjustment will not be reflected to the color & black integrated pattern.
2. When this adjustment is performed, setting "1" in 08-7625 makes the result of 05-7165 impossible to be reflected on User Calibration.
3. The setting value must increase as the beam level number (0 to 4) becomes higher. Do not increase this order when setting the values.
4. Usually, beam level 4 / 4 is most effective on black mode.

6.2.12 Maximum toner density adjustment to paper type

The maximum toner adhesion amount can be adjusted for each paper type.
It is used when offsetting occurs.

<Adjustment Mode (05)>

Code	Paper type	Remarks
7913-0	Plain paper	The smaller the value is, the toner amount adhered decreases of the high density area (ex. prevention of fusing offsetting, etc.). Acceptable values: 0 to 255 (Default: 128)
7913-2	Recycled paper	
7913-3	Thick paper 1	
7913-4	Thick paper 2	
7913-5	Thick paper 3	
7913-6	Thick paper 4	
7913-7	Special paper 1	
7913-8	Special paper 2	
7913-9	OHP film	

Notes:

Even if a large value is set, the image does not drastically appear dark (the amount of toner adhering is not increased).

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.13 Maximum text density adjustment


The maximum text density in each color in the full color mode (Text/Photo, Text, Map mode) can be adjusted.

<Adjustment Mode (05)>

Color	Code	Item to be adjusted	Remarks
Yellow	7889	Maximum text density	The larger the value is, the darker the maximum text density of each color to be adjusted becomes. Acceptable values: 0 to 10 (Default: 5)
Magenta	7890		
Cyan	7891		
Black	7892		The larger the value is, the darker the maximum text density of each color to be adjusted becomes. Acceptable values: 0 to 10 (Default: 8)

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

Notes:

Be sure that this adjustment is made after performing  P. 6-27 "6.2.1 Automatic gamma adjustment".

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.14 Text/Photo reproduction level adjustment

Text/Photo reproduction level at the Full color mode and Auto color mode can be adjusted.
Text/Photo reproduction level adjustment can be switched to "Photo oriented 1", "Photo oriented 2", "Text oriented 1" or "Text oriented 2" in the following codes.

<Adjustment Mode (05)>

Mode	Mode	Item to be adjusted	Contents
Text/Photo	Custom mode (Text/Photo base)		
7840	7841	Text/Photo reproduction level adjustment	0: Default 1: Photo oriented 2 (The printed image reproduction level higher than that of the Photo oriented 1) 2: Photo oriented 1 (The printed image reproduction level higher than that of the Default) 3: Equivalent to the Default 4: Text oriented 1 (The text reproduction level higher than that of the Default) 5: Text oriented 2 (The text reproduction level higher than that of the Text oriented 1)

Notes:

- The text reproduction level is lower when the mode is switched from the default value to the Photo oriented 1 or Photo oriented 2. (The text reproduction level in Photo oriented 2 is lower than that in Photo oriented 1.)
- When you change the setting from the default value to "Text oriented 1" or "Text oriented 2", noise occurs in a printed photo with a few lines. (More noise occurs in "Text oriented 2" than "Text oriented 1".)
- The codes for the user custom setting are enabled only when the base original mode of the user custom mode is Text/Photo.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.15 Black header density level adjustment

The density level of headers in the black mode is adjusted.

<Adjustment Mode (05)>

Mode	Code	Original mode	Remarks
Full Color/ ACS Color	7811	Text/Photo *	The larger the value is, the darker the headers become. However, the density level differs depending on the modes. Acceptable values: 0 to 8 (Default: 0)
	7812	Text	
Full Color	7816	Custom mode	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustment.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.16 Black area adjustment in twin color copy mode

<Adjustment Mode (05)>

Mode	Code	Item to be adjusted	Remarks
Twin color mode with selected colors	7641-0	High density	The larger the value is, the larger the area recognized as black in the original becomes. The smaller the value is, the larger the area recognized as the color other than black becomes. Acceptable values: 0 to 255 (Default: 128)
	7641-1	Medium density	
	7641-2	Low density	
Twin color mode (Black and red)	7642-0	High density	The larger the value is, the larger the black area becomes. The smaller the value is, the larger the red area becomes. Acceptable values: 0 to 255 (Default: 128)
	7642-1	Medium density	
	7642-2	Low density	

<Procedure>

The procedure is the same as that of  P. 6-30 "6.2.3 Color balance adjustment".

6.2.17 Judgment threshold adjustment for blank originals

The judgment level is adjusted for automatic identification of whether the original set is blank or not. This adjustment is made when "OMIT BLANK PAGE" is selected on the control panel. The adjustment value is simultaneously applied to all modes at PPC and scanning.
<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
7618	Judgment threshold adjustment for blank original	The larger the value is, the more an original tends to be judged as a bank sheet. Acceptable values: 0 to 255 (Default: 128)

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.18 Background offsetting adjustment for RADF

The background level for scanning originals with the RADF is adjusted when the background fogging at the scanning of a manually-set original and an original used with the RADF is different. This is to adjust the level of the background image removed when the scanning of the originals with the RADF is performed.

<Adjustment Mode (05)>

Color mode	Code	Remarks
Full Color	7764	The larger the value is, the lighter the background density becomes. Acceptable values: 0 to 255 (Default: 128)
Mono Color	7765	
Twin Color mode	7766	
Black	7025	

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.19 Twin color copy / mono color copy adjustment

The density of the color specified on the touch panel is adjusted in the monochrome copy or twin color copy mode. This adjustment is reflected to both monochrome and twin color copying.

<Adjustment Mode (05)>

Code	Subcode				Remarks
	Y	M	C	K	
Magenta	7644-0	7644-1	7644-2	7644-3	The larger the value is, the darker the density becomes, and the smaller the value is, the lighter the density becomes. When "255" is set, the specified solid color is used for printing. When "0" is set, nothing is printed. For example, in case of "Red", the color when "Red" is specified becomes blue if you set as follows: (Y) 7649-0=0 (M) 7649-1=128 (C) 7649-2=255 Acceptable value: 0 to 255 (Default: 128) Notes: <ul style="list-style-type: none"> • If a large value is set for all of YMCK, offsetting may occur. Make an adjustment while checking the image. • If "0" is set for all four colors of YMCK, when a color is specified for the adjustment item, nothing is printed.
Yellow	7645-0	7645-1	7645-2	7645-3	
YellowGreen	7646-0	7646-1	7646-2	7646-3	
Cyan	7647-0	7647-1	7647-2	7647-3	
Pink	7648-0	7648-1	7648-2	7648-3	
Red	7649-0	7649-1	7649-2	7649-3	
Orange	7650-0	7650-1	7650-2	7650-3	
Green	7651-0	7651-1	7651-2	7651-3	
Blue	7652-0	7652-1	7652-2	7652-3	
Purple	7653-0	7653-1	7653-2	7653-3	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code of the color to be adjusted and press the [START] button.
- (3) Select the color to be subjected to density adjustment with digital keys (0, 1, 2 or 3), and press the [START] button.
 - 0: Y
 - 1: M
 - 2: C
 - 3: K
- (4) Key in an adjustment value. (To correct the value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value in memory.
 - The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Turn ON the power of the equipment and make a copy.
- (8) If the desired image quality has not been attained, repeat step (1) to (7).

6.2.20 Maximum density adjustment for each paper type

The maximum density for each paper type can be adjusted collectively.

<Adjustment Mode (05)>

Code	Paper type	Remarks
7902	Plain paper	The smaller the value is, the lower the density of the whole image becomes.
7904	Recycled paper	
7905	Thick paper 1	Acceptable values: 0 to 255 (Default: Plain paper: 255, Thick paper 1: 255, Thick paper 2: 255, Thick paper 3: 255, OHP film: 240, special paper 1: 255, special paper 2: 255, Recycled paper: 255, Thick paper 4: 255)
7906	Thick paper 2	
7907	Thick paper 3	
7908	Thick paper 4	
7909	Special paper 1	
7910	Special paper 2	
7911	OHP film	

Notes:

Be aware that if too small a value is set, a faint image occurs.

<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".

6.2.21 ADF noise reduction (Copying Function)

The noise reduction level for streaks can be adjusted with the following codes when a copy job whose color mode is [BLACK] is performed using the ADF while its scan noise reduction function is set to enable (*).

* When [LOW], [MIDDLE] or [HIGH] is selected in the [ADMIN] tab of the [USER FUNCTIONS] menu, or when "0", "1" or "2" is selected in 08-7617.

<Adjustment Mode (05)>

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Custom mode		
Black	7151	7152	7150	ADF scan noise reduction	When the value decreases, the effect of reducing streaks becomes larger. When the value increases, the effect of reducing streaks becomes smaller. When "0" is set, this function is disabled. Acceptable values: 0 to 200 (Default: 100)

When [FULL COLOR] or [AUTO COLOR] is selected for the color mode, the ADF noise reduction function for streaks can be set to enable or disable with the following codes.

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text	Custom mode		
Color	7694	-	7693	ADF scan noise reduction	Enable/Disable setting 0: Disabled 1: Enabled (Default: 1) 05-7693 is available only when "1" (TEXT/PHOTO base) is set for 08-7614.

Notes:

- Remember the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value.
- If too small a value is set, the text may not be printed clearly.


<Procedure>

The procedure is the same as that of  P. 6-29 "6.2.2 Density adjustment".



6.3 Image Quality Adjustment (Printing Function)

6.3.1 Automatic gamma adjustment

When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment. In case the gradation reproduction of the image checked is not satisfactory, make this adjustment as described below at parts replacement.

1. When unpacking or any of the following parts has been replaced, be sure to make this adjustment:
 - Photoconductive drum
 - Developer material
 - Laser optical unit
 - Transfer belt
 - 1st transfer roller
 - Drum cleaning blade
 - Needle electrode
 - Main charger grid
 - Image position aligning sensor
 - Image quality sensor
 - SRAM board (LGC board, SYS board)
2. When any of the following parts are replaced or adjusted, make a print and check the image to determine if adjustment is necessary:
 - 2nd transfer roller
 - Screen switchover (05-8176, 8179)
 P. 6-56 "6.3.13 Screen switchover"

Notes:

Be sure that this adjustment be made after performing the image adjustment in  P. 6-4 "6.1.3 Performing Image Quality Control" and  P. 6-5 "6.1.5 Adjustment of the transfer belt due to environmental factors".

<Adjustment Mode (05)>

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON. → Adjustment Mode
- (2) Select the A4/LT drawer. Key in the pattern number and press the [FAX] button to output a “Patch chart for adjustment”.

Pattern No.	Paper type	Remarks
70	Plain paper	Used when the code 8004-0 is performed
74	Recycled paper	Used when the code 8004-2 is performed
76	Thick paper 1	Used when the code 8004-3 is performed
78	Thick paper 2	Used when the code 8004-4 is performed
80	Thick paper 3	Used when the code 8004-5 is performed
82	Thick paper 4	Used when the code 8004-6 is performed
84	Special paper 1	Used when the code 8004-7 is performed
86	Special paper 2	Used when the code 8004-8 is performed

Notes:

However, this is applied to all paper types when 05-8008 is performed.

- (3) Place the patch chart for adjustment printed in step (2) face down on the original glass, with its side, on which two black squares are present, aligned against the original scale.
- (4) Key in a code and press the [START] button. → The scanner reads the chart automatically and performs automatic gamma adjustment calculation (approx. 30 sec.).

Code	Paper type	Remarks
8004-0	Plain paper	When the reproduction of gradation is not appropriate, the gradation reproducibility of all colors Y, M, C and K can be corrected by performing this automatic gamma adjustment.
8004-2	Recycled paper	
8004-3	Thick paper 1	
8004-4	Thick paper 2	
8004-5	Thick paper 3	
8004-6	Thick paper 4	
8004-7	Special paper 1	
8004-8	Special paper 2	
8008	All paper types	

* If the code 8008 is performed, the adjustment will be applied to all paper types.

- (5) When the adjustment has finished normally, press the [OK] button to have the adjustment results reflected.
(To cancel the reflection of adjustment results, press the [CANCEL] button.)
In the case of an abnormal ending, “ADJUSTMENT ERROR” is shown. Press the [CANCEL] button to clear the error display.
When it is cleared, the control panel display will return to the ready state. Then, check if the patch chart on the original glass is placed in the wrong direction or if it is placed inclined on the original glass, and then repeat step (3) and afterward.

To select the paper type for the automatic gamma adjustment in user calibration, change the code below to “1”. (copy/print)

Code	Remarks
08-9059	0: No paper selecting buttons displayed 1: Paper selecting buttons displayed. (For both Copy and Printer)

6.3.2 Gamma balance adjustment (Black Mode)

The gamma balance is adjusted by adjusting the density at the Black Mode. The adjustment is performed by selecting its density area from the following: low density, medium density, high density and highest density.

When "Black" (600 dpi) is set for the color mode and "Auto" is selected for the halftone setting, the gamma balance can be adjusted in each area of Text, Graphics and Image.


<Adjustment Mode (05)>

Color mode	Smooth	Detail	Smooth	Detail	Smooth	Detail	Item to be adjusted	Item to be adjusted	Remarks
	(PS)	(PS)	(PCL)	(PCL)	(XPS)	(XPS)	When "0" is set for "05-8066"	When "1" is set for "05-8066"	
Black (600dpi)	7315-0	7316-0	7317-0	7318-0	7319-0	7320-0	Low density	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255 (Default: 128)
	7315-1	7316-1	7317-1	7318-1	7319-1	7320-1	Medium density	Medium density	
	7315-2	7316-2	7317-2	7318-2	7319-2	7320-2	High density	High density / Maximum density	

Color mode	Auto (PS)			Auto (PCL)			Item to be adjusted		Remarks
	Text	Graphics	Image	Text	Graphics	Image	When "0" is set for "05-8066"	When "1" is set for "05-8066"	
Black (600dpi)	7360-0	7361-0	7362-0	7363-0	7364-0	7365-0	Low density	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255 (Default: 128)
	7360-1	7361-1	7362-1	7363-1	7364-1	7365-1	Medium density	Medium density	
	7360-2	7361-2	7362-2	7363-2	7364-2	7365-2	High density	High density / Maximum density	


Color mode	Auto (XPS)			Item to be adjusted		Remarks
	Text	Graphics	Image	When "0" is set for "05-8066"	When "1" is set for "05-8066"	
Black (600dpi)	7366-0	7367-0	7368-0	Low density	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255 (Default: 128)
	7366-1	7367-1	7368-1	Medium density	Medium density	
	7366-2	7367-2	7368-2	High density	High density/ Highest density	

Notes:

- Be sure that this adjustment be made after performing  P. 6-44 "6.3.1 Automatic gamma adjustment".
- Changing the adjustment setting influences the adjacent density area slightly.
E.g.: When the value of the medium density is larger, the adjacent areas in the low density and high density range will become slightly darker.
- The adjustment item can be changed by the setting value of code 05-8066; however, the maximum density may not appear as high even when High density / Maximum density is set to high if "1" is set for "05-8066".

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes to be adjusted (language and screen) and press the [START] button.
- (3) Key in the value corresponding to the density area to be adjusted (0, 1 or 2) and press the [START] button.
0: Low density 1: Medium density 2: High density/Highest density
- (4) Key in the adjustment value. (To correct the value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Let the equipment restart and perform the printing job.
- (8) If the image density has not been attained, repeat step (1) to (7)

<Range of the density area (low density, medium density, high density, highest density)>
 The color from the 1st to the 7th stage (low density), from the 8th to the 11th stage (medium density) and from the 12th (high density) to the 13th stage (highest density) in "Patch chart for gamma adjustment ([71] [FAX])" output as a confirmation in  P. 6-44 "6.3.1 Automatic gamma adjustment" can be used as a guide for the range of the density area (low density, medium density, high density, highest density) influenced by the change of the adjustment value.

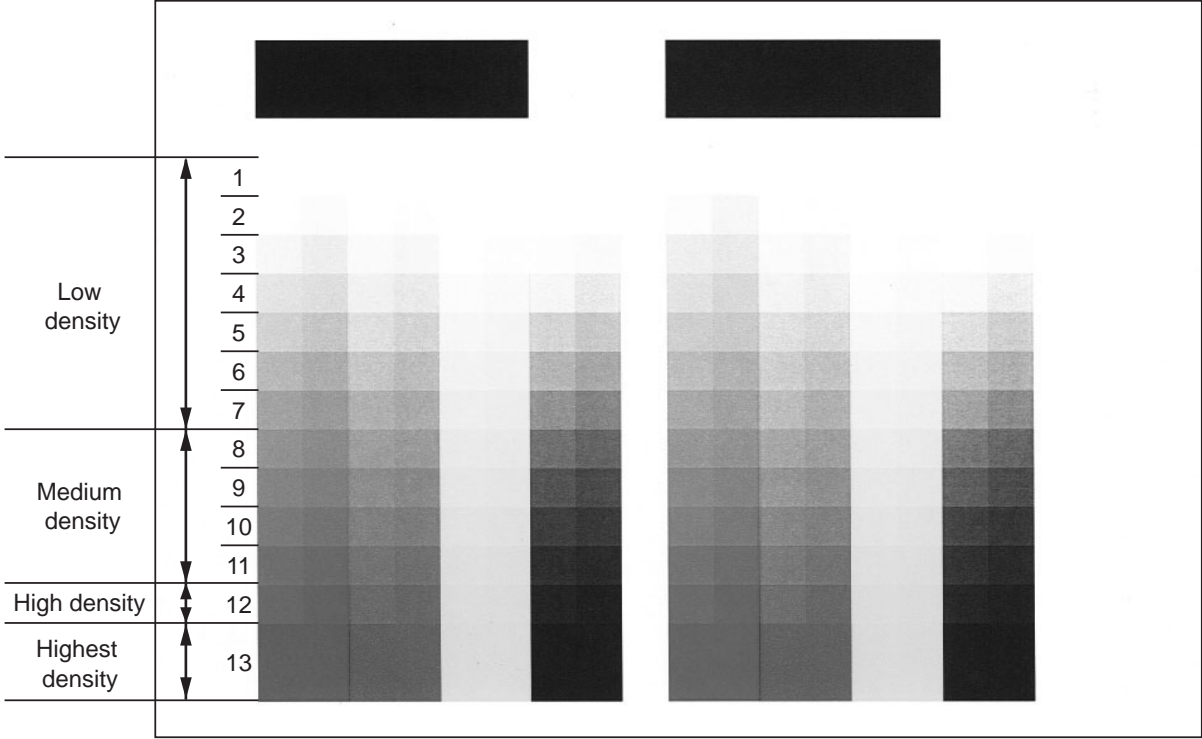


Fig.6-22

6.3.3 Color balance adjustment

The color balance is adjusted by adjusting the density of each color. The adjustment is performed by selecting its density area from the following: low density, medium density, high density and highest density.


<Adjustment Mode (05)>

For color printing


Color	PS		PCL		XPS		Item to be adjusted		Remarks
	smoot h	detail	smoot h	detail	smoot h	detail	When "0" is set for "05-8066"	When "1" is set for "05-8066"	
Yellow (600dpi)	8050-0	8054-0	8058-0	8062-0	8042-0	8046-0	Low	Low	The larger the value is, the darker the color to be adjusted becomes. Acceptable values: 0 to 255 (Default: 128)
	8050-1	8054-1	8058-1	8062-1	8042-1	8046-1	Medium	Medium	
	8050-2	8054-2	8058-2	8062-2	8042-2	8046-2	High density	High density/Highest density	
Magenta (600dpi)	8051-0	8055-0	8059-0	8063-0	8043-0	8047-0	Low	Low	
	8051-1	8055-1	8059-1	8063-1	8043-1	8047-1	Medium	Medium	
	8051-2	8055-2	8059-2	8063-2	8043-2	8047-2	High density	High density/Highest density	
Cyan (600dpi)	8052-0	8056-0	8060-0	8064-0	8044-0	8048-0	Low	Low	
	8052-1	8056-1	8060-1	8064-1	8044-1	8048-1	Medium	Medium	
	8052-2	8056-2	8060-2	8064-2	8044-2	8048-2	High density	High density/Highest density	
Black (600dpi)	8053-0	8057-0	8061-0	8065-0	8045-0	8049-0	Low	Low	
	8053-1	8057-1	8061-1	8065-1	8045-1	8049-1	Medium	Medium	
	8053-2	8057-2	8061-2	8065-2	8045-2	8049-2	High density	High density/Highest density	

Color	PS		PCL		Item to be adjusted		Remarks
	smooth	Detail	smooth	Detail	When "0" is set for "05-8066"	When "1" is set for "05-8066"	
Yellow	8026-0	8030-0	8034-0	8038-0	Low density	Low density	The larger the value is, the darker the color to be adjusted becomes. Acceptable values: 0 to 255 (Default: 128)
	8026-1	8030-1	8034-1	8038-1	Medium density	Medium density	
	8026-2	8030-2	8034-2	8038-2	High density	High density/ Highest density	
Magenta	8027-0	8031-0	8035-0	8039-0	Low density	Low density	
	8027-1	8031-1	8035-1	8039-1	Medium density	Medium density	
	8027-2	8031-2	8035-2	8039-2	High density	High density/ Highest density	
Cyan	8028-0	8032-0	8036-0	8040-0	Low density	Low density	
	8028-1	8032-1	8036-1	8040-1	Medium density	Medium density	
	8028-2	8032-2	8036-2	8040-2	High density	High density/ Highest density	
Black	8029-0	8033-0	8037-0	8041-0	Low density	Low density	
	8029-1	8033-1	8037-1	8041-1	Medium density	Medium density	
	8029-2	8033-2	8037-2	8041-2	High density	High density/ Highest density	


Notes:

- Be sure that this adjustment be made after performing  P. 6-44 "6.3.1 Automatic gamma adjustment".
- Changing the adjustment setting influences the adjacent density area slightly.
E.g.: When the value of the medium density is larger, the adjacent areas in the low density and high density range will become slightly darker.
- The adjustment item can be changed by the setting value of code 05-8066; however, the maximum density may not appear as high even when High density / Maximum density is set to high if "1" is set for "05-8066".

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

<Range of the density area (low density, medium density, high density, highest density)>

The color from the 1st to the 7th stage (low density), from the 8th to the 11th stage (medium density), from the 12th stage (high density) and from the 13 stage (highest density) in "Patch chart for gamma adjustment ([71] [FAX])" output in  P. 6-44 "6.3.1 Automatic gamma adjustment" can be used as a guide for the range of the density area influenced by the adjustment with the printer driver and the change of the adjustment value (low density, medium density, high density and highest density (Refer to P. 6-48 "Fig.6-22").

6.3.4 Adjustment of faint text

The faint text can be improved in the following codes.

<Adjustment Mode (05)>

Black mode			Color mode			Remarks
PS	PCL	XPS	PS	PCL	XPS	
7340	7341	7342	8130	8131	8132	When the small characters or fine lines in a halftone image are faint, they can be improved by increasing the value to raise the density level. Acceptable values: 0 to 8 (Default: 0)

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes to be adjusted and press the [START] button.
- (3) Key in the adjustment value. (To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) For resetting the value, repeat step (2) to (4).
- (6) Let the equipment restart and perform the printing job.
- (7) If the desired image has not been attained, repeat step (1) to (6).


6.3.5 Upper limit value at Toner Saving Mode

The upper limit value of the density when "Toner save" is selected in the Custom tab of the printer driver can be adjusted.

<Adjustment Mode (05)>

Color	PS	PCL	XPS	Remarks
Black mode	7307-0	7307-1	7307-2	The smaller the value is, the lighter the density of image becomes. Acceptable values: 0 to 255
Color mode	8160-0	8160-1	8160-2	

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.6 Maximum toner density adjustment (OHP)

The maximum toner amount adhering to the paper can be controlled.

<Adjustment Mode (05)>

Code	Paper type	Remarks
8145	OHP film	The smaller the value is, the toner amount adhered decreases of the high density area (ex. prevention of fusing offsetting, etc.). Acceptable values: 0 to 255 (Default: OHP film: 200)

<Procedure>

The procedure is the same as that of  P. 6-52 "6.3.4 Adjustment of faint text".

Notes:

The larger the value is, the more frequently fusing offsetting occurs.


6.3.7 Fine line enhancement switchover

The setting of the thin line enhancement is changed.

<Adjustment Mode (05)>

	Black mode			Color mode			Remarks
	PS	PCL	XPS	PS	PCL		
e-Bridge	7322-0	7322-1	7322-2	8102-0	8102-1	8102-2	Whether fine lines are enhanced or not can be switched. 0: OFF 1: ON Acceptable values: 0 to 1 (Default: 1)
EFI	7323-0	7323-1	---	8103-0	8103-1	---	

<Procedure>


The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.8 "PureBlack/PureGray" threshold adjustment (PCL)

<Adjustment Mode (05)>

Original mode				Item to be adjusted	Remarks
General	Photographic	Presentation	Line art		
8210-0	8210-1	8210-2	8210-3	Text	The larger the value is, the wider the color range to be printed only with the black toner becomes. The smaller the value is, the narrower this color range becomes. Acceptable values: 1 to 255
8211-0	8211-1	8211-2	8211-3	Graphics	
8212-0	8212-1	8212-2	8212-3	Image	

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.9 “PureBlack/PureGray” threshold adjustment (Twin color mode)

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
8213	Text	The larger the value is, the wider the color range to be printed only with the black toner becomes. The smaller the value is, the narrower this color range becomes. Acceptable values: 1 to 255
8214	Graphics	
8215	Image	

<Procedure>


The procedure is the same as that of  P. 6-52 "6.3.4 Adjustment of faint text".

6.3.10 “PureBlack/PureGray” threshold adjustment (PS)

<Adjustment Mode (05)>

Original mode					Item to be adjusted	Remarks
General	Photographic	Presentation	Line art	Color profile		
8252-0	8252-1	8252-2	8252-3	8252-4	Text	The larger the value is, the wider the color range to be printed only with the black toner becomes. The smaller the value is, the narrower this color range becomes. Acceptable values: 1 to 255
8253-0	8253-1	8253-2	8253-3	8253-4	Graphics	
8254-0	8254-1	8254-2	8254-3	8254-4	Image	

<Procedure>


The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.11 “PureBlack/PureGray” threshold adjustment (XPS)

<Adjustment Mode (05)>

Original mode					Item to be adjusted	Remarks
General	Photographic	Presentation	Line art	Color profile		
8249-0	8249-1	8249-2	8249-3	8249-4	Text	The larger the value is, the wider the color range to be printed only with the black toner becomes. The smaller the value is, the narrower this color range becomes. Acceptable values: 1 to 255
8250-0	8250-1	8250-2	8250-3	8250-4	Graphics	
8251-0	8251-1	8251-2	8251-3	8251-4	Image	

<Procedure>


The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.12 Toner limit threshold adjustment

<Adjustment Mode (05)>

Smooth (PS/PCL/XPS)	Detail (PS/PCL/XPS)	Paper type	Remarks
8071-0	8070-0	Plain paper	When you set a larger value, the density becomes high in some parts of the high density area since the maximum amount of toner adhering increases. When you set a smaller value, the reproduction of the gradation tends to be reduced since the maximum amount of toner adhering decreases and the maximum density becomes low. Be aware that if too large a value is set, offsetting occurs. Acceptable values: 0 to 255 (Default: 128)
8071-2	8070-2	Recycled paper	
8071-3	8070-3	Thick paper 1	
8071-4	8070-4	Thick paper 2	
8071-5	8070-5	Thick paper 3	
8071-6	8070-6	Thick paper 4	
8071-7	8070-7	Special paper 1	
8071-8	8070-8	Special paper 2	
8071-9	8070-9	OHP film	

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.13 Screen switchover


<Adjustment Mode (05)>

Code	Remarks
8176	The level of the screen ruling when "Smooth" is selected for the "Halftone" in the "Detailed setting" in the Image quality tab of the printer driver can be switched. 0: High screen ruling value (smoother image) 1: Low screen ruling value (rougher image)
8179 (EFI Printer Board)	

When "0" is set for "05-8176" or "05-8179" (EFI printer board), the level of the screen ruling in the Black mode can be individually switched by the following codes:

Code	Item to be adjusted	Remarks
8187	Graphics	The level of the screen ruling in the Black mode is switched. 0: High screen ruling value (fine) 1: Low screen ruling value (rough) * It is enabled only when "0" is set for "05-8176". When "1" is set for "05-8176", the setting by this code is disabled and low screen ruling value is applied.
8188	Image	
8190 (EFI Printer board)	Graphics	The level of the screen ruling in the Black mode is switched. 0: High screen ruling value (fine) 1: Low screen ruling value (rough) * It is enabled only when "0" is set for "05-8179". When "1" is set for "05-8179", the setting by this code is disabled and low screen ruling value is applied.
8191 (EFI Printer board)	Image	

Notes:

When the screen is switched, perform  P. 6-44 "6.3.1 Automatic gamma adjustment".

<Procedure>

The procedure is the same as that of  P. 6-52 "6.3.4 Adjustment of faint text".

6.3.14 Sharpness adjustment

This adjustment is applied when images need to be softer or sharper.


The adjustment for each original mode is available.

The performance of this adjustment differs depending on the setting value of 05-7322, 05-7323, 05-8102 or 05-8103 with "6.3.7 Fine line enhancement switchover" as shown below.

<Adjustment Mode (05)>

Black	General	Photo	Present ation	Line art	EFI	Item to be adjusted	Remarks
8118-0	8110-0	8111-0	8112-0	8113-0	8119-0	Text	The larger the value is, the sharper the image becomes. The smaller the value is, the softer the image becomes. Acceptable values: 0 to 255 (Default: 128)
8118-1	8110-1	8111-1	8112-1	8113-1	8119-1	Graphics	
8118-2	8110-2	8111-2	8112-2	8113-2	8119-2	Image	

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.15 Thin line width lower limit adjustment

<Adjustment Mode (05)>

Code	Remarks
8240	<p>Sets the lower limit value of the thin line width when "Distinguish Thin Lines" is selected in the screen selecting menu of the printer driver. The larger the value is, the thicker (darker) the thin line becomes.</p> <p>Acceptable values: 1 to 9 (Default: 2)</p>

<Procedure>

The procedure is the same as that of  P. 6-52 "6.3.4 Adjustment of faint text".


6.3.16 Offsetting adjustment for background processing

The density of background can be adjusted as follows.

<Adjustment Mode (05)>

	PS		PCL		XPS		Remarks
	Smooth	Detail	Smooth	Detail	Smooth	Detail	
Color	8010-0	8013-0	8010-1	8013-1	8010-2	8013-2	<p>The larger the value is, the darker the background becomes. The smaller the value is, the lighter the background becomes. Acceptable values: 0 to 255 (default: 128)</p>
Twin Color	8011-0	8014-0	8011-1	8014-1	8011-2	8014-2	
Black	8012-0	8015-0	8012-1	8015-1	8012-2	8015-2	

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

6.3.17 Color/black judgment setting for twin color printing images

The color reproduction of the image object is specified in the twin color mode.

<Adjustment Mode (05)>

Code	Remarks
8218	<p>0: Reproduced with black and the specified color 1: Reproduced with black only (default) Acceptable values: 0 to 1 (Default: 0)</p>

<Procedure>

The procedure is the same as that of  P. 6-52 "6.3.4 Adjustment of faint text".

6.3.18 Beam level conversion setting

The beam level used for smoothing process (divided into 4) in the BOX printing, list printing, network FAX and e-mail FAX can be set.


The size of the dots can be adjusted.

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
7300-0	Beam level 0/4	The smaller the value is, the smaller the beam width of the primary scanning direction becomes. Therefore, the smaller dots are reproduced accordingly. Acceptable values: 0 to 255 (Default: Level 0/4: 0, Level 1/4: 63, Level 2/4: 127, Level 3/4: 191, Level 4/4: 255)
7300-1	Beam level 1/4	
7300-2	Beam level 2/4	
7300-3	Beam level 3/4	
7300-4	Beam level 4/4	

Make a test copy and compare the image obtained with the current settings; if necessary, make adjustments according to the following procedure.

<Procedure>

The procedure is the same as that of  P. 6-46 "6.3.2 Gamma balance adjustment (Black Mode)".

Notes:

1. The setting value must increase as the beam level number (0 to 4) becomes higher. Do not increase this order when setting the values.
2. Usually, beam level 4 / 4 is most effective on black mode.
3. It is not applied to the images printed in the Black mode by the printer driver.

6.4 Image Quality Adjustment (Scanning Function)

6.4.1 Gamma balance adjustment

The gamma balance at the Black Mode is adjusted by adjusting the density. The adjustment is performed by selecting its density area from the following: low density, medium density and high density.

<Adjustment Mode (05)>

Black			Gray Scale	Item to be adjusted	Remarks
Original mode					
Text/Photo	Photo	Custom mode			
7485-0	7487-0	7480-0	7488-0	Low density	The larger the value is, the density of the item to be adjusted becomes darker. Acceptable values: 0 to 255 (Default: 128)
7485-1	7487-1	7480-1	7488-1	Medium density	
7485-2	7487-2	7480-2	7488-2	High density	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the code corresponding to the desired original mode and press the [START] button.
- (3) Key in the value corresponding to the density area to be adjusted (0, 1 or 2) and press the [START] button.
0: Low density (L), 1: Medium density (M), 2: High density (H)
- (4) Key in the adjustment value. (To correct the value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value in memory.
→ The equipment goes back to the ready state.
- (6) For resetting the value, repeat step (2) to (5).
- (7) Let the equipment restart and perform the scanning job.
- (8) If the desired image has not been attained, repeat step (1) to (7).

6.4.2 Density adjustment

Adjusts the center density and the variation of density adjustment buttons.

<Adjustment Mode (05)>

Color Mode	Original mode				Item to be adjusted	Remarks
	Text	Printed image	Photo	Custom mode		
Color	8340	8341	8342	8380	Manual density center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)
	8344	8345	8346	8381	Manual density light step value	Sets the changing amount by 1 step at the density adjustment on the control panel. The larger the value is, the lighter the light side becomes. Acceptable values: 0 to 255 (Default: 20)
	8348	8349	8350	8382	Manual density dark step value	Sets the changing amount by 1 step at the density adjustment on the control panel. The larger the value is, the darker the dark side becomes. Acceptable values: 0 to 255 (Default: 20)

<Adjustment Mode (05)>

Black					Gray Scale	Item to be adjusted	Remarks
Original mode							
Text/ Photo	Text	Photo	Custom mode				
7444	7445	7446	7475	7447	Manual density center value	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)	
7456	7457	7458	7478	7459	Automatic density		

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value (acceptable values: 0 to 255).
(To correct a value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory.
→ The equipment goes back to the ready state.
- (5) Let the equipment restart and perform the scanning.
- (6) If the desired image quality has not been attained, repeat step (1) to (5).

6.4.3 Background adjustment (Color Mode)

The adjustment level of background center value is adjusted. The control value of background adjustment button is automatically adjusted to the same level as the adjusted center value. For example, when the control value of background adjustment key ranges from 0 to 6, the background center value (-2 to +2) is used to be the range from 6 to 14 accordingly.

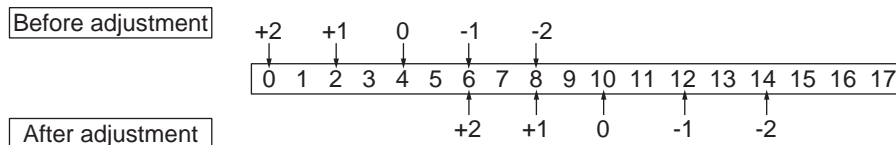


Fig.6-23

<Adjustment Mode (05)>

Code	Original mode	Remarks
8310	Text	The smaller the value is, the background becomes lighter. Acceptable values: 0 to 50 (Default: 50)
8311	Printed Image	
8312	Photo	
8370	Custom mode	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values: 0 to 50. (To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform the scanning job.
- (6) If the desired image has not been attained, repeat step (1) to (5).

6.4.4 Judgment threshold for ACS (common for copy and network scan)

The judgment level is adjusted for the automatic identification of whether the original set on the glass is black or color. Namely, this is to adjust the judgment level used when "Auto Color" is selected at color modes. The same adjustment value is simultaneously applied to all cases of originals on the original glass for copier functions and network scanning functions, and those placed on the RADF.

<Adjustment Mode (05)>

Code	Item to be adjusted	Contents
7630	Judgment threshold for ACS	The larger the value is, the more an original tends to be judged as black even at the Auto Color Mode. The smaller the value is, the more it tends to be judged as color. Acceptable values: 0 to 255 (Default: 70)

<Procedure>:

The procedure is the same as that of P. 6-60 "6.4.2 Density adjustment".

6.4.5 Sharpness adjustment

If you want to make scan images look softer or sharper, perform the following adjustment. The adjustment can be made for each of the color modes and original modes independently.

<Adjustment Mode (05)>

Code	Color mode	Original mode	Contents
8335	Full Color	Text	The larger the value is, the sharper the image becomes; while the smaller the value is, the softer the image becomes. The smaller the value is, the less moire tends to appear.
8336		Printed Image	
8337		Photo	
8375		Custom mode	
7430	Black	Text/Photo	The acceptable values are 0 to 255. The center value is 128.
7431		Text	
7432		Photo	
7470		Custom mode	
7433	Gray Scale	-	

Notes:

You have to make adjustment by balancing between moire and sharpness.

<Procedure>

The procedure is the same as that of  P. 6-60 "6.4.2 Density adjustment".

6.4.6 Setting range correction

The values of the background peak in the range correction can be switched to “varied” or “fixed” in the following codes.

If they are fixed, the range correction is performed with standard values.

The values of the background peak affects the reproduction of the background density and the values of the text peak affects that of the text density.

<Adjustment Mode (05)>

Color mode	Black				Gray Scale	Item to be adjusted	Remarks
	Original mode						
	Text/Photo	Text	Photo	Custom mode			
Black	7416	7417	7418	7425	7419	Range correction (Automatic density adjustment)	0: Background peak - fixed 1: Background peak - varied
	7421	7422	7423	7426	7424		

Color mode	Color				Item to be adjusted	Remarks
	Original mode					
	Text	Photo	Printed Image	Custom mode		
Color	8330	8331	8332	8334	Range correction (Automatic density adjustment)	0: Background peak - fixed 1: Background peak - varied
	8361	8362	8363	8365	Range correction (Manual density adjustment)	

<Procedure>

The procedure is the same as that of  P. 6-60 "6.4.2 Density adjustment".

6.4.7 Fine adjustment of black density

The density of black side on scanned image is adjusted at color-scanning.

<Adjustment Mode (05)>

Code	Original mode	Remarks
8315	Text	The larger the value is, the black side of the image becomes darker. Acceptable values: 0 to 4 (Default: 0)
8316	Printed Image	
8317	Photo	
8371	Custom mode	

Notes:

Be careful for the value not to be too large since the gradation is reproduced worse in darker side.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values: 0 to 4. (To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform the scanning job.
- (6) If the desired image has not been attained, repeat step (1) to (5).

6.4.8 RGB conversion method selection

The color space conversion method of image is decided at color-scanning.

<Adjustment Mode (05)>

Code	Original mode	Remarks
8320	Text	0: sRGB, 1: AppleRGB, 2: ROMMRGB, 3: AdobeRGB (Default: 0)
8321	Printed Image	
8322	Photo	
8372	Custom mode	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values: 0 to 3. (To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform the scanning job.
- (6) If the desired image has not been attained, repeat step (1) to (5).

6.4.9 Adjustment of saturation

The saturation of the scanned image is adjusted for color-scanning.

<Adjustment Mode (05)>

Code	Original mode	Remarks
8325	Text	The larger the value is, the brighter the image becomes.
8326	Printed Image	The smaller the value is, the duller the image becomes.
8327	Photo	Acceptable values: 0 to 255 (Default: 128)
8373	Custom mode	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes and press the [START] button.
- (3) Key in the adjustment values. Acceptable values: 0 to 255.
(To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in the memory. → The equipment goes back to the ready state.
- (5) Let the equipment restart and perform the scanning job.
- (6) If the desired image has not been attained, repeat step (1) to (5).

6.4.10 Background processing offset adjustment

The density of background is adjusted.

<Adjustment Mode (05)>

Black			Gray scale	Item to be adjusted	Remarks
Original mode					
Text/ Photo	Photo	Custom mode			
8400	8402	8404	8403	Background density adjustment / Automatic density adjustment	The larger the value is, the lower the density of the image background (low density section) becomes. The smaller the value is, the higher the density of the image background (low density section) becomes. Acceptable values: 0 to 255 (Default: 128)
8405	8407	8409	8408	Background density adjustment / Manual density adjustment	

Color				Item to be adjusted	Remarks
Original mode					
Text	Printed Image	Photo	Custom mode		
8385	8386	8387	8389	Background density adjustment / Automatic density adjustment	The larger the value is, the lower the density of the image background (low density section) becomes. The smaller the value is, the higher the density of the image background (low density section) becomes. Acceptable values: 0 to 255 (Default: 128)
8390	8391	8392	8394	Background density adjustment / Manual density adjustment	

<Procedure>

The procedure is the same as that of  P. 6-60 "6.4.2 Density adjustment".

6.4.11 Adjustment of the capacity and image quality of SlimPDF

The compression quality or the resolution is adjusted to reduce the file capacity of a SlimPDF or improve its quality.

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
9104	Compression quality of SlimPDF background processing	The smaller the value, the less the file capacity and the lower the image quality becomes. The larger the value, the greater the file capacity and the higher the image quality becomes. Acceptable values: 0 to 10 (Default: 5)
9107	Resolution of SlimPDF background processing	The smaller the value, the less the file capacity and the lower the image quality becomes. The larger the value, the greater the file capacity and the higher the image quality becomes. 0: 75dpi 1: 100dpi 2: 150dpi 3: 200dpi Acceptable values: 0 to 3 (Default: 1)

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in the codes to be adjusted and press the [START] button.
- (3) Key in the adjustment value. (To correct a value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value in memory. -> The equipment goes back to the ready state.
- (5) Let the equipment restart. Acquire the SlimPDF file and check it.
- (6) If the desired image quality has not been attained, repeat step (1) to (5).

6.4.12 Surrounding void amount adjustment

The void amount around the network scanned image is adjusted.

In network scanning, since the void amount is very small in stored images, a shadow may appear around the scanned image due to the subtle difference in the original sizes. This shadow can be eliminated by adjusting the setting value.

The setting value is applied to all resolutions and color modes.

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
7489	Surrounding void amount adjustment	When the value increases, the blank area around the scanned image becomes wider, and the data on the image decrease. Acceptable values: 0 to 255 (Default: 0) The setting value "1" is equal to 1 dot with 600 dpi. (The value "24" is equal to approx. 1 mm.)

<Procedure>

The procedure is the same as that of  P. 6-60 "6.4.2 Density adjustment".

6.4.13 ADF noise reduction (Scanning Function)

The noise reduction level for streaks can be adjusted with the following codes when a scan job is performed using the ADF while its scan noise reduction function is set to enable (*).

* When [LOW], [MIDDLE] or [HIGH] is selected in the [ADMIN] tab of the [USER FUNCTIONS] menu, or when "0", "1" or "2" is selected in 08-8300.

<Adjustment Mode (05)>

Color				Item to be adjusted	Remarks
Original mode					
Text	Printed Image	Photo	Custom mode		
8414	8415	8416	8412	ADF noise reduction	When the value decreases, the effect of reducing streaks becomes larger. When the value increases, the effect of reducing streaks becomes smaller. When "0" is set, this function is disabled. Acceptable values: 0 to 200 (Default: 100)

Black				Gray scale	Item to be adjusted	Remarks
Original mode						
Text/ Photo	Text	Photo	Custom mode			
7401	7402	7403	7400	7404	ADF noise reduction	When the value decreases, the effect of reducing streaks becomes larger. When the value increases, the effect of reducing streaks becomes smaller. When "0" is set, this function is disabled. Acceptable values: 0 to 200 (Default: 100)

Notes:

- Remember the image specifications and life span of the replacing parts may not meet the standard when the setting value is changed from the default value.
- If too small a value is set, the text may not be printed clearly.

<Procedure>

The procedure is the same as that of  P. 6-60 "6.4.2 Density adjustment".

6.5 Image Quality Adjustment (FAX Function)

6.5.1 Density adjustment

The center density and the density variation controlled by density adjustment keys can be adjusted as follows.

<Adjustment Mode (05)>

Color mode	Original mode			Item to be adjusted	Remarks
	Text/Photo	Text *	Photo		
Black	7533	7534	7535	Manual density center value	[TEXT/PHOTO], [PHOTO]: The larger the value is, the darker the image becomes. [Text]: The larger the value is, the lighter the image becomes. Acceptable values: 0 to 255 (Default: 128)
	7542	-	7543	Automatic density mode	The larger the value is, the darker the image becomes. Acceptable values: 0 to 255 (Default: 128)

* Since the gradation in this mode is reproduced in a binary image (black and white), this adjustment should be a simple binary threshold adjustment.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in an adjustment value.
(To correct the value once keyed in, press the [CLEAR] button.)
- (4) Press the [OK] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (5) Turn the power OFF.

<Confirmation>

If possible, perform a Fax transmission and check the adjusted density with the image on the recipient's side.

6.5.2 Beam level conversion setting

A beam level for smoothing process (divided into 4) in the fax function can be set. In this setting the size of dots is adjusted.

<Adjustment Mode (05)>

Code	Item to be adjusted	Remarks
7594-0	Beam level 0/4	The smaller the value is, the smaller the beam width becomes. Therefore, the smaller dot is reproduced accordingly. Acceptable values: 0 to 255 (Default: Level 0/4: 0, Level 1/4: 63, Level 2/4: 127, Level 3/4: 191, Level 4/4: 255)
7594-1	Beam level 1/4	
7594-2	Beam level 2/4	
7594-3	Beam level 3/4	
7594-4	Beam level 4/4	

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Key in a code and press the [START] button.
- (3) Key in a sub-code and press the [START] button.
- (4) Key in an adjustment value.
(To correct a value once keyed in, press the [CLEAR] button.)
- (5) Press the [OK] or [INTERRUPT] button to store the value. → The equipment goes back to the ready state.
- (6) Take the POWER OFF.

<Confirmation>

Check the beam level conversion setting with the actual fax data received, if possible.

Notes:

- The setting value must increase as the beam level number (0 to 4) becomes higher. Do not increase this order when setting the values.
- Usually, beam level 4 / 4 is most effective on black mode.

6.6 Scanner

6.6.1 Adjustment carriages-1 and -2 positions

- (1) Take off the RADF.
P. 4-174 "4.12.1 MR-3021/3022 (Reversing Automatic Document Feeder (RADF))"
- (2) Take off the original glass.
P. 4-14 "4.3.1 Original glass"
- (3) Take off the upper rear cover.
P. 4-7 "4.1.17 Upper rear cover"
- (4) Move the carriage-2 toward the exit side.

Notes:

Rotate the drive pulley to move the carriage.

- (5) Loosen the fixing screws of the front side pulley bracket, make sections A and B of carriage-2 touch the inside of the exit side frame and tighten them.

Notes:

Make sure that the sections A and B of the carriage-2 touch with the exit side frame.

- (6) Put carriage-1 on the rail. Then make sections C and D of carriage-1 touch the inside of the exit side frame and tighten the front and rear sides of the bracket with the screws.

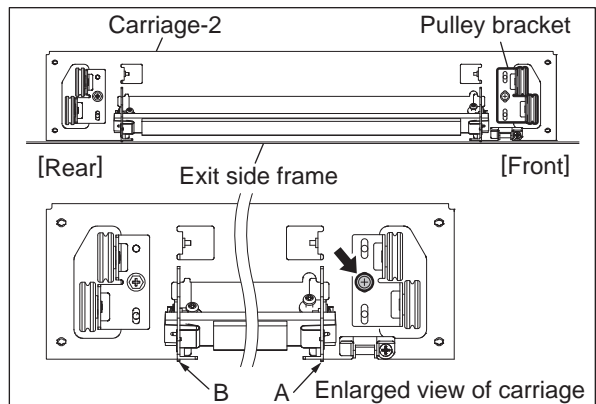


Fig.6-24

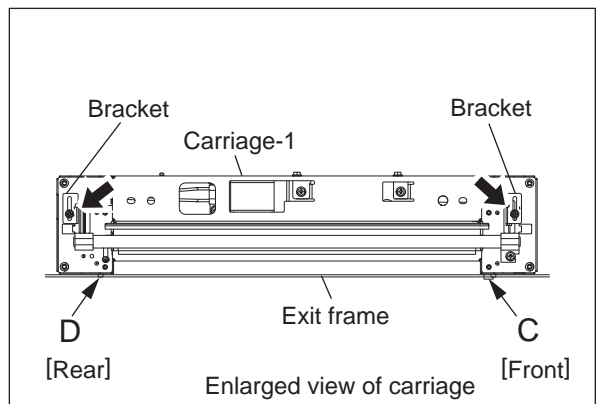


Fig.6-25

6.6.2 Belt tension adjustment of the Scan motor

- (1) Hook the belt tension jig to the motor bracket and the frame.
- (2) Loosen screw-B and -C. (There is no need to loosen screw-A, since it is a shoulder screw.)
- (3) The scan motor is pulled by the belt tension jig. Fix screw-B and then -C at the stopped position.
- (4) Remove the belt tension jig.

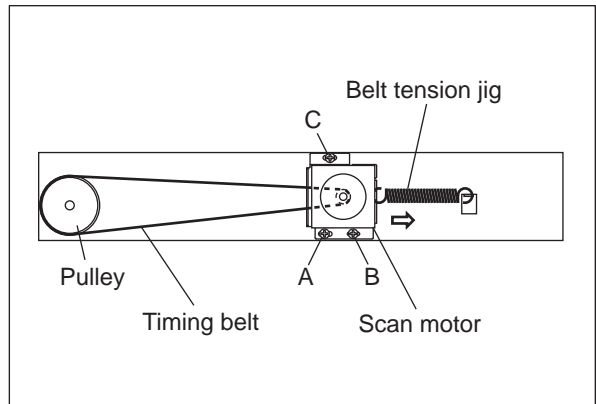


Fig.6-26

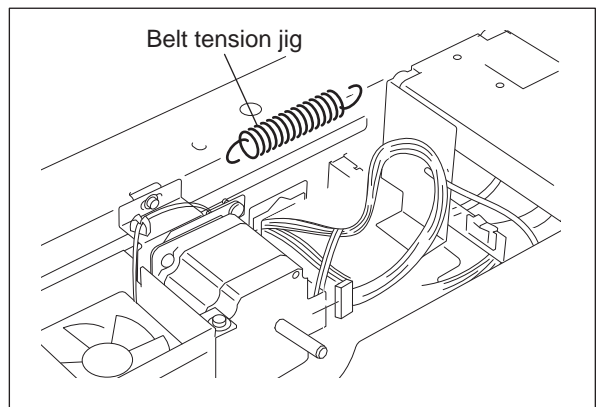



Fig.6-27


6.7 Laser Optical Unit


6.7.1 Image Adjustment in Laser Optical Unit

See the following pages for details.

 P. 6-13 "[A] Reproduction ratio of primary scanning direction (Fine adjustment of polygonal motor rotation speed (Printer))"

 P. 6-13 "[B] Primary scanning data laser writing start position (Printer)"

 P. 6-15 "[D] Secondary scanning data laser writing start position"

 P. 6-16 "[E] Primary scanning data laser writing start position at duplexing"

6.8 Paper Feeding System

6.8.1 Sheet sideways deviation caused by paper feeding

<Procedure>

- The center of the printed image shifts to the front side. → Move the guide to the front side (Arrow (A) direction in the lower figure).

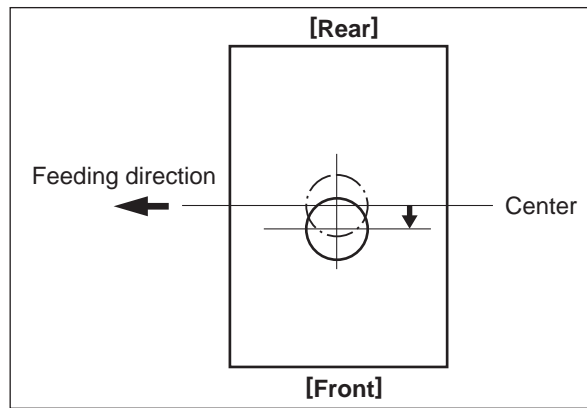


Fig.6-28

- The center of the printed image shifts to the rear side. → Move the guide to the rear side (Arrow (B) direction in the lower figure).

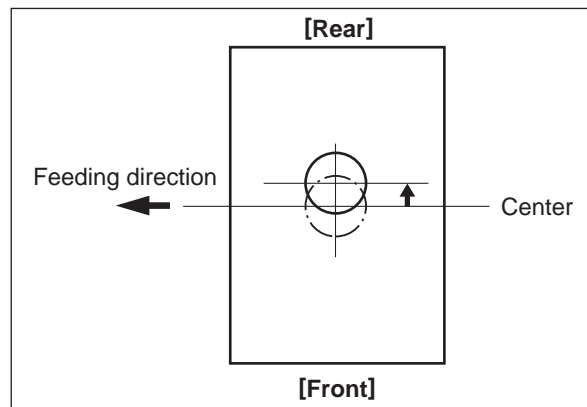


Fig.6-29

- Bypass feeding
 1. Loosen the screen.
 2. Move the entire guide to the front or rear side.
 3. Tighten the screw.

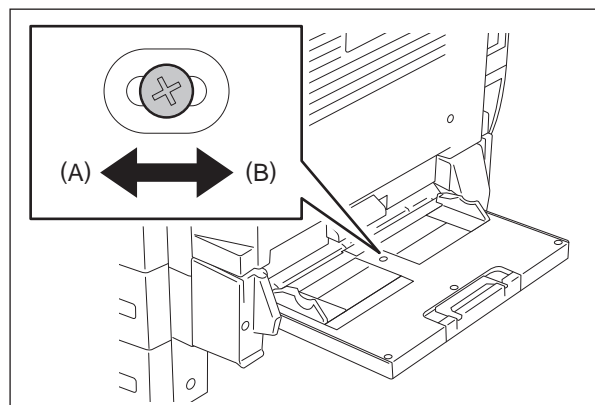


Fig.6-30

- Drawer feeding

- (1) Pull out the drawer until the locking lever [1] on the rear side comes to the operable position. If the lever is locked, release it.

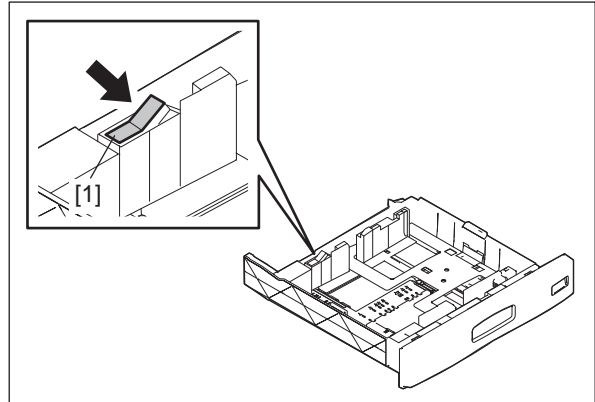


Fig.6-31

- (2) If the side guides [1] are located on the extreme outside, slightly shift them to the inside. (Keep the locking lever on the rear side released.)

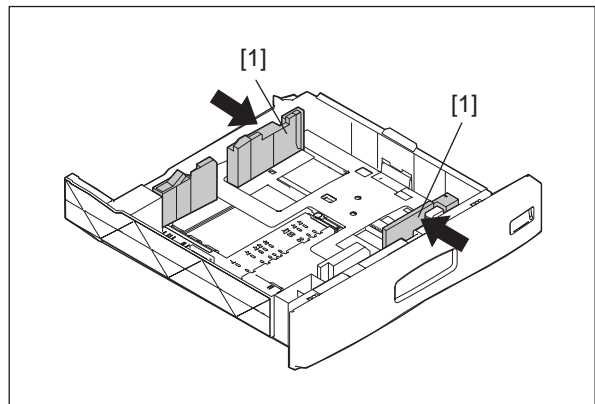


Fig.6-32

- (3) Rotate 2 screws about half a turn to loosen them.

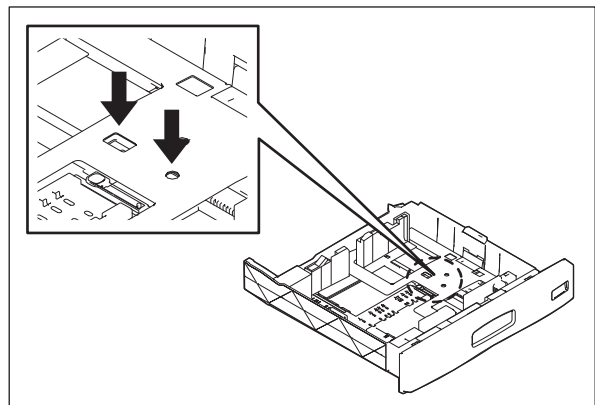


Fig.6-33

- (4) Pull down the protrusion indicated by the arrow and shift it in the specified direction.

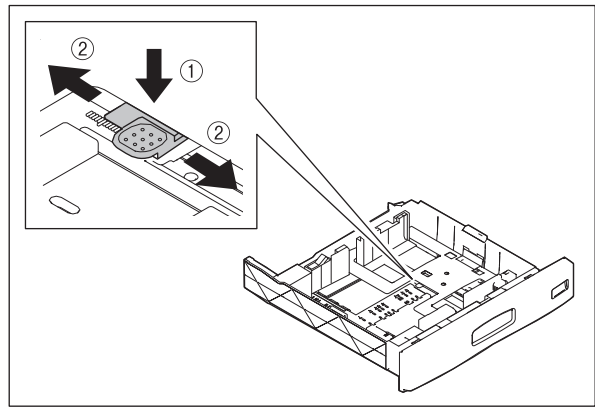


Fig.6-34

- (5) Tighten 2 screws.

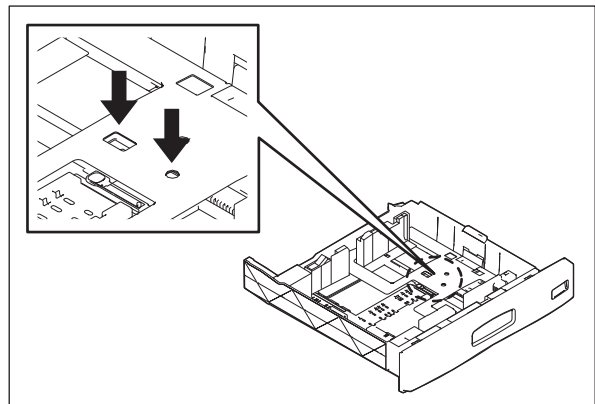


Fig.6-35

6.8.2 Adjusting the clearance of the paper and side guides

If the clearance between the paper and the side guides is too wide, it can be adjusted to between 0 and 1 mm using the following procedure (the clearance between the paper and the guides is 1 to 2 mm including both front and rear sides).

<Procedure>

- (1) Take out the drawer.
- (2) Check the scale position [1] of the pinion fixing holder.

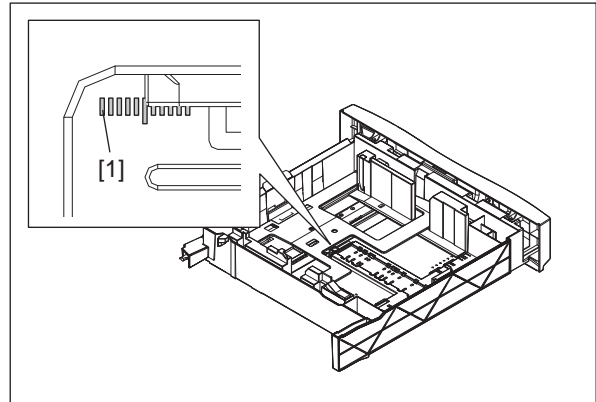


Fig.6-36

- (3) If the side guides [1] are located on the extreme outside, slightly shift them to the inside.

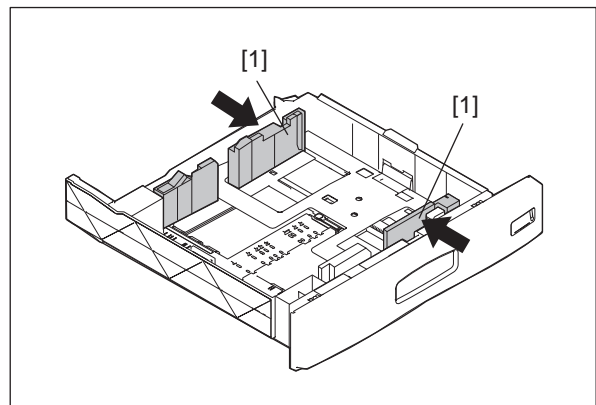


Fig.6-37

- (4) Remove the drawer paper tray [1]

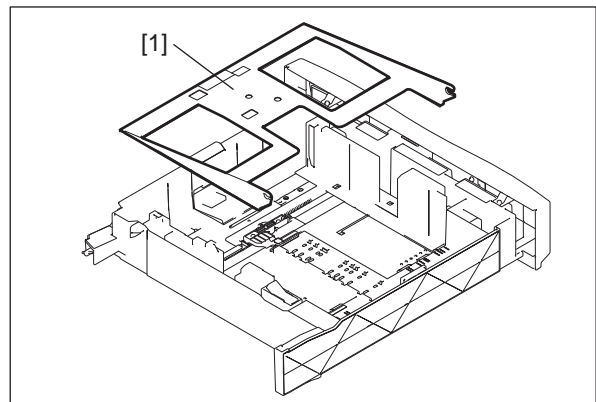


Fig.6-38

- (5) Remove 2 screws and take off the pinion fixing holder [1] and the pinion gear [2].

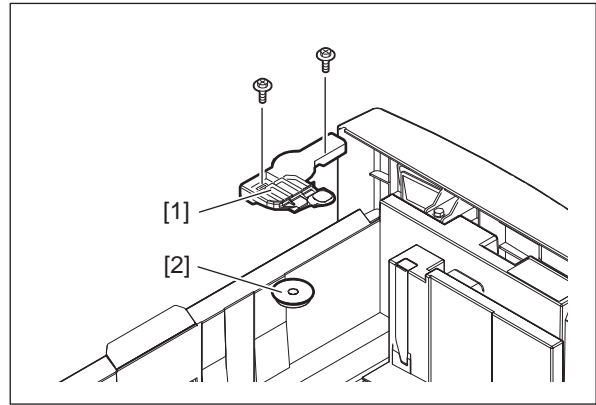


Fig.6-39

- (6) Take off the front side guide, locking lever and spring.

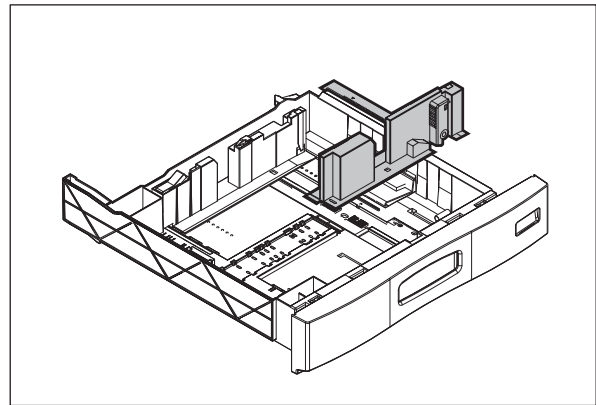


Fig.6-40

- (7) Remove 2 screws and take off the side guide lock piece [1].

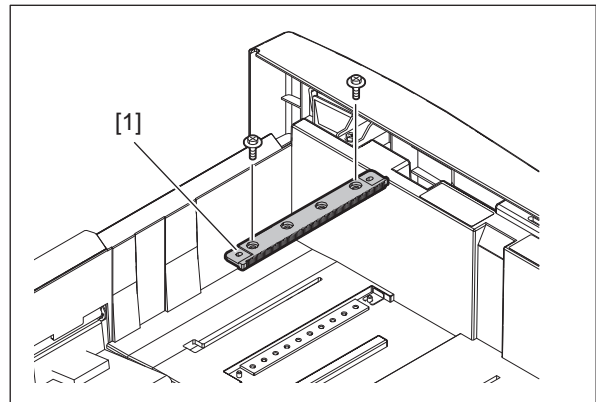


Fig.6-41

- (8) Move the lock position adjustment piece [1] as shown in the figure.

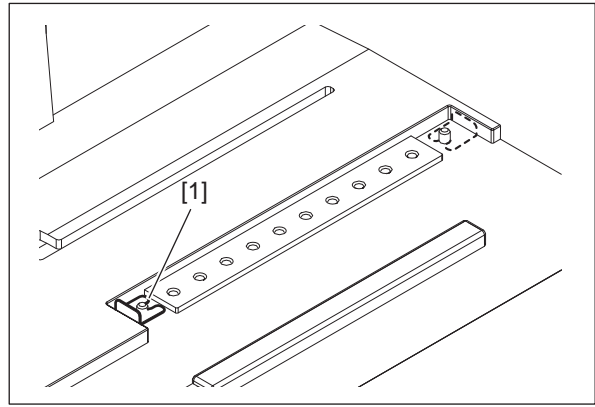


Fig.6-42

- (9) Attach the side guide lock piece [1] with 2 screws.

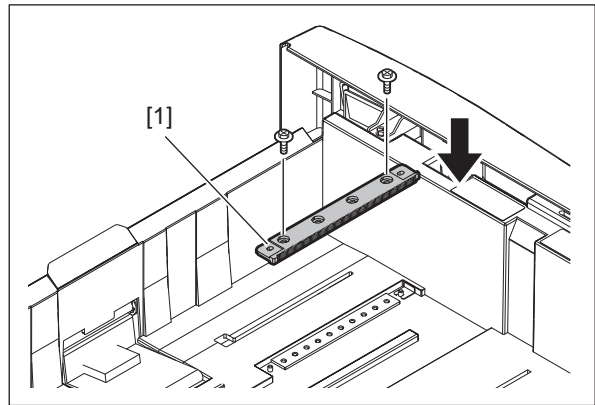


Fig.6-43

- (10) Attach the front side guide, locking lever and spring.

Notes:

- Be sure to shift the front and rear side guides to the extreme outside.

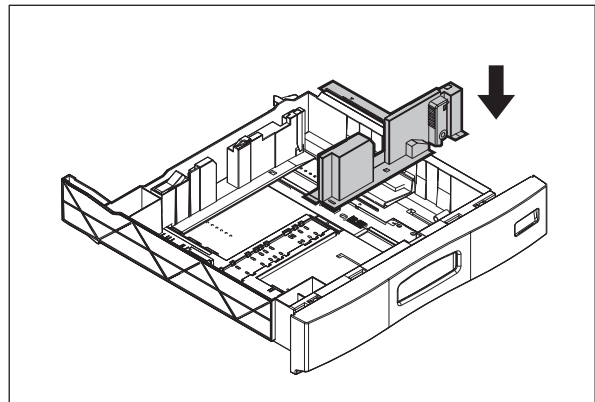


Fig.6-44

(11) Reassemble the pinion fixing holder [1] and the pinion gear [2].

Notes:

- When the pinion is attached, be sure to align its center.
- When the pinion fixing holder is reassembled, be sure to align it to the center of the scale as shown in the figure.

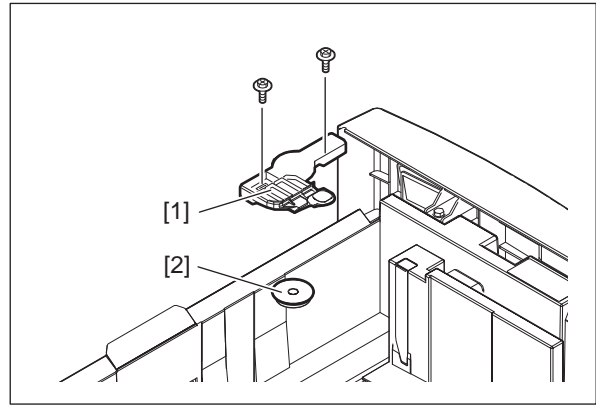


Fig.6-45

(12) Install the drawer paper tray [1]

Notes:

If the pinion fixing holder is not located in the center of the scale in step 2, adjust it to the proper position in accordance with the procedure to adjust sideways deviation.

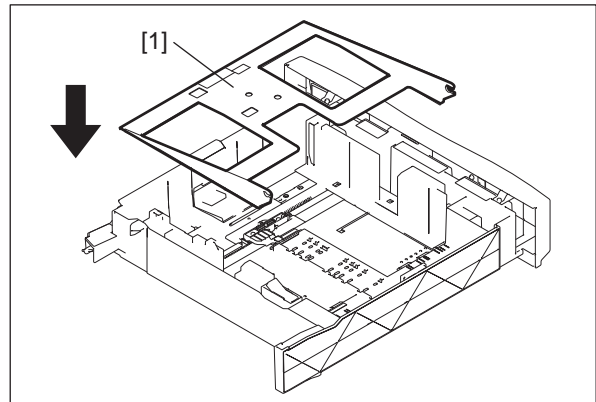


Fig.6-46

6.8.3 Separation roller pressure force adjustment of the bypass unit

Generally paper jams and multiple feeding often occur as the life end of the roller approaches. However, if they often occur even though its life has not yet reached its replacement timing, or if the life end comes much earlier than the scheduled replacement timing, the jams and multiple feeding can be suppressed by adjusting the pressure force of the separation roller.

In this method, however, when the roller life becomes longer, jams and multiple feeding may occur frequently, and when the jams and multiple feeding are suppressed, the roller life may become shorter. Therefore, perform this adjustment while checking the status carefully, and if necessary, give a sufficient explanation to users.

<Adjustment procedure>

- (1) Take off the bypass unit.
☞ P. 4-38 "4.5.1 Bypass unit".
- (2) Remove 3 screws and take off the lower plate [1].

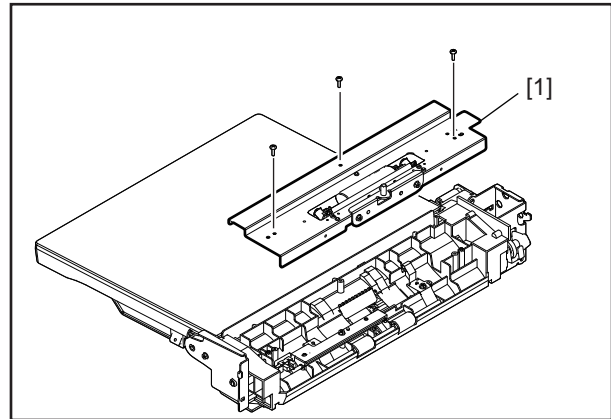


Fig.6-47

- (3) Remove 1 screw from the round hole of the front side bracket [1], and screw it temporarily into the oblong hole.

Notes:

Make a mark for the installation position of the bracket [1] in advance.

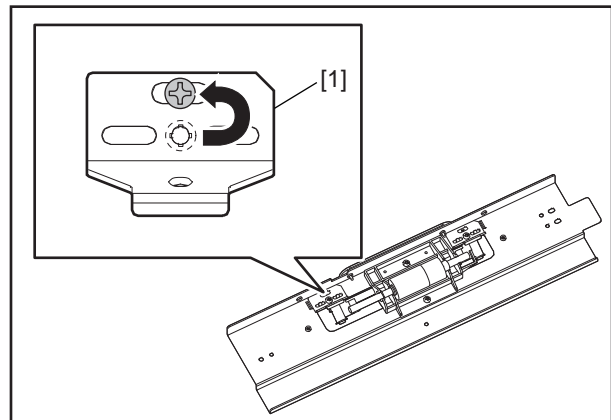


Fig.6-48

- (4) Move the front side bracket [1].
 Moving in the direction of A: The roller life will become longer (but multiple feeding may occur frequently).
 Moving in the direction of B: Multiple feeding will be suppressed (but the roller life may become shorter).

Notes:

The recommended moving distance of the bracket is within 1 or 2 scale marks.

- (5) Tighten the screw that was temporarily inserted.

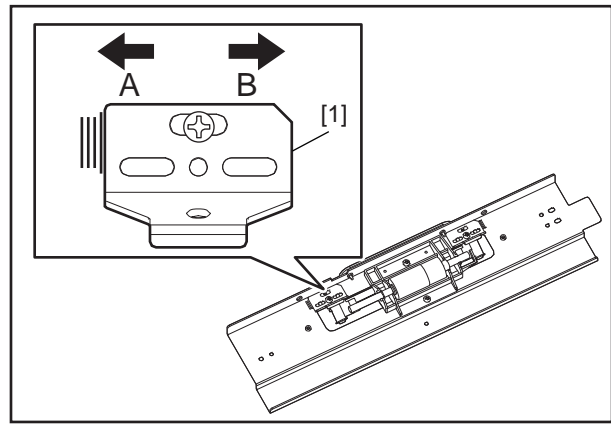


Fig.6-49

* If the roller life is not improved or the multiple feeding is not suppressed with the adjustment in step (4), perform the following procedure in steps (6) through (8).

- (6) Remove 1 screw from the round hole of the rear side bracket [1], and screw it temporarily into the oblong hole.

Notes:

Make a mark for the installation position of the bracket [1] in advance.

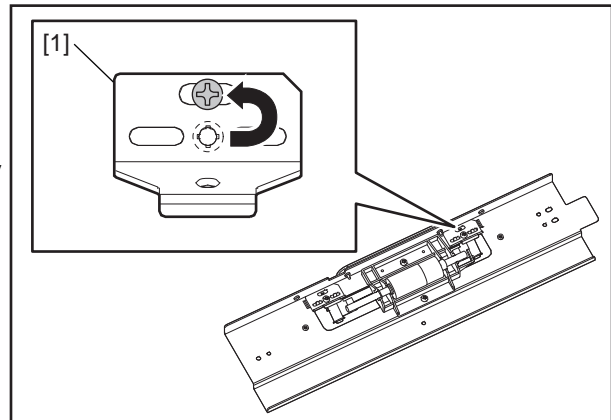


Fig.6-50

- (7) Move the rear side bracket [1].
 Moving in the direction of A: The roller life will become longer (but multiple feeding may occur frequently).
 Moving in the direction of B: Multiple feeding will be suppressed (but the roller life may become shorter).

- (8) Tighten the screw that was temporarily inserted.

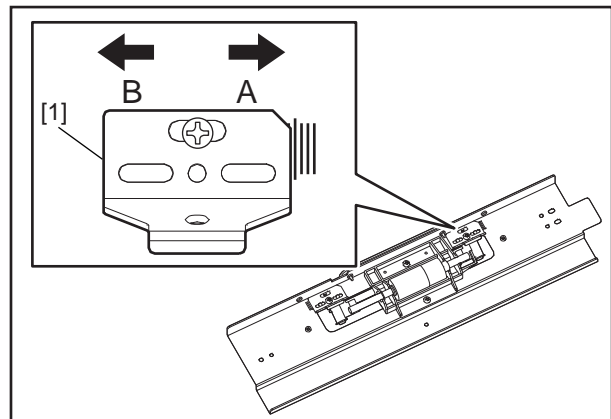


Fig.6-51

Notes:

The recommended moving distance of the bracket is within 1 or 2 scale marks.
If the moving distance in the direction B, especially for the rear side bracket, is too large, the separation roller holder [2] and the lever [3] may be contacted.

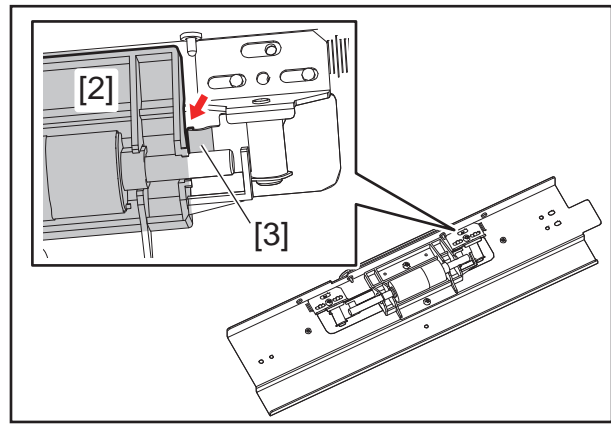


Fig.6-52

6.9 Process Unit Related Section

6.9.1 High-Voltage Transformer Setting

The high-voltage transformers (PS-HVT-450) supply high-voltage to the parts related to charging, development, transfer and Discharging blade.

The high-voltage transformer has the following high-voltage outputs.

CH1	1	Main charger needle (Y)
	2	Main charger needle (M)
	3	Main charger needle (C)
	4	Main charger needle (K)
CH2	1	Main charger grid bias (Y)
	2	Main charger grid bias (M)
	3	Main charger grid bias (C)
	4	Main charger grid bias (K)
CH3	1	Developer bias (Y)
	2	Developer bias (M)
	3	Developer bias (C)
	4	Developer bias (K)
CH4	1	1st transfer roller bias (Y)
	2	1st transfer roller bias (M)
	3	1st transfer roller bias (C)
	4	1st transfer roller bias (K)
CH5	-	2nd transfer roller bias

Notes:

Never move the variable resistance on the board since the output adjustment has been performed at the shipment for the high-voltage transformer supplied as a service part. Also do not perform the setting change when the high-voltage power supply is replaced.

6.10 Developer Unit

6.10.1 Adjustment of the Auto-Toner Sensor

When the developer material is replaced, adjust the auto-toner sensor.

📖 P. 6-2 "6.1.2 Adjustment of the Auto-Toner Sensor"

6.10.2 Adjustment of the doctor-to-sleeve gap

For the adjustment of the doctor-to-sleeve gap, perform the same procedure for the Y, M, C and K developer units.

Adjustment tool to use: Doctor-sleeve gap jig

<Adjustment procedure>

- (1) Take off the process unit from the equipment.
- (2) Take off the developer unit from the process unit.
📖 P. 4-66 "4.6 Process Unit Related Section"
- (3) Take off the developer material cover. Then discharge the developer material.

Notes:

While reattaching the developer material cover set the latches securely.

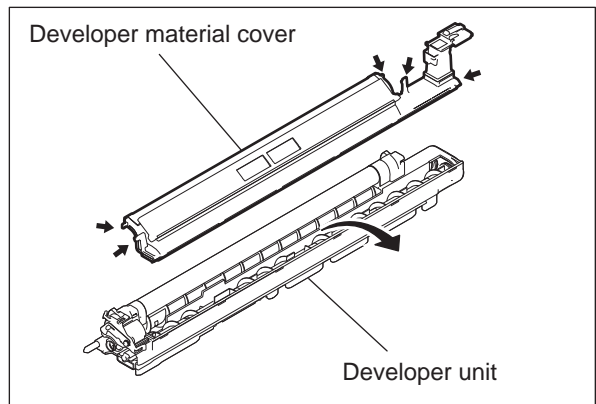


Fig.6-53

- (4) Loosen 2 doctor blade fixing screws.
- (5) Insert the doctor-sleeve gap jig to adjust the gap.
Insert the gauge "0.70" of the doctor-sleeve gap jig between the developer sleeve and the doctor blade to adjust the gap, and tighten the screws.

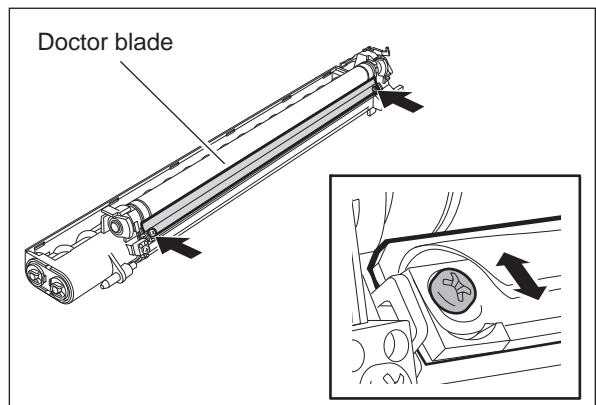


Fig.6-54

Notes:

1. Flip up 2 protection sheets for the doctor blade from the sleeve before inserting the gauge. Also, be sure not to damage the protection sheets.
2. When confirming and adjusting the gap between the developer sleeve and the doctor blade, insert the gauges into the gap after rotating the developer sleeve so that its marking faces the doctor blade.

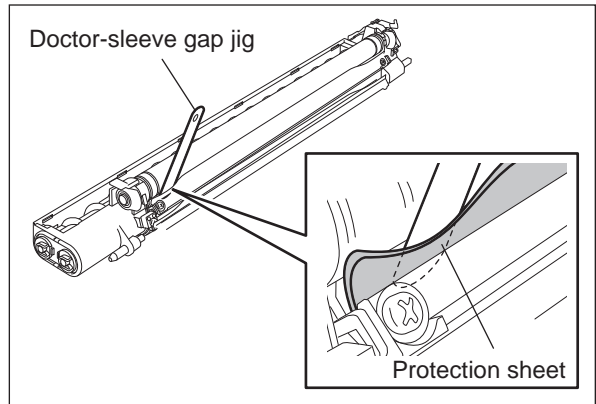


Fig.6-55

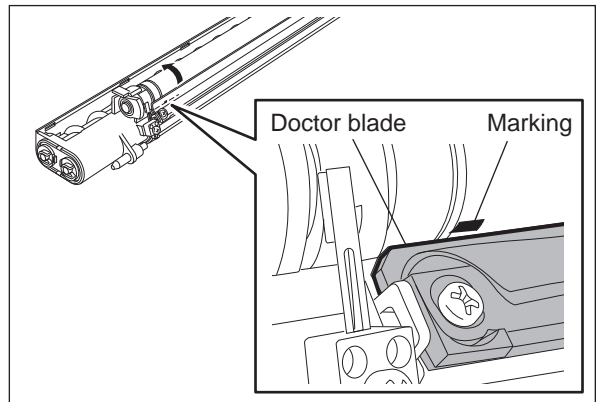


Fig.6-56

- (6) Insert the gauge "0.65" of the doctor-sleeve gap jig between the developer sleeve and the doctor blade to make sure that the gauge can move smoothly in the front/rear direction and the gauge "0.75" cannot be inserted into the gap.

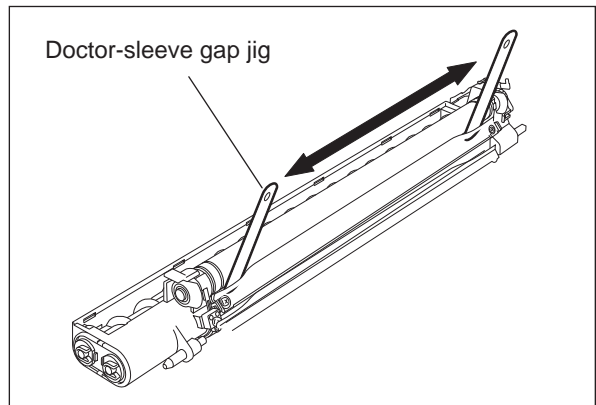


Fig.6-57

6.11 Transfer Unit

6.11.1 Adjustment of the transfer belt due to environmental factors

The length of the transfer belt may change depending on the environmental temperature and humidity, and this will cause change to the leading edge position of the image.

Although image position adjustment has been performed at factory shipment, when the equipment is installed or any part is replaced, it is necessary to check the difference between the “05-4732-0: Reference value” and “05-4732-1: actual value” of the “Displaying corrected values of leading edge adjustment”, because there may be a difference between the environment of the factory and that of the installation location. If the difference between the reference value and actual value is 10 bits or more, be sure to perform “Image location adjustment of secondary scanning direction (05-4402)”.

- The equipment automatically corrects the change in the leading edge position caused by any environmental change. However, readjustment for the leading edge position in the installation environment (i.e. obtaining the reference value) can make the automatic correction even more precise, since it can suppress inconsistency caused by the dispersion of units, parts and sensors.
- A difference between the reference value and actual value may occur even if the equipment has not been moved. However, you do not have to perform “05-4402” every time a difference is found, if it has already been performed after installation of the equipment or replacement of parts.

Code	Adjustment item	Remarks
4732-0	Displaying corrected values of leading edge adjustment Absolute humidity reference value	Displays the absolute value of the corrected value of the leading edge adjustment
4732-1	Displaying corrected values of leading edge adjustment Absolute humidity actual value	Displays the actual value of the corrected value of the leading edge adjustment
4402	Image location adjustment of secondary scanning direction	Performs the image location adjustment of the secondary scanning direction (laser writing start position adjustment)

Notes:

When checking “Displaying corrected values of leading edge adjustment (05-4732-0), (05-4732-1)” and “Image location adjustment of secondary scanning direction (05-4402)”, be sure to do this in a few hours after the equipment has been installed or any part has been replaced.

The length of the transfer belt changes slowly according to the environment, so the larger the environmental change is, the longer it takes the belt length to become stable. And if you perform this adjustment immediately after installation or replacement work, the adjustment value may not be proper, and therefore, deviation in the leading edge position is likely to occur when the equipment becomes stable.

<Procedure>

- (1) While pressing [0] and [5] simultaneously, turn the power ON.
- (2) Perform paper selection for the drawer, key in [98], and then press the [FAX] button to output the grid pattern (to update the actual value).
- (3) Key in [4732] and press the [START] button.
- (4) Key in [0] and press the [START] button.
- (5) Record the displayed "Reference value (A)" and press the [OK] button.
- (6) Key in [4732] and press the [START] button.
- (7) Key in [1] and press the [START] button.
- (8) Record the displayed "actual value (B)" and press the [OK] button.
- (9) Calculate the difference between "Reference value (A)" and "actual value (B)" to obtain "Difference (C)".

Range of difference (C)	Remarks
$C \leq -10$	Perform the image location adjustment of the secondary scanning direction. Proceed to step (10).
$-10 < C < 10$	The image location of the secondary scanning direction is set properly. Proceed to step (12).
$10 \leq C$	Perform the image location adjustment of the secondary scanning direction. Proceed to step (10).

* When the difference between "05-4732-0: Reference value" and "05-4732-1: actual value" is 10 bits, the equipment has already performed automatic correction by approx. 1 mm.

- (10) Key in [4402] and press the [START] button.

- (11) Enter the adjustment value by means of the following procedure.
 In order to enter the adjustment value, it is necessary to key in a value other than the current one to clear the previously stored one. Then enter the value which has been displayed as the current one after keying in the code [4402] again.

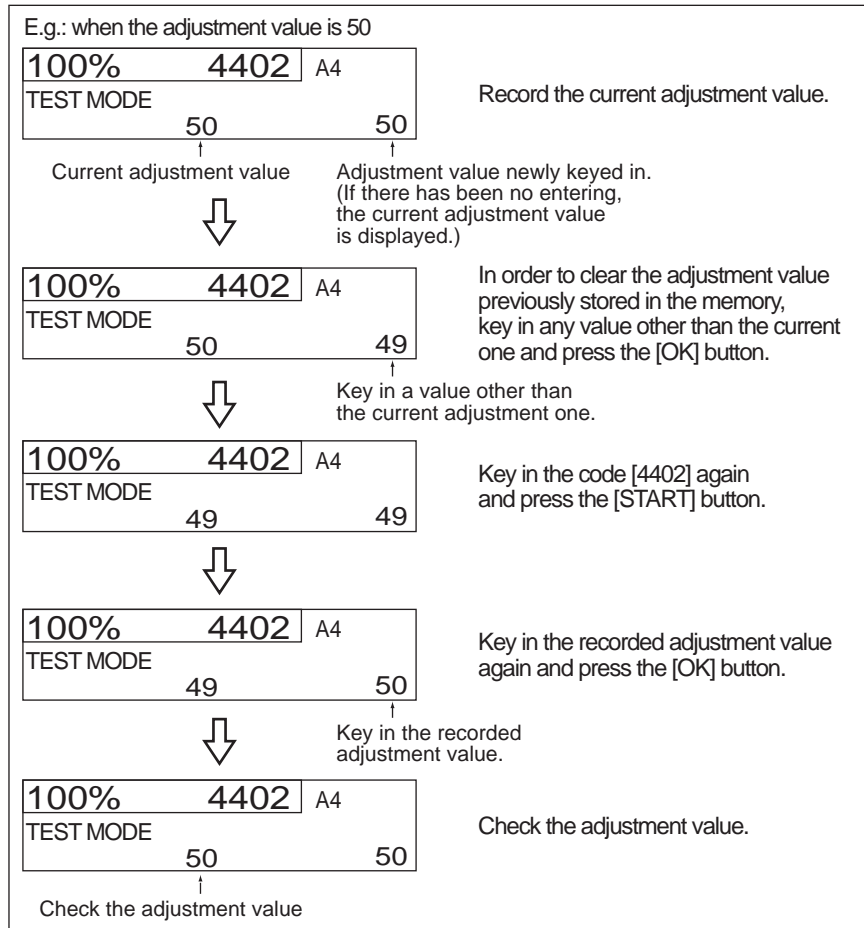


Fig.6-58

- (12) Turn the power OFF.

6.11.2 Adjustment of Gap between Transfer Belt Unit (TBU) Drive Gears

Perform this adjustment for setting the gap between the shafts of the drive transmission gear and the TBU drive gear.

Since the gap can be adjusted only by the tension of the spring, no jig is required.

Perform this adjustment after replacing or disassembling any of the parts described below. (If this adjustment is not performed, image problems or abnormal noise may occur.)

- A. When the transfer belt motor unit was replaced and removed.
- B. When the TBU drive transmission gear [1] was replaced
- C. When the TBU was replaced
- D. When the frame of the TBU was disassembled for parts replacement
(The adjustment is not required when only the transfer belt or only the TBU drive gear [2] was replaced.)

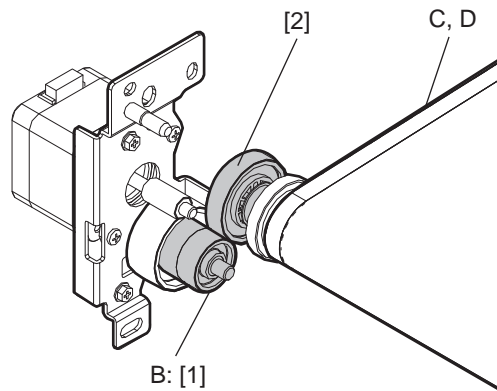


Fig.6-59

<Procedure>

- (1) Remove 3 screws. (Tension is applied by the spring.)

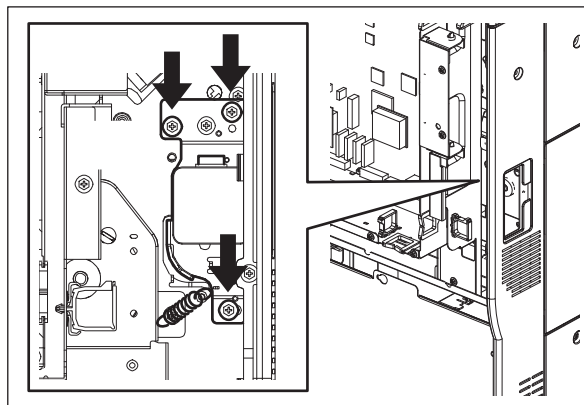


Fig.6-60

- (2) Turn the TBU lifting lever [1] to the fixed position (horizontal position) so that the transfer belt unit is contacted.

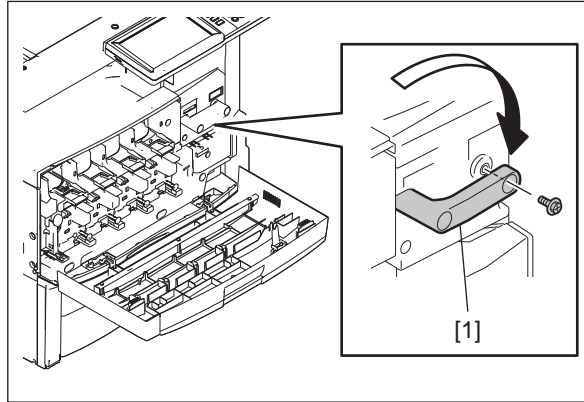


Fig.6-61

- (3) Install the transfer belt cleaner unit.
P. 4-108 "4.8.1 Transfer belt cleaning unit"
- (4) Install the TBU cleaner waste toner duct [1] with 1 screw.

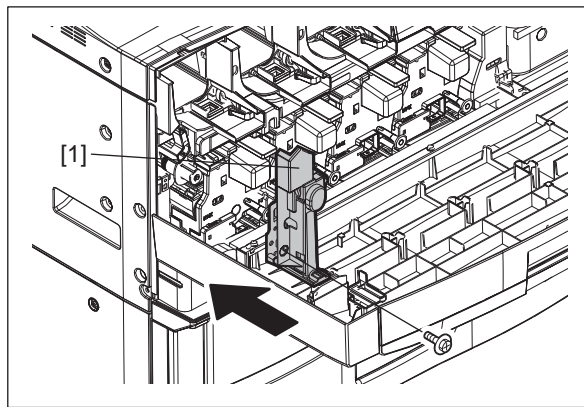


Fig.6-62

- (5) Close the front cover.
- (6) Fix the transfer belt motor unit with 3 screws in order of A and B then C.

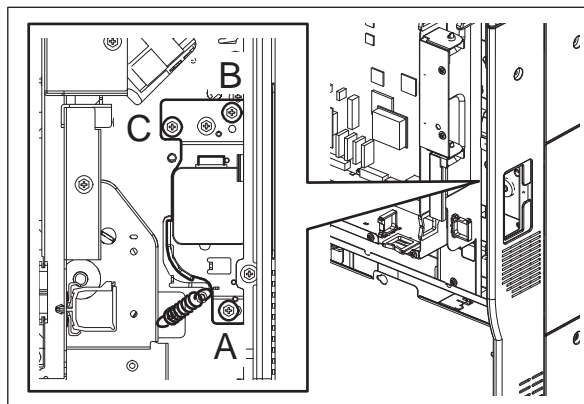


Fig.6-63

- (7) Connect the relay connector [1] and tighten the screw. Then install the ozone exhaust duct [2].

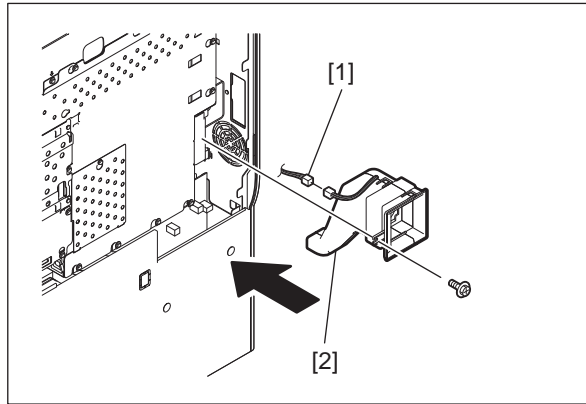


Fig.6-64

- (8) Connect the connector and tighten the screw. Then install the duct [1].

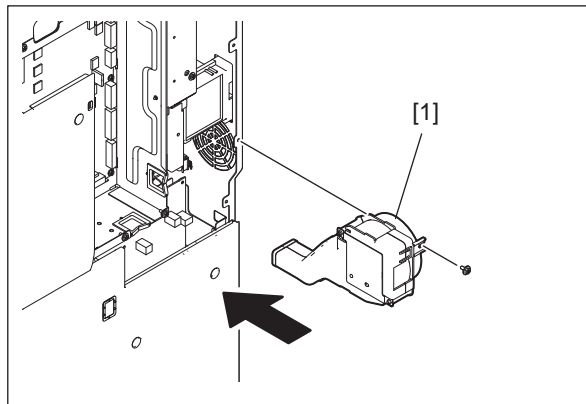


Fig.6-65

- (9) Install the rear cover-2.

6.12 Image Quality Control

6.12.1 Performing Image Quality Control

When the image quality sensor is replaced, perform the automatic initialization of the image quality control.

📖 P. 6-4 "6.1.3 Performing Image Quality Control"

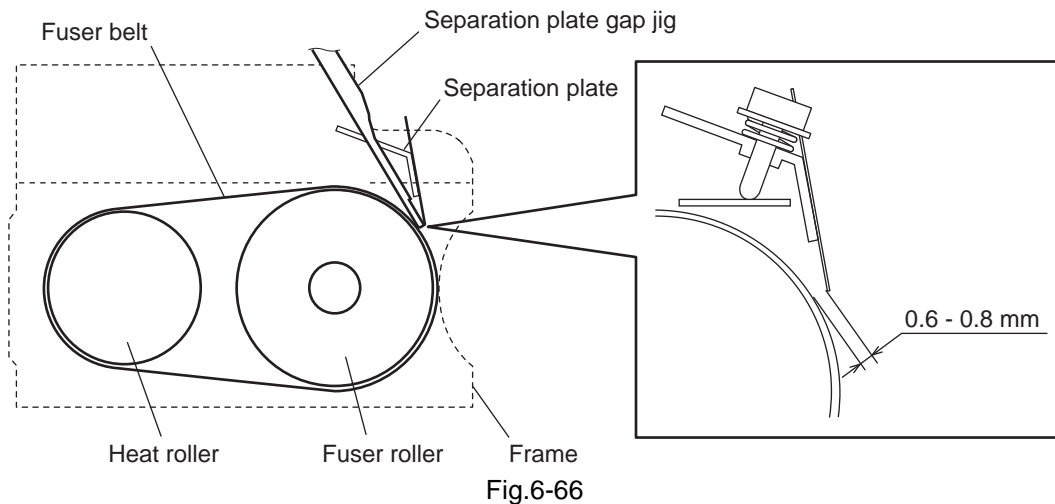
6.13 Fuser Unit / Paper Exit Section

6.13.1 Adjustment of the Separation Plate Gap

Perform this adjustment when the following parts are replaced or disassembled.

- Separation plate
- Fuser belt
- Fuser roller
- Frame of fuser unit
- Heat roller

Adjustment tool to use: Separation plate gap jig



Notes:

- Perform gap adjustment when the fuser unit is at a normal temperature.
- Make sure that the pressure roller is released.
- Be careful not to damage the fuser belt and jig (to protect the fuser belt, the jig is made from ABS).

<Adjustment procedure>

- (1) Take off the front side cover, heat roller cover, and transport guide.
📖 P. 4-135 "4.10.2 Front side cover"
📖 P. 4-136 "4.10.4 Heat roller cover"
📖 P. 4-137 "4.10.6 Transport guide"
- (2) Insert the jig end (with a hole) into the first window on the separation plate viewed from the front.
- (3) Adjust it with a screw so that the 0.6 mm jig can be inserted between the separation plate and the fuser belt, but the 0.8 mm jig cannot.
- (4) Insert the jig into the last window on the separation plate viewed from the front, and then adjust it in the same manner.
- (5) Insert the jig into the remaining three windows on the separation plate, and then adjust them in the same manner.
 - * If the 0.6 mm jig cannot be inserted, the gap is too narrow. Adjust it again.
 - * If the 0.8 mm jig can be inserted, the gap is too wide. Adjust it again.

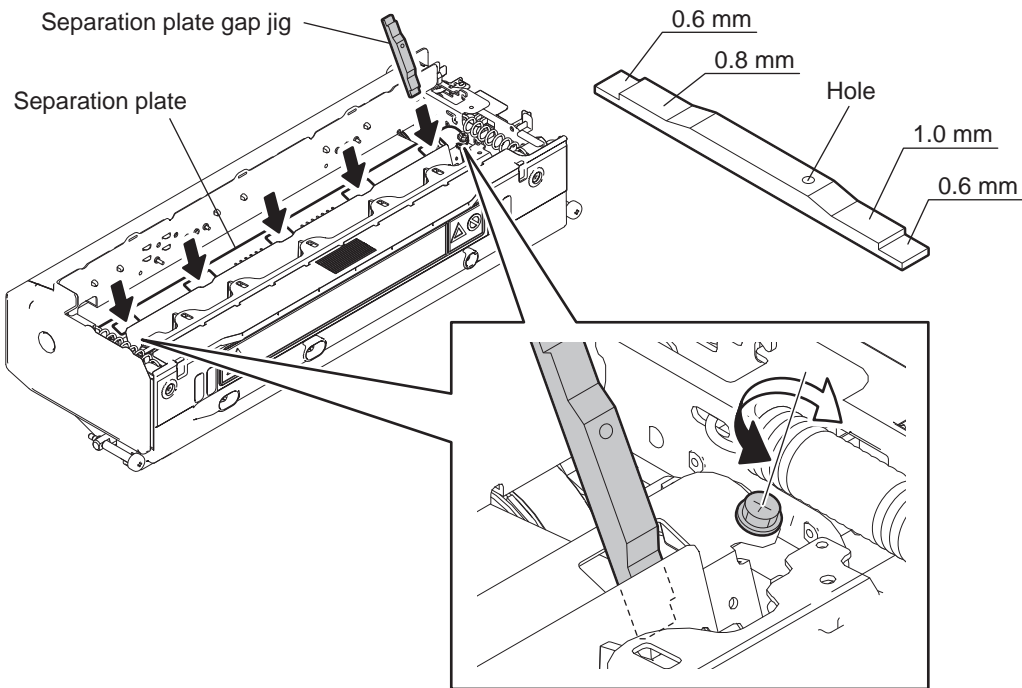


Fig.6-67

Notes:

- Perform the gap adjustment at the side without the hole on it for the jig.

7. PREVENTIVE MAINTENANCE (PM)

7.1 General Description

The purpose of preventive maintenance (PM) is to maintain the quality level of this equipment by periodically inspecting and cleaning this equipment and also replacing the parts whose replacement timing has come according to the maintenance contract. There are PM kits packaged for each unit or a group of parts with the same replacement number of output pages, allowing you to carry out efficient parts replacement.

Also to maintain the quality level of the equipment, overhauling is required when a specified number of pages has been printed or when a specified period of time has passed, regardless of the number of output pages.

7.2 PM Display

7.2.1 General Description

The maintenance timing for the PM parts of the process unit, such as the drum and developer material, and the PM parts of the units other than the process unit, such as the 2nd transfer roller and fuser belt varies depending on the conditions of the use, such as the ratio of color/black printing. Therefore, this equipment shows the appropriate maintenance timing of each part on the control panel LCD.

7.2.2 PM Display Conditions

The conditions of the PM display consist of the codes of the setting mode (08) for “the setting value treated as a threshold of the PM display”, “the counter indicating the current number of prints and driving time” and “the setting value which determines the display conditions”.

The PM timing is displayed when the counter exceeds the setting value according to the display condition based on “the setting value which determines the display conditions”.

- Setting value treated as a threshold of the PM display

Notes:

When “0” is entered as the setting value, PM timing is not displayed.

- 08-6190 : Setting value of PM counter [process unit (K)]
- 08-6191 : Setting value of PM time counter [process unit (K)]
- 08-6192 : Setting value of PM counter [process unit (Y)]
- 08-6193 : Setting value of PM time counter [process unit (Y)]
- 08-5550 : Setting value of PM counter [process unit (M)]
- 08-5551 : Setting value of PM time counter [process unit (M)]
- 08-5552 : Setting value of PM counter [process unit (C)]
- 08-5553 : Setting value of PM time counter [process unit (C)]
- 08-5554 : Setting value of PM counter [developer material (K)]
- 08-5555 : Setting value of PM time counter [developer material (K)]
- 08-5556 : Setting value of PM counter [developer material (Y)]
- 08-5557 : Setting value of PM time counter [developer material (Y)]
- 08-5558 : Setting value of PM counter [developer material (M)]
- 08-5559 : Setting value of PM time counter [developer material (M)]
- 08-5560 : Setting value of PM counter [developer material (C)]
- 08-5561 : Setting value of PM time counter [developer material (C)]
- 08-5562 : Setting value of PM counter [parts other than the PM parts of the process unit]
- 08-5563 : Setting value of PM time counter [parts other than the PM parts of the process unit]

- Counter indicating the current number of prints and driving time
 - 08-6194 : Current value of PM counter [process unit (K)]
 - 08-6195 : Current value of PM time counter [process unit (K)]

08-6196 : Current value of PM counter [process unit (Y)]
08-6197 : Current value of PM time counter [process unit (Y)]
08-5564 : Current value of PM counter [process unit (M)]
08-5565 : Current value of PM time counter [process unit (M)]
08-5566 : Current value of PM counter [process unit (C)]
08-5567 : Current value of PM time counter [process unit (C)]
08-5568 : Current value of PM counter [developer material (K)]
08-5569 : Current value of PM time counter [developer material (K)]
08-5570 : Current value of PM counter [developer material (Y)]
08-5571 : Current value of PM time counter [developer material (Y)]
08-5572 : Current value of PM counter [developer material (M)]
08-5573 : Current value of PM time counter [developer material (M)]
08-5574 : Current value of PM counter [developer material (C)]
08-5575 : Current value of PM time counter [developer material (C)]
08-5576 : Current value of PM counter [parts other than the PM parts of the process unit]
08-5577 : Current value of PM time counter [parts other than the PM parts of the process unit]

- Setting value which determines the display conditions

08-6198 : Switching of output pages/driving counts at PM [process unit (K)]
08-5578 : Switching of output pages/driving counts at PM [process unit (Y)]
08-5579 : Switching of output pages/driving counts at PM [process unit (M)]
08-5580 : Switching of output pages/driving counts at PM [process unit (C)]
08-5581 : Switching of output pages/driving counts at PM [developer material (K)]
08-5582 : Switching of output pages/driving counts at PM [developer material (Y)]
08-5583 : Switching of output pages/driving counts at PM [developer material (M)]
08-5584 : Switching of output pages/driving counts at PM [developer material (C)]
08-5585 : Switching of output pages/driving counts at PM [parts other than the PM parts of the process unit]

7.2.3 PM Display Contents

When the counter value exceeds the setting value, the equipment notifies you of when the maintenance time has come by displaying the message "Time for periodic maintenance ****" on the control panel LCD. "****" in the message is a 4-digit hexadecimal number code. This number is allocated in the following manner, therefore the parts needing maintenance can be identified.

PM parts of the process unit (K)	: 0008
PM parts of the process unit (Y)	: 0001
PM parts of the process unit (M)	: 0002
PM parts of the process unit (C)	: 0004
Developer material (K)	: 0080
Developer material (Y)	: 0010
Developer material (M)	: 0020
Developer material (C)	: 0040
Parts other than the PM parts of the process unit	: 0100

If multiple parts have reached the maintenance time, the sum of the corresponding code values listed above is displayed in hexadecimal numbers.

For example, if the PM parts of the process units (K) and (C) and the developer materials (K) and (C) reach the maintenance time, the 4-digit hexadecimal number code will be "00CC" in hexadecimal numbers: 0008+0004+0080+0040=00CC.

4th digit	3rd digit		2nd digit		1st digit	
None	Part (transfer roller)		Developer material		Photoconductive drum	
	Hexadecimal number code	Explanation	Hexadecimal number code	Explanation	Hexadecimal number code	Explanation
Always "0"	0	No maintenance required	0	No maintenance required	0	No maintenance required
	1	Maintenance required	1	Y	1	Y
			2	M	2	M
			3	M+Y	3	M+Y
			4	C	4	C
			5	Y+C	5	Y+C
			6	C+M	6	C+M
			7	Y+M+C	7	Y+M+C
			8	K	8	K
			9	K+Y	9	K+Y
			A	K+M	A	K+M
			B	K+M+Y	B	K+M+Y
			C	K+C	C	K+C
			D	K+Y+C	D	K+Y+C
			E	K+C+M	E	K+C+M
		F	K+Y+M+C	F	K+Y+M+C	

7.2.4 Counter Clearing

The counter indicating “current number of prints and driving time” used for the PM display function is reset by entering “0” in it or clearing it in the PM support mode.

Notes:

Even if “0” is entered in the PM management setting value of the setting mode (08), the corresponding counter for the PM display is not reset. Be sure to clear the counter in the PM support mode when the maintenance is finished.

The reset condition of each counter is as follows:

- 08-6194: Current value of PM counter [process unit (K)]
- 08-6195: Current value of PM time counter [process unit (K)]
When the current value of “CLEANER/DRUM/CHARGER (K)” on the main screen or “DRUM (K)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-6196: Current value of PM counter [process unit (Y)]
- 08-6197: Current value of PM time counter [process unit (Y)]
When the current value of “CLEANER/DRUM/CHARGER (Y)” on the main screen or “DRUM (Y)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5564: Current value of PM counter [process unit (M)]
- 08-5565: Current value of PM time counter [process unit (M)]
When the current value of “CLEANER/DRUM/CHARGER (M)” on the main screen or “DRUM (M)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5566: Current value of PM counter [process unit (C)]
- 08-5567: Current value of PM time counter [process unit (C)]
When the current value of “CLEANER/DRUM/CHARGER (C)” on the main screen or “DRUM (C)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5568: Current value of PM counter [developer material (K)]
- 08-5569: Current value of PM time counter [developer material (K)]
When the current value of “DEVELOPMENT UNIT” on the main screen or “BLACK DEVELOPER (K)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5570: Current value of PM counter [developer material (Y)]
- 08-5571: Current value of PM time counter [developer material (Y)]
When the current value of “DEVELOPMENT UNIT” on the main screen or “YELLOW DEVELOPER (Y)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5572: Current value of PM counter [developer material (M)]
- 08-5573: Current value of PM time counter [developer material (M)]
When the current value of “DEVELOPMENT UNIT (M)” on the main screen or “MAGENTA DEVELOPER (M)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5574: Current value of PM counter [developer material (C)]
- 08-5575: Current value of PM time counter [developer material (C)]
When the current value of “DEVELOPMENT UNIT” on the main screen or “CYAN DEVELOPER (C)” on the sub-screen in the PM support mode is cleared, the counter is reset.
- 08-5576: Current value of PM counter [parts other than the PM parts of the process unit]
- 08-5577: Current value of PM time counter [parts other than the PM parts of the process unit]
When the current value of “2nd TRANSFER” on the main screen or “2nd TRANSFER ROLLER” on the sub screen in the PM support mode is cleared, the counter is reset.

7.3 General Descriptions for PM Procedure

(1) Preparation

- Ask the user about the current conditions of the equipment and note them down.
- Before starting maintenance, make some sample copies and store them.
- See the replacement record and check the parts to be replaced in the PM support mode (6S) or list printing mode (9S-103).

6S : [6] + [START] + [POWER] ON

9S-103 : [9] + [START] + [POWER] ON → [103] → [START]

UNIT	OUTPUT PAGES DEVELOP COUNTS	PM OUTPUT PAGES DEVELOP COUNTS	DRIVE COUNTS	PM DRIVE COUNTS
DRUM(K)	1957	1957	3940	170000
DRUM BLADE(K)	1957	1957	10870	170000
GRID(K)	1957	1957	10870	170000
MAIN CHARGER NEEDLE(K)	1957	1957	10870	170000
CHARGER CLEANING PAD(K)	1957	1957	10870	170000
DRUM(Y)	1077	1077	3766	170000
DRUM BLADE(Y)	1077	1077	3766	170000
GRID(Y)	1077	1077	3766	170000
MAIN CHARGER NEEDLE(Y)	1077	1077	3766	170000
CHARGER CLEANING PAD(Y)	1077	1077	3766	170000
DRUM(M)	1077	1077	9547	170000
DRUM BLADE(M)	1077	1077	9547	170000
GRID(M)	1077	1077	9547	170000
MAIN CHARGER NEEDLE(M)	1077	1077	9547	170000
CHARGER CLEANING PAD(M)	1077	1077	9547	170000
DRUM(C)	1077	1077	9547	170000
DRUM BLADE(C)	1077	1077	9547	170000
GRID(C)	1077	1077	9547	170000
MAIN CHARGER	1077	1077	9547	170000
		1077	9547	170000

Fig. 7-1

- Turn OFF the power and make sure to unplug the equipment.
- (2) Perform a preventive maintenance using the following checklist and illustrations. Refer to the Service Manual if necessary.
 - (3) Plug in the equipment after the maintenance has been finished. Then turn ON the power and make some copies to confirm that the equipment is working properly.

7.4 PM Support Mode

7.4.1 General Description

This equipment has a PM support mode which enables you to confirm the use status of each part (the number of output pages or developed pages, and drive counts) requiring periodic replacement and also the replacement record, as well as resetting counter values efficiently. This record can be printed out in the list print mode.

7.4.2 Operational flow

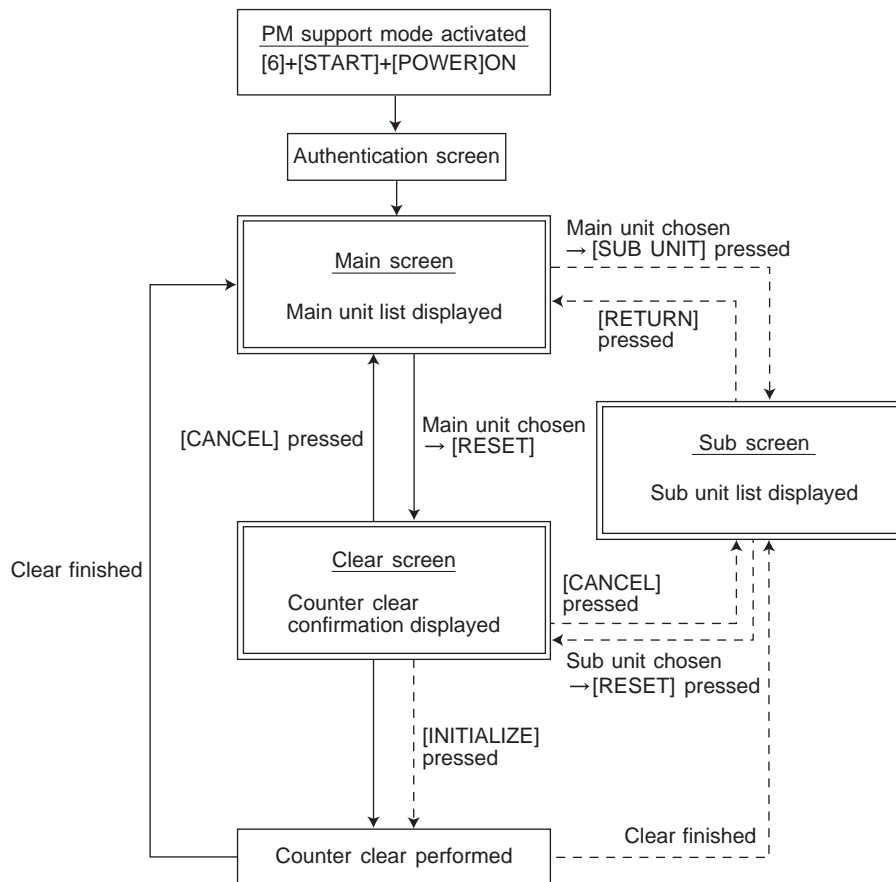


Fig. 7-2

- * When the authentication screen appears, press [OK]. (Enter the password, if one has been set.)
- * To finish the PM support mode, shut down the equipment by pressing and holding [ON/OFF] on the main screen for a few seconds.
- * The screen goes back to the main screen when the counter clear is performed or the [CANCEL] button is pressed after moving from the main screen, while it goes back to the sub screen after moving from the sub screen.

7.4.3 Operational screen

The description of the display (including the function of each button) on the LCD screen is shown below.

1. Main screen

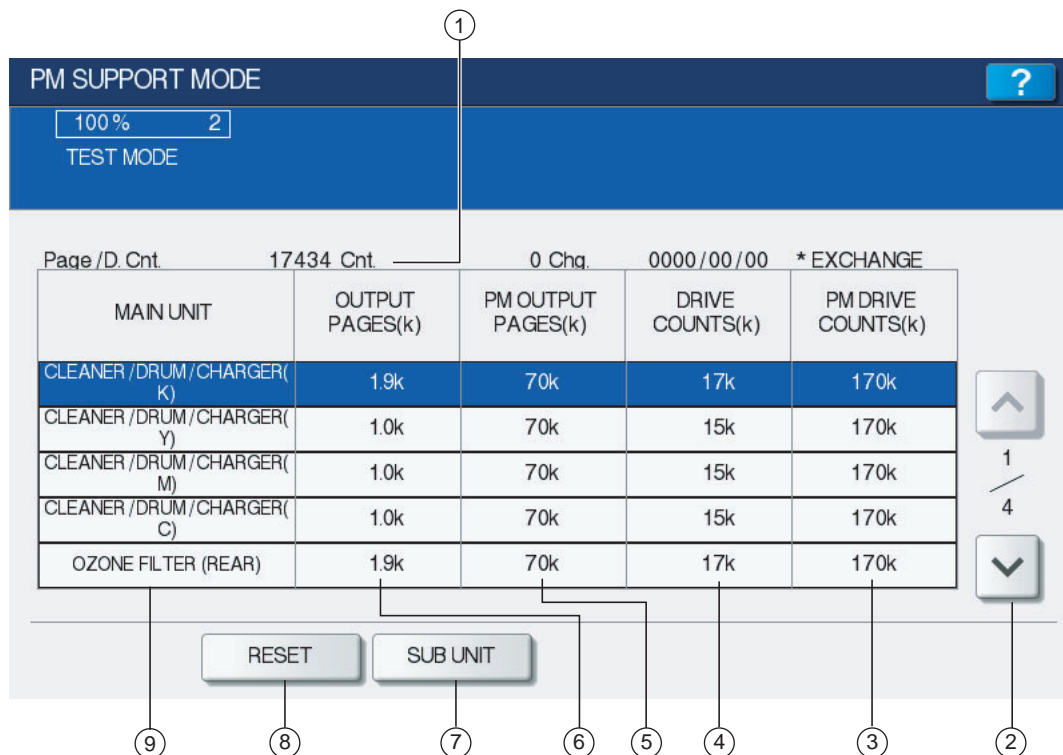


Fig. 7-3

- ① Displaying of the number of print / develop pages (Page/D. cnt), drive counts (Cnt.) and previous replacement date (Chg.) for a chosen unit
When the replacement date for the sub unit is different, press the [SUB UNIT] button to move to the sub screen and see each information, otherwise information is not displayed
- ② Moving to the next/previous page
- ③ Displaying of the standard number of drive counts to replace the unit parts
- ④ Displaying of the present drive counts
“*” is displayed next to the present number when the number of drive counts has exceeded its PM standard number.
- ⑤ Displaying of the present number of print / develop pages
When there are differences among the sub units (parts), “_” is displayed and “CHECK SUBUNIT” is displayed at the top
“*” is displayed next to the present number when the number of print / develop pages has exceeded its PM standard number.
- ⑥ Displaying of the standard number of print / develop pages to replace the unit parts
- ⑦ Moving to the sub screen of the selected unit
- ⑧ Moving to the clear screen to clear the selected unit counters ④ and ⑥, including all sub unit (parts) counters belonging to that unit When the unit is not selected, all counters are cleared.
- ⑨ Displaying of the main unit name

Notes:

- “—” is always displayed at the drive counts section for the reversing automatic document feeder (RADF) and feed unit.
- “—” is displayed at the numeric section for the paper source which is not installed since the paper source is different depending on the structure of options.

2. Sub screen

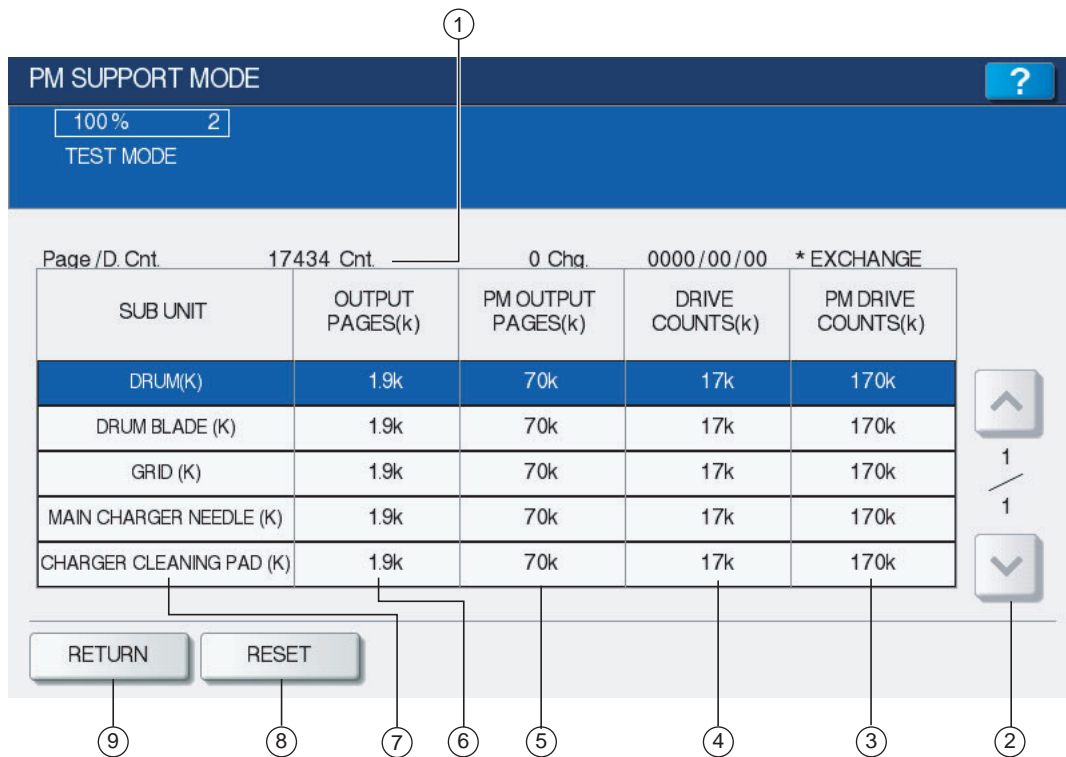


Fig. 7-4

- ① Displaying of the number of print / develop pages and drive counts and previous replacement date for a chosen sub unit
- ② Moving to the next/previous page
- ③ Displaying of the standard number of drive counts to replace the sub unit (parts)
- ④ Displaying of the present drive counts
“*” is displayed next to the present number when the number of drive counts has exceeded its PM standard number.
- ⑤ Displaying of the standard number of print / develop pages to replace the sub unit (parts)
- ⑥ Displaying of the present number of print / develop pages
“*” is displayed next to the present number when the number of print / develop pages has exceeded its PM standard number.
- ⑦ Displaying of the sub unit (parts) name
- ⑧ Moving to the clear screen to clear the selected unit (parts) counters
- ⑨ Back to the main screen

3. Clear screen

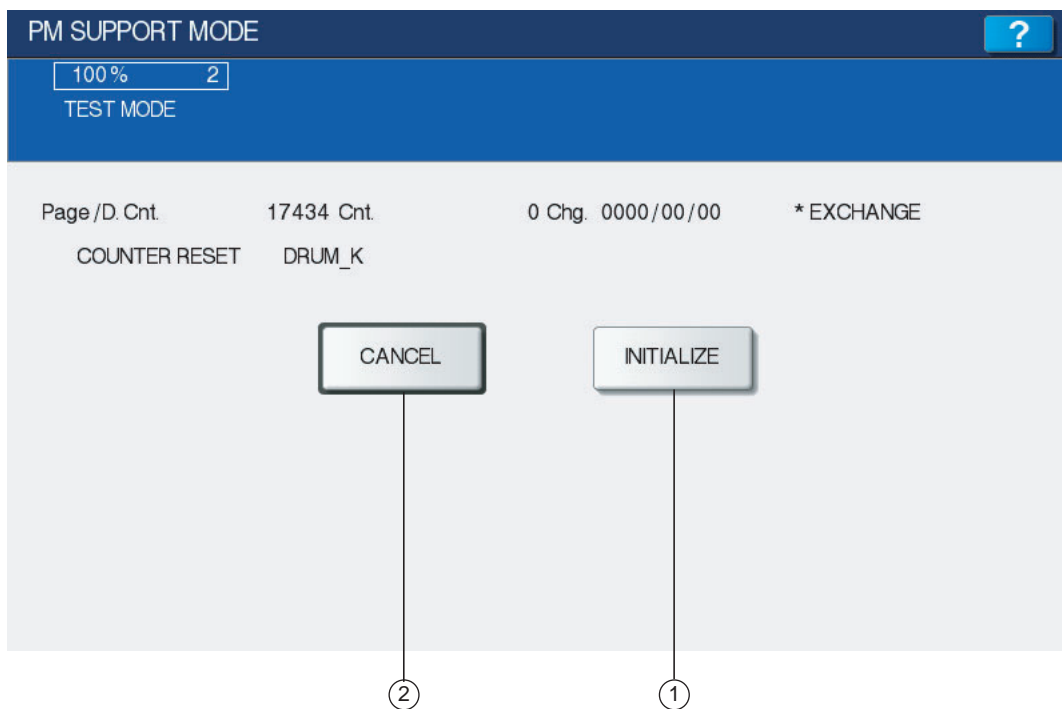


Fig. 7-5

- ① When the [INITIALIZE] button is pressed, "Present number of print / develop pages" and Present driving counts" are cleared and "Previous replacement date" is updated.
- ② When the [CANCEL] button is pressed, the counter is not cleared and the display returns to the main or sub screen.

7.4.4 Access tree

The relation between the main unit and the sub unit is shown below.

Notes:

Some parts in this manual are described with different names on the LCD screen. In this case, the name in this manual is indicated in square brackets [].

Main screen	Sub-screen
CLEANER/DRUM/CHARGER (K) [Process unit (K)]	DRUM (K) DRUM BLADE (K) [Drum cleaning blade] GRID (K) [Main charger grid] MAIN CHARGER NEEDLE (K) [Needle electrode] CHARGER CLEANING PAD (K) [Main charger cleaner]
CLEANER/DRUM/CHARGER (Y) [Process unit (Y)]	DRUM (Y) DRUM BLADE (Y) [Drum cleaning blade] GRID (Y) [Main charger grid] MAIN CHARGER NEEDLE (Y) [Needle electrode] CHARGER CLEANING PAD (Y) [Main charger cleaner]
CLEANER/DRUM/CHARGER (M) [Process unit (M)]	DRUM (M) DRUM BLADE (M) [Drum cleaning blade] GRID (M) [Main charger grid] MAIN CHARGER NEEDLE (M) [Needle electrode] CHARGER CLEANING PAD (M) [Main charger cleaner]
CLEANER/DRUM/CHARGER (C) [Process unit (C)]	DRUM (C) DRUM BLADE (C) [Drum cleaning blade] GRID (C) [Main charger grid] MAIN CHARGER NEEDLE (C) [Needle electrode] CHARGER CLEANING PAD (C) [Main charger cleaner]
OZONE FILTER (REAR) [Ozone filter-1]	-----
DEVELOPMENT UNIT	BLACK DEVELOPER [Developer material K] YELLOW DEVELOPER [Developer material Y] MAGENTA DEVELOPER [Developer material M] CYAN DEVELOPER [Developer material C] DEVELOPER FILTER (K) DEVELOPER FILTER (Y) DEVELOPER FILTER (M) DEVELOPER FILTER (C)
TBU CLEANING PAD [Transfer belt cleaning film]	CLEANING PAD (FACING ROLLER) [2nd transfer facing roller cleaning film]
TRANSFER BELT CLEANER [Transfer belt cleaning unit]	BELT BLADE [Transfer belt cleaning blade]
2nd TRANSFER	2nd TRANSFER ROLLER
FUSER	FUSER BELT PRESS ROLLER FUSER ROLLER PRESS ROLLER FINGER [Separation finger] FUSER BELT GUIDE
1st CST. [1st drawer]	PICK UP ROLLER (1st CST.) FEED ROLLER SEP ROLLER (1st CST.) [Separation roller]
2nd CST. [2nd drawer]	PICK UP ROLLER (2nd CST.) FEED ROLLER (2nd CST.) SEP ROLLER (2nd CST.) [Separation roller]

Main screen	Sub-screen
SFB [Bypass unit]	PICK UP ROLLER (SFB) FEED ROLLER (SFB) SEP ROLLER (SFB) [Separation roller]
RADF	PICK UP ROLLER (RADF) FEED ROLLER (RADF) SEP ROLLER (RADF) [Separation roller]
LCF	PICK UP ROLLER (LCF) FEED ROLLER (LCF) SEP ROLLER (LCF) [Separation roller]
3rd CST. [PFP upper drawer]	PICK UP ROLLER (3rd CST.) FEED ROLLER (3rd CST.) SEP ROLLER (3rd CST.) [Separation roller]
4th CST. [PFP lower drawer]	PICK UP ROLLER (4th CST.) FEED ROLLER (4th CST.) SEP ROLLER (4th CST.) [Separation roller]

Notes:

When the counter value of any of the pickup roller, feed roller and separation roller in each unit is reset, the value of the feeding retry counter is also reset simultaneously. When the [RESET] button is pressed after selecting the feed unit in the Main Screen, the value of the feeding retry counter is also reset simultaneously.

The feeding retry counter:

- 1st drawer Reset the feeding retry counter (08-6230)
- 2nd drawer Reset the feeding retry counter (08-6231)
- PFP upper drawer Reset the feeding retry counter (08-6232)
- PFP lower drawer Reset the feeding retry counter (08-6233)
- Bypass unit Reset the feeding retry counter (08-6234)
- LCF Reset the feeding retry counter (08-6235)

7.5 Work flow of parts replacement

The life span of the parts changes depending on their general use, such as the ratio of the color/black printing or the adjustment for keeping the printing quality. Therefore, it is necessary to consider not only the number of printed/developed pages but also the drive counts when deciding the timing for parts replacement. Even if the number of print / develop pages has reached the level of replacement, for instance, the part may still be usable with its drive counts not reaching the specified drive counts. On the other hand, the part may need replacement even if the number of print / develop pages has not reached the level of replacement with its driving time exceeding the specified drive counts. The life span of some parts such as feed roller is heavily dependent on the number of output pages rather than the drive counts.

The following work flow diagram shows how to judge the timing of replacement with the number of print / develop pages.

Example 1:

When the number of print / develop pages has reached the specified level

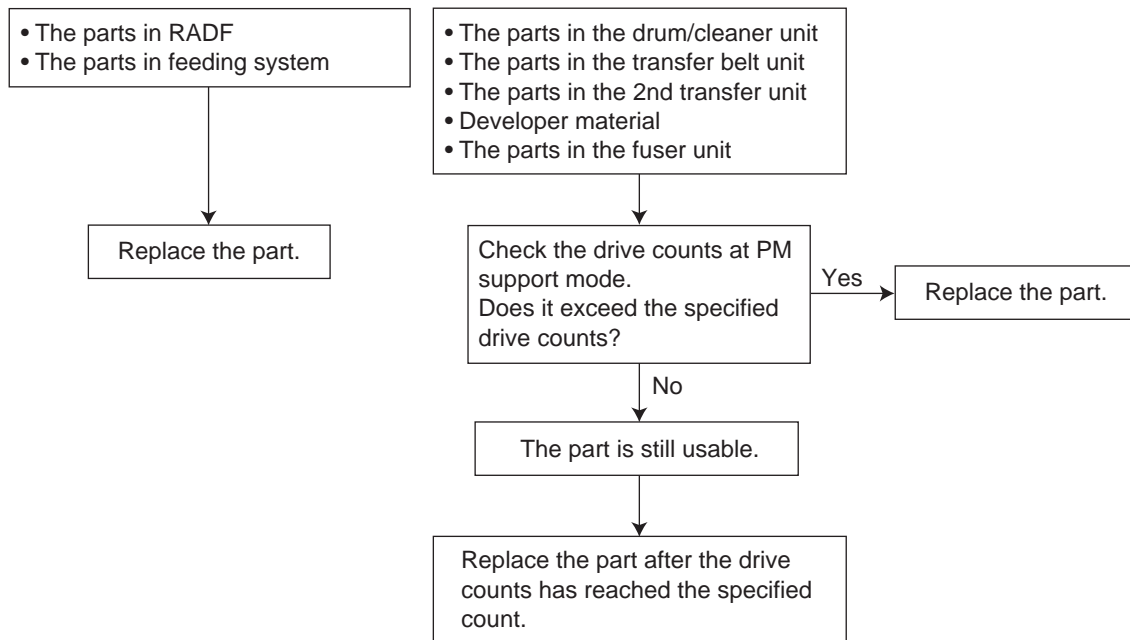


Fig. 7-6

Example 2:

When the image failure occurred before the number of print / develop pages has reached the specified level

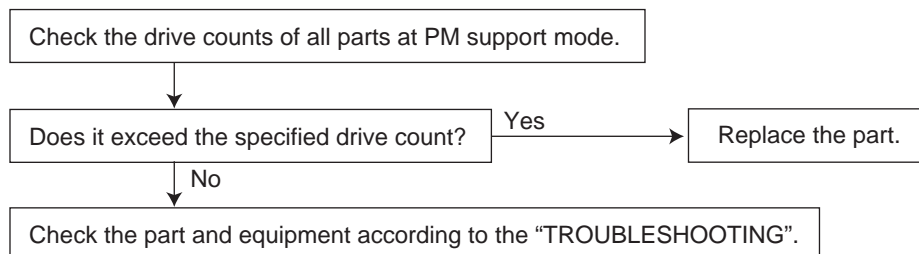


Fig. 7-7

7.6 Preventive Maintenance Checklist

Symbols/value used in the checklist

Cleaning	Lubrication/Coating	Replacement	Operation check
A: Clean with alcohol B: Clean with soft pad, cloth or vacuum cleaner	L: Launa 40 SI: Silicon oil W1: White grease (Molykote EM-30L) W2: White grease (Molykote HP-300) AV: Alvania No.2 FL: Floil (GE-334C)	Value: Replacement cycle R: Replace if deformed or damaged	O: After cleaning or replacement, confirm there is no problem.

[Preventive Maintenance Checklist]

Notes:

- Perform cleaning and lubricating in the following timing. Lubricate the replacement parts according to the replacement cycle.

Model name	Black	Full color
e-STUDIO2040C	every 44,000 sheets	every 44,000 sheets
e-STUDIO2540C	every 55,000 sheets	every 55,000 sheets
e-STUDIO3040C	every 66,000 sheets	every 66,000 sheets
e-STUDIO3540C	every 77,000 sheets	every 77,000 sheets
e-STUDIO4540C	every 77,000 sheets	every 77,000 sheets

- The value in the "Replacement" field of the table below indicates the replacement number of output pages in either the black or the full color mode. If they differ according to the model, they are indicated in the order of the e-STUDIO2040C, e-STUDIO2540C, e-STUDIO3040C, e-STUDIO3540C and e-STUDIO4540C.
- The replacement cycle of the parts in the feeding section equals to the number of sheets fed from each paper source.
- Be careful not to put oil on the rollers, belts and belt pulleys when lubricating.
- Parts list <P-I> represents the page item in "e-STUDIO2040C/2540C/3040C/3540C/4540C Service Parts List".

7.6.1 Scanner

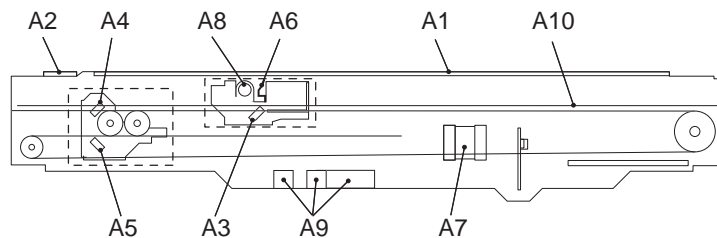


Fig. 7-8

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
A1	Original glass	B or A				28-1
A2	ADF original glass	B				28-2
A3	Mirror-1	B				-
A4	Mirror-2	B				-
A5	Mirror-3	B				-
A6	Reflector	B				-
A7	Lens	B				12-10
A8	Exposure lamp		R	R	O	29-6
A9	Automatic original detection sensor	B			O	12-12
A1 0	Slide sheet (front and rear)	B or A	R	R		-

* A1: Original glass, A2: ADF original glass
Clean both sides of the original glass and ADF original. Make sure that there is no dust on the mirrors-1, -2, -3 and lens after cleaning. Then install the original glass and ADF original glass.

Notes:

Make sure that there is no fingerprints or oil staining on part of the original glass on where the original scale is mounted since the shading correction plate is located below the scale to be scanned.

When cleaning the glass with alcohol, do so only for the stained areas because fog may appear.

7.6.2 Laser unit

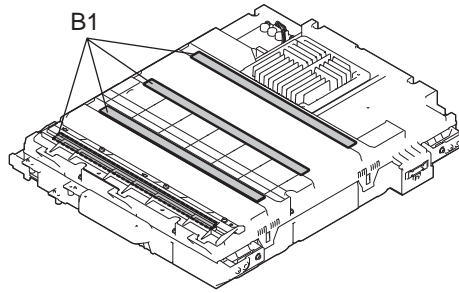


Fig. 7-9

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
B1	LSU slit glass	B or A					-

7.6.3 Feed unit

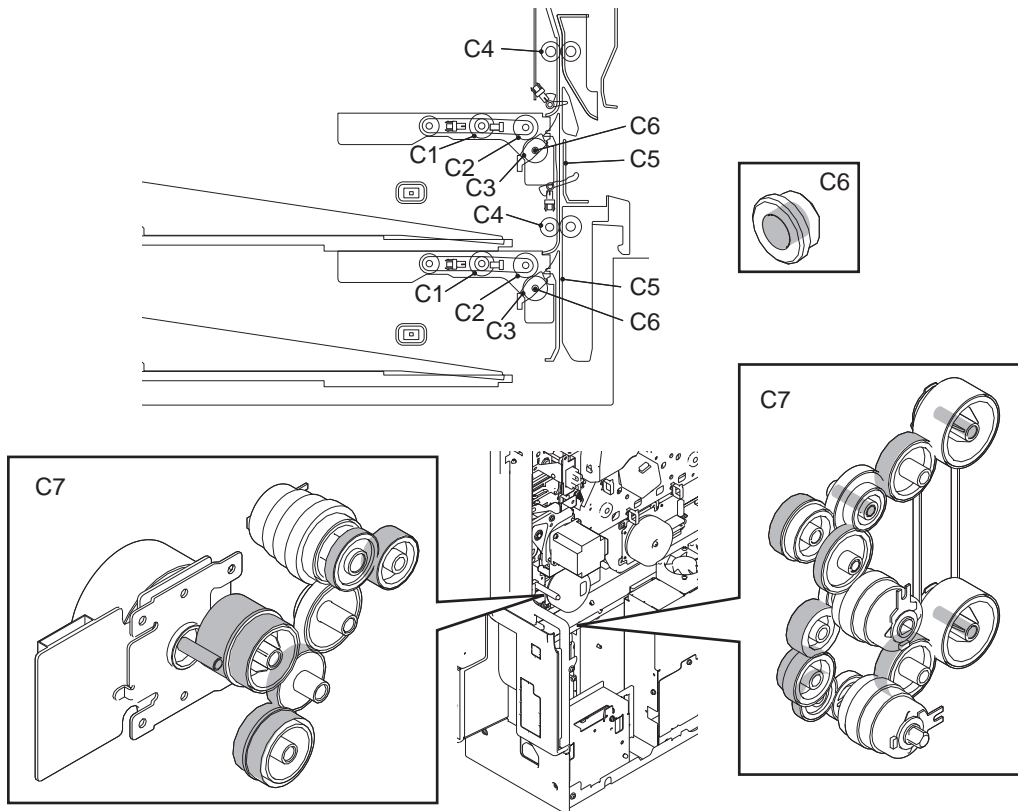


Fig. 7-10

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
C1	Pickup roller		80	-		20-20
C2	Feed roller		80	-		20-24
C3	Separation roller	AV, W2	80	-		20-5
C4	Transport roller	A	R	R		-
C5	Paper guide	B				-
C6	GCB bushing bearing		L			-
C7	Drive gear (tooth face and shaft)		W1			-
C8	One side of the plastic bushing to which the shaft is inserted		W1			-
C9	Registration roller (metal)	A	R	R		25-19
C10	Middle guide	A				25-2

* C3: Separation roller
Apply an even coat of grease (Alvania No.2) to all round the inside of the spring.

When replacing the separation roller, apply 1 rice-sized grain of white grease (Molykote HP-300) on the places of the holder shown in the figure (4 places).

Notes:

Make sure that the grease does not adhere to the roller surface. Wipe it off with alcohol if adhered.

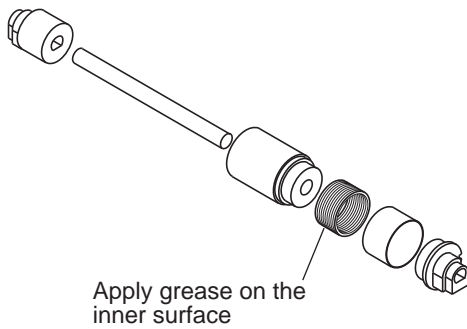


Fig. 7-11

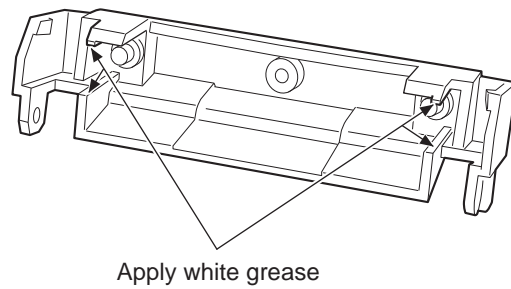


Fig. 7-12

* C7: Drive gear

Apply a blob of white grease (Molykote EM-30L) onto the teeth (3 rice-sized grains) and onto the inner shaft (1 rice-sized grain) of the drive gears.

Notes:

Make sure that oil is not running over or scattered around as the gear is rotated coming into the clutch after applying molykote to the gear which is located near the clutch. The quantity of molykote should be smaller than that to be applied to the other parts.

* C10: Middle guide

Open the 2nd transfer unit, and then open the middle guide by holding its knob to clean the entire surface of the bracket with alcohol.

Notes:

Do not hold the middle guide itself when opening and closing it.

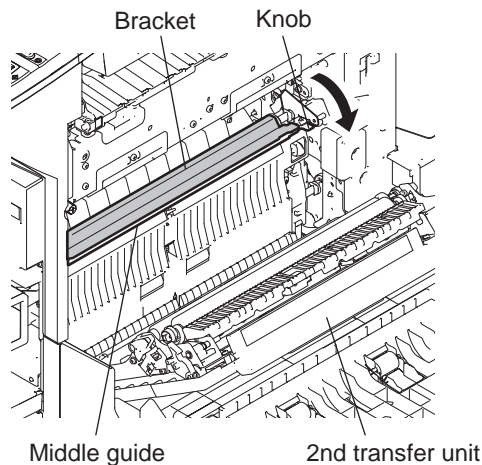


Fig. 7-13

7.6.4 Automatic duplexing unit

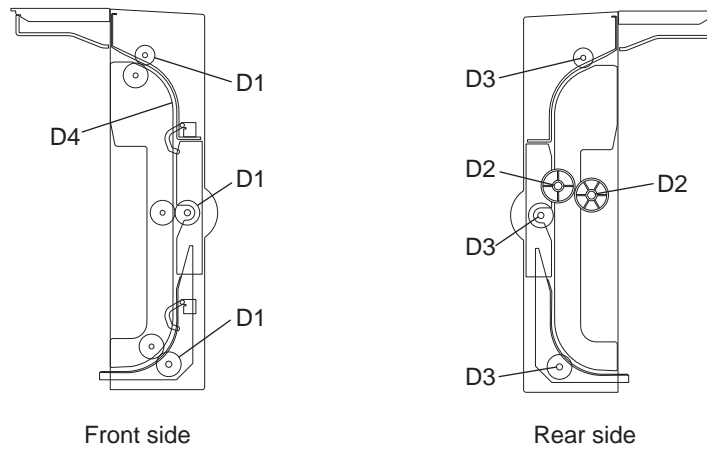


Fig. 7-14

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
D1	Transport roller (upper, middle and lower)	A		R	R		48-3 48-38 48-3
D2	One side of the GCB bushing to which the shaft is inserted		L				48-8
D3	One side of the plastic bushing to which the shaft is inserted		W1				48-10
D4	Paper guide	B					48-4

7.6.5 Bypass feed unit

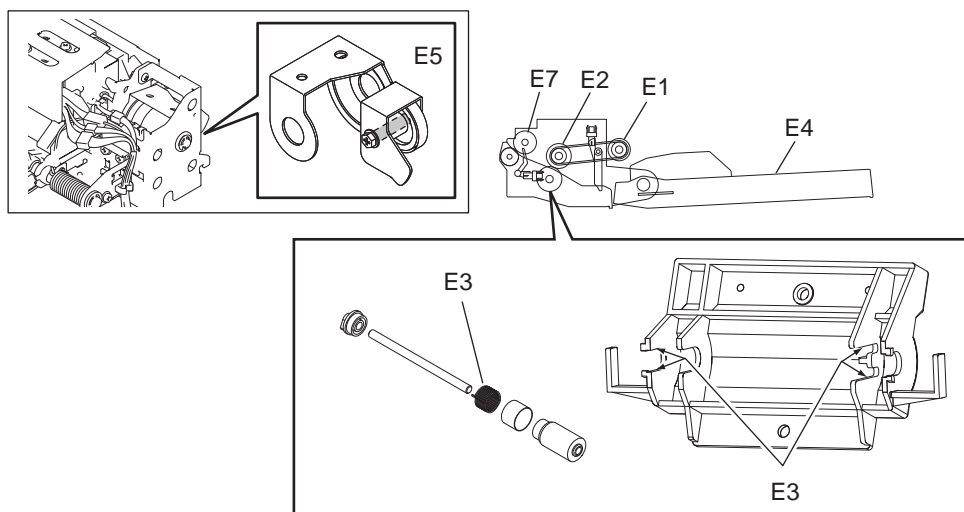


Fig. 7-15

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
E1	Pickup roller		80	-		24-26
E2	Feed roller		80	-		24-37
E3	Separation roller	AV, W2	80	-		23-1
E4	Bypass tray	B				
E5	Drive gear (shaft)	W1				
E6	GCB bushing bearing	L				
E7	Transport roller	A	R	R		24-40

* E3: Separation roller

Apply an even coat of grease (Alvania No.2) to all round the inside of the spring.

When replacing the separation roller, apply 1 rice-sized grain of white grease (Molykote HP-300) on the places of the holder shown in the figure (4 places).

Make sure that the grease does not adhere to the roller surface. Wipe it off with alcohol if adhered.

7.6.6 Main charger

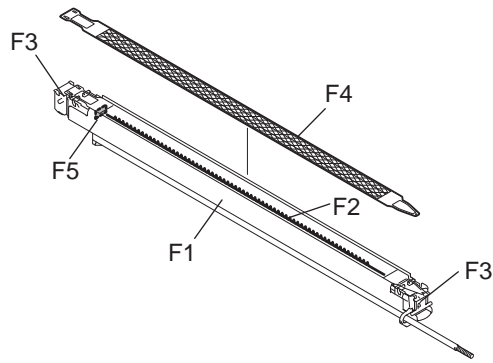


Fig. 7-16

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
F1	Main charger case	B					40-1
F2	Needle electrode			44/55/66/ 77/77	187	O	40-6
F3	Contact point of terminals	B					40-2 40-3
F4	Main charger grid			44/55/66/ 77/77	187		40-14
F5	Main charger cleaner			44/55/66/ 77/77	187		40-15

* F1: Main charger case

Clean the main charger case with a cloth soaked in water and squeezed tightly, and then wipe them with a dry cloth.

7.6.7 Drum/Cleaner unit, Cleaner related section

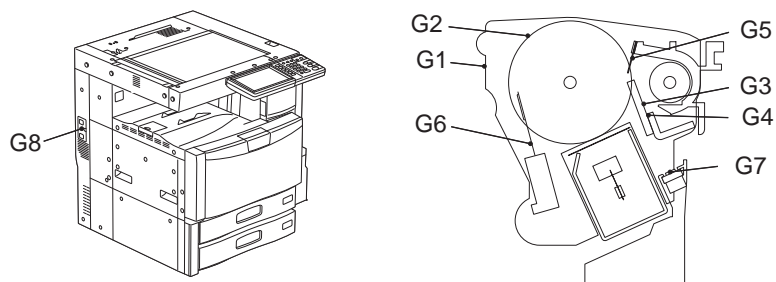


Fig. 7-17

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
G1	Whole cleaner unit	B					
G2	Drum			44/55/66/ 77/77	187		
G3	Drum cleaning blade			44/55/66/ 77/77	187		39-16
G4	Felt	B		R	R		39-19 39-20
G5	Recovery blade	B					39-21
G6	Drum thermistor	B					38-33
G7	Discharge LED	B					36-19
G8	Ozone filter-1			44/55/66/ 77/77	187		4-21

* G2: Drum

- Handling precautions
If fingerprints or oil adhere to the surface of the drum, its properties may degrade, affecting the quality of the copy image. So, wear gloves to avoid touching the drum surface with your bare hands. Be sure to handle the drum carefully when installing and removing it so as not to damage its surface.
- Do not use "patting powder" (lubricant)
Since "patting powder" may affect the initial image if it adheres to the OPC surface, do not apply it. The friction between the drum and cleaning blade is sufficiently small without it and no problem would occur even if it is not applied.

- Clearing the drum counter
When the drum has been replaced with a new one, the drum counter for the new drum (K, Y, M, C) must be cleared to 0 (zero). This clearing can be performed in PM support mode.
 - Drum counter
 - Drum (K): 08-6250-0, 3, 6, 7
 - Drum (Y): 08-6252-0, 3, 6, 7
 - Drum (M): 08-6254-0, 3, 6, 7
 - Drum (C): 08-6256-0, 3, 6, 7
- Storage location of photoconductive drums
The drum should be stored in a dark place where the ambient temperature is between 10°C to 35°C (no condensation). Be sure to avoid places where drums may be subjected to high humidity, chemicals and/or their fumes.
Do not place the drum in a location where it is exposed to direct sunlight or high intensity light such as near a window. Otherwise the drum will fatigue, and will not produce sufficient image density immediately after being installed in the equipment.
- Cleaning the drum
At periodic maintenance calls, wipe the entire surface of the drum clean using the designated cleaning cotton. Note that there is no need to clean the surface of the new drum unless there is a problem. Use sufficiently thick cleaning cotton (dry soft pad) so as not to scratch the drum surface inadvertently with your fingertips or nails. Also, remove your rings and wristwatch before starting cleaning work to prevent accidental damage to the drum.
Do not use alcohol, selenium refresher and other organic solvents or silicon oil as they will have an adverse effect on the drum.
- Scratches on drum surface
If the surface is scratched in such a way that the aluminum substrate is exposed, no copy image will be produced on this area. In addition, the cleaning blade will be damaged so replacement with a new drum will be necessary.
- Collecting used drums
Regarding the recovery and disposal of used drums, we recommend following the relevant local regulations or rules.

* G3: Drum cleaning blade

- Handling precautions
Pay attention to the following points as the cleaning blade life is determined by the condition of its edge. Since the edge of the blade is vulnerable and can be easily damaged by factors such as the adherence of paper dust.
 - Do not allow hard objects to hit or rub against blade edge.
 - Do not rub the edge with a cloth or soft pad.
 - Do not leave oil (or fingerprints, etc.) on the edge.
 - Do not apply solvents such as paint thinner to the blade.
 - Do not allow paper fibers or dirt to contact the blade edge.
 - Do not place the blade near a heat source.
- Cleaning procedure
Clean the blade edge with a cloth moistened with water and squeezed lightly.
Replace the cleaning blade with new ones if poor images are copied due to the damaged blade regardless of the number of output pages which have been made

* G4: Felt

When replacing the drum cleaning unit, check that there is no gap between the blade and felt on both ends. If there is, or when the felts put pressure to the cleaning blade, reattach the felts on the position shown in the figure (by slightly pushing them to the direction of the arrows).

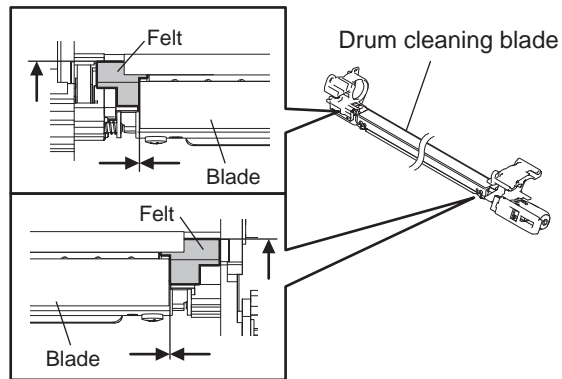


Fig. 7-18

* G5: Recovery blade

Clean the surface of the recovery blade with a soft pad or cloth, if dirt cannot be removed with a vacuum cleaner. If the edge of recovery blade is damaged, replace the blade regardless of the number of output pages.

Notes:

Never use water or alcohol for cleaning the transfer belt recovery blade.

7.6.8 Developer unit (K, Y, M, and C)

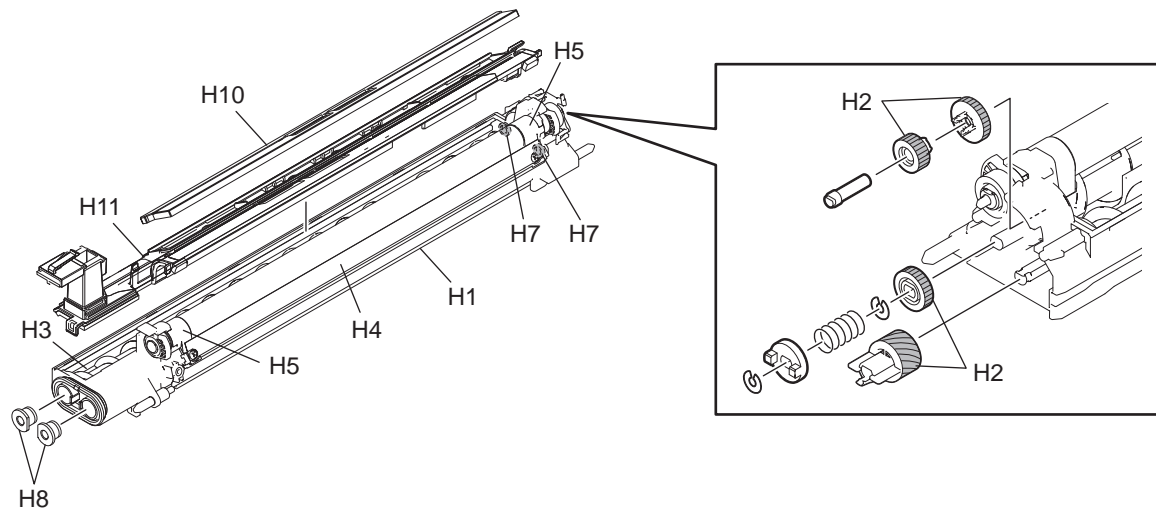


Fig. 7-19

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
H1	Whole developer unit	B					
H2	Developer unit drive section		W1				
H3	Developer material			44/55/66/ 77/77	138		103-2
H4	Front shield (unified with the doctor blade)	B		R	R		38-26
H5	Side seal (front, rear)	B		R	R		38-27 38-28
H7	Oil seal (Rear side)			R	R		38-2
H8	Oil seal (Front side)			R	R		38-4 38-13
H9	Auto-toner sensor	B					38-31
H10	Developer filter			44/55/66/ 77/77	138		38-40
H11	Developer unit upper cover	B					38-25

* H1: Developer unit, H4: Front shield (unified with the doctor blade)

1. Cleaning

Clean the doctor blade so as to prevent developer material from adhering to it when the drum is being replaced.

Space the front shield from the developer sleeve and then insert a doctor blade cleaning jig into the doctor sleeve gap. Then clean the doctor blade by running the jig for 3 times to and fro along with the edge of the blade.

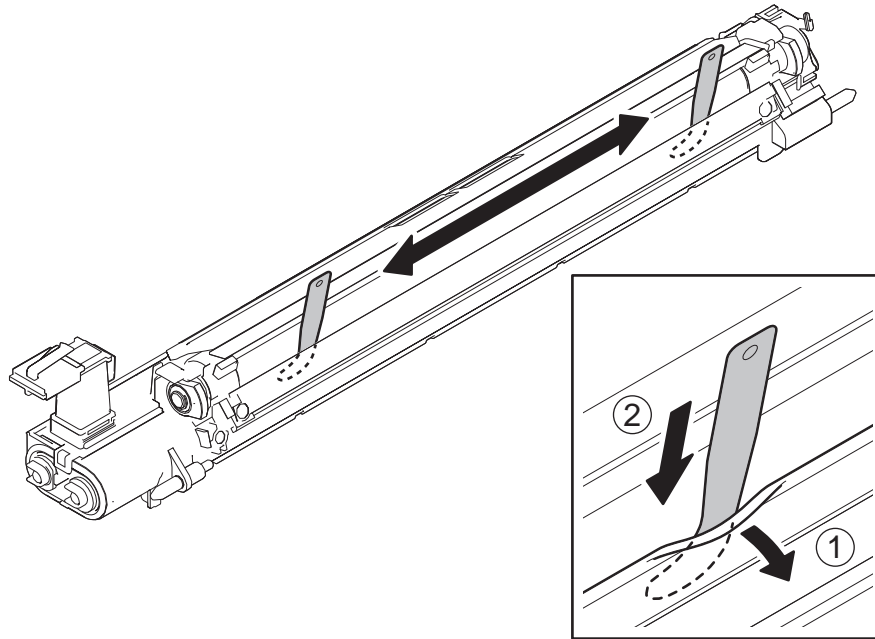


Fig. 7-20

2. Removal of foreign matter in the developer unit

(1) Take off the process unit (EPU).

(2) Space the front shield.

(3) Insert the cleaning jig all the way in the developer unit at a position approx. 30 mm away from the white streak.

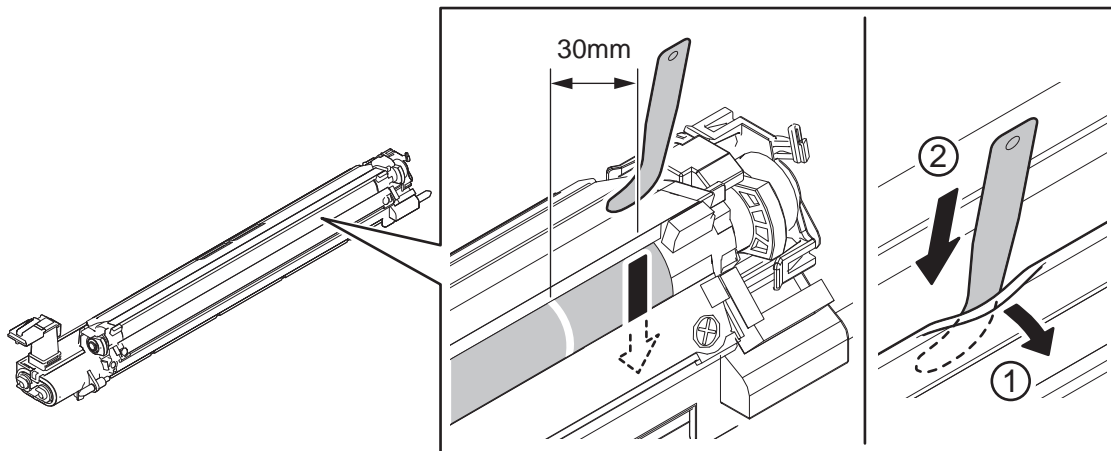


Fig. 7-21

(4) Slide the cleaning jig to where the white streak appears.

(5) Pull out the cleaning jig while manually turning the gear to rotate the developer sleeve.

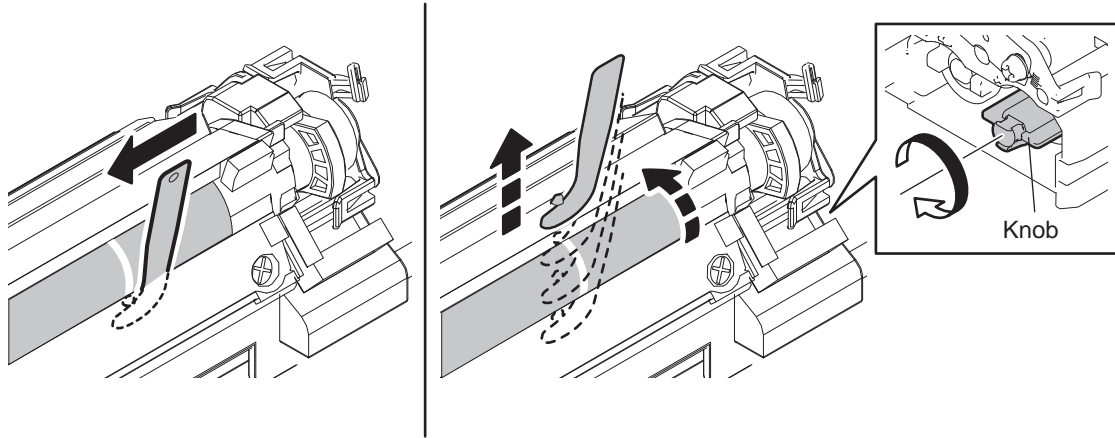


Fig. 7-22

Tip:

If foreign matter is not removed by the above procedure, take off the developer unit, discharge the developer material on to a sheet of clean paper and then remove any foreign matter found. If you cannot find any foreign matter, exchange the developer material.

3. Removal of foreign matter on the developer sleeve

(1) Apply a sheet of paper to the developer sleeve.

(2) Scrape off foreign matter and developer material on the developer sleeve using the jig.

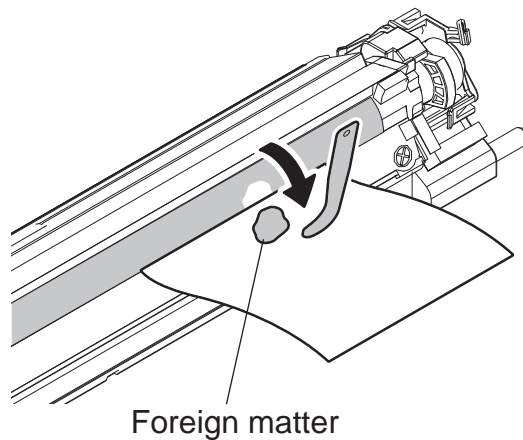


Fig. 7-23

*** H3: Developer material**

After replacing the developer material, be sure to perform the auto-toner adjustment and then image quality control initialization.

📖 P. 6-2 "6.1.2 Adjustment of the Auto-Toner Sensor"

📖 P. 6-4 "6.1.3 Performing Image Quality Control"

*** H9: Auto-toner sensor**

Clean the surface of the auto-toner sensor with a cotton swab or soft cloth with sufficient alcohol filled in.

7.6.9 Waste Toner Box

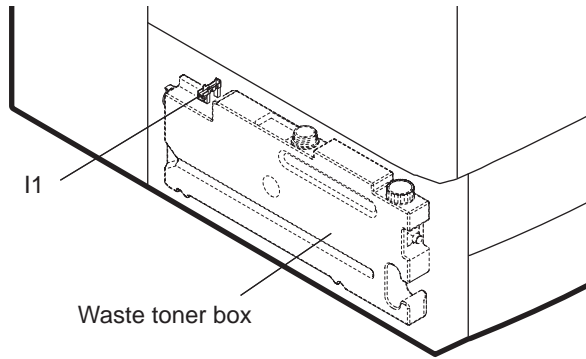


Fig. 7-24

	Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
I1	Waste toner box full detection sensor	B					4-109

7.6.10 Transfer belt unit / Transfer belt cleaning unit

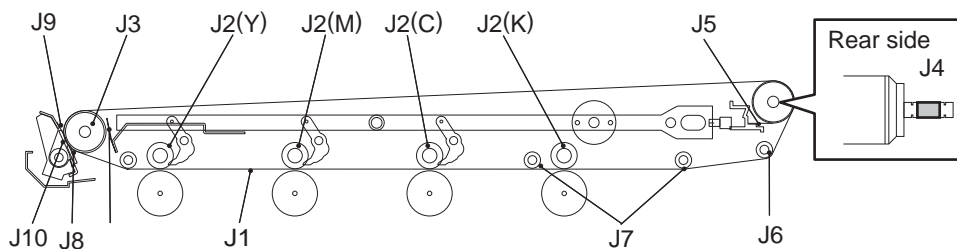


Fig. 7-25

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
J1	Transfer belt	A		R	R	33-1
J2	1st transfer roller			R	R	33-9
J3	Drive roller	A		R	R	33-5
J4	2nd transfer facing roller	A		R	R	33-10
J5	2nd transfer facing roller cleaning film			160/224/ 224/280/ 280	680	31-14
J6	Tension roller	A		R	R	33-8
J7	Idling roller	A		R	R	33-7
J8	Transfer belt cleaning blade			160/224/ 224/280/ 280	680	35-4
J9	Recovery blade	B		R	R	35-3 35-15
J10	Blade seal			160/224/ 224/280/ 280	680	35-8 35-11

* J1: Transfer belt

- Handling precautions
 - Do not touch the front and rear surfaces of the transfer belt surface with bare hands.
 - Prevent oil or other foreign matter from adhering to both surfaces of the transfer belt.
 - Do not apply external pressure that might scratch the transfer belt.
 - When replacing the belt and transfer belt cleaning unit, apply patting powder sufficiently and evenly. Otherwise, it may reduce the cleaning efficiency.
 - When replacing the transfer belt, clean the drive roller, 2nd transfer facing roller, and tension roller with a solvent such as alcohol, and then attach the transfer belt.
- Cleaning procedure

Fully clean up the toner and such adhering to the roller with alcohol, and then wipe it with a dry cloth until no trace remains. Take care not to have the transfer belt surface being damaged or dented. Replace the transfer belt with a new one regardless of the number of output pages, if any crack or major scar is found.

- * J3: Drive roller, J4: 2nd transfer facing roller, J6: Tension roller, J7: Idling roller
Fully clean up the toner and such adhering to the roller with alcohol when the transfer belt cleaning blade is replaced, since an image failure may occur if there is any dirt remaining on the roller. Also, remove dust and toner scattering adhering to the inside of the transfer belt unit in order to keep rollers clean.

- * J4: 2nd transfer facing roller
Apply Floil (GE-334C) all around the shaft of the 2nd transfer facing roller, which contacts the grounding plate inside the 2nd transfer facing roller rear holder.

- * J8: Transfer belt cleaning blade
 - Handling precautions
Pay attention to the following points as the cleaning blade life is determined by the condition of its edge.
 - Do not allow hard objects to hit or rub against blade edge.
 - Do not rub the edge with a cloth or soft pad.
 - Do not leave oil (or fingerprints, etc.) on the edge.
 - Do not apply solvents such as paint thinner to the blade.
 - Do not allow paper fibers or dirt to contact the blade edge.
 - Do not place the blade near a heat source.

 - Cleaning procedure
Clean the blade edge with a cloth moistened with water and squeezed lightly.

7.6.11 Image quality control unit

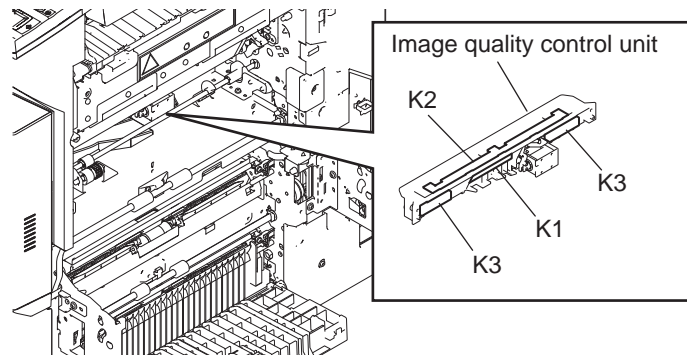


Fig. 7-26

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
K1	Image quality sensor	A		R	R		27-5
K2	Sensor shutter	B		R	R		27-2
K3	Image position aligning sensor (Front/Rear)	A					27-4

* K1: Image quality sensor, K2: Sensor shutter, K3: Image position aligning sensor
Clean the image quality sensor, image position aligning sensor (Front/Rear) and the sensor shutter when replacing the transfer belt cleaning blade and the blade seal, or the transfer belt itself.

7.6.12 2nd transfer roller unit

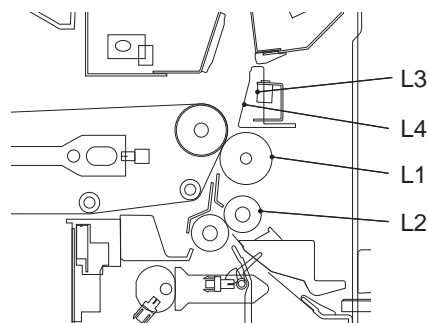


Fig. 7-27

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
L1 2nd transfer roller		FL	160/224/ 224/280/ 280	680		13-10
L2 Registration roller (rubber)	A		R	R		14-1
L3 Paper clinging detection sensor	B					13-108
L4 2nd transfer roller paper guide	A					

* L1: 2nd transfer roller

Apply FLOIL (the size of one rice grain) to the contacting point of the leaf spring of the end of the 2nd transfer roller shaft.

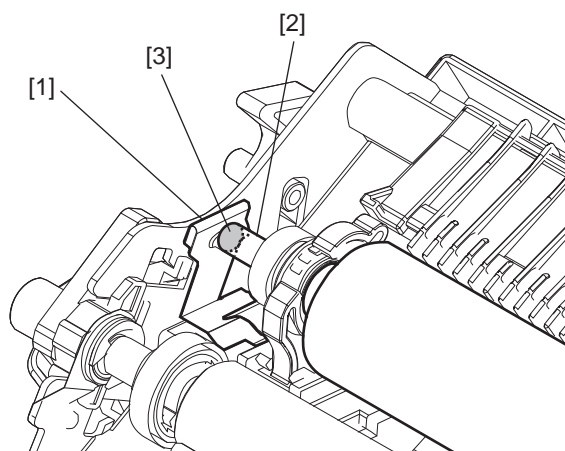


Fig. 7-28

- [1] Leaf spring
- [2] 2nd transfer roller
- [3] Areas to apply grease

* L3: Paper clinging detection sensor

Open the 2nd transfer unit and clean the paper clinging detection sensor with a cotton swab.

Notes:

Be sure to clean the entire surface of the sensor.

Paper clinging detection sensor

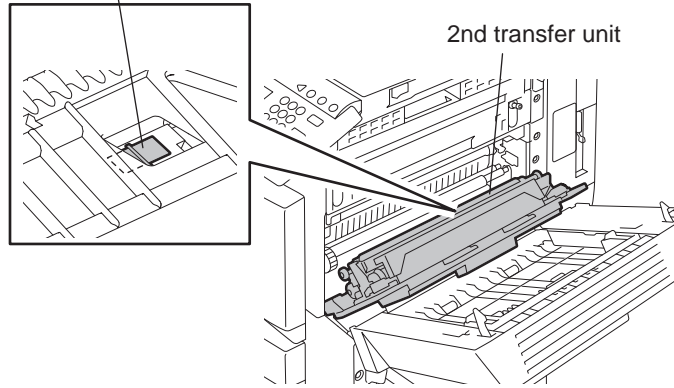


Fig. 7-29

* L4: 2nd transfer roller paper guide

If toner adheres to the ribs of the 2nd transfer roller paper guide, clean it with a soft pad, cloth or electric vacuum cleaner.

7.6.13 Fuser unit

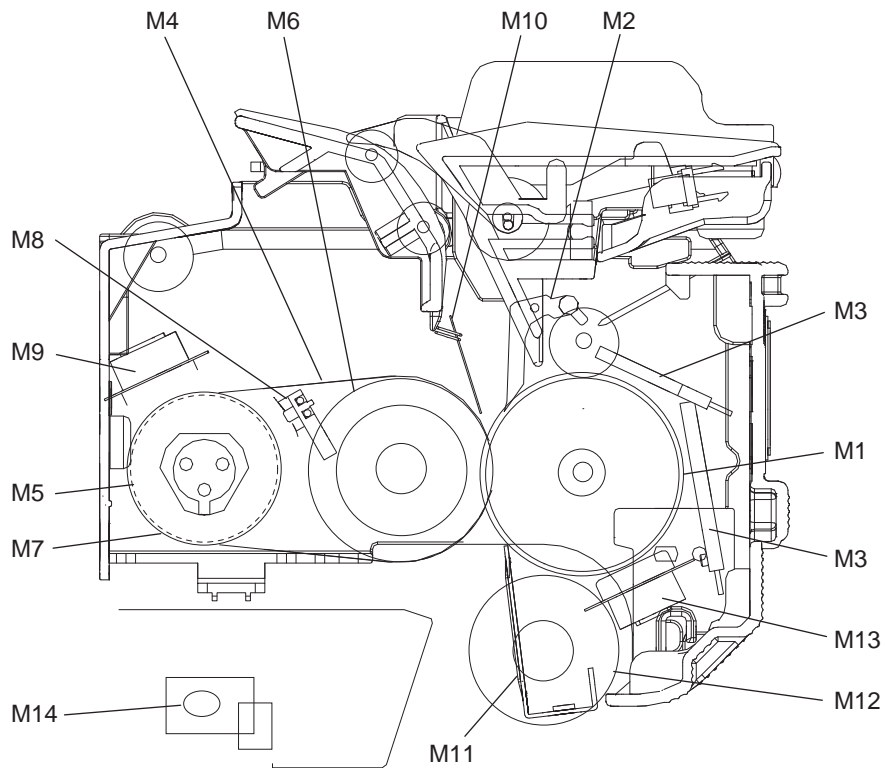


Fig. 7-30

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
M1	Pressure roller		80/112/ 112/140/ 140	340		44-1
M2	Pressure roller separation finger		80/112/ 112/140/ 140	340		44-18
M3	Pressure roller thermistor (center/rear)	A	R	R		44-14
M4	Fuser belt		80/112/ 112/140/ 140	340		43-3
M5	Heat roller		R	R		43-10
M6	Fuser roller		80/112/ 112/140/ 140	340		43-4
M7	Fuser belt guide		80/112/ 112/140/ 140	340		43-12
M8	Fuser belt front thermistor	A	R	R		43-21
M9	Fuser belt thermostat (center/rear)	A	R	R		43-19 43-20
M10	Separation plate	A				43-2

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
			(x 1,000 sheets)	(x 1,000 drive counts)		
M11	Entry guide	A				44-27 44-28
M12	Fuser unit gear		W2	R	R	44-30
M13	Pressure roller cleaning pad	A		R	R	44-13
M14	Fuser belt thermopiles (center/rear)	A		R	R	46-4

* M1: Pressure roller, M4: Fuser belt

- Handling precautions

- Pressure roller

- Do not leave any oil (fingerprints, etc.) on the pressure roller.
 - Be careful not to allow any hard object to hit or rub against the pressure roller, or it may be damaged, possibly resulting in poor cleaning.
 - When the pressure roller [2] is replaced, apply the white grease (size of a grain rice, Molykote HP-300) to 3 points of the bushing [1] on both ends of the pressure roller.

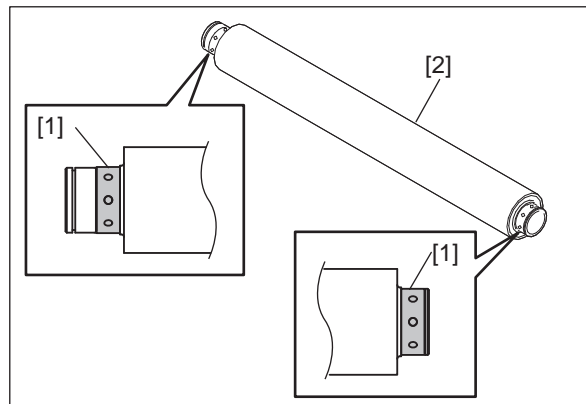


Fig. 7-31

- Fuser belt

- Do not touch the fuser belt surface with bare hands.
 - Prevent oil or other foreign matter from staining the fuser belt surface.
 - Do not allow alcohol or any other organic solvent to contact with the fuser belt.
 - Do not apply external pressure that might scratch the fuser belt.
 - Checking
 - Check for stain and damage on the fuser belt and pressure roller, and clean if necessary.
 - Check the separation plate and fingers and check for chipped tips.
 - Check the thermistors' contact and non-contact status.
 - Check the fused and fixed condition of the toner.
 - Check the gap between the inlet guide and pressure roller.
 - Check the fuser belt for proper transportation.
 - Check the pressure roller for proper rotation.
 - Cleaning procedure

When the fuser belt and pressure roller become dirty, they will cause jamming. If this happens, wipe the surface clean with a suitable cloth. For easier cleaning, clean the belt and roller while they are still warm.

Notes:

Be careful not to rub the fuser belt and pressure roller surface with your nails or hard objects because it can be easily damaged. Do not use silicone oil on the fuser belt and pressure roller.

- Checking after the assembly of the fuser belt unit

After the assembly, rotate the fuser belt for a round to confirm that the belt is neither folded nor scratched.

A folded or scratched belt may be broken when it is in use.

- * M2: Pressure roller separation finger

The paper jam may be caused if the tip of the finger is damaged or deformed. If there is any problem with it, replace the finger with a new one regardless of the number of output pages which have been made. Do not damage the tip of the finger during the cleaning. The finger may be damaged if the toner adhering to the tip of it is scraped off forcibly. Replace the finger if the toner is sticking to it heavily.

- * M3: Pressure roller thermistor

Clean the thermistor with alcohol if the toner or dirt is sticking to it when the pressure roller is replaced. Do not deform or damage the thermistor during the cleaning. Replace the thermistor with a new one if it is damaged or deformed regardless of degree.

- * M4: Fuser belt, M5: Heat roller, M6: Fuser roller

When any or all of fuser belt, heat roller and fuser roller is replaced or taken off from the fuser unit, perform adjustment for the separation plate gap.

📖 P. 6-93 "6.13.1 Adjustment of the Separation Plate Gap"

- * M8: Fuser belt front thermistor

Clean the thermistor with alcohol if the toner or dirt is sticking to it when the fuser belt is replaced. Do not deform or damage the thermistor during the cleaning. Replace the thermistor with a new one if it is damaged or deformed regardless of degree.

- * M12: Fuser unit gear

Wipe off any old grease, and then apply 3 to 4 rice-sized grains of white grease (Molykote HP-300) onto the gear teeth.

Notes:

Do not apply grease to the gears in the figure.

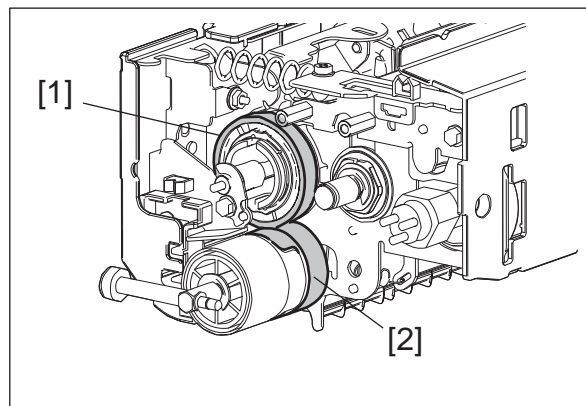


Fig. 7-32

[1] Gear (black)

[2] Gear (brown)

- * M14: Fuser belt thermopiles (center/rear)

Remove the thermopiles. Use a cloth with a small amount of alcohol to clean them.

Be sure not to touch the lens of the thermopiles.

Clean the equipment according to the following timing.

Model name	Black	Full color
e-STUDIO2040C	every 80,000 sheets	every 80,000 sheets
e-STUDIO2540C	every 100,000 sheets	every 100,000 sheets
e-STUDIO3040C	every 120,000 sheets	every 120,000 sheets
e-STUDIO3540C	every 140,000 sheets	every 112,000 sheets
e-STUDIO4540C	every 140,000 sheets	every 140,000 sheets

7.6.14 Exit unit

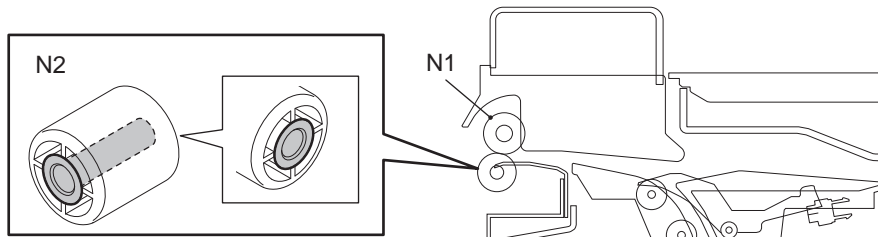


Fig. 7-33

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
N1	Upper exit roller	A					46-21
N2	Lower exit roller		W2				46-30

* N2: Lower exit roller

Wipe off any old grease, and then apply 0.5 to 1 rice-sized grains of white grease (Molykote HP-300) onto the inside of the roller and both end faces of the shaft hole.

7.6.15 RADF (MR-3021/3022)

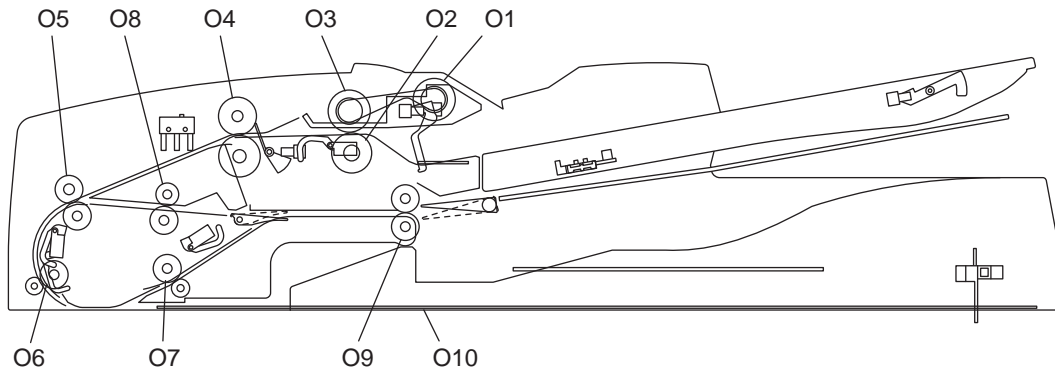


Fig. 7-34

Items to check	Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>	
			(x 1,000 sheets)	(x 1,000 drive counts)			
O1	Pickup roller	A		120	-		5-1
O2	Separation roller	A		120	-		4-10
O3	Feed roller	A		120	-		5-1
O4	Registration roller	A					4-30
O5	Intermediate transfer roller	A					3-13
O6	Front read roller	A					3-14
O7	Rear read roller	A					3-1
O8	Reverse registration roller	A					3-10
O9	Exit/reverse roller	A					4-25
O10	Platen sheet	B or A					

7.6.16 PFP (KD-1027)

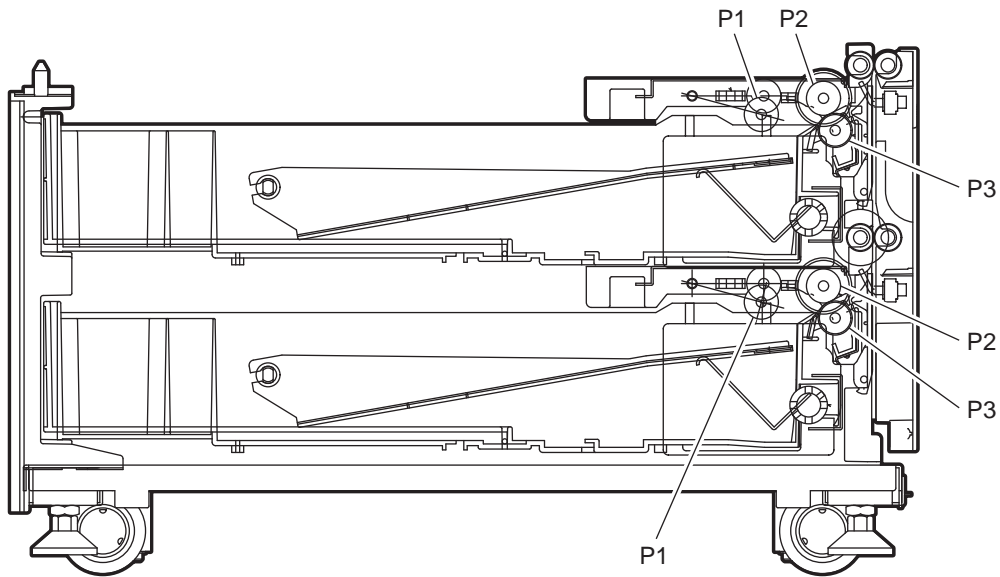


Fig. 7-35

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
P1	Pickup roller (upper/lower)	A		80	-		5-20
P2	Feed roller (upper/lower)	A		80	-		5-24
P3	Separation roller (upper/lower)	A	AV, W2	80	-		5-5
P4	Drive gear (tooth face)		W1				

7.6.17 LCF (KD-1028)

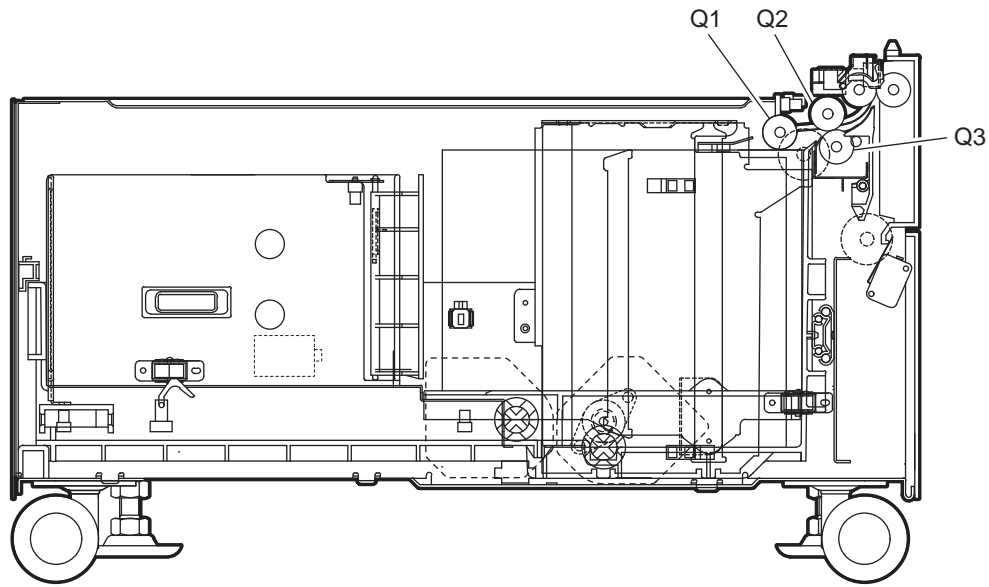


Fig. 7-36

Items to check		Cleaning	Lubrication/ Coating	Replacement		Operation check	Parts list <P-I>
				(x 1,000 sheets)	(x 1,000 drive counts)		
Q1	Pickup roller	A		160	-		4-30
Q2	Feed roller	A		160	-		4-28
Q3	Separation roller	A		160	-		5-12
Q4	Drive gear (tooth face)		W1				

7.7 Storage of Supplies and Replacement Parts

Precautions for storing supplies and replacement parts are shown below.

1. Toner/Developer
Toner and developer should be stored in a place where the ambient temperature is between 10°C to 35°C (no condensation), and should also be protected against direct sunlight during transportation.
2. Photoconductive drum
Like the toner and developer, photoconductive drum should be stored in a dark place where the ambient temperature is between 10°C to 35°C (no condensation). Be sure to avoid places where drums may be subjected to high humidity, chemicals and/or their fumes.
3. Drum cleaning blade / Transfer belt cleaning blade
This item should be stored in a flat place where the ambient temperature is between 10°C to 35°C, and should also be protected against high humidity, chemicals and/or their fumes.
4. Transfer belt / Transfer roller / Fuser belt / Pressure roller
Avoid places where the rollers may be subjected to high humidity, chemicals and/or their fumes.
5. Paper
Avoid storing copy paper in places where it may be subjected to high humidity.
After a package is opened, be sure to place and store it in a storage bag.

7.8 PM KIT

A PM kit is a package for each unit of replacement parts requiring PM.

KIT name	Component	Qty.	P-I*1
DEV-KIT-FC25K*2	Drum cleaning blade	1	39-16
	Main charger grid	1	40-14
	Needle electrode	1	40-6
	Main charger cleaner	2	40-15
	Developer material (K)	1	103-2A
	Developer unit filter	1	38-40
	Ozone filter 1	1	4-21
	Slit glass cleaner pad	1	11-14
DEV-KIT-FC25CLR*2	Drum cleaning blade	3	39-16
	Main charger grid	3	40-14
	Needle electrode	3	40-6
	Main charger cleaner	6	40-15
	Developer material (Y)	1	103-2B
	Developer material (M)	1	103-2C
	Developer material (C)	1	103-2D
	Developer filter	3	38-40
TBU-KIT-FC25*2	Transfer belt cleaning blade	1	35-4
	2nd transfer roller	1	13-10
	Blade seal (front side)	1	35-8
	Blade-seal (rear side)	1	35-11
	2nd transfer facing roller cleaning film	1	31-14
FR-KIT-FC28*2	Fuser belt	1	43-3
	Fuser roller	1	43-4
	Press roller	1	44-1
	Separation finger	5	44-18
	Fuser belt guide	2	43-12
PM-KIT-ROLLER*2	Pick up roller	1	20-20
	Feed roller	1	20-24
	Separation roller	1	20-5
ROL-KIT-1010*3	Pick up roller	1	4-30
	Feed roller	1	4-28
	Separation roller	1	5-12
DF-KIT-3018*4	Pick up roller	1	5-1
	Feed roller	1	5-1
	Separation roller	1	4-10

*1: "P-I" represents the page item in the Service Parts List".

*2: Refer to "e-STUDIO2040C/2540C/3040C/3540C/4540C Service Parts List".

*3: Refer to "KD-1024/1028 Service Parts List".

*4: Refer to "MR-3021/3022 Service Parts List".

7.9 Maintenance Part List

The parts used for the maintenance of this equipment are as follows.

No.	Item	Purpose	P-I*
1	Cleaning brush	Cleaning inside of the equipment	101-2
2	Doctor blade cleaning jig	Cleaning the doctor blade	101-3
3	Wire holder jig	Fixing the wire at the assembly of the carriage wire	101-4
4	Developer material nozzle	Pouring the developer material (attached to the developer bottle)	101-5
5	Doctor-sleeve gap jig	Measuring the gap between the developer sleeve and the doctor blade (gauge 0.60, 0.65, 0.70)	101-6
6	Belt tension jig	Adjusting the belt tension at the installation of the scan motor	101-7
7	Separation plate gap jig	Measuring the gap between the separation plate and the fuser belt	101-8
8	Drum bag	Storing the drum	101-9
9	Download jig (DLM board)	Updating the scanner/options ROM	102-1
10	ROM	Installing the DLM board	102-10
11	Download jig-2 (6 Flash ROMs)	Updating the system/engine/scanner ROM	102-2
12	ROM writer adapter (For 1881)	Writing the data of PWA-DWNLD-350-JIG2	102-4
13	ROM writer adapter (For 1931)	Writing the data of PWA-DWNLD-350-JIG2	102-5
14	Harness jig	Updating the converter PC board	21-3
15	Doctor-sleeve gap jig	Measuring the gap between the developer sleeve and the doctor blade (gauge 0.75)	101-27
16	Patting powder	For transfer belt	101-27
17	Door-switch jig	Lock of door switch	101-1
18	Color test chart	For test print (A4/LT)	101-28
19	Color test chart	For test print (A3/LD)	101-31

* "P-I" represents the page item in "e-STUDIO2040C/2540C/3040C/3540C/4540C Service Parts List".
 No.1-13,15: Refer to "e-STUDIO2040C/2540C/3040C/3540C/4540C Service Parts List"
 No.14: Refer to "MJ-1101 Service Parts List"

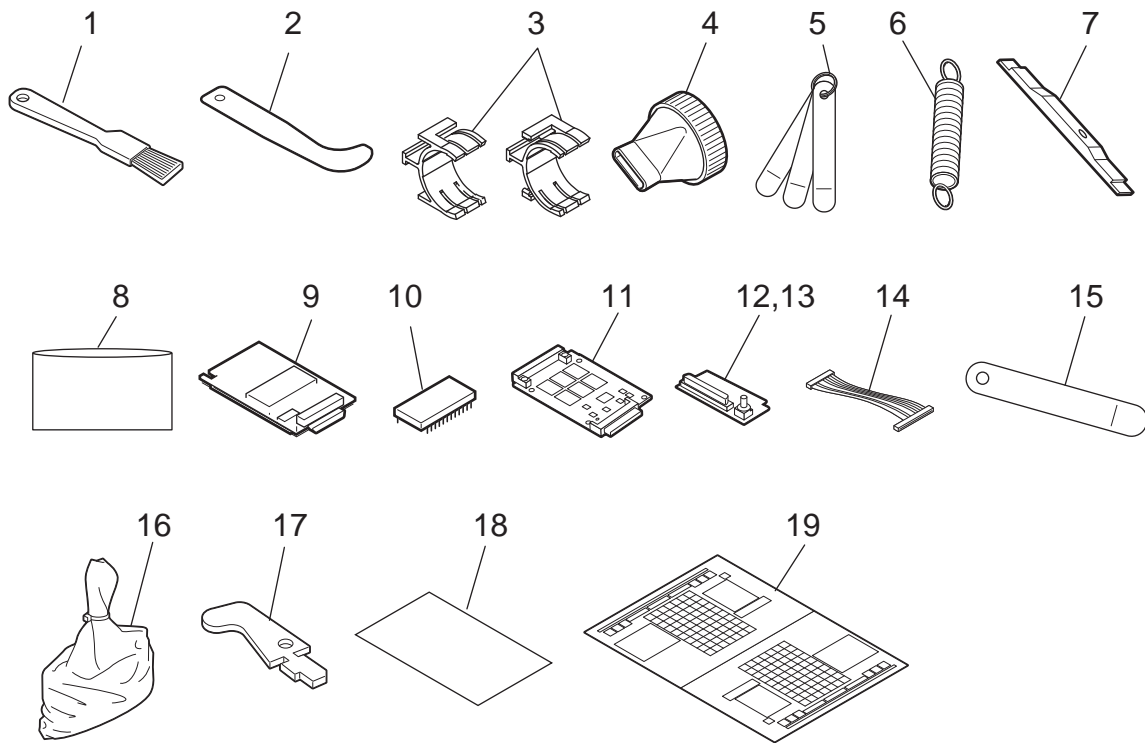


Fig. 7-37

7.10 Grease List

The parts used for the maintenance of this equipment are as follows.

Symbol	Grease name	Volume	Container	Parts list <P-I>*
L	Launa 40	100 cc	Oiler	101-21
W1	White grease (Molykote EM-30L)	100 g	Tube	101-24
W2	White grease (Molykote HP-300)	10 g	Bottle	101-22
AV	Alvania No.2	100 g	Tube	101-23
FL	FLOIL (GE-334C)	20 g	Bottle	101-26

*: Part list <P-I> represents the page item in “e-STUDIO2040C/2540C/3040C/3540C/4540C Service Parts List”.

7.11 Operational Items in Overhauling

Overhauling must be performed in order to maintain the quality level of this equipment at the following timing.

e-STUDIO2040C: When the number of output pages has reached 400,000 or 2.5 years have passed from the start of use (Whichever is earlier.)

e-STUDIO2540C: When the number of output pages has reached 500,000 or 2.5 years have passed from the start of use (Whichever is earlier.)

e-STUDIO3040C: When the number of output pages has reached 600,000 or 2.5 years have passed from the start of use (Whichever is earlier.)

e-STUDIO3540C: When the number of output pages has reached 700,000 or 2.5 years have passed from the start of use (Whichever is earlier.)

e-STUDIO4540C: When the number of output pages has reached 700,000 or 2.5 years have passed from the start of use (Whichever is earlier.)

- (1) Replace all the supplies.
- (2) Replace ozone filters-2 and -3.
- (3) Check the components in the drive section (gears, pulleys, timing belts, etc.). Replace them with new ones if they are damaged.
- (4) Check all the adhesives such as tape and film if they are damaged or have become unstuck. Replace them with new ones if necessary.
- (5) Check the performance of all the switches and sensors. Replace them with new ones if necessary.
- (6) Clean inside the equipment thoroughly.

8. ERROR CODE AND TROUBLESHOOTING

8.1 General Descriptions

This chapter explains the procedures for solving troubles occurring in the equipment.

When a trouble occurs, check if an error code is displayed on the LCD screen of the control panel first. If displayed, refer to “8.2 Error Code List” to figure out the classification and contents of the error, and then refer to “8.3 Diagnosis and Prescription for Each Error Code” to remove its cause.

If not displayed and the equipment does not operate properly or images are not printed properly, refer to “8.4 Other errors” or “8.5 Troubleshooting for the Image” to remove its cause.

Note:

If unusual odor is detected or if smoke or fire comes out of the equipment, immediately turn the power OFF.

Even in the cases other than the above, fully observe safety precautions.

If any PC board or HDD shall be replaced, refer to “9.3 Precautions for Installation of GP-1070 and Disposal of HDD/Board”.

8.1.1 If a problem continues even after performing all troubleshooting.

If a problem continues even after performing all troubleshooting and technical tips, report the problem to the appropriate Toshiba service center along with the following information. This information will help the service center understand your problem and take quick action to find the solution.

1. Serial Number
2. List Print

Refer to the appropriate Service Manual / Service Handbook for the detailed procedure to obtain a List Print.

- A. Enter the value given below to obtain a List Print by CSV file.

9S-300: All CSV files

- B. Enter the value given below to obtain a List Print by printing it out.

9S-101: 05 code

9S-102: 08 code

9S-104: Pixel counter data (Toner cartridge standard)

9S-106: Error history (1000 cases max)

9S-108: Firmware update log (200 cases max)

9S-110: Power on/off log (100 cases max)

3. For image-related problems, collect image samples with the problem areas and the feeding direction marked first. Then provide information about the media type and weight, and the print data / spool files for duplicating the problem.
4. For abnormal acoustic noise, describe the situation in as much detail as possible.
5. For hardware-related problems, provide photos of any broken parts, paper jams, etc.
In case of paper jams, include the type of paper and its manufacturer.
6. For software-related problems, provide list prints, TopAccess Logs and the detailed procedure needed to duplicate the problem.

* This is the minimum information required to report a complaint. It would be appreciated if you could obtain additional information.

* Follow the directions of the service center if they request additional information as each issue is unique to some degree.

8.1.2 Collection of debug log with USB media

Notes:

To collect the debug log with USB media, HD data external version (08-8952) needs to be "T140HD0W3000" or later.

[1] General description

The purpose of collecting the debug logs is to acquire the information for analyzing problems which occurred during the MFP's operation. In such a case, you can collect the debug logs by inserting a USB device into the MFP. Even if the power has to be turned OFF with the main power switch after a problem occurs, the debug logs will be saved in the MFP (up to 3 logs). If the debug logs have already been saved in the MFP, they also can be collected.

The following information is included in the USB debug logs.

Internal operation, Job history, HDD/memory usage status, etc. (Personal/Corporate information (address book) not included)

When the debug logs are collected, also do so for the following information since it may be difficult to investigate only using the debug log.

- List print mode ([9] + [START]) [300: All CSV files]
- Job logs below in TopAccess -> [Logs] -> [Export Logs]
 - Print Job Log Export
 - Fax Transmission Journal Export
 - Fax Reception Journal Export
 - Scan Log Export
 - Messages Log Export
- Problem occurrence time

Or the time when the customer called if it is difficult to work out when it occurred.

- Status of when you collected the debug log

As in the example below, check the status to know if the problem occurred at the debug log collection or how the customer recovered it.

E.g.

- You checked the problem and connected a USB device to the equipment.
- No problem occurred when an attempt to collect the debug log was made; however the customer did turn the main power switch OFF when the problem occurred, so the log can be collected.

[2] Collection procedure

1. Note

When collecting a log, be sure to obtain consent from the user in advance and get the dedicated script file from the service center.

2. About USB devices

Be sure to format the USB device with FAT16/32 beforehand. (Recommend size: 2GB or more)

3. Advance preparation of collection

Store the dedicated script file to the root directory of the USB device.

4. Procedure for collecting debug logs

1. Insert USB device, in which the dedicated script file is stored, into the MFP while the power is ON.
2. The LED in the MFP starts blinking after the USB device has been inserted.
3. When the collection of the debug logs is finished, beeping is heard.
4. After the beeping has stopped, remove the USB device.

Notes:

- Do not remove the USB device while the LED in the MFP is blinking.
- If the LED does not start blinking after the USB device is inserted and a few minutes have passed, try the procedure from step 1 again.
- If there is no beeping after the LED starts blinking (about 20 minutes), try procedure from step 1 again.
- If the USB device is inserted when the MFP is not ready, the debug logs cannot be collected.

5. Collected debug logs

- When the collection of the debug logs is completed, the compressed file of the collected logs is stored in the root directory of the USB device.
File name: XXXX.YYYYMMDDHHmmSS
(XXXX= Serial number of the equipment, YYYY= year, MM= month, DD= day, HH= hour, mm= minute, SS= second)
- After the debug logs have been collected, be sure to send them to the service center together with a report.

8.2 Error Code List

The following error codes is displayed at the upper right of the screen when the “CLEAR PAPER” or “CALL SERVICE” symbol is blinking.

8.2.1 Jam

Error code	Classification	Contents	Troubleshooting
E010	Paper exit jam	Jam not reaching the exit sensor: The paper which has passed through the fuser unit does not reach the exit sensor.	P. 8-41
E011	Other paper jam	Transfer belt paper-clinging jam: The paper after the 2nd transfer is clinging to the transfer belt, or a paper jam occurred between the registration roller and the paper clinging detection sensor.	P. 8-55
E020	Paper exit jam	Stop jam at the exit sensor: The trailing edge of the paper does not pass the exit sensor after its leading edge has reached this sensor.	P. 8-42
E030	Other paper jam	Power-ON jam: The paper is remaining on the paper transport path when power is turned ON.	P. 8-56
E061		Incorrect paper size setting for 1st drawer: The size of paper in the 1st drawer differs from size setting of the equipment.	P. 8-57
E062		Incorrect paper size setting for 2nd drawer: The size of paper in the 2nd drawer differs from size setting of the equipment.	P. 8-57
E063		Incorrect paper size setting for PFP upper drawer: The size of paper in the 3rd drawer differs from size setting of the equipment.	P. 8-57
E064		Incorrect paper size setting for PFP lower drawer: The size of paper in the 4th drawer differs from size setting of the equipment.	P. 8-57
E065		Incorrect paper size setting for bypass tray: The size of paper in the bypass tray differs from size setting of the equipment.	P. 8-57
E090		Image data delay jam: Image data to be printed cannot be prepared.	P. 8-57
E091		Motor-ON time-out jam: The equipment does not operate normally because abnormality occurred on an interface between the SYS board and engine firmware.	P. 8-58
E0A0		Image transport ready time-out jam: Image data to be printed cannot be sent.	P. 8-59

Error code	Classification	Contents	Troubleshooting
E110	Paper misfeeding	ADU misfeeding (Paper not reaching the registration sensor): The paper which has passed through ADU does not reach the registration sensor during duplex printing.	P. 8-44
E120		Bypass misfeeding (Paper not reaching the bypass feed sensor): Paper fed from the bypass tray does not reach the bypass feed sensor.	P. 8-44
E130		1st drawer misfeeding (Paper not reaching the 1st drawer feed sensor): The paper fed from the 1st drawer does not reach the 1st drawer feed sensor.	P. 8-45
E140		2nd drawer misfeeding (Paper not reaching the 2nd drawer feed sensor): The paper fed from the 2nd drawer does not reach the 2nd drawer feed sensor.	P. 8-45
E150		PFP upper drawer misfeeding (Paper not reaching the PFP upper drawer feed sensor): The paper fed from the PFP upper drawer does not reach the PFP upper drawer feed sensor.	P. 8-46
E160		PFP lower drawer misfeeding (Paper not reaching the PFP lower drawer feed sensor): The paper fed from the PFP lower drawer does not reach the PFP lower drawer feed sensor.	P. 8-46
E190		LCF misfeeding (Paper not reaching the LCF feed sensor): The paper fed from the LCF does not reach the LCF feed sensor.	P. 8-47

Error code	Classification	Contents	Troubleshooting
E200	Paper transport jam	1st drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st drawer feed sensor.	P. 8-48
E210		2nd drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st drawer feed sensor.	P. 8-48
E220		2nd drawer transport jam (Paper not reaching the 1st drawer feed sensor): The paper does not reach the 1st drawer feed sensor after it has passed the 2nd drawer feed sensor.	P. 8-49
E270		Bypass transport jam (Paper not reaching the registration sensor): Paper fed from the bypass tray and passed through the bypass feed sensor does not reach the registration sensor.	P. 8-48
E300		PFP upper drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st drawer feed sensor.	P. 8-48
E310		PFP upper drawer transport jam (Paper not reaching the 1st drawer feed sensor): The paper does not reach the 1st drawer feed sensor after it has passed the 2nd drawer feed sensor.	P. 8-49
E320		PFP upper drawer transport jam (Paper not reaching the 2nd drawer feed sensor): The paper does not reach the 2nd drawer feed sensor after it has passed the PFP upper drawer feed sensor.	P. 8-49
E330		PFP lower drawer transport jam (Paper not reaching the registration sensor): The paper does not reach the registration sensor after it has passed the 1st drawer feed sensor.	P. 8-48
E340		PFP lower drawer transport jam (Paper not reaching the 1st drawer feed sensor): The paper does not reach the 1st drawer feed sensor after it has passed the 2nd drawer feed sensor.	P. 8-49
E350		PFP lower drawer transport jam (Paper not reaching the 2nd drawer feed sensor): The paper does not reach the 2nd drawer feed sensor after it has passed the PFP upper drawer feed sensor.	P. 8-49
E360	PFP lower drawer transport jam (Paper not reaching the PFP upper drawer feed sensor): The paper does not reach the PFP upper drawer feed sensor after it has passed the PFP lower drawer feed sensor.	P. 8-50	

Error code	Classification	Contents	Troubleshooting
E3C0	Paper transport jam	LCF transport jam (Paper not reaching the registration sensor): Paper fed from the LCF and passed through the 1st drawer feed sensor does not reach the registration sensor.	P. 8-48
E3D0		LCF transport jam (Paper not reaching the 1st drawer feed sensor): Paper fed from the LCF and passed through the 2nd drawer feed sensor does not reach the 1st drawer feed sensor.	P. 8-49
E3E0		LCF transport jam (Paper not reaching the 2nd drawer feed sensor): Paper fed from the LCF and passed through the LCF feed sensor does not reach the 2nd drawer feed sensor.	P. 8-49
E400	Cover open jam	Jam access cover open jam: The jam access cover has opened during printing.	P. 8-62
E410		Front cover open jam: The front cover has opened during printing.	P. 8-62
E420		PFP side cover open jam: The PFP side cover has opened during printing.	P. 8-62
E430		ADU open jam: The ADU has opened during printing.	P. 8-63
E440		Side cover open jam: The side cover has opened during printing.	P. 8-63
E450		LCF side cover open jam: The LCF side cover has opened during printing.	P. 8-64
E480		Bridge unit open jam: The bridge unit has opened during printing.	P. 8-64
E4A0		Waste toner cover open jam: The waste toner cover has opened during printing.	P. 8-65
E510	Paper transport jam (ADU section)	Jam not reaching the ADU entrance sensor: The paper does not reach the ADU entrance sensor after it is switchbacked in the exit section.	P. 8-51
E520		Stop jam in the ADU: The paper does not reach the ADU exit sensor after it has passed the ADU entrance sensor.	P. 8-52
E550	Other paper jam	Paper remaining jam on the transport path: The paper is remaining on the transport path when printing is finished.	P. 8-59
E551		Paper remaining jam on the transport path (when a service call occurs)	P. 8-60
E552		Paper remaining jam on the transport path (when the cover is closed)	P. 8-60

Error code	Classification	Contents	Troubleshooting
E712	RADF jam	Jam not reaching the original registration sensor: The original fed from the original feeding tray does not reach the original registration sensor.	P. 8-66
E714		Feed signal reception jam: The feed signal is received even no original exists on the original feeding tray.	P. 8-66
E721		Jam not reaching the read sensor: The original does not reach the read sensor after it has passed the registration sensor (when scanning obverse side) or the reverse sensor (when scanning reverse side).	P. 8-66
E722		Jam not reaching the original exit/reverse sensor (during scanning): The original which passed the read sensor does not reach the original exit/reverse sensor when it is transported from the scanning section to exit section.	P. 8-67
E724		Stop jam at the original registration sensor: The trailing edge of the original does not pass the original registration sensor after its leading edge has reached this sensor.	P. 8-67
E725		Stop jam at the read sensor: The trailing edge of the original does not pass the read sensor after its leading edge has reached this sensor.	P. 8-68
E726		Transport/exit signal reception jam: RADF receives the transport/exit reception signal from the equipment when no original is at the exposure waiting position.	P. 8-68
E731		Stop jam at the original exit/reverse sensor: The trailing edge of the original does not pass the original exit/reverse sensor after its leading edge has reached this sensor.	P. 8-69
E860		RADF jam access cover open: The RADF jam access cover has opened during RADF operation.	P. 8-69
E870		RADF open jam: RADF has opened during RADF operation.	P. 8-70
E871	Cover open jam in the read ready status	P. 8-70	

Error code	Classification	Contents	Troubleshooting
E910	Finisher jam (Bridge unit)	Jam at the bridge unit transport sensor 1: The paper does not reach the bridge unit transport sensor 1 after it has passed the exit sensor.	P. 8-71
E920		Stop jam at the bridge unit transport sensor 1: The trailing edge of the paper does not pass the bridge unit transport sensor 1 after its leading edge has reached the sensor.	P. 8-71
E930		Jam at the bridge unit transport sensor 2: The trailing edge of the paper does not reach the bridge unit transport sensor 2 after its leading edge has reached the bridge unit transport sensor 1.	P. 8-72
E940		Stop jam at the bridge unit transport sensor 2: The trailing edge of the paper does not pass the bridge unit transport sensor 2 after its leading edge has reached the bridge unit transport sensor 2.	P. 8-72
E9F0	Finisher jam (Punch unit)	Punching jam: Punching is not performed properly. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-89
EA10	Finisher jam (Finisher section)	Paper transport delay jam: The paper which has passed the bridge unit does not reach the inlet sensor.[MJ-1031/1101] The paper which has passed the bridge unit does not reach the inlet sensor. [MJ-1106]	P. 8-73
EA20		Paper transport stop jam: The paper does not pass through the inlet sensor. The paper which has passed through the inlet sensor does not reach the feeding sensor. [MJ-1101/1106]	P. 8-74 P. 8-75
EA21		Paper size error jam: Paper does not reach the sensor because the paper is shorter than spec. [MJ-1101/1106]	P. 8-75
EA22		Paper transport jam (Finisher paper punching edge detection sensor): The paper position sensor on the Finisher transport path detects paper shorter than the acceptable paper size. [MJ-1101/1106]	P. 8-75

Error code	Classification	Contents	Troubleshooting
EA23	Finisher jam (Finisher section)	Paper transport jam (transport sensor): Paper being transported on the Finisher transport path is stopped at the outlet sensor at 27.56 inches or longer. [MJ-1101/1106]	P. 8-76
EA24		Paper transport jam (between entrance and transport sensors): The leading edge of paper which has passed the entrance sensor on the Finisher transport path does not reach the transport sensor. [MJ-1101/1106]	P. 8-76
EA25		Paper transport jam (after paper stack exit): The finishing tray paper detection sensor detects paper after a stack of paper exits from the finishing tray. [MJ-1101/1106]	P. 8-76
EA26		Paper transport jam (stop command request): A command to stop equipment operation is received while paper is being transported in the Finisher. [MJ-1101/1106]	P. 8-76
EA27		Paper transport jam (paper not inserted): The equipment detects a paper-not-inserted jam but the entrance sensor is turned ON before the equipment is stopped. [MJ-1101/1106]	P. 8-76
EA28		Paper transport jam (paper holder plate operation delay): An attempt to start the arm assisting operation for dropping paper on the finishing tray is made, but the previous arm assisting operation has not yet been finished. [MJ-1101/1106]	P. 8-76
EA29		Paper transport jam (stack transport delay): The buffer tray is extended to drop a stack of paper on the finishing tray but the previous stack has not yet exited. [MJ-1101/1106]	P. 8-76
EA30		Power-ON jam: Paper exists at the inlet sensor when power is turned ON. [MJ-1031]	P. 8-78
EA31		Transport path paper remaining jam: The paper which has passed through the inlet sensor does not reach the transport sensor. [MJ-1101/1106]	P. 8-78
EA32		Exit paper remaining jam: The paper is remaining on the finishing tray when the power is turned ON. [MJ-1101/1106]	P. 8-79
EA40		Joint open jam: The finisher cover opened during machine operation. [MJ-1031] Cover open error: The front cover or stationary tray is opened during paper transport. [MJ-1106]	P. 8-79
EA50		Stapling jam: Stapling is not performed properly. [MJ-1031/1101]	P. 8-81
EA60		Early arrival jam: The inlet sensor detects the paper earlier than a specified timing. [MJ-1031/1101/1106]	P. 8-82

Error code	Classification	Contents	Troubleshooting
EA70	Finisher jam (Finisher section)	Stack exit belt home position error: The stack exit belt is not at the home position. [MJ-1101/1106] Stack slider home position error: The stack slider is not at the home position. [MJ-1031]	P. 8-83
EA90	Finisher jam (Saddle stitcher section)	Door open jam: The delivery cover or inlet cover has opened during printing. [MJ-1106]	P. 8-85
EAA0		Paper remaining in Saddle Stitch Finisher: Paper remaining in Saddle Stitch Finisher [MJ-1106]	P. 8-85
EAB0		Paper transport jam in Saddle Stitch Finisher: Paper transport jam in Saddle Stitch Finisher [MJ-1106]	P. 8-86
EAB1		Short paper jam: Short paper jam (Saddle Stitch Finisher) [MJ-1106]	P. 8-87
EAD0	Other paper jam	Print end command time-out jam: The printing has not finished normally because of an error occurring on the interface between the SYS board and the engine firmware at the end of printing.	P. 8-90
EAE0	Finisher jam	Receiving time-out jam: The printing has been interrupted because of the communication error between the equipment and finisher when the paper is transported from the equipment to the finisher.	P. 8-90
EB30		Ready time-out jam: The equipment judges that the paper transport to the finisher is disabled because of the communication error between the equipment and finisher at the start of printing.	P. 8-90
EB50	Paper transport jam	Paper remaining on the transport path: The multiple feeding of preceding paper caused the misfeeding of upcoming paper.	P. 8-52
EB60		Paper remaining on the transport path: The multiple feeding of preceding paper caused the misfeeding of upcoming paper (redetection after no jam is detected at [EB50]).	P. 8-54

Error code	Classification	Contents	Troubleshooting
ED10	Finisher jam	Skew adjustment motor (M1) home position detection abnormality: The Skew adjustment motor is not at the home position. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-91
ED11		Sideways adjustment motor (M2) home position detection error: The Sideways adjustment motor is not at the home position. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-91
ED12		Shutter home position error: The shutter is not at the home position. [MJ-1101/1106]	P. 8-91
ED13		Front alignment plate home position error: The front alignment plate is not at the home position. [MJ-1101/1106]	P. 8-92
ED14		Rear alignment plate home position error: The rear alignment plate is not at the home position. [MJ-1101/1106]	P. 8-93
ED15		Paddle home position error: The paddle is not at the home position. [MJ-1101/1106]	P. 8-94

Error code	Classification	Contents	Troubleshooting
ED16	Finisher jam (Finisher section)	Buffer tray home position error: The buffer tray is not at the home position. [MJ-1101/1106]	P. 8-95
EF10		Paper not supported for Saddle Stitch Finisher: Unsupported paper size, type and an excess number of pages for stapling are selected. [MJ-1106]	P. 8-95
EF11		Saddle Stitch Finisher stapling error (front): Front stapling is not correctly done. [MJ-1106]	P. 8-96
EF12		Saddle Stitch Finisher stapling error (rear): Rear stapling is not correctly done. [MJ-1106]	P. 8-96
EF13		Saddle paper holder home position detection abnormality: The paper holder home position cannot be detected. [MJ-1106]	P. 8-97
EF14		Saddle paper exit jam: Outputting paper is not completed within a fixed time. [MJ-1106]	P. 8-97
EF15		Saddle Stitch Finisher side alignment motor home position detection abnormality: The side alignment motor home position cannot be detected. [MJ-1106]	P. 8-98
EF16		Saddle Stitch Finisher stacker motor home position detection abnormality: The stacker motor home position cannot be detected. [MJ-1106]	P. 8-98
EF17		Saddle Stitch Finisher folding blade home position detection abnormality: The folding blade home position cannot be detected. [MJ-1106]	P. 8-99
EF18		Saddle Stitch Finisher additional folding roller home position detection abnormality: The additional folding roller home position cannot be detected. [MJ-1106]	P. 8-99
EF19		Saddle paper folding jam: Fold processed paper cannot be transported to the additional folding roller. [MJ-1106]	P. 8-100
EF20		Saddle stacker jam: Transported paper cannot be detected in the stacker. [MJ-1106]	P. 8-100

8.2.2 Service call

Error code	Classification	Contents	Troubleshooting	
C040	Paper feeding system related service call	PFP motor abnormality: The PFP motor is not rotating normally. (the case that paper can be fed from any drawer except the PFP)	P. 8-101	
C130		1st drawer tray abnormality: The tray-up motor is not rotating or the 1st drawer tray is not moving normally. (the case that paper can be fed from any drawer except the 1st drawer)	P. 8-101	
C140		2nd drawer tray abnormality: The tray-up motor is not rotating or the 2nd drawer tray is not moving normally. (the case that paper can be fed from any drawer except the 2nd drawer)	P. 8-101	
C150		PFP upper drawer tray abnormality: The PFP upper drawer tray-up motor is not rotating or the PFP upper drawer tray is not moving normally. (the case that paper can be fed from any drawer except the PFP upper drawer)	P. 8-102	
C160		PFP lower drawer tray abnormality: The PFP lower drawer tray-up motor is not rotating or the PFP lower drawer tray is not moving normally. (the case that paper can be fed from any drawer except the PFP lower drawer)	P. 8-102	
C180		LCF tray-up motor abnormality: The LCF tray-up motor is not rotating or the LCF tray is not moving normally. (the case that paper can be fed from any drawer except the LCF)	P. 8-103	
C1A0		LCF end fence motor abnormality: The LCF end fence motor is not rotating or the LCF end fence is not moving normally. (the case that paper can be fed from any drawer except the LCF)	P. 8-104	
C1B0		LCF transport motor abnormality: The LCF transport motor is not rotating normally (when paper can be fed from any drawer except the LCF).	P. 8-105	
C260		Scanning system related service call	Peak detection error: Lighting of the exposure lamp (white reference) is not detected when power is turned ON.	P. 8-107
C270			(1) Carriage home position sensor not turning OFF within a specified period of time: The carriage does not shift from its home position in a specified time. (2) Downloading firmware with an incorrect model. If the error occurs, the exposure lamp lights twice at the same time.	P. 8-108
C280	Carriage home position sensor not going ON within a specified time		P. 8-108	
C290	Scanner fuse blowout: 24V power for the scanning system is not supplied at the scanner warming-up after power-ON.		P. 8-109	

Error code	Classification	Contents	Troubleshooting
C370	Copy process related service call	Transfer belt unit abnormality	P. 8-169
C380		Auto-toner sensor-K abnormality (upper limit)	P. 8-169
C381		Auto-toner sensor-K abnormality (lower limit)	P. 8-170
C390		Auto-toner sensor-C abnormality (upper limit)	P. 8-171
C391		Auto-toner sensor-C abnormality (lower limit)	P. 8-172
C3A0		Auto-toner sensor-M abnormality (upper limit)	P. 8-173
C3A1		Auto-toner sensor-M abnormality (lower limit)	P. 8-174
C3B0		Auto-toner sensor-Y abnormality (upper limit)	P. 8-175
C3B1		Auto-toner sensor-Y abnormality (lower limit)	P. 8-176
C411		Fuser unit related service call	Thermistor or heater lamp abnormality at power-ON: Abnormality of the thermistor is detected when power is turned ON or the temperature of the fuser roller does not rise in a specified period of time after power is turned ON.
C412	Thermistor/heater lamp abnormality at power-ON: Thermistor abnormality is detected at power-ON or the fuser roller temperature does not rise within a specified period of time after power-ON.		P. 8-110
C443	Heater lamp abnormality after abnormality judgment (not reaching to intermediate temperature)		P. 8-110
C445	Heater lamp abnormality after abnormality judgment (pre-running end temperature abnormality)		P. 8-110
C446	Heater lamp abnormality after abnormality judgment (pre-running end temperature abnormality)		P. 8-110
C447	Heater lamp abnormality after abnormality judgment (temperature abnormality at ready status)		P. 8-110
C448	Heater lamp continuous lighting abnormality: Heater lamp lights continuously for a certain period of time when the pressure roller temperature during ready status is higher than the specified		P. 8-111
C449	Heater lamp abnormality after abnormality judgment (temperature abnormality at high temperature)		P. 8-110
C450	Abnormal temperature difference between the center thermopile and the edge thermistor		P. 8-112
C451	Abnormal temperature difference between the center thermopile and the edge thermistor		P. 8-112
C452	Abnormal thermopile temperature difference		P. 8-112
C465	Pressure roller thermistor abnormality after entering ready status (pre-running end temperature abnormality)		P. 8-112

Error code	Classification	Contents	Troubleshooting
C466	Fuser unit related service call	Pressure roller thermistor abnormality after entering ready status (pre-running end temperature abnormality)	P. 8-112
C467		Pressure roller thermistor abnormality after entering ready status (temperature abnormality at ready status)	P. 8-112
C468		Pressure roller thermistor abnormality after entering ready status (overheating)	P. 8-112
C4B0		Fuser unit counter abnormality	P. 8-113
C4B1		Fuser unit destination selection abnormality	P. 8-114
C4D0		Fuser belt thermopile abnormality	P. 8-114
C550	Optional communication related service call	RADF I/F error: Communication error has occurred between the RADF and the scanner.	P. 8-115
C551		RADF model detection error	P. 8-117
C570		Communication error between Engine-CPU and IPC board	P. 8-115
C580		Communication error between IPC board and finisher	P. 8-115
C5A0	Circuit related service call	SRAM board not connected (LGC board)	P. 8-117
C5A1		SRAM board data abnormality (LGC board)	P. 8-118
C8E0	Optional communication related service call	RADF communication protocol abnormality: The system has to be stopped because the control	P. 8-117
C900	Circuit related service call	Connection error between SYS board and LGC board	P. 8-118
C901		System format error for scanner	P. 8-118
C910		Toner cartridge IC chip access board abnormality	P. 8-119
C911		Toner cartridge IC chip access board abnormality (caused by factors other than C910)	P. 8-120
C940		Engine-CPU abnormality	P. 8-121
C962		LGC board ID abnormality	P. 8-121
C970	Process related service call	High-voltage transformer abnormality: Leakage of the main charger is detected.	P. 8-177
C9E0	Circuit related service call	Connection error between SLG board and SYS board	P. 8-121
CA00	Image control related service call	color registration abnormality	P. 8-152
CA10	Laser optical unit related service call	Polygonal motor abnormality: The polygonal motor is not rotating normally.	P. 8-124
CA20		H-Sync detection error: H-Sync signal detection PC board cannot detect laser beams.	P. 8-125

Error code	Classification	Contents	Troubleshooting
CB00	Finisher related service call	Finisher not connected: Communication error has occurred between the equipment and finisher. [MJ-1101/1106]	P. 8-127
CB01		Finisher communication error: Communication error has occurred between the equipment and finisher. [MJ-1101/1106]	P. 8-127
CB10		Entrance motor abnormality: The entrance motor is not rotating normally. [MJ-1101/1106]	P. 8-128
CB11		Buffer tray guide motor abnormality: The buffer tray guide motor is not rotating or the buffer tray guide is not moving normally. [MJ-1101/1106]	P. 8-129
CB12		Buffer roller drive motor abnormality: The buffer roller drive motor is not rotating or the buffer roller is not moving normally. [MJ-1101/1106]	P. 8-129
CB13		Finisher exit motor abnormality [MJ-1101/1106]	P. 8-130
CB14		Paper holding arm motor abnormality [MJ-1101/1106]	P. 8-130
CB20		Delivery motor abnormality: Delivery motor or delivery roller is not rotating normally. [MJ-1031]	P. 8-131
CB30		Movable tray shift motor abnormality: The movable tray shift motor is not rotating or the movable tray is not moving normally. [MJ-1101/1106]	P. 8-131
CB31		Movable tray paper-full detection error: The actuator of the movable tray paper-full detection sensor does not move smoothly. [MJ-1101/1106]	P. 8-132
CB40		Front alignment motor abnormality: The front alignment motor is not rotating or the front alignment plate is not moving normally. [MJ-1101]	P. 8-133
CB50		Staple unit abnormality: Staple unit is not moving normally. [MJ-1031] Stapler home position error: The stapler home position sensor does not work. [MJ-1101/1106]	P. 8-133 P. 8-134
CB51		Stapler shift home position error: The stapler is not at the home position. [MJ-1101]	P. 8-134
CB60		Stapler shift motor abnormality: Stapler shift motor is not rotating or staple unit is not moving normally. [MJ-1101/1106]	P. 8-135

Error code	Classification	Contents	Troubleshooting
CB80	Finisher related service call	Backup RAM data abnormality: Abnormality of checksum value on finisher controller PC board is detected when the power is turned ON. [MJ-1031/1101/1106]	P. 8-136
CB81		Flash ROM abnormality: Abnormality of checksum value on finisher controller PC board is detected when the power is turned ON. [MJ-1101/1106]	P. 8-137
CB82		Finisher - Main CPU program error	P. 8-137
CB83		Saddle Stitch Finisher - Main CPU program error [MJ-1106]	P. 8-137
CB84		Hole Punch Unit - Main CPU program error	P. 8-137
CB91		Saddle Stitch Finisher flash ROM abnormality [MJ-1106]	P. 8-138
CB92		Saddle Stitch Finisher RAM abnormality [MJ-1106]	P. 8-138
CB93		Additional folding motor abnormality [MJ-1106]	P. 8-138
CB94		Saddle transport motor abnormality [MJ-1106]	P. 8-139
CB95		Stacker motor abnormality [MJ-1106]	P. 8-139
CBA0		Front saddle stapler home position error: The stapler home position detection is abnormally operated and finished. [MJ-1106]	P. 8-140
CBB0		Rear saddle stapler home position error: The stapler home position detection is abnormally operated and finished. [MJ-1106]	P. 8-140
CBC0		Saddle Stitch Finisher side alignment motor (M15) abnormality: The alignment motor is not rotating or the alignment plate is not working properly. [MJ-1106]	P. 8-140
CBE0		Saddle Stitch Finisher folding motor (M17) abnormality: The folding motor is not rotating or the folding roller is not moving normally. [MJ-1106]	P. 8-141
CC20		Saddle communication error [MJ-1106]	P. 8-141
CC30		Stack transport motor abnormality: The stack transport motor is not rotating or the stack transport belt is not moving normally. [MJ-1101/1106]	P. 8-142
		Stack delivery motor abnormality: The stack delivery motor is not rotating normally. [MJ-1031]	P. 8-142
CC31		Transport motor abnormality: The transport motor is not rotating or the stack transport roller -1 and -2 is not rotating normally. [MJ-1101/1106]	P. 8-143
CC41		Paper holder cam home position abnormality: The paper holder cam is not at the home position. [MJ-1101]	P. 8-143
CC51		Sideways adjustment motor (M2) abnormality: Sideways adjustment motor is not rotating or puncher is not shifting normally. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-144

Error code	Classification	Contents	Troubleshooting
CC52	Finisher related service call	Skew adjustment motor (M1) abnormality: Skew adjustment motor is not rotating or puncher is not shifting normally. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-145
CC61		Punch motor (M3) home position detection error: Punch motor is not rotating or puncher is not shifting normally. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-145
CC71		Punch ROM checksum error: Abnormality of checksum value on Hole punch controller PC board is detected when the power is turned on. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-146
CC72		Punch RAM read/write error: Abnormality of checksum value on Hole punch controller PC board is detected when the power is turned on. [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-146
CC80		Rear alignment motor abnormality: The rear alignment motor is not rotating or the rear alignment plate is not moving normally. [MJ-1101/1106]	P. 8-146
CC90		Tray shift motor abnormality: The tray shift motor is not rotating or the stack tray is not moving normally. [MJ-1031]	P. 8-147
CCB0		Offset motor abnormality: The offset motor is not rotating normally. [MJ-1031]	P. 8-148
CCF1		Tray safety switch abnormality - (1) The tray safety switch turned on during tray operation (moving up or down). (2) The tray operated with the tray safety switch turned on. [MJ-1031]	P. 8-148
CD70	Process related service call	Waste toner box mixing paddle locked: The mixing paddle in the waste toner box does not rotate.	P. 8-177
CD71		Waste toner transport motor drive locking error.	P. 8-178
CD72		Waste toner motor locking error ("Waste toner box replacement"): "Waste toner box replacement" appears when either CD70 or CD71 error occurs. The error code CD72 is noted on the error history and logs.	P. 8-178
CDE0	Finisher related service call	Paddle motor abnormality: The paddle motor is not rotating or the paddle is not rotating normally. [MJ-1101/1106]	P. 8-148
CE00		Communication error between finisher and punch unit: Communication error between finisher controller PC board and punch controller PC board [MJ-1101/1106 (when MJ-6103 is installed)]	P. 8-149

Error code	Classification	Contents	Troubleshooting
CE10	Image control related service call	Image quality sensor abnormality (OFF level): The output value of this sensor is out of a specified range when sensor light source is OFF.	P. 8-160
CE20		Image quality sensor abnormality (no pattern level): The output value of this sensor is out of a specified range when the image quality control test pattern is not formed.	P. 8-160
CE40		Image quality control test pattern abnormality: The test pattern is not formed normally.	P. 8-163
CE50	Image control related service call	Temperature/humidity sensor abnormality: The output value of this sensor is out of a specified range.	P. 8-165
CE60		Drum thermistor-Y abnormality: The output value of the drum thermistor-Y is out of a specified range.	P. 8-165
CE70		Drum drive switching abnormality: The drum switching detection sensor (S19) is not turned ON after the drum motor was rotated for a specified period of time.	P. 8-166
CE71		Drum phase adjustment abnormality: Drum phase sensors (Color drum phase sensor (S43) and K drum phase sensor (S44)) are not turned ON after the drum motor was rotated for a specified period of time.	P. 8-167
CE90		Drum thermistor-K abnormality: The output value of the drum thermistor-K is out of a specified range.	P. 8-166
CEC1	Copy process related service call	2nd transfer roller contacting position detection abnormality	P. 8-179
CEC2	Copy process related service call	2nd transfer roller releasing position detection abnormality	P. 8-180
CF10	Finisher related service call	Communication module SRAM reading failure. [MJ-1101/1106]	P. 8-150
CF90	Laser optical unit related service call	Laser optical unit shutter abnormality.	P. 8-126
F070	Communication related service call	Communication error between System-CPU and Engine-CPU	P. 8-116
F090	Circuit related service call	SRAM abnormality on the SYS board	P. 8-122
F100_0	Other service call	HDD format error: Operation of HDD key data fails.	P. 8-181
F100_1		HDD format error: Encryption key data of either the SYS board or the SRAM board for the SYS board are damaged.	P. 8-181
F100_2		HDD format error: Encryption key data of both the SYS board and the SRAM board for the SYS board are damaged.	P. 8-182
F101_0		HDD connection error (HDD connection cannot be detected.)	P. 8-184

Error code	Classification	Contents	Troubleshooting
F101_1	Other service call	Root partition mount error (HDD formatting fails.): The HDD cannot be connected (mounted) caused by damage to the areas in which the program is mainly stored.	P. 8-184
F101_2		Partition mount error: The HDD cannot be connected (mounted) caused by damage to areas other than those described in the F101_1 and F101_4 to F101_9 errors.	P. 8-184
F101_3		Partition mount error: The HDD cannot be connected (mounted) caused by damage to areas other than those described in the F101_1 and F101_4 to F101_9 errors.	P. 8-184
F101_4		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/work" partition.	P. 8-185
F101_5		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/registration" partition.	P. 8-186
F101_6		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/backup" partition.	P. 8-187
F101_7		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/imagedata" partition.	P. 8-188
F101_8		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/storage" partition.	P. 8-189
F101_9		Partition mount error: The HDD cannot be connected (mounted) caused by damage to the "/encryption" partition.	P. 8-190
F102			HDD start error: HDD cannot become 'Ready' state.
F103		HDD transfer time-out: Reading/writing cannot be performed in the specified period of time.	P. 8-191
F104		HDD data error: Abnormality is detected in the data of HDD.	P. 8-191
F105		HDD other error	P. 8-191
F106_0		ADI-HDD error: Illegal disk replacement detected (ADI-HDD Exchange to SATA-HDD)	P. 8-191
F106_1		ADI-HDD error: HDD type detection error	P. 8-192
F106_2		ADI-HDD error: ADI encryption key download operation error	P. 8-192
F106_3		ADI-HDD error: ADI authentication Admin Password generation error	P. 8-193
F106_4		ADI-HDD error: Authentication random number generation error	P. 8-193
F106_5		ADI-HDD error: Authentication data transmission error	P. 8-194

Error code	Classification	Contents	Troubleshooting
F106_6	Other service call	ADI-HDD error: Error caused by reason other than F106_0 to 5 errors	P. 8-194
F106_7			P. 8-194
F106_8			P. 8-194
F106_10			P. 8-194
F106_UNDEF			P. 8-194
F109_0		Key consistency error: Consistency check operation error.	P. 8-194
F109_1		Key consistency error: SRAM encryption AES key data damage.	P. 8-195
F109_2		Key consistency error: Signature Check public key damage.	P. 8-195
F109_3		Key consistency error: HDD encryption parameter damage.	P. 8-196
F109_4		Key consistency error: license data damage.	P. 8-197
F109_5		Key consistency error: Encryption key for ADI-HDD is damaged.	P. 8-198
F109_6		Key consistency error: Administrator password error for ADI-HDD authentication.	P. 8-200
F110	Communication related service call	Communication error between System-CPU and Scanner-CPU	P. 8-116
F111		Scanner response abnormality	P. 8-116
F120	Other service call	Database abnormality: Database is not operating normally.	P. 8-202
F121		Database abnormality (user information management database)	P. 8-202
F122		Database abnormality (Message/Job log management database)	P. 8-202
F124		Database abnormality: Database is not operating normally. (Language management database)	P. 8-203
F130		Invalid MAC address	P. 8-203
F131		Error due to damage to filtering setting file	P. 8-203
F140		ASIC format error: ASIC formatting fails or memory acquiring fails when software is formatted	P. 8-204
F200		Data Overwrite option (GP-1070) disabled	P. 8-204
F350		Circuit related service call	SLG board abnormality
F400	SYS board cooling fan abnormality		P. 8-205
F500	Other service call	HD partition damage	P. 8-205
F510		Application start error	P. 8-205
F520		Operating system start error	P. 8-205
F521		Integrity check error	P. 8-206
F550		Encryption partition error	P. 8-206
F600		Software update error	P. 8-206
F700		Overwrite error	P. 8-206
F800		Date error	P. 8-207
F900		Machine information alignment error	P. 8-207

8.2.3 Error in Internet FAX / Scanning Function

1. Internet FAX related error

Error code	Classification	Troubleshooting
1C10	System access abnormality	P. 8-208
1C11	Insufficient memory	P. 8-208
1C12	Message reception error	P. 8-208
1C13	Message transmission error	P. 8-208
1C14	Invalid parameter	P. 8-208
1C15	Exceeding file capacity	P. 8-208
1C30	Directory creation failure	P. 8-208
1C31	File creation failure	P. 8-208
1C32	File deletion failure	P. 8-208
1C33	File access failure	P. 8-208
1C40	Image conversion abnormality	P. 8-208
1C60	HDD full failure during processing	P. 8-208
1C61	Address Book reading failure	P. 8-208
1C63	Terminal IP address unset	P. 8-208
1C64	Terminal mail address unset	P. 8-208
1C65	SMTP address unset	P. 8-209
1C66	Server time time-out error	P. 8-209
1C69	SMTP server connection error	P. 8-209
1C6B	Terminal mail address error	P. 8-209
1C6C	Destination mail address error	P. 8-209
1C6D	System error	P. 8-209
1C70	SMTP client OFF	P. 8-209
1C71	SMTP authentication error	P. 8-209
1C72	POP before SMTP error	P. 8-209
1CC0	Job canceling	-
1CC1	Power failure	P. 8-209

2. RFC related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2500	Syntax error, command unrecognized	HOST NAME error (RFC: 500) Destination mail address error (RFC: 500) Terminal mail address error (RFC: 500)	P. 8-209
2501	Syntax error in parameters or arguments	HOST NAME error (RFC: 501) Destination mail address error (RFC: 501) Terminal mail address error (RFC: 501)	P. 8-209
2503	Bad sequence of commands	Destination mail address error (RFC: 503)	P. 8-209
2504	Command parameter not implemented	HOST NAME error (RFC: 504)	P. 8-209
2550	Mailbox unavailable	Destination mail address error (RFC: 550)	P. 8-210
2551	User not local	Destination mail address error (RFC: 551)	P. 8-209
2552	Insufficient system storage	Terminal/Destination mail address error (RFC: 552)	P. 8-210
2553	Mailbox name not allowed	Destination mail address error (RFC: 553)	P. 8-210

3. Electronic Filing related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2B11	Job status failed.	JOB status abnormality	P. 8-210
2B20	Failed to access file.	File library function error	P. 8-210
2B30	Insufficient disk space.	Insufficient disk space in /BOX partition	P. 8-210
2B31	Failed to access Electronic Filing.	Status of specified Electronic Filing or folder is undefined or being created/deleted	P. 8-210
2B50	Failed to process image.	Image library error	P. 8-210
2B51	Failed to print images from the document box	List library error	P. 8-210
2B71	Document(s) expire(s) in a few days	Documents expiring in a few days exist	-
2B80	Hard Disk space for Electronic Filing nearly full.	Hard disk space in /BOX partition is nearly full (90%).	-
2B90	Insufficient Memory.	Insufficient memory capacity	P. 8-210
2BA0	Invalid Box password specified.	Invalid Box password	P. 8-210
2BA1	Incorrect paper size / invalid color mode / invalid resolution	The specified paper size, color mode or resolution is not available.	P. 8-210
2BB0	Job canceled	Job canceling	-
2BB1	Power failure occurred	Power failure	P. 8-210
2BC0	System fatal error.	Fatal failure occurred	P. 8-210
2BD0	Power failure occurred during e-Filing restoring.	Power failure occurred during restoring of Electronic Filing	P. 8-210
2BE0	Failed to get machine parameter.	Machine parameter reading failure	P. 8-210
2BF0	Maximum number of page range is reached.	Exceeding maximum number of pages	P. 8-211
2BF1	Maximum number of document range is reached.	Exceeding maximum number of documents	P. 8-211
2BF2	Maximum number of folder range is reached.	Exceeding maximum number of folders	P. 8-211

4. Remote scanning related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2A20	Failed to acquire resource	System management module resource acquiring failure	P. 8-211
2A31	WS Scan function is not available	Disabled WS Scan	P. 8-211
2A40	System fatal error	System error	P. 8-211
2A50	Job canceling	Job canceling	-
2A51	Power failure	Power failure	P. 8-211
2A60	Authentication for WS Scan failed	WS Scan user authentication failure	P. 8-211
2A70	Insufficient permission to execute RemoteScan	Remote Scan privilege check error	P. 8-211
2A71	Insufficient permission to execute WS Scan	WS Scan privilege check error	P. 8-211
2A72	Insufficient permission to access e-Filing box using scan utility.	e-Filing data access privilege check error (Scan Utility)	P. 8-211

5. E-mail related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2C10	Illegal Job status	System access abnormality	P. 8-212
2C11	Not enough memory	Insufficient memory	P. 8-212
2C12	Illegal Job status	Message reception error	P. 8-212
2C13	Illegal Job status	Message transmission error	P. 8-212
2C14	Invalid parameter specified	Invalid parameter	P. 8-212
2C15	Email size exceeded limit or maximum size	Exceeding file capacity	P. 8-212
2C20	Illegal Job status	System management module access abnormality	P. 8-212
2C21	Illegal Job status	Job control module access abnormality	P. 8-212
2C22	Illegal Job status	Job control module access abnormality	P. 8-212
2C30	Failed to create directory	Directory creation failure	P. 8-212
2C31	Failed to create file	File creation failure	P. 8-212
2C32	Failed to delete file	File deletion failure	P. 8-212
2C33	Failed to create file	File access failure	P. 8-212
2C40	Failed to convert image file format	Image conversion abnormality	P. 8-212
2C43	Encryption error. Failed to create file	Encryption error	P. 8-212
2C44	Creating the image file was not permitted.	Encryption PDF enforced mode error	P. 8-212
2C45	Failed in making meta data.	Meta data creation error (Scan to Email)	P. 8-212
2C60	Failed to process your Job. Insufficient disk space.	HDD full failure during processing	P. 8-212
2C61	Failed to read AddressBook	Address Book reading failure	P. 8-213
2C62	Not enough memory	Memory acquiring failure	P. 8-212
2C63	Invalid Domain Address	Terminal IP address unset	P. 8-213
2C64	Invalid Domain Address	Terminal mail address unset	P. 8-213
2C65	Failed to connect to SMTP server	SMTP address unset	P. 8-213
2C66	Failed to connect to SMTP server	Server time time-out error	P. 8-213
2C69	Failed to connect to SMTP server	SMTP server connection error	P. 8-213
2C6A	Failed to send E-Mail message	HOST NAME error (No RFC error)	P. 8-213
2C6B	Invalid address specified in From: field	Terminal mail address error	P. 8-213
2C6C	Invalid address specified in To: field	Destination mail address error (No RFC error)	P. 8-213
2C70	SMTP service is not available	SMTP client OFF	P. 8-213
2C71	Failed SMTP Authentication	SMTP authentication error	P. 8-213
2C72	POP Before SMTP Authentication Failed	POP before SMTP error	P. 8-213
2CC0	Job canceled	Job canceling	-
2CC1	Power failure occurred	Power failure	P. 8-213

6. File sharing related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2D10	Illegal Job status	System access abnormality	P. 8-213
2D11	Not enough memory	Insufficient memory	P. 8-214
2D12	Illegal Job status	Message reception error	P. 8-214
2D13	Illegal Job status	Message transmission error	P. 8-214
2D14	Invalid parameter specified	Invalid parameter	P. 8-214
2D15	Document size exceeded limit or maximum size.	Exceeding the maximum size for file sharing	P. 8-214
2D30	Failed to create directory	Directory creation failure	P. 8-214
2D31	Failed to create file	File creation failure	P. 8-214
2D32	Failed to delete file	File deletion failure	P. 8-213
2D33	Failed to create file	File access failure	P. 8-214
2D40	Failed to convert image file format	Image conversion abnormality	P. 8-214
2D43	Encryption error. Failed to create file	Encryption error	P. 8-214
2D44	Creating the image file was not permitted.	Encryption PDF enforced mode error	P. 8-214
2D45	Failed in making meta data.	Meta data creation error (Scan to File)	P. 8-214
2D62	Failed to connect to network destination. Check destination path	File server connection error	P. 8-214
2D63	Specified network path is invalid. Check destination path	Invalid network path	P. 8-214
2D64	Logon to file server failed. Check username and password	Login failure	P. 8-214
2D65	There are too many documents in the folder. Failed in creating new document.	Exceeding documents in folder: Creating new document is failed.	P. 8-214
2D66	Failed To Process your Job. Insufficient Storage space.	Storage capacity full failure during processing	P. 8-215
2D67	FTP service is not available	FTP service not available	P. 8-215
2D68	File Sharing service is not available	File sharing service not available	P. 8-215
2D69	NetWare service is not available	NetWare service not available	P. 8-215
2DA0	Expired scan documents deleted from share folder.	Periodical deletion of scanned documents completed properly.	-
2DA1	Expired Sent Fax documents deleted from shared folder.	Periodical deletion of transmitted FAX documents completed properly.	-
2DA2	Expired Received Fax documents deleted from shared folder.	Periodical deletion of received FAX documents completed properly.	-
2DA3	Scanned documents in shared folder deleted upon user's request.	Manual deletion of scanned documents completed properly.	-

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
2DA4	Sent Fax Documents in shared folder deleted upon user's request.	Manual deletion of transmitted FAX documents completed properly.	-
2DA5	Received Fax Documents in shared folder deleted upon user's request.	Manual deletion of received FAX documents completed properly.	-
2DA6	Failed to delete file.	File deletion failure	P. 8-213
2DA7	Failed to acquire resource.	Resource acquiring failure	P. 8-214
2DC0	Job canceled	Job canceling	-
2DC1	Power failure occurred	Power failure	P. 8-215
2E10	Failed to store document(s) in USB folder.	USB storage system access abnormality	P. 8-215
2E11	Failed to store document(s) in USB folder.	Insufficient memory capacity for USB storage	P. 8-215
2E12	Failed to store document(s) in USB folder.	Message reception error in USB storage	P. 8-215
2E13	Failed to store document(s) in USB folder.	Message transmission error in USB storage	P. 8-215
2E14	Failed to store document(s) in USB folder.	Invalid parameter for USB storage	P. 8-215
2E15	Document size exceeded limit or maximum size	Exceeding the maximum size for file sharing	P. 8-215
2E30	Failed to store document(s) in USB folder.	Creation of a directory failed.	P. 8-215
2E31	Failed to store document(s) in USB folder.	File creation failure in USB storage	P. 8-215
2E32	Failed to store document(s) in USB folder.	File deletion failure in USB storage	P. 8-215
2E33	Failed to store document(s) in USB folder.	File access failure in USB storage	P. 8-215
2E40	Failed to convert image file format	Image conversion abnormality in USB storage	P. 8-216
2E43	Encryption error. Failed to create file.	Encryption failure in USB storage	P. 8-216
2E44	Creating the image file was not permitted.	Encryption PDF enforced mode error in USB storage	P. 8-216
2E45	Failed in making meta data.	Meta data creation error in USB storage (Scan to File)	P. 8-216
2E65	There are too many documents in folders. Failed in creating new document.	File creation error due to insufficient USB folder capacity	P. 8-216
2E66	Failed To Process your Job. Insufficient Storage space.	HDD full failure during USB storage	P. 8-216
2EC0	Job canceled	Job canceling	-
2EC1	Power Failure Job Aborted	Power failure in USB storage	P. 8-216

7. E-mail reception related error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
3A10	MIME Error has been detected in the received mail.	E-mail MIME error	P. 8-217
3A20	Analyze Error has been detected in the received mail.	E-mail analysis error	P. 8-217
3A30	Whole partial mails were not reached by timeout.	Partial mail time-out error	P. 8-217
3A40	Partial Mail Error has been detected in the received mail.	Partial mail related error	P. 8-217
3A50	HDD Full Error has been occurred in this mail.	Insufficient HDD capacity error	P. 8-217
3A70	Receiving partial mail was aborted since the partial mail setting has been changed to Disable.	Warning of partial mail interruption	P. 8-217
3A80	Partial mail was received during the partial mail setting is disabled.	Partial mail reception setting OFF	P. 8-217
3B10	Format Error has been detected in the received mail.	E-mail format error	P. 8-217
3B20	Content-Type Error has been detected in the received mail.	Content-Type error	P. 8-217
3B40	Decode Error has been detected in the received mail.	E-mail decode error	P. 8-217
3C10	Tiff Analyze Error has been detected in the received mail.	TIFF analysis error	P. 8-217
3C13	Tiff Analyze Error has been detected in the received mail.		P. 8-217
3C20	Tiff Compression Error has been detected in the received mail.	TIFF compression error	P. 8-217
3C30	Tiff Resolution Error has been detected in the received mail.	TIFF resolution error	P. 8-217
3C40	Tiff Paper Size Error has been detected in the received mail.	TIFF paper size error	P. 8-217
3C50	Offramp Destination Error has been detected in the received mail.	Offramp destination error	P. 8-218
3C60	Offramp Security Error has been detected in the received mail.	Offramp security error	P. 8-218
3C70	Power Failure has been occurred in Email receiving.	Power failure error	P. 8-218
3C90	OffRamp Fax transmission disable error has been detected in the received mail.	OffRamp Fax transmission disable error	P. 8-218
3D10	SMTP Destination Error has been detected in the received mail. This mail was deleted.	Destination address error	P. 8-218
3D20	Offramp Destination limitation Error has been detected in the received mail.	Offramp destination limitation error	P. 8-218

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
3D30	Fax Board Error has been occurred in the received mail.	FAX board error	P. 8-218
3E10	POP3 Connection Error has been occurred in the received mail.	POP3 server connection error	P. 8-218
3E20	POP3 Connection Timeout Error has been occurred in the received mail.	POP3 server connection time-out error	P. 8-218
3E30	POP3 Login Error has been occurred in the received mail.	POP3 login error	P. 8-218
3E40	POP3 Login Error occurred in the received mail.	POP3 login method error	P. 8-218
3F10	File I/O Error has been occurred in this mail. The mail could not be received until File I/O is recovered.	File I/O error	P. 8-218
3F20			P. 8-218

8.2.4 Printer function error

Following codes are displayed at the end of the user name on the print job log screen.

Error code	Contents	Troubleshooting
4011	Print job cancellation - Print job (copy, list print, network print) is deleted from the print job screen.	P. 8-219
4021	Print job power failure - The power of the equipment is turned OFF during print job (copy, list print, network print).	P. 8-219
4031	HDD full during print - Large quantity image data by private print or invalid network print are saved in HDD.	P. 8-219
4041	User authentication error: The user who intended to print a document is not registered as a user.	P. 8-219
4042	Department authentication error? A department whose code is specified for a print job is not registered.	P. 8-219
4045	Problem in LDAP server connection or LDAP server authorization settings	P. 8-219
4111	Quota over error (The number of the assigned pages set by department and user management has reached 0.): The numbers of output pages have exceeded those specified with both of the department code and the user code at the same time.	P. 8-219
4112	Quota over error (The number of the assigned pages set by user management has reached 0.): The number of output pages has exceeded the one specified with the user code.	P. 8-219
4113	Quota over error (The number of the assigned pages set by department management has reached 0.): The number of output pages has exceeded the one specified with the department code.	P. 8-219
4121	Job canceling due to external counter error	P. 8-219
4211	Printing data storing limitation error: Printing with its data being stored to the HDD temporarily (Proof print, Private print, Scheduled print, etc.) cannot be performed.	P. 8-219
4212	e-Filing storing limitation error: Printing with its data being stored to the HDD (print and e-Filing, print to e-Filing, etc.) cannot be performed.	P. 8-219
4213	File storing limitation error: The file storing function is set to "disabled".	P. 8-219
4214	Fax/Internet Fax transmission limitation error: Fax / Internet Fax transmission function or Network Fax/Internet Fax function is disabled.	P. 8-219
4221	Private-print-only error: Jobs other than Private print jobs cannot be performed.	P. 8-219
4231	Hardcopy security printing error: hardcopy security printing job is performed when the function is restricted.	P. 8-219
4311	Not being authorized to perform JOB	P. 8-220
4312	Not authorized to store a file	P. 8-220
4313	No privilege for e-Filing storage: No privilege to store e-Filing data is given. (e-Filing storage permission)	P. 8-220
4314	No privilege for Fax / Internet Fax transmission: No privilege to send Fax or Internet Fax jobs is given. (Fax / Internet Fax transmission permission)	P. 8-220
4321	No privilege for print settings: No privilege to print with the specified settings is given. (Print setting permission)	P. 8-220

Error code	Contents	Troubleshooting
4411	Image data creation failure: Data that you tried to print may be corrupted. <ul style="list-style-type: none"> • Network print: Data are corrupted or invalid. • Direct print: A file is corrupted or not in a supported format. 	P. 8-220
4412	Double-sign encoding error: A double-sign encoding error occurred because the PDF file is encrypted in a forbidden language or in a language not supported.	P. 8-220
4611	Font download failure (exceeding maximum number of registrations): A new font cannot be registered because the number of fonts registered in this equipment has reached the limit.	P. 8-220
4612	Font download failure (HDD full): A new font cannot be registered because there is not sufficient space in the font storage area of this equipment.	P. 8-220
4613	Font download failure (others): A new font cannot be registered due to other abnormality.	P. 8-220
4621	Font deletion failure: A font cannot be deleted because the specified font does not exist, the specified font is undeletable or any other abnormality occurred.	P. 8-220
4F10	Printing was not performed successfully due to other abnormalities.	P. 8-220

8.2.5 TopAccess related error/Communication error with external application

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
5010	-	Internal setting error: There is a print job, a proof print job, a private print job, a print job without a set department code, a scan job or a fax job remaining in this equipment.	P. 8-221
5012	Invalid temporary password and permanent password	Authentication error: A temporary password downloaded from e-Bridge and entered in this equipment is not valid, or the permanent password set in the e-Bridge is not valid.	P. 8-221
5013	e-Bridge communication error	e-Bridge communication error: Communication is attempted while the e-Bridge is enabled for some reason such as version upgrade.	P. 8-221
5014	No SSL certificate	No SSL certificate: There is no SSL certificate or the certificate is not in a correct file format.	P. 8-221
5015	Invalid SSL certificate	Invalid SSL certificate: SSL certificate is not valid.	P. 8-221
5016	Expired SSL certificate/Incorrect time in MFP	Expired SSL certificate: SSL certificate is expired.	P. 8-222

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
5017	Other SSL certificate related error	Other SSL certificate related error: SSL certificate is invalid.	P. 8-222
5018	Invalid DNS error	Invalid DNS error: DNS address is invalid.	P. 8-222
5019	Connection error	Connection error: Settings for initial URL and proxy are incorrect.	P. 8-222
501A	Proxy error	Proxy error: IP address or port for proxy setting is invalid.	P. 8-222
501B	No URL (host/port) or invalid path	No URL (host/port) or invalid path: Initial URL is invalid.	P. 8-223
5030	HTTP communication error	An error in the HTTP communication	P. 8-223
50FF	eBR2 internal error	A fatal error occurred in the MFP	P. 8-223
5110	Toner Not Recognized - Please Check Toner.	Toner cartridge detection error.	P. 8-223
5212	Time for Slit Glass and Main Charger Cleaning - Please Clean Slit Glass and Main Charger.	Appears when the time for main charger cleaning comes (at every output of approx. 10,000 sheets)	P. 8-223
5BD0	Power failure occurred during restore	Power supply is cut off during the restoration of database sent from TopAccess	P. 8-224
5C10	FAX Unit is not attached.	Network FAX is disabled because the FAX Unit is not attached	P. 8-224
5C11	Security error on Address Book.	The network FAX job failed because the specified address is not registered in the Address Book	P. 8-225
5C20	The file has been imported	Displayed when data have been imported from TopAccess (Not an error message)	P. 8-225
5C21	Failed to import the file - Invalid file format	Data import from TopAccess failed due to invalid file format	P. 8-225
5C22	Failed to import the file - Internal error	Data import from TopAccess failed due to an internal error, the cause of which is unknown	P. 8-225

8.2.6 MFP access error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
6007	Failed user login	Unsuccessful User Login to MFP: User authentication cannot be done because connection to the authentication server has failed.	P. 8-227

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
6008	Failed to connect on External LDAP server for Role Base Access Control	Failed to connect on External Role Base Access Control (LDAP) Server: User authentication cannot be done because connection to an external RBAC server has failed.	P. 8-227
6013	Failed to connect on the authentication server	Connection failure to the authentication server: Failed to connect to the authentication server	P. 8-227
6014	Detected the authentication server that can not be connected	Detected the authentication server that can not be connected: The authentication server that cannot be accessed is detected	P. 8-227
6032	Illegal period.	Card related error: Expired card: The card cannot be used because it has expired.	P. 8-227
6033	No entering record.	Card related error: Invalid flag data (no room-entry data): The card cannot be used because no room-entry data are recorded in it.	P. 8-228
6034	Illegal entering record.	Card related error: Invalid flag data (invalid card data): The card cannot be used because the data required for the use of the card are not correctly set.	P. 8-228
6041	Card Authentication Failed because of Card Reading Error	Card authentication: Card related error: Card data cannot be obtained correctly.	P. 8-228
6042	Card Authentication Failed because of setting Error	Card authentication: Card setting error: The self-diagnostic code required for card authentication is not set in this equipment correctly.	P. 8-228
6121	SecureErase fails	Automatic Secure Erase failure	P. 8-228
6131	SNTP server synchronization failure	Synchronization with the SNTP server failed.	P. 8-229

8.2.7 Maintenance error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
7101	Failed to update Copier Firmware	System firmware installation failure	P. 8-230
7103	Failed to update Copier Main ROM	Engine firmware installation failure	P. 8-230
7105	Failed to update Copier Scanner ROM	Scanner firmware installation failure	P. 8-230
7109	Failed to update Printer Driver	Printer driver upload failure	P. 8-230

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
710B	Failed to update Point And Print	Point and Print data upload failure	P. 8-230
710F	Failed to install Language Pack	Failed to install Language Pack Language Pack installation failure	P. 8-231
7111	Failed to install Patch	Patch installation failure	P. 8-230
7113	Failed to install Plugin	Plug-in installation failure	P. 8-230
7115	Failed to update HDD Data	HDD data installation failure	P. 8-230
7117	Failed to update Reversing Automatic Document Feeder ROM	DF firmware installation failure	P. 8-230
711D	Failed to remove License Key	License key returning failure	P. 8-231
711F	Failed to install License Key	License key installation failure	P. 8-231
71A4	Failed in consistency confirmation of cryptographic key	Cryptographic key consistency confirmation failure	P. 8-231
71AA	Invalid Error Occurd while getting Certificate from SCEP server	Invalid Error Occurd while getting Certificate from SCEP server	P. 8-231
71AB	Timeout Error Occurd while getting Certificate from SCEP server	Timeout Error Occurd while getting Certificate from SCEP server	P. 8-232
71AC	File Save Error Occurd while getting Certificate from SCEP server	File Save Error Occurd while getting Certificate from SCEP server	P. 8-232
71B0	Failed to decrypt Software Package	Software package file decryption failure	P. 8-232

8.2.8 Network error

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
8000	Static IPv4 duplicated address detected	IPv4 address overlaps.	P. 8-232
8011	Link Local address of IPv6 was duplicated.	Linklocal Address Conflict	P. 8-233
8012	Manual address of IPv6 was duplicated.	Manual IPv6 Address Conflict	P. 8-233
8013	Stateless address of IPv6 was duplicated.	Stateless Address Conflict	P. 8-233
8014	Stateful address of IPv6 was duplicated.	Stateful Address Conflict	P. 8-233
8022	Authentication Failure	Failed in 802.1X authentication.	P. 8-233
8023	Can not contact Authentication Server/Switch	Failed in connection to authentication server and switch.	P. 8-233
8024	Certificate verification Failure	Failed in verification of certificate.	P. 8-234
8031	No IKE proposal chosen	Ipsec error for ikev1 certification failed	P. 8-234
8032	IKE Certificate Authentication failed	Ipsec error for wrong proposal choosen	P. 8-234

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
8033	IKE Pre-shared key Authentication failed	Ipssec error if auth for shared key failed	P. 8-234
8034	Invalid Certificate	Ipssec error if invalid certificate uploaded	P. 8-234
8035	Certificate Type unsupported	Ipssec error if certificate not supported	P. 8-235
8036	Invalid certificate authority	Ipssec error if invalid certificate authentication	P. 8-235
8037	Certificate unavailable	Ipssec error if certificate are not available	P. 8-235
8038	No ISAKMP SA established	Ipssec error for SA is not present	P. 8-235
8039	Invalid Signature	Ipssec error for invalid signaturer for certificate	P. 8-235
803A	No IKEv2 proposal chosen	Ipssec error is proposal chosen is wrong	P. 8-236
803B	IKEv2 Certificate Authentication failed	Ipssec error for ikev2 certification failed	P. 8-236
803C	IKEv2 Secret key Authentication failed	Ipssec error for ikev2 if secret key auth failed	P. 8-236
803D	Falling Back to IKEv1	Ipssec error if peer dosent support IKEv2 and falling back to IKEv1	P. 8-236
803E	ISAKMP SA unusable (deleted)	Ipssec error if ISAKMP SA is not created of destroyed due to some uncertain condition	P. 8-236
803F	Crypto operation failed	Ipssec error for ikev2 if crypto operation failed	P. 8-237
8040	Invalid key information	Ipssec error for ikev2 if key info is invalid	P. 8-237
8041	CA not trusted	Ipssec error for ikev2 if CA is not trusted	P. 8-237
8042	Authentication Method mismatch	Ipssec error if auth method is not matching	P. 8-237
8043	IKE Version mismatch	Ipssec error if ike version is not matching	P. 8-237
8044	Encapsulation mode mismatch	Ipssec error for encapsulation is not matching	P. 8-238
8045	Peer IP Address mismatch	Ipssec error for peer ip mismatch	P. 8-238
8046	Local IP Address mismatch	Ipssec error for local ip mismatch	P. 8-238
8047	Local ID mismatch	Ipssec error for local id mismatch	P. 8-238
8048	Remote ID mismatch	Ipssec error for remote id mismatch	P. 8-238
8049	IPsec Remote IP mismatch	Ipssec error for remote ip mismatch	P. 8-238
804A	IKEv1/IKEv2 Timed out	Ipssec error for ike timeout	P. 8-239
804B	Invalid manual key data	Ipssec error id manual key is not valid	P. 8-239
8061	Secure Update to Primary IPv4 DDNS failed.	Secure primary DDNS update error	P. 8-239
8062	Secure Update to Secondary IPv4 DDNS failed	Secure secondary DDNS update error	P. 8-239

Error code	Message displayed in the TopAccess screen	Contents	Troubleshooting
8063	Secure Update to Primary IPv6 DDNS failed.	Secure primary DDNS update error	P. 8-239
8064	Secure Update to Secondary IPv6 DDNS failed	Secure secondary DDNS update error	P. 8-239
8065	IPv6 Update to Primary DDNS failed.	IPv6 primary DDNS update error	P. 8-239
8066	IPv6 Update to Secondary DDNS failed.	IPv6 secondary DDNS update error	P. 8-239
8067	IPv4 Update to Primary DDNS failed.	IPv4 primary DDNS update error	P. 8-239
8068	IPv4 Update to Secondary DDNS failed.	IPv4 secondary DDNS update error	P. 8-239
8069	Invalid TSIG/SIG(0) Key file uploaded	This message is displayed when the key file for SIG(0) or TSIG is invalid	P. 8-240
8101	Wireless association with Access point failure	Wireless association with Access point failure	P. 8-240
8102	Unable to contact Access point	MFP not able to contact the Access point with the specified SSID	P. 8-240
8103	Certificate verification Failure	Wireless Certificate verification failure	P. 8-240
8121	Domain - General Failure during Authentication	Domain - General Failure during Authentication	P. 8-240
8122	Domain - Invalid Username or Password	Domain - Invalid Username or Password	P. 8-241
8123	Domain - Server not present in Network	Domain - Server not present in Network	P. 8-241
8124	Domain - User account is disabled on Server	Domain - User account is disabled on Server	P. 8-241
8125	Domain - User account has expired and cannot be used for logon	Domain - User account has expired and cannot be used for logon	P. 8-241
8126	Domain - User account is locked and cannot be used for logon	Domain - User account is locked and cannot be used for logon	P. 8-241
8127	Domain - Invalid logon hours for the User	Domain - Invalid logon hours for the User	P. 8-242
8128	Active Directory Domain - Clock Skew error due to difference in Time between Server and MFP	Active Directory Domain - Clock Skew error due to difference in Time between Server and MFP	P. 8-242
8129	Active Directory Domain - Kerberos Ticket has expired and cannot be used for Authentication	Active Directory Domain - Kerberos Ticket has expired and cannot be used for Authentication	P. 8-242
812A	Active Directory Domain - Verification of the Ticket has failed	Active Directory Domain - Verification of the Ticket has failed	P. 8-242
812B	Active Directory Domain-The Domain specified could not be found	Active Directory Domain-The Domain specified could not be found	P. 8-242

8.2.9 Error history

In the setting mode (08-9703), the latest twenty groups of error data will be displayed.

Display example

EA10	99999999	2013-04-14 17:57:32	064	064	2362_1000_0000_0 _XXXXXXXXXX
Error code	Total counter	YYYY-MM-DD HH:MM:SS	MMM	NNN	ABCD_EFHI_JLOP_Q_R
4 digits	8 digits	14 digits	3 digits	3 digits	23 digits

A	Paper source
	0: Not selected 1: Bypass feed 2: LCF 3: 1st drawer 4: 2nd drawer 5: PFP upper drawer 6: PFP lower drawer 7: Unused 8: Unused
B	Paper size code
	0: A5/ST 1: A5-R 2: ST-R 3: LT, 4: A4 5: B5-R 6: LT-R 7: A4-R 8: OTHER/UNIV 9: B5, A: FOLIO/COMP B: LG C: B4 D: LD E: A3 F: 13"LG G: Unused H: A6-R I: Post card J: 8.5"SQ K: A3-wide L: LD wide M: 8K N: 16K-R O: 16K P: Unused Q: Unused R: Unused S: Unused T: Unused U: SRA3(320x450) V: SRA3(320x460) Z: Not selected
C	Sort mode/staple mode
	0: Non-sort/Non-staple 1: Group 2: Sort 7: Front staple 8: Double staple 9: Rear staple A: Saddle stitch
D	ADF mode
	0: Unused 1: AUTO FEED (SADF) 2: STACK FEED
E	APS/AMS mode
	0: Not selected 1: APS 2: AMS
F	Duplex mode
	0: Not selected 1: Book 2: Double-sided/Single-sided 4: Double-sided/Duplex copying 8: Single-sided/Duplex copying
G	Unused
H	Image shift
	0: Unused 1: Book 2: Left 3: Right 4: Top 5: Bottom 6: Book+Top 7: Book+Bottom 8: Left+Top 9: Left+Bottom A: Right+Top B: Right+Bottom
I	Editing
	0: Unused 1: Masking 2: Trimming 3: Mirror image 4: Unused 5: NEG/POS
J	Edge erase/Dual-page
	0: Unused 1: Edge erase 2: Dual-page 3: Edge erase & Dual-page
K	Unused
L	Function
	0: Unused 1: Copying 2: FAX/Internet FAX transmission 3: FAX/Internet FAX/E-mail reception printing 4: Unused 5: Printing/List print 6: Scan/E-mail transmission
MMM	Primary scanning reproduction ratio (Display in hexadecimal)
	(Mx256)+(Mx16)+M
NNN	Secondary scanning reproduction ratio (Display in hexadecimal)
	(Nx256)+(Nx16)+N
O	Color mode
	0: Auto color 1: Full color 2: Black 3: Unused 4: Twin color copy 5: Gray scale 6: Unused 7: Image smoothing

P	Media type 0: Plain paper 1: Thick 1 2: Thick 2 3: Thick 3 4: Thick 4 5: Special paper 1 6: Special paper 2 7: Recycled paper 8: Plain paper 1 9: Plain paper 2 A: Thin paper B: OHP film C: Thick 1/ reverse D: Thick 2/ reverse E: Thick 3/ reverse F: Thick 4/ reverse G: Special paper 1/ reverse H: Special paper 2/ reverse I: Envelope J: Tab paper Z: Unused
Q	RADF size mixed 0: Unused 1: Size mixed 2: Single-size document
R	Workflow ID: 10-digit ID

8.3 Diagnosis and Prescription for Each Error Code

8.3.1 Check item

Check item	Contents
Sensor check	<ul style="list-style-type: none"> • Check the sensor in the test mode. • Check that there is no dust on the sensor. • Check that the actuator is correctly operated.
Connector check	<ul style="list-style-type: none"> • Check that the connector is not disconnected. • Check that the pins are not deformed and do not come off. • Disconnect and reconnect the connector.
Harness check	<ul style="list-style-type: none"> • Check if the harnesses are open circuited.
Motor check	<ul style="list-style-type: none"> • Check the motor in the test mode. • Check that there is no abnormality in the driving section. • Check that there is no abnormality in the roller.
Board check	<ul style="list-style-type: none"> • Check if the board is short circuited or open circuited.

8.3.2 Paper transport jam (paper exit section)

[E010] Jam not reaching the exit sensor

Classification	Error content
Paper transport jam	Jam not reaching the exit sensor

Phenomenon of paper jamming	Check item	Measures
Paper separation failure at separation plate in the Fuser Unit	Fuser unit	<ul style="list-style-type: none"> • Check the gap between the separation plate and the fuser belt. (Refer to "6.7.4 Gap adjustment for separation plate".) • Paper transport check
	Drawer	Check that paper is not skewed in the side guides of the drawer.
	Leading edge margin	Adjust the margin with 05-4402 (Leading edge position adjustment) to "Color: 5.5 mm". Widen the margin if needed. (Specification Black: 4.2 mm / Color: 5 mm) <ul style="list-style-type: none"> • Use A3/LD paper • It is easy to check skew with a copy of a solid image (about 10 mm on its leading edge). Refer to "6.1.1 Image Related Adjustment".
Paper jamming at separation finger in the Fuser Unit.	Fuser unit	Clean the separation finger. Check if the fingers or springs of the separation finger are securely attached. Replace the separation finger.
The leading edge of paper has no scratches and the paper stops before being fused.	Fuser unit	Check that the pressure release screw of the pressure roller is securely tightened and pressure is properly applied.
	Transfer belt	Replace the transfer belt. Replace the transfer belt unit.
Paper folded in one side and fused during duplex printing		Check if toner adheres to the fuser entry guide. Clean it if needed.

Phenomenon of paper jamming	Check item	Measures
All	Exit sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[B]) • Connector check • Harness check
	LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN333) • Harness check

Parts to be replaced	Remark
Separation plate of the fuser unit	
Separation finger of the fuser unit	
Transfer belt	
Transfer belt unit	
Exit sensor	
LGC board	

[E020] Stop jam at the exit sensor

Classification	Error content
Paper transport jam	Stop jam at the exit sensor

Phenomenon of paper jamming	Check item	Measures
Paper jamming at separation finger in the Fuser Unit.	Fuser unit	Clean the separation finger. Check if the fingers or springs of the separation finger are securely attached. Replace the separation finger.
Paper separation failure at separation plate in the fuser unit	Fuser unit	<ul style="list-style-type: none"> • Check the gap between the separation plate and the fuser belt. (Refer to "6.7.4 Gap adjustment for separation plate".) • Paper transport check
	Drawer	Check that paper is not skewed in the side guides of the drawer.
	Leading edge margin	Adjust the margin with 05-4402 (Leading edge position adjustment) to "Color: 5.5 mm". (Specification Black: 4.2 mm / Color: 5 mm) <ul style="list-style-type: none"> • Use A3/LD paper • It is easy to check skew with a copy of a solid image (about 10 mm on its leading edge). Refer to "6.1.1 Image Related Adjustment".
Scratches on the leading edge of paper		Check if toner adheres to the exit gate. Clean it if needed.

Phenomenon of paper jamming	Check item	Measures
All	Self-diagnosis code	Change the setting value of 08-4542 (Switching for incorrect size jam detection) from "1" (Disabled) to "0"(Enabled).
	Exit sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[B]) • Actuator check • Connector check • Harness check
	LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN333) • Harness check

Parts to be replaced	Remark
Separation plate of the fuser unit	
Separation finger of the fuser unit	
Exit sensor	
LGC board	

8.3.3 Paper misfeeding

[E110] ADU misfeeding (paper not reaching the registration sensor)

Classification	Error content
Paper transport jam	ADU misfeeding (paper not reaching the registration sensor)

Phenomenon of paper jamming	Check item	Measures
Paper stop jam at the registration roller position	Registration guide	Check the registration guide. Replace it if needed.
All	Registration sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[ALL]OFF/[7]/[F]) • Connector check (CN337) • Harness check
	LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN337, CN338) • Harness check
	ADU clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-222) • Connector check (CN338) • Harness check
	ADU	Check if the connector between the ADU and equipment is connected.

Parts to be replaced	Remark
Registration sensor	
LGC board	
ADU clutch	
Rollers in the ADU	Clean or replace it.

[E120] Bypass misfeeding (paper not reaching the bypass feed sensor)

Classification	Error content
Paper transport jam	Bypass misfeeding (paper not reaching the bypass feed sensor)

Check item	Measures
Bypass feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-204 and the input check: 03-[FAX]ON/[4]/[D]) • Connector check (CN338) • Harness check
Bypass feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the output check: 03-204 and the input check: 03-[FAX]ON/[4]/[D]) • Connector check (CN338) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN338) • Harness check

Parts to be replaced	Remark
Bypass feed clutch	
Bypass feed sensor	
LGC board	

Parts to be replaced	Remark
Bypass transport roller	Replace it if it is worn out.
Bypass feed roller	Replace it if it is worn out.
Bypass separation roller	Replace it if it is worn out.
Bypass pickup roller	Replace it if it is worn out.

[E130] 1st drawer misfeeding (paper not reaching the 1st drawer feed sensor)

Classification	Error content
Paper transport jam	1st drawer misfeeding (paper not reaching the 1st drawer feed sensor)

Check item	Measures
1st drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[G]) • Connector check (CN337) • Harness check
1st drawer feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-201) • Harness check • Connector check (CN337)
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN337) • Harness check

Parts to be replaced	Remark
1st drawer feed sensor	
1st drawer feed clutch	
LGC board	
1st drawer feed roller	Replace it if it is worn out.
1st drawer separation roller	Replace it if it is worn out.
1st drawer pickup roller	Replace it if it is worn out.

[E140] 2nd drawer misfeeding (paper not reaching the 2nd drawer feed sensor)

Classification	Error content
Paper transport jam	2nd drawer misfeeding (paper not reaching the 2nd drawer feed sensor)

Check item	Measures
2nd drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[F]) • Connector check (CN348) • Harness check
2nd drawer feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-202) • Harness check • Connector check (CN348)
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN348) • Harness check

Parts to be replaced	Remark
2nd drawer feed sensor	
2nd drawer feed clutch	

Parts to be replaced	Remark
LGC board	
2nd drawer feed roller	Replace it if it is worn out.
2nd drawer separation roller	Replace it if it is worn out.
2nd drawer pickup roller	Replace it if it is worn out.

[E150] PFP upper drawer misfeeding (paper not reaching the PFP upper drawer feed sensor)

Classification	Error content
Paper transport jam	PFP upper drawer misfeeding (paper not reaching the PFP upper drawer feed sensor)

Check item	Measures
PFP upper drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[ALL]OFF/[2]/[D]) • Connector check (CN241, CN243, CN349) • Harness check
PFP upper drawer feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-226) • Connector check (CN241, CN243, CN349) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN349) • Harness check
PFP board	<ul style="list-style-type: none"> • Board check • Connector check (CN241, CN247) • Harness check

Parts to be replaced	Remark
PFP upper drawer feed sensor	
PFP upper drawer feed clutch	
LGC board	
PFP board	
PFP upper drawer feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.

[E160] PFP lower drawer misfeeding (paper not reaching the PFP lower drawer feed sensor)

Classification	Error content
Paper transport jam	PFP lower drawer misfeeding (paper not reaching the PFP lower drawer feed sensor)

Check item	Measures
PFP upper drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[ALL]OFF/[8]/[D]) • Connector check (CN241, CN243, CN349) • Harness check
PFP upper drawer feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-228) • Connector check (CN241, CN243, CN349) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN349) • Harness check

Check item	Measures
PFP board	<ul style="list-style-type: none"> • Board check • Connector check (CN241, CN247) • Harness check

Parts to be replaced	Remark
PFP lower drawer feed sensor	
PFP lower drawer feed clutch	
LGC board	
PFP board	
PFP lower drawer feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.

[E190] LCF misfeeding (paper not reaching the LCF feed sensor)

Classification	Error content
Paper transport jam	LCF misfeeding (paper not reaching the LCF feed sensor)

Check item	Measures
LCF feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[0]/[G]) • Connector check (CN1, CN6, CN349) • Harness check
LCF feed clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-209) • Connector check (CN1, CN5, CN349) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN349) • Harness check
PFP board	<ul style="list-style-type: none"> • Board check • Connector check (CN1, CN6) • Harness check

Parts to be replaced	Remark
LCF feed sensor	
LCF feed clutch	
LGC board	
PFP board	
LCF feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.

8.3.4 Paper transport jam

[E200] 1st drawer transport jam (not reaching the registration sensor)

[E210] 2nd drawer transport jam (not reaching the registration sensor)

[E270] Bypass transport jam (not reaching the registration sensor)

[E300] PFP upper drawer transport jam (not reaching the registration sensor)

[E330] PFP lower drawer transport jam (not reaching the registration sensor)

[E3C0] LCF transport jam (not reaching the registration sensor)

Classification	Error content
Paper transport jam	1st drawer transport jam (not reaching the registration sensor) 2nd drawer transport jam (not reaching the registration sensor) Bypass transport jam (not reaching the registration sensor) PFP upper drawer transport jam (not reaching the registration sensor) PFP lower drawer transport jam (not reaching the registration sensor) LCF transport jam (not reaching the registration sensor)

Check item	Measures
Registration sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[ALL]OFF/[7]/[F]) • Connector check (CN348) • Harness check
Lower transport clutches	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-229, 231) • Connector check (CN348) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN348) • Harness check

Parts to be replaced	Remark
Registration sensor	
Lower transport clutch	
LGC board	
Feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.
Transport roller	Replace it if it is worn out.

[E220] 2nd drawer transport jam (not reaching the 1st drawer feed sensor)
[E310] PFP upper drawer transport jam (not reaching the 1st drawer feed sensor)
[E340] PFP lower drawer transport jam (not reaching the 1st drawer feed sensor)
[E3D0] LCF transport jam (not reaching the 1st drawer feed sensor)

Classification	Error content
Paper transport jam	2nd drawer transport jam (not reaching the 1st drawer feed sensor) PFP upper drawer transport jam (not reaching the 1st drawer feed sensor) PFP lower drawer transport jam (not reaching the 1st drawer feed sensor) LCF transport jam (not reaching the 1st drawer feed sensor)

Check item	Measures
1st drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[G]) • Connector check (CN337) • Harness check
Lower transport clutches (high/low speed)	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-230, 233) • Connector check (CN338) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN337, CN348) • Harness check

Parts to be replaced	Remark
1st drawer feed sensor	
Lower transport clutches (high/low speed)	
LGC board	
Feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.
Transport roller	Replace it if it is worn out.

[E320] PFP upper drawer transport jam (not reaching the 2nd drawer feed sensor)
[E350] PFP lower drawer transport jam (not reaching the 2nd drawer feed sensor)
[E3E0] LCF transport jam (not reaching the 2nd drawer feed sensor)

Classification	Error content
Paper transport jam	PFP upper drawer transport jam (not reaching the 2nd drawer feed sensor) PFP lower drawer transport jam (not reaching the 2nd drawer feed sensor) LCF transport jam (not reaching the 2nd drawer feed sensor)

Check item	Measures
2nd drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[F]) • Connector check (CN348) • Harness check
Lower transport clutches (high/low speed)	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-230, 233) • Connector check (CN348) • Harness check

Check item	Measures
PFP transport clutch	<ul style="list-style-type: none"> Clutch check (Perform the output check: 03-225) Connector check (CN241, CN244, CN349) Harness check
LGC board	<ul style="list-style-type: none"> Board check Connector check (CN348, CN349) Harness check
PFP board	<ul style="list-style-type: none"> Board check Connector check (CN241, CN244) Harness check

Parts to be replaced	Remark
2nd drawer feed sensor	
Lower transport clutches (high/low speed)	
PFP transport clutches	
LGC board	
PFP board	
Feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.
Transport roller	Replace it if it is worn out.

[E360] PFP lower drawer transport jam (not reaching the PFP upper drawer feed sensor)

Classification	Error content
Paper transport jam	PFP lower drawer transport jam (not reaching the PFP upper drawer feed sensor)

Check item	Measures
2nd drawer feed sensor	<ul style="list-style-type: none"> Sensor check (Perform the input check: 03-[FAX]ON/[1]/[F]) Connector check (CN348) Harness check
Lower transport clutches (high/low speed)	<ul style="list-style-type: none"> Clutch check (Perform the output check: 03-230, 233) Connector check (CN348) Harness check
PFP transport clutch	<ul style="list-style-type: none"> Clutch check (Perform the output check: 03-225) Connector check (CN241, CN244, CN349) Harness check
LGC board	<ul style="list-style-type: none"> Board check Connector check (CN349) Harness check
PFP board	<ul style="list-style-type: none"> Board check Connector check (CN241, CN244) Harness check

Parts to be replaced	Remark
PFP lower drawer feed sensor	
PFP transport clutches	
LGC board	
PFP board	

Parts to be replaced	Remark
Feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.
Pickup roller	Replace it if it is worn out.
PFP transport roller	Replace it if it is worn out.

[E510] ADU transport stop jam

Classification	Error content
Paper transport jam	ADU transport stop jam

Phenomenon of paper jamming	Check item	Measures
Paper falling on the inner tray	ADU	Check if the connector between the ADU and equipment is connected.
Paper jamming at the exit gate section	Drawer	Check that paper is not skewed in the side guides of the drawer. Change the setting value of 08-4564 from "0" to "1". Check the setting size and paper size. Example: Check if the paper size is A4 though A3 is set.
	Fuser Unit	Check that springs are securely attached to the separation finger.
Stop in the fuser unit / scratches on the leading edge of paper	Fuser Unit	Check if the bracket or jam releasing guide of the fuser unit is deformed. Replace it if needed.
All	ADU entrance sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[4]/[B]) • Connector check (CN338, CN440, CN441) • Harness check
	Exit motor	<ul style="list-style-type: none"> • Motor check (Perform the output check: 03-121/171) • Connector check (CN332) • Harness check
	ADU motor	<ul style="list-style-type: none"> • Motor check (Perform the output check: 03-110/160) • Connector check (CN338, CN440, CN445) • Harness check
	LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN338) • Harness check
	ADU board	<ul style="list-style-type: none"> • Board check • Connector check (CN440, CN441, CN445) • Harness check

Parts to be replaced	Remark
ADU entrance sensor	
Exit motor	
ADU motor	
LGC board	
ADU board	
Rollers in the ADU	Replace it if it is worn out.
Exit roller	Replace it if it is worn out.

Parts to be replaced	Remark
Pressure spring	

[E520] Stop jam in the ADU

Classification	Error content
Paper transport jam	Stop jam in the ADU

Check item	Measures
ADU entrance sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[4]/[A]) • Connector check (CN440, CN442, CN338) • Harness check
ADU clutch	<ul style="list-style-type: none"> • Clutch check (Perform the output check: 03-222) • Connector check (CN338, J564) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN338) • Harness check
ADU board	<ul style="list-style-type: none"> • Board check • Connector check (CN440, CN442) • Harness check

Parts to be replaced	Remark
ADU entrance sensor	
ADU clutch	
LGC board	
ADU board	
Rollers in the ADU	Replace it if it is worn out.

[EB50] Paper remaining on the transport path due to multiple feeding

Classification	Error content
Paper transport jam	Paper remaining on the transport path due to multiple feeding

When the paper is fed from any of the 1st drawer, bypass feed unit or ADU:
(When the paper is fed from the 1st drawer:)

Check item	Measures
1st drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1]/[G]) • Connector check (CN337) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN337) • Harness check

Parts to be replaced	Remark
1st drawer feed sensor	
LGC board	

(When the paper is fed from the bypass feed unit:)

Check item	Measures
1st drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[4/[D]]) • Connector check (CN338) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN338) • Harness check

Parts to be replaced	Remark
1st drawer feed sensor	
LGC board	

(When the paper is fed from the ADU:)

Check item	Measures
ADU entrance sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[4/[A]]) • Connector check (CN440, CN442, CN338) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN338) • Harness check
ADU board	<ul style="list-style-type: none"> • Board check • Connector check (CN440, CN442) • Harness check
Registration sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[ALL]OFF/[7/[F]]) • Connector check (CN337) • Harness check

Parts to be replaced	Remark
ADU entrance sensor	
LGC board	
ADU board	
Registration sensor	
Roller	Replace it if it is worn out.

When the paper is fed from any of the 2nd drawer, PFP or LCF:

Check item	Measures
1st/2nd drawer feed sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX]ON/[1/[F]]) • Connector check (CN348) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN348) • Harness check

Parts to be replaced	Remark
1st/2nd drawer feed sensor	
LGC board	
Roller	Replace it if it is worn out.

[EB60] Paper remaining on the transport path due to multiple feeding

Classification	Error content
Paper transport jam	

Check item	Measures
Registration sensor	<ul style="list-style-type: none">• Sensor check (Perform the input check: 03-[ALL]OFF/[7]/[F])• Connector check (CN337)• Harness check
PFC board	<ul style="list-style-type: none">• Connector check (CN337)• Board check
Drive unit, Rollers	<ul style="list-style-type: none">• Gear check• Roller check

Parts to be replaced	Remark
Registration sensor	
PFC board	
Rollers	Replace it if it is worn out.

8.3.5 Other paper jam

[E011] Paper jam caused by clinging to the transfer belt (Paper not reached the paper clinging detection sensor)

Classification	Error content
Other paper jam	Paper jam caused by clinging to the transfer belt (Paper not reached the paper clinging detection sensor)

Phenomenon of paper jamming	Check item	Measures
Paper stop jam at registration roller	Drawer	Check if paper is folded at the leading edge.
	Registration guide	Replace the registration guide.
No scratches on the paper leading edge	Drawer	Check if paper is folded at the leading edge. Check that paper is not skewed in the side guides of the drawer.
	Process unit	Clean the process unit or replace it.
	Paper clinging detection sensor	Clean the sensor Clean the facing section of the sensor.

Phenomenon of paper jamming	Check item	Measures
All	Registration motor	<ul style="list-style-type: none"> Motor check (Perform the input check: 03-108/158) Connector check (CN332) Harness check
	LGC board	<ul style="list-style-type: none"> Board check Connector check (CN332, CN337) Harness check
	Paper clinging detection sensor	<ul style="list-style-type: none"> Sensor check (Perform the input check: 03-[ALL]OFF/[7]/[E]) Connector check (CN337) Harness check
	Check of the 2nd transfer roller connection	<p>Check that the 2nd transfer roller shaft is securely grounded via the frame.</p> <ul style="list-style-type: none"> Check if the bearing and the leaf spring contact properly. Check if the shaft tip and the leaf spring contact properly, and that conductive grease is applied.
	Change of the 2nd transfer bias	<p>If the leading edge of paper clings to the 2nd transfer roller and causes paper jamming, change the 2nd transfer roller bias correction factor of the leading/trailing edge of the paper. (The larger the value, the smaller the transfer voltage of the leading/trailing edge of the paper.)</p> <p>Codes to be changed (Initial value of the transfer bias of the leading/trailing edge of the paper: 0)</p> <ul style="list-style-type: none"> Color mode print (top side): 05-2938-* Color mode print (back side): 05-2939-* Black mode print (top side): 05-2940-* Black mode print (back side): 05-2941-* <p>Sub codes:* -> Plain paper: 0, Recycled paper: 7</p> <p>Notes: After these codes are changed, perform solid duplex-printing and check that there is no faint or void image on the leading/trailing edge of the paper.</p>

Parts to be replaced	Remark
Process unit	
Registration motor	
LGC board	
Paper clinging detection sensor	
Registration roller	Replace it if it is worn out.

[E030] Power-ON jam

Classification	Error content
Other paper jam	Power-ON jam

Check item	Measures
Sensor in the jamming area	<ul style="list-style-type: none"> • Sensor check (Refer to the table below) • Connector check • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check • Harness check

Parts to be replaced	Remark
Sensor in the jamming area	Refer to the table below.
LGC board	

Relation between the jamming area and the corresponding sensors/covers.
(If a jam is occurring in the ADU, LCF or PFP, check the board in each unit.)

Jamming area	Cover	Sensor	Test Mode/Input check
Registration area	Jam access cover	Registration sensor	03-[FAX][COPY]OFF/[7]/[F]
		Paper clinging detection sensor	03-[FAX][COPY]OFF/[7]/[E]
		1st drawer feed sensor	03-[FAX]ON/[1]/[G]
Exit area	Fuser cover	Exit sensor	03-[FAX]ON/[1]/[B]
ADU	ADU	ADU entrance sensor	03-[FAX]ON/[4]/[B]
		ADU exit sensor	03-[FAX]ON/[4]/[A]
Bypass unit	Bypass unit	Bypass feed sensor	03-[FAX]ON/[4]/[D]
Feeding area (equipment)	Side cover	2nd drawer feed sensor	03-[FAX]ON/[1]/[F]
LCF	LCF side cover	LCF feed sensor	03-[FAX][COPY]OFF/[0]/[G]
PFP	PFP side cover	PFP upper drawer feed sensor	03-[FAX][COPY]OFF/[2]/[D]
		PFP lower drawer feed sensor	03-[FAX][COPY]OFF/[8]/[D]
Bridge unit	Bridge unit	Bridge unit transport sensor-1 (Entrance sensor)	03-[FAX][COPY]OFF/[5]/[F]
		Bridge unit transport sensor-2 (Exit sensor)	03-[FAX][COPY]OFF/[5]/[D]
Finisher	Finisher door	Sensors in the finisher	-

[E061] Incorrect paper size setting for 1st drawer

[E062] Incorrect paper size setting for 2nd drawer

[E063] Incorrect paper size setting for PFP upper drawer

[E064] Incorrect paper size setting for PFP lower drawer

[E065] Incorrect paper size setting for bypass tray

If any paper remains in the equipment or drawer, remove it. Match the paper size of the drawer setting and the one in the drawer.

* Paper size detection is performed at the first sheet of paper when the drawer is opened or closed, or when the power of the equipment is turned ON.

[E090] Image data delay jam

Classification	Error item
Other paper jam	Image data to be printed cannot be prepared.

Check item	Measures
Other	<ul style="list-style-type: none"> Remove the paper remained in front of the registration sensor) Check if the error is cleared by turning the power OFF and then back ON.
SYS board	<ul style="list-style-type: none"> Connector check Board check
IMG board	<ul style="list-style-type: none"> Connector check Board check
LGC board	<ul style="list-style-type: none"> Connector check Board check
HDD	<ul style="list-style-type: none"> Connector check HDD check
Page memory	Check if the page memory is correctly connected to the connector on the SYS board.

Replace parts	Remarks
SYS board	
IMG board	
LGC board	
HDD	
Page memory	

[E091] Motor on time-out jam

Classification	Error item
Other paper jam	The equipment does not operate normally because abnormality occurred on an interface between the SYS board and engine firmware.

Check item	Measures
Other	<ul style="list-style-type: none"> Check if there is any paper in the equipment. Remove it if there is. If the error still occurs, check the following.
Power	Check if the error is cleared by turning the power OFF and then back ON.
SYS board	<ul style="list-style-type: none"> Connector check Board check
IMG board	<ul style="list-style-type: none"> Connector check Board check
LGC board	<ul style="list-style-type: none"> Connector check Board check
HDD	<ul style="list-style-type: none"> Connector check HDD check

Replace parts	Remarks
SYS board	
IMG board	
LGC board	
HDD	

[E0A0] Image transport ready time-out jam

Classification	Error content
Other paper jam	Image transport ready time-out jam

Check item	Measures
LGC board	Connector check

Parts to be replaced	Remark
LGC board	

[E550] Paper remaining jam on the transport path

Classification	Error content
Other paper jam	Paper remaining on the transport path when printing is finished (caused by a multiple paper feeding)

Step	Check Item	Result	Measure	Next Step
1	Jamming transport path		Open the cover of the unit/area whose picture is flashing on the control panel and remove any paper on the transport path.	
2	Feed or transport roller possibly causing multiple feeding		Check the feed roller.	
3	Sensor in the jamming area		<ul style="list-style-type: none"> • Sensor check (Refer to the table below) • Harness check • Connector check 	
4	LGC board		<ul style="list-style-type: none"> • Harness check • Connector check • Board check 	
	Notes: If the jam is occurring in the ADU, LCF or PFP, check the board in each unit.			

Parts to be replaced	Remark
Feed or transport roller possibly causing multiple feeding	
Sensor in the jamming area	Refer to the table below.
LGC board	

Relation between the jamming area and the corresponding sensors/covers.

Jamming area	Cover	Sensor	Test Mode/Input check
Registration area	Jam access cover	Registration sensor	03-[FAX][COPY]OFF/[7]/[F]
		Paper clinging detection sensor	03-[FAX][COPY]OFF/[7]/[E]
		1st drawer feed sensor	03-[FAX]ON/[1]/[G]
Exit area	Fuser cover	Exit sensor	03-[FAX]ON/[1]/[B]

Jamming area	Cover	Sensor	Test Mode/Input check
ADU	ADU	ADU entrance sensor	03-[FAX]ON/[4]/[B]
		ADU exit sensor	03-[FAX]ON/[4]/[A]
Bypass unit	Bypass unit	Bypass feed sensor	03-[FAX]ON/[4]/[D]
Feeding area (equipment)	Side cover	2nd drawer feed sensor	03-[FAX]ON/[1]/[F]
LCF	LCF side cover	LCF feed sensor	03-[FAX][COPY]OFF/[0]/[G]
PFP	PFP side cover	PFP upper drawer feed sensor	03-[FAX][COPY]OFF/[2]/[D]
		PFP lower drawer feed sensor	03-[FAX][COPY]OFF/[8]/[D]
Bridge unit	Bridge unit	Bridge unit transport sensor-1 (Entrance sensor)	03-[FAX][COPY]OFF/[5]/[F]
		Bridge unit transport sensor-2 (Exit sensor)	03-[FAX][COPY]OFF/[5]/[D]
Finisher	Finisher door	Sensors in the finisher	-

[E551] Paper remaining jam on the transport path (when a service call occurs)

[E552] Paper remaining jam on the transport path (when the cover is closed)

Classification	Error content
Other paper jam	Paper remaining on the transport path when printing is finished (when a service call occurs) (E551) Paper remaining on the transport path when printing is finished (when the cover is closed) (E552)

Step	Check Item	Result	Measure	Next Step
1	Jamming transport path		Open the cover of the unit/area whose picture is flashing on the control panel and remove any paper on the transport path.	
2	Sensor in the jamming area		<ul style="list-style-type: none"> • Sensor check (Refer to the table below) • Harness check • Connector check 	
3	LGC board		<ul style="list-style-type: none"> • Harness check • Connector check • Board check 	
	Notes: If the jam is occurring in the ADU, LCF or PFP, check the board in each unit.			

Parts to be replaced	Remark
Feed or transport roller possibly causing multiple feeding	
Sensor in the jamming area	Refer to the table below.
LGC board	

Jamming area	Cover	Sensor	Test Mode/Input check
Registration area	Jam access cover	Registration sensor	03-[FAX][COPY]OFF/[7]/[F]
		Paper clinging detection sensor	03-[FAX][COPY]OFF/[7]/[E]
		1st drawer feed sensor	03-[FAX]ON/[1]/[G]

Jamming area	Cover	Sensor	Test Mode/Input check
Exit area	Fuser cover	Exit sensor	03-[FAX]ON/[1]/[B]
ADU	ADU	ADU entrance sensor	03-[FAX]ON/[4]/[B]
		ADU exit sensor	03-[FAX]ON/[4]/[A]
Bypass unit	Bypass unit	Bypass feed sensor	03-[FAX]ON/[4]/[D]
Feeding area (equipment)	Side cover	2nd drawer feed sensor	03-[FAX]ON/[1]/[F]
LCF	LCF side cover	LCF feed sensor	03-[FAX][COPY]OFF/[0]/[G]
PFP	PFP side cover	PFP upper drawer feed sensor	03-[FAX][COPY]OFF/[2]/[D]
		PFP lower drawer feed sensor	03-[FAX][COPY]OFF/[8]/[D]
Bridge unit	Bridge unit	Bridge unit transport sensor-1 (Entrance sensor)	03-[FAX][COPY]OFF/[5]/[F]
		Bridge unit transport sensor-2 (Exit sensor)	03-[FAX][COPY]OFF/[5]/[D]
Finisher	Finisher door	Sensors in the finisher	-

8.3.6 Cover open jam

[E400] Jam access cover open

Classification	Error content
Cover open jam	Jam access cover open

Check item	Measures
Switching regulator	<ul style="list-style-type: none">Is the voltage of 24V being supplied from the power supply unit? (Perform the input check: 03-[FAX] ON[2]/[B])Connector check (CN345, CN361)Fuse check (F201, F202, F203)
LGC board	<ul style="list-style-type: none">Board checkConnector check (CN345, CN361)Harness check
Transfer cover switch	<ul style="list-style-type: none">Switch check (Perform the input check: 03-[FAX] ON[3]/[D])Connector check (CN338)Harness check

Parts to be replaced	Remark
Switching regulator	
LGC board	
Transfer cover switch	

[E410] Front cover open jam

Classification	Error content
Cover open jam	Front cover open jam

Check item	Measures
Switching regulator	<ul style="list-style-type: none">Is the voltage of 24V being supplied from the power supply unit? (Perform the input check: 03-[FAX] ON[2]/[B])Connector check (CN345, CN361)Fuse check (F201, F202, F203)
LGC board	<ul style="list-style-type: none">Board checkConnector check (CN345, CN361)Harness check

Parts to be replaced	Remark
Switching regulator	
LGC board	

[E420] PFP side cover open jam

Classification	Error content
Cover open jam	PFP side cover open jam

Check item	Measures
PFP side cover opening/closing switch	<ul style="list-style-type: none"> Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX] OFF[2]/[F]) Connector check (CN349, CN241, CN243) Harness check
PFP board	<ul style="list-style-type: none"> Board check Connector check (CN241, CN243) Harness check
LGC board	<ul style="list-style-type: none"> Board check Connector check (CN349) Harness check

Parts to be replaced	Remark
PFP side cover opening/closing switch	
PFP board	
LGC board	

[E430] ADU open jam

Classification	Error content
Cover open jam	ADU open jam

Check item	Measures
ADU opening/closing switch	<ul style="list-style-type: none"> Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX] ON[2]/[C]) Connector check (CN338, CN440, CN443) Harness check
ADU board	<ul style="list-style-type: none"> Board check Connector check (CN440, CN443) Harness check
LGC board	<ul style="list-style-type: none"> Board check Connector check (CN338) Harness check

Parts to be replaced	Remark
ADU opening/closing switch	
ADU board	
LGC board	

[E440] Side cover open jam

Classification	Error content
Cover open jam	Side cover open jam

Check item	Measures
Side cover switch	<ul style="list-style-type: none"> Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX] ON[0]/[B]) Connector check (CN348) Harness check

Check item	Measures
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN348) • Harness check

Parts to be replaced	Remark
Side cover switch	
LGC board	

[E450] LCF side cover open jam

Classification	Error content
Cover open jam	LCF side cover open jam

Check item	Measures
LCF side cover opening/ closing switch	<ul style="list-style-type: none"> • Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX] ON[0]/[D]) • Connector check (CN349, CN1, CN6) • Harness check
LCF board	<ul style="list-style-type: none"> • Board check • Connector check (CN1, CN6) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN349) • Harness check

Parts to be replaced	Remark
LCF side cover opening/ closing switch	
LCF board	
LGC board	

[E480] Bridge unit open jam

Classification	Error content
Cover open jam	Bridge unit open jam

Check item	Measures
Bridge unit cover opening/ closing detection switch	<ul style="list-style-type: none"> • Is the PFP side cover opening/closing switch working? (Perform the input check: 03-[FAX] OFF[5]/[E]) • Connector check (CN334) • Harness check
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN334) • Harness check

Parts to be replaced	Remark
Bridge unit cover opening/ closing detection switch	
LGC board	

[E4A0] Waste toner cover open jam

Classification	Error content
Cover open jam	Waste toner cover open jam

Check item	Measures
Waste toner cover open/close detection switch	<ul style="list-style-type: none">• Is the waste toner cover open/close detection switch working? (Perform the input check: 03-[FAX] OFF[1]/[H])• Connector check (CN359)• Harness check
LGC board	<ul style="list-style-type: none">• Board check• Connector check (CN359)• Harness check

Parts to be replaced	Remark
Waste toner cover open/close detection switch	
LGC board	

8.3.7 RADF jam

[E712] Jam not reaching the original registration sensor

Classification	Error content
RADF jam	Jam not reaching the original registration sensor

Check item	Measures
Pickup roller Feed roller Separation roller	Clean them if they are stained.
Original registration sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[H]) • Connector check (CN74) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN74) • Harness check

Parts to be replaced	Remark
Original registration sensor	
RADF board	
Pickup roller	Replace it if it is worn out
Feed roller	Replace it if it is worn out.
Separation roller	Replace it if it is worn out.

[E714] Feed signal reception jam

Classification	Error content
RADF jam	Feed signal reception jam

Check item	Measures
Empty sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[B]) • Lever check • Connector check (J92, J96) • Harness check

Parts to be replaced	Remark
Empty sensor	

[E721] Jam not reaching the read sensor

Classification	Error content
RADF jam	Jam not reaching the read sensor

Phenomenon of paper jamming	Check item	Measures
All	Registration sensor Read roller	Clean the registration roller and the read roller if they are stained.
	Read sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[G]) • Connector check (J94) • Harness check
	RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN75) • Harness check

Parts to be replaced	Remark
Reading start guide of the RADF	
Paper guide of the RADF	
Read sensor	
RADF board	
Registration roller	Replace it if it is worn out.
Read roller	Replace it if it is worn out.

[E722] Jam not reaching the original exit/reverse sensor (during scanning)

Classification	Error content
RADF jam	Jam not reaching the original exit/reverse sensor (during scanning)

Check item	Measures
Read roller	Clean the read roller if it is stained.
Original exit/reverse sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[E]) • Connector check (J93) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN75) • Harness check

Parts to be replaced	Remark
Original exit/reverse sensor	
RADF board	
Read roller	Replace it if it is worn out.

[E724] Stop jam at the registration sensor

Classification	Error content
RADF jam	Stop jam at the registration sensor

Check item	Measures
Registration roller	Clean the registration roller if it is stained.

Check item	Measures
Registration sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[H]) • Connector check (J86, J88) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN74) • Harness check
Original width detection sensor-1	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[8]/[F]) • Connector check (J94) • Harness check
Original width detection sensor-2	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[8]/[G]) • Connector check (J94) • Harness check

Parts to be replaced	Remark
Registration sensor	
RADF board	
Registration roller	Replace it if it is worn out.

[E725] Stop jam at the read sensor

Classification	Error content
RADF jam	Stop jam at the read sensor

Check item	Measures
Read roller	Clean the read roller if it is stained.
Read sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[G]) • Connector check (J94) • Harness check
Original intermediate transport sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[F]) • Connector check (CN75, J94) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN75) • Harness check

Parts to be replaced	Remark
Read sensor	
RADF board	
Read roller	Replace it if it is worn out.

[E726] Transport/exit signal reception jam

Classification	Error content
RADF jam	Transport/exit signal reception jam

Check item	Measures
RADF board	<ul style="list-style-type: none"> • Board check • Connector check • Harness check

Check item	Measures
SLG board	<ul style="list-style-type: none"> • Board check • Connector check • Harness check
Switching power supply	<ul style="list-style-type: none"> • Check if the 24V and 5V outputs of the switching power supply are normal. • Board check • Connector check • Harness check

Parts to be replaced	Remark
RADF board	
SLG board	
Switching power supply	

[E731] Stop jam at the original exit/reverse sensor

Classification	Error content
RADF jam	Stop jam at the original exit/reverse sensor

Check item	Measures
Exit roller	Clean the exit roller if it is stained.
Stop jam at the original exit/reverse sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[E]) • Connector check (J93) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN75) • Harness check

Parts to be replaced	Remark
Exit sensor	
RADF board	
Exit roller	Replace it if it is worn out.

[E860] RADF jam access cover open

Classification	Error content
RADF jam	RADF jam access cover open

Check item	Measures
RADF jam access cover switch	<ul style="list-style-type: none"> • Switch check (Perform the input check: 03-[FAX] ON[7]/[C]) • Connector check (CN72) • Harness check
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN72) • Harness check

Parts to be replaced	Remark
RADF jam access cover switch	
RADF board	

[E870] RADF open jam

Classification	Error content
RADF jam	RADF open jam

Check item	Measures
RADF opening/closing sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03-[FAX] ON[7]/[D]) • Connector check (CN75) • Harness check • Is the RADF opening/closing sensor adjusted within the specified range?
RADF board	<ul style="list-style-type: none"> • Board check • Connector check (CN75) • Harness check

Parts to be replaced	Remark
RADF opening/closing sensor	
RADF board	

[E871] Cover open jam in the read ready status

Classification	Error item
RADF jam	Jam caused by opening of the Original jam access cover or front cover while the RADF is waiting for the scanning start signal from the equipment.

Check item	Measures
RADF	<ul style="list-style-type: none"> • Close the RADF if it is opened. • Remove if there is any original before closing it.
Original jam access cover opening/closing sensor	<ul style="list-style-type: none"> • Sensor check (Perform the input check: 03: [FAX]/ON/[7]/[C]) • Connector check • Harness check
RADF board	<ul style="list-style-type: none"> • Connector check (CN75) • Board check

Replace parts	Remarks
Original jam access cover opening/closing sensor	
RADF board	

8.3.8 Jam in bridge unit

[E910] Paper not reaching the bridge unit transport sensor-1

[E920] Paper stopping at the bridge unit transport sensor-1

Classification	Error content
Jam in bridge unit	Paper not reaching the bridge unit transport sensor-1 Paper stopping at the bridge unit transport sensor-1

Phenomenon of paper jamming	Check item	Measures
Paper separation failure at separation plate in the fuser unit	Fuser unit	<ul style="list-style-type: none"> Check the gap between the separation plate and the fuser belt. (Refer to "6.7.4 Gap adjustment for separation plate".) Paper transport check
	Drawer	Check that paper is not skewed in the side guides of the drawer.
	Leading edge margin	Adjust the margin with 05-4402 (Leading edge position adjustment) to "Color: 5.5 mm". Widen the margin if needed. (Specification Black: 4.2 mm / Color: 5 mm) <ul style="list-style-type: none"> Use A3/LD paper It is easy to check skew with a copy of a solid image (about 10 mm on its leading edge). Refer to "6.1.1 Image Related Adjustment".
There are scratches on the leading paper edge		Replace it if needed. Check if the guide is not deformed. Replace it if needed.
All	Bridge unit exit	Check that Mylar on the bridge unit exit is not deformed. Replace it if needed. (E920)
	Finisher	Check if paper jamming occurs in the finisher.
	Bridge unit transport sensor-1 (entrance sensor)	<ul style="list-style-type: none"> Sensor check (Perform the input check: 03-[FAX] ON[5]/[F]) Connector check (CN334, J523) Harness check
	Bridge unit gate solenoid	<ul style="list-style-type: none"> Solenoid check (Perform the output check: 03-232) Connector check (CN334, J523) Harness check
	LGC board	<ul style="list-style-type: none"> Board check Connector check (CN334) Harness check
	Bridge unit	<ul style="list-style-type: none"> Does the transport roller of the bridge unit work when the fuser motor is rotated? (Perform the output check: 03-113/163) Check the drive system of the equipment and bridge unit. Check if the rollers in the exit roller, the pressure spring and the bridge unit are worn out.

Parts to be replaced	Remark
Bridge unit transport sensor-1 (entrance sensor)	
LGC board	
Bridge unit gate solenoid	

[E930] Paper not reaching the bridge unit transport sensor-2**[E940] Paper stopping at the bridge unit transport sensor-2**

Classification	Error content
Jam in bridge unit	Paper not reaching the bridge unit transport sensor-2 Paper stopping at the bridge unit transport sensor-2

Check item	Measures
Bridge unit transport sensor-2 (exit sensor)	<ul style="list-style-type: none">• Sensor check (Perform the input check: 03-[FAX] ON[5]/[D])• Connector check (CN334, J523)• Harness check
LGC board	<ul style="list-style-type: none">• Board check• Connector check (CN334)• Harness check
Bridge unit	<ul style="list-style-type: none">• Does the transport roller of the bridge unit work when the fuser motor is rotated? (Perform the output check: 03-113/163)• Check the drive system of the equipment and bridge unit.• Check if the rollers in the exit roller, the pressure spring and the bridge unit are worn out.

Parts to be replaced	Remark
Bridge unit transport sensor-2 (exit sensor)	
LGC board	

8.3.9 Paper jam in finisher section

[EA10] Paper transport delay jam

Classification	Error content
Paper jam in finisher section	Paper transport delay jam

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Check item	Measures
Finisher controller PC board	<ul style="list-style-type: none"> Board check Connector check (J104) Harness check
Inlet sensor	<ul style="list-style-type: none"> Sensor check Is the inlet sensor working properly? (Check the movement of the actuator.)

Parts to be replaced	Remark
Finisher controller PC board	
Inlet sensor	

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Check item	Measures
Entrance sensor	Is there a disconnection of the connector, incorrect installation or breakage of the entrance sensor (S1)?
Gate solenoid	<ul style="list-style-type: none"> Is the gap between the flapper and entrance roller shaft other than $0.60 \pm 0.20\text{mm}$ when the gate solenoid (SOL2) is pulled? Is the harness between the gate solenoid (SOL2) and the finisher control PC board (CN22) disconnected or open circuited?
Entrance motor	Is the harness between the entrance motor (M1) and the finisher control PC board (CN7) disconnected or open circuited?

Parts to be replaced	Remark
Entrance sensor	
Finisher controller PC board	

[EA10] Transport delay jam (paper not inserted)

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Classification	Error content
Paper jam in finisher section	Transport delay jam (paper not inserted)

Check item	Measures
Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
Feeding sensor (S22)	Check if there is a disconnection of the connector, incorrect installation or breakage of the feeding sensor (S22). If there is, reinstall the sensor correctly or replace it.

Check item	Measures
Transport path switching solenoid (SOL5)	Check that the gap between the transfer guide surface and the upper surface of the flapper tip is in the acceptable range according to the status of the transport path switching solenoid (SOL5) (solenoid OFF: 1.5 to 2.1 mm, solenoid ON: 2.3 to 2.9 mm). If it is not, adjust it.
Entrance motor (M1)	Check the harness between the entrance motor (M1) and the finisher controller board (CN26). If there is any abnormality, correct it.
Interface PC board (I/F)	Check the harness between the transport path switching solenoid (SOL5) and the interface PC board (CN6), If there is any abnormality, correct it. <ul style="list-style-type: none"> • Board check • Connector check (CN5, CN6, CN7) • Harness check
Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN25, CN27) • Harness check

Parts to be replaced	Remark
Feeding sensor (S22)	
Transport path switching solenoid (SOL5)	
Entrance motor (M1)	
Interface PC board (I/F)	
Finisher control PC board (FIN)	

[EA20] Paper transport stop jam

Classification	Error content
Paper jam in finisher section	Paper transport delay jam

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Phenomenon of paper jamming	Check item	Measures
All	Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (J104) • Harness check
	Entrance sensor	<ul style="list-style-type: none"> • Sensor check • Is the inlet sensor working properly? (Check the movement of the actuator.)

Parts to be replaced	Remark
Finisher controller PC board	
Entrance sensor	

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Phenomenon of paper jamming	Check item	Measures
All	Transport sensor	<ul style="list-style-type: none"> • Sensor check • Connector check (S2) • Harness check
	Finisher controller PC board	Board check(CN22)

Parts to be replaced	Remark
Transport sensor	
Finisher controller PC board	

[EA20] Paper transport stop jam (inlet sensor)

Classification	Error content
Paper jam in finisher section	Paper transport stop jam (inlet sensor)

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Phenomenon of paper jamming	Check item	Measures
All	Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
	Entrance sensor (S1)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN26) • Harness check

Parts to be replaced	Remark
Entrance sensor (S1)	
Finisher control PC board (FIN)	

[EA21] Paper size error jam (outlet sensor)

[EA22] Paper size error jam (punch paper edge sensor)

Classification	Error content
Paper jam in finisher section	Paper size error jam (outlet sensor) Paper size error jam (punch paper edge sensor)

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Check item	Measures
Entrance sensor	<ul style="list-style-type: none"> • Sensor check(S1) • Connector check (CN7, CN22) • Harness check
Transport sensor	<ul style="list-style-type: none"> • Sensor check(S2) • Connector check (CN7, CN22) • Harness check

Parts to be replaced	Remark
Entrance sensor	
Transport sensor	
Finisher controller PC board	

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Phenomenon of paper jamming	Check item	Measures
All	Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
	Entrance sensor (S1)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Transport sensor (S2)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN6, CN26) • Harness check

Parts to be replaced	Remark
Entrance sensor (S1)	
Transport sensor (S2)	
Finisher control PC board (FIN)	

[EA23] Paper transport stop jam (transport sensor)

[EA24] Paper transport stop jam (between entrance & transport sensor)

[EA25] Paper transport stop jam (after paper stack exit)

[EA26] Paper transport stop jam (stop command request)

[EA27] Paper transport stop jam (paper not inserted)

[EA28] Paper transport stop jam (paper holder plate operation delay)

[EA29] Paper transport stop jam (stack transport delay)

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Classification	Error content
Paper jam in finisher section	Paper transport stop jam (transport sensor) Paper transport stop jam (between entrance & transport sensor) Paper transport stop jam (after paper stack exit) Paper transport stop jam (stop command request) Paper transport stop jam (paper not inserted) Paper transport stop jam (paper holder plate operation delay) Paper transport stop jam (stack transport delay)

Check item	Measures
Entrance sensor	<ul style="list-style-type: none"> • Sensor check(S1) • Connector check (CN7, CN22) • Harness check

Check item	Measures
Transport sensor	<ul style="list-style-type: none"> • Sensor check(S2) • Connector check (CN7, CN22) • Harness check

Parts to be replaced	Remark
Entrance sensor	
Transport sensor	
Finisher controller PC board	

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Phenomenon of paper jamming	Check item	Measures
All	Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
	Entrance sensor (S1)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Transport sensor (S2)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Processing tray sensor (S12)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Paper holding cam	Is there any mechanical problem when the paper holding cam is rotated?
	Assist arm motor (M10)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
	Buffer tray guide	Open and close the buffer tray guide. If there is any mechanical problem, fix its mechanism.
	buffer tray guide motor (M2)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN6, CN13, CN11, CN18, CN26) • Harness check 	

Parts to be replaced	Remark
Entrance sensor (S1)	
Transport sensor (S2)	
Processing tray sensor (S12)	
Assist arm motor (M10)	
buffer tray guide motor (M2)	
Finisher control PC board (FIN)	

[EA30] Power-ON jam

Classification	Error content
Paper jam in finisher section	Power-ON jam

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Check item	Measures
Entrance sensor	<ul style="list-style-type: none"> • Sensor check • Connector check (J104) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Sensor check • Connector check (J104) • Harness check

Parts to be replaced	Remark
Entrance sensor	
Finisher controller PC board	

[EA31] Transport path paper remaining jam

Classification	Error content
Paper jam in finisher section	Transport path paper remaining jam

MJ-1101

Check item	Measures
Transport sensor	<ul style="list-style-type: none"> • Sensor check(S2) • Connector check (CN22) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (CN22) • Harness check

Parts to be replaced	Remark
Transport sensor	
Finisher controller PC board	

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Phenomenon of paper jamming	Check item	Measures
All	Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
	Transport sensor (S2)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN6) • Harness check

Parts to be replaced	Remark
Transport sensor (S2)	
Finisher control PC board (FIN)	

[EA32] Exit paper remaining jam

Classification	Error content
Paper jam in finisher section	Exit paper remaining jam

MJ-1101

Check item	Measures
Processing tray sensor	<ul style="list-style-type: none"> • Sensor check(S12) • Connector check (CN11) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Sensor check • Connector check (CN11) • Harness check

Parts to be replaced	Remark
Processing tray sensor	
Finisher controller PC board	

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Phenomenon of paper jamming	Check item	Measures
All	Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
	Processing tray sensor (S12)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
	Finisher control PC board (FIN)	<ul style="list-style-type: none"> • Board check • Connector check (CN18) • Harness check

Parts to be replaced	Remark
Processing tray sensor (S12)	
Finisher control PC board (FIN)	

[EA40] Door open jam / joint open jam

Classification	Error content
Paper jam in finisher section	Door open jam / joint open jam

MJ-1031

Check item	Measures
Finisher	<ul style="list-style-type: none"> • Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is. • Check if the connector J110 on the finisher controller PC board is disconnected from the Joint switch (SW1) or the harnesses are open circuited. Correct if any.
Joint switch	<ul style="list-style-type: none"> • Switch check • Connector check (J110) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (J110) • Harness check

Parts to be replaced	Remark
Joint switch	
Finisher controller PC board	

MJ-1101

Check item	Measures
Front cover switch	<ul style="list-style-type: none"> • Switch check(SW1) • Connector check (CN16) • Harness check
Stationary tray opening/closing switch	<ul style="list-style-type: none"> • Switch check(SW2) • Connector check (CN16) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Switch check • Connector check (CN16) • Harness check

Parts to be replaced	Remark
Handle cover	If it is broken.
Front cover switch	
Stationary tray opening/closing switch	
Finisher controller PC board	

[EA40] Cover open error

Classification	Error content
Paper jam in finisher section	Cover open error

MJ-1106

Check item	Measures
Cover	<ul style="list-style-type: none"> • Close the front cover or the stationary tray if they are opened.
Front cover switch (SW1)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check

Check item	Measures
Stationary tray opening/closing switch (SW2)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Finisher controller board	<ul style="list-style-type: none"> • Connector check(CN16) • Board check

Parts to be replaced	Remark
Cover locking bracket	If it is broken.
Front cover switch (SW1)	
Stationary tray opening/closing switch (SW2)	
Finisher controller board	

[EA50] Stapling jam

Classification	Error content
Paper jam in finisher section	Stapling jam

MJ-1031

Check item	Measures
Stapler	<ul style="list-style-type: none"> • Check if there is any paper in the finisher or stapler and remove it if there is • Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case? • Connector check (J112, J113) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (J112, J113) • Harness check

Parts to be replaced	Remark
Stapler	
Finisher controller PC board	

MJ-1101

Check item	Measures
Stapler	<ul style="list-style-type: none"> • Check if there is any paper in the finisher or on the transport path of the equipment or on the finishing tray. Remove it if there is • Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case?(S11) • Connector check (CN2) • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (CN2) • Harness check

Parts to be replaced	Remark
Stapler	
Finisher controller PC board	

MJ-1106

Check item	Measures
Stapler	<ul style="list-style-type: none"> • Check if there is any paper in the finisher or on the transport path of the equipment or on the finishing tray. Remove it if there is • Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet slid from the staple case? • If the actuator of the stapler safety sensor (S11) does not move smoothly, remove its clip from the side and then reattach it. • Connector check • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (CN19) • Harness check

Parts to be replaced	Remark
Stapler	
Finisher controller PC board	

[EA60] Early arrival jam

Classification	Error content
Paper jam in finisher section	Early arrival jam

MJ-1031

Check item	Measures
Entrance sensor	<ul style="list-style-type: none"> • Sensor (Actuator) check • Connector check • Harness check
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (J104) • Harness check

Parts to be replaced	Remark
Entrance sensor	
Finisher controller PC board	

MJ-1101

Check item	Measures
Entrance sensor	<ul style="list-style-type: none"> • Sensor check(S1) • Connector check (CN7) • Harness check

Check item	Measures
Finisher controller PC board	<ul style="list-style-type: none"> • Board check • Connector check (CN7) • Harness check

Parts to be replaced	Remark
Entrance sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Finisher	Check if there is any paper in the finisher or on the transport path of the equipment and remove it if there is.
Feeding sensor (S22)	<ul style="list-style-type: none"> • Sensor check(S22) • Connector check (CN8) • Harness check
Interface control PC board (I/F)	<ul style="list-style-type: none"> • Board check • Connector check (CN8) • Harness check

Parts to be replaced	Remark
Feeding sensor (S22)	
Interface control PC board (I/F)	

[EA70] Stack exit belt home position error / Stack slider home position error

Classification	Error content
Paper jam in finisher section	Stack exit belt home position error / Stack slider home position error

MJ-1101

Check item	Measures
Stack belt exit home position sensor	Check if the connector CN11 on the finisher controller PC board is disconnected from the stack belt exit home position sensor (S9) and the harnesses are open circuited. Correct if any.
Stack transport motor	Is the harness between the stack transport motor (M5) and the finisher control PC board (CN10) disconnected or open circuited?

Parts to be replaced	Remark
Stack belt exit home position sensor	
Stack transport motor	
Finisher controller PC board	

MJ-1031

Check item	Measures
Stack slider HP sensor	Check if the connector J111 on the finisher controller PC board is disconnected from the stack edging HP sensor (SR8) or the harnesses are open circuited. Correct if any.
Stack slide motor	Check if the connector J111 on the finisher controller PC board is disconnected from the stack slide motor (M4) or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Stack slider HP sensor	
Stack slide motor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Stack belt exit home position sensor	<p>Check if there is a disconnection of the connector, incorrect installation or breakage of the stack belt exit home position sensor (S9). If there is, reinstall the sensor correctly or replace it.</p> <p>Check if the connector (CN18) on the finisher controller PC board is disconnected from the stack belt exit home position sensor (S9) and the harnesses are open circuited. Correct if any.</p>
Stack transport motor	Check if the connector (CN17) on the finisher controller PC board is disconnected from the stack transport motor (M8) and the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Stack belt exit home position sensor	
Stack transport motor	
Finisher controller PC board	

8.3.10 Paper jam in saddle stitcher section

[EA90] Saddle stitch unit open error

MJ-1106

Classification	Error item
Paper jam in saddle stitcher section	Door open jam

Check item	Measures
Saddle stitch unit	Close the saddle stitch unit if it is open.
Finisher, stacker	Remove any paper on the stacker.
Saddle stitch unit opening/closing switch	Check if there is a disconnection of the connector, incorrect installation or breakage of the saddle stitch unit opening/closing switch (SW5). If there is, reinstall the sensor correctly or replace it.
	Check if the harness between the saddle stitch unit opening/closing switch (SW5) and the CN13 of the saddle control PC board or the CN2 of the interface PC board (I/F) is disconnected or open circuited. Correct if so.

Replace parts	Remarks
Saddle stitch unit opening/closing switch	
Finisher controller PC board	
Interface PC board	

[EAA0] Paper remaining in Saddle Stitch Finisher

Classification	Error item
Finisher jam (Saddle stitcher section)	

MJ-1106

Check item	Measures
Finisher, saddle stitcher	<ul style="list-style-type: none"> Check if there is any paper in the finisher, saddle stitcher or the on the transport path of the equipment. Remove it if there is. Use paper accepted in the specifications.
Paper	Do not use the paper shorter than the specification.
Junction box paper detection sensor (S24)	<ul style="list-style-type: none"> Sensor check(S24) Connector check(CN8) Harness check
Transport path-2 (S27)	<ul style="list-style-type: none"> Sensor check(S27) Connector check(CN20) Harness check
Transport path-3 (S28)	<ul style="list-style-type: none"> Sensor check(S28) Connector check(CN20) Harness check
Ejecting roller sensor(S29)	<ul style="list-style-type: none"> Sensor check(S29) Connector check(CN20) Harness check

Check item	Measures
Interface PC board (I/F)	<ul style="list-style-type: none"> • Board check • Connector check(CN1, CN2, CN5, CN7, CN8) • Harness check
Saddle stitcher controller board	<ul style="list-style-type: none"> • Board check • Connector check(CN10, CN13, CN20) • Harness check

Replace parts	Remarks
Junction box paper detection sensor (S26)	
Transport path-2 (S27)	
Transport path-3 (S28)	
Ejecting roller (S29)	
Interface PC board (I/F)	
Saddle stitcher controller board	

[EAB0] Paper transport jam in Saddle Stitch Finisher

Classification	Error item
Finisher jam (Saddle stitcher section)	Paper transport jam in Saddle Stitch Finisher

MJ-1106

Check item	Measures
Finisher, saddle stitcher	<ul style="list-style-type: none"> • Check if there is any paper in the finisher, saddle stitcher or the on the transport path of the equipment. Remove it if there is. • Use paper accepted in the specifications.
Paper	Do not use the paper longer than the specification.
Transport roller	Fix any mechanical problem occurring when the transfer roller is rotated.
Feeding sensor (S22)	<ul style="list-style-type: none"> • Sensor check(S22) • Connector check • Harness check
Junction box paper detection sensor (S24)	<ul style="list-style-type: none"> • Sensor check(S24) • Connector check(CN8) • Harness check
Transport path-2 (S27)	<ul style="list-style-type: none"> • Sensor check(S27) • Connector check(CN20) • Harness check
Transport path-3 (S28)	<ul style="list-style-type: none"> • Sensor check(S28) • Connector check(CN20) • Harness check
Ejecting roller sensor(S29)	<ul style="list-style-type: none"> • Sensor check(S29) • Connector check(CN20) • Harness check
Transport path switching solenoid (SOL5)	Check that the gap between the transfer guide surface and the upper surface of the flapper tip is in the acceptable range according to the status of the transport path switching solenoid (SOL5) (solenoid OFF: 1.5 to 2.1 mm, solenoid ON: 2.3 to 2.9 mm). If it is not, adjust it.

Check item	Measures
Entrance motor (M1)	<ul style="list-style-type: none"> • Motor check(M1) • Connector check(CN26) • Harness check
Transport path switching solenoid (SOL9)	<ul style="list-style-type: none"> • Solenoid check(SOL9) • Connector check(CN26) • Harness check
Interface PC board (I/F)	<ul style="list-style-type: none"> • Board check • Connector check(CN1, CN2, CN5, CN7, CN8) • Harness check
Saddle stitcher controller board	<ul style="list-style-type: none"> • Board check • Connector check(CN10, CN13, CN20) • Harness check

Replace parts	Remarks
Junction box paper detection sensor (S26)	
Feeding sensor (S22)	
Transport path-2 (S27)	
Transport path-3 (S28)	
Ejecting roller (S29)	
Entrance motor (M1)	
Transport path switching solenoid (SOL9)	
Interface PC board (I/F)	
Saddle stitcher controller board	
Finisher controller board	

[EAB1] Short paper jam in Saddle Stitch Finisher

Classification	Error item
Finisher jam (Saddle stitcher section)	Short paper jam in Saddle Stitch Finisher

MJ-1106

Check item	Measures
Finisher, saddle stitcher	<ul style="list-style-type: none"> • Check if there is any paper in the finisher, saddle stitcher or the on the transport path of the equipment. Remove it if there is. • Use paper accepted in the specifications.
Feeding sensor (S22)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Junction box paper detection sensor (S26)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Transport path-2 (S27)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check

Check item	Measures
Transport path-3 (S28)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Ejecting roller (S29)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Interface PC board (I/F)	<ul style="list-style-type: none"> • Connector check(CN8) • Board check
Saddle stitcher controller board	<ul style="list-style-type: none"> • Connector check(CN20) • Board check
Finisher controller board	<ul style="list-style-type: none"> • Connector check • Board check

Replace parts	Remarks
Feeding sensor (S22)	
Junction box paper detection sensor (S26)	
Transport path-2 (S27)	
Transport path-3 (S28)	
Ejecting roller (S29)	
Interface PC board (I/F)	
Saddle stitcher controller board	
Finisher controller board	

8.3.11 Paper jam in puncher unit

[E9F0] Punching jam

Classification	Error content
Finisher jam (Saddle stitcher section)	

MJ-1101 (when MJ-6103 is installed)

Check item	Measures
Punch motor	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Punch HP sensor	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Hole punch control PC board	<ul style="list-style-type: none"> • Board check • Connector check • Harness check

Parts to be replaced	Remark
Punch motor	
Punch HP sensor	
Hole punch control PC board	

MJ-1106(when MJ-6103 is installed)

Check item	Measures
Punch Unit	Check if there is any paper on the transport path of the equipment and remove it if there is.
Punch motor(M3)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Punch HP sensor(S4)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Punch sensor(S5)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Hole punch control PC board	<ul style="list-style-type: none"> • Board check • Connector check • Harness check

Parts to be replaced	Remark
Punch HP sensor(S4)	
Punch sensor(S5)	
Punch motor(M3)	
Hole punch control PC board	

8.3.12 Other paper jam

[EAD0] Print end command time-out jam

Classification	Error content
Other paper jam	The printing has not finished normally because of an error occurring on the interface between the SYS board and the engine firmware at the end of printing.

Check item	Measures
Power	<ul style="list-style-type: none"> • Check if the error is cleared by turning the power OFF and then back ON.
SYS board	<ul style="list-style-type: none"> • Connector check • Board check
LGC board	<ul style="list-style-type: none"> • Connector check • Board check

Parts to be replaced	Remark
SYS board	
LGC board	

[EAE0] Receiving time-out jam

Classification	Error content
Other paper jam	Receiving time-out jam

MJ-1031

Check item	Measures
Finisher	<ul style="list-style-type: none"> • Is the finisher working? • Check if the voltage (24V) is being supplied to the finisher. • Check if the harness connecting the I/F connector of the finisher side and finisher controller PC board is open circuited.
LGC board IPC board Finisher controller PC board	<ul style="list-style-type: none"> • Check the connection of the LGC board and IPC board. • Check if the harness connecting the IPC board and finisher I/F connector of the equipment side is open circuited.

Parts to be replaced	Remark
Finisher controller PC board	

[EB30] Ready time-out jam

Classification	Error content
Other paper jam	Ready time-out jam

Check item	Measures
Finisher	Check if the connector on the equipment is disconnected from the finisher or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
IPC board	

Parts to be replaced	Remark
LGC board	
Finisher controller PC board	

[ED10] Skew adjustment motor (M1) home position detection abnormality

MJ-1101/1106 (when MJ-6103 is installed)

Classification	Error content
Other paper jam	Skew adjustment motor (M1) home position detection abnormality

Check item	Measures
Skew adjustment motor	Rotate skew adjustment motor and fix its mechanism if it does not rotate smoothly.
Skew HP sensor Skew adjustment motor Hole punch control PC board	Check if the connectors on the hole punch controller PC board (HP board) are disconnected from the skew HP sensor (S2) and the skew adjustment motor, or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Skew adjustment motor	
Hole punch control PC board	

[ED11] Sideways adjustment motor (M2) home position detection error

MJ-1101/1106 (when MJ-6103 is installed)

Classification	Error content
Other paper jam	Sideways adjustment motor (M2) home position detection error

Check item	Measures
Sideways adjustment motor	Rotate sideways adjustment motor and fix its mechanism if it does not rotate smoothly.
sideways deviation HP sensor Sideways adjustment motor Hole punch control PC board	Check if the connectors on the hole punch controller PC board (HP board) are disconnected from the sideways deviation HP sensor (S3) and the sideways adjustment motor, or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Sideways adjustment motor	
Hole punch control PC board	

[ED12] Shutter home position error

Classification	Error content
Other paper jam	Shutter home position error

MJ-1101

Check item	Measures
Shutter	Open and close the shutter. If there is any mechanical problem, fix its mechanism.
Shutter opening/closing sensor Shutter clutch Finisher controller PC board	Check if the connectors on the finisher controller PC board are disconnected from the shutter opening/closing sensor (S4) and the shutter clutch (CLT1), or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Shutter clutch	
Shutter opening/closing sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Movable tray paper-full sensor	Fix any mechanical problem occurring when the actuator is moved.
	Check if there is a disconnection of the connector, incorrect installation or breakage of the movable tray paper-full sensor (S16). If there is, reinstall the sensor correctly or replace it.
	Check if the connector (CN12) on the finisher controller PC board is disconnected from the movable tray paper-full sensor (S16) and the harnesses are open circuited. Correct if so.
Shutter	Open and close the shutter. Fix any mechanical problem.
Shutter opening/closing sensor	Check if there is a disconnection of the connector, incorrect installation or breakage of the shutter opening/closing sensor (S4). If there is, reinstall the sensor correctly or replace it.
	Check if the connector (CN12) on the finisher controller PC board is disconnected from the shutter opening/closing sensor (S4) and the harnesses are open circuited. Correct if so.
Shutter clutch	Check if the connector (CN10) on the finisher controller PC board is disconnected from the shutter clutch (CLT1) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Movable tray paper-full sensor	
Finisher controller PC board	
Shutter opening/closing sensor	

[ED13] Front alignment plate home position error

Classification	Error content
Other paper jam	Front alignment plate home position error

MJ-1101

Check item	Measures
Front alignment plate	Move the front alignment plate. If there is any mechanical problem, fix its mechanism.

Check item	Measures
Front alignment motor Front alignment plate home position sensor Finisher controller PC board	Check if the connectors on the finisher controller PC board are disconnected from the front alignment plate home position sensor (S7) and the front alignment motor (M9), or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Front alignment motor	
Front alignment plate home position sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Front alignment plate	Move the front alignment plate. Fix any mechanical problem.
Front alignment plate home position sensor	Check if there is a disconnection of the connector, incorrect installation or breakage of the front alignment plate home position sensor (S7). If there is, reinstall the sensor correctly or replace it. Check if the connector (CN18) on the finisher controller PC board is disconnected from the front alignment plate home position sensor (S7) and the harnesses are open circuited. Correct if so.
Front alignment motor	Check if the connector (CN17) on the finisher controller PC board is disconnected from the front alignment motor (M5) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Front alignment plate home position sensor	
Finisher controller PC board	

[ED14] Rear alignment plate home position error

Classification	Error content
Other paper jam	Rear alignment plate home position error

MJ-1101

Check item	Measures
Rear alignment plate	Move the Rear alignment plate. If there is any mechanical problem, fix its mechanism.
Rear alignment motor Rear alignment plate home position sensor Finisher controller PC board	Check if the connectors on the finisher controller PC board are disconnected from the Rear alignment plate home position sensor (S8) and the Rear alignment motor (M10), or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Front alignment motor	
Front alignment plate home position sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Rear alignment plate	Move the rear alignment plate. Fix any mechanical problem.
Rear alignment plate home position sensor	Check if there is a disconnection of the connector, incorrect installation or breakage of the rear alignment plate home position sensor (S8). If there is, reinstall the sensor correctly or replace it. Check if the connector (CN18) on the finisher controller PC board is disconnected from the rear alignment plate home position sensor (S8) and the harnesses are open circuited. Correct if so.
Rear alignment motor	Check if the connector (CN17) on the finisher controller PC board is disconnected from the rear alignment motor (M6) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Rear alignment plate home position sensor	
Finisher controller PC board	

[ED15] Paddle home position error

Classification	Error content
Other paper jam	Paddle home position error

MJ-1101

Check item	Measures
Paddle	Rotate the paddle. If there is any mechanical problem, fix its mechanism.
Paddle home position sensor Paddle motor Finisher controller PC board	Check if the connectors on the finisher controller PC board are disconnected from the paddle home position sensor (S3) and the paddle motor (M8), or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Paddle motor	
Paddle home position sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Rear alignment plate	Move the rear alignment plate. Fix any mechanical problem.
Rear alignment motor	Check if the connector (CN17) on the finisher controller PC board is disconnected from the rear alignment motor (M6) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Rear alignment motor	

Parts to be replaced	Remark
Finisher controller PC board	

[ED16] Buffer tray home position error

Classification	Error content
Other paper jam	Buffer tray home position error

MJ-1101

Check item	Measures
Buffer tray guide	Open and close the buffer tray guide. If there is any mechanical problem, fix its mechanism.
Buffer tray home position sensor Buffer tray guide motor Finisher controller PC board	Check if the connectors on the finisher controller PC board are disconnected from the buffer tray home position sensor (S5) and the buffer tray guide motor (M3), or the harnesses are open circuited. Correct if any.

Parts to be replaced	Remark
Buffer tray guide motor	
Buffer tray home position sensor	
Finisher controller PC board	

MJ-1106

Check item	Measures
Buffer tray guide	Open and close the buffer tray guide. Fix any mechanical problem.
Buffer tray home position sensor	Check if there is a disconnection of the connector, incorrect installation or breakage of the buffer tray home position sensor (S5). If there is, reinstall the sensor correctly or replace it. Check if the connector (CN11) on the finisher controller PC board is disconnected from the buffer tray home position sensor (S5) and the harnesses are open circuited. Correct if so.
Assist arm motor	Check if the connector (CN13) on the finisher controller PC board is disconnected from the assist arm motor (M10) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Buffer tray home position sensor	
Finisher controller PC board	

[EF10] Paper not supported for Saddle Stitch Finisher

MJ-1106

Classification	Error item
Finisher jam (Finisher section)	Unsupported paper size, type and an excess number of pages for stapling are selected.

Check item	Measures
Paper	<ul style="list-style-type: none"> Paper size check
Buffer tray home position sensor	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Buffer tray guide motor	<ul style="list-style-type: none"> Motor check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check Board check

Parts to be replaced	Remark
Buffer tray home position sensor	
Buffer tray guide motor	
Saddle controller board	

[EF11] Saddle Stitch Finisher stapling error (front)

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	Front stapling is not correctly done.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any paper remaining on the paper transport path in the Finisher or the equipment, or on the finishing tray?. Is the jam released by taking off the front staple cartridge from the Finisher and removing the staple sheet slid from the staple case?
Front saddle stapler drive unit	<ul style="list-style-type: none"> Unit check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN3) Board check

Replace parts	Remarks
Front saddle stapler drive unit	
Saddle controller board	

[EF12] Saddle Stitch Finisher stapling error (rear)

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	Rear stapling is not correctly done.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any paper remaining on the paper transport path in the Finisher or the equipment, or on the finishing tray?. Is the jam released by taking off the rear staple cartridge from the Finisher and removing the staple sheet slid from the staple case?
Rear saddle stapler drive unit	<ul style="list-style-type: none"> Unit check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN3) Board check

Replace parts	Remarks
Rear saddle stapler drive unit	
Saddle controller board	

[EF13] Saddle stitch unit paper holding home position detection error

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	The paper holder home position cannot be detected.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any mechanical problem when the paper holding cam is rotated?
Paper holding home position sensor (S38)	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN8) Board check

Replace parts	Remarks
Paper holding home position sensor (S38)	
Saddle controller board	

[EF14] Saddle paper exit jam

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	Outputting paper is not completed within a fixed time.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any paper remaining in the paper transport path of the equipment or the saddle stitch section of the Finisher?
Exit sensor (S31)	<ul style="list-style-type: none"> Sensor check Connector check Harness check

Check item	Measures
Saddle controller board	<ul style="list-style-type: none"> • Connector check (CN19) • Board check

Replace parts	Remarks
Exit sensor (S31)	
Saddle controller board	

[EF15] Saddle Stitch Finisher side alignment motor home position detection abnormality

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	The side alignment motor home position cannot be detected.

Check item	Measures
Finisher	<ul style="list-style-type: none"> • Is there any mechanical problem when the jog is moved?
Side alignment home position sensor (S36)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Side alignment motor (M15)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Saddle controller board	<ul style="list-style-type: none"> • Connector check (CN5) • Board check

Replace parts	Remarks
Side alignment home position sensor (S36)	
Side alignment motor (M15)	
Saddle controller board	

[EF16] Saddle Stitch Finisher stacker motor home position detection abnormality

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	The stacker motor home position cannot be detected.

Check item	Measures
Stacker carrier	<ul style="list-style-type: none"> • Is there any mechanical problem when the stacker carrier is moved?
Stacker home position sensor (S33)	<ul style="list-style-type: none"> • Sensor check • Connector check • Harness check
Stacker motor (M14)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Saddle controller board	<ul style="list-style-type: none"> • Connector check (CN4) • Board check

Replace parts	Remarks
Stacker home position sensor (S33)	
Stacker motor (M14)	
Saddle controller board	

[EF17] Saddle Stitch Finisher folding blade home position detection abnormality

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	The folding blade home position cannot be detected.

Check item	Measures
Folding blade cam	<ul style="list-style-type: none"> Is there any mechanical problem when the folding blade cam is rotated?
Folding blade home position sensor (S35)	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Folding blade clutch (CLT3)	<ul style="list-style-type: none"> Clutch check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN15) Board check

Replace parts	Remarks
Folding blade home position sensor (S35)	
Folding blade clutch (CLT3)	
Saddle controller board	

[EF18] Saddle Stitch Finisher additional folding roller home position detection abnormality

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	The additional folding roller home position cannot be detected.

Check item	Measures
Additional folding carrier	<ul style="list-style-type: none"> Is there any mechanical problem when the additional folding carrier is moved?
Additional folding home position sensor (S39)	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Additional folding motor (M20)	<ul style="list-style-type: none"> Motor check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN18, CN19) Board check

Replace parts	Remarks
Additional folding home position sensor (S39)	
Additional folding motor (M20)	
Saddle controller board	

[EF19] Saddle paper folding jam

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	Fold processed paper cannot be transported to the additional folding roller.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any paper remaining in the paper transport path in the equipment or the saddle stitch section of the Finisher?
Exit transport sensor (S41)	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN19) Board check

Replace parts	Remarks
Exit transport sensor (S41)	
Saddle controller board	

[EF20] Saddle stacker jam

MJ-1106

Classification	Error item
Finisher jam (Saddle section)	Transported paper cannot be detected in the stacker.

Check item	Measures
Finisher	<ul style="list-style-type: none"> Is there any paper remaining in the paper transport path in the equipment or the saddle stitch section of the Finisher?
Stacker paper detection sensor (S30)	<ul style="list-style-type: none"> Sensor check Connector check Harness check
Saddle controller board	<ul style="list-style-type: none"> Connector check (CN19) Board check

Replace parts	Remarks
Stacker paper detection sensor (S30)	
Saddle controller board	

8.3.13 Paper feeding system related service call

[C040] PFP motor abnormality

Classification	Error content
Paper feeding system related service call	PFP motor abnormality

Procedure	Check item	Result	Measure	Next Step
1	Is the PFP motor working? (Perform the output check: 03-109/159)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the signal line connector CN503 of the PFP motor is disconnected. • Check if the power line connector CN502 of the PFP motor is disconnected. • Check if the connector CN246 on the PFP board is disconnected. • Check if the signal line connector CN241 on the PFP board is • Check if the power line connector CN242 on the PFP board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the PFP motor board, PFP board and LGC board are short circuited or open circuited. 	
2	Is the LED on the PFP motor board lit without flashing?	Yes		3
		No	<ul style="list-style-type: none"> • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the PFP motor board, PFP board and LGC board are short circuited or open circuited. 	
3	PFP board		<ul style="list-style-type: none"> • Check if the PLL lock signal CN246-8 pin output from the PFP board is always "L" level. • Check if the voltage supplied to the microcomputer input terminal IC5-17 pin is always "L" level. 	

Parts to be replaced	Remark
PFP motor	
PFP board	
LGC board	

[C130] 1st drawer tray abnormality

[C140] 2nd drawer tray abnormality

Classification	Error content
Paper feeding system related service call	1st drawer tray abnormality 2nd drawer tray abnormality

Procedure	Check item	Result	Measure	Next Step
1	Does the tray go up? (Perform the output check: 03-242, 243)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the connector of the tray-up motor is disconnected. • Check if the connector CN348 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	
2	Is the tray-up sensor working? (Perform the input check: 03-[ALL]OFF/[4]/[B], /[4]/[A])	Yes		3
		No	<ul style="list-style-type: none"> • Check if the connector of the sensor is disconnected. • Check if the connector CN348 on the LGC board is disconnected. • Check if the slit reaches the sensor. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	
3	LGC board		<ul style="list-style-type: none"> • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	

Parts to be replaced	Remark
Tray-up motor	
LGC board	
Tray-up sensor	

[C150] PFP upper drawer tray abnormality

[C160] PFP lower drawer tray abnormality

Classification	Error content
Paper feeding system related service call	PFP upper drawer tray abnormality PFP lower drawer tray abnormality

Procedure	Check item	Result	Measure	Next Step
1	Does the tray go up? (Perform the output check: 03-278, 280)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the connector of the tray-up motor is disconnected. • Check if any of the connectors CN241, CN242 and CN244 on the PFP board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited. 	
2	Is the tray-up sensor working? (Perform the input check: 03-[ALL]OFF/[4]/[B], /[4]/[A])	Yes		3
		No	<ul style="list-style-type: none"> • Check if the connector of the sensor is disconnected. • Check if any of the connectors CN241, CN247 and CN248 on the PFP board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the slit reaches the sensor. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the PFP board and LGC board are short circuited or open circuited. 	
3	LGC board		<ul style="list-style-type: none"> • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	

Parts to be replaced	Remark
Tray-up motor	
PFP board	
LGC board	
Tray-up sensor	

[C180] LCF tray-up motor abnormality

Classification	Error content
Paper feeding system related service call	LCF tray-up motor abnormality

Procedure	Check item	Result	Measure	Next Step
1	Does the tray move? (Perform the output check: 03-271)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the connector of the LCF tray-up motor is disconnected. • Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited. 	
2	Are the LCF tray-up sensor and LCF tray bottom sensor working? (Perform the input check: 03-[ALL]OFF/[0]/[F], /[9]/[A])	Yes		3
		No	<ul style="list-style-type: none"> • Check if the connectors of the sensors are disconnected. • Check if any of the connectors CN100, CN104 and CN105 on the LCF board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the slit reaches the sensors. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited. 	
3	LGC board		<ul style="list-style-type: none"> • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	

Parts to be replaced	Remark
LCF tray-up motor	
LCF board	
LGC board	
LCF tray-up sensor	
LCF tray bottom sensor	

[C1A0] LCF end fence motor abnormality

Classification	Error content
Paper feeding system related service call	LCF end fence motor abnormality

Procedure	Check item	Result	Measure	Next Step
1	Is the LCF end fence motor working? (Perform the output check: 03-207)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the connector of the LCF end fence motor is disconnected. • Check if any of the connectors CN100, CN101 and CN103 on the LCF board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited. 	
2	Are the LCF end fence home/stop position sensors working? (Perform the input check: 03-[ALL]OFF/[0]/[A],/[0]/[B])	Yes		3
		No	<ul style="list-style-type: none"> • Check if the connectors of the sensors are disconnected. • Check if either of the connectors CN100 or CN107 on the LCF board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the slit reaches the sensors. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the LCF board and LGC board are short circuited or open circuited. 	
3	LGC board		<ul style="list-style-type: none"> • Check if the conductor pattern on the LGC board is short circuited or open circuited. 	

Parts to be replaced	Remark
LCF end fence motor	
LCF board	
LGC board	
LCF end fence home position sensor	
LCF end fence stop position sensor	

[C1B0] LCF transport motor abnormality

Classification	Error content
Paper feeding system related service call	The LCF transport motor is not rotating normally (when paper can be fed from any drawer except the LCF).

Procedure	Check item	Result	Measure	Next Step
1	Is the LCF transport motor working? (Perform the output check: 03-122/172)	Yes		2
		No	<ul style="list-style-type: none"> • Check if the connector CN112 of the LCF transport motor is disconnected. • Check if the connector CN102 on the LCF board is disconnected. • Check if the signal line connector CN100 on the LCF board is disconnected. • Check if the power line connector CN101 on the LCF board is disconnected. • Check if the connector CN349 on the LGC board is disconnected. • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the connector pins are disconnected or the harnesses are open circuited. 	
2	LCF transport motor LGC board		<ul style="list-style-type: none"> • Check if the connector pins are disconnected or the harnesses are open circuited. • Check if the conductor patterns on the LCF transport motor board, LCF board and LGC board are short circuited or open circuited. • Check if the PLL lock signal CN102-3 pin output from the LCF board is always "L" level. • Check if the voltage supplied to the microcomputer input terminal IC103-17 pin is always "L" level. 	

Parts to be replaced	Remark
LCF transport motor	
LCF board	
LGC board	

8.3.14 Scanning system related service call

[C260] Peak detection error

Classification	Error content
Scanning system related service call	Peak detection error


Procedure	Check item	Result	Measure	Next Step
1	Is the exposure lamp lit? (Output check: 03-267)	Yes	It is lit.	2
		No	It is not lit.	3
2	Shading correction plate	1. Check if there is any scratch or stain on the shading correction plate.		
	Mirror	1. Check if the mirror is tilted. - Check that the lens is reflected in the mirror looking at carriage-1 from the upper position. - Check that the mirror is secured at the leaf spring.		
	Exposure lamp	1. Check if the exposure lamp is correctly lit. 2. Check if the harness is connected properly to the exposure lamp connector. 3. When the carriage is driven, check if the harness interferes with it or parts are caught in it.		
	CCD board / Lens unit	1. Check if the connector of the CCD board is connected properly. 2. Check if the CCD board is installed properly. (Check that the lens unit is not tilted or the screw is securely tighten.)		
	SLG board	1. Check if the connector of the SLG board is connected properly. 2. Check if the mounted parts on the SLG board are damaged or abnormal. 3. Check if 10 V is output from the power supply for CCD.		
3	SLG board	1. Check if the supply cable is connected properly to the connector. 2. Check if the mounted parts on the SLG board are damaged or abnormal.		
	Inverter board	1. Check if the harness of the exposure lamp is connected to the inverter board properly. 2. Check if the supply harness to the inverter board is connected properly. 3. Check if the mounted parts on the inverter board are damaged or abnormal.		
	Exposure lamp	1. Check if the harness of the exposure lamp is connected to the inverter board properly. 2. Check if the exposure lamp is scratched or damaged.		
	Supply harness	1. Check if wiring of the supply harness (CN127) is abnormal. 2. Check if the harness is scratched or open circuited.		

Parts to be replaced	Remark
Lens unit	
SLG board	
Exposure lamp	
Supply harness	

[C270] Carriage home position sensor not going OFF within a specified time / Downloading firmware with an incorrect model

Classification	Error content
Scanning system related service call	Carriage home position sensor not going OFF within a specified time / Downloading firmware with an incorrect model

Remove the original glass and move the carriages to the paper feeding side. Turn ON the power and check the following items.

Procedure	Check item	Measure
1	Carriage lock	Check if the carriage lock for packaging is attached.
2	Carriage home position sensor	1. Check if the harness of the carriage home position sensor is connected properly. 2. Check if the harness is caught or open circuited.
3	SLG board	1. Check if the connector of the carriage home position sensor on the SLG board is connected properly. 2. Check if the mounted parts on the SLG board are damaged or abnormal. 3. If the model of the firmware downloaded is incorrect, a C270 error (exposure lamp blinks twice) occurs. If the exposure lamp blinks twice, download the correct ROM.
4	Scan motor	1. Check if the belt tension is loosened. 2. Check if the motor fixing screw is loosened. 3. Check if the carriage wire and the timing belt come off. 4. Check if the connector is connected to the motor properly. 5. Check if the harness of the motor is caught or open circuited.
5	Setting	Clear the SRAM data by starting the equipment in the 3C mode, and initialize them in the 08 mode. ( P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)").

Parts to be replaced	Remark
Carriage home position sensor	
Carriage home position sensor harness	
SLG board	
Scan motor	
Scan motor harness	

[C280] Carriage home position sensor not going ON within a specified time

Classification	Error content
Scanning system related service call	Carriage home position sensor not going ON within a specified time

Remove the original glass and move the carriages to the paper feeding side. Turn ON the power and check the following items.

Procedure	Check item	Measure
1	Carriage lock	Check if the carriage lock for packaging is attached.

Procedure	Check item	Measure
2	Carriage home position sensor	1. Check if the harness is properly connected to the sensor 2. Check if the harness is caught or open circuited.
3	SLG board	1. Check if the harness of the carriage home position sensor is connected properly. 2. Check if the mounted parts on the SLG board are damaged or abnormal.
4	Scan motor	1. Check if the belt tension is loosened (if the motor screw is loosened). 2. Check if the wire and the belt come off. 3. Check if the connector (J007/J125) is connected to the motor properly. 4. Check if the harness of the motor is caught or open circuited.

Parts to be replaced	Remark
Carriage home position sensor	
Carriage home position sensor harness	
SLG board	
Scan motor	
Scan motor harness	

[C290] Scanner fuse blowout

Classification	Error content
Scanning system related service call	The scanning system does not operate due to a blowout of the fuse in the scanning system.

Procedure	Check item	Result	Measure	Next Step
1	Is 24V supplied to the SLG board?	Yes	Supplied.	2
		No	Not supplied.	3
2	SLG board	Check the following because the signal for checking 24V on the SLG board is abnormal. 1. Check if 3V is input in 35 Pin of the scanner CPU (IC15). 2. Check if the mounted parts on the SLG board are damaged or abnormal.		
3	Supply harness	1. Check if the supply harness is connected properly to the connector.		
3	SLG board	1. Check if 24V and SG on the SLG board are short circuited. 2. Check if the power supply is short circuited by pulling out the supply harness on the SLG board.		
3	LVPS	1. Check if the fuse on the LVPS is open circuited.		

Parts to be replaced	Remark
SLG board	
Fuse	
Supply harness	
LVPS	

8.3.15 Fuser unit related service call

Notes:

Be sure to turn OFF the power and unplug the power cable beforehand when checking the power supply unit and fuser unit.
The fuser unit itself or the part of the unit remains heated and the capacitors are still charged after a while the power cable is unplugged. So make sure the unit is cooled down enough before checking.

[C411/C412] Thermistor / heater lamp abnormality at power-ON

Classification	Error content
Fuser unit related service call	Thermistor / heater lamp abnormality at power-ON

Check item	Measures
Power voltage	Check if the power voltage is normal.(Is the voltage during the operation $\pm 10\%$ of the rated voltage?)
Thermopiles	<ul style="list-style-type: none"> • Check if the fuser belt center and side thermopiles (front, rear) are installed properly. • Check if the harnesses of the fuser belt center and side thermopiles (front, rear) are open circuited.
Power supply unit and fuser unit	<ul style="list-style-type: none"> • Is the fuser unit installed correctly? • Check if the heater lamp is broken. • Check if the connector of the heater lamp is disconnected. • Check if the thermostat is blown • Check if the connectors of the power supply unit are disconnected (power supply unit AC output connector CN408, CN409 and LGC I/F connector CN404 CN405). • Check if the power supply unit is abnormal.
LGC board	<ul style="list-style-type: none"> • Check if the connectors CN333, CN345 and CN361 are disconnected. • Check if the conductor pattern on the LGC board is short circuited or open circuited.
Status counter	<p>After repairing the matter which caused the error [C411/C412], perform the following:</p> <ul style="list-style-type: none"> • Turn ON the power while [0] and [8] are pressed simultaneously • Key in "2002", then press [START]. • Change the current status counter value "1" or "2" to "0", then press [OK] or [INTERRUPT] (to cancel [C411/C412]). • Turn the power OFF and then back ON. Make sure that the equipment enters the normal ready state.

Parts to be replaced	Remark
Power supply unit.	
LGC board	

[C443/C445/C446/C447/C449] Heater lamp abnormality after abnormality judgment

Classification	Error content
Fuser unit related service call	Heater lamp abnormality after abnormality judgment

1.2.3.4. Check the thermopiles, Heater and LGC board

Check the above components following the procedures 1, 2,3 and 4 for [C411/C412].

Procedure	Check item	Measures
5	Clear the status counter	<p>Change the current status counter value (08-2002) “3”, “5”, “6”, “9”, “19”, “21”, “22”, “23”, “24”, “25”, “27”, “29” or “32” to “0” for [C44X], taking the same procedure as that for [C41X].</p> <p>* The status counter value is as follows in the following cases.</p> <ul style="list-style-type: none"> - The error occurred during warming-up: “3”, “5” or “6” The error occurred after the equipment has become ready: “7”. - The temperature detected by the fuser belt center thermopile is 220°C or higher, the temperature detected by the side thermopile is 230°C or higher or the temperature detected by the front thermopile is 250°C or higher: “9”, “19”, “21”, “22”, “23”, “25”, “27” or “29” - The error occurred during printing: “24” or “25”. - The error occurred during energy saving: “27”. - A paper jam occurred: “29”.

[C448] Heater lamp lights continuously for a certain period of time when the pressure roller temperature during ready status is higher than the specified

Classification	Error content
Fuser unit related service call	Heater lamp lights continuously for a certain period of time when the pressure roller temperature during ready status is higher than the specified

Check item	Measure
Power supply and fuser unit	<ul style="list-style-type: none"> • Check if the fuser unit is installed properly • Check if foreign matter or paper in the fuser unit is plugging up the monitoring opening of the fuser belt thermopile. • Check if there is any stain on sensor area of the fuser belt thermopile. • Check if the opening of the fuser belt thermopile of the equipment is plugged up. • Check if the connectors of the power supply are disconnected (CN404, CN405, CN408, CN409). • Check if the power supply unit is abnormal.
LGC board	<ul style="list-style-type: none"> • Check if the connector CN333 is disconnected. • Check if the conductor pattern on the LGC board is short circuited or open circuited.
Status counter	<p>After repairing the matter which caused the error [C448], perform the following:</p> <ol style="list-style-type: none"> 1. Turn the power ON while [0] and [8] are pressed simultaneously. 2. Key in “2002”, then press the [START] button. 3. Change the displayed current status counter value “32” to “0”, then press [OK] or [INTERRUPT] (to cancel C448). 4. Turn the power OFF and then back ON. Make sure that the equipment enters the normal status.

Parts to be replaced	Remark
Power supply unit.	
LGC board	

[C450/C451] Abnormal temperature difference between the center thermopile and the edge thermistor

[C452] Abnormal thermopile temperature difference

Classification	Error content
Fuser unit related service call	<ul style="list-style-type: none"> Abnormal temperature difference between the center thermopile and the edge thermistor Abnormal thermopile temperature difference

Check item	Measure
Power supply and fuser unit	<ul style="list-style-type: none"> Check if the fuser unit is installed properly. Check if foreign matter or paper in the fuser unit is plugging up the monitoring opening of the thermopile. Check if there is any stain on sensor area of the fuser belt thermopile. Check if the heater lamp is open circuited. Check if the connector of the heater lamp is disconnected. Check if the thermistor is open circuited. Check if the connectors of the power supply unit (power supply unit AC output connector CN408, CN409 and LGC/IF connector CN404, CN405) are disconnected. Check if the power supply unit is broken.
Thermopile	<ul style="list-style-type: none"> Check if foreign matter is plugging up the thermopile. Check if the thermopile is installed properly. Check if the harnesses are open circuited.
LGC board	<ul style="list-style-type: none"> Check if the connectors CN333, CN345 and CN361 are disconnected. Check if the conductor pattern on the LGC board is short circuited or open circuited.
Status counter	<ol style="list-style-type: none"> Turn the power ON while [0] and [8] are pressed simultaneously. Key in "2002", then press the [START] button. Reset the displayed current status counter value "38", "39", "41", "42", "48", "49", "50" or "51" to "0", then press [OK] or [INTERRUPT]. (The error C451 or C452 is cleared.) Turn the power OFF and then back ON. Make sure that the equipment enters the normal status.

Parts to be replaced	Remark
Power supply unit	
Thermopile	
LGC board	

[C465/C466/C467/C468] Pressure roller thermistor abnormality after entering ready status

Classification	Error content
Fuser unit related service call	Pressure roller thermistor abnormality after entering ready status

Check item	Measure
Pressure roller thermistor	<ul style="list-style-type: none"> • Connector check • Check if the pressure roller center/rear thermistor is installed properly. • Check if the harnesses of the pressure roller center and rear thermistors are open circuited.
Power supply unit and fuser unit	<ul style="list-style-type: none"> • Check if the fuser unit is installed properly. • Check if the pressure roller lamp is open circuited. (Check if the pressure roller lamp has electric continuity.) • Check if the connector of the pressure roller lamp is disconnected. • Check if the thermistor is open circuited. • Check if the connectors of the power supply (CN404, CN405, CN408, CN409) are disconnected. • Check if the power supply unit is broken.
LGC board	<ul style="list-style-type: none"> • Connector check (CN333, CN345, CN361) • Check if the conductor pattern on the board is short circuited or open circuited.
Status counter	<p>Change the current status counter value (08-2002) "5", "6", "8", "18", "20", "26", "28", "33" or "34" to "0"</p> <ul style="list-style-type: none"> • The status counter value is set as follows in the following cases. • The error occurred during warming-up: "5" or "6" • The error occurred after the equipment has become ready: "33" • Regardless of the equipment's status (i.e. during warming-up, printing, paper jam or in ready status), when the temperature detected by the pressure roller thermistor is 210°C or higher: "8", "18", "20", "26" or "28". • The error occurred during printing: "34"

Parts to be replaced	Remark
Power supply unit	
LGC board	

[C4B0] IGBT overheating abnormality

Classification	Error content
Fuser unit related service call	IGBT overheating abnormality

Check item	Measure
LGC board	<ul style="list-style-type: none"> • Check if the conductor pattern on the board is short circuited or open circuited. • Check if SRAM is mounted.
Status counter	<p>Change the values "52" or above, "4", "10", "11", "12", "13", "14", "15", "16", "17", "35", "36", "37", "40", "43", "44", "45", "46" or "47" of the status counter (08-2002) to "0".</p>

Parts to be replaced	Remark
LGC board	

[C4B1] Fuser unit destination selection abnormality

Classification	Error content
Fuser unit related service call	Fuser unit destination selection abnormality

The first occurrence of the error C4B1 is not the determination of the error. When the error C4B1 occurred, turn the power of the equipment OFF and then back ON following the instruction shown in the touch panel. If the abnormality is resolved, the value of the fuser unit status counter is automatically reset to "0". When the error C4B1 occurred twice or more consecutively, the error is determined and recorded in the error history.

Check item	Measure
Fuser unit	<ul style="list-style-type: none">• Check if the fuser unit is installed correctly or if its destination is correct.• Check if any harness in the fuser unit is caught.
LGC board	<ul style="list-style-type: none">• Check if the destination of the SRAM is correct.

Parts to be replaced	Remark
LGC board	

[C4D0] Fuser belt thermopile abnormality

Classification	Error content
Fuser unit related service call	Fuser belt thermopile abnormality

Check item	Measure
Thermopile	<ul style="list-style-type: none">• Connector check• Check if the harnesses of the fuser belt center thermopile and the fuser belt side thermopile are open circuited.
LGC board	<ul style="list-style-type: none">• Connector check (CN333)• Check if the conductor pattern on the LGC board is open circuited or short circuited.
Cancel the service call	After repairing the matter which caused the error [C4D0], turn the power OFF and then back ON to cancel the service call. However, the counter value will be stored until it is written over by the value of the other service call.

Parts to be replaced	Remark
Thermopile	
LGC board	

8.3.16 Communication related service call

[C550] RADF I/F error

Classification	Error content
Communication related service call	RADF I/F error

Check item	Measure
RADF board	<ul style="list-style-type: none"> • Check if the harness connecting the RADF board and SLG board is disconnected or open circuited. • Check if the conductor pattern on the RADF board is short circuited or open circuited. • Connector check
SLG board	<ul style="list-style-type: none"> • Check if the conductor pattern on the SLG board is short circuited or open circuited. • Connector check

Parts to be replaced	Remark
RADF board	
SLG board	

[C570] Communication error between Engine-CPU and IPC board

Classification	Error content
Communication related service call	Communication error between Engine-CPU and IPC board

Check item	Measure
LGC board	<ul style="list-style-type: none"> • Check if the LGC board and IPC board are connected properly. • Check if the conductor pattern on the LGC board is short circuited or open circuited.
IPC board	Check if the conductor pattern on the IPC board is short circuited or open circuited.

Parts to be replaced	Remark
LGC board	
IPC board	

[C580] Communication error between IPC board and finisher

Classification	Error content
Communication related service call	Communication error between IPC board and finisher

Check item	Measure
Finisher	Check if the specified finisher is attached.
IPC board	<ul style="list-style-type: none"> • Check if the harness connecting the IPC board and the finisher controller PC board is disconnected or open circuited. • Check if the conductor pattern on the IPC board is short circuited or open circuited.

Check item	Measure
Finisher controller PC board	Check if the conductor pattern on the finisher controller PC board is short circuited or open circuited.

Parts to be replaced	Remark
IPC board	
Finisher controller PC board	

[F070] Communication error between System-CPU and Engine-CPU

Classification	Error content
Communication related service call	Check the version of the system ROM on the SYS board.

Check item	Measure
Switching regulator	<ul style="list-style-type: none"> • Check the fuse (F210). • Connector check (CN404, CN405) • Board check
Check ROM version	<ul style="list-style-type: none"> • Check the version of the system ROM on the SYS board. • Check the version of the engine ROM on the LGC board.
Board check	<ul style="list-style-type: none"> • Check if the connector CN423 on the IMG board and the connector CN354 on the LGC board are completely inserted. • Check if the connector pin between the IMG board (connector CN423) and the LGC board (connector CN354) is disconnected. • Check if the connector CN422 on the IMG board and the connector CN135 on the SYS board are completely inserted. • Check if the connector pin between the IMG board (connector CN422) and the SYS board (connector CN135) is disconnected. • Check if the conductor patterns on the IMG board, LGC board and SYS board are short circuited or open circuited

Parts to be replaced	Remark
Switching regulator	<ul style="list-style-type: none"> • Replace the fuse (F210). • Replace the switching regulator.
LGC board	
SYS board	
IMG board	

[F110] Communication error between System-CPU and Scanner-CPU

[F111] Scanner response abnormality

Classification	Error content
Communication related service call	Communication error between System-CPU and Scanner-CPU Scanner response abnormality

Check item	Measure
Reproducibility	Turn the power OFF and then back ON using the main power switch.

Check item	Measure
Harness check	Check if the harness connecting the IMG board and SLG board is disconnected or open circuited.
Check ROM version	<ul style="list-style-type: none"> Check the version of the system ROM on the SYS board. Check the version of the scanner ROM version on the SLG board.

Parts to be replaced	Remark
SYS board	
SLG board	

8.3.17 RADF related service call

[C551] RADF model detection error

Classification	Error content
RADF related service call	Incorrect RADF installed to the equipment

Check item	Measure
RADF	<ul style="list-style-type: none"> Replace the RADF with the correct one.

Parts to be replaced	Remark
RADF	

[C8E0] RADF communication protocol abnormality

Classification	Error content
Optional communication related service call	The system has to be stopped because the control abnormality occurred.

Check item	Measure
Power	Turn the power OFF and then back ON to check if the equipment operates normally.
RADF board	<ul style="list-style-type: none"> Connector check Board check

Parts to be replaced	Remark
RADF board	

8.3.18 Circuit related service call

[C5A0] SRAM board not connected (LGC board)

Classification	Contents
Circuit related service call	SRAM board data abnormality (LGC board)

Check Item	Measure
SRAM board	<ul style="list-style-type: none"> Connector check (CN170) Board check

Check Item	Measure
LGC board	<ul style="list-style-type: none"> Connector check (CN363) Board check

Replacement part	Remarks
SRAM board	
LGC board	

[C5A1] SRAM board data abnormality (LGC board)

Classification	Contents
Circuit related service call	SRAM board data abnormality (LGC board)

Check Item	Measure
SRAM board	<ul style="list-style-type: none"> Connector check (CN170) Board check
LGC board	<ul style="list-style-type: none"> Connector check (CN363) Board check

Replacement part	Remarks
SRAM board	
LGC board	

[C900] Connection error between the SYS board and the LGC board

Classification	Contents
Circuit related service call	Connection error between SYS board and LGC board

Check Item	Measure
LGC board	<ul style="list-style-type: none"> Connector check (CN354) Board check
IMG board	<ul style="list-style-type: none"> Connector check (CN422, CN423) Board check
SYS board	<ul style="list-style-type: none"> Connector check (CN135) Board check

Replacement part	Remarks
LGC board	If the problem is not corrected with the replacement of the LGC board, reinstall the removed LGC board and replace the SYS board.
SYS board	If the problem is still not corrected with the replacement of the SYS board, reinstall the removed SYS board and replace the IMG board.
IMG board	

[C901] System format error for scanner

Classification	Contents
Circuit related service call	System format error for scanner

Check Item	Measure
Main power switch	Does service call still occur even after turning OFF the main power switch then back ON?
SLG board	<ul style="list-style-type: none"> Connector check (CN12) Board check
SYS board	<ul style="list-style-type: none"> Connector check (CN135) Board check

Replacement part	Remarks
LGC board	
IMG board	
SYS board	

[C910] Toner cartridge IC chip access board abnormality

Classification	Contents
Toner cartridge related service call	Abnormal access between the CTRG board and LGC board

Procedure	Check item	Result	Measure	Next Step
1	Does the non-genuine toner cartridge display appear when the front cover is opened and closed?	Yes	Use the genuine toner cartridge.	2
		No		2
2	Toner cartridge		<ul style="list-style-type: none"> Check the phenomenon by removing the toner cartridges (Y, M, C and K) and reinserting them. Check that the CTRG board of each cartridge (Y, M, C and K) is installed properly. 	
3	Contact point on the equipment side		Check that the spring of the contact point for each color (Y, M, C and K) is not deformed.	
4	Is the spring of the contact point returned when it is pushed lightly?	Yes		
		No	<ul style="list-style-type: none"> Check that the CTIF board is installed properly. Board check 	7
<p>Notes: The spring of the contact point may be released if you push the toner cartridge all the way in when an abnormality occurs.</p>				
5	LGC board		<ul style="list-style-type: none"> Connector check (CN364) Board check 	
6	HRNS-LGC-TNRIC-140		<ul style="list-style-type: none"> Relay connector check (J556, J557, J558, J559) Harness check 	
7	CTIF board for each color (Y, M, C and K)		<ul style="list-style-type: none"> Check that the board is installed properly. Board check 	
8	HRNS-TNRIC-140 for each color (Y, M, C and K)		<ul style="list-style-type: none"> Connector check Harness check 	

Replacement part	Remarks
Toner cartridge	
LGC board	
HRNS-LGC-TNRIC-140	
CTIF board	
HRNS-TNRIC-140	

[C911] Toner cartridge IC chip access board abnormality (caused by factors other than C910)

Classification	Contents
Toner cartridge related service call	Abnormal access between the CTRG board and LGC board (High possibility of failure except the LGC board)

Procedure	Check item	Result	Measure	Next Step
1	Does non-genuine toner cartridge display appear when the front cover is opened and closed?	Yes	Use the genuine toner cartridge.	2
		No		2
2	Toner cartridge		<ul style="list-style-type: none"> Check the phenomenon by removing the toner cartridges (Y, M, C and K) and reinserting them. Check that the CTRG board of each cartridge (Y, M, C and K) is installed properly. 	
3	Contact point on the equipment side		Check that the spring of the contact point for each color (Y, M, C and K) is not deformed.	
4	Is the spring of the contact point returned when it is pushed lightly?	Yes		
		No	<ul style="list-style-type: none"> Check that the CTIF board is installed properly. Board check 	7
	<p>Notes: The spring of the contact point may be released if you push the toner cartridge all the way in when an abnormality occurs.</p>			
5	LGC board		<ul style="list-style-type: none"> Connector check (CN364) Board check 	
6	HRNS-LGC-TNRIC-140		<ul style="list-style-type: none"> Relay connector check (J556, J557, J558, J559) Harness check 	
7	CTIF board for each color (Y, M, C and K)		<ul style="list-style-type: none"> Check that the board is installed properly. Board check 	
8	HRNS-TNRIC-140 for each color (Y, M, C and K)		<ul style="list-style-type: none"> Connector check Harness check 	

Replacement part	Measure
Toner cartridge	
LGC board	
HRNS-LGC-TNRIC-140	
CTIF board	
HRNS-TNRIC-140	

[C940] Engine-CPU abnormality

Classification	Contents
Circuit related service call	Engine-CPU abnormality

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Engine-CPU, FROM, and SRAM	Check if the conductor pattern between the Engine-CPU, FROM, and SRAM is short circuited or open circuited.
LGC board	Board check

Replacement part	Remarks
LGC board	

[C962] LGC board ID abnormality

Classification	Contents
Circuit related service call	LGC board ID abnormality

Check Item	Measure
LGC board	<ul style="list-style-type: none"> Connector check (CN344, CN354, CN332, CN333, CN343) Board check
IMG board	<ul style="list-style-type: none"> Connector check (CN423, CN425) Board check
Switching regulator	<ul style="list-style-type: none"> Connector check (CN403)
Laser optical unit	<ul style="list-style-type: none"> Check that the laser optical unit corresponding to the applicable model is installed
Laser optical unit connection harness	<ul style="list-style-type: none"> Relay connector check (J506)
Harness	<ul style="list-style-type: none"> Connector check Harness check

Replacement part	Remarks
LGC board	If the problem is not corrected with the replacement of the LGC board, reinstall the removed LGC board and replace the IMG board.
IMG board	If the problem is still not corrected with the replacement of the IMG board, reinstall it and ask a specialist to repair it. (Abnormal ID)

[C9E0] Connection error between the SLG board and the SYS board

Classification	Contents
Circuit related service call	Connection error between SLG board and SYS board

Check Item	Measure
SLG board	<ul style="list-style-type: none"> Connector check (CN12) Board check
IMG board	<ul style="list-style-type: none"> Connector check (CN421, CN422) Board check

Check Item	Measure
SYS board	<ul style="list-style-type: none"> • Connector check (CN135) • Board check

Replacement part	Remarks
SLG board	If the problem is not corrected with the replacement of the SLG board, reinstall the removed SLG board and replace the IMG board.
IMG board	If the problem is not corrected with the replacement of the IMG board, reinstall the removed IMG board and replace the SYS board.
SYS board	

[F090] SRAM abnormality on the SYS board

Classification	Contents
Circuit related service call	SRAM abnormality on the SYS board

Check Item	Measure
SRAM	Check the connection of SRAM
	<ol style="list-style-type: none"> 1. Turn the power OFF, and start up the Setting Mode (08). 2. When "SRAM REQUIRES INITIALIZATION" is displayed on the LCD, check the destination and then press the [START] button. If the destination is not correct, key in the correct one and then press the [START] button. (SRAM is initialized.) 3. After the confirmation message is displayed, press the [INTERRUPT] button. 4. Perform the panel calibration (08-9050). 5. Enter the serial number (08-9601). Match it with the serial number on the label attached to the rear cover of the equipment. 6. Initialize the NIC information (08-9083). 7. Turn the power OFF and then start up with the Adjustment mode (05). 8. Perform "Data transfer of characteristic value of scanner" (05-3203). 9. Perform "Automatic gamma adjustment" <PPC> (05-7869). (using [4][FAX] test pattern) 10. Perform "Automatic gamma adjustment" <PRT> (05-8008). (using [70][FAX] test pattern) 11. Turn the power OFF and then back ON.
SYS board	Board check

Replacement part	Remarks
SRAM on the SYS board	
SYS board	

[F350] SLG board abnormality

Classification	Contents
Circuit related service call	SLG board abnormality

Check Item	Measure
SLG board	Board check
Combination of the firmware version	<ul style="list-style-type: none">• Check the combination of the firmware version of the system ROM, engine ROM, and scanner ROM.• Reinstall the scanner ROM firmware.

Replacement part	Remarks
SLG board	

8.3.19 Laser optical unit related service call

[CA10] Polygonal motor abnormality

Classification	Contents
Laser optical unit related service call	Polygonal motor abnormality: The polygonal motor is not rotating normally.

e-STUDIO2040C/2540C/3040C/3540C

Step	Check Item	Result	Measure	Next Step
1	Is the polygonal motor rotating?	Yes		3
		No		2
2	Polygonal motor		Connector check	
3	LGC board		<ul style="list-style-type: none"> Connector check (CN343, J506) Board check 	
4	Laser unit cooling fan		<ul style="list-style-type: none"> Check if the laser unit cooling fan is stopped. Check if the suction area of the laser unit cooling fan is plugged up. 	
5	Units with high-voltage		<ul style="list-style-type: none"> Check if the units with high-voltage (developer unit, transfer belt unit, 2nd transfer roller unit) are securely grounded. Check if the bias supply joints of the units with high-voltage are securely connected or they are not stained. 	
6	Plate in the paper transport system		Check if the plate in the paper transport system is securely grounded.	
7	Equipment		Check if the equipment is grounded.	
8	Laser unit cooling fan		<ul style="list-style-type: none"> Check if the laser unit cooling fan is stopped. Check if the suction area of the laser unit cooling fan is plugged up. 	

Replacement part	Remarks
Laser optical unit	
LGC board	

e-STUDIO4540C

Step	Check Item	Result	Measure	Next Step
1	Is the polygonal motor rotating?	Yes		2
		No		3
2	Is the printed image distorted?	Yes		3
		No		6
3	POL board		<ul style="list-style-type: none"> Connector check (connectors on the both edges of the HRNS-POL-DRV-382) Board check 	4

Step	Check Item	Result	Measure	Next Step
4	LGC board		<ul style="list-style-type: none"> Connector check (CN343, J506) Board check 	5
5	Laser unit cooling fan		<ul style="list-style-type: none"> Check if the laser unit cooling fan is stopped. Check if the suction area of the laser unit cooling fan is plugged up. 	
6	LGC board		Board check	
7	Units with high-voltage		<ul style="list-style-type: none"> Check if the units with high-voltage (developer unit, transfer belt unit, 2nd transfer roller unit) are securely grounded. Check if the bias supply joints of the units with high-voltage are securely connected or they are not stained. 	
8	Plate in the paper transport system		Check if the plate in the paper transport system is securely grounded.	
9	Equipment		Check if the equipment is grounded.	
10	Laser unit cooling fan		<ul style="list-style-type: none"> Check if the laser unit cooling fan is stopped. Check if the suction area of the laser unit cooling fan is plugged up. 	

Replacement part	Remarks
POL board	
Laser optical unit	
LGC board	

[CA20] H-Sync detection error

Classification	Contents
Laser optical unit related service call	H-Sync detection error: H-Sync signal detection PC board cannot detect laser beams.

Step	Check Item	Result	Measure	Next Step
1	LGC board		<ul style="list-style-type: none"> Check the connectors and harnesses between CN356 and LDR board. Check the connectors and harnesses between CN355 and SNS board. Connector check (J503, J505) 	
2	Front cover ADU		Close the front cover and ADU if it is open.	
3	Is the pin CN405-4 on the power supply unit +5V?	Yes		4
		No		5
4	Is the pin CN361-4 on the LGC board +5V?	Yes		6
		No		5

Step	Check Item	Result	Measure	Next Step
5	Power supply unit		Check the connectors and harnesses between the power supply unit and LGC board.	
6	LGC board		Board check	
7	Units with high-voltage		<ul style="list-style-type: none"> Check if the units with high-voltage (developer unit, transfer belt unit, 2nd transfer roller unit) are securely grounded. Check if the bias supply joints of the units with high-voltage are securely connected or they are not stained. 	
8	Plate in the paper transport system		Check if the plate in the paper transport system is securely grounded.	
9	Equipment		Check if the equipment is grounded.	
10	Laser unit cooling fan		<ul style="list-style-type: none"> Check if the laser unit cooling fan is stopped. Check if the suction area of the laser unit cooling fan is plugged up. 	

Replacement part	Remarks
Power supply unit	
Laser optical unit	
LGC board	

[CF90] Laser optical unit shutter abnormality

Classification	Contents
Laser optical unit related service call	Laser optical unit shutter abnormality.

Step	Check Item	Result	Measure	Next Step
1	Shutter motor (M12)		<ul style="list-style-type: none"> Motor check (Perform the output check: 03-417) Connector check (J606, J561) 	
2	Shutter		<ul style="list-style-type: none"> Check the installation Check operation 	
3	Shutter sensor		<ul style="list-style-type: none"> Sensor check (Perform the input check: 03-[FAX]ON/[2]/[D]) Connector check (J606) Harness check 	
4	LGC board		<ul style="list-style-type: none"> Connector check (CN359) Board check 	12

Replacement part	Remarks
Shutter unit	
LGC board	

8.3.20 Finisher related service call

[CB00] Finisher not connected

[CB01] Finisher communication error

Classification	Contents
Finisher related service call	Finisher not connected: Communication error has occurred between the equipment and finisher. Finisher communication error: Communication error has occurred between the equipment and finisher.

MJ-1101

Check Item	Measure
Setting of the equipment	Check if the MJ-1101 is set as the specified finisher on the equipment.
Converter PC board	<ul style="list-style-type: none"> Check the harnesses connecting the converter PC board and the finisher controller PC board. Board check
Finisher controller PC board	Board check

Replacement part	Remarks
Converter PC board	
Finisher controller PC board	

MJ-1106

(when MJ-6103 is not connected)

Check item	Measures
Main power switch	Turn the main power switch OFF and then back ON.
Setting of the equipment	Check if the MJ-1106 is set as the specified finisher on the equipment.
Finisher control PC board	Check if the harness between the converter PC board of the equipment and the finisher control PC board (FIN) is disconnected or open circuited.
Converter PC board	Update the firmware version of the converter PC board.
Finisher control PC board	Check if the conductor pattern on the finisher control PC board (FIN) is open circuited or short circuited. Update the firmware version of the finisher control PC board (FIN).

Parts to be replaced	Remark
Finisher control PC board	
Converter PC board	

MJ-1106

(when MJ-6103 is connected)

Check item	Measures
Main power switch	Turn the main power switch OFF and then back ON.
Setting of the equipment	Check if the MJ-1106 is set as the specified finisher on the equipment.

Check item	Measures
Finisher control PC board	Check if the harness between the converter PC board of the equipment and the finisher control PC board (FIN) is disconnected or open circuited.
Converter PC board	Update the firmware version of the converter PC board.
Hole punch control PC board	Check if the harness between the hole punch control PC board (HP) and the interface PC board (I/F) is disconnected or open circuited.
	Check if the conductor pattern on the hole punch control PC board (HP) is open circuited or short circuited.
Interface PC board	Check if the harness between the interface PC board (I/F) and the finisher control PC board (FIN) is disconnected or open circuited.
	Check if the conductor pattern on the interface PC board (I/F) is open circuited or short circuited.
Finisher control PC board	Check if the conductor pattern on the finisher control PC board (FIN) is open circuited or short circuited.
	Update the firmware version of the finisher control PC board (FIN).

Parts to be replaced	Remark
Finisher control PC board	
Converter PC board	

[CB10] Entrance motor abnormality

Classification	Contents
Finisher related service call	Entrance motor abnormality: The entrance motor is not rotating normally.

MJ-1101

Check Item	Measure
Entrance roller	If there is mechanical problem when the entrance roller is rotated, fix the mechanism.
Entrance motor (M1)	Check the connectors and harnesses between the entrance motor (M1) and the finisher control PC board (CN7).

Replacement part	Remarks
Entrance motor (M1)	
Finisher controller PC board	

MJ-1106

Check Item	Measure
Feeding roller	Rotate the feeding roller. Fix any mechanical problem.
Entrance motor	Check if the connector (CN26) on the finisher controller PC board is disconnected from the entrance motor (M1) and the harnesses are open circuited. Correct if so.

Replacement part	Remarks
Entrance motor	
Finisher control PC board	

[CB11] Buffer tray guide motor abnormality

* A [CB11] error occurs if the [ED16] error occurs three times in succession or the [ED16] error occurs during the initialization.

Classification	Contents
Finisher related service call	Buffer tray guide motor abnormality: The buffer tray guide motor is not rotating or the buffer tray guide is not moving normally.

MJ-1101

Check Item	Measure
Buffer tray guide	If there is mechanical problem when the buffer tray guide is opened/closed while the buffer roller is lifted up, fix the mechanism.
Buffer tray guide motor (M3)	Check the connectors and harnesses between the buffer tray guide motor (M3) and the finisher control PC board (CN18).

Replacement part	Remarks
Buffer tray guide motor (M3)	
Finisher controller PC board	

MJ-1106

Check Item	Measure
Buffer tray guide	Raise the buffer roller and open/close the buffer tray guide. Fix any mechanical problem.
Buffer tray guide motor	Check if the connector (CN11) on the finisher controller PC board is disconnected from the buffer tray guide motor (M2) and the harnesses are open circuited. Correct if so.

Replacement part	Remarks
Buffer tray guide motor	
Finisher controller PC board	

[CB12] Buffer roller drive motor abnormality

Classification	Contents
Finisher related service call	Buffer roller drive motor abnormality: The buffer roller drive motor is not rotating or the buffer roller is not moving normally.

MJ-1101

Check Item	Measure
Buffer roller	If there is mechanical problem when the buffer roller is rotated, fix the mechanism.

Check Item	Measure
Buffer roller drive motor (M6)	Check the connectors and harnesses between the buffer roller drive motor (M6) and the finisher control PC board (CN18).

Replacement part	Remarks
Buffer roller drive motor (M6)	
Finisher controller PC board	

MJ-1106

Check Item	Measure
Buffer roller	Rotate the buffer roller. Fix any mechanical problem.
Buffer roller drive motor	Check if the connector (CN11) on the finisher controller PC board is disconnected from the buffer roller drive motor (M4) and the harnesses are open circuited. Correct if so.

Replacement part	Remarks
Buffer roller drive motor	
Finisher controller PC board	

[CB13] Finisher exit motor (M11) abnormality

MJ-1101/1106

Classification	Error item
Finisher related service call	

Check item	Measures
Exit roller	<ul style="list-style-type: none"> Is there any mechanical problem when the exit roller is rotated?
Exit motor (M11).	<ul style="list-style-type: none"> Motor check Connector check Harness check
Finisher control board	<ul style="list-style-type: none"> Connector check (CN13) Board check

Replace parts	Remarks
Exit motor	
Finisher control board	

[CB14] Paper pusher arm motor (M10) abnormality

MJ-1101/1106

Classification	Error item
Finisher related service call	

Check item	Measures
Paper pusher cam	<ul style="list-style-type: none"> Is there any mechanical problem when the paper pusher cam is rotated?

Check item	Measures
Assist arm motor (M10)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Finisher control board	<ul style="list-style-type: none"> • Connector check (CN13) • Board check

Replace parts	Remarks
Assist arm motor	
Finisher control board	

[CB20] Delivery motor abnormality
MJ-1031

Classification	Error item
Finisher related service call	Delivery motor or delivery roller is not rotating normally.

Check item	Measures
Paper exit roller	Rotate the paper exit roller manually and fix any mechanical problem.
Exit motor clock sensor (PI10)	<ul style="list-style-type: none"> • Connector check • Sensor check
Finisher controller circuit board	Check that the voltage of the finisher controller circuit board between J11-4 and J11-5 is 24V while the exit motor is rotated.
Exit motor	<ul style="list-style-type: none"> • Connector check • Harness check

Replace parts	Remarks
Exit motor clock sensor (PI10)	
Finisher controller circuit board	
Exit motor	

[CB30] Movable tray shift motor abnormality
MJ-1101

Classification	Contents
Finisher related service call	Movable tray shift motor abnormality: The movable tray shift motor is not rotating or the movable tray is not moving normally.

Check Item	Measure
Movable tray	If there is mechanical problem when the movable tray is moved, fix the mechanism.
Movable tray shift motor (M7)	Check the connectors and harnesses between the movable tray shift motor (M7) and the finisher control PC board (CN8).
Movable tray position A, B, and C sensors (S13, S14, and S15)	<ul style="list-style-type: none"> • Connector check • Sensor check

Replacement part	Remarks
Movable tray shift motor (M7)	
Movable tray position A, B, and C sensors (S13, S14, and S15)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Movable tray	If there is mechanical problem when the movable tray is moved, fix the mechanism.
Movable tray shift motor (M12)	Check the connectors and harnesses between the movable tray shift motor (M12) and the finisher control PC board (CN16).
Movable tray position A, B, and C sensors (S13, S14, and S15)	<ul style="list-style-type: none"> • Connector check • Sensor check

Parts to be replaced	Remark
Movable tray shift motor (M7)	
Movable tray position A, B, and C sensors (S13, S14, and S15)	
Finisher controller PC board	

[CB31] Movable tray paper-full detection error

Classification	Contents
Finisher related service call	Movable tray paper-full detection error: The actuator of the movable tray paper-full detection sensor does not move smoothly.

MJ-1101

Check Item	Measure
Movable tray paper-full detection sensor (S16)	<ul style="list-style-type: none"> • If there is mechanical problem when the actuator is moved, fix the mechanism. • Sensor check • Check the connectors and harnesses between the movable tray paper-full detection sensor (S16) and the finisher control PC board (CN13).

Replacement part	Remarks
Movable tray paper-full detection sensor (S16)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Movable tray paper-full sensor	Fix any mechanical problem occurring when the actuator is moved.
	Check if there is a disconnection of the connector, incorrect installation or breakage of the movable tray paper-full sensor (S16). If there is, reinstall the sensor correctly or replace it.
	Check if the connector (CN12) on the finisher controller PC board is disconnected from the movable tray paper-full sensor (S16) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Movable tray paper-full sensor	
Finisher control PC board	

[CB40] Front alignment motor abnormality

* You receive a [CB40] error when the [ED13] error occurs three times in succession.

Classification	Contents
Finisher related service call	Front alignment motor abnormality: The front alignment motor is not rotating or the front alignment plate is not moving normally.

MJ-1101

Check Item	Measure
Front alignment plate	If there is mechanical problem when the front alignment plate is moved, fix the mechanism.
Front alignment motor (M9)	Check the connectors and harnesses between the front alignment motor (M9) and the finisher control PC board (CN10).

Replacement part	Remarks
Front alignment motor (M9)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Front alignment plate	If there is mechanical problem when the front alignment plate is moved, fix the mechanism.
Front alignment motor (M5)	Check the connectors and harnesses between the front alignment motor (M5) and the finisher control PC board (CN10).

Parts to be replaced	Remark
Front alignment motor (M5)	
Finisher controller PC board	

[CB50] Staple unit abnormality

MJ-1031

Classification	Contents
Finisher related service call	Staple unit abnormality: Staple unit is not moving normally.

Check Item	Measure
Stapler	Check the connectors and harnesses between the stapler and finisher controller PC board (J112, J113).

Replacement part	Remarks
Stapler	
Finisher controller PC board	

[CB50] Stapler home position error

* You receive a [CB50] error when the [EA50] error occurs three times in succession.

Classification	Contents
Finisher related service call	Stapler home position error: The stapler home position sensor does not work.

MJ-1101

Check Item	Measure
Stapler	<ul style="list-style-type: none"> • Check the connectors and harnesses between the stapler(M4) and finisher controller PC board (CN2). • Check the harnesses in the stapler.

Replacement part	Remarks
Finisher controller PC board	

MJ-1106

Check item	Measures
Stapler	<ul style="list-style-type: none"> • Check the connectors and harnesses between the stapler and finisher controller PC board (CN19). • Check the harnesses in the stapler.

Parts to be replaced	Remark
Stapler	
Finisher controller PC board	

[CB51] Stapler shift home position error

Classification	Contents
Finisher related service call	Stapler shift home position error: The stapler is not at the home position.

MJ-1101

Check Item	Measure
Stapler	If there is mechanical problem when the stapler is moved, fix the mechanism.
Stapler unit home position sensor (S10)	<ul style="list-style-type: none"> • Sensor check • Check the connectors and harnesses between the stapler unit home position sensor (S10) and the finisher control PC board (CN1).
Stapler unit shift motor (M4)	Check the connectors and harnesses between the stapler unit shift motor (M4) and the finisher control PC board (CN5).

Replacement part	Remarks
Stapler unit home position sensor (S10)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Stapler	Move the stapler. Fix any mechanical problem.
Stapler unit home position sensor	<p>Check if there is a disconnection of the connector, incorrect installation or breakage of the stapler unit home position sensor (S10). If there is, reinstall the sensor correctly or replace it.</p> <p>Check if the connector (CN21) on the finisher controller PC board is disconnected from the stapler unit home position sensor (S10) and the harnesses are open circuited. Correct if so.</p>
Stapler unit shift motor	Check if the connector (CN10) on the finisher controller PC board is disconnected from the stapler unit shift motor (M9) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Stapler unit home position sensor	
Finisher controller PC board	

[CB60] Stapler unit shift motor abnormality

Classification	Contents
Finisher related service call	Stapler shift motor abnormality: Stapler shift motor is not rotating or staple unit is not moving normally.

MJ-1101

Check Item	Measure
Stapler	If there is mechanical problem when the stapler is moved, fix the mechanism.
Stapler unit shift motor (M4)	Check the connectors and harnesses between the stapler unit shift motor (M4) and the finisher control PC board (CN5).

Replacement part	Measure
Stapler unit shift motor (M4)	
Finisher controller PC board	

MJ-1106

Check Item	Measure
Stapler	If there is mechanical problem when the stapler is moved, fix the mechanism.
Stapler unit shift motor (M9)	Check the connectors and harnesses between the stapler unit shift motor (M9) and the finisher control PC board (CN10).

Replacement part	Remarks
Stapler unit shift motor (M4)	
Finisher controller PC board	

[CB80] Backup RAM data abnormality

MJ-1031

Classification	Contents
Finisher related service call	Backup RAM data abnormality: Abnormality of checksum value on finisher controller PC board is detected when the power is turned ON.

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.

Replacement part	Remarks
Finisher controller PC board	

[CB80] Backup RAM data abnormality

MJ-1101/1106

Classification	Contents
Finisher related service call	Backup RAM data abnormality: Abnormality of checksum value on finisher controller PC board is detected when the power is turned ON.

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.

Replacement part	Remarks
Finisher controller PC board	

[CB81] Flash ROM abnormality

MJ-1101/1106

Classification	Contents
Finisher related service call	Flash ROM abnormality: Abnormality of checksum value on finisher controller PC board is detected when the power is turned ON.

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Finisher controller PC board	Board check

Replacement part	Remarks
Finisher controller PC board	

[CB82] Finisher main program error

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Finisher control board	Update the firmware version of the finisher control PC board (FIN).

Replace parts	Remarks
Finisher control board	

[CB83] Saddle main program error

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Saddle control PC board	<ul style="list-style-type: none"> • Update the firmware version of the saddle control PC board (SDL). • Connector check • Board check

Replace parts	Remarks
Saddle control PC board	

[CB84] Punch unit main program error

Classification	Error item
Finisher related service call	

Check item	Measures
Hole punch control PC board (HP)	<ul style="list-style-type: none"> • Is the firmware version of the PNC board (HP) latest? • Connector check • Board check

Replace parts	Remarks
Hole punch control PC board	

[CB91] Saddle flash ROM abnormality

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Saddle controller PC board (SDL)	<ul style="list-style-type: none"> • Check if the conductor pattern on the saddle controller PC board (SDL) is open circuited or short circuited. • Connector check • Board check

Replace parts	Remarks
Saddle controller PC board	

[CB92] Saddle Stitch Finisher RAM abnormality

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Saddle controller PC board (SDL)	<ul style="list-style-type: none"> • Check if the conductor pattern on the saddle controller PC board (SDL) is open circuited or short circuited. • Connector check • Board check

Replace parts	Remarks
Saddle controller PC board	

[CB93] Saddle Stitch Finisher additional folding motor abnormality

MJ-1106

Classification	Error item
Finisher related service call	The [CB93] error also occurs when the error [EF18] has occurred consecutively for 3 times.

Check item	Measures
Additional folding carrier	<ul style="list-style-type: none"> • Is there any mechanical problem when the additional folding carrier is moved? • Connector check • Harness check
Additional folding motor (M20)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> • Connector check (CN18) • Board check

Replace parts	Remarks
Additional folding motor	
Saddle control PC board	

[CB94] Saddle transport motor abnormality

MJ-1106

Classification	Error item
Finisher related service call	The [CB94] error also occurs when the error [EAB0] or [EF13] has occurred consecutively for 3 times.

Check item	Measures
Transport roller	<ul style="list-style-type: none"> • Is there any mechanical problem when the transport rollers are rotated?
Saddle transport motor (M16)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> • Connector check (CN18) • Board check

Replace parts	Remarks
Saddle transport motor	
Saddle control PC board	

[CB95] Saddle Stitch Finisher stacker motor abnormality

MJ-1106

Classification	Error item
Finisher related service call	The [CB95] error also occurs when the error [EF16] has occurred consecutively for 3 times.

Check item	Measures
Stacker carrier	<ul style="list-style-type: none"> • Is there any mechanical problem when the stacker carrier is moved?

Check item	Measures
Stacker motor (M14)	<ul style="list-style-type: none"> • Motor check • Connector check • Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> • Connector check (CN4) • Board check

Replace parts	Remarks
Stacker motor	
Saddle control PC board	

[CBA0] Front saddle stapler home position error

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Front saddle stapler clinch unit	Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> • Connector check (CN4) • Board check

Replace parts	Remarks
Front saddle stapler clinch unit	
Saddle control PC board	

[CBB0]Rear saddle stapler home position error

MJ-1106

Classification	Error item
Finisher related service call	

Check item	Measures
Rear saddle stapler clinch unit	Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> • Connector check (CN7) • Board check

Replace parts	Remarks
Rear saddle stapler clinch unit	
Saddle control PC board	

[CBC0] Saddle Stitch Finisher side alignment motor (M15) abnormality

MJ-1106

* You receive a [CBC0] error when the [EF15] error occurs three times in succession.

Classification	Contents
Finisher related service call	

Check Item	Measure
Saddle Unit	If there is mechanical problem when the jog is moved, fix the mechanism.

Check Item	Measure
Side alignment motor (M15)	Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> Connector check (CN7) Board check

Replacement part	Remarks
Side alignment motor (M15)	
Saddle control PC board (SDL)	

[CBE0] Saddle Stitch Finisher folding motor (M17) abnormality

MJ-1106

* You receive a [CBE0] error when the [EF17] error occurs three times in succession.

Classification	Contents
Finisher related service call	An encoder pulse interruption error or rotation abnormality occurs in the saddle stitch finisher folding motor.

Check Item	Measure
Folding motor encoder sensor (S34)	<ul style="list-style-type: none"> Sensor check (S34) Connector check Harness check
Side alignment motor (M15)	Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> Connector check (CN11, CN14) Board check

Replacement part	Remarks
Folding motor encoder sensor (S34)	
Side alignment motor (M15)	
Saddle control PC board (SDL)	

[CC20] Saddle communication error

MJ-1106

Classification	Contents
Finisher related service call	Saddle communication error

Check Item	Measure
Interface PC board (I/F)	<ul style="list-style-type: none"> Connector check Harness check
Finisher control PC board (FIN)	<ul style="list-style-type: none"> Connector check Harness check
Saddle control PC board (SDL)	<ul style="list-style-type: none"> Connector check Harness check
Interface PC board (I/F)	Board check
Finisher control PC board (FIN)	Board check
Saddle control PC board (SDL)	Board check
Finisher control PC board (FIN)	Update the firmware version of the finisher control PC board (FIN).

Check Item	Measure
Saddle control PC board (SDL)	Update the firmware version of the saddle control PC board (SDL).

Replacement part	Remarks
Interface PC board (I/F)	
Finisher control PC board (FIN)	
Saddle control PC board (SDL)	

[CC30] Stack delivery motor abnormality

MJ-1031

Classification	Contents
Finisher related service call	Stack delivery motor abnormality: The stack delivery motor is not rotating normally.

Check Item	Measure
Stack edging HP sensor (SR8)	Check the connectors and harnesses between the stack edging HP sensor (SR8) and the connector J111 on the finisher controller PC board.
Stack slide motor (M4)	Check the connectors and harnesses between the stack slide motor (M4) and the connector J106 on the finisher controller PC board.

Replacement part	Remarks
Stack edging HP sensor (SR8)	
Stack slide motor (M4)	
Finisher controller PC board	

[CC30] Stack transport motor abnormality

* You receive a [CC30] error when the [EA70] error occurs three times in succession.

Classification	Contents
Finisher related service call	Stack transport motor abnormality: The stack transport motor is not rotating or the stack transport belt is not moving normally.

MJ-1101

Check Item	Measure
Stack transport belt	If there is mechanical problem when the stack transport belt is moved, fix the mechanism.
Stack transport motor (M5)	Check the connectors and harnesses between the stack transport motor (M5) and the finisher control PC board (CN10).

Replacement part	Remarks
Stack transport motor (M5)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Stack transport belt	Move the stack transport belt. Fix any mechanical problem.
Stack transport motor	Check if the connector (CN17) on the finisher controller PC board is disconnected from the stack transport motor (M8) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Stack transport motor	
Finisher control PC board	

[CC31] Transport motor abnormality

* You receive a [CC31] error when the [ED12] error occurs three times in succession.

Classification	Contents
Finisher related service call	Transport motor abnormality: The transport motor is not rotating or the stack transport roller -1 and -2 is not rotating normally.

MJ-1101

Check Item	Measure
Stack transport roller	If there is mechanical problem when the stack transport roller -1 and -2 are rotated, fix the mechanism.
Transport motor (M2)	Check the connectors and harnesses between the transport motor (M2) and the finisher control PC board (CN5).

Replacement part	Remarks
Transport motor (M2)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Stack transport roller -1 Stack transport roller -2	Rotate the stack transport roller -1 and -2. Fix any mechanical problem.
Transport motor	Check if the connector (CN10) on the finisher controller PC board is disconnected from the transport motor (M7) and the harnesses are open circuited. Correct if so.

Parts to be replaced	Remark
Transport motor	
Finisher control PC board	

[CC41] Paper holder cam home position abnormality

Classification	Contents
Finisher related service call	Paper holder cam home position abnormality: The paper holder cam is not at the home position.

MJ-1101

Check Item	Measure
Paper holder cam	If there is mechanical problem when the paper holder cam is rotated, fix the mechanism.
Paper holder home position sensor (S6)	Check the connectors and harnesses between the paper holder home position sensor (S6) and the finisher control PC board (CN17).

Replacement part	Remarks
Paper holder home position sensor (S6)	
Finisher controller PC board	

MJ-1106

Check item	Measures
Paper pusher cam	Rotate the paper pusher cam. Fix any mechanical problem.
Paper holder home position sensor	Check if the connector (CN9) on the finisher controller PC board is disconnected from the paper holder home position sensor (S6) and the harnesses are open circuited. Correct if so.

Replacement part	Remark
Paper holder home position sensor	
Finisher control PC board	

[CC51] Sideways adjustment motor (M2) abnormality

MJ-1101/1106 (When MJ-6103 is installed)

* You receive a [CC51] error when the [ED11] error occurs three times in succession or occurs during the initialization.

Classification	Contents
Finisher related service call	Sideways adjustment motor (M2) abnormality: Sideways adjustment motor is not rotating or puncher is not shifting normally.

Check Item	Measure
Transport path	If there is any paper remaining on the transport path, remove the paper.
Sideways adjustment motor (M2)	<ul style="list-style-type: none"> If there is mechanical problem when the sideways adjustment motor (M2) is rotated, fix the mechanism. Check the connectors and harnesses between the hole punch control PC board (HP) and sideways adjustment motor (M2).
Sideways deviation home position sensor (S3)	<ul style="list-style-type: none"> Sensor check Harness check

Replacement part	Remarks
Sideways adjustment motor (M2)	
Hole punch control PC board (HP)	

[CC52] Skew adjustment motor (M1) abnormality

MJ-1101/1106 (When MJ-6103 is installed)

* The [CC52] error occurs when the [ED10] error occurs three times in succession or during the initial operation.

Classification	Contents
Finisher related service call	Skew adjustment motor (M1) abnormality: Skew adjustment motor is not rotating or puncher is not shifting normally.

Check Item	Measure
Transport path	If there is any paper remaining on the transport path, remove the paper.
Skew adjustment motor (M1)	<ul style="list-style-type: none"> If there is mechanical problem when the skew adjustment motor (M1) is rotated, fix the mechanism. Check the connectors and harnesses between the hole punch control PC board (HP) and skew adjustment motor (M1).
Skew home position sensor (S2)	<ul style="list-style-type: none"> Sensor check Harness check

Replacement part	Remarks
Skew home position sensor (S2)	
Skew adjustment motor (M1)	
Hole punch control PC board (HP)	

[CC61] Punch motor (M3) home position detection error

MJ-1101/1106 (When MJ-6103 is installed)

* The [CC61] error occurs when the [E9F0] error occurs three times in succession or during the initial operation.

Classification	Contents
Finisher related service call	Punch motor (M3) home position detection error: Punch motor is not rotating or puncher is not shifting normally.

Check Item	Measure
Transport path	If there is any paper remaining on the transport path, remove the paper.
Punch motor (M3)	<ul style="list-style-type: none"> If there is mechanical problem when the punch motor (M3) is rotated, fix the mechanism. Check the connectors and harnesses between the hole punch control PC board (HP) and punch motor (M3).
Punch home position sensor (S4)	<ul style="list-style-type: none"> Sensor check Harness check

Replacement part	Remarks
Punch home position sensor (S4)	

Replacement part	Remarks
Punch motor (M3)	
Hole punch control PC board (HP)	

[CC71] Punch ROM checksum error

MJ-1101/1106 (When MJ-6103 is installed)

Classification	Contents
Finisher related service call	Punch ROM checksum error: Abnormality of checksum value on Hole punch controller PC board is detected when the power is turned on.

Check Item	Measure
Hole punch control PC board (HP)	Board check

Replacement part	Remarks
Hole punch control PC board (HP)	

[CC72] Punch RAM read/write error

MJ-1101/1106 (When MJ-6103 is installed)

Classification	Contents
Finisher related service call	Punch RAM read/write error: Abnormality of checksum value on Hole punch controller PC board is detected when the power is turned on.

Check Item	Measure
Hole punch control PC board (HP)	Board check

Replacement part	Remarks
Hole punch control PC board (HP)	

[CC80] Rear alignment motor abnormality

* You receive a [CC80] error when the [ED14] error occurs three times in succession.

Classification	Contents
Finisher related service call	Rear alignment motor abnormality: The rear alignment motor is not rotating or the rear alignment plate is not moving normally.

MJ-1101

Check Item	Measure
Rear alignment plate	If there is mechanical problem when the rear alignment plate is moved, fix the mechanism.
Rear alignment motor (M10)	Check the connectors and harnesses between the rear alignment motor (M10) and the finisher control PC board (CN10).

Replacement part	Remarks
Rear alignment motor (M10)	
Finisher control PC board	

MJ-1106

Check Item	Measure
Rear alignment plate	If there is mechanical problem when the rear alignment plate is moved, fix the mechanism.
Rear alignment motor (M6)	Check the connectors and harnesses between the rear alignment motor (M6) and the finisher control PC board (CN17).

Replacement part	Remarks
Rear alignment motor (M6)	
Finisher control PC board	

[CC90] Tray shift motor abnormality

MJ-1031

Classification	Contents
Finisher related service call	Tray shift motor abnormality: The tray shift motor is not rotating or the stack tray is not moving normally.

Check Item	Measure
Tray shift motor (M2)	Check the connectors and harnesses between the finisher controller PC board and tray shift motor (M2).
Stack tray	Check if the front and rear sides of the stack tray are leveled.
Tray clock sensor (SR9)	Sensor check
Tray lower limit sensor (SR5)	Sensor check
Tray 500 sensor (SR4)	Sensor check
Tray safety switch (SW2)	Switch check
Finisher controller PC board	Check if the voltage between the pins J114-1 and J114-2 on the finisher controller PC board becomes 24V when the tray shift motor starts rotating.

Replacement part	Remarks
Tray clock sensor (SR9)	
Tray lower limit sensor (SR5)	
Tray 500 sensor (SR4)	
Sensor controller PC board	
Finisher control PC board	
Tray shift motor (M2)	

[CCB0] Offset motor abnormality

MJ-1031

Classification	Contents
Finisher related service call	Offset motor abnormality: The offset motor is not rotating normally.

Check Item	Measure
Offset HP sensor (SR1)	Check the connectors and harnesses between the offset HP sensor (SR1) and the connector J104 on the finisher controller PC board.
Offset motor (M5)	Check the connectors and harnesses between the offset motor (M5) and the connector J107 on the finisher controller PC board.

Replacement part	Remarks
Offset HP sensor (SR1)	
Offset motor (M5)	
Finisher control PC board	

[CCF1] Tray safety switch abnormality

MJ-1031

Classification	Contents
Finisher related service call	Tray safety switch abnormality: <ul style="list-style-type: none"> The tray safety switch turned on during tray operation (moving up or down). The tray operated with the tray safety switch turned on.

Check Item	Measure
Tray safety switch (SW2)	Check the connectors and harnesses between the tray safety switch (SW2) and the connector J110 on the finisher controller PC board.
Stack tray shift motor (M2)	Check the connectors and harnesses between the stack tray shift motor (M2) and the connector J114 on the finisher controller PC board.

Replacement part	Remarks
Tray safety switch (SW2)	
Stack tray shift motor (M2)	
Finisher control PC board	

[CDE0] Paddle motor abnormality

* You receive a [CDE0] error when the [ED15] error occurs three times in succession or during the initial operation.

Classification	Contents
Finisher related service call	Paddle motor abnormality: The paddle motor is not rotating or the paddle is not rotating normally.

MJ-1101

Check Item	Measure
Paddle	Rotate the paddle. Fix any mechanical problem.
Paddle motor	Check if the connector (CN22) on the finisher controller PC board is disconnected from the paddle motor (M3) and the harnesses are open circuited. Correct if so.

Replacement part	Remarks
Paddle motor	
Finisher control PC board	

MJ-1106

Check Item	Measure
Paddle	Rotate the paddle. Fix any mechanical problem.
Paddle motor (M8)	Check the connectors and harnesses between the paddle motor (M8) and the finisher control PC board (CN6).

Replacement part	Remarks
Paddle motor (M8)	
Finisher control PC board	

[CE00] Punch communication error

Classification	Contents
Finisher related service call	Communication error between finisher and punch unit: Communication error between finisher controller PC board and punch controller PC board

MJ-1101 (When MJ-6103 is installed)

Check Item	Measure
Hole punch control PC board (HP)	<ul style="list-style-type: none"> Check the connectors and harnesses between the hole punch control PC board (HP) and the finisher control PC board. Board check

Replacement part	Remarks
Hole punch control PC board (HP)	
Finisher control PC board	

MJ-1106 (When MJ-6103 is installed)

Check item	Measures
Hole punch control PC board (HP)	<ul style="list-style-type: none"> Check the connectors and harnesses between the hole punch control PC board (HP) and the finisher control PC board. Board check

Parts to be replaced	Remark
Hole punch control PC board (HP)	

[CF10] Communication module SRAM reading failure

Classification	Contents
Finisher related service call	Communication module SRAM reading failure.

MJ-1101

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Setting of the equipment	Check if the MJ-1101 is set as the specified finisher on the equipment.
Converter PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the converter PC board and the finisher controller PC board. Board check
Finisher control PC board	Board check

Replacement part	Remarks
Converter PC board	
Finisher control PC board	

MJ-1101 (When MJ-6103 is installed)

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Setting of the equipment	Check if the MJ-1101 is set as the specified finisher on the equipment.
Converter PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the converter PC board and the finisher controller PC board. Board check
Finisher control PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the hole punch control PC board and the finisher control PC board. Board check
Hole punch control PC board	Board check

Replacement part	Remarks
Converter PC board	
Finisher control PC board	
Hole punch control PC board	

MJ-1106

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Setting of the equipment	Check if the MJ-1106 is set as the specified finisher on the equipment.

Check Item	Measure
Converter PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the converter PC board and the finisher controller PC board. Board check
Finisher control PC board	Board check

Replacement part	Remarks
Converter PC board	
Finisher control PC board	

MJ-1106 (When MJ-6103 is installed)

Check Item	Measure
Main power switch	Turn OFF the main power switch, then back ON.
Setting of the equipment	Check if the MJ-1106 is set as the specified finisher on the equipment.
Converter PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the converter PC board and the finisher controller PC board. Board check
Finisher control PC board	<ul style="list-style-type: none"> Check the connectors and harnesses between the hole punch control PC board and the finisher control PC board. Board check
Hole punch control PC board	Board check

Replacement part	Remarks
Converter PC board	
Finisher control PC board	
Hole punch control PC board	

8.3.21 Image control related service call

- (1) Based on the procedure of [CE10], [CE20] and [CE40] described below, check the status and take appropriate actions. And then perform the forced performing of image quality closed-loop control according to the following procedure.
 1. While pressing [0] and [5] simultaneously, turn ON the power.
 2. Key in [2742], and then press the [START] button. Confirm that the image quality control has finished normally.
- (2) After confirming the items in (1), clear the abnormal detection counter of image quality control.
 1. While pressing [0] and [8] simultaneously, turn ON the power.
 2. Key in [2528], and then press the [START] button.
 3. Rewrite the displayed status counter from “1” - “16” to “0”, and then press the [OK] or [INTERRUPT] button.
 4. Key in [2529], and then press the [START] button.
 5. Rewrite the displayed status counter from “1” - “16” to “0”, and then press the [OK] or [INTERRUPT] button.
 6. Key in [2530], and then press the [START] button.
 7. Rewrite the displayed status counter from “1” - “16” to “0”, and then press the [OK] or [INTERRUPT] button.
 8. Key in [2531], and then press the [START] button.
 9. Rewrite the displayed status counter from “1” - “16” to “0”, and then press the [OK] or [INTERRUPT] button.
 10. Turn the power OFF and then back ON. Make sure that the equipment enters the normal ready state.

[CA00] Color registration abnormality

Classification	Contents
Image control related service call	Color registration abnormality

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 “Prevention of color toner low density / ON/OFF setting” to ON, and then set number of sheets to be judged at the code 08-2693 “Prevention of color toner low density/Judged number of sheets setting”.	
2	Open the front cover and take off the exit tray. (Refer to “4.1.2 Exit Tray”.)			
3	Take off toner cartridges (Y) and (M), and then close the front cover.			
4	Perform color registration pattern / image quality control pattern. Is an image created on the transfer belt?	Yes		8
		No		5
5	Check if there is any abnormality on the hand grips and rods of the main charger cleaner. Correct if there is.			

Step	Check Item	Result	Measure	Next Step
6	Check if the drum is rotated properly by turning the coupling of the developer unit. Correct the auger and the surrounding hardware if not.			
7	Laser optical unit		<ul style="list-style-type: none"> • Check the connectors and harnesses between the LGC board (CN343, CN355, and CN356) and the laser optical unit. • Check if there is any stain or scratch on the glass surface of the laser optical unit. Clean or correct if there is. 	
8	Check if there is any stain on the image quality sensor and Image position aligning sensors.			
9	Check if the sensor shutter is working properly.			
10	< Invalidating color registration control >		<ul style="list-style-type: none"> • Turn the power ON while [0] and [8] are pressed simultaneously. • Key in "4546", then press the [START] button. (08-4546: Position adjustment control / Mode setting) • Set the value to "0" (not performed automatically). • Turn the power OFF. 	
11	< Checking the abnormal status on color registration >		<ul style="list-style-type: none"> • Turn the power ON while [0] and [5] are pressed simultaneously. • Key in "4720", then press the [START] button. (05-4720: Displaying the cause of color registration detection error) 	

Step	Check Item	Result	Measure	Next Step
12	Check the displayed value. When the error [CA00] occurs, the value between 1 and 255 is displayed. (0: Normal completion) (The statuses of total 8 sections (4 colors on the front and rear sides) are displayed.)		1: Y on the rear side detection abnormality (*1)	18
			2: Y on the front side detection abnormality (*1)	18
			3: Y on the front and rear sides detection abnormality	18
			4: M on the rear side detection abnormality (*1)	18
			8: M on the front side detection abnormality (*1)	18
			12: M on the front and rear sides detection abnormality	18
			16: C on the rear side detection abnormality (*1)	18
			32: C on the front side detection abnormality (*1)	18
			48: C on the front and rear sides detection abnormality	18
			64: K on the rear side detection abnormality (*1)	18
			85: All colors on the rear side detection abnormality	13
			128: K on the front side detection abnormality (*1)	18
			170: All colors on the front side detection abnormality	13
			192: K on the front and rear sides detection abnormality	18
			255: All colors on the front and rear sides detection abnormality	13
Other than the above: Multiple colors detection abnormality	18			
			Remarks: The adjustment value is the sum of (*1), which, as in the example below, specifies the cause of the detection abnormality. (E.g. 1) 05-4720 --- in case of 72 $72 = 64 + 8$ → K on the rear side / M on the front side detection abnormality (E.g. 2) 05-4720 --- in case of 146 $146 = 128 + 18 = 128 + 16 + 2$ → K on the front side / C on the rear side / Y on the front side detection abnormality	

Step	Check Item	Result	Measure	Next Step
13	< Checking the status of the image position aligning sensor >		<p>Check if the light emitting area of the image position aligning sensor emits LEDs and if the reflected lights on the transfer belt surface are detected by the light receiving area of the image position aligning sensor.</p> <ol style="list-style-type: none"> 1. Turn the power ON while [0] and [3] are pressed simultaneously. 2. Press the [START] button. 3. Check how items [G] and [H] are displayed while [7] is pressed. 4. Press the [CLEAR] button. 5. Key in "125", then press the [START] button. (03-125: Sensor shutter is opened) 6. Key in "126", then press the [START] button. (03-126: Image position aligning sensor / LED ON) 7. Press the [START] button. 8. Check how items [G] and [H] are displayed while [7] is pressed. 9. Compare them with the statues of [G] and [H] displayed in (3). <ul style="list-style-type: none"> - Both [G] and [H] are changed - The image position aligning sensors on both sides are operating normally. - [G] remains same - The image position aligning sensor on the rear side is not operating normally. - [H] remains same - The image position aligning sensor on the front side is not operating normally. - Both [G] and [H] remain same - The image position aligning sensors on both sides are not operating normally. 10. Press the [CLEAR] button. 11. Key in "176", then press the [START] button. (03-176: Image position aligning sensor / LED OFF) 12. Key in "175", then press the [START] button. (03-175: Sensor shutter closed) 13. Turn the power OFF. 14. If the image position aligning sensors on both sides are operating normally, proceed to step (23). In other cases, proceed to step (22). 	

Step	Check Item	Result	Measure	Next Step
14	Image position aligning sensor		<ul style="list-style-type: none"> • Check the connectors and harnesses between the image position aligning sensor and the LGC board (CN337). • Check if the light emitting or receiving area of the image position aligning sensor stained with toner. 	
15	Are the sensor shutters of the image position aligning sensor opening or closing normally? Are they normal without any damage? 1. Take off the transfer belt unit so that the sensor unit can be seen. 2. Turn the power ON while [0] and [3] are pressed simultaneously. 3. The shutter should be opened when "125" is keyed in. It should be closed when "175" is keyed in.	Yes		16
		No		17
16	Is the light emitting area of the image position aligning sensor emitting LEDs? 1. Key in "125" to open the sensor shutter. 2. The light emitting area of the sensor should emit LEDs when "126" is keyed in.	Yes		18
		No		17
17	Image position aligning sensor		<ul style="list-style-type: none"> • Connector and harness check • Clean the light emitting and receiving areas of the image position aligning sensor. • If the sensor shutter is damaged, replace it. • If the sensor shutter solenoid is not operating normally, replace the solenoid. 	13
18	< Checking with test pattern >		<ul style="list-style-type: none"> • Turn the power ON while [0] and [4] are pressed simultaneously. • Key in "220", then press the [START] button. • Select "C", "M", "Y" or "K", then press the [START] button. • Press the [CLEAR] button after one sheet of test pattern has been exited. • Check if the printed image of the test pattern in each color contains difference in density on its front, center and rear sides, or if there is any image trouble in a whole image. 	

Step	Check Item	Result	Measure	Next Step
19	Is the test pattern printed in blank?	Yes		20
		No		21
20	Laser shutter		<p>Check if the laser shutter is operating normally.</p> <ol style="list-style-type: none"> 1. Take off the developer unit so that the laser shutter can be seen. * Clean around the laser shutter if the toner or developer material is spilled over. 2. Turn the power ON while [0] and [3] are pressed simultaneously. 3. Key in "417". (03-417: Laser shutter opening/closing status) 4. Press the [START] button repeatedly to open and close the shutter alternatively. <p>If the laser shutter is not opening or closing normally, check the shutter and correct it if necessary.</p>	18
21	Is the image of the test pattern printed normally without any difference in density on its front and rear sides?	Yes		24
		No		22
22	Transfer belt and the photoconductive drum		Check the contacting status of the transfer belt and the photoconductive drum.	23
23	Developer material		Check the amount of the developer material. (Check if the developer material is supplied on the developer sleeve.)	24
24	Is the image printed normally without yellow, magenta, cyan or black streaks in the secondary scanning direction?	Yes		26
		No		25
25	Check if the main charger wire corresponding to the color of the streaks is stained.			26
26	Is the image printed normally without white streaks in the secondary scanning direction?	Yes		28
		No		27
27	Check if the slit glass of the laser optical unit is stained.			
28	Is a certain color in the printed image turned to black solid?	Yes		29
		No		30

Step	Check Item	Result	Measure	Next Step
29			<ul style="list-style-type: none"> • Abnormality in the main high-voltage transformer corresponding to the color or abnormality in the laser optical unit. • Switch one of 4 main high-voltage transformers which possibly contains abnormality with the one possibly normal. Then print the same test pattern. • If the color which turned into black solid changes along with the replacement of the main high-voltage transformer, this main high-voltage transformer is defined as abnormal. • If the color which turned into black solid does not change, check if the harness between the LGC board and the main high-voltage transformer is broken or if the power is sufficiently supplied to the main charger (breaking of the high-voltage harness or connection defect). If no problem is found, check the laser optical unit. 	30
30	If the density level is low on both front and rear sides, is the image printed normally in cases other than noted above?	Yes		32
		No		31

Step	Check Item	Result	Measure	Next Step
31			<ul style="list-style-type: none"> • Check if the photoconductive drum and the transfer belt are rotating. If not, correct their mechanism. • Check if there are abnormal stain, large breaking or scratches on the transfer belt surface. • Check if the connector of the transfer transformer is disconnected. • Check if the high-voltage harnesses of the main high-voltage transformer and the transfer transformer are disconnected. • Check if the harness between the LGC board and the transfer transformer is broken. • Check if the high-voltage joints of the transfer belt unit are securely contacted or if they are not stained. • Check if the high-voltage harness is broken. • Check if the connector of the main high-voltage transformer is disconnected. • Check if the harness between the LGC board and the main high-voltage transformer is broken. • Replace the transfer transformer. • Replace the main high-voltage transformer. 	18
32	<p>< Checking with the enforced image position adjustment > Does the error [CA00] occur during the position adjustment control? 1. Turn the power ON while [0] and [5] are pressed simultaneously. 2. Key in "4719", then press the [START] button. (05-4719: Enforced position adjustment)</p>	Yes		11
		No		33
33	<p>< Validating the color registration control ></p>		<p>Check the operation and correct if necessary. Then be sure to perform the following:</p> <ol style="list-style-type: none"> 1. Turn the power ON while [0] and [8] are pressed simultaneously. 2. Key in "4546", then press the [START] button. (08-4546: Position adjustment control / Mode setting) 3. Set the value to "5" (performed automatically). 4. Turn the power OFF. 	
34	<p><Checking the image position aligning sensor></p>		<p>Clean the image position aligning sensor (S16, S17).</p>	

Step	Check Item	Result	Measure	Next Step
35	<Checking the power supply>		Check if any of the springs for supplying power to the transfer belt unit is deformed. Replace the spring if it is deformed.	

[CE10] Image quality sensor abnormality (OFF level)

Classification	Contents
Image control related service call	Image quality sensor abnormality (OFF level): The output value of this sensor is out of a specified range when sensor light source is OFF.

Check Item	Measure
Image quality sensor	Connector check
LGC board	<ul style="list-style-type: none"> Connector check (CN337) Check the harnesses between the LGC board and the image quality sensor. Check the harnesses between the LGC board and the switching power supply. Check if the +12V voltage is normally output by the CN345-7pin on the LGC board.

Replacement part	Remarks
Switching power supply	
Image quality sensor	
LGC board	

[CE20] Image quality sensor abnormality

Classification	Contents
Image control related service call	Image quality sensor abnormality (no pattern level): The output value of this sensor is out of a specified range when the image quality control test pattern is not formed.

Step	Check Item	Result	Measure	Next Step
1	<ul style="list-style-type: none"> Is the transfer belt or the transfer belt unit securely installed? Are there any abnormal stains (cleaning defects), large scratches or breaking on the transfer belt surface? Are the drum and the transfer belt rotating? 	Yes		5
		No		2
2	Transfer belt unit		Check if the transfer belt unit is securely installed. Correct it if not.	3

Step	Check Item	Result	Measure	Next Step
3	Transfer belt		Check if any toner image remains on the transfer belt surface. If any, check the installation status of the TBU cleaner unit. If there is any abnormality, correct it, and clean the transfer belt.	4
4	Drum and transfer belt		Check if the drum and the transfer belt are properly operated. (ON: 03-101 / OFF: 03-151) If they are not rotating normally, check if their drive gears are damaged or if they contact the equipment. Correct it if needed.	17*
5	<ul style="list-style-type: none"> Is the sensor shutter of the image quality sensor opening or closing normally? Or is it normal without any damage? Is the sensor surface of the image quality sensor clean? 	Yes		8
		No		6
6	Sensor unit		Take off the transfer belt unit so that you can see the sensor unit.	
7	Sensor shutter		<ul style="list-style-type: none"> Check if the sensor shutter is opening or closing normally. (Opening: 03-125 / Closing: 03-175) If the sensor shutter is not opening or closing, check if it is damaged or there is any abnormality in the sensor shutter solenoid. Check the connector and the harness between the sensor shutter solenoid and the LGC board. (LGC CN337-8pin, 9pin) Slide the sensor shutter so that the sensor surface can be seen. Clean the sensor surface with a cotton swab or a soft cloth. Clean the area around the sensor (e.g.: sensor shutter) if it is stained, so that the sensor surface does not become dirty. 	17*
8	Image quality sensor		Check the connectors and harnesses between the LGC board (CN337) and the image quality sensor.	*
9	<ul style="list-style-type: none"> Is +12V power supply voltage normally supplied to the image quality sensor? Is +12V voltage normally output by the CN345-7pin on the LGC board? 	Yes		12
		No		10
10	Switching power supply		Check if +12V voltage is output by the switching power supply (PS-ACC CN404-7pin).	

Step	Check Item	Result	Measure	Next Step
11	LGC board		<ul style="list-style-type: none"> • Check if +12V voltage is output by the CN345-7pin on the LGC board. • Check if the supply harness between the switching power supply and the LGC board is open circuited, damaged or disconnected. 	17*
12	Set the values of "Image quality closed-loop control / Contrast voltage (08-2486)" and "Image quality closed-loop control / Laser power (08-2487)" to "0" (Invalid).			
13	Output the image quality control test pattern (04-270) more than one time and the list print ([9][START]). Is the image normal?	Yes		15
		No		14
14	Abnormal image Correct the abnormal image.		Blank print, Solid print, White banding, Color banding, White spots, Poor transfer, Uneven image density, Faded image (low density), Uneven light distribution, Blotched image. * Blank print: including when one of the YMCK colors is not printed.	16
15	Replace the image quality sensor or the LGC board.			
16	Set the values of "Image quality closed-loop control / Contrast voltage (08-2486)" and "Image quality closed-loop control / Laser power (08-2487)" to "1" (Valid).			
17	Perform "Forced performing of image quality closed-loop control (05-2742)" and make sure it is completed normally. (Error [CE10], [CE20] and [CE40] do not appear.)	Yes		19
		No		18
18	Check and correct it accordingly.			
19	Perform "Automatic gamma adjustment".			
20	Reset all of the values in the codes "Abnormality detection count (Y/M/C/K) Display/0 clearing (08-2528 to 08-2531)".			

* Go to step 12 for the second time.

[CE40] Image quality control test pattern abnormality

Classification	Contents
Image control related service call	Image quality control test pattern abnormality: The test pattern is not formed normally.

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Check if there is any abnormality on the hand grips and rods of the main charger cleaner. Correct if there is.			
3	Check if the drum is rotated properly by turning the coupling of the developer unit. Correct the auger and the surrounding hardware if not.			
4	Laser optical unit		<ul style="list-style-type: none"> Check the connectors and harnesses between the LGC board (CN343, CN355, and CN356) and the laser optical unit. Check if there is any stain or scratch on the glass surface of the laser optical unit. Clean or correct if there is. 	
5	Check if there is any stain on the image quality sensor and Image position aligning sensors.			
6	Check if the sensor shutter is working properly.			
7	Use "Image quality control abnormal detection counter Y to K display/0 clearing (08-2528 to 2531)" to check the abnormal occurring condition for each color.			
8	Check "Output value display of image quality sensor / Low-density pattern (05-2732-0 to 3)" to check if the low-density pattern abnormality occurs for each color. Are the values 180 or more for Y, M and C, and 20 or more for K?	Yes		10
		No		9
9	Low-density pattern abnormality Check the transfer belt.		If the cleaning is poor, check the installation status of the transfer belt cleaner unit and correct it if necessary.	18*

Step	Check Item	Result	Measure	Next Step
10	Check "Output value display of image quality sensor / High-density pattern (05-2731-0 to 3)" to check if the high-density pattern abnormality occurs for each color and identify the color which pattern is abnormal. Is the value 628 or less?	Yes		13
		No		11
11	High-density pattern abnormality Check if the laser shutter is working properly.		<ol style="list-style-type: none"> 1. Take off the developer unit so that the laser shutter can be easily seen. Clean around the laser shutter if the developer has been spilled over. 2. While pressing the digital keys [0] and [3] simultaneously, turn the power ON. 3. Key in "417". 4. Press the [START] button repeatedly to open and close the shutter alternatively. If the laser shutter does not open/ close, check the shutter and correct it if necessary.	
12	Check if the developer unit has been installed properly.		Visually check the installation status of the developer unit, and correct it if there is any abnormality.	18*
13	Set the values of "Image quality closed-loop control / Contrast voltage (08-2486)" and "Image quality closed-loop control / Laser power (08-2487)" to "0" (Invalid).			
14	Output the image quality control test pattern (04-270) more than one time and the list print ([9][START]), and check the patch of the color identified in step (7). Is the image normal?	Yes		16
		No		15
15	Abnormal image Correct the abnormal image.		Blank print, Solid print, White banding, Color banding, White spots, Poor transfer, Uneven image density, Faded image (low density), Uneven light distribution, Blotched image. * Blank print: including when one of the YMCK colors is not printed.	17
16	Replace the image quality sensor or LGC board.			
17	Set the values of "Image quality closed-loop control / Contrast voltage (08-2486)" and "Image quality closed-loop control / Laser power (08-2487)" to "1" (Valid).			

Step	Check Item	Result	Measure	Next Step
18	Perform "Forced performing of image quality closed-loop control (05-2742)." Is it completed normally?	Yes		20
		No		19
19	Check and correct it accordingly.			
20	Perform "Automatic gamma adjustment".			
21	Clear all "Image quality control abnormal detection counter Y to K display/0 clearing (08-2528 to 2531)".			
22	Check if any of the springs for supplying power to the transfer belt unit is deformed. Replace the spring if it is deformed.			

* If you have already performed this checking cycle once, proceed to step (13).

[CE50] Temperature/humidity sensor abnormality

Classification	Contents
Image control related service call	Temperature/humidity sensor abnormality: The output value of this sensor is out of a specified range.

Check Item	Measure
Temperature/humidity sensor	Check the connectors and harnesses between the temperature/humidity sensor and LGC board (CN342).

Replacement part	Remarks
Temperature/humidity sensor	
LGC board	

[CE60] Drum thermistor Y abnormal

Classification	Contents
Image control related service call	Drum thermistor-Y abnormality: The output value of the drum thermistor-Y is out of a specified range.

Check Item	Measure
Drum thermistor	Connector and harness check of drum thermistor Y
LGC board	<ul style="list-style-type: none"> Check the harnesses between the LGC board and the drawer connector for developer unit. Connector check (CN340)

Replacement part	Remarks
Drum thermistor Y	
LGC board	

[CE90] Drum thermistor K abnormal

Classification	Contents
Image control related service call	Drum thermistor-K abnormality: The output value of the drum thermistor-K is out of a specified range.

Check Item	Measure
Drum thermistor	Connector and harness check of drum thermistor K
LGC board	<ul style="list-style-type: none"> Check the harnesses between the LGC board and the drawer connector for developer unit. Connector check (CN340)

Replacement part	Remarks
Drum thermistor K	
LGC board	

[CE70] Drum drive switching abnormality

Classification	Contents
Image control related service call	Drum drive switching abnormality: The drum switching detection sensor (S19) is not turned ON after the drum motor was rotated for a specified period of time.

Step	Check Item	Result	Measure	Next Step
1	Is the drum switching motor (M11) operating properly? (Perform the output check: 03-240)	Yes		5
		No		2
2	Drum switching motor (M11)		Check the connector of the motor and joint connectors	
3	Drum switching detection sensor (S19)		Sensor check	
4	LGC board		<ul style="list-style-type: none"> Connector check (CN339) Board check 	
5	Is the drum switching detection sensor (S19) working? (Perform the input check: 03-[FAX]ON/[0]/[E] (Highlighted in the color mode))	Yes		8
		No		6
6	Drum switching detection sensor (S19)		<ul style="list-style-type: none"> Sensor, connector, joint connector check Check if there is any foreign matter such as grease in the detection area of the drum switching detection sensor. 	
7	LGC board		<ul style="list-style-type: none"> Connector check (CN339) Board check 	
8	Is the drum switching motor assembled in the drum drive unit able to be rotated smoothly by hand?	Yes		10
		No		9

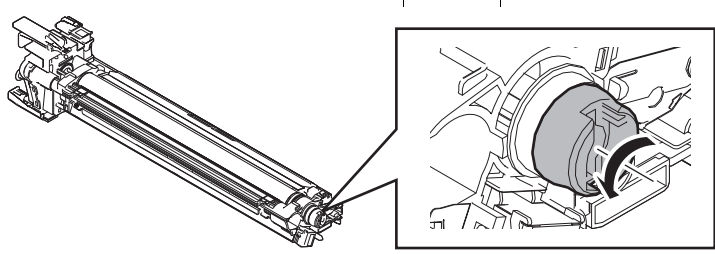
Step	Check Item	Result	Measure	Next Step
9	Drum switching motor (M11)		<ul style="list-style-type: none"> While reinstalling the drum switching motor, push it so that its gear will slightly move away from the engaging gear. Check the bracket in which the drum switching motor is installed. If it is deformed, replace it. 	
10	Is the drum switching guide able to be moved smoothly by hand after the drum switching motor has been removed?	Yes		12
		No		11
11	Drum switching motor (M11)		Check if the slide area (guide, plate) of the drum switching guide is deformed or any foreign matter is attached to it. (Replace it if there is.)	
12	LGC board		Board check	

Replacement part	Remarks
Drum switching motor (M11)	
Drum switching detection sensor (S19)	
LGC board	

[CE71] Drum phase adjustment abnormality

Classification	Contents
Image control related service call	Drum phase adjustment abnormality: Drum phase sensors (Color drum phase sensor (S43) and K drum phase sensor (S44)) are not turned ON after the drum motor was rotated for a specified period of time.

Step	Check Item	Result	Measure	Next Step
1	<ul style="list-style-type: none"> Is the error cleared after the power is turned OFF and then back ON? Is the drum motor (M10) operating properly? (Perform the output check: ON 03-101 / OFF 03-151.) * Check the operation after removing all process units (EPU (Y, M, C, K)). 	Yes		5
		No		2
2	Drum motor (M10)		Connector check	
3	Drum drive unit		Check if their drive gears are damaged or if they contact with the equipment. Correct if any.	
4	LGC board		<ul style="list-style-type: none"> Connector check (CN332) Board check 	

Step	Check Item	Result	Measure	Next Step
5	<p>Rotate the drum of each EPU in the direction of the arrow once. (See the figure below.) If the rotation of the drum is extremely heavy or not smooth, check if the mechanism of the EPU is normal.</p>  <p style="text-align: center;">Fig. 8-1</p>			
6	<p>Rotate the drum with 03-101. Are the drum phase sensors (Color drum phase sensor (S43) and K drum phase sensor (S44)) are operating properly? (Perform the input check: Color 03-[ALL]OFF/[1]/[F] K 03-[ALL]OFF/[1]/[E].)</p>	Yes		9
		No		7
7	Drum phase sensor		<ul style="list-style-type: none"> Check the connector of the drum phase sensors (S43, S44) and joint connectors Check if there is any foreign matter such as grease in the detection area of the drum phase sensors (S43, S44). 	
8	LGC board		<ul style="list-style-type: none"> Connector check (CN332) Board check 	
9	Drum drive unit		Check if the drive gears are installed properly. (Check if the mark on each gear is aligned with the area of the punched mark on the frame.)	
10	Actuator		Check if the actuator is installed properly.	
11	LGC board		Board check	

Replacement part	Remarks
Drum motor (M10)	
Drum drive unit	
<ul style="list-style-type: none"> Color drum phase sensor (S43) K drum phase sensor (S44) 	
LGC board	

CE71 error can be prevented by setting the drum phase adjustment control OFF in the self-diagnostic code below.

The setting value shall be returned after the recovery, otherwise color deviation increases.

Drum phase adjustment control ON/OFF code

08-4766

0: Disabled

1: Enabled (Default)

8.3.22 Copy process related service call

[C370] Transfer belt unit abnormality

Classification	Contents
Copy process related service call	Transfer belt unit abnormality

Check Item	Measure
Transfer belt unit	<ul style="list-style-type: none"> Connector check (J578) Check if the transport belt unit is working normally.
1st transfer roller cam motor	Connector check
LGC board	Connector check (CN342)
Transfer belt	Check if it's normal
1st transfer roller status detection sensor (S15)	Sensor check

Replacement part	Remarks
1st transfer roller cam motor	
LGC board	

[C380] Auto-toner sensor-K abnormality (upper limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-K abnormality (upper limit)

Step	Check Item	Result	Measure	Next Step
1	Developer unit		<ul style="list-style-type: none"> Check if the developer unit is installed properly. Check that the developer unit and coupling on the equipment side are properly engaged. Check that the mixer of the developer unit is rotated. Check if the developer material is too dark visually. Check if the amount of the developer material is too large or too small. 	
2	EPU		<ul style="list-style-type: none"> Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
3	Auto toner sensor - Equipment Harness - LGC board		<ul style="list-style-type: none"> Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). Remove any foreign matter such as toner in the connector of the auto toner sensor. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C381] Auto-toner sensor-K abnormality (lower limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-K abnormality (lower limit)

Step	Check Item	Result	Measure	Next Step
1	Developer unit		<ul style="list-style-type: none"> • Check if the developer unit is installed properly. • Check that the developer unit and coupling on the equipment side are properly engaged. • Check that the mixer of the developer unit is rotated. • Check if the developer material is too light visually. • Check if the amount of the developer material is too large or too small. 	
2	EPU		<ul style="list-style-type: none"> • Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. • Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
3	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> • Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). • Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C390] Auto-toner sensor-C abnormality (upper limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-C abnormality (upper limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> • Check if the developer unit is installed properly. • Check that the developer unit and coupling on the equipment side are properly engaged. • Check that the mixer of the developer unit is rotated. • Check if the developer material is too dark visually. • Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> • Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. • Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> • Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). • Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C391] Auto-toner sensor-C abnormality (lower limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-C abnormality (lower limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> Check if the developer unit is installed properly. Check that the developer unit and coupling on the equipment side are properly engaged. Check that the mixer of the developer unit is rotated. Check if the developer material is too light visually. Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C3A0] Auto-toner sensor-M abnormality (upper limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-M abnormality (upper limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> • Check if the developer unit is installed properly. • Check that the developer unit and coupling on the equipment side are properly engaged. • Check that the mixer of the developer unit is rotated. • Check if the developer material is too dark visually. • Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> • Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. • Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> • Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). • Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C3A1] Auto-toner sensor-M abnormality (lower limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-M abnormality (lower limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> Check if the developer unit is installed properly. Check that the developer unit and coupling on the equipment side are properly engaged. Check that the mixer of the developer unit is rotated. Check if the developer material is too light visually. Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C3B0] Auto-toner sensor-Y abnormality (upper limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-Y abnormality (upper limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> Check if the developer unit is installed properly. Check that the developer unit and coupling on the equipment side are properly engaged. Check that the mixer of the developer unit is rotated. Check if the developer material is too dark visually. Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C3B1] Auto-toner sensor-Y abnormality (lower limit)

Classification	Contents
Copy process related service call	Auto-toner sensor-Y abnormality (lower limit)

Step	Check Item	Result	Measure	Next Step
1	<Color toner low density> Check the printing status. Is the color printing ratio 5% or more?	Yes		2
		No	The color toner low density might be the cause. Turn the code 08-2692 "Prevention of color toner low density / ON/OFF setting" to ON, and then set number of sheets to be judged at the code 08-2693 "Prevention of color toner low density/Judged number of sheets setting".	
2	Developer unit		<ul style="list-style-type: none"> • Check if the developer unit is installed properly. • Check that the developer unit and coupling on the equipment side are properly engaged. • Check that the mixer of the developer unit is rotated. • Check if the developer material is too light visually. • Check if the amount of the developer material is too large or too small. 	
3	EPU		<ul style="list-style-type: none"> • Remove any toner or dust on the ATC sensor connector and the drawer connector of the process cover. • Remove any toner or dust on the EPU sensor connector and the drawer connector on the equipment side. 	
4	Auto toner sensor Harness LGC board		<ul style="list-style-type: none"> • Check the connectors and harnesses between the auto toner sensor and LGC board (CN340). • Check if there is any foreign matter such as toner in the connector of the auto toner sensor. Remove if there is and reconnect it. 	

Replacement part	Remarks
Auto toner sensor	
Harness	
LGC board	
Developer material	

[C970] High-voltage transformer abnormality

Classification	Contents
Copy Process related service call	High-voltage transformer abnormality: Leakage of the main charger is detected.

Check Item	Measure
Main charger	Check if the main charger is installed securely.
Spring of high-voltage supply contact point	Check if the spring of high-voltage supply contact point is deformed.
Needle electrode	<ul style="list-style-type: none"> Check if the needle electrode is broken or the main charger grid is deformed. Check if any foreign matter is on the needle electrode or main charger grid.

[CD70] Waste toner box mixing paddle locked

Classification	Contents
Copy Process related service call	Waste toner box mixing paddle locked: The mixing paddle in the waste toner box does not rotate.

Step	Check Item	Result	Measure	Next Step
1	Do the paddles in the waste toner box rotate? (Actually make them rotate.)	Yes		2
		No	Replace the waste toner box.	
2	Is the waste toner paddle motor (M6) rotating? (Perform the output check: 03-414)	Yes		5
		No		3
3	Waste toner paddle motor (M6)		<ul style="list-style-type: none"> Connector and relay connector check Check if there is any damage or abnormality in the gears on the driving cascade of the waste toner paddle motor. 	
4	LGC board		<ul style="list-style-type: none"> Connector check (CN359) Board check 	
5	Is the waste toner paddle motor lock detection sensor (S14) operating normally? (Perform output check: 03-[FAX] OFF/[1]/[C]) * To judge an error, check if the sensor detects each status of normal display and highlighted display.	Yes		7
		No		6
6	Waste toner paddle motor lock detection sensor (S14)		Connector and relay connector check	
7	LGC board		<ul style="list-style-type: none"> Connector check (CN359) Board check 	

Replacement part	Remarks
Waste toner box	
Waste toner paddle motor (M6)	
Waste toner paddle motor lock detection sensor (S14)	
LGC board	

[CD71] Waste transport motor drive locking error

Classification	Contents
Copy Process related service call	Waste toner transport motor drive locking error: The auger in the waste toner transport path does not rotate.

Step	Check Item	Result	Measure	Next Step
1	Is the waste toner transport motor (M31) rotating? (Perform the output check: 03-415)	Yes		4
		No		2
2	Waste toner transport motor (M31)		<ul style="list-style-type: none"> Connector and relay connector check Check if there is any damage or abnormality in the gears on the driving cascade of the waste toner transport motor. 	
3	LGC board		<ul style="list-style-type: none"> Connector check (CN342) Board check 	
4	Is the auger lock detection sensor (S42) operating normally? (Perform output check: 03-[FAX] ON/[2]/[G]) * To judge an error, check if the sensor detects each status of normal display and highlighted display.	Yes		6
		No		5
5	Auger lock detection sensor (S42)		Connector and relay connector check	
6	LGC board		<ul style="list-style-type: none"> Connector check (CN359) Board check 	

Replacement part	Remarks
Waste toner transport motor (M31)	
Auger lock detection sensor (S42)	
LGC board	

[CD72] Waste toner motor locking error (“Waste toner box replacement”)

Classification	Contents
Copy process related service call	“Waste toner box replacement” appears when either CD70 or CD71 error occurs. The error code CD72 is noted on the error history and logs.

Step	Check Item	Result	Measure	Next Step
1	Waste toner box		Replace it according to the displayed instruction.	
	Notes: If you close the access cover without replacing the waste toner box, a message prompting you to turn the power OFF and then back ON appears, followed by CD70 or CD71. Replace the waste toner box first to check if CD70 or CD71 is cleared. If not, follow the troubleshooting procedure for CD70 or CD71.			
2	Power supply unit		Turn the power OFF and then back ON according to the displayed instruction.	
3	CD70 or CD71 display		Follow the troubleshooting procedure for CD70 or CD71.	

Replacement part	Remarks
Waste toner box	

[CEC1] 2nd transfer roller contacting position detection abnormality

Classification	Contents
Copy Process related service call	2nd transfer roller contacting position detection abnormality

Step	Check Item	Result	Measure	Next Step
1	Is the 2nd transfer roller's contact and release proper? (Perform output check: 03-239)	Yes		4
		No		2
2	Registration motor (M19)		<ul style="list-style-type: none"> Connector check Harness check 	
3	LGC board		<ul style="list-style-type: none"> Connector check (CN332) Board check 	
4	Is the 2nd transfer roller position detection sensor (S29) working properly? (Perform input check: 03-[ALL]OFF/[7]/[E])	Yes		7
		No		5
5	2nd transfer roller position detection sensor (S29)		<ul style="list-style-type: none"> Connector and relay connector check Harness check 	
6	LGC board		<ul style="list-style-type: none"> Connector check (CN337) Board check 	
7	Mechanical section		Sensor check	
8	LGC board		Board check	

Replacement part	Remarks
Registration motor (M19)	
LGC board	
2nd transfer roller position detection sensor (S29)	

[CEC2] 2nd transfer roller releasing position detection abnormality

Classification	Contents
Copy Process related service call	2nd transfer roller releasing position detection abnormality

Step	Check Item	Result	Measure	Next Step
1	Is the 2nd transfer roller's contact and release proper? (Perform output check: 03-239)	Yes		9
		No		2
2	Is the registration motor (M19) rotating?	Yes		5
		No		3
3	Registration motor (M19)		<ul style="list-style-type: none"> Connector check Harness check 	
4	LGC board		<ul style="list-style-type: none"> Connector check (CN332) Board check 	
5	Is the 2nd transfer roller holding arm operated smoothly when it is pushed?	Yes		8
		No		6
6	2nd transfer roller pressure spring		Check that the spring is installed properly (not running off the frame of the mold).	
7	Parts surrounding the 2nd transfer roller		Check if there is any damage or abnormality.	
8	One-way clutch gear at the end of the shaft		Replace it.	
9	Is the 2nd transfer roller position detection sensor (S29) working properly? (Perform input check: 03-[ALL]OFF/[7]/[E])	Yes		
		No		10
10	LGC board		<ul style="list-style-type: none"> Connector and relay connector check Harness check 	
11	Parts surrounding the 2nd transfer roller		<ul style="list-style-type: none"> Connector check (CN337) Board check 	
12	Mechanical section		Sensor check	
13	LGC board		Board check	

Replacement part	Remarks
Registration motor (M19)	
LGC board	
One-way clutch gear at the end of the shaft	
2nd transfer roller position detection sensor (S29)	

8.3.23 Other service call

[F100_0] HDD format error (Operation failure of key data)

Classification	Contents
Other service call	HDD format error: Operation of HDD key data fails.

Check Item	Measure
Setting	Reboot the equipment. If it cannot be recovered, reinstall the software in the following procedure. (1) Install the OS data.

[F100_1] HDD format error (HDD encryption key data damaged - one board)

Classification	Contents
Other service call	HDD format error: Encryption key data of either the SYS board or the SRAM board for the SYS board are damaged.

Check Item	Measure
Encryption key status	Check the displayed message. ([3] + [C] + [POWER] → 5. Key Backup Restore)







Take appropriate countermeasures shown in the table below according to the messages displayed in "SRAM Key Status" and "FROM Key Status".

Remarks:

If the error is not cleared, reinstallation of the OS data, master data and application is needed.

([4]+[9] → Power-ON)

 P. 11-6"11.1 Firmware Updating with USB Media"

SRAM Key Status	FROM Key Status	Measure
OK	AccessFailed	Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps)
OK	KeyNull	Recover the encryption key on the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" ([F]Restore encryption key)
	KeyBroken	
AccessFailed	OK	Replace the SRAM board (for the SYS board). (USB backup data are not used)  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)
KeyNull	OK	Recover the encryption key on the SRAM board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" ([H]Backup encryption key)
KeyBroken		
Keymismatch	Keymismatch	<The error occurs when the SYS board is replaced> Recover the encryption key on the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" ([F]Restore encryption key) <The error occurs except when the SYS board is replaced> Replace the SRAM board (for the SYS board).  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)

[F100_2] HDD format error (HDD encryption key data damaged - both boards)




Classification	Contents
Other service call	HDD format error: Encryption key data of both the SYS board and the SRAM board for the SYS board are damaged.

Check Item	Measure
Encryption key status	Check the displayed message. ([3] + [C] + [POWER] → 5. Key Backup Restore)

Take appropriate countermeasures shown in the table below according to the messages displayed in “SRAM Key Status” and “FROM Key Status”.

Remarks:

If the error is not cleared, reinstallation of the OS data / master data and application is needed.
([4]+[9] → Power-ON)

SRAM Key Status	FROM Key Status	Measure
*	AccessFailed	Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps) <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see “12.1.4Cloning procedure [B]Restore procedure”) 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in “9.2.4Precautions and Procedures when replacing the SYS board”. [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license
AccessFailed	*	Replace the SYS board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (for the SYS board, all steps)
KeyNull/ KeyBroken	KeyNull/ KeyBroken	<No USB backup data> 1. Reinstall the system software.  P. 11-6"11.1 Firmware Updating with USB Media" <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see “12.1.4Cloning procedure [B]Restore procedure”) 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in “9.2.4Precautions and Procedures when replacing the SYS board”. [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license

* AccessFailed, KeyNull or KeyBroken

[F101_0] HDD connection error (HDD connection cannot be detected.)

[F101_1] Root partition mount error (HDD formatting fails.)

[F101_2][F101_3] Partition mount error (The HDD cannot be connected (mounted) caused by damage to areas other than those described in the F101_1 and F101_4 to F101_9 errors.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 0: HDD connection error (HDD connection cannot be detected.) Sub-code 1: Root partition mount error (HDD formatting fails.) Sub-code 2, 3: Partition mount error (The areas other than those described in the F101_1 and F101_4 to F101_9 errors are damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> Connector and harness check Check if the connector pins of the HDD are bent. Check if HDD for other equipment is not installed. Check if SRAM for other equipment is not installed. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is "OK". If not, recover the key (copy "SRAM Key Status" to "FROM Key Status" or vice versa). If the error still persists after step 2, perform the following. <ul style="list-style-type: none"> Perform [3C] - [3] (Format HDD), and then install "System Software (HD data)" with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> Message Log Job Log Spool Data (Print, Email reception) Template <p>If F101_1 occurs with ADI-HDD or the error persists after performing step 3, perform step 3 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> If the error persists even after step 3, replace the HDD. If the error persists even after step 4, replace the SATA harness. If the error persists even after step 5, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_4] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the “/work” partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 4: Partition mount error (The “/work” partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> 1. Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> - Connector and harness check - Check if the connector pins of the HDD are bent. - Check if HDD for other equipment is not installed. - Check if SRAM for other equipment is not installed. 2. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is “OK”. - If not, recover the key (copy “SRAM Key Status” to “FROM Key Status” or vice versa). 3. If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→3. /work, and then restart the equipment. 4. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→2. /work, and then restart the equipment. 5. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [3] (Format HDD), and then install “System Software (HD data)” with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> 6. If the error persists even after step 5, replace the HDD. 7. If the error persists even after step 6, replace the SATA harness. 8. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_5] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the “/registration” partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 5: Partition mount error (The “/registration” partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> Connector and harness check Check if the connector pins of the HDD are bent. Check if HDD for other equipment is not installed. Check if SRAM for other equipment is not installed. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is “OK”. If not, recover the key (copy “SRAM Key Status” to “FROM Key Status” or vice versa). If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→4. /registration, and then restart the equipment. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→3. /registration, and then restart the equipment. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> Perform [3C] - [3] (Format HDD), and then install “System Software (HD data)” with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> Message Log Job Log Spool Data (Print, Email reception) Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> If the error persists even after step 5, replace the HDD. If the error persists even after step 6, replace the SATA harness. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_6] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the “/backup” partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 6: Partition mount error (The “/backup” partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> 1. Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> - Connector and harness check - Check if the connector pins of the HDD are bent. - Check if HDD for other equipment is not installed. - Check if SRAM for other equipment is not installed. 2. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is “OK”. - If not, recover the key (copy “SRAM Key Status” to “FROM Key Status” or vice versa). 3. If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→5. /backup, and then restart the equipment. 4. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→4. /backup, and then restart the equipment. 5. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [3] (Format HDD), and then install “System Software (HD data)” with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> 6. If the error persists even after step 5, replace the HDD. 7. If the error persists even after step 6, replace the SATA harness. 8. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_7] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the "/imagedata" partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 7: Partition mount error (The "/imagedata" partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> 1. Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> - Connector and harness check - Check if the connector pins of the HDD are bent. - Check if HDD for other equipment is not installed. - Check if SRAM for other equipment is not installed. 2. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is "OK". - If not, recover the key (copy "SRAM Key Status" to "FROM Key Status" or vice versa). 3. If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→6. /imagedata, and then restart the equipment. 4. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→5. /imagedata, and then restart the equipment. 5. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [3] (Format HDD), and then install "System Software (HD data)" with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> 6. If the error persists even after step 5, replace the HDD. 7. If the error persists even after step 6, replace the SATA harness. 8. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_8] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the “/storage” partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 8: Partition mount error (The “/storage” partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> 1. Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> - Connector and harness check - Check if the connector pins of the HDD are bent. - Check if HDD for other equipment is not installed. - Check if SRAM for other equipment is not installed. 2. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is “OK”. - If not, recover the key (copy “SRAM Key Status” to “FROM Key Status” or vice versa). 3. If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→7. /storage, and then restart the equipment. 4. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→6. /storage, and then restart the equipment. 5. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [3] (Format HDD), and then install “System Software (HD data)” with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> 6. If the error persists even after step 5, replace the HDD. 7. If the error persists even after step 6, replace the SATA harness. 8. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F101_9] Partition mount error (The HDD cannot be connected (mounted) caused by damage to the “/encryption” partition.)

Classification	Contents
Other service call	HDD unmounted: Connection of HDD cannot be detected. Sub-code 9: Partition mount error (The “/encryption” partition is damaged.)

Check item	Measures
HDD, SYS board, Setting	<ol style="list-style-type: none"> 1. Turn the power of the equipment OFF and check the connection of the HDD. <ul style="list-style-type: none"> - Connector and harness check - Check if the connector pins of the HDD are bent. - Check if HDD for other equipment is not installed. - Check if SRAM for other equipment is not installed. 2. If the error still occurs after step 1, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [5] (Key Backup Restore) and check that each Key Status is “OK”. - If not, recover the key (copy “SRAM Key Status” to “FROM Key Status” or vice versa). 3. If the error persists after step 2, perform [5]+[C]+[POWER]→2. Recovery F/S→8. /encryption, and then restart the equipment. 4. If the error persists after step 3, perform [5]+[C]+[POWER]→3. Initialize HDD→7. /encryption, and then restart the equipment. 5. If the error still persists after step 4, perform the following. <ul style="list-style-type: none"> - Perform [3C] - [3] (Format HDD), and then install “System Software (HD data)” with [49] - [4]. <p>Notes: The following items will be deleted by performing [3C] - [3] (Format HDD).</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template <p>If the error persists after performing step 5, perform step 5 after performing [4]+[C]+[POWER]→1. Revert factory initial status HDD.</p> 6. If the error persists even after step 5, replace the HDD. 7. If the error persists even after step 6, replace the SATA harness. 8. If the error persists even after step 7, replace the SYS board.

Replacement part	Remarks
HDD	
SATA harness	
SYS board	

[F102] HDD start error
[F103] HDD transfer time-out
[F104] HDD data error
[F105] HDD other error

Classification	Contents
Other service call	HDD start error: HDD cannot become "Ready" state. HDD transfer time-out: Reading/writing cannot be performed in the specified period of time. HDD data error: Abnormality is detected in the data of HDD. HDD other error

Check item	Measures
HDD	<ul style="list-style-type: none"> • Connector and harness check • Check if the connector pins of the HDD are bent. • Perform the bad sector check (08-9072). If the check result is OK, recover the data in the HDD. If the check result is failed, replace the HDD.

Replacement part	Remarks
HDD	
SYS board	

[F106_0] ADI-HDD error: Illegal disk replacement detected (ADI-HDD Exchange to SATA-HDD)

Classification	Error item
Other service call	ADI-HDD error: The ADI-HDD has been replaced illegally to SATA-HDD (normal type).

Check Item	Measure
Setting	<p>Check if the HDD has been replaced with a SATA-HDD (normal type).</p> <ol style="list-style-type: none"> (1) Start the equipment in the 4C mode: [4] + [C] + [POWER] (2) Check the type of the HDD shown on the top left of the control panel display "Current HDD type". <p>2a. In case of "SATA-HDD" (normal type), replace it with the original ADI-HDD or a new ADI-HDD.</p> <p>Notes: To replace with the original ADI-HDD, start the equipment in the normal mode and then reinstall master data (HD Data) only if any abnormality occurs.</p> <p>2b. In case of "ADI-HDD" Check each item in the Measures field for the HDD below. If the error still occurs, reinstall the master data (HD Data).</p>

Check Item	Measure
HDD	<ul style="list-style-type: none"> Connector check Harness check Perform the bad sector check (08-9072). If the check result is OK, recover the data in the HDD. If the check result fails, replace the HDD. If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F106_1] ADI-HDD error: HDD type detection error

Classification	Error item
Other service call	ADI-HDD error: HDD type detection fails.

Check Item	Measure
Setting	If the error is not recovered after rebooting the equipment or no abnormality is found on any check items for the HDD, reinstall the master data (HD Data).
HDD	<ul style="list-style-type: none"> Connector check Harness check Perform the bad sector check (08-9072). If the check result is OK, recover the data in the HDD. If the check result fails, replace the HDD. Check that either the ADI-HDD or SATA-HDD (normal type) is mounted. <ol style="list-style-type: none"> Start the equipment in the 4C mode: [4] + [C] + [POWER] Check the type of the HDD shown on the top left of the control panel display "Current HDD type". Normal status: ADI-HDD or SATA-HDD Abnormal status: Unknown HDD If "Unknown HDD" is displayed, reinstall the master data (HD Data). If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F106_2] ADI-HDD error: ADI encryption key download operation error

Classification	Error item
Other service call	ADI-HDD error: Downloading of or consistency check for ADI-HDD encryption key fails.

Check Item	Measure
Setting	Checking of ADI-HDD encryption key status (1) Start the equipment in the 3C mode: [3] + [C] + [POWER] (2) The authentication menu is displayed. Press [OK]. (Not required in the default setting) (3) Select "5. Key Backup Restore" and then press the [START] button. (4) Check the status of the ADI-HDD encryption key on the Key Backup Restore Mode menu. (5) After the operation is completed, shut down the equipment by pressing the [POWER] button. <ul style="list-style-type: none"> • In case both the SRAM ADIKey and FROM ADIKey status are OK Reinstall the system ROM data (OS Data). • In case either the SRAM ADIKey or FROM ADIKey status is other than OK Restore the ADI-HDD encryption key. • In case both of the SRAM ADIKey or FROM ADIKey status are other than OK Reinstall the master data (HD Data).
HDD	If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F106_3] ADI-HDD error: ADI authentication Admin Password generation error

Classification	Error item
Other service call	ADI-HDD error: The generation of ADI authentication Admin Password fails.
HDD	If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

Check Item	Measure
Setting	Reinstall the system ROM data (OS Data). Reinstall the master data (HD Data).

[F106_4] ADI-HDD error: Authentication random number generation error

Classification	Error item
Other service call	ADI-HDD error: The generation of a random number for authentication data fails.

Check Item	Measure
Setting	Reinstall the system ROM data (OS Data). Reinstall the master data (HD Data).
HDD	If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F106_5] ADI-HDD error: Authentication data transmission error

Classification	Error item
Other service call	ADI-HDD error: The transmission of authentication data fails.

Check Item	Measure
Setting	<p>Reinstall the system ROM data (OS Data). Reinstall the master data (HD Data).</p> <ul style="list-style-type: none"> • In case this error occurred after returning SRAM data for SRAM cloning: Copy the ADI-HDD encryption key from FROM to SRAM. <ol style="list-style-type: none"> (1) Start the equipment in the 3C mode: [3] + [C] + [POWER] (2) The authentication menu is displayed. Press [OK]. (Not required in the default setting) (3) Select "5. Key Backup Restore" and then press the [START] button. (4) Select "6. ADIKey FROM to SRAM" and then press the [START] button. (5) After the restoring of the encryption key has completed, "Operation Complete" is displayed. (6) After the operation has completed, shut down the equipment by pressing the [POWER] button.
HDD	If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F106_6]/[F106_7]/[F106_8]/[F106_10] / [F106_UNDEF] ADI-HDD error: Error caused by reason other than F106_0 to 5 errors

Classification	Error item
Other service call	ADI-HDD error: Error caused by reason other than F106_0 to 5 errors

Check Item	Measure
Setting	<p>Perform [3]+[C]+[POWER]-> [3.Format HDD], and then install the system software by performing [4]+[9]+[POWER]-> [4.System Software(HD data)].</p> <p>Notes: The following items will be deleted by performing [3]+[C]+[POWER]-> [3.Format HDD].</p> <ul style="list-style-type: none"> • Message Log • Job Log • Spool Data (Print, Email reception) • Template
HDD	If the error persists even after above step, replace the HDD. If the equipment operation disabled after above step, replace the HDD.

[F109_0] Key consistency error (Consistency check operation error)

Classification	Contents
Other service call	Key consistency error - Key consistency check on each key data fails.

Check Item	Measure
Setting	Reboot the equipment. If it cannot be recovered, reinstall the software in the following procedure. (1) Install the OS data. (2) Reinstall the master data and application program.
SRAM board (for SYS board)	If the error is not cleared after the software reinstallation, replace the SRAM board. (P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)"
SYS board	If the error is not cleared after this (see above), replace the SYS board. (P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board"

Replacement part	Remarks
SRAM board	
SYS board	

[F109_1] Key consistency error (SRAM encryption AES key data damage)

Classification	Contents
Other service call	Key consistency error - AES key data used for SRAM encryption are damaged.

Check Item	Measure
Setting	Reboot the equipment. If it cannot be recovered, reinstall the software in the following procedure. (1) Install the OS data. (2) Reinstall the master data and application program.

[F109_2] Key consistency error (Signature Check public key damage)

Classification	Contents
Other service call	Key consistency error - Public key data used for Integrity Check are damaged.

Check Item	Measure
Setting	Reboot the equipment. If it cannot be recovered, reinstall the software in the following procedure. (1) Install the OS data. (2) Reinstall the master data and application program.

[F109_3] Key consistency error (HDD encryption parameter damage)






Classification	Contents
Other service call	Key consistency error - Parameter used for HDD partition encryption are damaged.


Check Item	Measure
Encryption key status confirmation	Check the message displayed by [3] + [C] + [POWER] → 5. Key Backup Restore.

Take measures given in the following table according to the messages displayed in the SRAM Key Status and FROM Key Status fields.

Remarks:

If the error is not cleared, reinstallation of the OS data, master data and application is needed.
([4]+[9] → Power-ON)

SRAM Key Status	FROM Key Status	Measure
*	AccessFailed	Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps) <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure") 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board". [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license
AccessFailed	*	Replace the SYS board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (for the SYS board, all steps)
OK	KeyNull/ KeyBroken	Recover the encryption key on the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" ([F]Restore encryption key)
AccessFailed	OK	Replace the SRAM board (for the SYS board).  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)
KeyNull/ KeyBroken	OK	Recover the encryption key on the SRAM board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (for the SYS board, [H] Backup encryption key)

SRAM Key Status	FROM Key Status	Measure
KeyNull/ KeyBroken	KeyNull/ KeyBroken	<p><No USB backup data></p> <p>1. Reinstall the system software.  P. 11-6"11.1 Firmware Updating with USB Media"</p> <p><With USB backup data: All key data recovery></p> <p>1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure")</p> <p>2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board"</p> <p>[E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license</p>

* AccessFailed, KeyNull or KeyBroken

[F109_4] Key consistency error (license data damage)



Classification	Contents
Other service call	Key consistency error - The license data are damaged.



Check Item	Measure
Encryption key status confirmation	Check the message displayed by [3] + [C] + [POWER] → 5. Key Backup Restore.

Take measures given in the following table according to the messages displayed in the SRAM Key Status and FROM Key Status fields.

Remarks:

If the error is not cleared, reinstallation of the OS data, master data and application is needed.
([4]+[9] → Power-ON)

SRAM Licence Status	FROM Licence Status	Measure
*	AccessFailed	<p>Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps)</p> <p><With USB backup data: All key data recovery></p> <p>1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure")</p> <p>2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board".</p> <p>[E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license</p>
AccessFailed	*	<p>Replace the SYS board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)</p>

SRAM Licence Status	FROM Licence Status	Measure
KeyMismatch	KeyMismatch	<p><The error occurs when the SYS board is replaced> Recover the license on the SYS board. (Transfer the license from SYS-SRAM to SYS-FROM.)  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board"([G]Restore license)</p> <p><The error occurs except when the SYS board is replaced> Recover the license on the SRAM board. (Transfer the license from SYS-FROM to SYS-SRAM.)  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)"([I]Backup license)</p>

* AccessFailed or KeyMismatch

[F109_5] Key consistency error (encryption key for ADI-HDD is damaged)




Classification	Contents
Other service call	Key consistency error - Encryption key for ADI-HDD is damaged.





Check item	Measures
Encryption key status confirmation	Check the message displayed by [3] + [C] + [POWER] → 5. Key Backup Restore.

Take measures given in the following table according to the messages displayed in the SRAM Key Status and FROM Key Status fields.

Remarks:

If the error is not cleared, reinstallation of the system firmware, system software and application is needed. ([4]+[9] → Power-ON)

SRAM Key Status	FROM Key Status	Measure
*	AccessFailed	<p>Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps) <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure") 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board". [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license</p>
AccessFailed	*	<p>Replace the SRAM board (for the SYS board).  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)</p>
OK	KeyNull/ KeyBroken	<p>Recover the ADI key on the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" ([E]Restore ADI key)</p>

SRAM Key Status	FROM Key Status	Measure
KeyNull/ KeyBroken	OK	Recover the encryption key on the SRAM board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" ([G]Backup ADI key)
KeyNull/ KeyBroken	KeyNull/ KeyBroken	<No USB backup data> 1. Create the partition in the HDD, and reinstall the system software.  P. 9-19"9.2.3 Precautions and procedures when replacing the HDD"(Perform step 3 or later in "[E]Replace / Format HDD") <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure".) 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board". [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license
KeyMismatch	KeyMismatch	<The error occurs when the SYS board is replaced> Recover the encryption key on the SYS board. (Transfer the license from SYS-SRAM to SYS-FROM.)  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board"([E]Restore ADI key) <The error occurs except when the SYS board is replaced> Recover the encryption key on the SRAM board. (Transfer the license from SYS-FROM to SYS-SRAM.)  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)"([G]Backup ADI key)

* AccessFailed or KeyMismatch

[F109_6] Key consistency error (administrator password error for ADI-HDD authentication)





Classification	Contents
Other service call	Key consistency error - Administrator password error for ADI-HDD authentication.




Check item	Measures
Encryption key status confirmation	Check the message displayed by [3] + [C] + [POWER] → 5. Key Backup Restore.

Take measures given in the following table according to the messages displayed in the SRAM Key Status and FROM Key Status fields.

Remarks:

If the error is not cleared, reinstallation of the system firmware, system software and application is needed. ([4]+[9] → Power-ON)

SRAM Key Status	FROM Key Status	Measure
*	AccessFailed	Replace the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" (all steps) <With USB backup data: All key data recovery> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure".) 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board". [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license
AccessFailed	*	Replace the SRAM board (for the SYS board).  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" (all steps)
OK	KeyNull/ KeyBroken	Recover the ADI key on the SYS board.  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board" ([E]Restore ADI key)
KeyNull/ KeyBroken	OK	Recover the encryption key on the SRAM board.  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)" ([G]Backup ADI key)

SRAM Key Status	FROM Key Status	Measure
KeyNull/ KeyBroken	KeyNull/ KeyBroken	<p><No USB backup data></p> <ol style="list-style-type: none"> 1. Create the partition in the HDD, and reinstall the system software.  P. 9-19"9.2.3 Precautions and procedures when replacing the HDD"(Perform step 3 or later in "[E]Replace / Format HDD") <p><With USB backup data: All key data recovery></p> <ol style="list-style-type: none"> 1. Recover all the data on the SRAM board. [5] + [9] + [POWER] → 2. Restore SRAM Data from USB (For details, see "12.1.4Cloning procedure [B]Restore procedure".) 2. Recover the encryption key/license on the SYS board. Follow the procedures below noted in "9.2.4Precautions and Procedures when replacing the SYS board". [E] Restore ADI key (only when ADI-HDD is installed) [F] Restore encryption key [G]Restore license
KeyMismatch	KeyMismatch	<p><The error occurs when the SYS board is replaced> Recover the encryption key on the SYS board. (Transfer the license from SYS-SRAM to SYS-FROM.)  P. 9-24"9.2.4 Precautions and Procedures when replacing the SYS board"([E]Restore ADI key)</p> <p><The error occurs except when the SYS board is replaced> Recover the encryption key on the SRAM board. (Transfer the license from SYS-FROM to SYS-SRAM.)  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)"([G]Backup ADI key)</p>

* AccessFailed or KeyMismatch

[F120] Database abnormality

Classification	Error item
Other service call	Database abnormality: Database is not operating normally.

Check item	Measures
Setting	<ol style="list-style-type: none"> 1. Check that no jobs remain and rebuild the databases. ([5] + [C] + [POWER] -> 4. Initialize database -> 1. LDAP DB and 2. Log DB (Job,Msg). 2. If the error is not recovered, reinstall the system software. ([4] + [9] + [POWER] -> 4. System Software(HD data)) <p>Notes:</p> <ul style="list-style-type: none"> • If you rebuild the databases with a job remaining, delete it after finishing. • When “Rebuilding all databases” is performed, all data including log/user/role/group/department information and address book data are deleted. If you back up the data in advance, they will be recovered by restoring them after rebuilding the database.

[F121] Database abnormality (user information management database)

Classification	Error item
Other service call	Login after the startup fails in any starting mode because user management database is corrupted.

Check item	Measures
Setting	<ol style="list-style-type: none"> 1. Delete the log in the following procedure:[5] + [C] + [POWER] → 4. Initialize database → 1. LDAP database (to delete user database) (Note that all user, role, group and accounting data will be deleted.) 2. If the error is not recovered, reinstall the system software. ([4] + [9] + [POWER] -> 4. System Software(HD data)) <p>Notes:</p> <ul style="list-style-type: none"> • If you rebuild the databases with a job remaining, delete it after finishing. • When “Rebuilding all databases” is performed, all data including log/user/role/group/department information and address book data are deleted. If you back up the data in advance, they will be recovered by restoring them after rebuilding the database.


[F122] Database abnormality (message/job log management database)

Classification	Error item
Other service call	Login after the startup fails in any starting mode because log management database is corrupted.

Check item	Measures
Setting	<ol style="list-style-type: none"> Delete the log in the following procedure: [5] + [C] + [POWER] → 4. Initialize database → 2. Log database (jobs and messages) (Note that all job and message logs will be deleted.) If the error is not recovered, reinstall the system software. ([4] + [9] + [POWER] → 4. System Software(HD data)) <p>Notes:</p> <ul style="list-style-type: none"> If you rebuild the databases with a job remaining, delete it after finishing. When "Rebuilding all databases" is performed, all data including log/user/role/group/department information and address book data are deleted. If you back up the data in advance, they will be recovered by restoring them after rebuilding the database.

[F124] Language DB damage error

Classification	Error item
Other service call	Login after the startup fails in any starting mode because language management database is corrupted.

Check item	Measures
Setting	<p>Delete the journal file: [5] + [C] + [START] → 4. Initialize DB -> 3. Language DB</p> <p>If the recovery is still not completed, reinstall the master data and application program.  P. 11-23"11.2.1 Master data/ System ROM"</p>

[F130] Invalid MAC address

Classification	Error item
Other service call	Invalid MAC address (This error occurs when the top 3 bytes of the MAC address is not "00" "80" "91".)

Check Item	Measure
SYS board	Replace the SYS board.

Replace parts	Remarks
SYS board	

[F131] Error due to damage to filtering setting file

Classification	Error item
Other service call	The filtering function is not working properly due to the damage to the file for the filtering setting.

Check Item	Measures
Setting	<ol style="list-style-type: none"> 1. Check the bad sector of the HDD (08-9072). If the result is "NG", replace the HDD. <p>Notes: It may take more than 30 minutes to finish the checking.</p> <ol style="list-style-type: none"> 2. Perform [3] + [C] + [POWER] -> [3], and then reinstall the HDD software. <p>Notes: User data will be deleted when [3] + [C] + [POWER] -> [3] is performed.</p>

Replace parts	Remarks
HDD	

[F140] ASIC format error

Classification	Error item
Other service call	ASIC formatting fails or memory acquiring fails when software is formatted

Check item	Measures
SYS board	<ul style="list-style-type: none"> • Connector check • Board check
Main memory	<ul style="list-style-type: none"> • Check the installation • Main memory check

Replace parts	Remarks
SYS board	
Main memory	

[F200] Data Overwrite option (GP-1070) disabled

Classification	Contents
Other service call	Data Overwrite option (GP-1070) disabled

Check Item	Measure
Setting	<p>Perform firmware installation (all firmware: OS, HDD, SYS, PFC Firmware, Engine Main Firmware, and Scanner Firmware) with the USB media.</p> <p>* When the function of the Data Overwrite option (GP-1070) is deleted from the equipment, the service call "F200" occurs.</p> <p>Perform 08-3840 to install the Data Overwrite Enabler (GP-1070).</p> <p>* If F200 occurs while High (Åg3Åh) is set for the security level (08-8911), it cannot be released by installing the firmware using the USB media. Install the Data Overwrite Enabler (GP-1070) by 08-384.</p>

[F400] SYS board cooling fan abnormality

Classification	Contents
Circuit related service call	SYS board cooling fan abnormality

Check Item	Measure
SYS board cooling fan	Check if the fan is rotating properly. If not, check if any foreign object is adhered.
SYS board	Check the connector (CN126) and relay connector.

Replacement part	Measure
SYS board	
SYS board cooling fan	

[F500] HD partition damage

Classification	Error item
Other service call	The file system is abnormal.

Check item	Measures
Setting	<ul style="list-style-type: none"> • Diagnose the file system with [5] + [C] + [POWER] → 1. • Check F/S, and then recover the problem partition with [5] + [C] + [POWER] → 2. Recovery F/S. • If it is not recovered, reinstall the software after the HDD format.

Replace parts	Remarks

[F510] Application start error

Classification	Error item
Other service call	The application fails to start.

Check item	Measures
Setting	<ol style="list-style-type: none"> 1. Reboot. 2. If it has still not recovered, reinstall the HDD software. 3. If it still persists after step 2, perform [3] + [C] + [POWER] → 3, and then reinstall the HDD software. <p>Notes: User data will be deleted when [3] + [C] + [POWER] → 3 is performed.</p>

[F520] Operating system start error

Classification	Error item
Other service call	The operating system fails to start.

Check item	Measures
Setting	<ol style="list-style-type: none"> 1. Reboot. 2. If it has still not recovered, reinstall the HDD software. 3. If it still persists after step 2, perform [3] + [C] + [POWER] → 3, and then reinstall the HDD software. <p>Notes: User data will be deleted when [3] + [C] + [POWER] → 3 is performed.</p>

[F521] Integrity check error

Classification	Error item
Other service call	The program data fails to be authenticated.

Check item	Measures
Setting	<p>Restart the equipment. If the error is not recovered after restarting the equipment, reinstall software following the procedure below.</p> <ol style="list-style-type: none"> (1) Reinstall the master data and application program. P. 9-19 "9.2.3 Precautions and procedures when replacing the HDD ([E] Replace / Format HDD)"

[F550] Encryption partition error

Classification	Error item
Other service call	The encryption partition fails to be read and written.

Check item	Measures
Setting	<ul style="list-style-type: none"> • Recover the encryption key with [3] + [C] + [POWER] → 5.

[F600] F/W update error

Classification	Error item
Other service call	The firmware fails to be updated.

Check item	Measures
Setting	<ol style="list-style-type: none"> (1) Perform [3] + [C] + [POWER] -> [1] -> [START] for "Clear Error Flag in Software Installation". (2) Reinstall the firmware in error displayed on the F600 error screen.

[F700] Overwrite error

Classification	Error item
Other service call	Overwriting fails.

Check item	Measures
Setting	<ul style="list-style-type: none"> • If a service call occurs again after the reboot, replace the HDD.

[F800] Date error

Classification	Error item
Other service call	The year 2038 problem

Check item	Measures
Setting	Reset the date, and request the administrator to set the date and time. <ol style="list-style-type: none">1. Turn the power on while pressing the [6] and [CLEAR] button.2. Select [2] key, and then press the [START] button.3. Press the [START] button on the confirmation screen displayed. (The date is set to January 1st, 2011.)4. Request the administrator to set the date and time.


[F900] Model information error

Classification	Error item
Other service call	Machine information alignment error. The machine information is damaged.

Check item	Measures
Setting	Recover the machine information by means of the following procedure. Notes: The following procedure is supported in the firmware with the version "2050" or later. If the version is before "2050", first upgrade it to "2050" or later with [4] + [9] -> [1] for "SYSTEM FIRMWARE (OS Data)". <Machine information recovery> <ol style="list-style-type: none">(1) Turn the power ON while pressing [6] and the [CLEAR] button simultaneously.(2) Key in [3] to select "3. SRAM Re-Initialize Support", and then press the [START] button.(3) After the operation is completed, shut down the equipment by pressing the [ON/OFF] button. * If it is not recovered, perform the following procedure.(4) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.(5) Enter the password on the Authentication screen. If no password is set for Service, press the [OK] button without entering anything. If the High Security Mode has been set, enter "#1048#".(6) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.(7) Key in [2] to select "2. Key FROM to SRAM", and then press the [START] button.(8) After the operation is completed, shut down the equipment by pressing the [ON/OFF] button.

8.3.24 Error in Internet FAX / Scanning Function

Notes:

- When formatting the HDD ([5] + [C] + [POWER] ON -> [3] -> [1]), all data in the shared folder, Electronic Filing, Address Book, template, etc. are erased. Back up these data before the initialization. Note that some of data cannot be backed up
 P. 9-19"9.2.3 Precautions and procedures when replacing the HDD"

[1] Internet FAX related error

[1C10] System access abnormality

[1C32] File deletion failure

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

[1C11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs. If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[1C12] Message reception error

[1C13] Message transmission error

Turn the power OFF and then back ON. Perform the job in error again.

[1C14] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[1C15] Exceeding file capacity

Reset and extend the "Maximum send to E-mail/iFAX size" or reduce the number of pages and perform the job again.

[1C30] Directory creation failure

[1C31] File creation failure

[1C33] File access failure

Check if the access privilege to the storage directory is writable.

Check if the server or local disk has a sufficient space in disk capacity.

[1C40] Image conversion abnormality

Turn the power OFF and then back ON. Perform the job in error again.

Replace the main memory and perform the job again.

[1C60] HDD full failure during processing

Delete the job in progress or being set or in the HOLD/PRIVATE/PROOF/INVALID, and perform it again.

Check if the server or local disk has a sufficient space in disk capacity.

[1C61] Address Book reading failure

Turn the power OFF and then back ON. Perform the job in error again.

Reset the data in the Address Book and perform the job again.

[1C63] Terminal IP address unset

Reset the Terminal IP address.

Turn the power OFF and then back ON. Perform the job in error again.

[1C64] Terminal mail address unset

Reset the Terminal mail address.

Turn the power OFF and then back ON. Perform the job in error again.

[1C65] SMTP address unset

Reset the SMTP address and perform the job.
Turn the power OFF and then back ON. Perform the job in error again.

[1C66] Server time-out error

Check if the SMTP server is operating properly.

[1C69] SMTP server connection error

Reset the login name or password of SMTP server and perform the job again.
Check if the SMTP server is operating properly.

[1C6B] Terminal mail address error

Check the SMTP Authentication method.
Check if there is an illegal character in the Terminal mail address.
Set the correct SMTP Authentication method or delete the illegal character and reset the appropriate Terminal mail address, then perform the job again.

[1C6C] Destination mail address error

Check if there is an illegal character in the Destination mail address.
Delete the illegal character and reset the appropriate Destination mail address, then perform the job again.

[1C6D] System error

Turn the power OFF and then back ON. Perform the job in error again.
If the error still occurs, replace the SYS board.

[1C70] SMTP client OFF

Set the SMTP valid and perform the job again.

[1C71] SMTP authentication error

Check that SMTP authentication method, login name and password are correct, then perform authentication again.

[1C72] POP Before SMTP error

Check that both the POP Before SMTP setting and POP3 setting are correct, then perform authentication again.

[1CC1] Power failure

Check if the power cable is connected properly and it is inserted securely.
Check if the power voltage is unstable.

[2] RFC related error

[2500] HOST NAME error (RFC: 500) / Destination mail address error (RFC: 500) / Terminal mail address error (RFC: 500)

[2501] HOST NAME error (RFC: 501) / Destination mail address error (RFC: 501) / Terminal mail address error (RFC: 501)

Check if the Terminal mail address and Destination mail address are correct.
Check if the mail server is operating properly.
Turn the power OFF and then back ON. Perform the job in error again.

[2503] Destination mail address error (RFC: 503)

[2504] HOST NAME error (RFC: 504)

[2551] Destination mail address error (RFC: 551)

Check if the mail server is operating properly.
Turn the power OFF and then back ON. Perform the job in error again.
If the error still occurs, replace the SYS board.

[2550] Destination mail address error (RFC: 550)

Check the state of the mail box in the mail server.

[2552] Terminal/Destination mail address error (RFC: 552)

Confirm the size on the mail server.

Transmit again in text mode or with lower resolution or divide the document and transmit again.

If the error still occurs, turn the power OFF and then back ON. Perform the job in error again.

[2553] Destination mail address error (RFC: 553)

Check if there is an illegal character in the mail box in the mail server.

[3] Electronic Filing related error

[2B11] JOB status abnormality

[2B20] File library function error

[2B30] Insufficient disk space in BOX partition

[2BC0] Fatal failure occurred

Erase some data in the Electronic Filing or the shared folder and perform the job in error again (in case of [2B30]).

Ask the administrator if e-Filing has been disabled. (In case of [2CC1])

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

If the recovery is still not completed, replace the SYS board.

[2B31] Status of specified Electronic Filing or folder is undefined or being created/deleted

Check if the specified Electronic Filing or folder exists. (If no, this error would not occur.)

Delete the specified Electronic Filing or folder.

Perform the job in error again.

[2B50] Image library error

[2B90] Insufficient memory capacity

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, replace the main memory.

Delete the job in progress or being set or in the HOLD/PRIVATE/PROOF/INVALID, and retry the job in error.

[2B51] List library error

Check if the Function list can be printed.

If it can be printed, retry the job in error.

If it cannot, replace the main memory.

If it still cannot be printed, initialize the HDD ([5] + [C] + [POWER] ON -> [3] -> [1])

[2BA0] Invalid Box password

Check if the password is correct.

Reset the password.

When this error occurs when printing the data in the Electronic Filing, perform the printing with the administrator's password.

[2BA1] Invalid paper size/color mode/resolution.

The specified paper size, color mode or resolution cannot be used. Check the setting.

[2BB1] Power failure

[2BD0] Power failure occurred during restoring of Electronic Filing

Check if the power cable is connected properly and it is inserted securely.

Check if the power voltage is unstable.

[2BE0] Machine parameter reading error

Turn the power OFF and then back ON. Perform the job in error again.

[2BF0] Exceeding maximum number of pages

Reduce the number of the pages of the job in error, and retry the job.

[2BF1] Exceeding maximum number of documents

Backup the documents in the box or folder to PC or delete them.

[2BF2] Exceeding maximum number of folders

Backup the folders in the box or folder to PC or delete them.

[4] Remote scanning related error**[2A20] System management module resource acquiring failure**

Retry the job in error.

If the error still occurs, turn the power OFF and then back ON, then retry the job in error.

[2A31] Disabled WS Scan

Check if the WS Scan function is disabled.

Or, check if the forcible encryption setting of the secure PDF is enabled.

[2A40] System error

Turn the power OFF and then back ON, then retry the job in error.

[2A51] Power failure

Check if the power cable is properly connected.

Check if the power supply voltage is inconstant.

[2A60] WS Scan user authentication failure

- When "1" (TTEC's WIA driver) is set for 08-9749 and also Windows Fax&Scan is used Check if the user name that you used to log in Windows is a name registered as a user.
- When MFP panel or EWB Scan is used Check if the login user name is a name registered as a user.

[2A70] Remote Scan privilege check error

Check if correct privilege is given to the user.

[2A71] WS Scan privilege check error

Check if correct privilege is given to the user.

[2A72] e-Filing data access privilege check error (Scan Utility)

Check if correct privilege is given to the user.

[5] E-mail related error**[2C10] System access abnormality****[2C32] File deletion failure**

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

[2C11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2C12] Message reception error**[2C13] Message transmission error**

Turn the power OFF and then back ON. Perform the job in error again.

[2C14] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2C15] Exceeding file capacity

Reset and extend the "Maximum send to E-mail/iFAX size" or reduce the number of pages and perform the job again.

[2C20] System management module access abnormality**[2C21] Job control module access abnormality****[2C22] Job control module access abnormality**

Turn the power OFF and then back ON. Perform the job in error again.

Check if there are no other running jobs and perform the HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

If the recovery is still not completed, replace the SYS board.

[2C30] Directory creation failure**[2C31] File creation failure****[2C33] File access failure**

Check if the access privilege to the storage directory is writable.

Check if the server or local disk has a sufficient space in disk capacity.

[2C40] Image conversion abnormality**[2C62] Memory acquiring failure**

Turn the power OFF and then back ON. Perform the job in error again.

Replace the main memory and perform the job again.

[2C43] Encryption error

Turn the power OFF and then back ON. Perform the job in error again.

[2C44] Encryption PDF enforced mode error

Reset the encryption and perform the job in error again.

If an image file not encrypted is created, consult your administrators.

[2C45] Meta data creation error (Scan to Email)

Check the template settings. Perform the job in error again. If the error still occurs, turn the power OFF and then back ON, and then perform the job in error again.

[2C60] HDD full failure during processing

Delete the job in progress or being set or in the HOLD/PRIVATE/PROOF/INVALID, and perform it again.

Check if the server or local disk has a sufficient space in disk capacity.

Check that there is enough space in the server or local disk.

[2C61] Address Book reading failure

Turn the power OFF and then back ON. Perform the job in error again.
Reset the data in the Address Book and perform the job again.

[2C63] Terminal IP address unset

Reset the Terminal IP address.
Turn the power OFF and then back ON. Perform the job in error again.

[2C64] Terminal mail address unset

Reset the Terminal mail address.
Turn the power OFF and then back ON. Perform the job in error again.

[2C65] SMTP address unset

Reset the SMTP address and perform the job.
Turn the power OFF and then back ON. Perform the job in error again.

[2C66] Server time-out error

Check if the SMTP server is operating properly.

[2C69] SMTP server connection error

Reset the login name and password of SMTP server and perform the job again.
Check if the SMTP server is operating properly.

[2C6A] HOST NAME error (No RFC error)

Check if there is an illegal character in the device name.
Delete the illegal character and reset the appropriate device name.

[2C6B] Terminal mail address error

Check the SMTP Authentication method.
Check if there is an illegal character in the Terminal mail address.
Set the correct SMTP Authentication method or delete the illegal character and reset the appropriate Terminal mail address, then perform the job again.

[2C6C] Destination mail address error (No RFC error)

Check if there is an illegal character in the Destination mail address.
Delete the illegal character and reset the appropriate Destination mail address, then perform the job again.

[2C70] SMTP client OFF

Set the SMTP valid and perform the job again.

[2C71] SMTP authentication error

Check that SMTP authentication method, login name and password are correct, then perform authentication again.

[2C72] POP Before SMTP error

Check that both the POP Before SMTP setting and POP3 setting are correct, then perform authentication again.

[2CC1] Power failure

Check if the power cable is connected properly and it is inserted securely.
Check if the power voltage is unstable.

[6] File sharing related error**[2D10] System access abnormality****[2D32] File deletion failure****[2DA6] File deletion failure**

[2DA7] Resource acquiring failure

Delete some files in the shared folder by using Explorer because of automatic/manual file deletion failure (in case of [2DA6])

Turn the power OFF and then back ON. Perform the job in error again.

If the error still occurs, first, check if there are no jobs existing and then perform the HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

[2D11] Insufficient memory

When there are running jobs, perform the job in error again after the completion of the running jobs.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2D12] Message reception error**[2D13] Message transmission error**

Turn the power OFF and then back ON. Perform the job in error again.

[2D14] Invalid parameter

When a template is used, form the template again.

If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[2D15] Exceeding the maximum size for file sharing

Divide the file in error into several files and retry. Or retry the job in a single-page format.

[2D30] Directory creation failure**[2D31] File creation failure****[2D33] File access failure**

Check if the access privilege to the storage directory is writable.

Check if the server or local disk has a sufficient space in disk capacity.

[2D40] Image conversion abnormality

Turn the power OFF and then back ON. Perform the job in error again.

Replace the main memory and perform the job again.

[2D43] Encryption error

Turn the power OFF and then back ON. Perform the job in error again.

[2D44] Encryption PDF enforced mode error

Reset the encryption and perform the job in error again.

If an image file not encrypted is created, consult your administrators.

[2D45] Meta data creation error (Scan to File)

Check the template settings. Perform the job in error again. If the error still occurs, turn the power OFF and then back ON, and then perform the job in error again.

[2D62] File server connection error

Check the IP address or path of the server.

Check if the server is operating properly.

[2D63] Invalid network path

Check the network path.

If the path is correct, turn the power OFF and then back ON, and perform the job again.

[2D64] Login failure

Reset the login name and password. Perform the job.

Check if the account of the server is properly set up.

[2D65] Exceeding documents in folder: Creating new document is failed

Delete some documents in the folder.

[2D66] Storage capacity full failure during processing

Delete the job in progress or being set or in the HOLD/PRIVATE/PROOF/INVALID, and perform it again.

Check if the server or local disk has a sufficient space in disk capacity.

Check that there is enough space in the server or local disk.

[2D67] FTP service not available

Check if the setting of FTP service is valid.

[2D68] File sharing service not available

Check if the setting of SMB is valid.

[2D69] NetWare service not available

Check if the Netware setting is enabled.

[2DC1] Power failure

Check if the power cable is connected properly and it is inserted securely.

Check if the power voltage is unstable.

[2E10] USB storage system access abnormality

Turn the power OFF and then back ON. Perform the job in error again. If the error still occurs, first, check if there are no jobs existing and then perform HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

[2E11] Insufficient memory capacity for USB storage

If there is a job in progress, perform the job in error again after the job in progress is finished. If the error still occurs, turn the power OFF and then back ON, and then perform the job in error again.

[2E12] Message reception error in USB storage**[2E13] Message transmission error in USB storage**

Turn the power OFF and then back ON. Perform the job in error again.

[2E14] Invalid parameter for USB storage

If a template is being used, recreate the template. If the error still occurs, turn the power OFF and then back ON. Perform the job in error again.

[2E15] Exceeding maximum file capacity

Delete some files in the folder. Perform the job in error again.

[2E30] Directory creation failure in USB storage

Check if access privilege to the storage directory is writable. Check if the server or local disk has sufficient space in its disk capacity.

[2E31] File creation failure in USB storage

Check if access privilege to the storage directory is writable. Check if the server or local disk has sufficient space in its disk capacity.

[2E32] File deletion failure in USB storage

Turn the power OFF and then back ON. Perform the job in error again. If the error still occurs, first, check if there are no jobs existing and then perform HDD formatting ([5] + [C] + [POWER] ON -> [3] -> [1]).

[2E33] File access failure in USB storage

Check if access privilege to the storage directory is writable. Check if the server or local disk has sufficient space in its disk capacity.

[2E40] Image conversion abnormality in USB storage

Turn the power OFF and then back ON. Perform the job in error again. Replace the main memory and then perform the job in error again.

[2E43] Encryption failure in USB storage

Turn the power OFF and then back ON. Perform the job in error again.

[2E44] Encryption PDF enforced mode error in USB storage

Reset the encryption and perform the job in error again. To create an image file not encrypted, consult your administrator.

[2E45] Meta data creation error in USB storage (Scan to File)

Check the template settings. Perform the job in error again. If the error still occurs, turn the power OFF and then back ON, and then perform the job in error again.

[2E65] File creation error due to insufficient USB folder capacity

Delete unnecessary files in the folder.

[2E66] HDD full failure in USB storage

Delete the job in progress or being set or in the HOLD/PRIVATE/PROOF/INVALID, and perform it again.

Check if the server or local disk has a sufficient space in disk capacity.

Check that there is enough space in the USB memory.

[2EC1] Power failure in USB storage

Check if the power cable is connected properly and inserted securely. Check if the power voltage is unstable.

[7] E-mail reception related error

[3A10] E-mail MIME error

The format of the mail is not corresponding to MIME 1.0.

Request the sender to retransmit the mail in the format corresponding to MIME 1.0.

[3A20] E-mail analysis error

[3B10] E-mail format error

[3B40] E-mail decode error

These errors occur when the mail data is damaged from the transmission to the reception of the mail.

Request the sender to retransmit the mail.

[3A30] Partial mail time-out error

The partial mail is not received in a specified period of time.

Request the sender to retransmit the partial mail, or set the time-out period of the partial mail longer.

[3A40] Partial mail related error

The format of the partial mail is not corresponding to this equipment.

Request the sender to remake and retransmit the partial mail in RFC2046 format.

[3A50] Insufficient HDD capacity error

These errors occur when the HDD capacity is not sufficient for a temporary concentration of the jobs, etc.

Request the sender to retransmit after a certain period of time, or divide the mail into more than one.

Insufficient HDD capacity error also occurs when printing is disabled for no printing paper.

In this case, supply the printing paper.

[3A70] Warning of partial mail interruption

This error occurs when the partial mail reception setting becomes OFF during the partial mail reception.

Reset the partial mail reception setting ON and then request the sender to retransmit the mail.

[3A80] Partial mail reception setting OFF

Reset the partial mail reception setting ON and then request the sender to retransmit the mail.

[3B20] Content-Type error

The format of the attached file is not supported by this equipment (TIFF-FX).

Request the sender to retransmit the file in TIFF-FX.

[3C10] [3C13] TIFF analysis error

These errors occur when the mail data is damaged from the transmission to the reception of the mail, or when the format of the attached file is not supported by this equipment (TIFF-FX).

Request the sender to retransmit the mail.

[3C20] TIFF compression error

The compression method of the TIFF file is not acceptable for this equipment. (Acceptable: MH/MR/MMR/JBIG)

Request the sender to retransmit the file in the acceptable compression method.

[3C30] TIFF resolution error

The resolution of the TIFF file is not acceptable for this equipment. (Acceptable: 200 x 100, 200 x 200, 200 x 400, 400 x 400, 300 x 300 or equivalent)

Request the sender to retransmit the file in the acceptable resolution.

[3C40] TIFF paper size error

The paper size of the TIFF file is not acceptable for this equipment. (Acceptable: A4, B4, A3, B5, LT, LG, LD or ST)

Request the sender to retransmit the file in the acceptable paper size.

[3C50] Offramp destination error

These errors occur when the FAX number of the offramp destination is incorrect.
Request the sender to correct the FAX number of offramp destination and then retransmit the mail.

[3C60] Offramp security error

These errors occur when the FAX number of the offramp destination is not on the Address Book.
Check if the FAX number of the offramp destination is correctly entered or the number has not been changed.

[3C70] Power failure error

Check if the mail is recovered after turning ON the power again.
Request the sender to retransmit the mail if it is not recovered.

[3C90] OffRamp Fax transmission disable error

OffRamp Fax transmission disable error has been detected in the received mail.
Confirm if the Fax Send Function of MFP setting is disable or not.

[3D10] Destination address error

Check if the setting of the server or DNS is correct. Correct if any of the setting is incorrect.
When the content of the setting is correct, confirm the sender if the destination is correct.

[3D20] Offramp destination limitation error

Inform the sender that the transfer of the FAX data over 40 is not supported.

[3D30] FAX board error

This error occurs when the FAX board is not installed or the FAX board has an abnormality.
Check if the FAX board is correctly connected.

[3E10] POP3 server connection error

Check if the IP address or domain name of the POP3 server set for this equipment is correct, or check if POP3 server to be connected is operating properly.

[3E20] POP3 server connection time-out error

Check if POP3 server to be connected is operating properly.
Check if the LAN cable is correctly connected.

[3E30] POP3 login error

Check if the POP3 server login name and password set for this equipment are correct.

[3E40] POP3 Login Type error

Check that the login type (Auto, POP3 or APOP) to the POP3 server is correct.

[3F10] [3F20] File I/O error

These errors occur when the mail data is not transferred properly to the HDD.
Request the sender to retransmit the mail.
Replace the HDD if the error still occurs after retransmission.

8.3.25 Printer function error

[4011] Print job cancellation

This message appears when deleting the job on the screen.

[4021] Print job power failure

When there are running jobs, perform the job in error again after the completion of the running jobs. If the error still occurs, turn the power OFF and then back ON, and perform the job again.

[4031] HDD full error

Delete unnecessary private print jobs and invalid department print jobs.

[4041] User authentication error

Perform the authentication or register as a user, and then perform the printing again.

[4042] Department authentication error

Check department information registered in this equipment.

[4045] Problem in LDAP server connection or LDAP server authorization settings

Confirm the administrator for the LDAP server connection or LDAP server authorization settings.

[4111] Quota over error (The number of the assigned pages set by department and user management has reached 0.)

The number of the assigned pages set by the department and the number of those assigned by user management have both reached 0. Assign the number of the pages again or perform initialization.

[4112] Quota over error (The number of the assigned pages set by user management has reached 0.)

The number of the assigned pages set by the user management has reached 0. Assign the number of the pages again or perform initialization.

[4113] Quota over error (The number of the assigned pages set by department management has reached 0.)

The number of the assigned pages set by the department management has reached 0. Assign the number of the pages again or perform initialization.

[4121] Job canceling due to external counter error

1. Drop a coin in. Perform the print job in error again.
2. Insert a key card and then perform the print job in error again, or consult your administrator.
3. Insert a key copy counter and then perform the print job in error again.
4. Reset the scheduled print job and then perform the print job in error again.

[4211] Printing data storing limitation error

Select "Normal Print", and then perform the printing again.

[4212] e-Filing storing limitation error

Select "Normal Print", and then perform the printing again.

[4213] File storing limitation error

The file storing function is set to "disabled". Check the settings of the equipment.

[4214] Fax/Internet Fax transmission limitation error

Check the settings of this equipment.

[4221] Private-print-only error

Select "Private print", and then perform the printing again.

[4231] Hardcopy security printing error

Hardcopy security printing cannot be performed because the function is restricted in the self-diagnosis mode.

[4311] Printing not permitted

Confirm the administrator for the JOB authorization.

[4312] Not authorized to store a file

The user has not been authorized to perform this operation. Ask your administrator.

[4313] No privilege for e-Filing storage**[4314] No privilege for Fax / Internet Fax transmission****[4321] No privilege for print settings**

Check the privilege given, or request the administrator to add the necessary privilege.

[4411] Image data creation failure

Check if the file to be printed is broken. Perform printing again or use another printer driver.

- Network print: Perform the print job in error again, or use another printer driver (e.g.; PS3, Universal).
- Direct print: Check if the file is corrupted (e.g. checking if the file is displayed on your PC monitor), or check if the file format is supported by this equipment.

[4412] Double-sign encoding error

Printing using this function cannot be performed due to a decoding process error which occurs because the PDF file is encrypted incorrectly or encrypted in a language not supported.

[4611] Font download failure (reached the registration limit)**[4612] Font download failure (HDD full)**

Delete one or more font already registered.



[4613] Font download failure (others)

Reattempt the downloading. Recreate font data and reattempt the downloading.

[4621] Font deletion failure

Check if the font to be deleted is registered (or pre-registered) in this equipment.

[4F10] System abnormality

1. Perform the job in error again. If the error still occurs, turn the power OFF and then back ON, and perform the job again.
2. Collect the debug log with USB media.
 P. 8-2"8.1.2 Collection of debug log with USB media"
3. Initialize HDD.
Refer to step 3 and later in "[E] Replace / Format HDD" in  P. 9-19"9.2.3 Precautions and procedures when replacing the HDD".

8.3.26 TopAccess related error/Communication error with external application

[5010] Internal setting error

Classification	Error item
Communication error with external application	There is a print job, a proof print job, a private print job, a print job without a set department code, a scan job or a fax job remaining in this equipment.

Check item	Measures
Setting	Delete the remaining jobs. Turn the power OFF and then back ON. Until the initial registration is begun, do not press any button on the control panel or start any print or fax job.

[5012] Authentication error

Classification	Error item
Communication error with external application	A temporary password downloaded from e-Bridge and entered in this equipment is not valid, or the permanent password set in the e-Bridge is not valid.

Check item	Measures
Setting	Perform the job again at a later date.

[5013] e-Bridge communication error

Classification	Error item
Communication error with external application	Communication is attempted while the e-Bridge is enabled for some reason such as version upgrade.

Check item	Measures
Setting	Check if the MFP is connected to the eBR2 server.

[5014] No SSL certificate

Classification	Error item
Communication error with external application	There is no SSL certificate or the certificate is not in a correct file format.

Check item	Measures
Setting	Install the correct SSL certificate.

[5015] Invalid SSL certificate

Classification	Error item
Communication error with external application	SSL certificate is not valid.

Check item	Measures
Setting	Install the correct SSL certificate.

[5016] Expired SSL certificate

Classification	Error item
Communication error with external application	SSL certificate is expired.

Check item	Measures
Setting	Set the correct time.

[5017] Other SSL certificate related error

Classification	Error item
Communication error with external application	SSL certificate is invalid.

Check item	Measures
Setting	Install the correct SSL certificate.

[5018] Invalid DNS error

Classification	Error item
Communication error with external application	DNS address is invalid.

Check item	Measures
Setting	Set the correct DNS address. If any setting is needed in DNS, consult your administrators.

[5019] Connection error

Classification	Error item
Communication error with external application	Settings for initial URL and proxy are incorrect.

Check item	Measures
Setting	Perform the correct settings for initial URL and proxy.

[501A] Proxy error

Classification	Error item
Communication error with external application	IP address or port for proxy setting is invalid.

Check item	Measures
Setting	Set the correct IP address or port for the proxy setting. If any setting is needed in proxy, consult your administrators.

[501B] No URL (host/port) or invalid path

Classification	Error item
Communication error with external application	Initial URL is invalid.

Check item	Measures
Setting	Set the correct initial URL.

[5030] HTTP communication error

Classification	Error item
Communication error with external application	An error in the HTTP communication

Check item	Measures
Setting	<ul style="list-style-type: none"> • Check the URL for communication. • Check that the valid IP address is assigned to connect to the server.

[50FF] eBR2 internal error

Classification	Error item
MFP internal error	A fatal error occurred in the MFP

Check item	Measures
Setting	Restart the MFP, and then try again.

[5110] Toner cartridge detection error

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	<ul style="list-style-type: none"> • Check if the toner cartridge is installed properly. • Check if the toner cartridge detection sensor operates properly.

[5212] Time for cleaning of the slit glass and main charger

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	<ul style="list-style-type: none"> • Clean the slit glass and main charger. • If the message is not cleared after the cleaning, check if there is any detection error, breakage or poor connection of the needle electrode cleaner detection sensor.

[5BD0] Power failure during restoration

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	<ul style="list-style-type: none">• Check if the power cable is connected properly and is inserted securely.• Check if the power voltage is unstable.• Reattempt the restoration of the database (Address Book, templates, F-code (Mailbox) or user information).

[5C10] FAX Unit attachment error

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	<ul style="list-style-type: none"> • Check if the FAX Unit is attached. • Check if there is any damage or abnormality on the FAX board. • Check if the connector on the FAX board is connected properly.

[5C11] Network FAX transmission error

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	The address specified for the network FAX is not registered on the Address Book. Register it.

[5C20] Data import from TopAccess succeeded

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	Data (Address book, department or user information) have been imported successfully. No troubleshooting is required.

[5C21] Error in data import from TopAccess

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	Data import failed because the specified file (Address Book, department or user information) is incorrect or damaged. Check if the file is incorrect or damaged, and then reattempt the import.

[5C22] Error on data import from TopAccess

Classification	Error item
TopAccess related error	

Check item	Measures
Setting	<ul style="list-style-type: none"> • Data import failed because the specified file (Address Book, department or user information) is incorrect or damaged. Check if the file is incorrect or damaged, and then reattempt the import. • Check that no jobs remain and rebuild the databases ([5] + [C] + [POWER] ON -> [4] -> [1] LDAP DB or [2] Log DB(Job,Msg)). • If the error is not recovered, initialize the HDD ([5] + [C] + [POWER] ON -> [3] -> [1]). <p>Notes:</p> <ul style="list-style-type: none"> • If you rebuild the databases with a job remaining, delete it after finishing. • When “Rebuilding all databases ([5] + [C] + [POWER] ON -> [4] -> [1] LDAP DB)” is performed, all the data in the User, Role, Group, department information and Address Book are deleted. If you back up the data in advance, they will be recovered by restoring them after rebuilding the database.

8.3.27 MFP access error

[6007] Unsuccessful User Login to MFP

Classification	Error item
MFP access error	User authentication cannot be done because connection to the authentication server has failed.

Check item	Measures
Setting	Check if the operating status of the server and connection from an MFP have been confirmed.

[6008] Failed to connect on External Role Base Access Control (LDAP) Server

Classification	Error item
MFP access error	User authentication cannot be done because connection to an external RBAC server has failed.

Check item	Measures
Setting	Check if the operating status of the server and connection from the MFP have been confirmed.

[6013] Connection failure to the authentication server

Classification	Error item
MFP access error	Failed to connect to the authentication server

Check item	Measures
Setting	Check that the server setting is proper by accessing [TopAccess] -> [Administration] -> [Maintenance] -> [Directory Service]. When "Auto" is selected as the authentication method, this error may output to the log depending on the environment.

[6014] The authentication server that cannot be accessed is detected

Classification	Error item
MFP access error	The authentication server that cannot be accessed is detected

Check item	Measures
Setting	Check if the authentication server is down since the access to the authentication server is not available. The unavailable authentication server is accessed again if the time set in 08-8788 passes or the power of the equipment is turned OFF and back ON.

[6032] Card related error: Expired card

Classification	Error item
MFP access error	The card cannot be used because it has expired.

Check item	Measures
Setting	Use a card with a valid expiration.

[6033] Card related error: Invalid flag data (no room-entry data)

Classification	Error item
MFP access error	The card cannot be used because no room-entry data are recorded in it.

Check item	Measures
Setting	Use a correct card that has been used for entering the room.

[6034] Card related error: Invalid flag data (invalid card data)

Classification	Error item
MFP access error	The card cannot be used because the data required for the use of the card are not correctly set.

Check item	Measures
Setting	Use a valid card.

[6041] Card authentication: Card related error

Classification	Error item
MFP access error	Card data cannot be obtained correctly.

Check item	Measures
Setting	Reattempt scanning. If the error still occurs after reattempting scanning for several times, card data may be corrupted or the card reader may be out of order.

[6042] Card authentication: Card setting error

Classification	Error item
MFP access error	The self-diagnostic code required for card authentication is not set in this equipment correctly.

Check item	Measures
Setting	Set the correct self-diagnostic code.

[6121] Automatic Secure Erase failure

Classification	Error item
MFP access error	The automatic secure erase fails.

Check item	Measures
Setting	Data overwriting failed for some reason. If the error still occurs after rebooting the equipment, start up using the following procedure:[3] + [C] + [POWER] → 3. HDD formatting → Reinstallation of software or HDD replacement

[6131] MFP fail to verify clock with Time Server

Classification	Error item
MFP access error	The MFP is not synchronized with the SNTP server.

Check item	Measures
Setting	<ul style="list-style-type: none"> • Check that the SNTP server is operating correctly. • Check that the path to the SNTP server is operating correctly. • Check that the settings are correct in TopAccess -> [Administrator] -> [Setup] -> [General] -> [SNTP Service].

8.3.28 Maintenance error

[7101] System firmware installation failure

[7103] Engine firmware installation failure

[7105] Scanner firmware installation failure

[7111] Patch installation failure

[7113] Plug-in installation failure

[7115] HDD data installation failure

[7117] DF firmware installation failure

Classification	Error item
Maintenance error	System firmware installation failed. ([7101]) Engine firmware installation failed. ([7103]) Scanner firmware installation failed. ([7105]) MEP firmware installation failed. ([7107]) Patch installation failed. ([7111]) Plug-in installation failed. ([7113]) HDD data installation failed. ([7115]) DF firmware installation failed. ([7117])

Check item	Measures
Setting	Software package file may have a problem or may be corrupted. Check the software package file and then reattempt the installation.

[7109] Printer driver update failure

Classification	Error item
Maintenance error	Printer driver upload failed.

Check item	Measures
Setting	Printer driver file may have a problem or may be corrupted. Check the package file and then reattempt the upload.

[710B] Point and Print data installation failure

Classification	Error item
Maintenance error	Point and Print data upload failed.

Check item	Measures
Setting	Point and Print data may have a problem or may be corrupted. Check the package file and then reattempt the upload.

[710F] Language Pack installation failure

Classification	Error item
Maintenance error	Language Pack installation failed.

Check item	Measures
Setting	Language Pack file may have a problem or may be corrupted. Check the package file and then reattempt the installation.

[711D] License key returning failure

Classification	Error item
Maintenance error	The one-time dongle license fails to be returned to USB media.

Check item	Measures
Setting	Return the license to the USB media used for installing the license. Check that the USB media is correctly installed. Notes: The GP-1080 IPsec Enabler cannot return to the USB media due to license problem. The GP-1070 Overwrite Enabler cannot return to the USB media in the high security (08-8911: 3).

[711F] License key installation failure

Classification	Error item
Maintenance error	The one-time dongle license fails to be installed.

Check item	Measures
Setting	Check that the USB media is correctly installed.

[71A4] Cryptographic key consistency confirmation failure

Classification	Error item
Maintenance error	Cryptographic key consistency confirmation failed.

Check item	Measures
Setting	Start up the equipment in the following procedure:[3] + [C] + [POWER] → 5. Key Backup Restore Then overwrite the corrupted license key with a normal one.

[71AA] Unidentified error during certificate acquisition from SCEP server

Classification	Error item
Maintenance error	Unidentified error occurred during certificate acquisition from SCEP server.

Check item	Measures
Setting	Check SCEP server and the SCEP setting (automatic) on the TopAccess screen as follows: TopAccess Administration → Security → Certificate Management

[71AB] Timeout error during certificate acquisition from SCEP server

Classification	Error item
Maintenance error	Timeout error occurred during certificate acquisition from SCEP server.

Check item	Measures
Setting	Check SCEP server and the SCEP setting (automatic) on the TopAccess screen in the following procedure: TopAccess Administration → Security → Certificate Management

[71AC] File save error during certificate acquisition from SCEP server

Classification	Error item
Maintenance error	File save error occurred during certificate acquisition from SCEP server.

Check item	Measures
Setting	File saving failed for some reason. If the error still occurs after rebooting the equipment, start up using the following procedure:[3] + [C] + [POWER] → 3. HDD formatting → Reinstallation of software or HDD replacement

[71B0] Software package file decryption failure

Classification	Error item
Maintenance error	Software package file decryption failed.

Check item	Measures
Setting	Software package file may have a problem or may be corrupted. Check the software package file and then reattempt the installation.

8.3.29 Network error

[8000] Static IPv4 address conflict

Classification	Error item
Network error	IPv4 address overlaps.

Check item	Measures
Setting	Check if the same IP address is not used by other machine.

[8011] Linklocal Address Conflict

Classification	Error item
Network error	Linklocal Address Conflict

Check item	Measures
Setting	Check if the same IP address is not used by other machine.

[8012] Manual Address Conflict

Classification	Error item
Network error	Manual IPv6 Address Conflict

Check item	Measures
Setting	Check if the same IP address is not used by other machine.

[8013] Stateless Address Conflict

Classification	Error item
Network error	Stateless Address Conflict

Check item	Measures
Setting	Check if the same IP address is not used by other machine.

[8014] Stateful Address Conflict

Classification	Error item
Network error	Stateful Address Conflict

Check item	Measures
Setting	Check if the same IP address is not used by other machine.

[8022] Authentication Failure

Classification	Error item
Network error	Failed in 802.1X authentication.

Check item	Measures
Setting	Check the user credential.

[8023] Can not contact Authentication Server/Switch

Classification	Error item
Network error	Failed in connection to authentication server and switch.

Check item	Measures
Setting	Check connectivity to switch or server.

[8024] Certificate verification Failure

Classification	Error item
Network error	Failed in verification of certificate.

Check item	Measures
Setting	Check if a valid certificate is installed.

[8031] IKEv1 certification failed

Classification	Error item
Network error	Ipsec error for ikev1 certification failed

Check item	Measures
Setting	Check <ol style="list-style-type: none"> 1. CA and user certificate in both MFP and remote peer - certificate timestamp and IPsec Certificate template should be valid. 2. CRL DP server name is mapped in MFP's host table or DNS entry. 3. Certificate against CRL.

[8032] IKEv1 wrong proposal choosen

Classification	Error item
Network error	Ipsec error for wrong proposal choosen

Check item	Measures
Setting	Check the IKEv1 IPsec proposal parameters (like encryption/ authentication algorithms, DH group, authentication methods) in MFP and peer machine.

[8033] IKEv1 shared key authentication failed

Classification	Error item
Network error	Ipsec error if auth for shared key failed

Check item	Measures
Setting	Mismatch in IKEv1 Pre Shared Key. Check the PSK in MFP and remote machine.

[8034] IKEv1 invalid certificate

Classification	Error item
Network error	Ipsec error if invalid certificate uploaded

Check item	Measures
Setting	Check the CA and User certificate in MFP and peer machine.

[8035] IKEv1 certificate not supported

Classification	Error item
Network error	Ipsec error if certificate not supported

Check item	Measures
Setting	Check the User certificate type.

[8036] IKEv1 invalid certificate authentication

Classification	Error item
Network error	Ipsec error if invalid certificate authentication

Check item	Measures
Setting	Check the CA certificate in MFP and Peer machine.

[8037] IKEv1 certificate unavaliable

Classification	Error item
Network error	Ipsec error if certificate are not avaliable

Check item	Measures
Setting	Certificate has been deleted from Certificate store. Re-upload the corresponding certificates.

[8038] IKEv1 no SA established

Classification	Error item
Network error	Ipsec error for SA is not present

Check item	Measures
Setting	Check the IKEv1/IPsec proposal parameters (like encryption/ authentication algorithms, DH group, authentication methods) in MFP and peer machine. Check 1. CA and user certificate in both MFP and remote peer - certificate timestamp and IPsec Certificatetem.

[8039] IKEv1 invalid signature

Classification	Error item
Network error	Ipsec error for invalid signaturer for certificate

Check item	Measures
Setting	Mismatch in Signature payload (MAC or IV). Check the CA and user certificate in MFP and peer machine.

[803A] IKEv2 wrong proposal chosen

Classification	Error item
Network error	Ipsec error is proposal chosen is wrong

Check item	Measures
Setting	Check the IKEv2/IPsec proposal parameters (encryption/ authentication algorithms, DH group, authentication methods) in MFP and peer machine.

[803B] IKEv2 Certificate failed

Classification	Error item
Network error	Ipsec error for ikev2 certification failed

Check item	Measures
Setting	Check <ol style="list-style-type: none">1. CA and user certificate in both MFP and remote peer - certificate timestamp and IPsec Certificate template should be valid.2. CRL DP server name is mapped in MFP's host table or DNS entry.3. Certificate against CRL.

[803C] IKEv2 secret key authentication failed

Classification	Error item
Network error	Ipsec error for ikev2 if secret key auth failed

Check item	Measures
Setting	Mismatch in IKEv2 Pre Shared Key. Check the PSK in MFP and peer machine.

[803D] IKEv2 falling back to IKEv1

Classification	Error item
Network error	Ipsec error if peer dosent support IKEv2 and falling back to IKEv1

Check item	Measures
Setting	Remote machine is not supporting IKEv2. Going back to use IKEv1.

[803E] IKEv2 ISAKMP SA unavailalbe

Classification	Error item
Network error	Ipsec error if ISAKMP SA is not created of destroyed due to some uncertain condition

Check item	Measures
Setting	Restart IPsec service on Peer and retry.

[803F] IKEv2 cryptographic operation failed

Classification	Error item
Network error	Ipsec error for ikev2 if crypto operation failed

Check item	Measures
Setting	If Certificates are being used, re-upload the corresponding certificates using Security Services. Restart IPsec Service on MFP.

[8040] IKEv2 invalid key information

Classification	Error item
Network error	Ipsec error for ikev2 if key info is invalid

Check item	Measures
Setting	Check IKE settings in MFP and peer.

[8041] IKEv2 CA not trusted

Classification	Error item
Network error	Ipsec error for ikev2 if CA is not trusted

Check item	Measures
Setting	Check the CA certificate in MFP and peer machine. Check the CA certificate timestamp.

[8042] IKEv2 Authentication method mismatch

Classification	Error item
Network error	Ipsec error if auth method is not matching

Check item	Measures
Setting	Mismatch in IKE authentication type. Check the Authentication type in MFP and peer.

[8043] IPsec IKE version mismatch

Classification	Error item
Network error	Ipsec error if ike version is not matching

Check item	Measures
Setting	Mismatch in IKE version. Check the IKE version in MFP and peer.

[8044] IPsec encapsulation mismatch

Classification	Error item
Network error	Ipsec error for encapsulation is not matching

Check item	Measures
Setting	Check the IPsec mode (Transport/Tunnel) in MFP and peer.

[8045] IPsec Peer IP mismatch

Classification	Error item
Network error	Ipsec error for peer ip mismatch

Check item	Measures
Setting	Remote Traffic selector mismatch. Check the destination address/port in IPsec filter.

[8046] IPsec local IP mismatch

Classification	Error item
Network error	Ipsec error for local ip mismatch

Check item	Measures
Setting	Local traffic selector mismatch. Check the source address/port in IPsec filter.

[8047] IPsec local ID mismatch

Classification	Error item
Network error	Ipsec error for local id mismatch

Check item	Measures
Setting	Check the user certificate in MFP

[8048] IPsec Remote ID mismatch

Classification	Error item
Network error	Ipsec error for remote id mismatch

Check item	Measures
Setting	Check the user certificate in peer machine.

[8049] IPsec Remote IP mismatch

Classification	Error item
Network error	Ipsec error for remote ip mismatch

Check item	Measures
Setting	Remote traffic selector mismatch. Check the source address/port in IPsec filter.

[804A] IPsec IKE timeout

Classification	Error item
Network error	Ipsec error for ike timeout

Check item	Measures
Setting	Check the network connectivity between MFP and peer machine. Select the Flush Connections Option and retry.

[804B] IPsec invalid manual key

Classification	Error item
Network error	Ipsec error id manual key is not valid

Check item	Measures
Setting	Check the Inbound and Outbound (ESP Encryption/ Authentication and AH Authentication) keys in MFP and Remote PC.

[8061] Secure update to primary IPv4 server failed

[8062] Secure update to secondary IPv4 server failed

[8063] Secure update to primary IPv6 server failed

[8064] Secure update to secondary IPv6 server failed

[8065] IPv6 primary DDNS update error

[8066] IPv6 secondary DDNS update error

[8067] IPv4 primary DDNS update error

[8068] IPv4 secondary DDNS update error

Classification	Error item
Network error	Secure update to primary IPv4 server failed. ([8061]) Secure update to secondary IPv4 server failed. ([8062]) Secure update to primary IPv6 server failed. ([8063]) Secure update to secondary IPv6 server failed. ([8064]) IPv6 primary DDNS update error. ([8065]) IPv6 secondary DDNS update error. ([8066]) IPv4 primary DDNS update error. ([8067]) IPv4 secondary DDNS update error. ([8068])

Check item	Measures
Setting	Check if there is any problem with DNS or DDNS settings.

[8069] Invalid TSIG/SIG(0) Key file

Classification	Error item
Network error	This message is displayed when the key file for SIG(0) or TSIG is invalid.

Check item	Measures
Setting	Verify the TSIG/SIG(0) key files used.

[8101] Wireless association with Access point failure

Classification	Error item
Network error	Wireless association with Access point failure

Check item	Measures
Setting	Verify the credentials used for association with Access point.

[8102] MFP not able to contact the Access point with the specified SSID

Classification	Error item
Network error	MFP not able to contact the Access point with the specified SSID

Check item	Measures
Setting	Verify the access point name setting and mechanism used for association same as Access Point setting.

[8103] Wireless Certificate verification failure

Classification	Error item
Network error	Wireless Certificate verification failure

Check item	Measures
Setting	Verify the certificate settings used for association.

[8121] Domain - General Failure during Authentication

Classification	Error item
Network error	An unknown domain authentication error occurs when connecting to the domain controller.

Check item	Measures
Setting	Check the network settings of the equipment, and retry connecting to the domain controller.

[8122] Domain - Invalid Username or Password

Classification	Error item
Network error	The user name or password of the domain authentication is not valid and the user cannot log on.

Check item	Measures
Setting	Check if the user name or password is correctly entered. Enter them by specifying the upper and lower case letters correctly.

[8123] Domain - Server not present in Network

Classification	Error item
Network error	The server cannot be detected at domain authentication.

Check item	Measures
Setting	Check if the server fails. Check the network settings of the equipment. If name resolution is used, check the settings of the DNS and DDNS.

[8124] Domain - User account is disabled on Server

Classification	Error item
Network error	The user account is invalid at domain authentication and it cannot be used to log on.

Check item	Measures
Setting	Check if the setting of the user account in "Active Directory User and Computer" is disabled.

[8125] Domain - User account has expired and cannot be used for logon

Classification	Error item
Network error	The user account has expired at domain authentication and it cannot be used to log on.

Check item	Measures
Setting	Check if the setting of the user account in "Active Directory User and Computer" has expired.

[8126] Domain - User account is locked and cannot be used for logon

Classification	Error item
Network error	The user account is locked at domain authentication and it cannot be used to log on.

Check item	Measures
Setting	Check the setting of the account lock-out on the server.

[8127] Domain - Invalid logon hours for the User

Classification	Error item
Network error	The user log-on time is invalid at domain authentication and the user cannot log-on.

Check item	Measures
Setting	Check the log-on time setting of the user account in "Active Directory User and Computer".

[8128] Active Directory Domain - Clock Skew error due to difference in Time between Server and MFP

Classification	Error item
Network error	The difference between the time set in the equipment and that set in the server is more than five minutes at domain authentication of the Active Directory and the user cannot log on.

Check item	Measures
Setting	Match the time of the equipment and domain controller, or if an SNTP server is in the network, recommend the use of SNTP.

[8129] Active Directory Domain - Kerberos Ticket has expired and cannot be used for Authentication

Classification	Error item
Network error	A Kerberos ticket has expired at the domain authentication of the Active Directory and the user cannot log on.

Check item	Measures
Setting	Check if the Kerberos ticket on the Kerberos server has expired.

[812A] Active Directory Domain - Verification of the Ticket has failed

Classification	Error item
Network error	A Kerberos ticket authentication error of the Active Directory domain authentication occurs and the user cannot log on.

Check item	Measures
Setting	Check if the user name or password is correctly entered. If this problem still persists, contact your Window server administrator.

[812B] Active Directory Domain-The Domain specified could not be found

Classification	Error item
Network error	The Realm name for the domain authentication of the Active Directory is invalid and the user cannot log on.

Check item	Measures
Setting	Check if the Realm name of the Active Directory server of the equipment is wrong. If this problem still persists, contact your Window server administrator.

8.4 Other errors

8.4.1 Equipment operation disabled after the installation of option(s)

Check if the optional board is installed properly.

8.4.2 Wireless LAN connection disabled

The connection state and settings of the Wireless LAN can be checked with [USER FUNCTIONS] → [ADMIN] → [WIRELESS LAN] → [SETTING CHECK].

Confirm the settings with the administrator.

- “NIC INITIALIZING” does not disappear at the time of the power being turned ON and it disappears after 6 minutes with the NIC initializing time-out. In this case, the connection to the Wireless LAN did not succeed even though “NIC INITIALIZING” disappears.
- The connection to the Wireless LAN cannot be made if the Access Point to be connected is not found or security settings are not correct.

8.4.3 “Start page” printing disabled after the installation of the EFI Printer Board (GA-1211, optional)

When the firmware of the equipment or the system software of the EFI printer board is updated, perform “Initialization of NIC information (08-9083)” and “Default setting of the EFI printer board (08-9951)” if “Start page” is not printed out after a specified period of time. (In case of the equipment's firmware, wait approx. 3 minutes and in case of the EFI printer board's system software, wait approx. 10 minutes.)

1. Turn OFF the power of the equipment.
2. Confirm that the power of the EFI printer board is also turned OFF. (The 7-Segment LED of the EFI printer board goes off.)
3. Turn ON the power of the equipment while pressing digital keys [0] and [8] simultaneously to enter the Setting Mode (08).
4. Confirm that the power of the EFI printer board is also turned ON. (The 7-Segment LED of the EFI printer board is lit.)
5. Key in [9083] and press the [START] button (Initialization of NIC information).
6. Key in [9951] and press the [START] button (Default setting of the EFI printer board).
7. Turn OFF the power of the equipment.
8. Confirm that the power of the EFI printer board is also turned OFF.
9. Turn ON the power of the equipment.

8.4.4 “Invalid Department Code” is displayed

Log in to TopAccess as an administrator, select [Authentication] on the [User Management] tab, and then check whether Department Setting is enabled or disabled.

Department Setting is enabled:

- Log in to TopAccess as an administrator, select [Authentication] on the [User Management] tab, and then check User Management Setting.
- Confirm the settings of 08-3805 in the setting mode.

Department Setting is disabled:

- Log in to TopAccess as an administrator, select [Authentication] on the [User Management] tab, and then check User Management Setting.

8.4.5 Paper folded on the leading edge

If the leading edge of B4, B5 or B5-R paper is folded when it exits, check the following items.

1. Check if the rear and side guides of the drawer or the side guide of the bypass tray correspond to the paper size.
2. Check if the center of the paper in the drawer in which paper folding at the leading edge occurs is the same position as that of the 2nd drawer. If not, align it.
3. If paper folding at the leading edge still occurs:
If the front leading edge is folded, shift the guide to the front by 1 or 2 mm. If the rear one is folded, do so to the rear by 1 or 2 mm.
P. 6-63 "6.4.1 Sheet sideways deviation caused by paper feeding"

Notes:

Adjust the image position using the adjustment mode if required.

8.4.6 Abnormality of Recovery from the Sleep Mode (poor fusing, toner offset or delay of print start in the color mode)

The following phenomena may occur in this equipment since the recovery time from the sleep mode is shortened.

- When color printing is performed on paper of 90 g or more immediately after the recovery from the sleep mode, poor fusing may occur. (in e-STUDIO4540C for JPD and MJD only)
- Immediately after recovery from the sleep mode, there may be a delay of max. 30 seconds for color printing to start.
- When color printing is performed on special paper, poor fusing may occur.

These problems can be corrected by changing the following self-diagnosis code setting.

- Change the setting of 08-5212 (Control for recovery from the sleep mode) from "1" (Enabled) to "0" (Disabled).

8.4.7 Toner cartridge unrecognized

If the toner cartridge is not recognized, check the following.



- Check that there is no access abnormality on the CTRG board of the toner cartridge and LGC board.
P. 8-110 "[C910] Toner cartridge IC chip access board abnormality"
- Check that there is no access abnormality to the toner cartridge IC chip.
P. 8-111 "Toner cartridge IC chip access board abnormality (caused by factors other than C910)"

8.4.8 Error code “M00” is displayed while updating firmware


Check item	Measures
Switching regulator	<ul style="list-style-type: none"> • Connector check (CN404, CN405) • Harness check • Fuse check (F210)
LGC board	<ul style="list-style-type: none"> • Board check • Connector check (CN345, CN361) • Harness check

Replace parts	Remarks
Switching regulator	
LGC board	

8.4.9 “Authentication Failed” is displayed

- Reset the service password
Reset the service password by accessing [USER FUNCTIONS] -> [ADMIN] -> [GENERAL] -> [PASSWORD SETUP] -> [RESET SERVICE PASSWORD].
- Initialize the SRAM
Refer to  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)", and perform “[D] Initialize SRAM system storage area” and following steps.
- Replace the SRAM board
Refer to  P. 9-29"9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)", and replace the SRAM board.

8.4.10 Hard disk full error “H04” is displayed




Perform the following, referring to  P. 9-19"9.2.3 Precautions and procedures when replacing the HDD".

- Back up the user data
 - (1) [A] Back up data in HDD
 - (2) [B] Print out “FUNCTION LIST FOR MAINTENANCE”
 - (3) [C] Print out “FUNCTION” list
- Initialize the HDD
 - (4) [E] Replace / Format HDD
Step 2 for replacing the HDD is unnecessary.
- Restore the user data
 - (5) [F] Reset user’s setting items and restore data/information
 - (6) [G] Reset “FUNCTION LIST FOR MAINTENANCE”
 - (7) [H] Reset “FUNCTION” list
- Adjust image quality
 - (8) [I] Adjust image quality

8.5 Troubleshooting for the Image

8.5.1 Color deviation

1) Color deviation
<Symptoms>

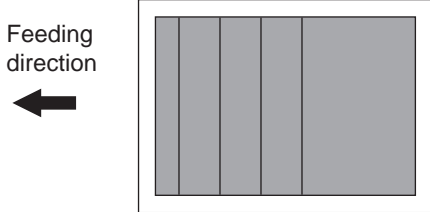
Original mode	Location	Phenomena	
All modes	Color blurred in outline of white text or illustration on a colored background	Color deviation→	 <p>Fig.8-2</p>
Text Mode Text/Photo Mode	Outline in black text on a colored background	White void→	 <p>Fig.8-3</p>
Photo Mode Map Mode	Color blurred in outline of line or text	Color deviation→	 <p>Fig.8-4</p>

Cause/Section	Step	Check Item	Measure	Remark
	1	Perform the Forced performing of color registration control adjustment (05-4719).	Has it ended normally? When CA00 occurs: → Proceed to [CA00] troubleshooting.	
	2	Test printing (A3/LD)	Output the built-in grid pattern	For the following checks
Drum rotation abnormality	3	Check the drum motor operation in the test mode (03) to see if there is any rotation abnormality of the drum.	Replace the drum motor.	
	4	Check the drum motor operation in the test mode (03) to see if there is any rotation abnormality of the drum.	Reconnect the connectors. Replace the harnesses. Replace the LGC board.	
Inadequate drum motor rotation speed	5	Check the value set for main motor rotation speed. (Is the value significantly different from the default value?)	Reset drum motor speed to 128.	
Drum coupling and coupling on the equipment side	6	Loose coupling, damage, deformation	Check if they are installed properly or replace the couplings.	

Cause/Section	Step	Check Item	Measure	Remark
Transfer belt	7	Deformation or damage of the transfer belt or stains on the transfer belt.	Clean or replace the transfer belt.	
	8	Are the gears on the transfer belt side loosen, damaged or deformed?	Tighten the screws if they loosen, or replace the gears.	
	9	Stain or damage of the drive roller	Clean or replace the drive roller.	
	10	Does the rib of the transfer belt overlap the collar on both edge of the drive roller?	Adjust the position of the transfer belt.	
	11	Is the belt edge damaged or stained?	Clean or replace the transfer belt.	
	12	Peeling of the cleaning blade (Large driving load)	Replace the cleaning blade.	
	13	Is the transfer belt unit installed normally? (Is the unit properly grounded?)	Check and correct the installing.	
Laser optical unit	14	Check the grid pattern. Are the lines of the primary scanning direction warped?	Replace the laser optical unit.	F θ lens characteristic defect or reflection mirror warp
High-voltage transformer	15	Check the connection of the high-voltage supply terminal of the 1st or 2nd transfer rollers.	Correct or replace the terminal if it is loosened or damaged.	

8.5.2 Uneven pitch and jitter image

<Symptoms>

Original mode	Location	Phenomena
All modes	Occurs cyclically at right angles to paper feeding direction	Uneven pitch  Fig.8-5

Cause/Section	Step	Check Item	Measure	Remark
	1	Test printing (A3/LD)	Output the built-in halftone and grid patterns.	For the following checks
Drum	2	Are there uneven pitches of approx. 94 mm?	Replace the drum.	
	3	Is there any damage on the drum surface?	Clean or replace the drum.	
Drum drive	4	Is there any dent, damage or deformation on the gears of the drum drive unit?	Replace the gears of the drum drive unit.	
Drum rotation abnormality	5	Check the drum motor operation in the test mode (03) to see if there is any rotation abnormality of the drum.	Reconnect the connectors. Replace the harnesses. Replace the LGC board. Replace the drum motor.	
Developer sleeve	6	Are there uneven pitches of approx. 28 mm?	Replace the developer sleeve.	
Inadequate drum motor rotation speed	7	Check the value set for drum motor rotation speed. (Is the value significantly different from the default value?)	Reset drum motor speed to 128.	
Drum coupling	8	Loose coupling, damage, deformation	Replace the couplings.	
Transfer belt	9	Deformation or damage of the transfer belt	Replace the transfer belt.	Check the halftone pattern. (Uneven pitch: approx. 90 mm)
	10	Stain or damage of the drive roller	Clean or replace the drive roller.	Check the halftone pattern. (Uneven pitch: approx. 90 mm)
	11	Large driving load due to the peeling of the cleaning blade	Replace the cleaning blade.	

Cause/Section	Step	Check Item	Measure	Remark
Transfer belt drive	12	Are there uneven pitches of 0.87 mm (e-STUDIO4540C) or 1.13 mm (e-STUDIO2040C/2540C/3540C)?	Adjust the gap between the TBU drive gears. (Ch6.11.2) Replace the TBU drive gears.	
	13	Is the gap between the TBU drive gears adjusted properly?		
	14	Is there any dent, damage or deformation on the TBU drive gears?		
Laser optical unit	15	Check the halftone pattern to see if there are uneven pitches of approx. 0.3 mm, 0.8 mm, 1.1 mm, 1.5 mm each in the whole image.	Replace the laser optical unit.	Check the halftone pattern. (Uneven pitch: approx. 0.3 mm, 0.8 mm, 1.1 mm, 1.5 mm)
Registration guide	16	Do jittery images occur in certain positions on the second and subsequent pages? (One or two streaks on each page.)	Replace the cams of the registration guide.	
	17	Is there any dent, damage, deformation, wear or malfunction on the front and rear side cams of the registration guide?		
Feeding drive	18	Are there uneven pitches of approx. 1.1 mm?	Replace the gears of the feed/transport gear unit and the first drawer transport clutches.	
	19	Is there any dent, damage or deformation on the gear of the feed/transport gear unit and the first drawer transport clutch (CLT1 or CLT2)?		
Fusing drive	20	Are there uneven pitches of approx. 3.1 mm?	Perform "Fine adjustment of fuser roller rotational speed" (05-4529 0 to 6).	
	21	Is the fuser unit properly installed in the equipment?	Check if the fuser unit is installed correctly.	
	22	Is there any dent, damage or deformation on the drive gears of the pressure roller?	Replace the drive gear of the pressure roller.	
EPU drive	23	Are there uneven pitches of approx. 0.8 mm or 1.2 mm?	Replace the developer drive unit, developer sleeve and drive gears of the mixer.	
	24	Is there any dent, damage or deformation on the developer drive unit, developer sleeve and drive gears of the mixer?		

8.5.3 Poor image density, color reproduction and gray balance

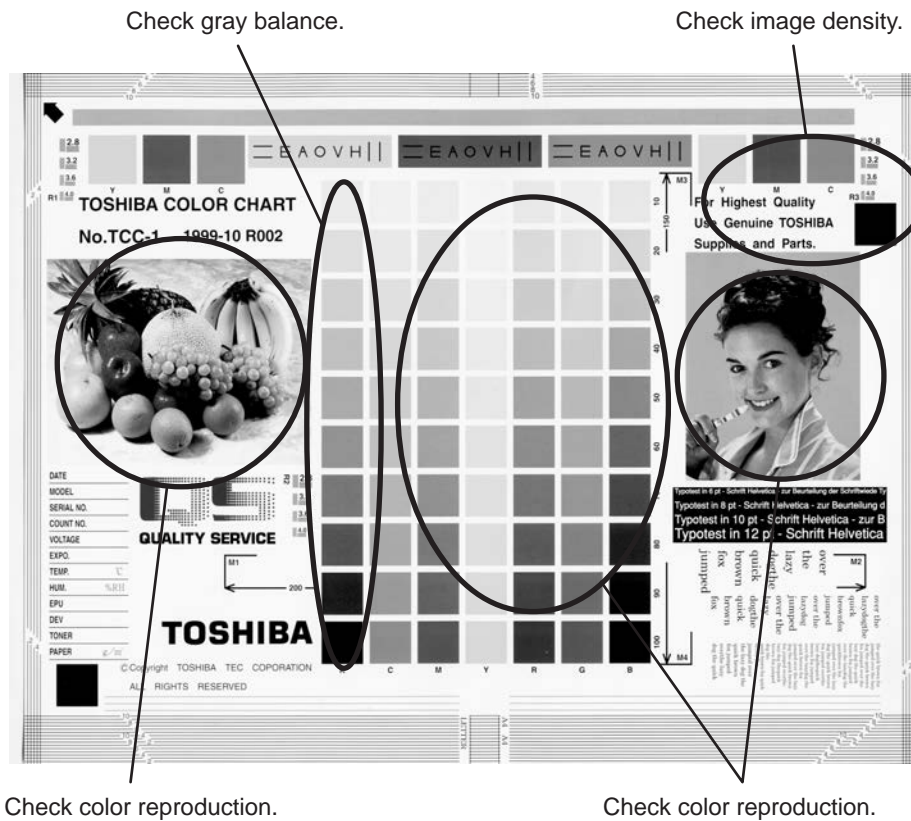


Fig.8-6

Cause/Section	Step	Check item	Measures	Remarks
Density / Color reproduction / Gray balance	1	Check the image density / color reproduction / gray balance.	Perform the enforced performing of image quality closed-loop control (05-2742) and then automatic gamma adjustment.	
Printer density	2	Check the density of printer output image.	Output the test patterns and check them. Color: using 04-231 for each color Black: using 04-113	See step 5 if defect occurs.
Scanner	3	Check if the original glass, mirrors or lens is dirty.	Clean it.	
Parameter adjustment value	4	Check the image processing parameters.	Adjust the color balance (color). Adjust the image density.	

Cause/Section	Step	Check item	Measures	Remarks
Printer output image abnormal	5	Is there any faded image (low density)?	Perform the troubleshooting procedures against the faded image.	
		Is there any fog in the background?	Perform the troubleshooting procedures against the background fogging.	
		Is there any blotch image?	Perform the troubleshooting procedures against the blotch image.	
		Is there any poor transfer?	Perform the troubleshooting procedures against the poor transfer.	
		Is there any poor cleaning of the transfer belt? (Check inside the equipment.)	Correct the transfer belt area.	

- * If the trouble is not solved at the step 1 and the step 2 or followings (excluding the parameter adjustment) are performed, make sure to perform "Enforced performing of image quality closed-loop control" and then "Automatic gamma adjustment" after taking a measure.

8.5.4 Background fogging

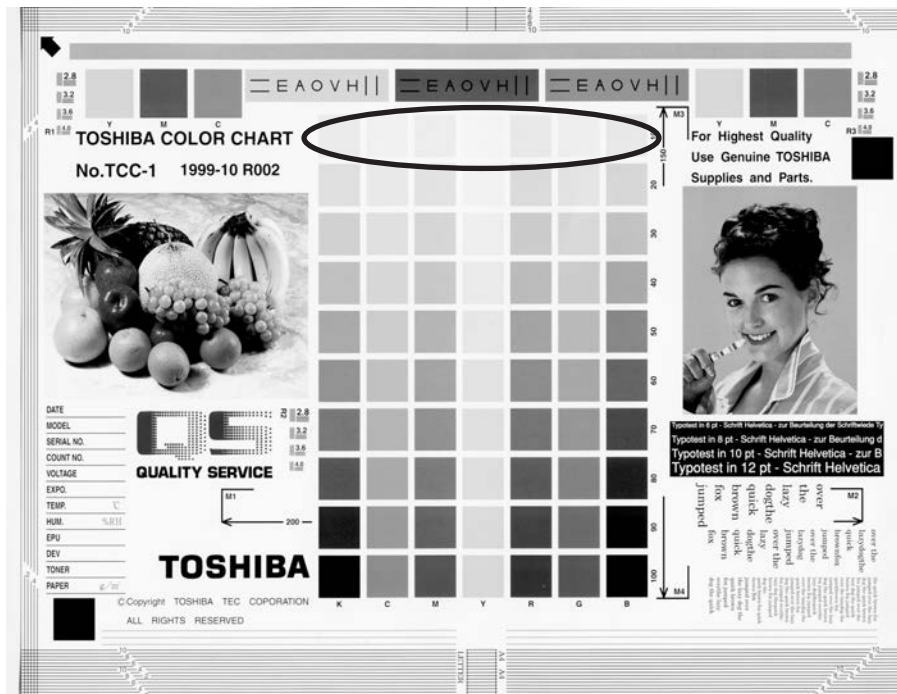


Fig.8-7

Cause/Section	Step	Check item	Measures	Remarks
Adjustment	1	Perform the shading correction.	Perform 05-3218. If an error occurs, retry it. If the error still persists, clean the original glass.	
Density reproduction	2	Check the gradation reproduction.	Perform the forced performing of image quality closed-loop control (05-2742) and then automatic gamma adjustment.	
Printer section	3	Check the printer output image.	Output the test patterns and check them. Color: using 04-231 for each color Black: using 04-113	See step 7 if defects occur.
Scanner	4	Check if the original glass, mirrors or lens is dirty.	Clean it.	

Cause/Section	Step	Check item	Measures	Remarks
Parameter adjustment value	5	Check the image processing parameters.	Check the value of offsetting adjustment for background processing (color), background adjustment (black) and background peak adjustment for range correction (black).	
	6	Adjust the image processing parameters.	While checking the above encircled image, adjust the reproduction level by the offsetting adjustment for background processing (color), background adjustment (black) and background peak adjustment for range correction (black).	
Cover	7	Is the cover installed properly? (Is the drum exposed to the external light?)	Correct it.	
Auto-toner	8	Is the auto-toner sensor normal?	Check the operation of auto-toner sensor and readjust.	
	9	Is the toner supply operating constantly?	Check the motor and circuits.	
Main charger output	10	Is the main charger output normal?	Check the circuits.	
Developer bias	11	Is the developer bias proper?	Check the circuits.	
Developer unit	12	Is the contact between the drum and developer material proper?	Check the doctor-to-sleeve gap and pole position.	
Developer material/ Toner/Drum	13	Using the specified developer material, toner and drum?	Use the specified developer material, toner and drum.	
	14	Have the developer material and drum reached their PM life?	Replace the developer material and drum.	
	15	Is the storage environment of the toner cartridge 35°C or less without dew?	Use the toner cartridge stored in the environment within specification.	
Drum cleaning blade	16	Is the drum cleaned properly?	Check the drum cleaning blade pressure.	
Transfer belt cleaning blade	17	Is the transfer belt cleaning blade in proper contact with the transfer belt?	Take off the transfer belt and check if the transfer belt cleaning blade pressure spring and pressure hook are installed properly.	
Toner dusting	18	Is the toner accumulated on the seals of the developer unit?	Remove the toner and clean the seals.	

* If the trouble is not solved at the step 2 and the step 3 or followings (excluding the parameter adjustment) are performed, make sure to perform “Enforced performing of image quality closed-loop control” and then “Automatic gamma adjustment” after taking a measure.

8.5.5 Moire /lack of sharpness

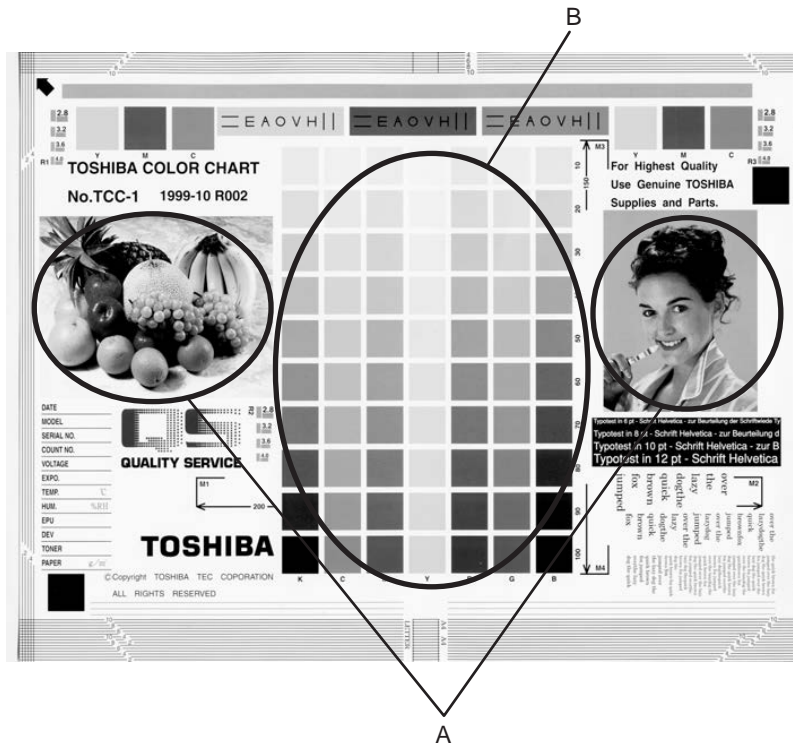


Fig.8-8

Moire

Cause/Section	Step	Check item	Measures	Remarks
Density reproduction	1	Check the gradation reproduction.	Perform the forced performing of image quality closed-loop control (05-2742) and then automatic gamma adjustment.	
Parameter adjustment value	2	Check the image processing parameters.	Check the sharpness adjustment value.	
	3	Adjust the image processing parameters.	While checking the above encircled images A and B, decrease moire by sharpness adjustment.	
Printer section	4	Check the printer output image.	Output the test patterns and check them. Color: using 04-231 for each color Black: using 04-113	When defects occur, perform the corresponding troubleshooting procedures.

Lack of sharpness

Cause/Section	Step	Check item	Measures	Remarks
Density reproduction	1	Check the gradation reproduction.	Perform the forced performing of image quality closed-loop control (05-2742) and then automatic gamma adjustment.	

Cause/Section	Step	Check item	Measures	Remarks
Parameter adjustment value	2	Check the image processing parameters.	Check the sharpness adjustment value.	
	3	Adjust the image processing parameters.	While checking the above encircled image A, increase sharpness by sharpness adjustment.	

* If the trouble is not solved at the step 1 and the step 2 or followings (excluding the parameter adjustment) are performed, make sure to perform "Enforced performing of image quality closed-loop control" and then "Automatic gamma adjustment" after taking a measure.

8.5.6 Toner offset

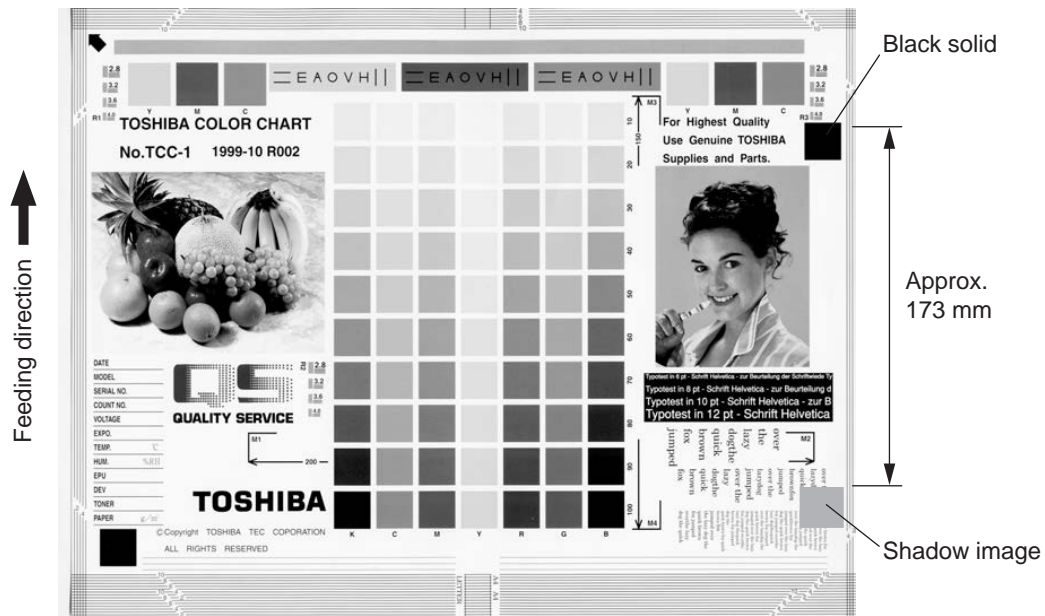


Fig.8-9

Toner offset (Shadow image appears approx. 173 mm behind the high density image.)

Cause/Section	Step	Check item	Measures	Remarks
Fuser unit	1	Is the pressure between the fuser belt and pressure roller proper?	Check the pressure removal parts and pressure mechanism.	
	2	Is there scratch on the fuser belt or pressure roller surface?	Replace the fuser belt or the pressure roller.	
	3	Has the fuser belt or pressure roller reached its PM life?	Replace the fuser belt or the pressure roller.	
	4	Is the fuser roller temperature proper?	Check and correct the control circuit.	
Paper	5	Is the paper type corresponding to its mode?	Use the proper type of paper or select the proper mode.	
	6	Using recommended paper?	Use the recommended paper.	
Developer material	7	Is the specified developer used?	Use the specified developer and toner.	
Scanner	8	Are the mirrors, original glass or lens dirty?	Clean them.	
Image quality control	9	Is the control activated?	Check the image quality control related codes.	
Density	10	Is the density too high?	Perform the forced performing of image quality closed-loop control (05-2742) and then automatic gamma adjustment.	

Cause/Section	Step	Check item	Measures	Remarks
Printer density	11	Check the density of printer output image.	Output the test patterns and check them. Color: using 04-231 for each color Black: using 04-113	When defects occur, perform the corresponding troubleshooting procedures.
Control for recovery from the sleep mode	12	Is this caused only after recovery from the sleep mode?	Change the setting of 08-5212 (Control for recovery from the sleep mode) from "1" (Enabled) to "0" (Disabled).	

8.5.7 Blurred image

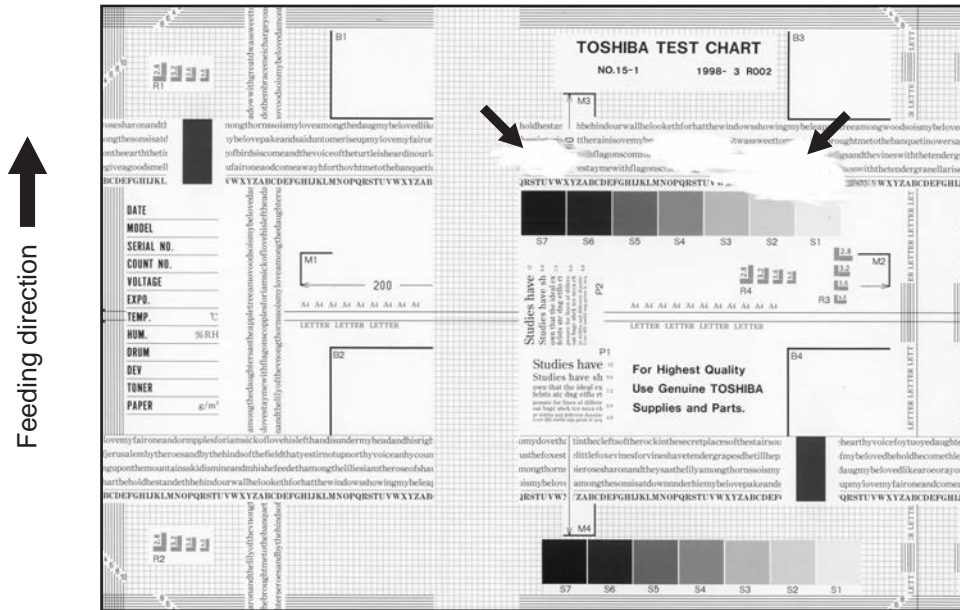


Fig.8-10

Cause/Section	Step	Check item	Measures
Scanner	1	Is the scanner bedewed?	Clean it.
Drum	2	Is the drum bedewed or dirty?	Wipe the drum with dry cloth. * Be sure never use alcohol or other organic solvents because they have bad effect on the drum.
Ozone exhaust	3	Is the ozone exhaust fan operating properly?	Check the connection of the connector.
	4	Is the ozone filter stained or damaged?	Replace it.

8.5.8 Poor fusing

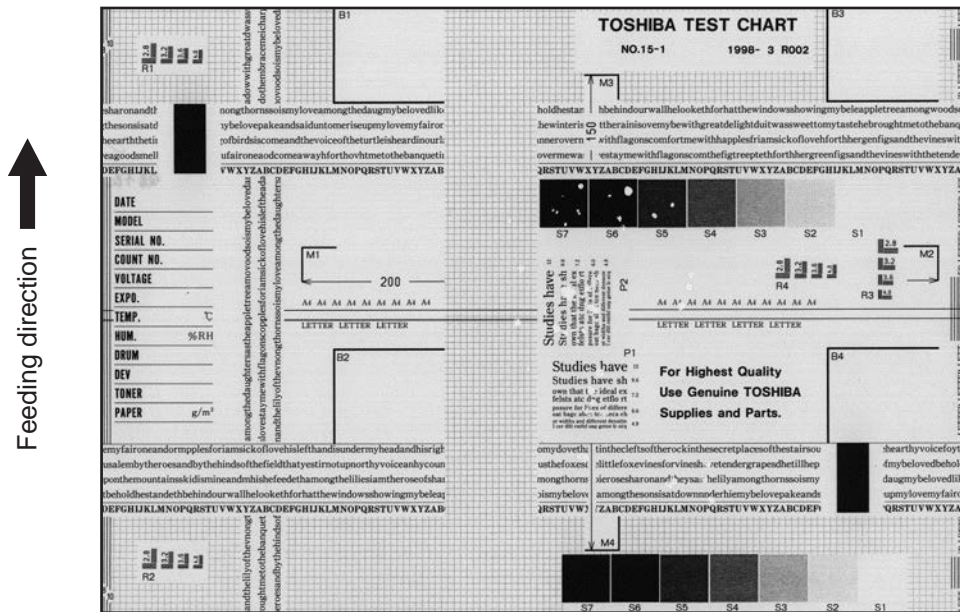


Fig.8-11

Cause/Section	Step	Check item	Measures
Electric power/control abnormal	1	Is the connector in proper contact with the equipment?	Correct it.
	2	Is the heater lamp control circuit (switching power supply) working properly?	Replace the switching power supply.
	3	Are the connectors on the LGC board and joint connectors connected properly?	Reconnect them.
	4	Is the LGC board normal?	Replace the LGC board.
	5	Is the harness connected with the LGC board short circuited or open circuited?	Replace the harness.
Pressure between fuser belt and pressure roller improper	6	Are the pressure springs working properly?	Check/adjust the pressure springs.
Fuser roller temperature	7	Is the temperature of fuser roller too low?	Check/correct the setting value of fuser roller temperature. Clean or replace the thermopiles. Check/correct the related circuit.
Developer material and toner	8	Using the specified developer material and toner?	Use the specified developer material and toner.
Paper	9	Is the paper damp?	Change the paper.
	10	Is the paper type corresponding to its mode?	Use the proper type of paper or select the proper mode.
	11	Using the recommended paper?	Use the recommended paper.

Cause/Section	Step	Check item	Measures
Control for recovery from the sleep mode	12	Is this caused only after recovery from the sleep mode?	Change the setting of 08-5212 (Control for recovery from the sleep mode) from "1" (Enabled) to "0" (Disabled).

8.5.9 Blank print

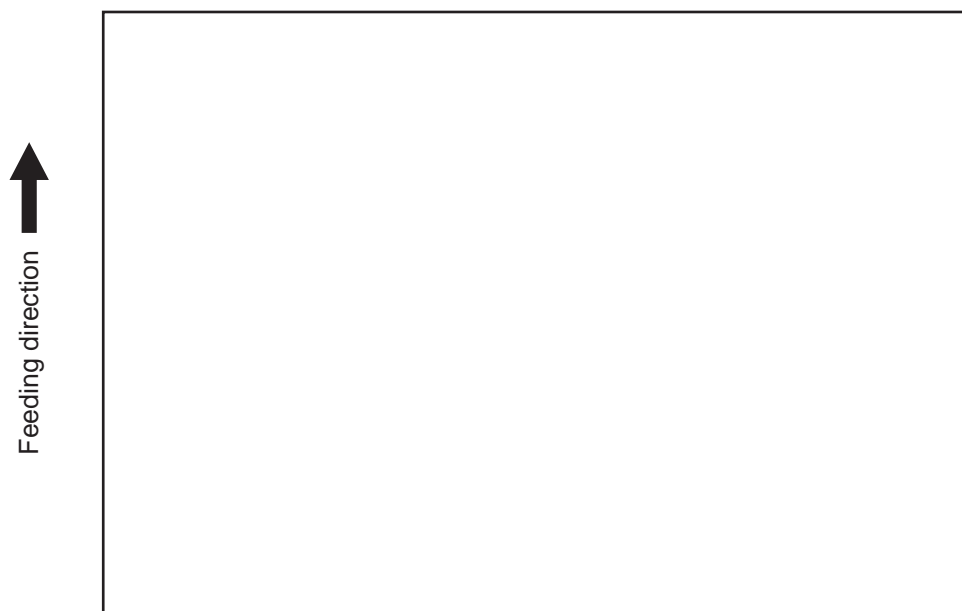


Fig.8-12

Cause/Section	Step	Check item	Measures
High-voltage transformer (1st/2nd transfer roller and developer bias)	1	Is the high-voltage transformer output defective?	Adjust the output and correct the circuit, or replace the transformer.
	2	Are the connector of the high-voltage harness securely connected? Is the harness open circuited?	Reconnect the harness securely. Replace the high-voltage harness.
Developer unit	3	Is the developer unit installed securely?	Check/correct the developer sleeve coupling engaging.
	4	Do the developer sleeve and mixer rotate?	Check/correct the developer drive system.
	5	Is the developer unit filled up with the developer material?	Check that the charger grid is not dirty. (The developer material may be reduced due to the carrier offset.)
	6	Is the developer material properly transported?	Remove foreign matter from the developer material, if any.
	7	Is there any magnetic brush phase error?	Check the developer pole position.
	8	Is the doctor sleeve gap incorrect?	Adjust the gap with the doctor-sleeve jig.
Drum	9	Is the drum rotating?	Check that the drum shaft is inserted. Check the drum drive system.
	10	Is the drum grounded?	Check the contact of the grounding plate.

Cause/Section	Step	Check item	Measures
Transfer unit	11	Is the transfer belt in proper contact with the drum?	Check if the contact releasing lever is at releasing position. Check the installation of the transfer belt.
	12	Is the transport of the transfer belt normal?	Check the installation of the transfer belt or transport mechanism.
	13	Is the 2nd transfer roller contacted and released properly?	Check the connection of the connector of 2nd transfer roller contact clutch and open circuit of harness.
Switching power supply	14	Is the power supply output (5.1VD) normal?	Replace the switching power supply.
Harnesses for SLG, SYS, LGC and LDR boards	15	Are the connectors securely connected? Is any harness between the boards open circuited?	Reconnect the connectors securely. Replace the harness.
Laser optical unit	16	Was the protection seal of slit removed when replacing the unit?	Remove the protection seal.

8.5.10 Solid print



Fig.8-13

When there is a void on the solid image

Cause/Section	Step	Check item	Measures
Exposure lamp Inverter	1	Does the exposure lamp light?	Check the contact of the inverter connector. If the inverter does not work, replace it. If the lamp does not work, replace it.
Harnesses for SLG, SYS, IMG and LGC boards	2	Are the connectors securely connected? Is any harness between the boards open circuited? Is the connector between the SYS and IMG boards not disconnected? Is the connector between the LGC and IMG boards not disconnected?	Reconnect the connectors securely. Replace the harness.
Scanner	3	Is there foreign matter in the optical path?	Remove it.
Bedewing of scanner	4	Is the scanner bedewed?	Clean the mirrors and lens. Keep the power cord plugged so that the damp heater can work.

When there is no void on the solid image

Cause/Section	Step	Check item	Measures
Main charger	1	Is the main charger securely installed?	Reinstall it securely.
	2	Does the needle electrode not come off?	Reinstall it securely.

Cause/Section	Step	Check item	Measures
High-voltage transformer (main charger needle electrode/grid bias)	3	Is the high-voltage transformer output defective?	Adjust the output and correct the circuit, or replace the high-voltage transformer.
	4	Are the connector of the high-voltage harness securely connected? Is the harness open circuited?	Reconnect the harness securely. Replace the high-voltage harness.
Bedewing of drum	5	Is the drum bedewed?	Clean the drum. Keep the power cord plugged so that the damp heater can work.

8.5.11 White banding (in feeding direction)

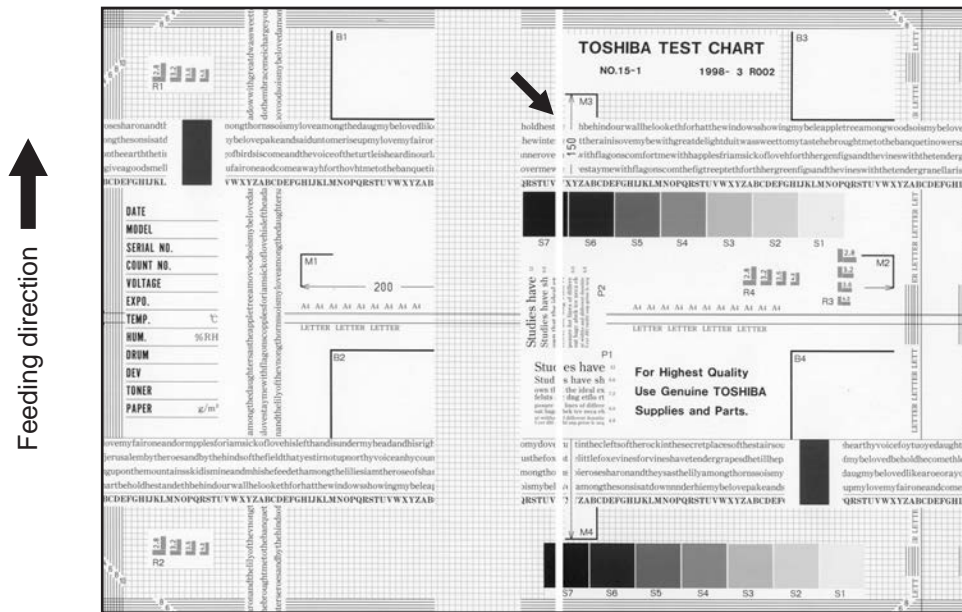


Fig.8-14

Cause/Section	Step	Check item	Measures
Laser optical unit	1	Is there foreign matter or dust on the slit glass?	Clean the slit glass.
Main charger grid	2	Is there foreign matter on the charger grid?	Remove foreign matter.
Developer unit	3	Is there foreign matter inside the doctor blade?	Remove foreign matter.
	4	Is there foreign matter on the drum seal?	Remove foreign matter.
	5	Do any paper fibers or dirt adhere to the developer unit and contact with the drum?	Remove the paper fibers or dirt.
Drum	6	Is there scratch or foreign matter on the drum surface?	Replace the drum.
Transfer unit	7	Is there scratch or foreign matter on the transfer belt surface?	Replace the transfer belt.
	8	Are the harness or foreign matters in contact with the transfer belt surface?	Correct or remove them.
	9	Is there any scratch or hole on the 1st/2nd transfer roller?	Replace the 1st/2nd transfer roller.
Transfer unit	10	Is there any foreign matter on the 2nd transfer facing roller?	Remove foreign matter or clean the roller.
Transport path	11	Does the toner image touch foreign matter after transfer, before entering the fuser unit?	Remove foreign matter.
Discharge lamp	12	Has any LED of discharge lamp gone out?	Replace the discharge lamp.

Cause/Section	Step	Check item	Measures
Scanner	13	Is there foreign matter or dust in the optical path?	Clean the lens and mirrors.

8.5.12 White banding (at right angles to feeding direction)

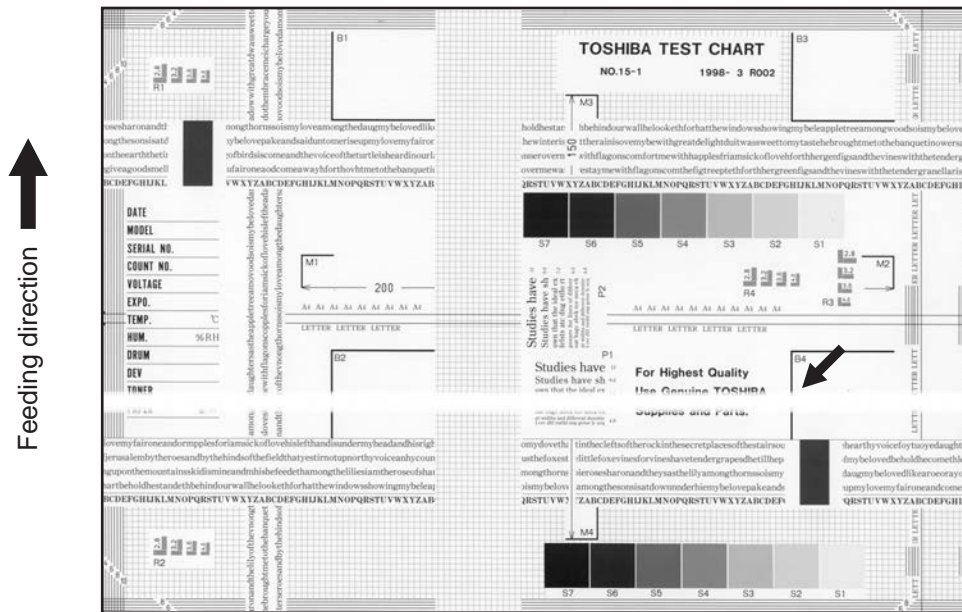


Fig.8-15

Cause/Section	Step	Check item	Measures
Main charger	1	Is there foreign matter on the charger?	Remove foreign matter.
	2	Is the terminal contact poor?	Clean or adjust the terminals.
Drum	3	Is there any abnormalities on the drum surface?	Replace the drum.
	4	Is the drum grounded?	Check the contact of the grounding plate.
Discharge lamp	5	Is the discharge lamp lighting properly?	Replace the discharge lamp or clean terminals.
Developer unit	6	Is the developer sleeve rotating correctly? Is there any abnormalities on the sleeve surface?	Check the developer drive system, or clean the sleeve surface.
	7	Is the connection of developer bias supply terminal normal?	Correct it.
Drive systems	8	Is the drum, scanner or transfer belt jittery?	Check each drive system.
High-voltage transformer (main charger needle electrode/grid, 1st/2nd transfer roller and developer bias)	9	Is the high-voltage transformer output defective?	Check/correct any electric leakage and related circuits. If the high-voltage transformer does not work, replace it.

8.5.13 Skew (slantwise copying)

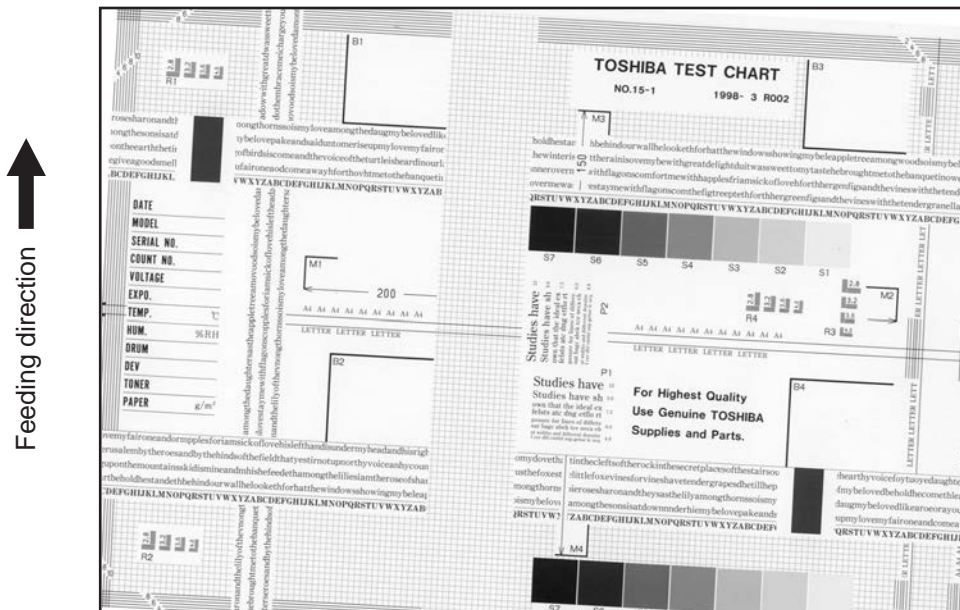


Fig.8-16

Cause/Section	Step	Check item	Measures
Drawer/LCF	1	Is the drawer or LCF properly installed?	Reinstall the drawer or LCF properly.
	2	Is too much paper loaded in the drawer or LCF?	Reduce paper to 550 sheets or less. (2500 sheets or less/stack for LCF)
	3	Is the paper corner folded?	Change the paper direction and reinsert it.
	4	Are the drawer or LCF side guides properly set?	Adjust the side guides.
Paper feed roller	5	Is the surface of paper feed roller dirty?	Clean the roller surface with alcohol, or replace the roller.
Rollers	6	Is each roller improperly fixed to the shaft?	Check E-rings, pins and clips.
Aligning amount	7	Is the aligning amount proper?	Increase the aligning amount.
Registration roller	8	Is the registration roller spring removed?	Mount the spring correctly. Clean the roller if it is dirty.
Registration guide	9	Is the registration guide improperly installed?	Correct it.
2nd transfer front guide	10	Is the 2nd transfer front guide installed properly?	Correct it.
RADF	11	Is the RADF installed and adjusted properly?	Reinstall and readjust it.
Transfer unit	12	Is the transfer belt unit installed properly?	Correct it.

8.5.14 Color banding (in feeding direction)

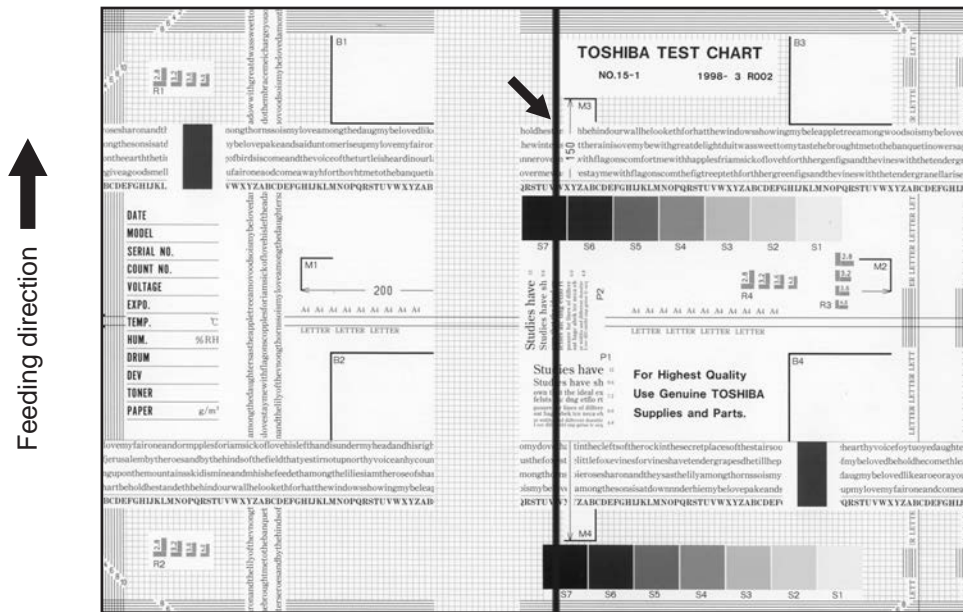


Fig.8-17

Cause/Section	Step	Check item	Measures
Scanner	1	Is there foreign matter in the optical path?	Clean the slit, lens and mirrors.
	2	Is there dust or stain on the shading correction plate or ADF original glass?	Clean it.
Main charger	3	Is there foreign matter on the charger grid?	Remove foreign matter.
	4	Is the charger grid dirty or deformed?	Clean or replace the charger grid.
	5	Is there foreign matter on the main charger?	Remove foreign matter.
	6	Is the needle electrode dirty or deformed?	Clean or replace the needle electrode.
	7	Is there foreign matter inside the charger case?	Remove foreign matter.
	8	Is the inner surface of charger case dirty?	Clean inside.
Drum cleaner	9	Is there any foreign matter on the drum cleaning blade edge?	Clean or replace the drum cleaning blade.
	10	Is toner recovery defective?	Clean the toner recovery auger section.

Cause/Section	Step	Check item	Measures
Transfer unit	11	Are the harness or foreign matters in contact with the transfer belt surface?	Correct or remove them.
	12	Is there paper dust on the edge of transfer belt cleaning blade?	Clean or replace the transfer belt cleaning blade.
	13	Is the transfer belt cleaning blade in proper contact with the transfer belt?	Take off the transfer belt and check if the transfer belt cleaning blade pressure spring and the pressure hook are installed properly.
Fuser unit	14	a. Is there dirt or scratches on the fuser belt and pressure roller surface? b. Is the thermistor dirty?	a. Clean or replace them. b. Clean the thermistor.
Drum	15	Are there scratches on the drum surface?	Replace the drum.
Laser optical unit	16	Is there foreign matter or dust on the slit glass?	Remove foreign matter or dust.

8.5.15 Color banding (at right angles to feeding direction)

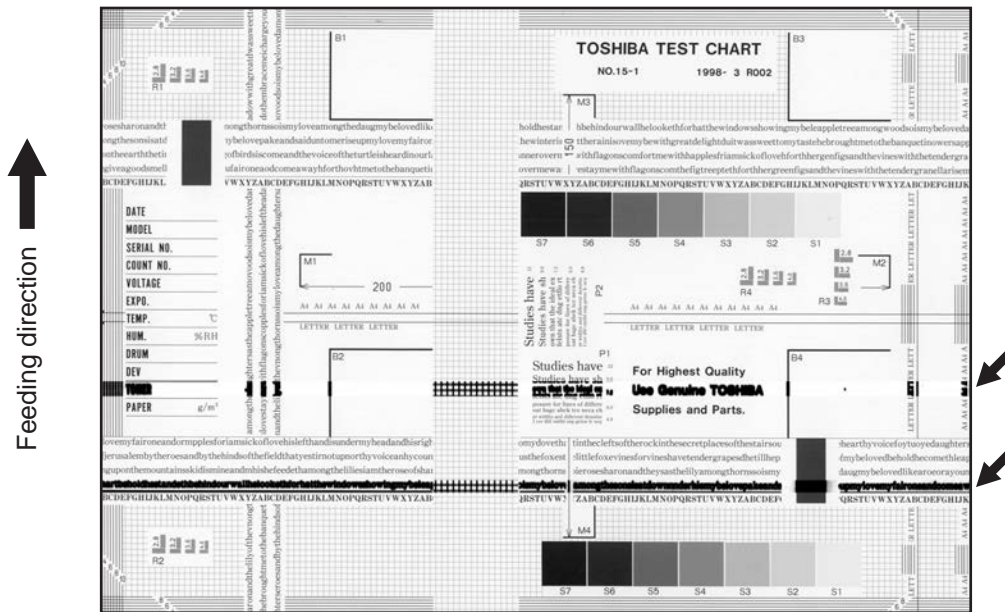


Fig.8-18

Cause/Section	Step	Check item	Measures
Main charger	1	Is the needle electrode dirty or deformed?	Clean or replace the needle electrode.
Fuser unit	2	Is the fuser belt or pressure roller dirty?	Clean them.
High-voltage transformer (main charger needle electrode/grid and transfer roller bias)	3	Is the high-voltage transformer output defective?	Check the circuit and replace the high-voltage transformer if not working.
	4	Is each joint of high-voltage output loosened? (Check if any electric leakage is causing noise.)	Reconnect each joint.
Drum	5	Is there deep scratch on the drum surface?	Replace the drum, especially if the scratch has reached the aluminum base.
	6	Are there fine scratches on the drum surface (drum pitting)?	Check and correct the contact of cleaning blade and recovery blade.
	7	Is the drum grounded?	Check the contact of the grounding plate.
2nd transfer roller	8	Is the 2nd transfer roller rotating normally?	Clean the roller area or replace the roller.
Scanner	9	Is there foreign matter on the carriage rail?	Remove foreign matter.

8.5.16 White spots

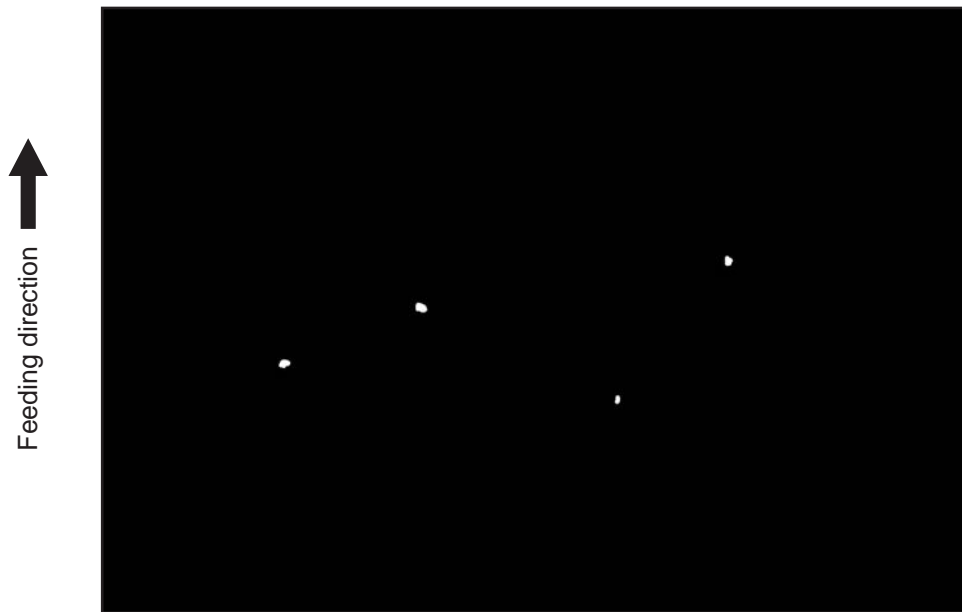


Fig.8-19

Cause/Section	Step	Check item	Measures
Developer unit/Toner cartridge	1	Is the toner density of developer material proper?	Check and correct the auto-toner sensor and toner supply operation. Check if the amount of toner is sufficient in the toner cartridge.
	2	Is the doctor-sleeve gap proper?	Adjust the gap.
Developer material/ Toner/Drum	3	Using the specified developer material, toner and drum?	Use the specified developer material, toner and drum.
	4	Have the developer material and drum reached their PM life?	Replace the developer material and drum.
	5	Is the storage environment of the toner cartridge 35oC or less without dew?	Use the toner cartridge stored in the environment within specification.
	6	Is there any dent on the surface of the drum?	Replace the drum.
	7	Is there any film forming on the drum?	Clean or replace the drum.
	8	Is the drum bedewed?	Wipe the drum surface with a piece of dry cloth.
Transfer unit	9	Is there foreign matter on the transfer belt surface?	Remove foreign matter.
	10	Is there foreign matter on the transfer belt 2nd transfer facing roller?	Clean the transfer belt unit.
Main charger	11	Is there foreign matter on the charger?	Remove it.
	12	Is the needle electrode dirty or deformed?	Clean or replace the needle electrode.

Cause/Section	Step	Check item	Measures
High-voltage transformer (main charger needle electrode/grid, developer 1st/2nd transfer roller bias)	13	Is the high-voltage transformer output defective?	Adjust the output.
Paper	14	Is the paper type corresponding to its mode?	Use the proper type of paper or select the proper mode.

8.5.17 Poor transfer

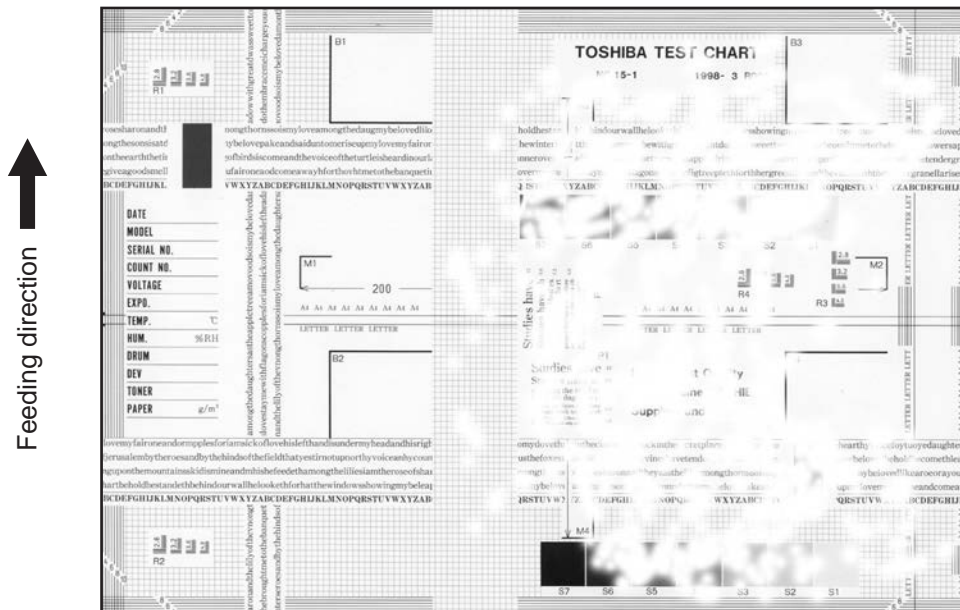


Fig.8-20

Cause/Section	Step	Check item	Measures
Transfer unit	1	Is the transfer belt or 1st/2nd transfer rollers dirty?	Clean it.
	2	Is the transfer belt in proper contact with the drum?	Correct it.
	3	Is the 2nd transfer roller in proper contact with the transfer belt?	Correct it.
	4	Is there any deformation or abnormalities on the transfer belt?	Replace the belt.
	5	Is the 2nd transfer facing roller dirty?	Clean the roller and replace the cleaning pad.
Paper	6	Is the high-voltage fed to the 2nd transfer roller correctly?	If any contact failure occurs in the feeding area (e.g. the conductive bushing and spring come off), correct it.
	7	Is paper in the drawer or LCF curled?	Reinsert paper with reverse side up or change paper.
	8	Is paper in the drawer or LCF damp?	Change paper. * Avoid storing paper in damp place.
Registration roller	9	Is the registration roller malfunctioning?	Clean the roller, remount the spring, or replace defective motor-related parts.
Aligning amount	10	Is the aligning amount proper?	Decrease the aligning amount

Cause/Section	Step	Check item	Measures
High-voltage transformer (1st/2nd transfer roller bias)	11	Is the high-voltage transformer output defective?	Check the circuit and adjust the transformer output.
	12	Are the high-voltage harness and terminals in proper contact?	Correct them if loosened.

8.5.18 Uneven image density 1 (in feeding direction)

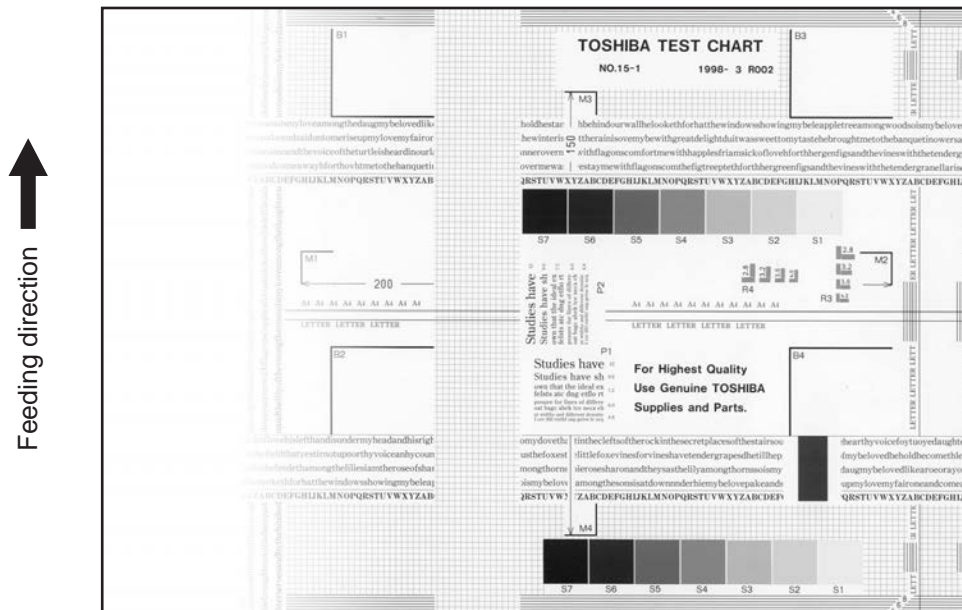


Fig.8-21

Cause/Section	Step	Check item	Measures
Main charger	1	Is the main charger dirty?	Clean it or replace the needle electrode.
Transfer unit	2	Is the transfer belt or 1st/2nd transfer rollers dirty?	Clean the belt.
	3	Is the transfer belt in proper contact with the drum?	Correct it.
	4	Is 2nd transfer roller in proper contact with the transfer belt? (Is the roller tilted?)	Correct it.
	5	Is there any abnormalities or deformation on the transfer belt?	Replace the transfer belt.
Laser optical unit	6	Is there foreign matter or dust on the slit glass?	Clean the slit glass.
Discharge lamp	7	Is the discharge lamp dirty?	Clean it.
	8	Has any LED of discharge lamp gone out?	Replace it.
Developer unit	9	Is the magnetic brush in proper contact with the drum?	Adjust the doctor-sleeve gap.
	10	Is the developer unit pressure spring applying properly?	Check the pressure spring.
	11	Is the transport of developer material poor?	Remove foreign matter if any.
Scanner section	12	a. Is the platen cover or RADF open? b. Is the original glass, mirrors, or lens dirty?	a. Close the platen cover or RADF. b. Clean them.

8.5.19 Uneven image density 1 (at right angles to feeding direction)

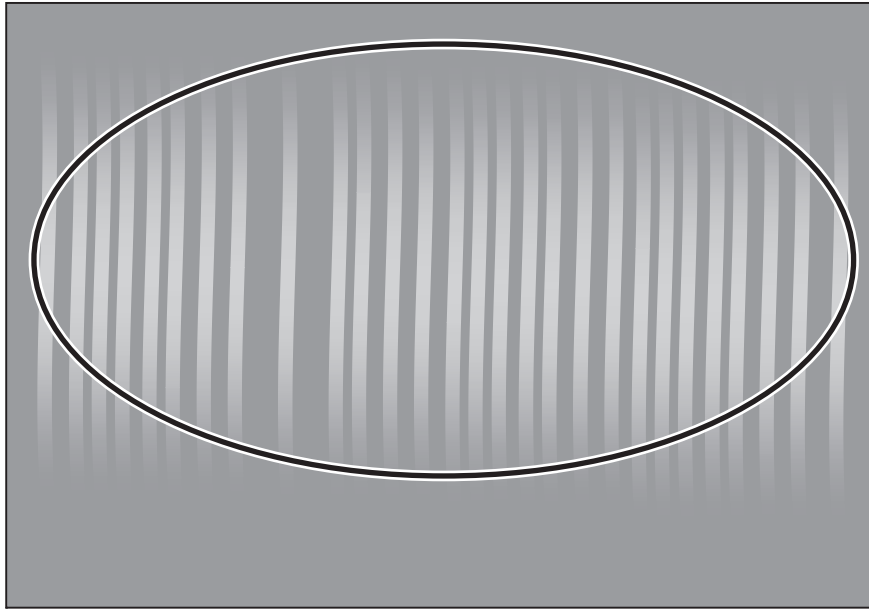


Fig.8-22

Cause/Section	Step	Check item	Measures
Developer unit	1	Is the magnetic brush in proper contact with the drum?	Adjust the doctor sleeve gap.

8.5.20 Uneven image density 2



← Feeding direction
Fig.8-23



← Feeding direction
Fig.8-24

Cause/Section	Step	Check item	Measures
Developer unit	1	Is the layer of the developer material on the developer sleeve where the density is uneven thin or lacking?	<ul style="list-style-type: none"> Remove the foreign matter in the developer unit. See "2. Removal of foreign matter in the developer unit" in "7.6.7 Developer unit (K, Y, M and C)" Clean the developer unit. See "1. Cleaning" in "7.6.7 Developer unit (K, Y, M and C)".
	2	Does uneven image density occur again?	See work flow diagram in "7.5 General Description".

8.5.21 Faded image (low density)

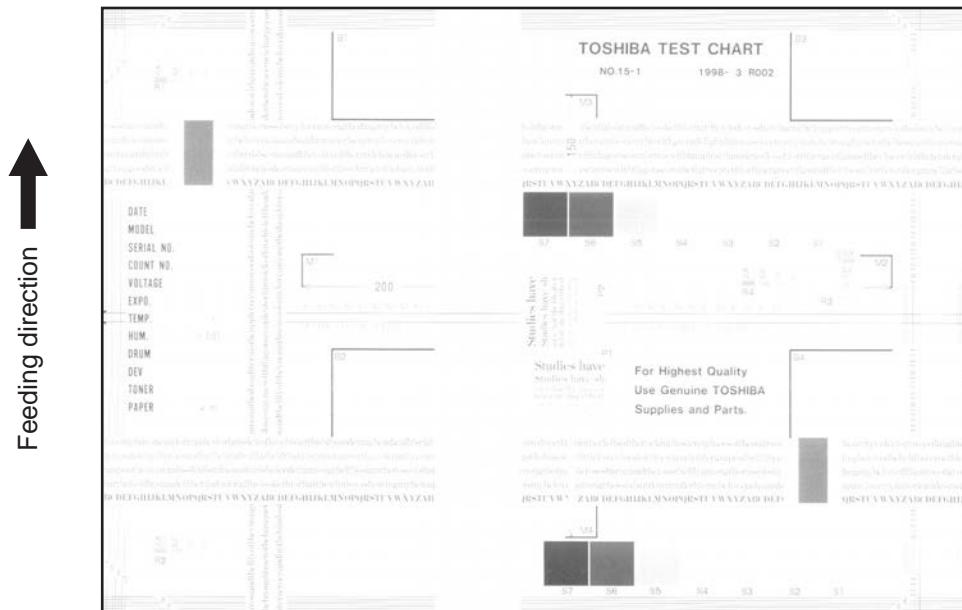


Fig.8-25

Cause/Section	Step	Check item	Measures
Toner empty Auto-toner circuit	1	Is the "ADD TONER" symbol blinking?	Replace the toner cartridge.
	2	Is there enough toner in the cartridge?	Check the auto-toner circuit function.
	3	Is the toner density of developer material too low?	
Toner motor	4	Is the toner motor malfunctioning?	Check the motor drive circuit.
Toner cartridge	5	Are there any abnormalities in the toner cartridge?	Replace the toner cartridge.
Developer material	6	Has the developer material reached its PM life?	Replace developer material.
Developer unit	7	Is the magnetic brush in proper contact with the drum?	Check the developer unit installation. Check the doctor-sleeve gap and pole position.
Main charger	8	Is the main charger dirty?	Clean it or replace the needle electrode.
Drum	9	Is there film forming on the drum surface?	Clean or replace the drum.
	10	Has the drum reached its PM life?	Replace the drum.
Transfer unit	11	Has the transfer belt, 1st or 2nd transfer roller reached its PM life?	Replace the transfer belt, 1st or 2nd transfer roller.
High-voltage transformer (developer bias)	12	Is the high-voltage transformer output settings improper?	Adjust the high-voltage transformer output.
	13	Are the connector of the high-voltage harness securely connected? Is the harness open circuited?	Reconnect the harness securely. Replace the high-voltage harness.

8.5.22 Image dislocation in feeding direction

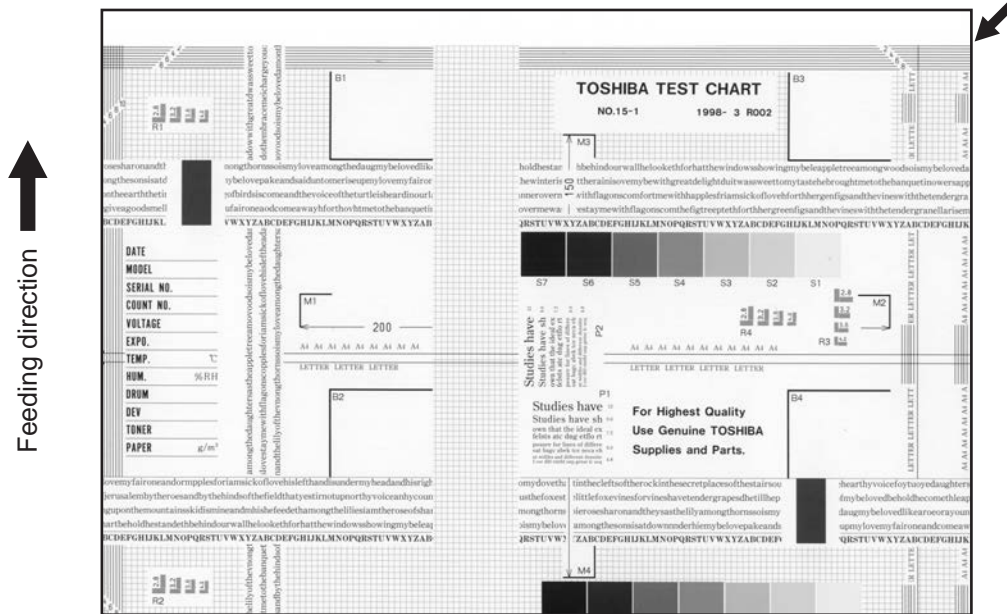


Fig.8-26

Cause/Section	Step	Check item	Measures
Adjustment error of scanner or printer section	1	Is same dislocation on every copy?	Adjust the scanner/printer using the Adjustment Mode.
Registration roller	2	Is the registration roller dirty, or is the spring removed?	Clean the roller with alcohol. Reinstall the spring.
	3	Is the registration motor malfunctioning?	Adjust or replace the gears, etc. if they are not engaged properly.
	4	Is the registration motor operating normally? (Is the timing of operation delaying?)	Replace the registration motor.
Paper feed clutch, Transport clutch	5	Are the paper feed clutch and transport clutch malfunctioning?	Check the circuit or the clutch and replace them if necessary.
Aligning amount	6	Is the aligning amount proper?	Decrease the aligning amount.
Each roller	7	Are the roller and shaft not fixed securely?	Check the E-ring, pin and clip.
	8	Is the roller surface dirty?	Clean the roller surface with alcohol or replace it.
Registration guide	9	Is the registration guide improperly installed?	Reinstall the guide.

8.5.23 Image jittering

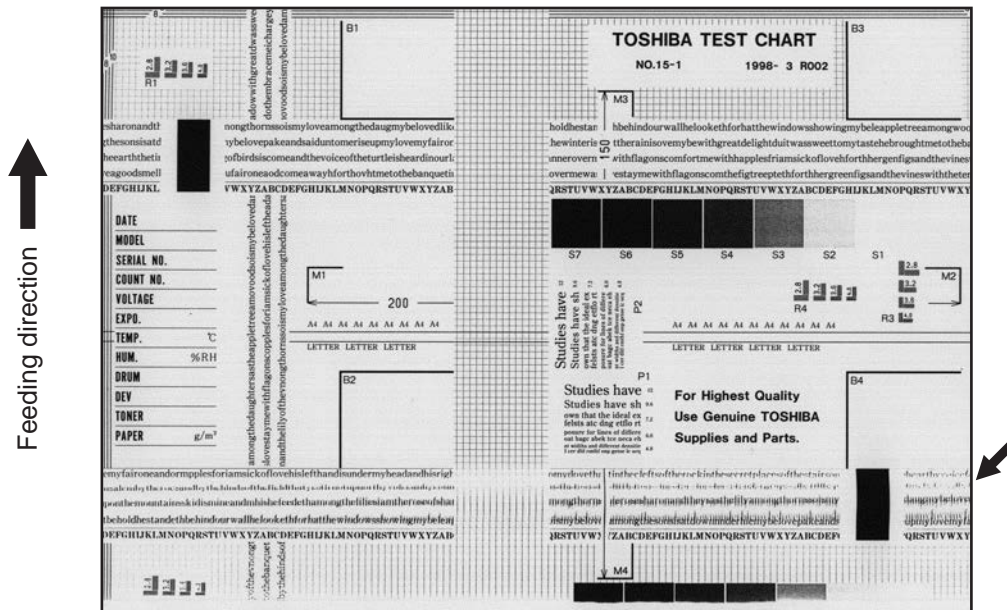


Fig.8-27

Cause/Section	Step	Check item	Measures
-	1	Is the toner image on the drum proper?	If proper, perform step 1 to 3; otherwise perform step 4 and after.
Registration roller	2	Is the registration roller rotating normally?	Check the registration roller section and its springs.
Transfer unit	3	Is the transfer belt or 2nd transfer roller operating normally?	Check the drive system and replace the transfer belt or 2nd transfer roller if necessary.
Fuser unit	4	Are the fuser roller and pressure roller rotation proper? Is the fuser belt transportation proper?	Check the drive system. Replace the fuser belt, fuser roller and pressure roller if necessary.
Drum	5	Is there large scratch on the drum?	Replace the drum.
Scanner	6	Is the slide sheet defective?	Replace it.
	7	Are there any abnormalities on the carriage feet?	Replace the feet.
	8	Is the tension of timing belt inappropriate?	Correct the tension.
	9	Is the carriage drive system malfunctioning?	Check the carriage drive system.
	10	Are any mirrors loosely installed?	Install them properly.
Drum drive system	11	Is the drum drive system malfunctioning?	Check the drum drive system. Clean or replace the belts, pulleys, bushings if they have dirt or scratches.

8.5.24 Poor cleaning

Notes:

Poor cleaning may occur in feeding direction.

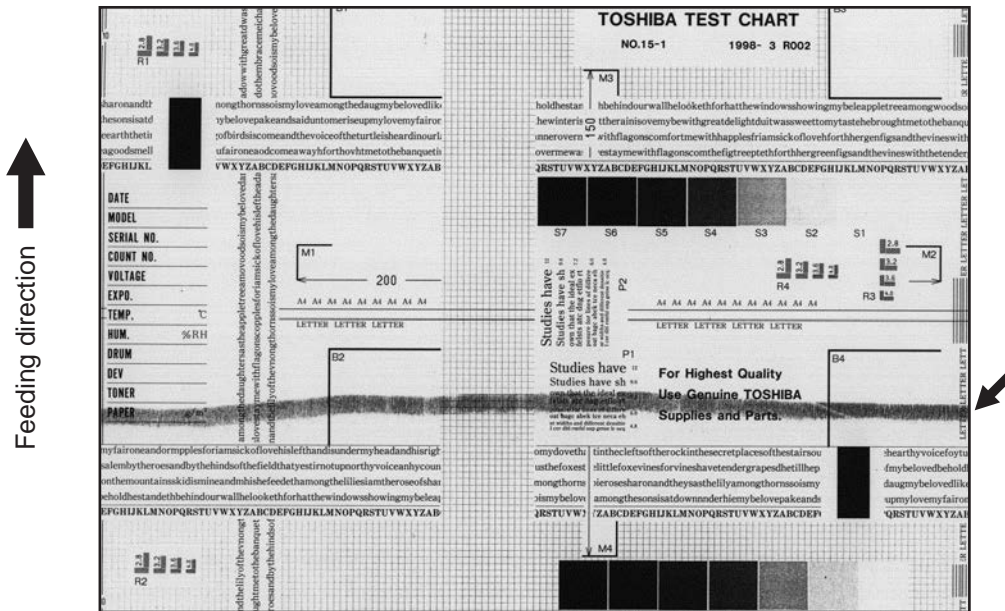


Fig.8-28

Cause/Section	Step	Check item	Measures
Developer material	1	Is the specified developer material used?	Use the specified developer material and toner.
Drum cleaner	2	Is there dust on the drum cleaning blade edge?	Clean or replace it.
	3	Is the drum cleaning blade peeled?	Replace the blade.
Transfer belt cleaner	4	Is there paper dust on the edge of transfer belt cleaning blade?	Clean or replace it.
	5	Is the transfer belt cleaning blade peeled?	Replace the blade.
	6	Is the transfer belt cleaning blade in proper contact with the transfer belt?	Take off the transfer belt and check if the transfer belt cleaning blade pressure spring and the pressure hook are installed properly.
Toner recovery auger	7	Is the toner recovery defective?	Clean the toner recovery auger. Check the cleaning blade pressure.

Cause/Section	Step	Check item	Measures
Fuser unit	8	Is there any bubble-like defect on the fuser belt (approx. 189 mm pitch on the image)?	Replace the fuser belt. Check and modify the heater lamp control circuit.
	9	Have the fuser belt and pressure roller reached their PM life?	Replace them.
	10	Is the pressure between the fuser belt and pressure roller proper?	Check and adjust the pressure mechanism.
	11	Is the temperature of fuser roller proper?	Check/correct the setting value of fuser roller temperature. Clean or replace the thermistors. Check and correct the circuit.

8.5.25 Uneven light distribution

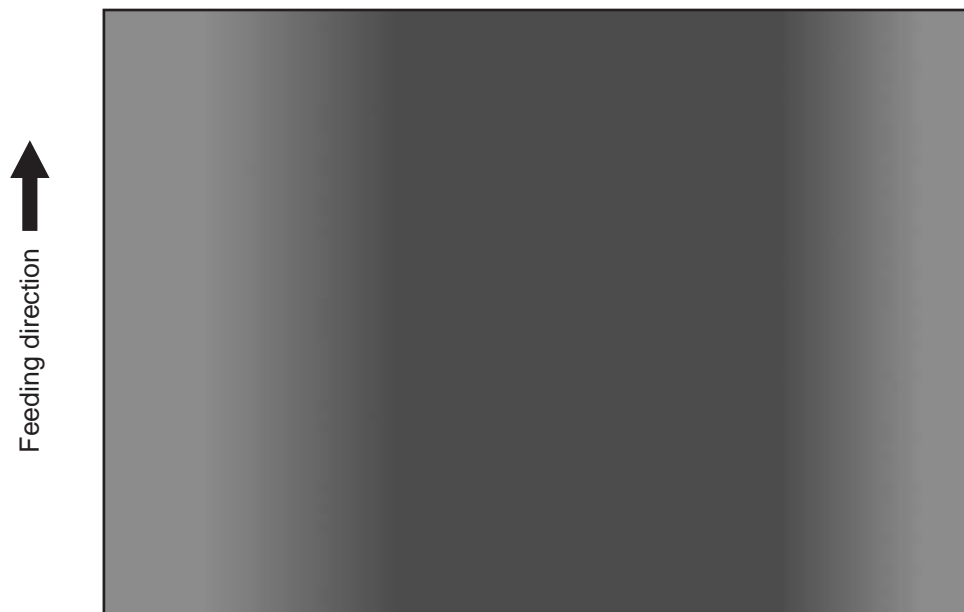


Fig.8-29

Cause/Section	Step	Check item	Measures
Original glass	1	Is the original glass dirty?	Clean the glass.
Main charger	2	Are the needle electrode, grid and case dirty?	Clean or replace them.
Discharge lamp	3	Is the discharge lamp dirty?	Clean it.
Scanner	4	Are the reflector, exposure lamp, mirrors, lens, etc. dirty?	Clean them.
Exposure lamp	5	Is the exposure lamp tilted?	Adjust the installed position of the lamp.
	6	Is the lamp discolored or degraded?	Replace it.
Process unit	7	Is the laser beam interrupted by a foreign material adhering to the doctor blade area of the developer unit or the charger case of the main charger?	Remove the foreign material.

8.5.26 Blotched image

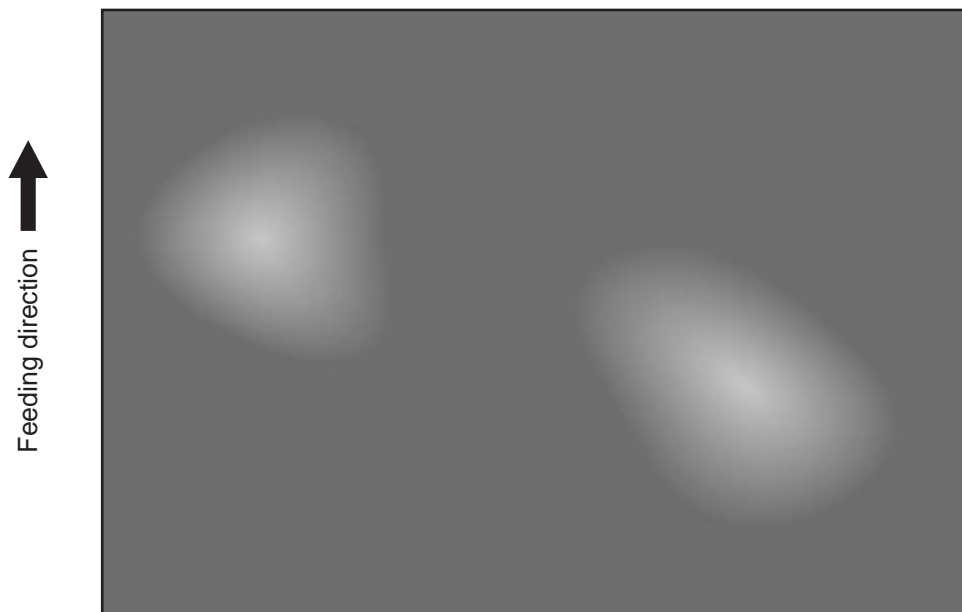


Fig.8-30

Cause/Section	Step	Check item	Measures
Paper	1	Is the paper type corresponding to its mode?	Check the paper type and mode.
	2	Is paper too dry?	Change paper.
Transfer unit	3	Is the transfer belt in proper contact with the drum?	Correct it.
	4	Is the 2nd transfer roller in proper contact with the transfer belt?	Correct it.
	5	Are there any abnormalities on the transfer belt?	Clean or replace the transfer belt.
High-voltage transformer (1st/2nd transfer roller bias)	6	Is the high-voltage transformer output abnormal?	Adjust the output. Replace the transformer, if necessary.

8.5.27 Stain on the paper back side

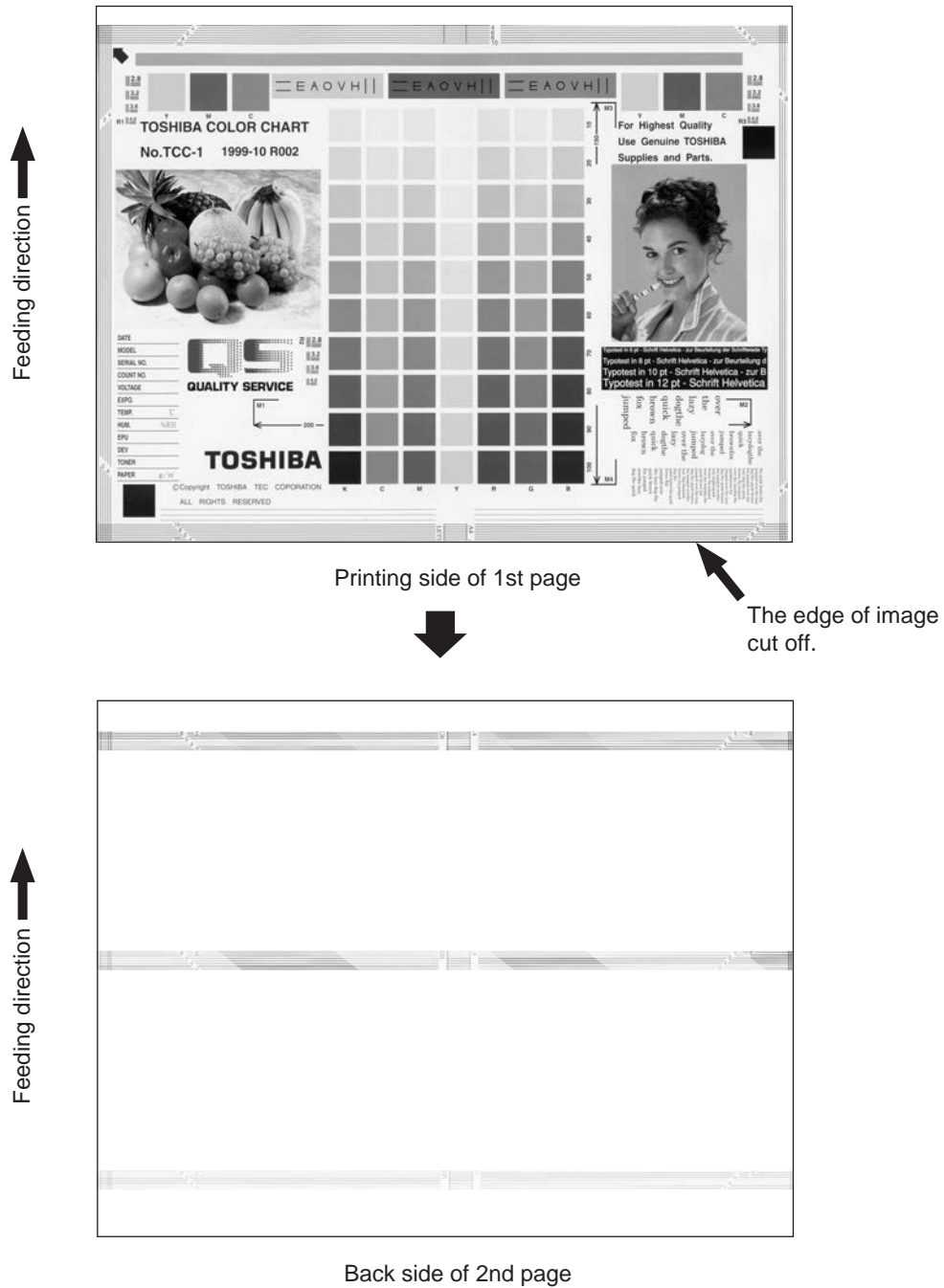


Fig.8-31

Cause/Section	Step	Check item	Measures
Image adjustment/ setting	1	Is the margin adjustment of image correct?	Adjust the margin.
	2	Is the margin adjustment of image correct when the paper size is not selected in bypass feeding?	Adjust the margin.
	3	Is the margin adjustment of image at duplexing correct?	Adjust the margin. (05-4064 0 to 5)
	4	Is the image location in primary/ secondary scanning direction correct?	Adjust the location.
	5	Is the reproduction ratio of image in primary/ secondary scanning direction correct?	Adjust the reproduction ratio.
	6	Is the tab setting correct?	Correct the setting.
Paper feeding /Transport area	7	Does the size of paper in the drawer or LCF correspond to the setting?	Use the appropriate paper size or correct the size setting.
	8	Is the width between the slides in the drawer correct (too wide)?	Correct the position of the slides.
	9	Is the width between the slides of the bypass tray correct (too wide)?	Correct the width.
	10	Is the sideways deviation adjustment for drawers or slides of the bypass tray correct?	Adjust the deviation.
	11	Is the paper aligning amount sufficient?	Adjust the aligning amount.
	12	Are the feed roller and transport roller dirty or worn out?	Clean or replace the rollers.
	13	Does the paper mode correspond to the paper type?	Use the appropriate paper type or paper mode.
	14	Using the recommended paper?	Use the recommended paper.
Transfer unit	15	Is there any stain caused by a poor cleaning, etc. on the transfer belt?	Clean the transfer belt.
	16	Is the transfer belt cleaning blade in proper contact with the transfer belt?	Take off the transfer belt and check if the transfer belt cleaning blade pressure spring and the pressure hook are installed properly.
	17	Is the 2nd transfer roller rotating properly?	Clean the area around the roller. Otherwise replace the roller.
	18	Is there any foreign matter or stain on the 2nd transfer roller?	Clean or replace the roller.
	19	Has the 2nd transfer roller reached to its PM life?	Replace the 2nd transfer roller.
Fuser unit	20	Are the fuser belt and pressure roller dirty?	Clean the fuser belt and pressure roller.
	21	Is the rib of transport guide dirty?	Clean the rib.

8.5.28 White void in the halftone

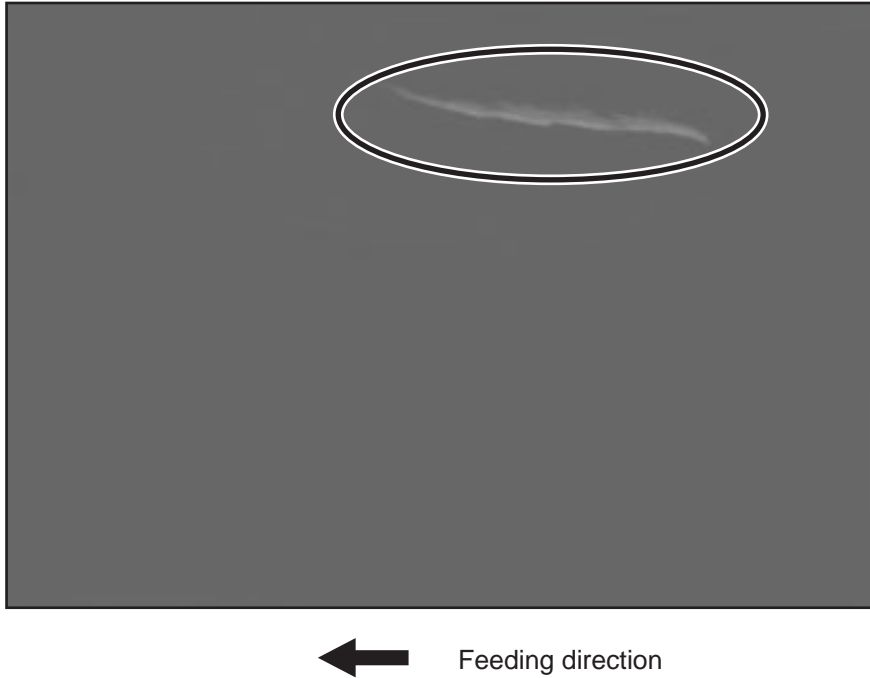


Fig.8-32

Cause/Section	Step	Check item	Measures
Fuser unit	1	Installed position of the fuser unit	Move the fuser unit tilt-adjustment plate up or down. (Fig.8-33)

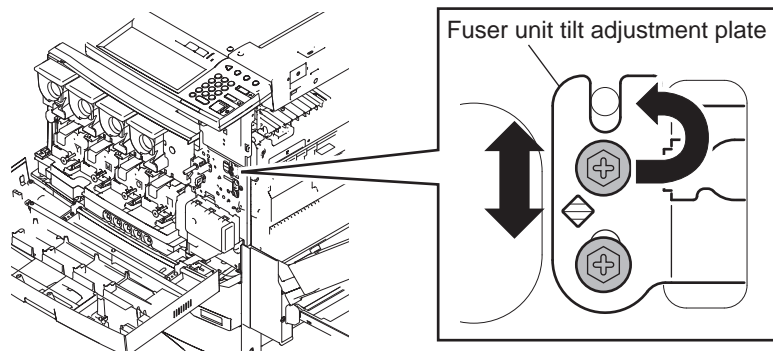


Fig.8-33

8.5.29 Paper wrinkle

There are 2 locations where the paper wrinkle occurs: before the fusing stage and in the fuser unit
See below to determine the case.

Smooth out the wrinkled paper. When there is no image in the wrinkled area

→See (1) "Paper wrinkle before fusing".

Smooth out the wrinkled paper. When there is a copied image in the wrinkled area

→See (2) "Paper wrinkle in the fuser unit".

(1) Paper wrinkle before fusing

Is paper properly set?

| NO → Set paper properly.

↓

YES

Is there any abnormality such as scratch or wear on the transport roller?

| YES Replace the transport roller.

↓

→

NO

Is flexible paper such as recycled paper used?


| YES Switch to the recycled paper mode.

| → (Select "RECYCLED PAPER" in MEDIA TYPE.)

↓

If the paper wrinkle still appears, proceed to NO.

NO

1. Increase the adjustment value for the paper alignment.
( P. 6-8"6.1.7 Paper alignment at the registration roller")
2. Increase the transport motor speed. (Adjust it at the code 05-4532 0 to 6.)

(2) Paper wrinkle in the fuser unit

Is the paper properly set?

| NO → Set the paper properly.

↓

YES

Has the paper absorbed moisture?

| YES → Use paper that has not absorbed moisture.

↓

NO

Is flexible paper such as recycled paper used?

| YES → Switch to the recycled paper mode.

| (Select "RECYCLED PAPER" in MEDIA TYPE.)

↓

If the paper wrinkle still appears, proceed to NO.

NO

1. Adjust the installed position of the fuser unit up or down and check if the paper wrinkle disappears. (See (26) "White void in the halftone".)
2. Adjust the inlet guide of the fuser unit and check if the paper wrinkle disappears. (Fig.8-34)

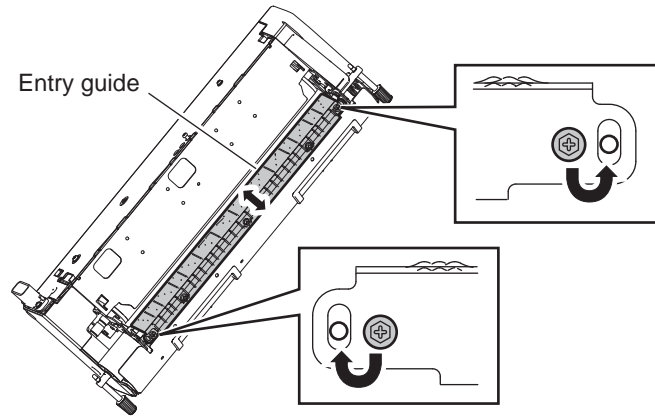


Fig.8-34

8.5.30 White void in the halftone

Staining may occur at the leading/trailing edge of the paper.

If a large amount of printing is carried out, staining may be seen as streaks as shown below.

Example: Leading edge of paper

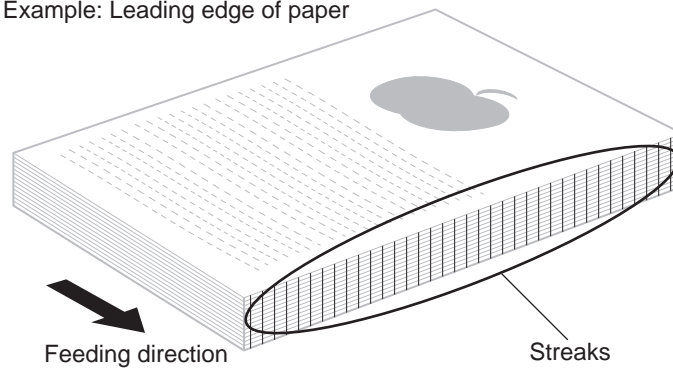


Fig.8-35

Cause/Section	Step	Check item	Measures
2nd transfer unit	1	Is there any toner adhering to the ribs of the transfer guide?	Clean the ribs of the transfer guide.

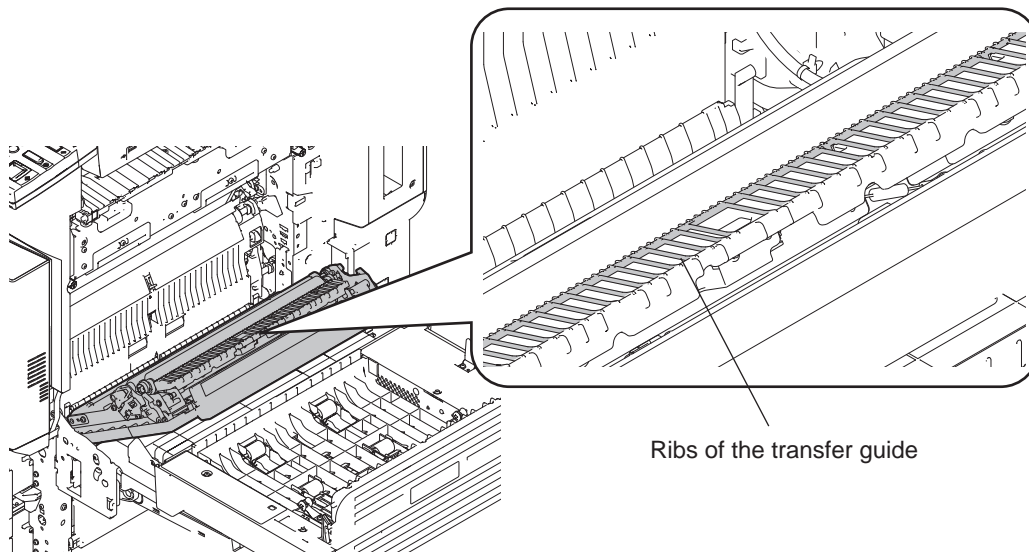


Fig.8-36

Notes:

Clean them with a soft pad, cloth or electric vacuum cleaner.

8.5.31 Faint image (immediately after equipment installation)



Fig.8-37

* Checking is easier with a halftone (Y) test chart.

Cause/Section	Step	Check item	Measures
Transfer belt unit (TBU)	1	Are the drum and the transfer belt contacted?	Contact and release the transfer belt unit several times with the TBU lifting lever. Check that the 1st transfer roller is rotated smoothly upward and downward.
	2	TBU tilt angle adjustment	For the details, see the procedure below. Rotate the TBU tilt-adjustment screw counterclockwise. Check the image every time you rotate the screw. Then adjust the tilt angle at the smallest number of rotations that can resolve the phenomenon. * Maximum 3 rotations
Process unit (EPU)	3	Is the developer material fully mixed?	Replace the drive gears of the developer drive unit, developer sleeve and mixer.
	4	Is the contact between the drum and developer material proper?	Check the doctor-to-sleeve gap and pole position.
Laser optical unit	5	Is there foreign matter or dust on the slit glass?	Clean the slit glass.
	6	Is the problem resolved if you replace the laser optical unit?	Replace the laser optical unit.

<Step 2 - TBU tilt angle adjustment>

1. Preparation

Hexagonal wrench for M3 (The longer part shall be 60 mm or shorter.)

2. Procedure

- (1) Confirm that there is no abnormality in the installation status of the equipment.
- (2) Open the front cover and raise the TBU using the TBU lifting lever.
- (3) Remove the Yellow and Magenta EPUs, front cover and transfer belt cleaner nozzle.
- (4) Rotate the adjustment screw in 360 degrees counterclockwise using the hexagonal wrench.
- (5) Install the Yellow and Magenta EPUs, front cover and transfer belt cleaner nozzle.
- (6) Lower the TBU using the TBU lifting lever and close the front cover.

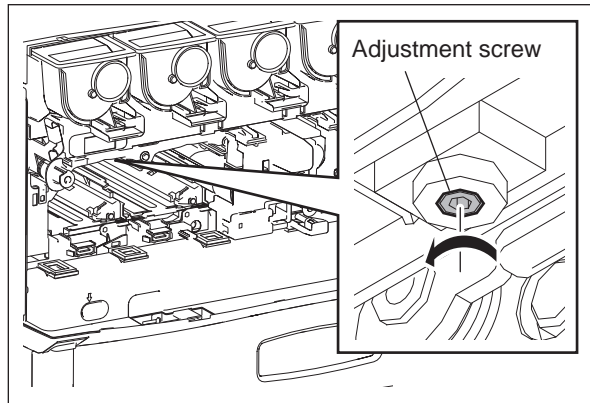


Fig.8-38

Notes:

- Do not rotate the adjustment screw more than 3 rotations or other image defects may occur.
- Be sure to rotate the adjustment screw while the TBU is being raised with the TBU lifting lever.
- If you become uncertain about the screw position during adjustment, return the screw to its standard position.

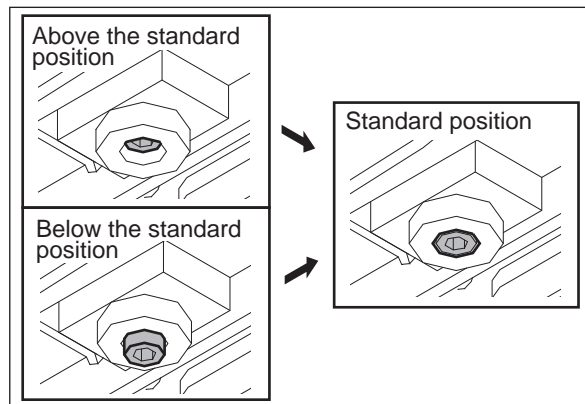


Fig.8-39

- If a faint image still occurs, return the screw to its standard position, and proceed to step 3 in the table above.

8.5.32 Tilted image at the leading edge of paper

When a printed image at the leading edge of paper is tilted as shown below, correct this by tilting the laser optical unit.

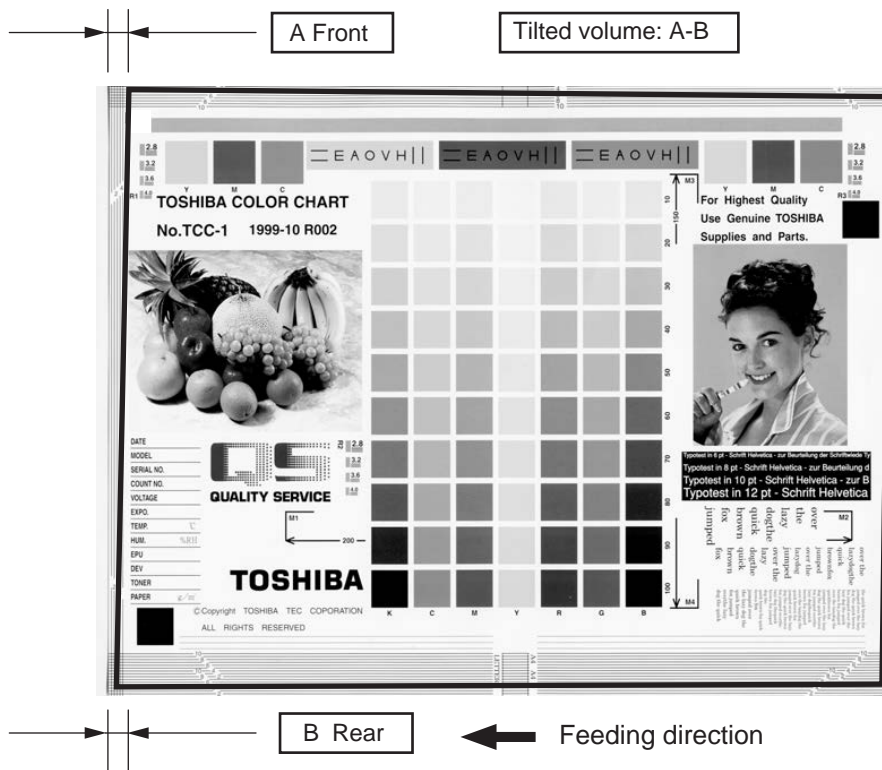


Fig.8-40

1. Preparation

Adjustment screw: M4x8 (S/FHEXM-M4X8-NI X0-02235000)

2. Procedure

- (1) Print out a grid pattern (A3/LD). Then check if the image at the leading edge is tilted.

Notes:

Before doing the above, check that copy paper is not skewed using the side guides of a drawer.

- (2) Remove 2 screws. Then release the hook [2] while lowering the right side of the inner cover [1] and take it off.

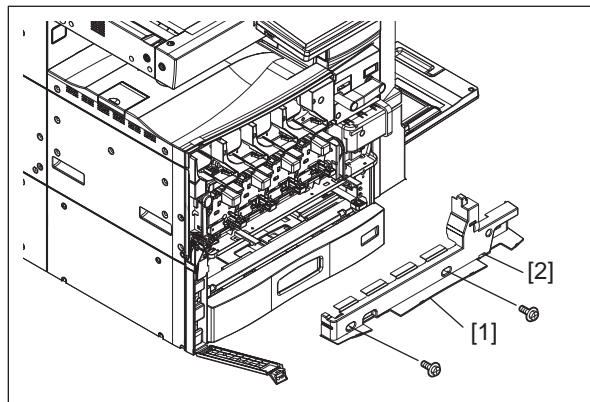


Fig.8-41

- (3) Loosen the screw shown below.

Remarks:

One rotation of the screw is 0.5 mm as an adjustment guide.
A maximum of 1.5 mm (3 rotations) can be adjusted.

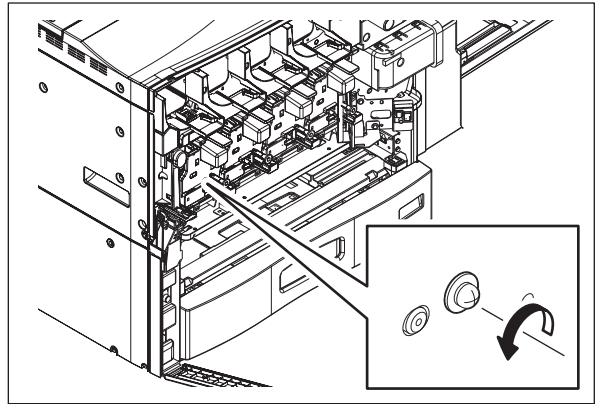


Fig.8-42

- (4) Mount the adjustment screw noted in “1. Preparation” in a screw hole shown below. Then tighten it securely until it is no longer rotated.

Notes:

Do not tighten it excessively otherwise the screw thread may be stripped.

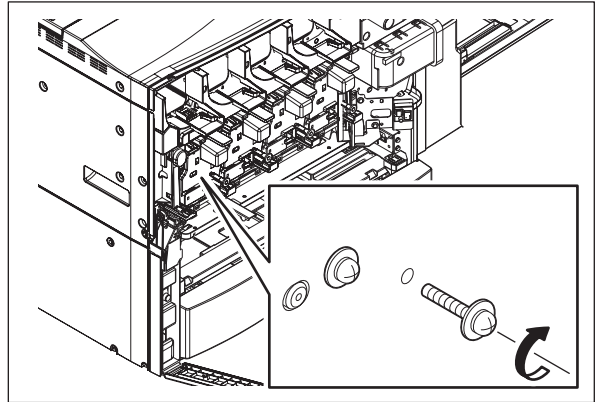


Fig.8-43

- (5) Tighten the screw shown below.

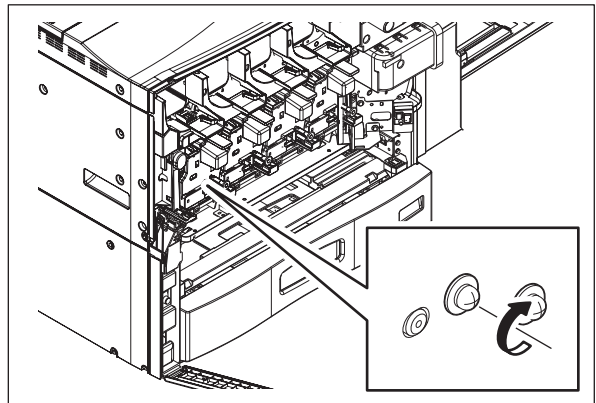


Fig.8-44

- (6) Print out a grid pattern (A3/LD). Then check if the image at the leading edge is still tilted.
Not tilted: The adjustment is finished.
Tilted: Repeat from step 2.
- (7) Reinstall the inner cover.


Notes:

- Perform steps 3 to 5 correctly, otherwise the screw thread may be stripped.
- Do not make more than 3 rotations of the adjustment screw, otherwise a void may appear on the image.
- It is recommended to perform the final adjustment at the customer's office.
- When taking off the laser optical unit, remove the adjustment screw. (Writing down the adjustment amount will help you perform readjustment.)

9. REPLACEMENT OF PC BOARDS/HDD


9.1 Removal and Installation of PC Boards/HDD

Notes:

When the PC board/HDD is replaced, refer to the respective Notes and Cautions of "Replacement of PC boards and HDD" in  P. 9-15 "9.2 Precautions, Procedures and Settings for Replacing PC Boards and HDD".

9.1.1 Hard disk (HDD)

[A] Normal hard disk (SATA-HDD)

- (1) Take off the rear cover-1.
 P. 4-7 "4.1.18 Rear cover-1"
- (2) Remove 4 screws.
- (3) Disconnect 2 connectors and take off the HDD case.

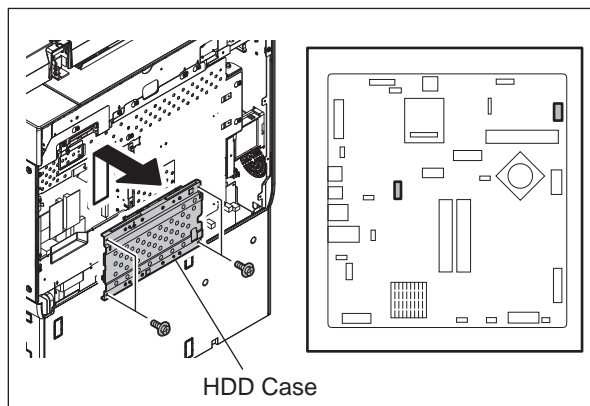


Fig. 9-1

- (4) Remove 6 screws and 1 clamp [1], and take off the bracket [2].

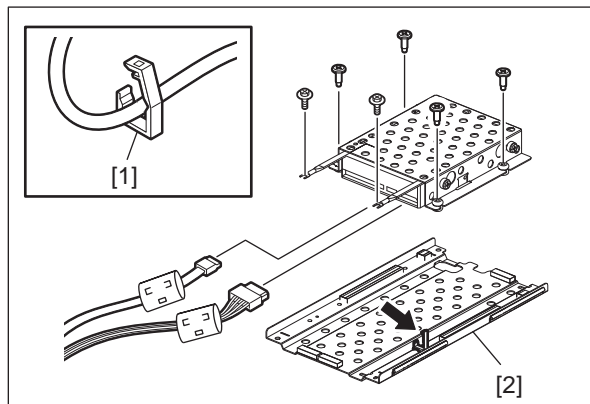


Fig. 9-2

- (5) Remove 4 screws and take off the hard disk [1].
- (6) Remove 1 screw each and the 2 ground wires [2].

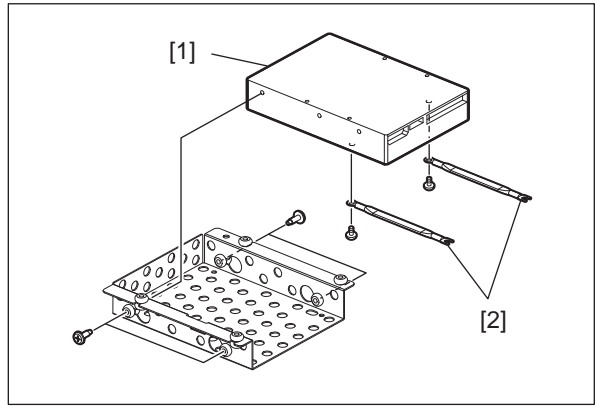



Fig. 9-3

[B] Security hard disk (ADI-HDD)

- (1) Take off the rear cover-1.
 P. 4-7 "4.1.18 Rear cover-1"
- (2) Remove 4 screws.
- (3) Disconnect 2 connectors and take off the HDD case.

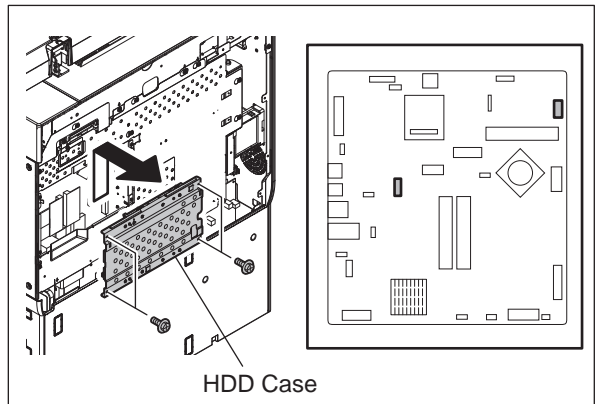


Fig. 9-4

- (4) Remove 6 screws and 1 clamp [1], and take off the bracket [2]. Disconnect 2 connectors.

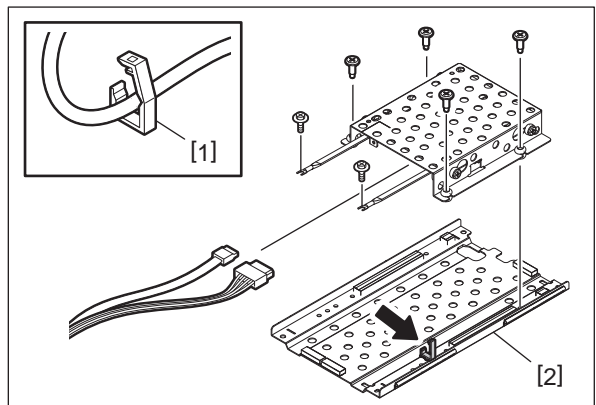


Fig. 9-5

- (5) Remove 4 screws and take off the bracket [1].
- (6) Remove 1 screw each and the 2 ground wires [2].

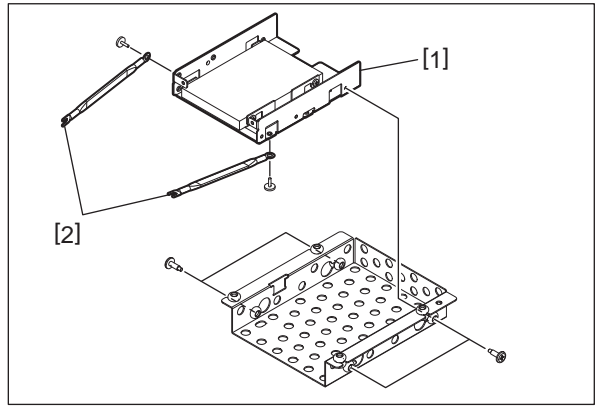


Fig. 9-6

- (7) Remove 4 screws and take off the hard disk [1].

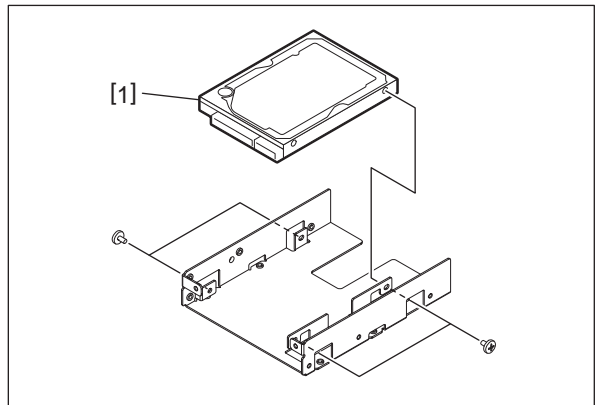


Fig. 9-7

9.1.2 Board cover

- (1) Take off the rear cover-2.
 P. 4-7 "4.1.19 Rear cover-2"
- (2) Remove 1 screw and loosen 11 screws.

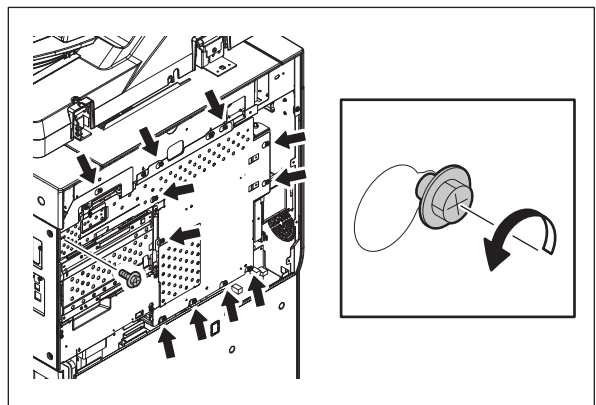


Fig. 9-8

- (3) Slide the board cover to take it off.

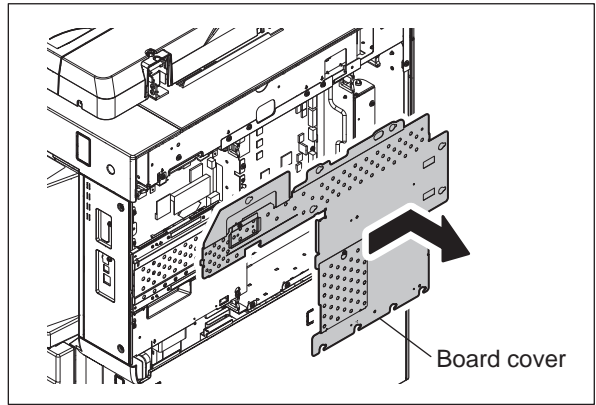


Fig. 9-9

9.1.3 FAX cover

- (1) Take off the rear cover-1.
 P. 4-7 "4.1.18 Rear cover-1"
- (2) Release 1 clamp and disconnect 1 connector.
- (3) Remove 1 screw and loosen 3 screws.
- (4) Slide the FAX cover to take it off.

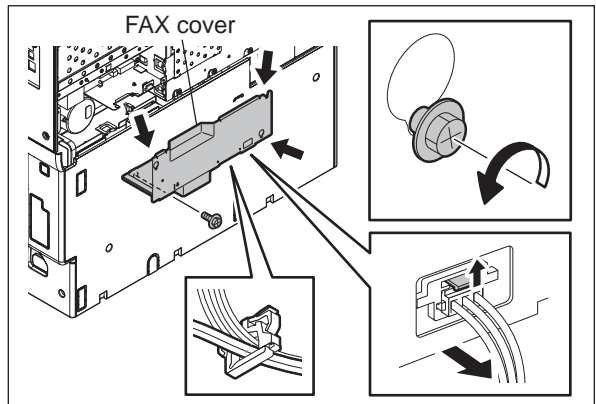


Fig. 9-10

9.1.4 SYS/HDD cooling fan

- (1) Take off the FAX cover.
 P. 9-4 "9.1.3 FAX cover"
- (2) Remove 2 screws and take off the duct [1].
- (3) Remove 2 screws and take off the SYS/HDD cooling fan [2].

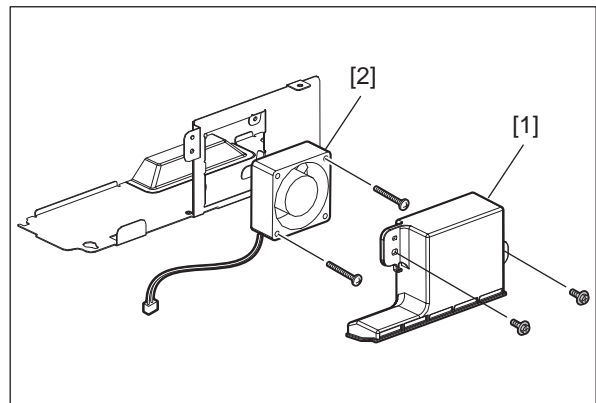





Fig. 9-11

9.1.5 SYS board

- (1) Take off the board cover.
 P. 9-3 "9.1.2 Board cover"
- (2) Take off the FAX cover.
 P. 9-4 "9.1.3 FAX cover"
- (3) Take off the hard disk.
 P. 9-1 "9.1.1 Hard disk (HDD)"
- (4) Remove 2 screws and take off 2 earth plates.

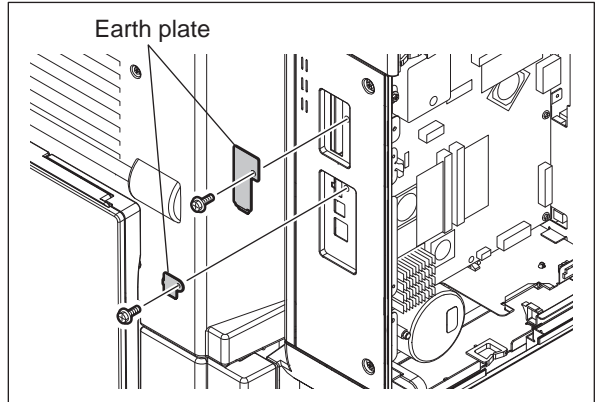


Fig. 9-12

- (5) Disconnect 3 connectors and the USB terminal.

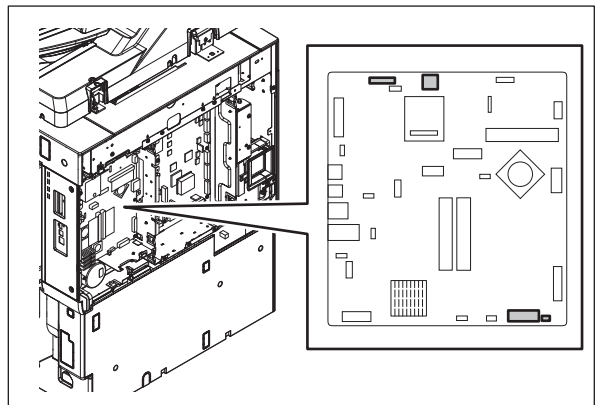


Fig. 9-13

- (6) Remove 7 screws, release 2 locking supports and take off the SYS board.

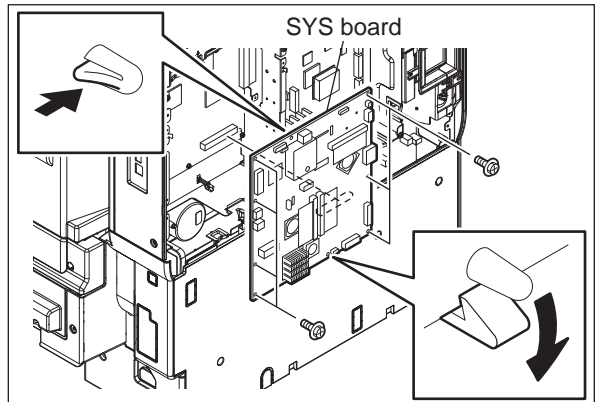



Fig. 9-14

9.1.6 IMG board

- (1) Take off the SYS board.
 P. 9-5 "9.1.5 SYS board"
- (2) Disconnect 2 connectors.
- (3) Remove 6 screws and slide the IMG board to take it off.

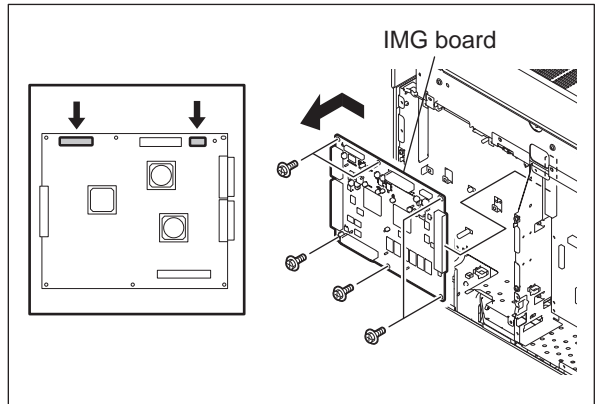



Fig. 9-15

9.1.7 LGC board

- (1) Take off the board cover.
 P. 9-3 "9.1.2 Board cover"
- (2) Disconnect 19 connectors.
- (3) Remove 8 screws and slide the LGC board to take it off.

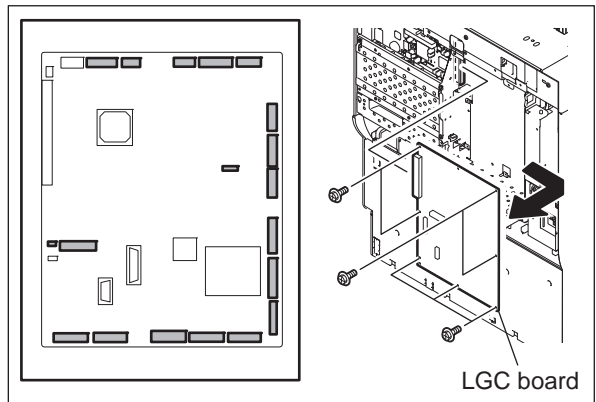



Fig. 9-16

9.1.8 Switching regulator

- (1) Take off the rear cover-3.
 P. 4-8 "4.1.20 Rear cover-3"
- (2) Remove 7 screws and take off the connector cover [1].

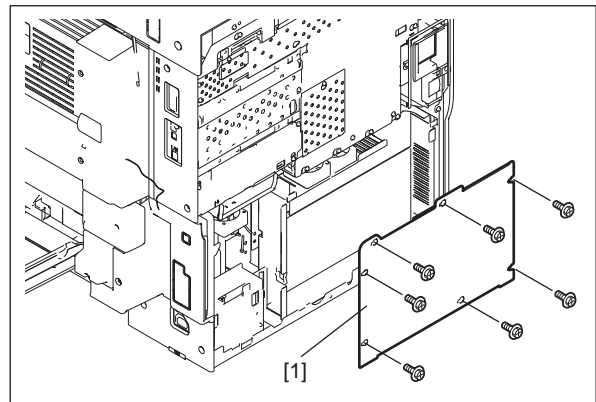


Fig. 9-17

- (3) Disconnect 10 connectors.
- (4) Remove 2 screws.
- (5) Slightly lift up the switching regulator [1] and release the hook.

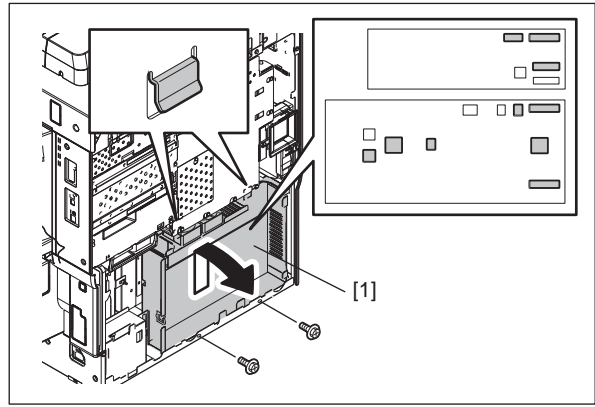


Fig. 9-18

- (6) Tilt the switching regulator [1] to the front side and take it off.

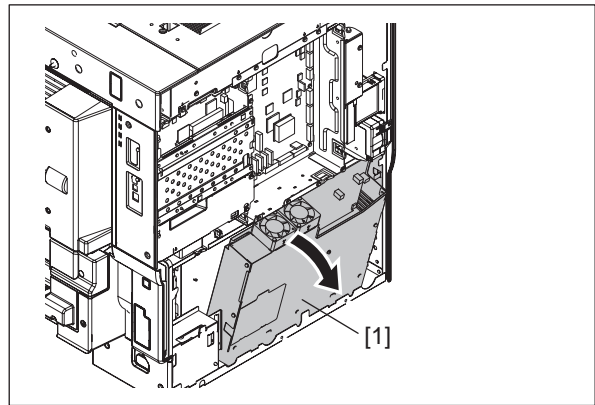


Fig. 9-19

9.1.9 High-voltage transformer (HVT)

- (1) Take off the switching regulator.
 P. 9-6 "9.1.8 Switching regulator"
- (2) Disconnect 18 connectors.

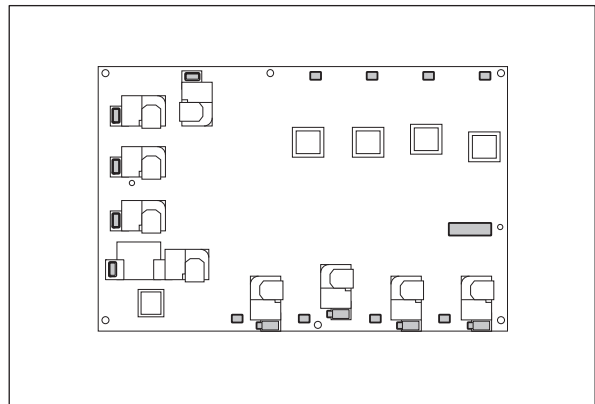


Fig. 9-20

- (3) Remove 7 screws.
- (4) Release 2 locking supports and take off the high-voltage transformer.

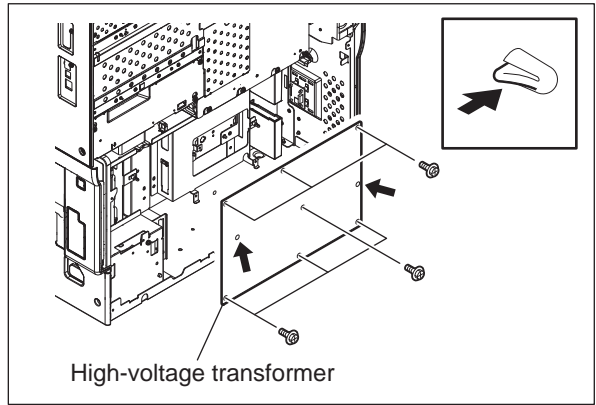


Fig. 9-21

9.1.10 FIL board

- (1) Take off the right lower cover.
 P. 4-5 "4.1.13 Right lower cover"
- (2) Take off the rear cover-3.
 P. 4-8 "4.1.20 Rear cover-3"

Notes:

Release the optional connector (KD-1027/1028) from the filter bracket if it is connected.

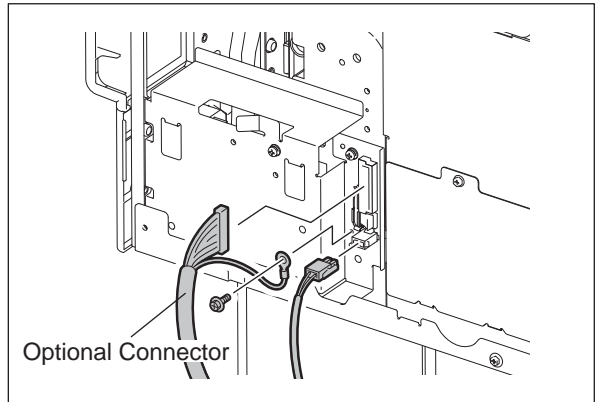


Fig. 9-22

- (3) Disconnect 2 relay connector of the filter bracket.

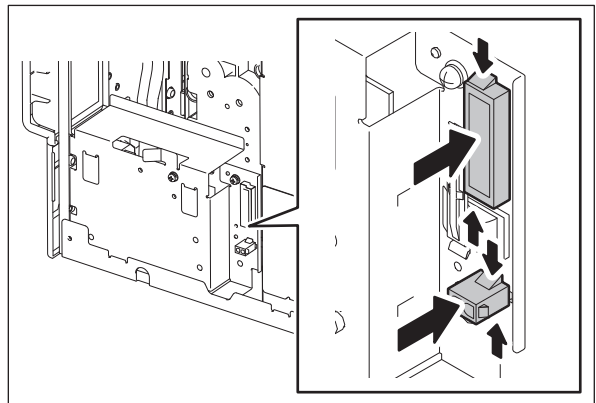


Fig. 9-23

- (4) Release 2 clamps.

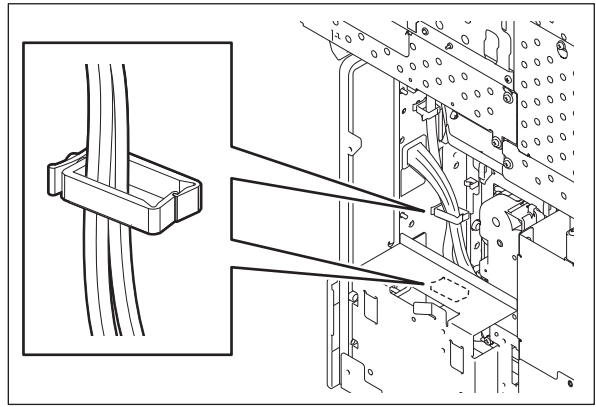


Fig. 9-24

- (5) Remove 3 screws and pull out the filter bracket.

Notes:

Do not pull it out too strongly because the harness is connected to it.

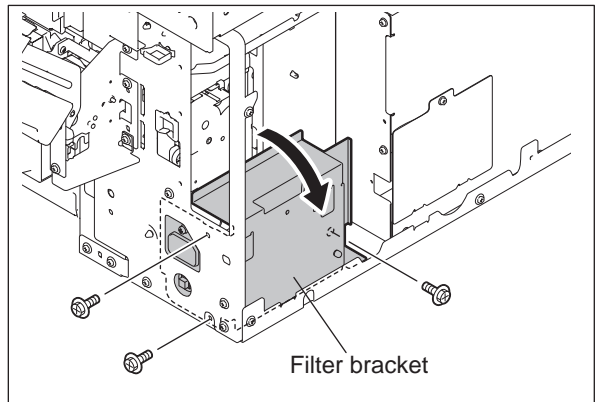


Fig. 9-25

- (6) Disconnect 5 connectors from the FIL board and take off the filter bracket.

Notes:

The connector connected to CN497 on the FIL board can be disconnected on the relay connector side.

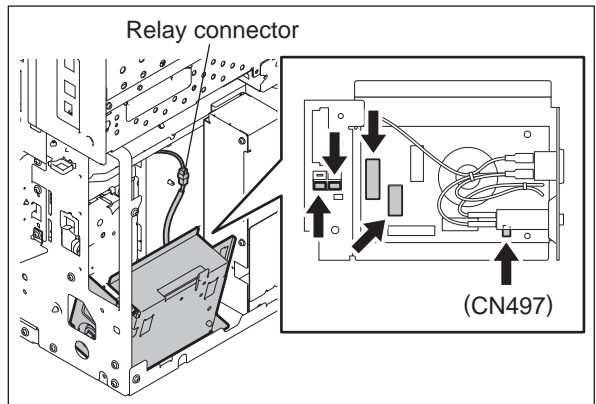


Fig. 9-26

- (7) Remove 1 binding band [1].
- (8) Remove 2 Faston terminals.

Notes:

Be sure to use the correct harness (white [2] or black [3]) when assembling.

- (9) Remove 2 screws, release 2 locking supports [4] and take off the FIL board [5].

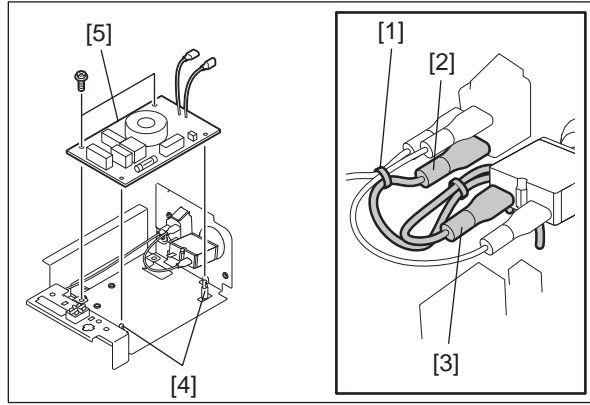



Fig. 9-27

9.1.11 Board case

- (1) Take off the board cover.
 P. 9-3 "9.1.2 Board cover"
- (2) Remove 5 screws.

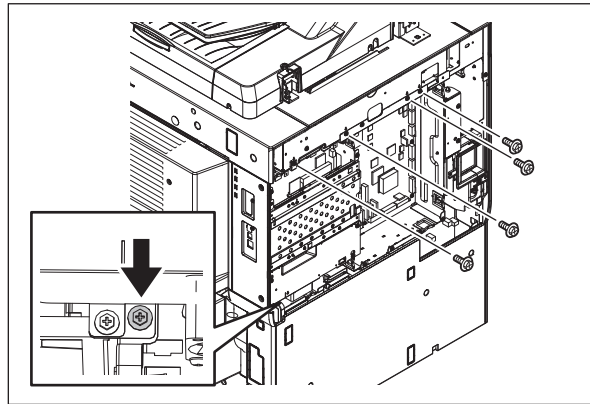


Fig. 9-28

- (3) Disconnect the USB terminal and 1 connector from the SYS board.
- (4) Disconnect the 1 connector from the IMG board.

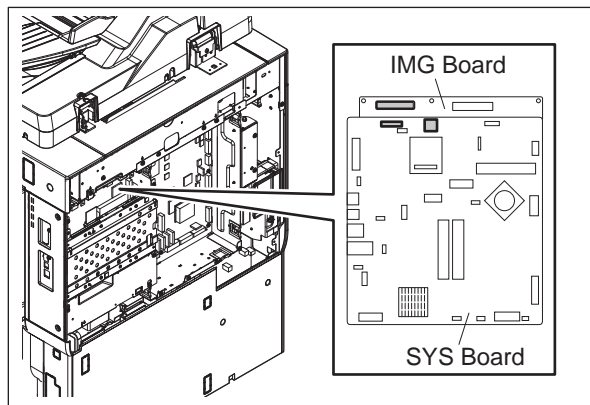


Fig. 9-29

- (5) Disconnect 2 connectors from the LGC board.

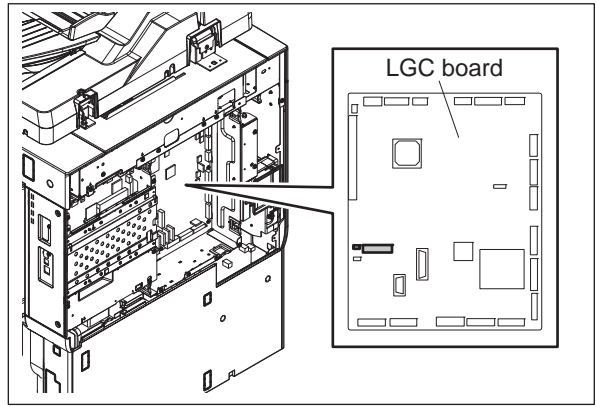


Fig. 9-30

- (6) Release harnesses from 4 clamps.

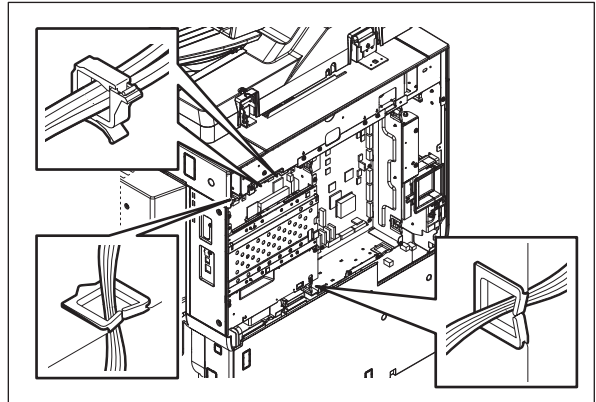


Fig. 9-31

- (7) Open the board case.

Notes:

Open the board case gently during maintenance work or similar.

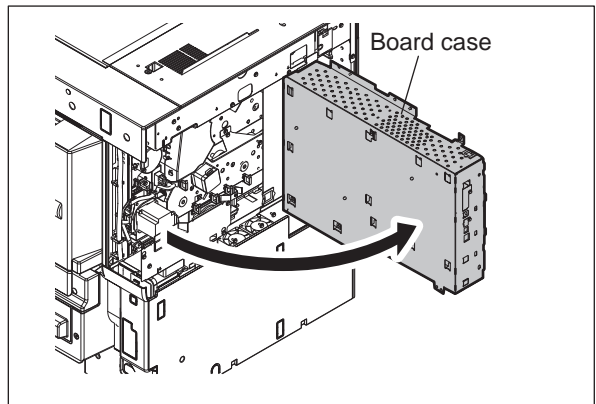



Fig. 9-32

9.1.12 SRAM board <for LGC board>

- (1) Take off the board cover.
 P. 9-3 "9.1.2 Board cover"
- (2) Release 2 latches and take off the SRAM board for the LGC board with the case.

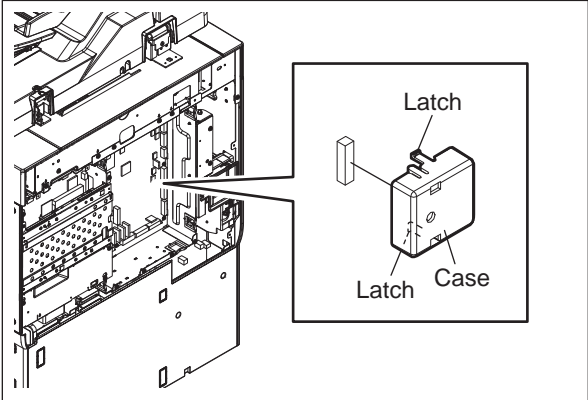


Fig. 9-33

- (3) Release 2 latches and take off the SRAM board for LGC board from the case.

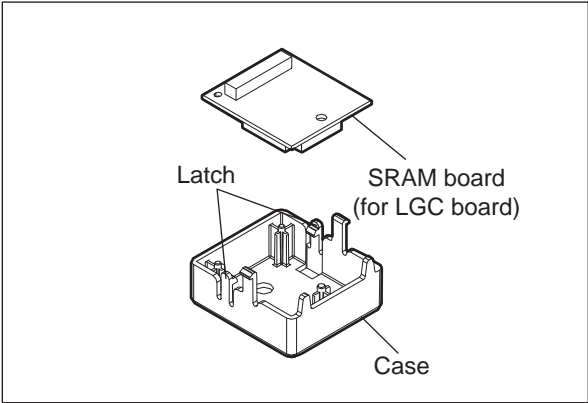


Fig. 9-34

Notes:

The shape of the SRAM board for the LGC board differs from the one for the SYS board. Be sure to assemble the correct SRAM board.

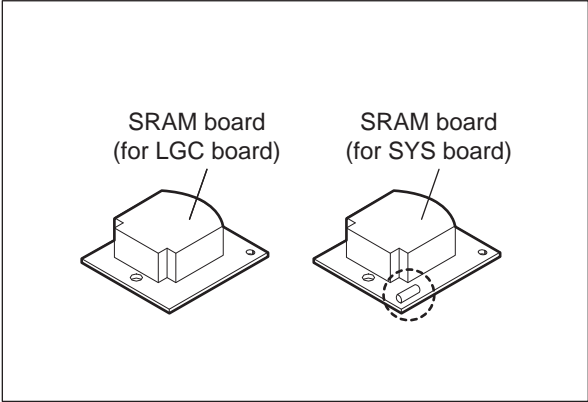



Fig. 9-35

9.1.13 SRAM board <for SYS board>

- (1) Take off the board cover.
 P. 9-3 "9.1.2 Board cover"
- (2) Disconnect 2 connectors and take off the HDD.

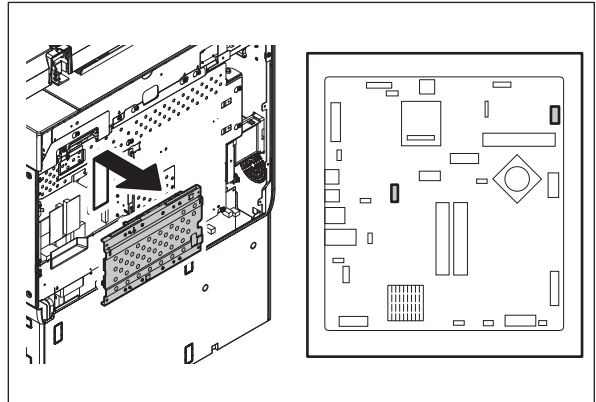


Fig. 9-36

- (3) Release 2 latches and take off the SRAM board for the SYS board with the case.

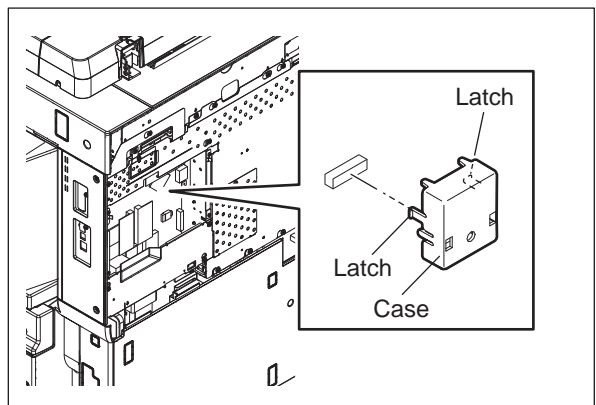


Fig. 9-37

- (4) Release 2 latches and take off the SRAM board for SYS board from the case.

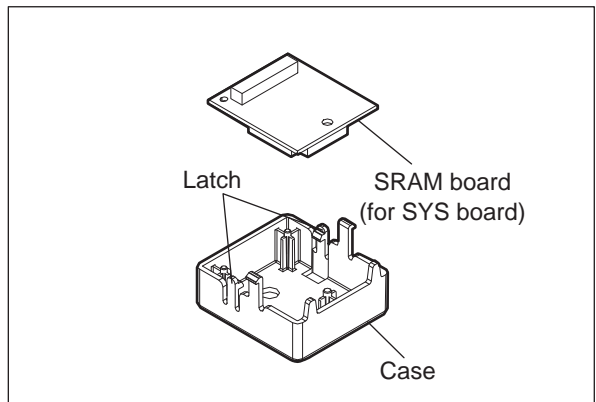


Fig. 9-38

Notes:

The shape of the SRAM board for the SYS board differs from the one for the LGC board. Be sure to assemble the correct SRAM board.

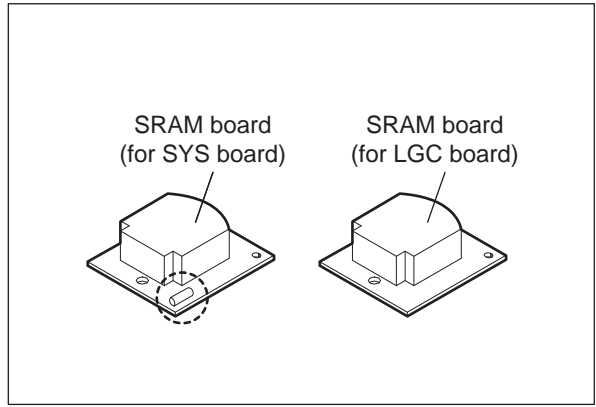


Fig. 9-39

9.2 Precautions, Procedures and Settings for Replacing PC Boards and HDD

9.2.1 Precautions when replacing PC boards

- The ID for each equipment is registered on the LGC board, the IMG board, the SYS board and the SLG board. So, if their replacement is required, be sure to replace only one board at a time.
 - If more than one of the LGC board, the IMG board and the SYS board require replacement, replace them in the following procedure.
 1. First, replace one of the board to be replaced.
 2. Turn the power ON and confirm that "READY" is displayed.
 3. Turn the power OFF.
 4. Replace another board that requires replacement.
 5. Repeat steps 2 to 4.
- The LGC board and IMG board can be replaced without other settings.
- When the HDD requires replacement, see "9.2.3Precautions and procedures when replacing the HDD".
- When the SYS board requires replacement, see "9.2.4Precautions and Procedures when replacing the SYS board".
- When the SLG board requires replacement, see "9.2.5Procedures and settings when replacing the SLG board".
- When SRAM board requires replacement, see "9.2.6Precautions and procedure when replacing the SRAM board (for the SYS board)" / "9.2.7Procedures and settings when replacing SRAM board (for LGC board)".

9.2.2 HDD fault diagnosis

This code displays the HDD operation history, which is recorded in the HDD, on the control panel. HDD failure can be diagnosed or predicted with the information displayed.

1. Display

The following screen is displayed with setting code 08-9065. You can also refer to the same information by pressing the [ON/OFF] button while pressing [5] and [C] simultaneously and then selecting "5".

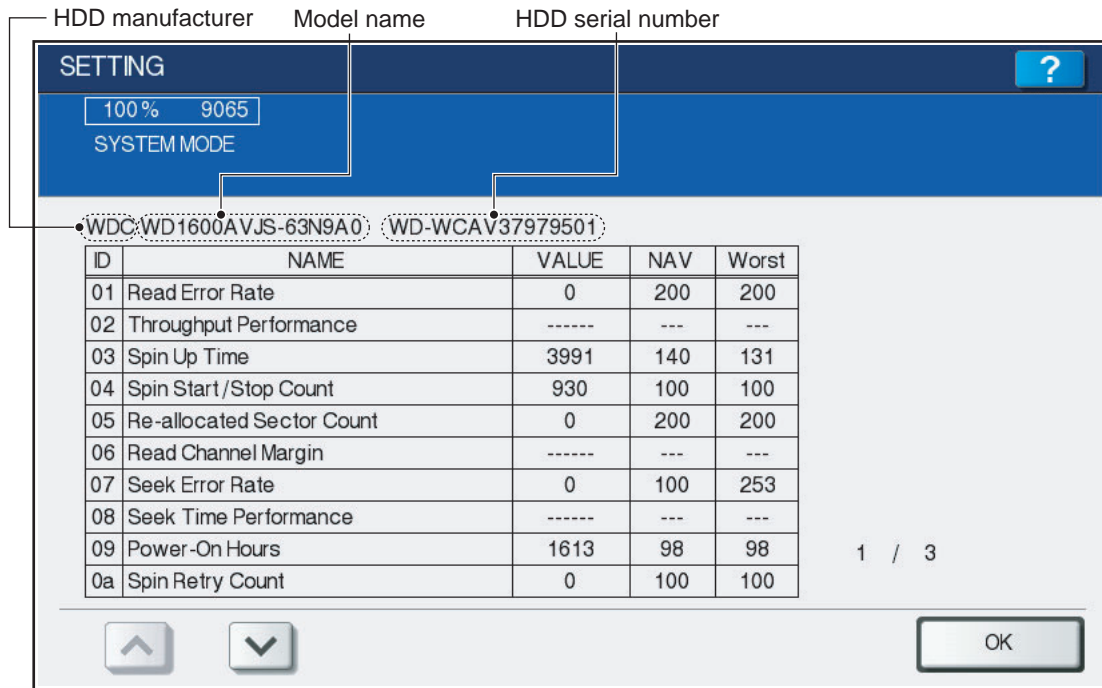


Fig. 9-40

- Items supported differ depending on the HDD manufacturer.
- "----" is displayed on the VALUE, NAV and Worst columns if items are not supported.

2. Usage

The combination of the values of ID=05 and c5 is used to diagnose whether or not the HDD has a physical failure when HDD failure is suspected (service call F100 - F108 or F121 or F122 occurred).

Result		Description	Diagnosis
ID	VALUE		
05	0	Low possibility of physical failure	HDD replacement is not required.
c5	0		
05	From 1 to 999	Defective sector has been reassigned and HDD is recovered.	HDD replacement is not required.
c5	0		
05	Any value	High possibility of defective sector existence. (There will be a possibility of physical failure depending on the use of HDD.)	HDD replacement is recommended.
c5	1 or more		
05	Either one is at least 1000.	High possibility of physical failure	HDD replacement is recommended.
c5			

Result		Description	Diagnosis
ID	VALUE		
05	All values are displayed as "-----".	High possibility of physical failure (A HDD connector, harness or SYS board may be one of the causes.)	HDD replacement is recommended.
c5			

3. ID=05 and c5

ID	Name	Description	Remarks
05	Re-allocated Sector Count	The number of sectors reassigned	This value tends to increase at HDD failure.
c5	Current Pending Sector Count	The number of candidate sectors to be reassigned	This value tends to increase at HDD failure.

4. Description of each ID

ID	Name	Meaning
01	Read Error Rate	This attribute is a measure of the read error rate.
02	Throughput Performance	This attribute is a measure of the throughput performance.
03	Spin Up Time	This attribute is a measure of how quickly the drive is able to spin up from a spun down condition.
04	Spin Start/Stop Count	This attribute is a measure of the total number of spin ups from a spun down condition.
05	Re-allocated Sector Count	This attribute is a measure of the total number of reallocated sectors.
07	Seek Error Rate	This is a measure of the seek error rate.
08	Seek Time Performance	This attribute is a measure of a drive's seek performance during normal online operations.
09	Power-On Hours	This attribute is a measure of the total time (hours or minutes depending on disk manufacturer) the drive has been on.
0a	Spin Retry Count	This attribute is a measure of the total number of spin retries.
0c	Power Cycle Count	This attribute is a measure of the number of times the drive has been turned on.
c0	Power off Retract Count	This attribute is a measure of the total number of emergency unloads.
c1	Load Cycle Count	This attribute is a measure of the total number of load/unloads.
c2	Temperature	This attribute is a measure of the temperature in the HDD.
c3	ECC On the Fly Count	This attribute is a measure of the total number of the ECC On the Fly.
c4	Reallocation Event Count	This attribute is a measure of the total number of the reallocation events.
c5	Current Pending Sector Count	This attribute is a measure of the total number of candidate sectors to be reallocated.
c6	Off-Line Scan Uncorrectable Sector Count	This attribute is a measure of the total number of uncorrectable sectors found during the off-line scan.

ID	Name	Meaning
c7	Ultra DMA CRC Error Count (Rate)	This attribute is a measure of the total number of errors found in data transfer in the Ultra-DMA mode.
c8	Write Error Rate	This attribute is a measure of the write error rate.

Notes:

“Over-range” is displayed if the number of digits acquired from the HDD exceeds the maximum digits which can be displayed on the control panel; however, this does not indicate an error.

9.2.3 Precautions and procedures when replacing the HDD

Notes:

- Replacing ADI-HDD with SATA-HDD is not possible. When replacing ADI-HDD, replace it with another ADI-HDD.
- When the HDD is replaced, it is necessary to back up the data in the HDD before replacing and to recover them after replacing.
- To maintain the security, ask users to perform the backup/restore for users' data/information in the HDD. The service technician can perform them only when users permit it.
- Some data in the HDD cannot be backed up and can be kept only on the paper.
- Do not replace the HDD and the SRAM board (for the SYS board) together.
- When the HDD is replaced, do not perform SRAM data formatting (Clear SRAM) before the normal start-up.
- When the HDD is replaced, do not restore the back-up file before the normal start-up.

A procedure for replacing the HDD is shown below.

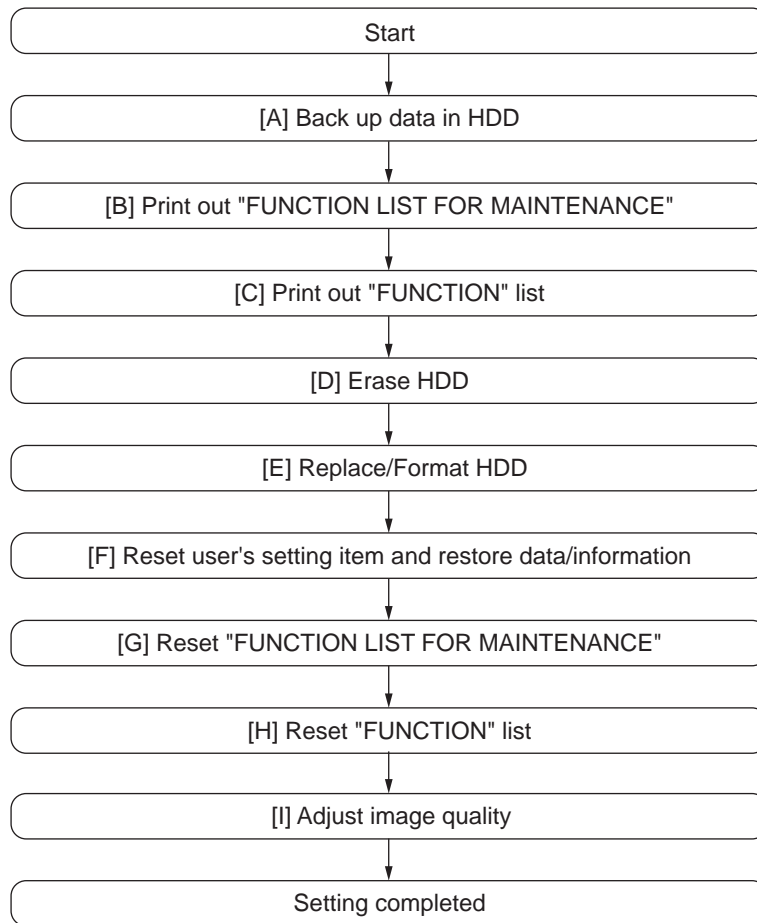



Fig. 9-41

[A] Back up in HDD

Ask the user (machine administrator) to back up the data in the HDD. Refer to the table below for the type of data, availability and method of backup.

Type of data in HDD	Availability	Backup method
Image data in the e-Filing	Available	Archive them in the “e-Filing” of TopAccess. As for the backup in Box data, all data (selectable by the box) can be backed up / restored in one go by using “e-Filing Backup/Restore Utility”.
F-code information, Template registration information, Address book data	Available	Back them up in the “Administrator” menu of TopAccess.
Department management data	Available	Export them in “Administrator” menu of TopAccess.
Log data (Print, Scan, FAX (Transmission/Reception))	Available	Export them in the “Administrator” menu of TopAccess. (Import cannot be performed.)
Data in the shared folder (Scanned data, Saved data of copy / FAX transmission)	Available	Copy them to the client computer via the network. (The data which have been copied to the client computer cannot be copied to the shared folder.)
Print waiting data (Copying data and FAX reception data that are waiting to be printed due to the paper run-out and jam, etc.)	Not available	Finish printing them after supplying paper or releasing the jam, etc. (The data cannot be left.)
Print job (Private print data, Schedule print data)	Not available	If any jobs are left, print them. (The data cannot be backed up.)
FAX saved data (Confidential / Bulletin board data)	Not available	Print them. (The data cannot be backed up.)
Registration data for FAX transmission (Delayed transmission / Recovery transmission)	Not available	Print them. (The data cannot be backed up.)

[B] Print out “FUNCTION LIST FOR MAINTENANCE”

- (1) Enter the Service Mode.  P. 5-5 "5.2 Service UI"
- (2) Select “FAX LIST PRINT MODE” and then press [NEXT].
- (3) Select “Function list for Maintenance” and then press [PRINT].

[C] Print out “FUNCTION” list

- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.

Notes:

Explain the procedure to the user (machine administrator) and ask him/her to enter his/her password.

- (3) Press the [LIST/REPORT] button and then the [LIST] button.
- (4) Press the [FUNCTION] button. The “FUNCTION LIST FOR MAINTENANCE” is printed out.

[D] Erase HDD


In case of the ADI-HDD:

- (1) Turn the power ON while pressing [4] and the [CLEAR] button simultaneously.
- (2) Key in [1] to select “1: Revert factory install status HDD.” and then press the [START] button.
- (3) Turn the power OFF.

In case of SATA-HDD:

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Key in [6] to select “6: Erase HDD Security.” and then press the [START] button.
- (3) Select “1. LOW”, “2. MEDIUM”, “3. HIGH” and “4. SIMPLE”.
- (4) Turn the power OFF.

[E] Replace / Format HDD

- (1) Confirm that the power is turned OFF.
- (2) Replace the HDD.
(Refer to  P. 9-1 "9.1.1 Hard disk (HDD)".)
- (3) Clear the partitions on the HDD.
 1. Turn the power ON while pressing [3] and [CLEAR] button simultaneously.
 2. When “Firmware Assist Mode” appears on the LCD, key in [3] to select “3: Format HDD” and then press the [START] button.
 3. When “Operation Complete” is displayed on the LCD, clearing of the partitions is completed.
- (4) Turn the power OFF.
- (5) Format the service tech password.
 1. Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
 2. When “Firmware Assist Mode” appears on the LCD, key in [8] to select “8. Clear Service Tech Password” and then press the [START] button.
 3. When “Reset Complete” is displayed on the LCD, formatting of the service tech password is completed.
- (6) Turn the power OFF.
- (7) Update the master data using the USB media.
See “11.1 Firmware Updating with USB Media” for details.
- (8) Turn the power OFF.

- (9) When the Fax Unit (GD-1250) is installed, perform “Fax Set Up” (1*-100) and “Clearing the image data” (1*-102). Then turn the power OFF.
- (10) Start up with the Setting mode (08).
- (11) Check the system ROM version (08-9930).
Confirm the version displayed on the LCD, and then press the [OK] button.
- (12) Turn the power OFF.

[F] Reset user’s setting items and restore data/information

Ask the user (machine administrator) to reset the user’s setting items and to restore data or information. Refer to the following for the reset and restore:


Items to reset/restore	Method
Printer driver	Upload them in the “Administrator” menu of TopAccess.
F-code information, Template registering information, Address book data	Restore them in the “Administrator” menu of TopAccess
Department management data	Import them in the “Administrator” menu of TopAccess.
Image data in the Electronic Filing	Upload them in the “e-Filing” of TopAccess.

- When the SSL is enabled, perform the setting of the following items again with “Self-signed certificate” of TopAccess.
 - Country Name
 - State or Province Name
 - Locality Name
 - Organization Name
 - Organizational Unit Name
 - Common Name
 - Email Address
- When wireless LAN is used, perform the setting again on the LCD panel. (only when security with a certificate is used) Also, upload the following certificate file with “Install Certificate for Wireless LAN” of TopAccess.
 - CA certificate
 - User certificate

[G] Reset “FUNCTION LIST FOR MAINTENANCE”

- (1) Print out the “FUNCTION LIST FOR MAINTENANCE” list after the formatting. For how to print it out, refer to [B]Print out “FUNCTION LIST FOR MAINTENANCE”.
- (2) While pressing [1] and [3] simultaneously, turn the power ON. (Function Mode)
- (3) Compare the lists which were printed before and after the formatting to check the setting items having the different setting values. Set the value which was set before the formatting.
- (4) Turn the power OFF.

[H] Reset “FUNCTION” list

Reset the fax function by referring to the “function list” that was printed out in  P. 9-21 “[C] Print out “FUNCTION” list”.


- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.

Notes:

Explain the user (machine administrator) about the next operation and ask him/her to enter his/her password.

- (3) Press the [FAX] button and then the [TERMINAL ID] button to set each item.
- (4) Press the [INITIAL SETUP] button to set each item.

[I] Adjust image quality

- (1) Start up with the Adjustment mode (05).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Perform "Automatic gamma adjustment" <PPC> (05-7165).
 P. 6-27 "6.2.1 Automatic gamma adjustment"
- (4) Turn the power OFF.

9.2.4 Precautions and Procedures when replacing the SYS board

A procedure for SYS board replacement is shown below.

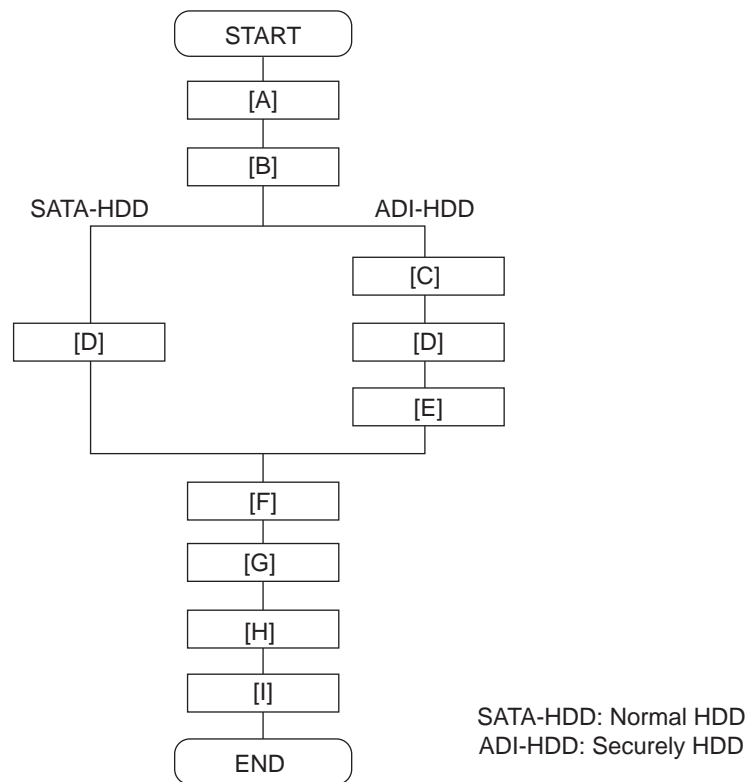


Fig. 9-42

Notes:

“[C] Update system ROM version (Jig)” is required only for the equipment in which the ADI-HDD has been installed and the OS version is less than “2000”.

“[E] Restore ADI key” is required only for the equipment in which the ADI-HDD has been installed.

[A] Return License

Notes:

- If the Setting Mode (08) is not started up, “[A]Return License” can be omitted. In that case, reinstall the license with “[1]Re-registration when the board is replaced” if it is cleared since “[F] Reinstallation of License” cannot be performed.
- When installing the Data Overwrite Enabler (GP-1070) and security mode is setting High Security, set the security mode level to “1” (Low level). Then restart the equipment.

- (1) Start up with the Setting Mode (08).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [ENTER] button.
- (4) Select the license to be returned, and then press the [REMOVE] button.
- (5) Install the one-time dongle, which you used for uploading the selected license, in the equipment, and then press the [OK] button.

- (6) The Remove screen is displayed, then press the [YES] button. If this screen is not displayed, check whether the one-time dongle is installed in the equipment properly.
- (7) After 10 to 40 seconds passes, the screen for notifying the success of performance is displayed. Then press the [OK] button. If this screen is not displayed or the screen for notifying the failure of performance is displayed, quit this operation by pressing the [NO]/[CLOSE] button. Then, check whether the one-time dongle, which you used for uploading the selected license, is installed in the equipment.
- (8) Check that the returned license is not displayed on the screen.

Remarks:

If there are any other licenses to be returned, repeat from step (4).

If there is no more licenses to be returned, press the [CLOSE] button, and then turn the power OFF.

[B] Replace the SYS board

Notes:

Before replacing the SYS board, perform the following procedure.

 P. 9-15 "9.2.1 Precautions when replacing PC boards"

- (1) Confirm that the power is turned OFF.
- (2) Replace the SYS board.
- (3) Install DIMM (main memory, page memory) to the new SYS board (from the old SYS board).
- (4) Install SRAM board to the new SYS board (from the old SYS board).

[C] Update system ROM version (Jig)

Notes:

This procedure is required only for the equipment in which the ADI-HDD has been installed and the OS (system ROM) version is less than "2000".

E.g.: When the SYS board, which is to be changed, has been supplied as a service part and its OS version has been less than "2000".

Therefore, this procedure is not required if the OS version of the to-be-changed SYS board has been "2000" or later.

- (1) Upgrade the system ROM (OS data) version to "2000" or later using a download jig.

[D] Update system ROM version

Update the version of system ROMs (OS data) with the USB media.

* See "11.1 Firmware Updating with USB Media" for details.

[E] Restore ADI key

Perform the following procedures if the ADI-HDD has been installed.


- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [5] to select "5.ADIKey SRAM to FROM", and then press the [START] button.

- (5) Wait until the restoring of the encryption key is completed. "Operation Complete" is displayed.
- (6) Restart the equipment after the restoring is completed. If you want to perform the restoring of the license, do not restart the equipment but perform from (4) in "[F] Restore license".

[F] Restore encryption key

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [1] to select "1. Key SRAM to FROM", and then press the [START] button.
- (5) Wait until the restoring of the encryption key is completed. "Operation Complete" is displayed.
- (6) Restart the equipment after the restoring is completed. If you want to perform the restoring of the license, do not restart the equipment but perform from (4) in "[G] Restore license".

[G] Restore license

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [3] to select "3. License SRAM to FROM", and then press the [START] button.
- (5) Wait until the restoring of the license is completed. "Operation Complete" is displayed.
- (6) After the restoring is completed, check that "OK" is indicated in "SRAM License STATUS" and "FROM License Status". Then, restart the equipment.
- (7) If "4. License FROM to SRAM" is performed by mistake, carry out the following procedure.
 P. 9-42 "[1] Re-registration when the board is replaced"

[H] Reinstall license

If the license was returned in "[A]Return License", reinstall it with the following procedure.

- (1) Turn the power ON while pressing [0] and [8] simultaneously.
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [START] button.
- (4) Press the [INSTALL] button.
- (5) Install the one-time dongle in the equipment (the one which you used for returning the selected license before replacing the equipment). Then press the [OK] button.
- (6) Select the license to be installed, and then press the [INSTALL] button.
- (7) The screen for notifying that the installation will be started is displayed. Then press the [YES] button.

- (8) After 10 to 40 seconds have passed, the screen for notifying the success of the performance is displayed. Then press the [OK] button. If the screen for notifying a failure of the performance is displayed, quit this operation by pressing the [NO] button. Then check that the one-time dongle is installed properly in the equipment.
- (9) Check that the installed license is displayed on the license list.

Remarks:

If there are any other licenses to be installed, repeat from step (4). If there are no other licenses to be installed, press the [CLOSE] button, and then turn the power OFF.

[I] Check ROM versions

- System ROM version (08-9930)

Notes:



If the security mode is changed from High Security to Low Security in the step "[A]Return License", set the value of 08-8911 to "3" (High Security).

9.2.5 Procedures and settings when replacing the SLG board

Notes:

Before replacing the SLG board, perform the following procedure.


When the SLG board has been replaced, make sure to follow the procedure below.

- (1) Confirm that the power is turned OFF.
- (2) Replace the SLG board.
 P. 4-26 "4.3.12 SLG board (SLG)"
- (3) Update the scanner ROM using the USB Media.
 P. 11-6 "11.1 Firmware Updating with USB Media"
- (4) Start up with the Adjustment Mode (05).
- (5) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (6) Perform "Data transfer of characteristic value of scanner / SYS board -> SLG board (05-3209)".
- (7) Perform "Shading correction plate Automatic dust detection adjustment (05-3218)".
- (8) Turn the power OFF.
- (9) Start up with the Setting Mode (08).
- (10) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (11) Check the version of the scanner ROM (08-9902).
- (12) Turn the power OFF.

9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)

Notes:

- Do not replace the HDD and the SRAM board (for the SYS board) together. Be careful not to damage the board when replacing the SRAM board.
- When the SRAM board is replaced, do not perform HDD partition creation (Format HDD) before the normal start-up.

A procedure for replacing the SRAM board is shown below. When disposing of the SRAM board, perform the items in  P. 9-44 "9.3.4 Precautions when disposing of the SRAM board (for SYS board)".

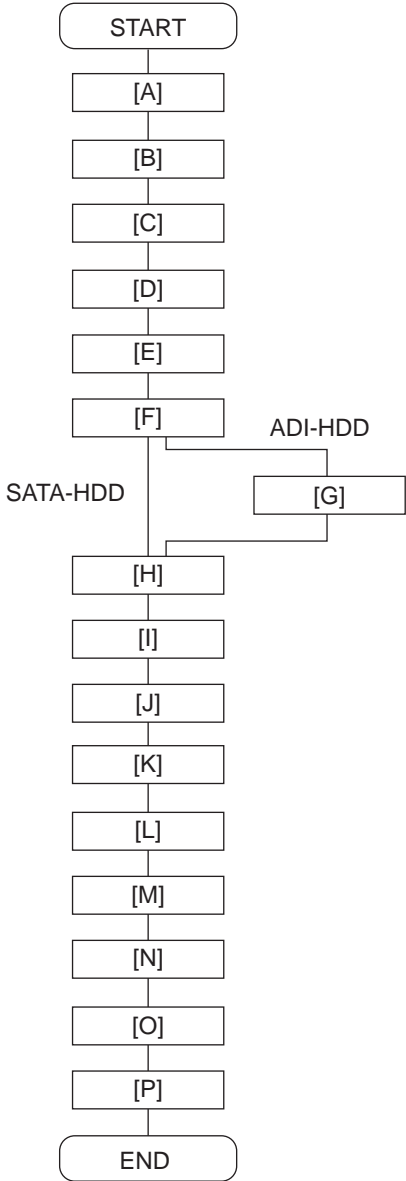


Fig. 9-43

Notes:

“[G] Backup ADI key” is required only for the equipment in which the ADI-HDD has been installed. Other procedures are the same as those for installing the SATA-HDD.

[A] Backup SRAM

Notes:

If “[A] Backup SRAM” fails, proceed to “[B]Return License”.

If “[A] Backup SRAM” succeeds, proceed to “[C]Replace SRAM board”.

- (1) Install the USB media in the equipment, and then turn the power ON while pressing [5] and [9] buttons simultaneously.
- (2) Key in [1] to select “1. Backup SRAM Data to USB”, and then press the [START] button.
- (3) Enter a password (max. 15 characters) to be set for the backup data.
- (4) Restart the equipment after the backup is completed.
- (5) Turn the power OFF.

[B] Return License


- (1) Start up with the Setting Mode (08).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [ENTER] button.
- (4) Select the license to be returned, and then press the [REMOVE] button.
- (5) Install the one-time dongle, which you used for uploading the selected license, in the equipment, and then press the [OK] button.
- (6) The Remove screen is displayed, then press the [YES] button. If this screen is not displayed, check whether the one-time dongle is installed in the equipment properly.
- (7) After 10 to 40 seconds passes, the screen for notifying the success of performance is displayed. Then press the [OK] button. If this screen is not displayed or the screen for notifying the failure of performance is displayed, quit this operation by pressing the [NO]/[CLOSE] button. Then, check whether the one-time dongle, which you used for uploading the selected license, is installed in the equipment.
- (8) Check that the returned license is not displayed on the screen.

Remarks:

If there are any other licenses to be returned, repeat from step (4).

If there is no more licenses to be returned, press the [CLOSE] button, and then turn the power OFF.

[C] Replace SRAM board

- (1) Confirm that the power is turned OFF.
- (2) Take off the Fax Unit (GD-1250) if it is installed.
- (3) Replace the SRAM board (for the SYS board).
 P. 9-13 "9.1.13 SRAM board <for SYS board>"

[D] Initialize SRAM system storage area

- (1) Turn the power ON while pressing [6] and [CLEAR] simultaneously.
- (2) When “SRAM Clear Mode” appears on the LCD, key in [1] to select “1. Clear SRAM” and then press the [START] button.
- (3) When “SRAM Format Completed” is displayed on the LCD, initializing is completed.
- (4) Turn the power OFF.

[E] Restore SRAM

If there is SRAM backup data, perform the following steps.

- (1) Turn the power ON while pressing [6] and the [CLEAR] button simultaneously.
- (2) When “SRAM Clear Mode” appears on the LCD, key in [0] to select “0. Set Serial Number” and then press the [START] button.
- (3) Key in the serial number on the label attached to the rear cover of the equipment, and then press the [OK] button.
- (4) “Serial Number Setting completed” is displayed.
- (5) Turn the power OFF.
- (6) Install the USB media in the equipment, and then turn the power ON while pressing [5] and [9] simultaneously.
- (7) Key in [2] to select “2. Restore SRAM Data from USB” and then press the [START] button.
- (8) Enter the password set for the backup data.
- (9) Enter the serial number of the backup file.
- (10) Turn the power OFF after the restoring of SRAM is completed.

Remarks:

When the restoration is completed successfully, do not perform “[F] Clear SRAM update error flags” or later procedures.

End this procedure here and finish replacing the SRAM board (for SYS board).

- (11) Reinstall the GD-1250 Fax Unit if used.

[F] Clear SRAM update Error flags

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) After “Firmware Assist Mode” is displayed on the LCD, check that “1: Clear Error Flag in Software Installation.” is marked and press the [START] button.
If not, key in [1] and then press the [START] button.
- (4) When “Operation Complete” is displayed on the LCD, clearing the flag is completed.
- (5) Turn the power OFF.

[G] Backup ADI key

Perform the following procedures if the ADI-HDD has been installed.

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [OK] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [6] to select "6. ADIKey FROM to SRAM", and then press the [START] button.
- (5) Wait until the backup of the ADI key is completed. "Operation Complete" is displayed.
- (6) Restart the equipment after the backup is completed.
If you want to perform the backup of the license, do not restart the equipment but perform from (4) in "[H] Backup encryption key".

[H] Backup encryption key

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [2] to select "2. Key FROM to SRAM", and then press the [START] button.
- (5) Wait until the backup of the encryption key is completed. "Operation Complete" is displayed.
- (6) Restart the equipment after the backup is completed. If you want to perform the backup of the license, do not restart the equipment but perform from (4) in "[I] Backup license".
- (7) Turn the power OFF.

[I] Backup license

Notes:

If "3. License SRAM to FROM" is performed by mistake, carry out the following procedure.

 P. 9-42 "[1] Re-registration when the board is replaced"

- (1) Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
- (2) Enter the password, and then press the [OK] button. (If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
- (4) Key in [4] to select "4. License FROM to SRAM", and then press the [START] button.
- (5) Wait until the backup of the license is completed. "Operation Complete" is displayed.
- (6) Restart the equipment after the backup is completed.
- (7) Turn the power OFF.

[J] Initialize SRAM board

- (1) Start up with the Setting Mode (08).

- (2) Initialize the SRAM error.
 1. When "SRAM REQUIRES INITIALIZATION" is displayed on the LCD, check the destination and then press the [START] button.
If the destination is not correct, key in the correct one and then press the [START] button.
 2. After the confirmation message is displayed, press the [INTERRUPT] button.
- (3) Perform the panel calibration (08-9050).
 1. Touch the center of "+" mark displayed on the upper left of the LCD.
 2. Touch the center of "+" mark displayed on the upper right of the LCD.
 3. Touch the center of "+" mark displayed on the lower left of the LCD.
 4. Touch the center of "+" mark displayed on the lower right of the LCD.
- (4) Perform the initialization at the software version upgrade (08-9030).
- (5) Initialize the NIC information (08-9083).
- (6) Enter the serial number (08-9601).
Key in the serial number on the label attached to the rear cover of the equipment, and then press the [OK] button.
- (7) Turn the power off.

[K] Reinstall license

If the license was returned in "[B]Return License", reinstall it with the following procedure.

- (1) Turn the power ON while pressing [0] and [8] simultaneously.
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [START] button.
- (4) Press the [INSTALL] button.
- (5) Install the one-time dongle in the equipment (the one which you used for returning the selected license before replacing the equipment). Then press the [OK] button.
- (6) Select the license to be installed, and then press the [INSTALL] button.
- (7) The screen for notifying that the installation will be started is displayed. Then press the [YES] button.
- (8) After 10 to 40 seconds have passed, the screen for notifying the success of the performance is displayed. Then press the [OK] button. If the screen for notifying a failure of the performance is displayed, quit this operation by pressing the [NO] button. Then check that the one-time dongle is installed properly in the equipment.
- (9) Check that the installed license is displayed on the license list.

Remarks:



If there are any other licenses to be installed, repeat from step (4). If there are no other licenses to be installed, press the [CLOSE] button, and then turn the power OFF.

[L] Enable HDD encryption

If you use the HDD encryption function, follow the procedure below.

- (1) Start up with the Setting mode (08).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Enable the HDD encryption function. Set the value of 08-8911 to "3", or the value of 08-8911 to "1" and 08-9379 to "1" or "2".
- (4) Turn the power OFF.

[M] Adjust image quality

- (1) Start up with the Adjustment mode (05).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Perform "Data transfer of characteristic value of scanner" (05-3203).
- (4) Perform "Automatic gamma adjustment" <PPC> (05-7869).
 P. 6-27 "6.2.1 Automatic gamma adjustment"
- (5) Perform "Automatic gamma adjustment" <PRT> (05-8008).
 P. 6-44 "6.3.1 Automatic gamma adjustment"
- (6) Turn the power OFF.

[N] Initialize settings when FAX Unit (GD-1250) is installed

- (1) Reinstall the FAX Unit (GD-1250).
- (2) Start up with the Setting mode (08).
- (3) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (4) Set the destination of FAX (08-9001).
- (5) Turn the power OFF.
- (6) Start up with the FAX Clearing Mode (1*).
- (7) Perform the FAX Set Up (1*-100).
- (8) Turn the power OFF and then back ON.
- (9) Set the dial type according to these buttons: [USER FUNCTIONS] -> [ADMIN] -> [FAX] -> [INITIAL SETUP]

[O] Set date and time

Set the date and time according to these buttons.

[USER FUNCTIONS] → [ADMIN] → [GENERAL] → [CLOCK] → [DATE/TIME]

[P] Set EFI Printer Board

If the EFI Printer Board (GA-1211) is installed, perform the following procedure.

- (1) Turn the power OFF.
- (2) Start the setting mode (08).
- (3) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (4) Initialize the EFI Printer Board (08-9951).
- (5) Turn the power OFF.

9.2.7 Procedures and settings when replacing SRAM board (for LGC board)

Notes:

Be careful not to damage the board when replacing the SRAM board.
A procedure for replacing the SRAM board is shown below.

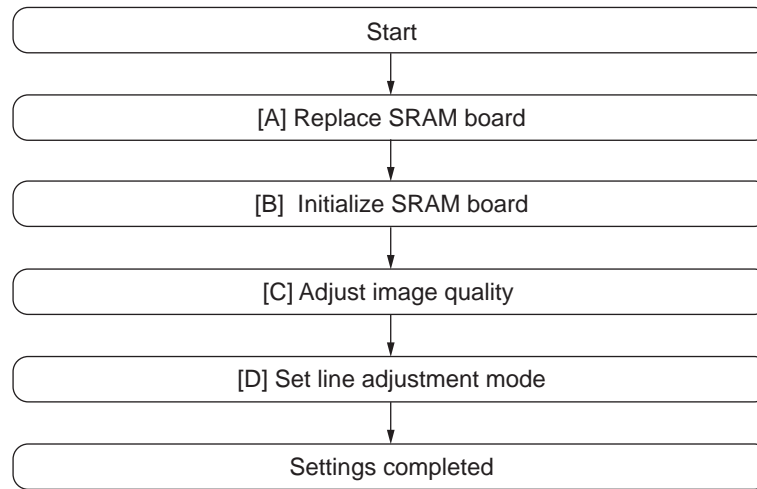



Fig. 9-44

[A] Replace SRAM board

- (1) Confirm that the power is turned OFF.
- (2) Replace the SRAM board (for the LGC board).
 P. 9-12 "9.1.12 SRAM board <for LGC board>"

[B] Initialize SRAM board

- (1) Open the front cover, and check the destination printed on the white tape stuck on the equipment.
- (2) Start up with the Setting Mode (08).
- (3) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (4) Perform "Destination display at SRAM initialization" (08-9060).
- (5) Check whether the displayed destination (see the below figure) of the SRAM board (for the SYS board) is the same as the one in step (1).

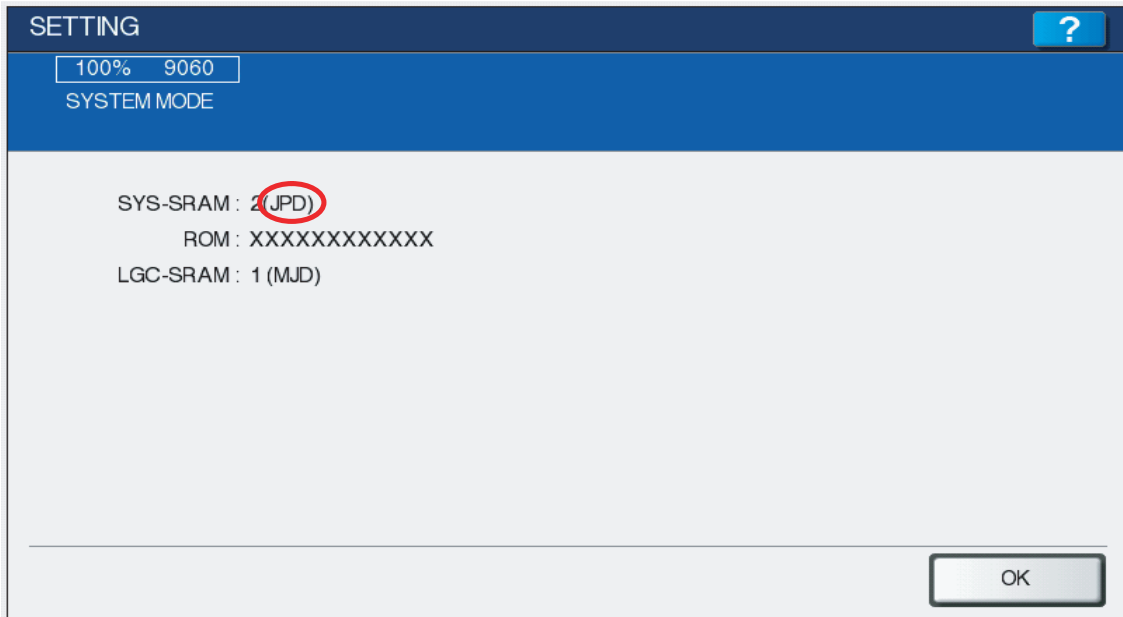


Fig. 9-45

Remarks:

If the destinations are different, initialize the SRAM board (for the SYS board) with reference to the following procedure.

📖 P. 9-29 "9.2.6 Precautions and procedure when replacing the SRAM board (for the SYS board)"

- (6) Perform "Printer all clear" (08-9090).

- (7) Press the [INITIALIZE] button to perform the initialization of the SRAM board (for the LGC board).

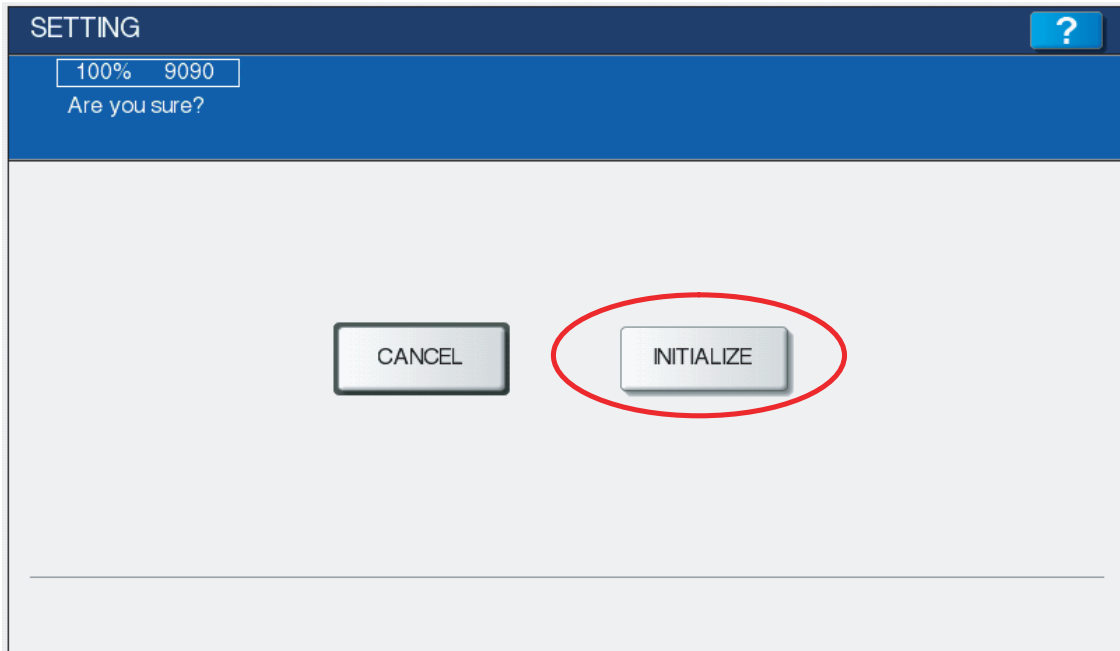


Fig. 9-46

- (8) Perform "Destination display at SRAM initialization" (08-9060), and check whether the same destinations are displayed for the SYS board and the LGC board of the SRAM boards.

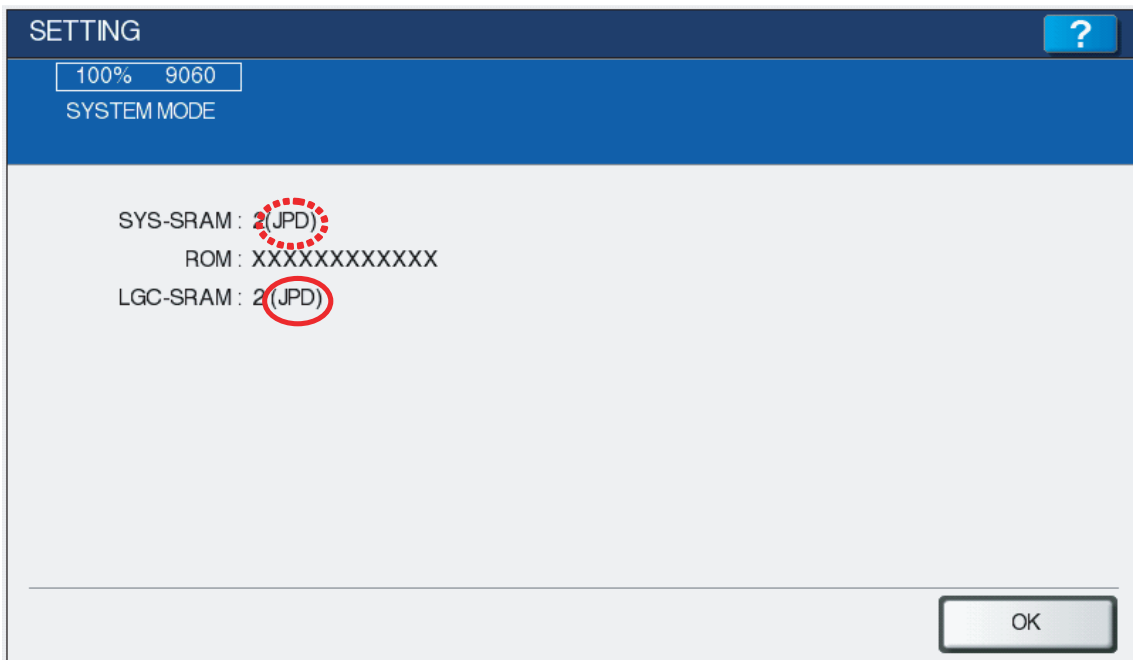




Fig. 9-47

Remarks:

If an error occurs during the initialization of the SRAM board (for the LGC board) and the initialization fails, error messages are displayed on the touch panel. The error messages and the corresponding troubleshooting methods are shown below.

Error message	Troubleshooting
R/W FAILURE	Check whether the SRAM board (for the LGC board) is connected properly.
UNDEFINED MODEL	Since the LGC board probably has a problem, replace it with a new one by following the procedure below.  P. 9-6 "9.1.7 LGC board"
UNDEFINED VERSION	Recheck the destination of the SRAM board (for the SYS board). Since the SRAM board (for the SYS board) probably has a problem, replace it with a new one by following the procedure below.  P. 9-13 "9.1.13 SRAM board <for SYS board>"
VERIFY ERROR	Check whether the SRAM board (for the LGC board) is connected properly.





[C] Adjust image quality

- (1) Write down the adjustment values of the following (05) code attached to the rear side of the front cover.

	L (0)	H (0)
05/2622		
05/2623		
05/2624		
05/2625		
05/2627		
05/2628		
05/2629		
05/2630		
05/2984		
05/2983		

- (2) Start up with the Adjustment mode (05).
- (3) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (4) Enter all the adjustment values written down in step (1).
- (5) Reset the auto toner sensor.
1. Turn the power OFF.
 2. Replace the developer materials for four colors (YMCK).
 3. Perform automatic adjustment of auto-toner sensor. Start up with the Adjustment mode (05), enter [2400] and press the [START] button.

Notes:

- You can reset the auto-toner sensor by directly entering the adjustment values for (05) 2405-0 to 3 with the Adjustment mode data list, which has been printed during normal operation of equipment such as when it is setup, when preventive maintenance (PM) is performed or when developer material is replaced, etc.
 - If you perform automatic adjustment (05-2400) of the auto-toner sensor without replacing the developer materials for four colors (YMCK), image quality is not guaranteed.
- (6) Perform the "Forced performing of image quality closed-loop control (05-2742)".
- (7) Perform "Mirror motor initial excitation setting" (05-4721).
- (8) Perform the enforced position adjustment (05-4719).
- (9) Perform printer related adjustment and scanner related adjustment.
 P. 6-12 "6.1.8 Image dimensional adjustment at the printing section"
 P. 6-18 "6.1.9 Image dimensional adjustment at the scanning section"
- (10) Perform "Automatic gamma adjustment" <PPC> (05-7869).
 P. 6-27 "6.2.1 Automatic gamma adjustment"
- (11) Perform "Automatic gamma adjustment" <PRT> (05-8008).
 P. 6-44 "6.3.1 Automatic gamma adjustment"

Notes:

Usually, it is only necessary to perform automatic gamma adjustment for [Plain paper]; however if other paper is used, perform automatic gamma adjustment per paper type.

[D] Set line adjustment mode

- (1) Turn the power OFF.
- (2) Start up with the Setting Mode (08).
- (3) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (4) Set "Line adjustment mode" to "0: For factory shipment" (08-9010).

Notes:

Be sure to change the setting of "Line adjustment mode" (08-9010) to "0: For factory shipment". Since "1: For line" is set for "Line adjustment mode" in SRAM supplied as a service part, number of prints is not counted unless it is changed.

9.2.8 Firmware confirmation after the PC board/HDD replacement

After replacing the PC board/HDD, check the firmware version in the setting mode (08) and confirm if the firmware combination is correct.

Firmware	Code	Remarks
Updating Master data (HDD program data)	08-8952	HD data external version
	08-9900	System software version
Updating System ROM (OS data)	08-9930	System ROM version
Updating Engine ROM (Engine firmware)	08-9901	Engine ROM version
Updating Scanner ROM (Scanner firmware)	08-9902	Scanner ROM version
Updating RADF ROM (RADF firmware)	08-9903	RADF ROM version
Updating Finisher ROM	08-9904	Finisher ROM version Saddle stitcher ROM version
	08-9944	Hole punch unit ROM version
	08-9945	Converter board ROM version
Updating FAX ROM	08-9905	FAX ROM version

9.2.9 License re-registration using the one-time dongle

[1] Re-registration when the board is replaced

The license registered using the one-time dongle can be re-registered only in the same equipment. When the SYS board or SRAM board (for SYS board) is replaced, follow the procedures for re-registration given below.

- (1) Start up with the Setting Mode (08).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [START] button.
- (4) Press the [INSTALL] button.
- (5) Install the one-time dongle in the equipment (the one which you used for registering the selected license), and then press the [OK] button.
- (6) Select the license to be installed, and then press the [INSTALL] button.
- (7) The screen for notifying that the installation will be started is displayed. Then press the [YES] button.
- (8) After 10 to 40 seconds have passed, the screen for notifying the success of the performance is displayed. Then press the [OK] button. If the screen for notifying a failure of the performance is displayed, quit this operation by pressing the [CLOSE] button. Then check that the one-time dongle, which you used for uploading the selected license, is installed in the equipment.
- (9) Check that the installed license is displayed on the license list.

Remarks:

If there are any other licenses to be returned, repeat from step (4). If there are no other licenses to be returned, press the [CLOSE] button, and then turn the power OFF.

Notes:

This procedure is available only with the one-time dongle used for the previous registration, since the model information registered in it is utilized. Use the same one-time dongle and the equipment when registering the license.

[2] Re-registration when the equipment is replaced due to malfunction

When the equipment has to be replaced due to a malfunction, return the license registered in the equipment to the one-time dongle and register it to the new equipment following the procedure below.

Notes:

The license of the IPsec Enabler (GP-1080) cannot be reinstalled. The one-time dongle to be used is the one for the previous registration of the license. The license is deleted from the equipment and is stored in the one-time dongle.

Do not perform the deletion of PDFa Converter since it is deleted without any return to the one-time dongle.

- (1) Start up with the Setting Mode (08).
- (2) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (3) Key in [3840], and then press the [START] button.
- (4) Select the license to be returned, and then press the [REMOVE] button.

- (5) Install the one-time dongle in the equipment (the one which you used for uploading the selected license), and then press the [OK] button.
- (6) The Remove screen is displayed. Then press the [YES] button.
If this screen is not displayed, check that the one-time dongle is installed in the equipment properly.
- (7) After 10 to 40 seconds have passed, the screen for notifying the success of the performance is displayed. Then press the [OK] button.
If the screen for notifying a failure of the performance is displayed, quit this operation by pressing the [CLOSE] button. Then check that the one-time dongle, which you used for uploading the selected license, is installed in the equipment.
- (8) Check that the returned license is not displayed on the screen.

Remarks:

If there are any other licenses to be returned, repeat from step (4).

If there are no other licenses to be returned, press the [CLOSE] button, and then turn the power OFF.

- (9) Replace the equipment.
- (10) Turn the power ON while pressing [0] and [8] simultaneously.
- (11) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (12) Key in [3840], and then press the [START] button.
- (13) Press the [INSTALL] button.
- (14) Install the one-time dongle in the equipment (the one which you used for returning the selected license before replacing the equipment). Then press the [OK] button.
- (15) Select the license to be installed, and then press the [INSTALL] button.
- (16) The screen for notifying that the installation will be started is displayed. Then press the [YES] button.
- (17) After 10 to 40 seconds have passed, the screen for notifying the success of the performance is displayed. Then press the [OK] button. If the screen for notifying a failure of the performance is displayed, quit this operation by pressing the [NO] button. Then check that the one-time dongle is installed properly in the equipment.
- (18) Check that the installed license is displayed on the license list.

Remarks:

If there are any other licenses to be installed, repeat from step (13). If there are no other licenses to be installed, press the [CLOSE] button, and then turn the power OFF.

9.3 Precautions for Installation of GP-1070 and Disposal of HDD/ Board

9.3.1 Precautions for Installation of GP-1070

When installing the Data Overwrite Enabler (GP-1070), perform the following setting:

3C->6. Erase HDD Securely: HDD securely erasing

This setting is the overwriting method complying with DoD 5220.22-M.

- 1: LOW: This is the normal overwriting method. (This setting is used normally.)
- 2: MEDIUM: This overwriting method is more secure than LOW. The erasing time is between LOW and HIGH.
- 3: HIGH: This is the most secure overwriting method. It takes the longest time to erase data
- 4:SIMPLE: This is the simple overwriting method. It takes the shortest time to erase data.

9.3.2 Precautions when disposing of the HDD

[1] When disposing of ADI-HDD

When disposing of ADI-HDD, perform the following setting:

4C->1. Revert factory initial status HDD

[2] When disposing of SATA-HDD

When disposing of SATA-HDD, perform the following setting:

3C->6. Erase HDD Securely (HDD securely erasing)

This setting is the overwriting method complying with DoD 5220.22-M.

- 1: LOW: This is the normal overwriting method. (This setting is used normally.)
- 2: MEDIUM: This overwriting method is more secure than LOW. The erasing time is between LOW and HIGH.
- 3: HIGH: This is the most secure overwriting method. It takes the longest time to erase data
- 4:SIMPLE: This is the simple overwriting method. It takes the shortest time to erase data.

9.3.3 Precautions when disposing of the SYS board

When disposing of the SYS board, data clearing is not required since important data, such as user information, etc. are stored in the SRAM board.

9.3.4 Precautions when disposing of the SRAM board (for SYS board)

When disposing of the SRAM board (for SYS board), perform 3C ->7:Erase SRAM Securely (SRAM securely erasing) for security reasons.

Notes:

If these codes are performed, the equipment cannot be started up.

9.3.5 Precautions when disposing of the SRAM board (for LGC board)

When disposing of the SRAM board (for LGC board), data clearing is not required since important data, such as user information, etc. are not stored.

10. REMOTE SERVICE

There are following functions as Remote Service.

1. Auto Supply Order
Automatically orders the toner and used waste toner box by FAX or E-mail.
2. Service Notification
Notifies the status of the equipment to the service technician by E-mail or FAX.

10.1 Auto Supply Order

10.1.1 Outline

Automatically orders the toner and used waste toner box.

(1) Placing an Order

There are two ways to place an order.

- FAX
Installation of the FAX board is required.
If the FAX board has not been installed, it is regarded as OFF setting.
- E-mail (E-mail body + TIFF image)

(2) If Order Failure Occurs

The Auto Supply Order is sent as indicated in the following steps.

- Toner cartridge
 1. Toner empty occurs.
 2. The toner cartridge is replaced.
 3. The toner empty counter is incremented when the total number of prints or the pixel counter value exceeds the threshold set in the following self-diagnostic code.

Code	Details	Contents
08-6506	Toner empty determination counter	Selects the counter to determine toner empty. 0: Output pages 1: Pixel counter
08-6507	Threshold setting for toner empty determination (output pages)	Sets the number of output pages to determine toner empty. This setting is valid when "0" is set at 08-6506.
08-6508	Threshold setting for toner empty determination (pixel counter)	Sets the number of the pixel counter value to determine toner empty. This setting is valid when "1" is set at 08-6506.

e.g.) When "0" is set for 08-6506 and "50" is set for 08-6507

The toner empty counter is incremented when 50 sheets are printed after the toner cartridge has been replaced.

4. When the accumulated number of toner empty times reaches the set condition, an order is placed automatically.

- Waste toner box
When the number of the waste toner box full detection times reaches the set condition, an order is placed automatically.

The order condition for the toner cartridge and the waste toner box can be set individually.

(3) If Order Failure Occurs

If some problems occur and the order cannot be placed after registering an order as a job, refer to the standard countermeasure for the FAX/E-mail transmission failure.

10.1.2 Setting Item

To enable Auto Supply Order, the following settings are required.

Notes:

When selecting E-mail to place an order, it is required that sending and receiving E-mails are available. Confirm the details to the administrator.

(1) Self-diagnosis (08) Setting

As the default setting, the Auto Supply Order setting screen is not displayed on the touch panel. To display it, switching the Valid/Invalid setting (08-9783) is required.

0: Valid (FAX/Internet FAX)

1: Valid (FAX/Internet FAX/HTTP)*

2: Invalid (Default)

When changing the setting value from "2" (default) to "0", the Auto Supply Order setting screen is displayed. (* HTTP has not been supported yet.)

(2) Touch Panel Setting

Each item is set from the Auto Supply Order screen on the touch panel.

Entering the password and customer information is required because the setting is made from the ADMIN screen. Setting it with the administrator is a must.

- Basic setting

[ADMIN] > [SERVICE] > [SUPPLY ORDER SETUP] > [ORDER INFORMATION]

AUTO SUPPLY ORDER	Ordered by: [FAX], [MAIL], [HTTP] (*1)
FAX NUMBER	FAX number of supplier (*2)
E-MAIL	E-mail address of supplier (*3)
CUSTOMER	Customer information
NAME	
TEL NUMBER	
E-MAIL	
ADDRESS	
SUPPLIER	Supplier information
NAME	
ADDRESS	
SERVICE TECNICIAN	Service technician information
NUMBER	
NAME	
TEL NUMBER	
E-MAIL	

*1 HTTP has not been supported yet.

*2 Even when "FAX" is selected, the order is not placed without entering the FAX number.

*3 Even when "MAIL" is selected, the order is not placed without entering the E-mail address.

- Detailed setting for the order

[ADMIN] > [SERVICE] > [SUPPLY ORDER SETUP] > [TONER ORDERING]

***** TONER ORDER	Order information (TONER /USED TONER CONTAINER)
PART NUMBER	Part number to be ordered
CONDITION	The number of conditions (*)
QUANTITY	The quantity to be ordered

AUTO ORDER	ON/OFF setting of order for each part
------------	---------------------------------------

* The order is placed when the number of replacement reaches the number specified for the CONDITION.

- FAX number of this equipment (common information)
[ADMIN] > [FAX] > [TERMINAL ID]


ID NAME	ID name of this equipment
FAX NUMBER	FAX number of this equipment

- E-mail information of this equipment (common information)
[ADMIN] > [E-MAIL]

FROM ADDRESS	E-mail address of this equipment (*)
FROM NAME	E-mail username of this equipment

* When sending an E-mail, validity of the address is checked. If the address is invalid, it is not sent.

(3) Output of setting list of the Auto Supply Order.

1. Enter the Service UI Mode.  P. 5-5 "5.2 Service UI"
2. Select "FAX LIST PRINT MODE" and then press [NEXT].
3. Select "SUPPLY ORDER LIST" and then press [PRINT].

10.1.3 Setting procedure

- (1) Start up the self-diagnosis setting mode 08-9783, and then change the setting value to "0".
- (2) Turn the power OFF, and then ON.
- (3) Press the [USER FUNCTIONS] button to enter the user function screen.
- (4) Press the [ADMIN] button.
When the Administrator Password has been set, ADMINISTRATOR PASSWORD screen is displayed.

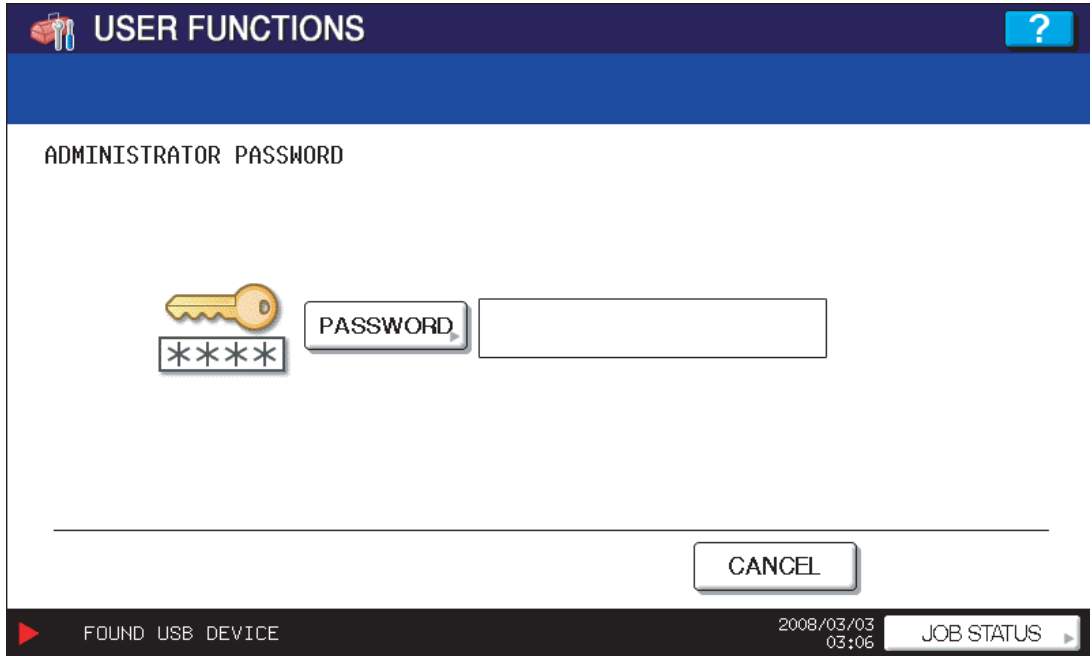


Fig.10-1

- (5) Press the [PASSWORD] button and the screen is switched to a full keyboard. Then key in the Administrator Password and press the [OK] button.
* Confirm the password to the administrator.

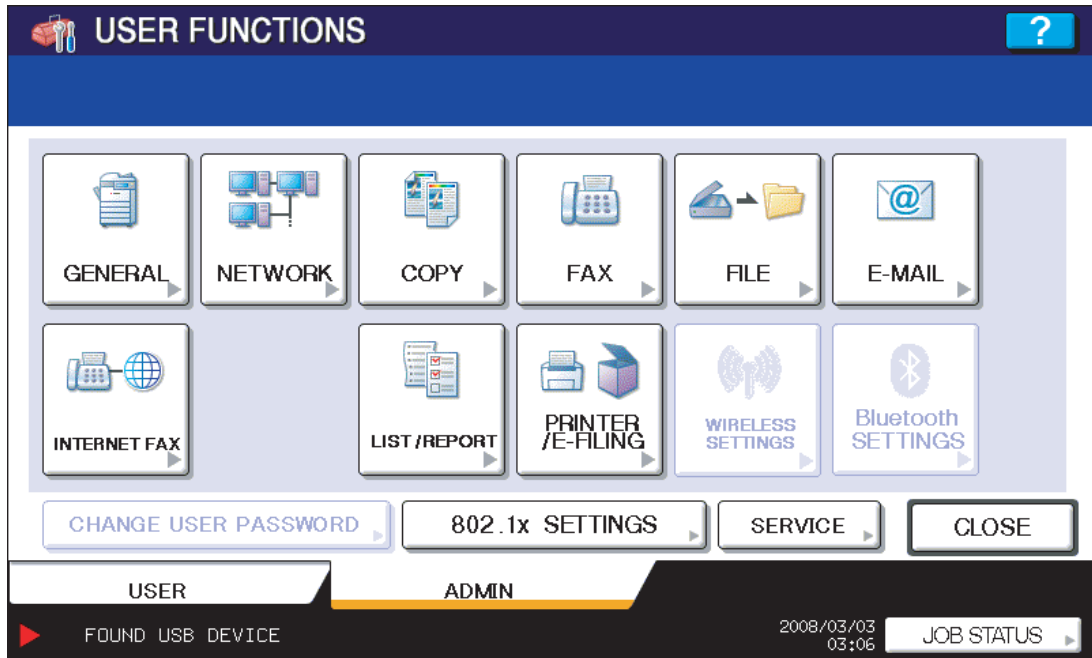


Fig.10-2

- (6) Press the [SERVICE] button in the ADMIN screen.
- (7) The SERVICE screen is displayed.

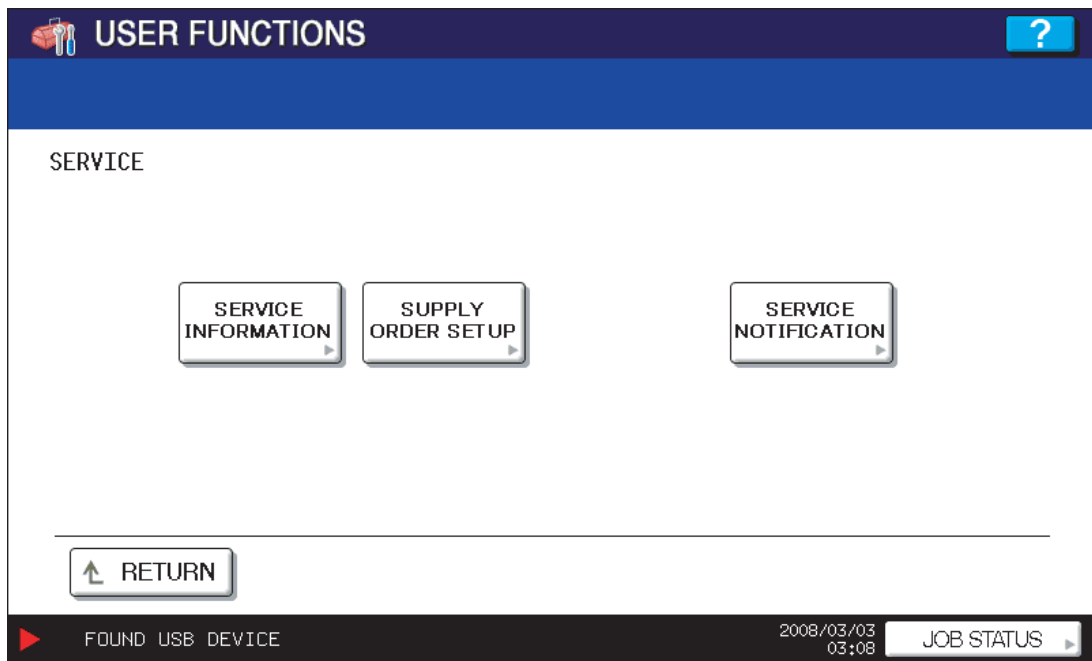


Fig.10-3

- (8) Press the [SUPPLY ORDER SETUP] button.

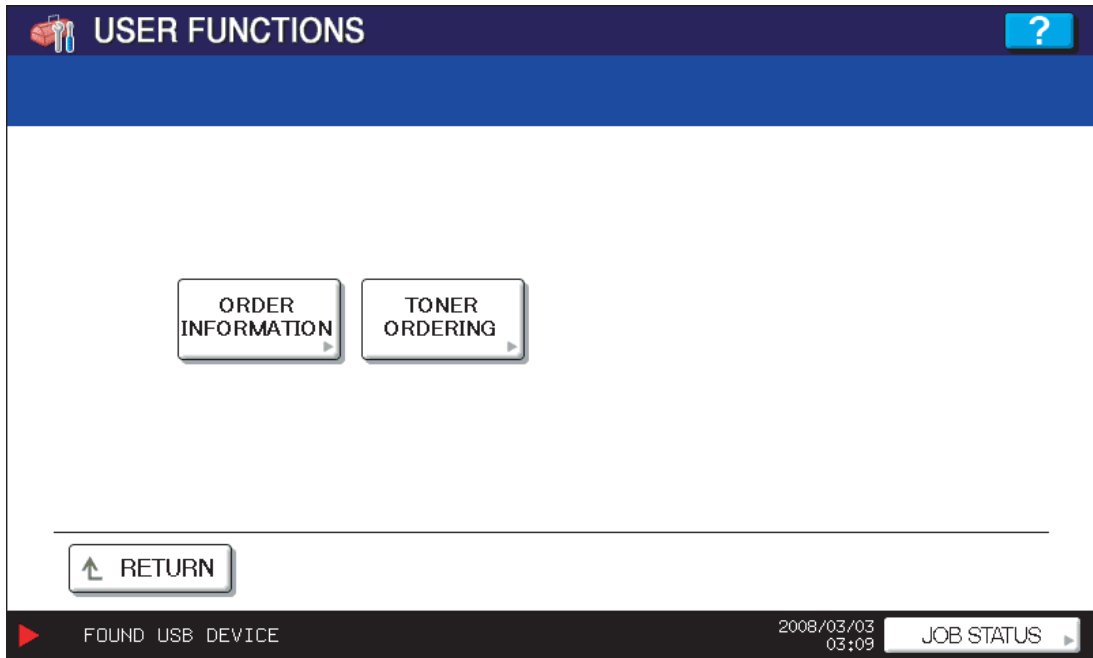


Fig.10-4

- (9) Press the [ORDER INFORMATION] button.
- (10) The ORDER INFORMATION screen is displayed.

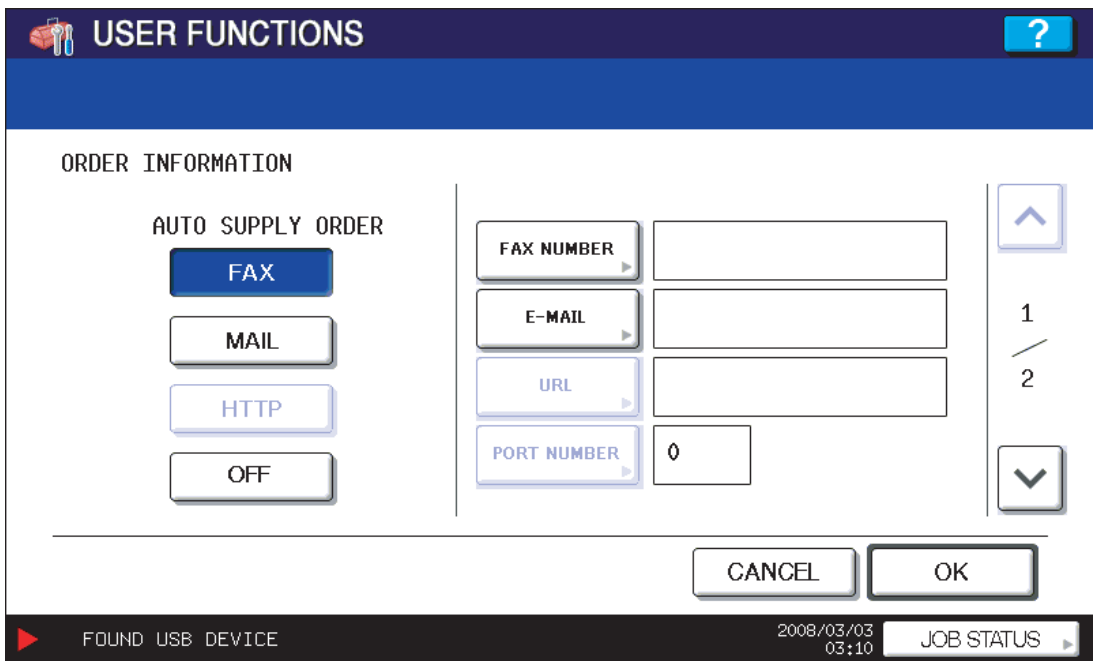


Fig.10-5

- (11) Press the buttons on the screen of ORDER INFORMATION to set the required item.

[FAX]/[MAIL]/
[OFF]

Select the [FAX] or the [MAIL] button for the transmitting way of order.
(HTTP has not been supported yet.)
[OFF]: Turn off the AUTO SUPPLY ORDER function.

- [FAX NUMBER] Input the FAX number of supplier.
 (To transmit by FAX, the order cannot be placed automatically if you do not input the number.)
- [E-MAIL] Input the E-mail address of supplier.
 (To transmit by E-mail, the order cannot be placed automatically if you do not input the address.)

- (12) Press the scroll button.
 (Press the [OK] button to register, and then the screen returns to the (7) SERVICE screen.
 Press the [CANCEL] button to cancel this register, and then the screen returns to the (7) SERVICE screen.)
- (13) The SUPPLIER screen is displayed.

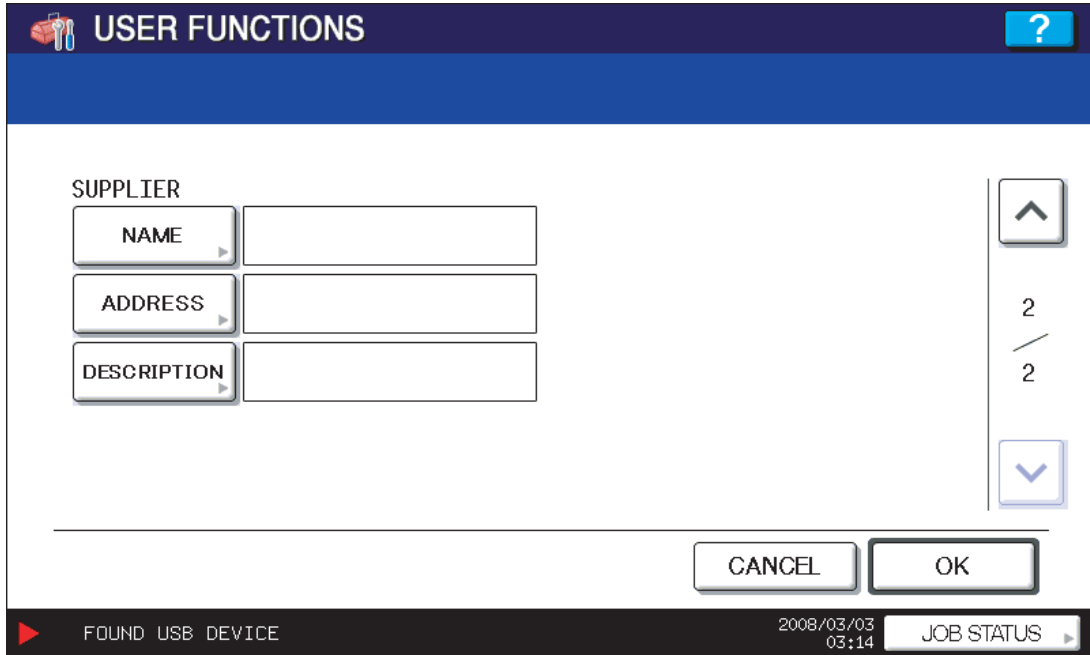


Fig.10-6

- (14) Press the buttons of the screen of SUPPLIER to set the required item.

- [NAME] Input the name of supplier.
 [ADDRESS] Input the address of supplier.

- (15) Press the [OK] button.
- (16) The SERVICE screen is displayed.

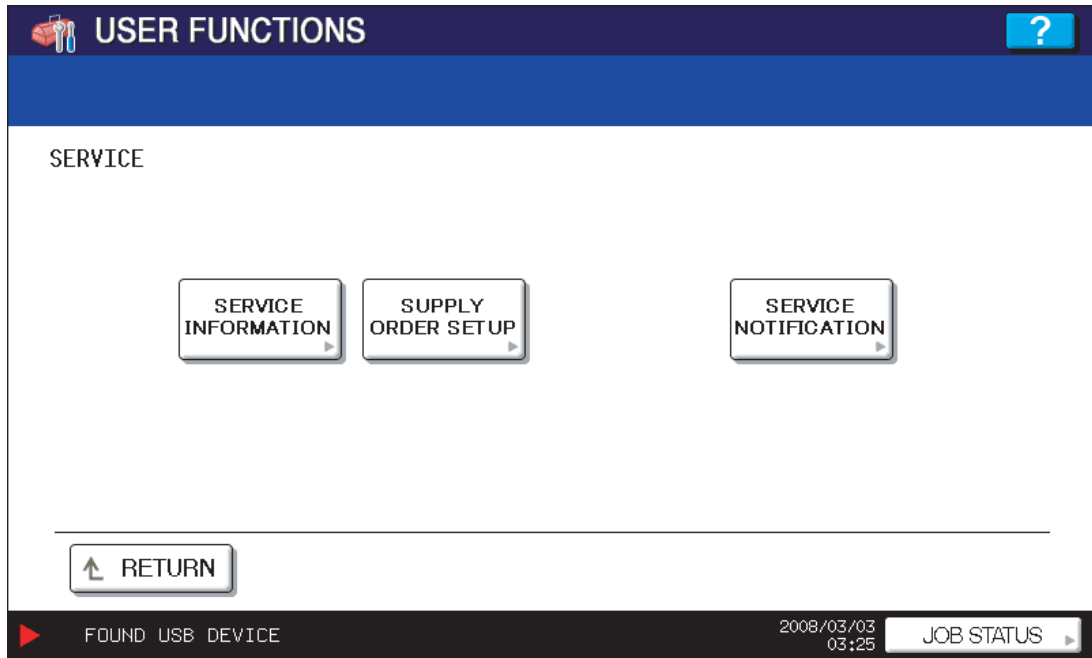


Fig.10-7

- (17) Press the [SERVICE INFORMATION] button.
- (18) The CUSTOMER/SERVICE TECHNICIAN screen is displayed.

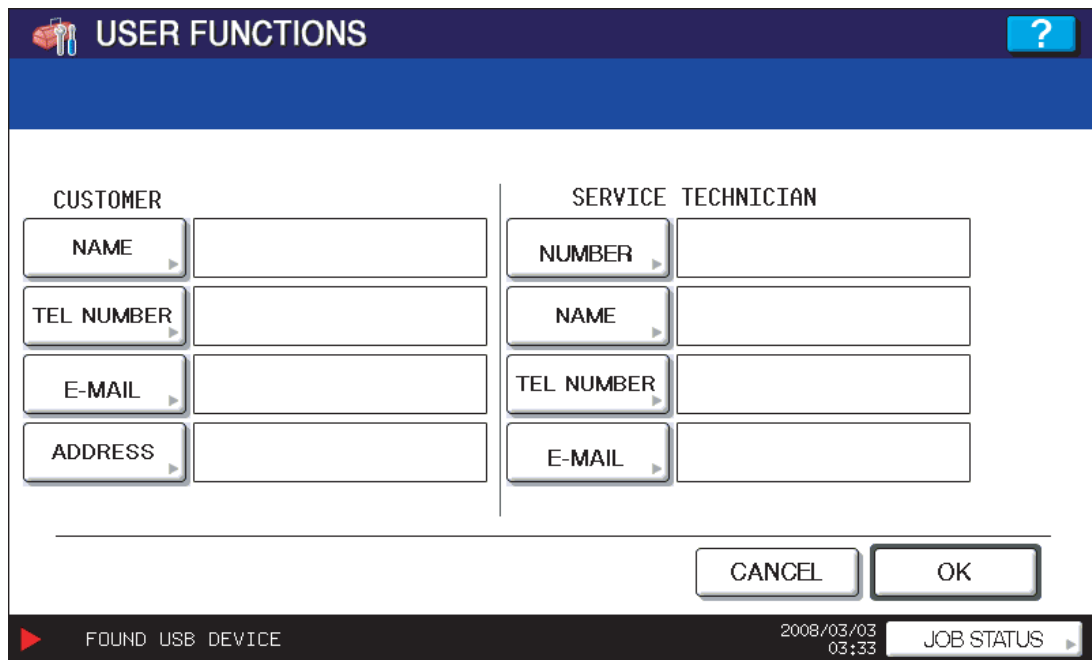


Fig.10-8

- (19) Press the buttons of the screen of CUSTOMER/SERVICE TECHNICIAN to set the required item.
CUSTOMER

- [NAME] Input the name of customer.
- [TEL NUMBER] Input the telephone number of customer.
- [E-MAIL] Input the E-mail address of customer.

[ADDRESS] Input the address of customer.

SERVICE TECHNICIAN

[NUMBER] Input the number of SERVICE TECHNICIAN.

[NAME] Input the name of SERVICE TECHNICIAN.

[TEL NUMBER] Input the telephone number of SERVICE TECHNICIAN.

[E-MAIL] Input the E-mail address of SERVICE TECHNICIAN.

(20) Press the [OK] button to register and complete the order information setting.

(21) The SERVICE screen is returned.

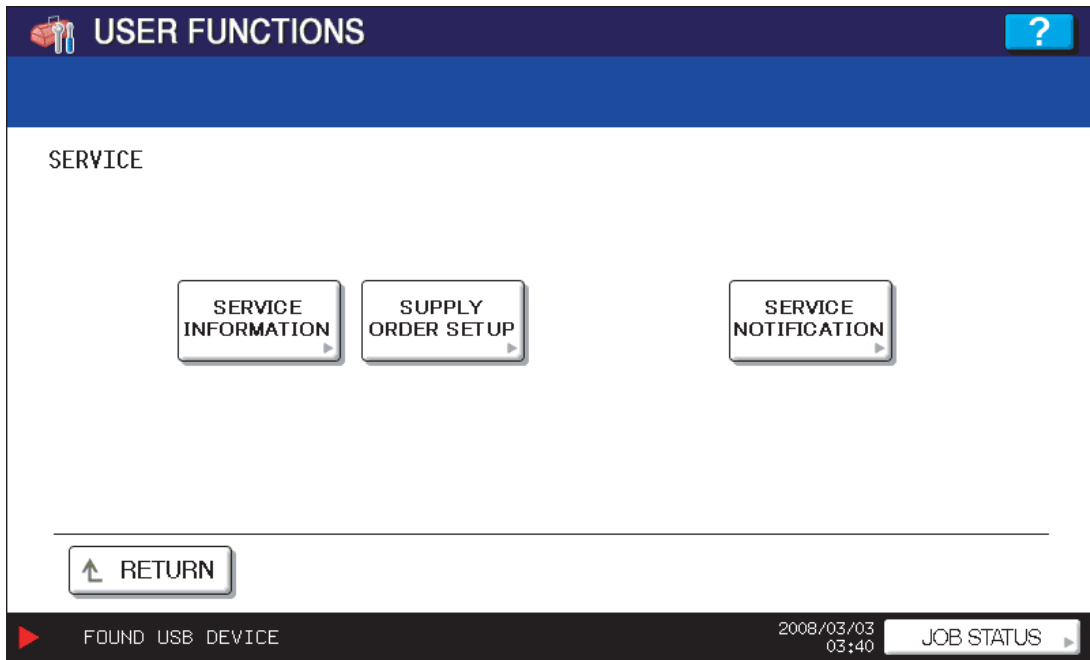


Fig.10-9

(22) Press the [SUPPLY ORDER SETUP] button.

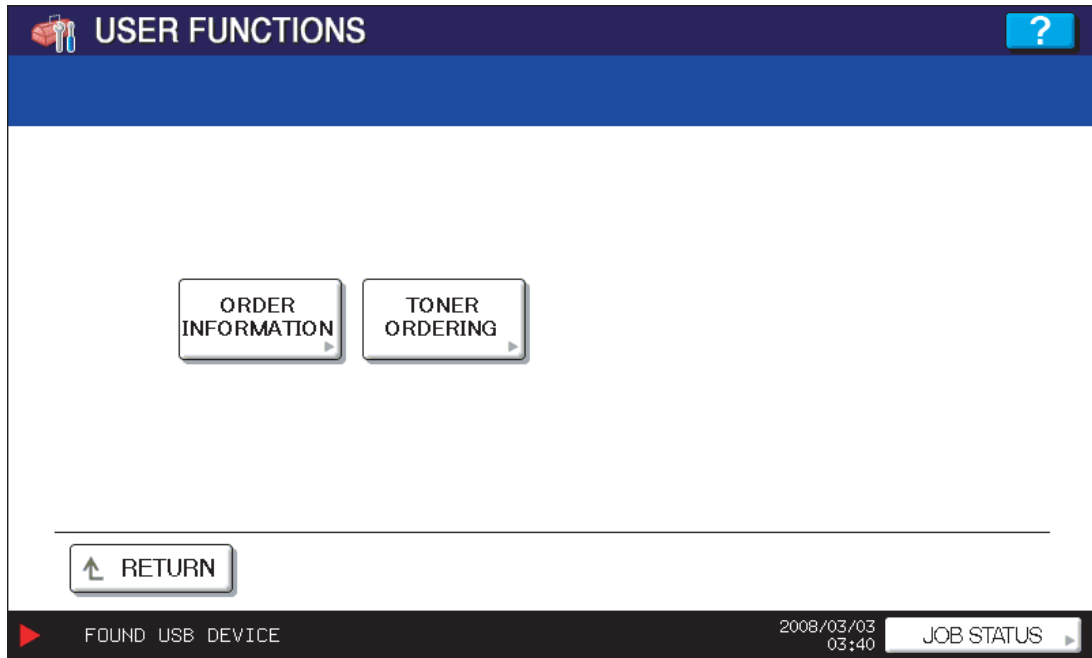


Fig.10-10

(23) Press the [TONER ORDERING] button.

(24) The TONER ORDERING screen is displayed.

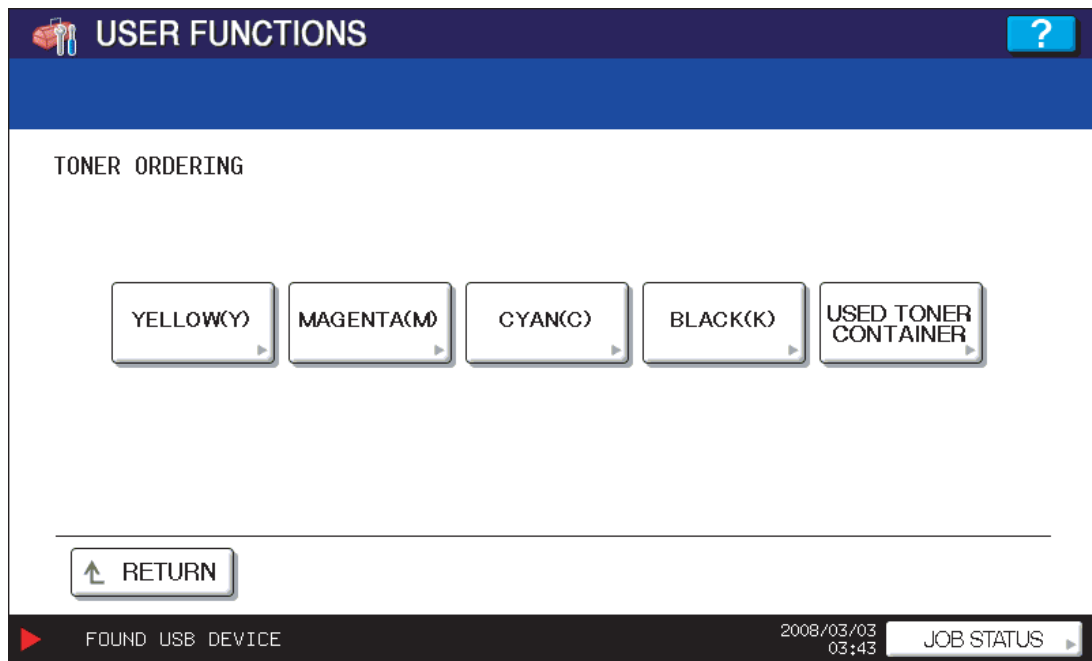


Fig.10-11

(25) Select the part to be ordered. (Press the [YELLOW(Y)] button.)

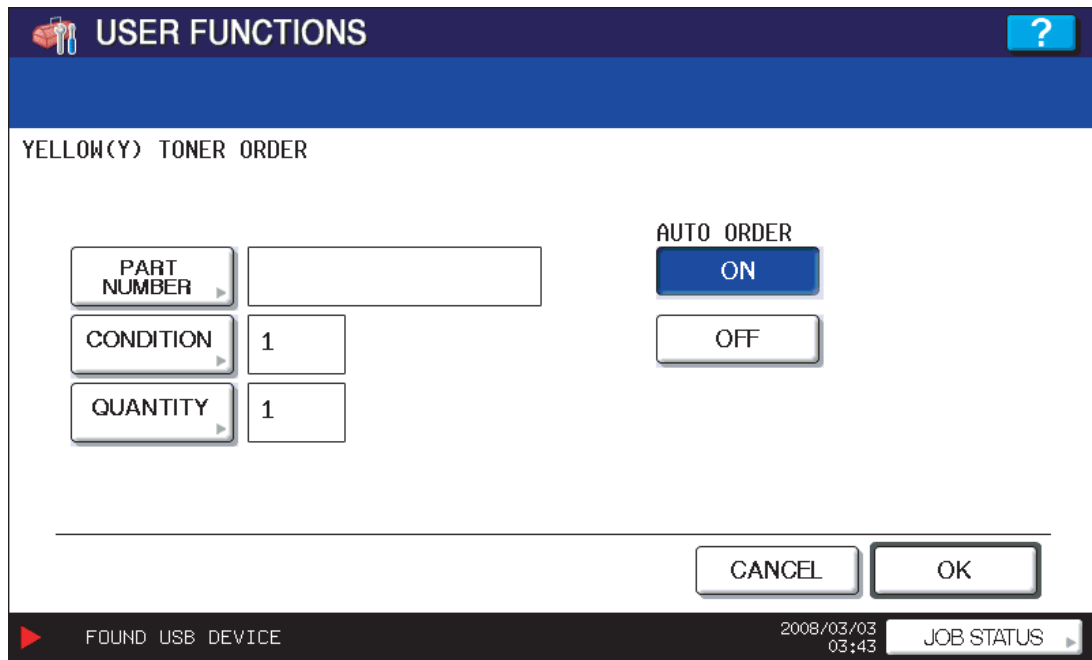


Fig.10-12

(26) Input the order information of TONER.

- [PART NUMBER] Toner number
- [CONDITION] The order is placed when the accumulated number of toner empty times reaches the value set in here.
- [QUANTITY] Quantity to be ordered

AUTO ORDER

- [ON]/[OFF] Allows you to select whether each part to be ordered is placed automatically or not.

(27) Press the [OK] button to register the setting of toner order.

(28) The TONER ORDERING screen is displayed.

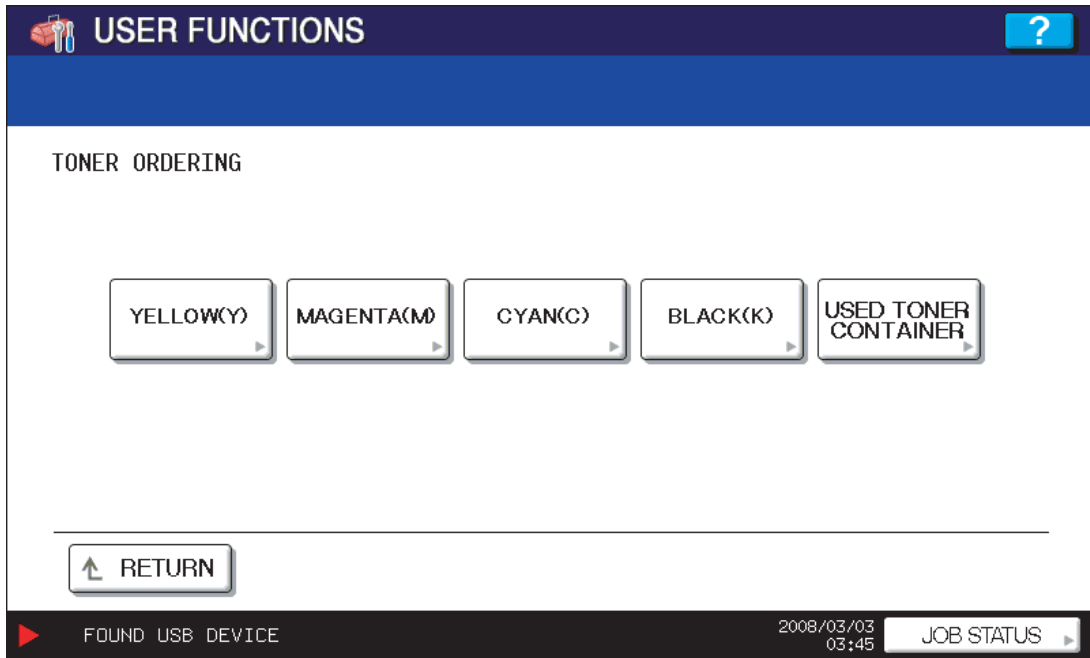


Fig.10-13

- (29) Press the [MAGENTA(M)] / [CYAN(C)] / [BLACK(K)] / [USED TONER CONTAINER] button, and then input the order information in the same way.

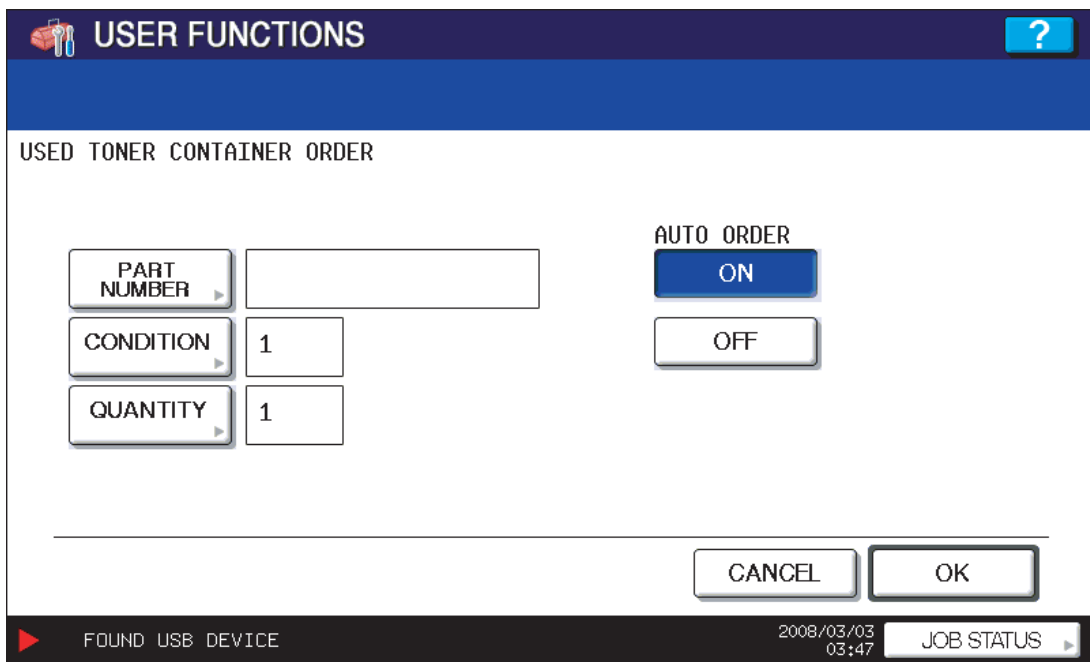


Fig.10-14

- (30) Press the [OK] button to register the order information.
- (31) The screen returns to the TONER ORDERING.
- (32) Press the [USER FUNCTION] button to be switched from the ADMIN screen on touch panel and returned to the BASIC screen, so that the setting of Auto Supply Order is finished.

Notes:

Auto Supply Order setting is also available from the following setting mode (08).

Items	08 code	Contents
The transmitting way of order [FAX]/[MAIL] / [OFF]	9750	0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF
SUPPLIER [FAX NUMBER]	9751	Maximum 32 digits
SUPPLIER [E-MAIL]	9752	Maximum 192 letters
CUSTOMER [NAME]	9756	Maximum 50 letters
CUSTOMER [TEL NUMBER]	9757	Maximum 32 digits
CUSTOMER [E-MAIL]	9758	Maximum 192 letters
CUSTOMER [ADDRESS]	9759	Maximum 100 letters
SUPPLIER [NAME]	9764	Maximum 50 letters
SUPPLIER [ADDRESS]	9765	Maximum 100 letters
SERVICE TECHNICIAN [NUMBER]	9760	Maximum 5 digits
SERVICE TECHNICIAN [NAME]	9761	Maximum 50 letters
SERVICE TECHNICIAN [TEL NUMBER]	9762	Maximum 32 digits
SERVICE TECHNICIAN [E-MAIL]	9763	Maximum 192 letters
Remarks [DESCRIPTION]	9766	Maximum 128 letters
RESULT PRINTING [OFF] / [ALWAYS] / [ON ERROR]	9782	0: OFF 1: Always 2: ON Error
YELLOW(Y) TONER [PART NUMBER]	9773	Maximum 20 digits
YELLOW(Y) TONER [CONDITION]	9775	1-99
YELLOW(Y) TONER [QUANTITY]	9774	1-99
MAGENTA(M) TONER [PART NUMBER]	9770	Maximum 20 digits
MAGENTA(M) TONER [CONDITION]	9772	1-99
MAGENTA(M) TONER [QUANTITY]	9771	1-99
CYAN(C) TONER [PART NUMBER]	9767	Maximum 20 digits
CYAN(C) TONER [CONDITION]	9769	1-99
CYAN(C) TONER [QUANTITY]	9768	1-99

Items	08 code	Contents
BLACK(K) TONER [PART NUMBER]	9776	Maximum 20 digits
BLACK(K) TONER [CONDITION]	9778	1-99
BLACK(K) TONER [QUANTITY]	9777	1-99
USED TONER CONTAINER [PART NUMBER]	9779	Maximum 20 digits
USED TONER CONTAINER [CONDITION]	9781	1-99
USED TONER CONTAINER [QUANTITY]	9780	1-99

10.1.4 Order Sheet Format

The sample of order sheet is as follows.

- (1) FAX (This format is the same as that of TIFF image attached E-mail.)
 *1 Part not to be ordered is not output. (Less space between the lines)

DATE & TIME	:99-99-'99 99:99
CUSTOMER NUMBER	:XXX
CUSTOMER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CUSTOMER E-MAIL ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SERVICE TECHNICIAN TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SERVICE TECHNICIAN E-MAIL	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SUPPLIER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SUPPLIER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

	PART NUMBER	QUANTITY
TONER CARTRIDGE		
CYAN	:XXXXXXXXXXXX	99
MAGENTA	:XXXXXXXXXXXX	99
YELLOW	:XXXXXXXXXXXX	99
BLACK	:XXXXXXXXXXXX	99
USED TONER CONTAINER	:XXXXXXXXXXXX	99

} (*1)

DESCRIPTION AREA

.....

DEVICE DESCRIPTION	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
SERIAL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE FAX NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE E-MAIL ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX

	TOTAL	BLACK	TWIN COLOR	FULL COLOR
PRINT COUNTER	999999999	999999999	999999999	999999999
SCAN COUNTER	999999999	999999999	999999999	999999999

TONER INFORMATION

YELLOW REMAINING QUANTITY (%)	: 0000059
MAGENTA REMAINING QUANTITY (%)	: 0000060
CYAN REMAINING QUANTITY (%)	: 0000061
BLACK REMAINING QUANTITY (%)	: 0000062

Fig.10-15

DESCRIPTION AREA: Remarks
 DEVICE DESCRIPTION: Model name
 SERIAL NUMBER: Serial number
 DEVICE FAX NUMBER: Fax number
 DEVICE E-MAIL ADDRESS: E-mail address

(2) E-MAIL (TIFF image attached with the E-mail is the same format with that of the FAX order sheet.)

SUBJECT: SUPPLY ORDER REQUEST

*1 Part not to be ordered is not output. (Less space between the lines)

```
Date&Time: '08-04-14 00:17
Customer Number: a1 MachineName: TOSHIBA e-STUDIO3520C
SerialNumber: 1234567890
Device FAX Number: 456
Device Email: aaa@linux.nam1.local
OrderInformation:
CYAN PartNumber: CYAN-01 Quantity: 15
MAGENTA PartNumber: MAGENTA-02 Quantity: 16 } (*1)
BLACK PartNumber: BLACK-04 Quantity: 18
CounterInformation:
PrintCounter(Small) FullColor: 0 TwinColor: 0 Black: 150
PrintCounter(Large) FullColor: 0 TwinColor: 0 Black: 0
ScanCounter FullColor: 0 TwinColor: 0 Black: 7
```

Fig.10-16

Date&Time:	Order date and time
Customer Number:	Customer number
MachineName:	Model name (MFP model name)
SerialNumber:	Serial number
Device FAX Number:	Fax number
Device Email:	E-mail address
OrderInformation:	Order information
CYAN PartNumber:	Cyan toner cartridge part number
MAGENTA PartNumber:	Magenta toner cartridge part number
BLACK PartNumber:	Black toner cartridge part number
Quantity:	Order quantity
CounterInformation:	Counter information
PrintCounter (Small) FullColor: 0 TwinColor: 0 Black:	Print count (Small size) for Full color, Twin color and Black
PrintCounter (Large) FullColor: 0 TwinColor: 0 Black:	Print count (Large size) for Full color, Twin color and Black
ScanCounter FullColor: 0 TwinColor: 0 Black:	Scan count
	Scan count for Full color, Twin color and Black

(3) Result list

*1 Part not to be ordered is not output. (Less space between the lines)

DATE & TIME	ORDER XXXXXXXXX	:99-99-'99 99:99
CUSTOMER NUMBER	:XXX	
CUSTOMER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
CUSTOMER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
CUSTOMER TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
CUSTOMER E-MAIL ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
SERVICE TECHNICIAN		
TEL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
SERVICE TECHNICIAN E-MAIL	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
SUPPLIER NAME	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
SUPPLIER ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	

	PART NUMBER	QUANTITY
TONER CARTRIDGE		
CYAN	:XXXXXXXXXXXX	99
MAGENTA	:XXXXXXXXXXXX	99
YELLOW	:XXXXXXXXXXXX	99 (*1)
BLACK	:XXXXXXXXXXXX	99
USED TONER CONTAINER	:XXXXXXXXXXXX	99

DESCRIPTION AREA

.....

DEVICE DESCRIPTION	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
SERIAL NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE FAX NUMBER	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX
DEVICE E-MAIL ADDRESS	:XXXXXXXXXXXXXXXXXXXXXXXXXXXX

	TOTAL	BLACK	TWIN COLOR	FULL COLOR
PRINT COUNTER	999999999	999999999	999999999	999999999
SCAN COUNTER	999999999	999999999	999999999	999999999

TONER INFORMATION

YELLOW REMAINING QUANTITY (%)	: 00000059
MAGENTA REMAINING QUANTITY (%)	: 00000059
CYAN REMAINING QUANTITY (%)	: 00000059
BLACK REMAINING QUANTITY (%)	: 00000059

Fig.10-17

- ORDER SUCCESSFUL/FAILURE: Automatic supply ordering: transmission success or failure
- DATE & TIME: Order date and time
- CUSTOMER NUMBER: Customer number
- CUSTOMER NAME: Customer name
- CUSTOMER ADDRESS: Customer address
- CUSTOMER TEL NUMBER: Customer telephone number
- CUSTOMER E-MAIL ADDRESS: Customer E-mail address
- SERVICE TECHNICIAN TEL NUMBER: Service technician telephone number
- SERVICE TECHNICIAN E-MAIL: Service technician E-mail address
- SUPPLIER NAME: Supplier name
- SUPPLIER ADDRESS: Supplier address
- PART NUMBER: Order part number
- QUANTITY: Order quantity

TONER CARTRIDGE:	Toner cartridge
	CYAN: Cyan
	MAGENTA: Magenta
	YELLOW: Yellow
	BLACK: Black
USED TONER CONTAINER:	Used toner container (waste toner box)
DESCRIPTION AREA:	Remarks
DEVICE DESCRIPTION:	Model name (MFP model name)
SERIAL NUMBER:	Serial number
DEVICE FAX NUMBER:	Fax number
DEVICE E-MAIL ADDRESS:	E-mail address
PRINT COUNTER:	Print count
SCAN COUNTER:	Scan count
TOTAL:	Total
BLACK:	Black
TWIN COLOR:	Twin color
FULL COLOR:	Full color
YELLOW REMAINING QUANTITY (%)	Toner remaining quantity (Yellow)
MAGENTA REMAINING QUANTITY (%)	Toner remaining quantity (Magenta)
CYAN REMAINING QUANTITY (%)	Toner remaining quantity (Cyan)
BKACKREMAINING QUANTITY (%)	Toner remaining quantity (Black)

10.2 Service Notification

10.2.1 Outline

This function automatically notifies the status of the equipment to the service technician by E-mail or FAX. The following three are the items to be notified.

- Total counter notification
When this function is effective, it notifies each counter information periodically (on the set date and time every month).
- Service call notification (E-mail only)
When this function is effective, it notifies the corresponding error code and such at a service call error.
- PM counter notification
When this function is effective, it notifies that the PM timing has come when the present PM count has reached to its setting value, or the present PM driving count has reached to its setting value.
- Toner near empty notification
When this function is effective, it notifies each counter information and toner cartridge information if toner near empty occurs.

10.2.2 Setting

Notes:

When using this function, it is required that sending and receiving E-mails or FAXes are available. Confirm the details to the administrator.

[1] Preparation

The screen to set this function is not displayed at the default setting.
Set this screen to be displayed with the following code (08).

- 08-9604 Setting of notification display
0: Invalid (Default)
1: Valid

[2] Setting procedure

- (1) Press the [USER FUNCTIONS] button and select the [ADMIN] button. Then enter the password and press the [OK] button.
Confirm the password to the administrator.

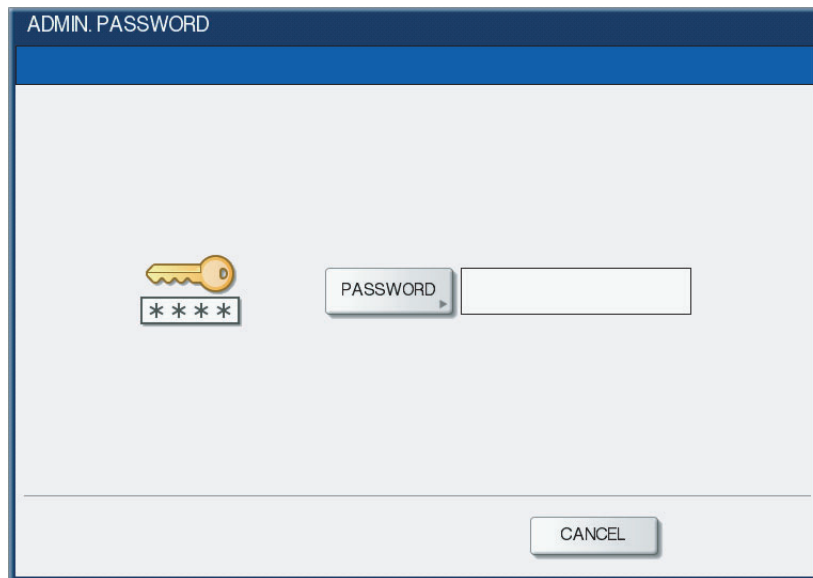


Fig.10-18

- (2) Press the [SERVICE] button.

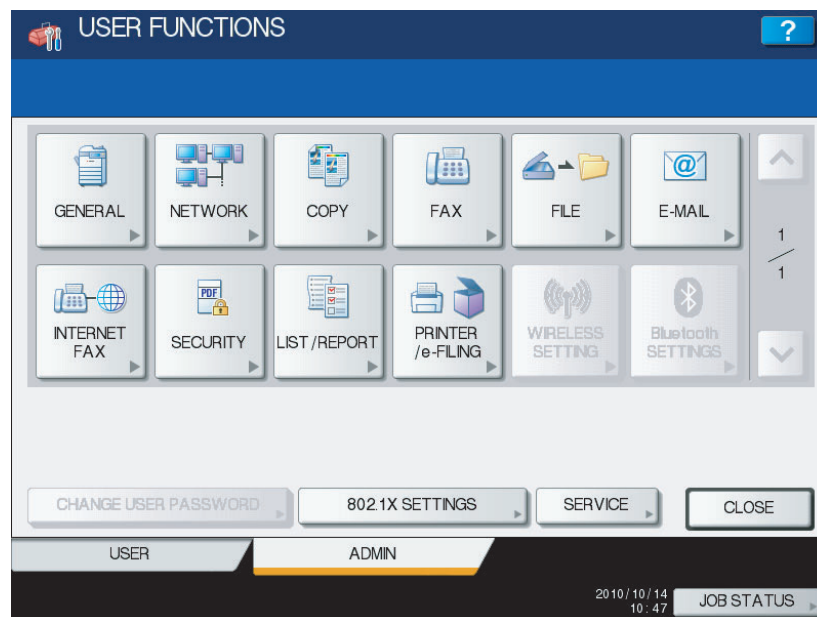


Fig.10-19

- (3) Press the [SERVICE NOTIFICATION] button.

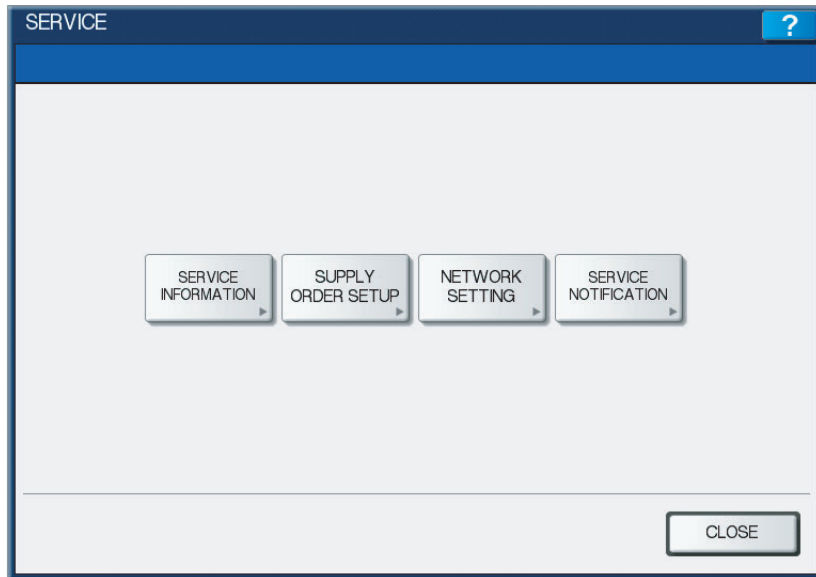


Fig.10-20

- (4) Press the [E-MAIL] or [FAX] button in "SERVICE NOTIFICATION".
When the [OFF] button is pressed, all functions related Service Notification become ineffective.

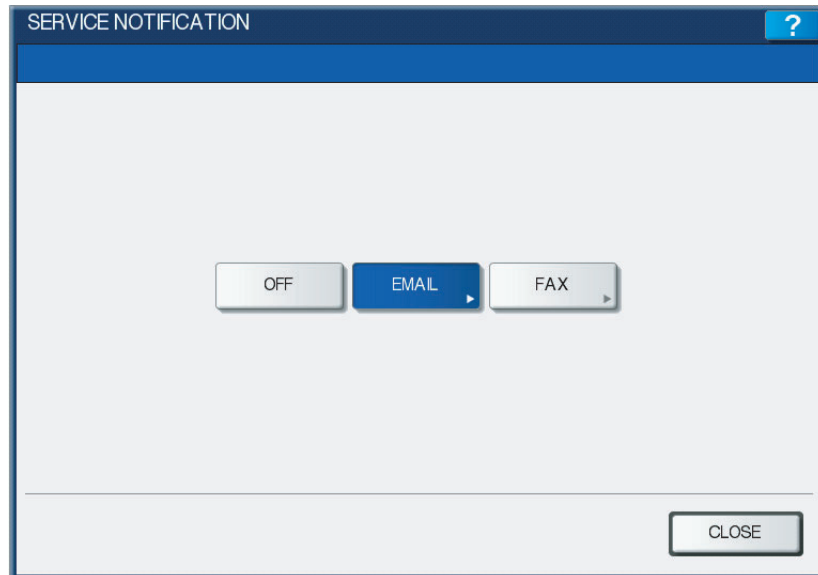


Fig.10-21

- (5) Enter the E-mail address or FAX number of the destination.
When pressing the [E-MAIL] button, the screen is switched to a full keyboard. Then enter the E-mail addresses and press the [OK] button. (Maximum 3 addresses can be set.)

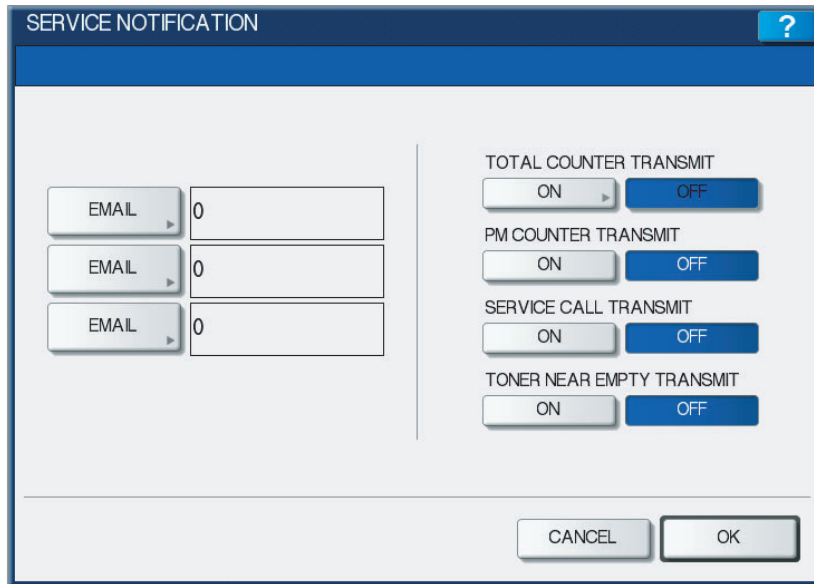


Fig.10-22

Press the [FAX NUMBER] button, key in the FAX number and then press the [OK] button.

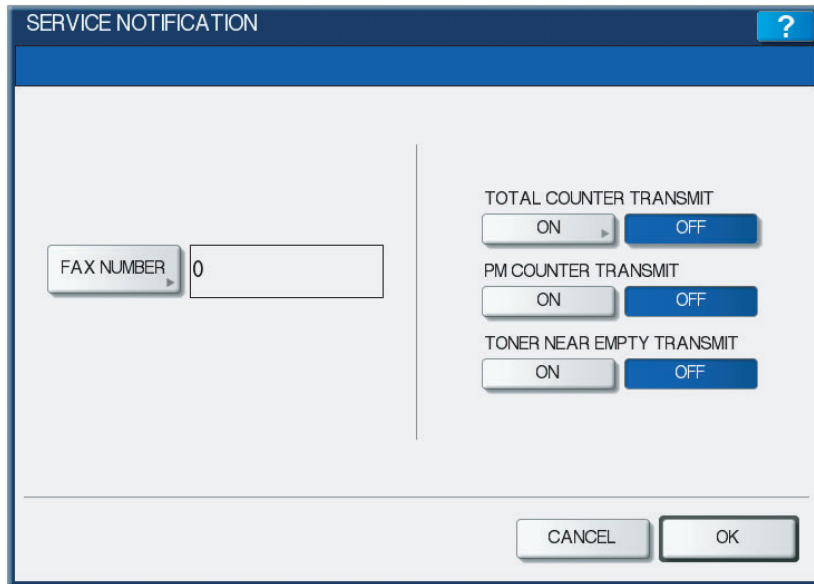


Fig.10-23

- (6) Press the [ON] button to notify or the [OFF] button not to notify each item for E-mail and FAX. When Total Count Transmit is set to ON, the screen to set the notification date is displayed. Then set the notification date with the following procedure.

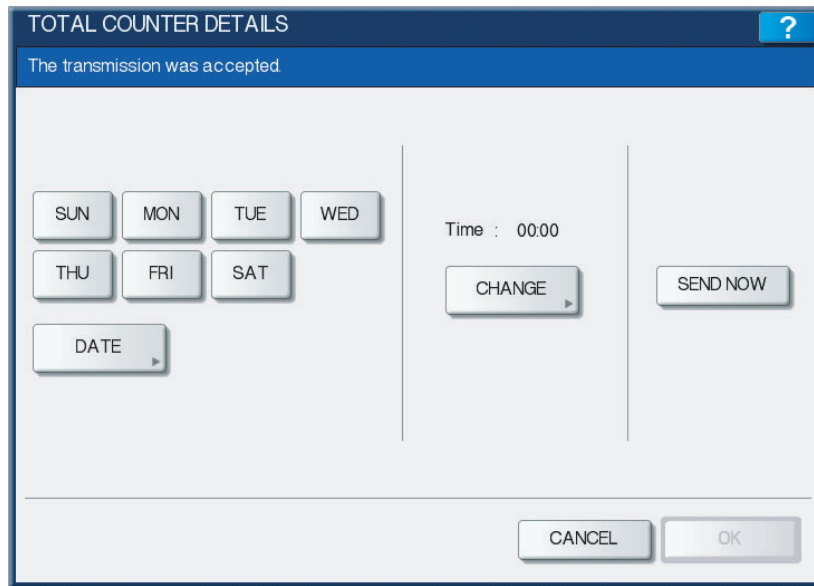


Fig.10-24

Set the date and time of the Total Counter.

The following 3 items can be specified for the date setting, and more than one day of the week also can be selected.

- Day of the week (More than one day can be selected.)
- Notify Date 1
- Notify Date 2

You can send the Total Counter immediately without the above settings by pressing the [SEND NOW] button.

- **Day of the week ([SUN] to [SAT] buttons)**
Pressing the buttons ([Sunday] to [Saturday]) of the desired day makes transmission on every specified day. More than one day can be selected.
 - * This does not affect the settings of "Notify Date 1" and "Notify Date 2".
- **Notify Date 1 and Notify Date 2 ([DATE] button)**
Pressing the [DATE] button sets up to 2 dates on which you want to send data.
 - * This is not affected by the specified day of the week.

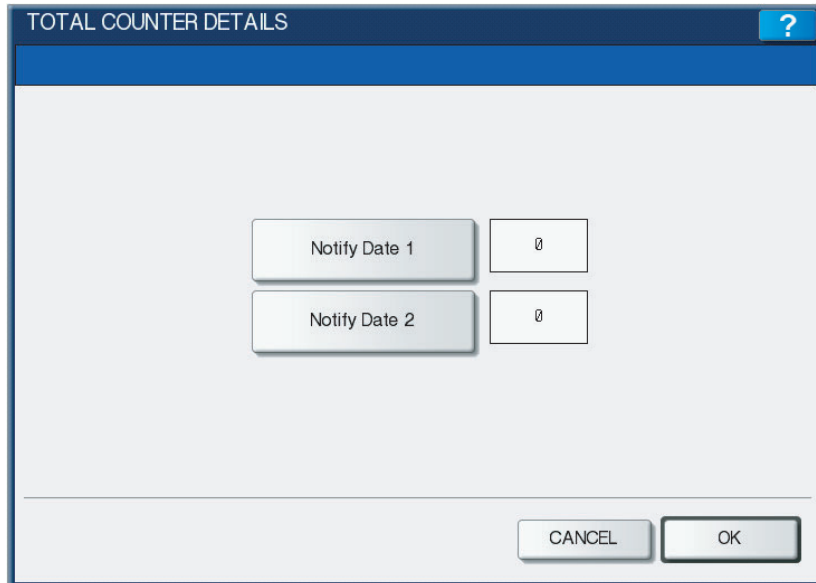


Fig.10-25

Key in the date (acceptable values: 0-31) in “Notify Date 1” or “Notify Date 2” and press the [OK] button.

- **Time setting ([CHANGE] button)**

Pressing the [CHANGE] button sets the time at which you want to send data.

This is the time when data are sent with “Day of the week”, “Notify Date 1” and “Notify Date 2”.

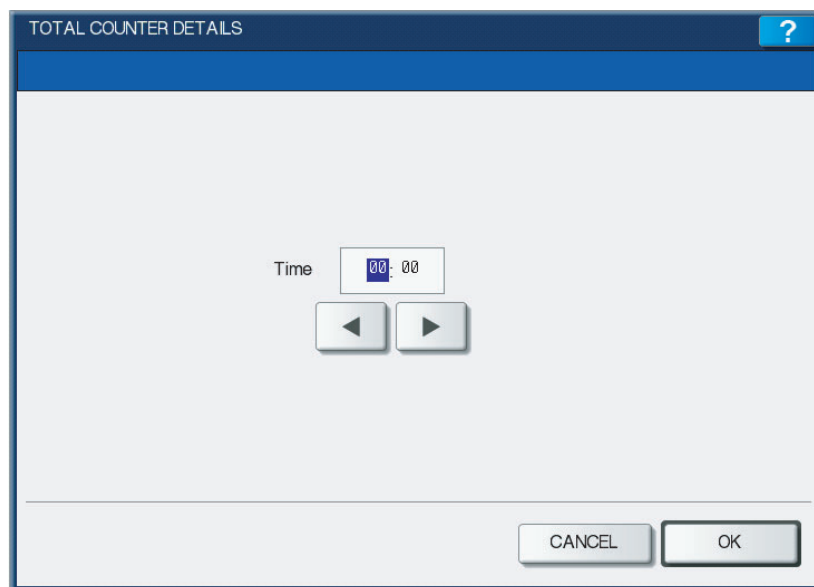


Fig.10-26

Key in the time (acceptable values: 00:00-23:59) in “Time”.

Key in the time in the hour column of “Time”, press the scroll button, key in the time in the minute column of “Time”.

After all the settings are completed, press the [OK] button. The display returns to the screen in step (5).

- (7) Press the [OK] button. The setting completes.

Notes:

Service Notification setting is also available from the following setting mode (08).

Items	08 code	Contents
Service Notification setting	9793	0: OFF (Invalid) 1:E-mail 2:FAX
E-mail address 1	9794	Maximum 192 letters
E-mail address 2	9607	Maximum 192 letters
E-mail address 3	9608	Maximum 192 letters
FAX number	9784	Maximum 32 digits
Total Counter Transmit setting	9795	0: OFF (Invalid) 1: ON (Valid)
Total counter transmission date setting	9796	0 to 31
Total counter transmission date setting(2)	9880	0 to 31
Day of total counter data transmission	9881	1 byte 00000000(0)-01111111(127) From the 2nd bit - Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday
Total counter transmission interval setting (Hour/Minute/Minute)	9606	00:00-23:59
Service Call Transmit setting	9605	0: OFF (Invalid) 1: ON (Valid)
PM Counter Transmit setting	9797	0: OFF (Invalid) 1: ON (Valid)

10.2.3 Items to be notified

The items to be notified are shown below.

1. Total Counter Transmit / PM Counter Transmit by E-mail

Subject: Counter Notification

(In case of the PM Counter Transmit, it is shown as "Periodical Maintenance Notification".)

①	Date	: 04/26/2008 12:34	
②	Machine Model	: TOSHIBA e-STUDIO3520C	
③	SerialNumber	: 1234567890	
④	Total Counter	: 00004787	
⑤	Supplier:		
	Name	: SUPPLIER_NAME	
	Tel Number	: 1122334455	
	E-Mail	: <u>Supplier_emailaddress@cccc.xxx</u>	
	Address	: SUPPLIER_ADDRESS	
⑥	Customer:		
	Name	: CUSTOMER_NAME	
	Tel Number	: 1234567890	
	E-Mail	: <u>customer_emailaddress@dddd.xxx</u>	
	Address	: CUSTOMER_ADDRESS	
⑦	Service Technician:		
	Number	: svc12	
	Name	: SERVICE_TECHNICIAN_NAME	
	Tel Number	: 0987654321	
	E-Mail	: <u>svc@toshibatec.co.jp</u>	
	ChargeCounterFormat:		
⑧	LargeSizeChargeCount		1
⑨	LargeSizeChargePaperDefinition		1
	PMCounterFormat:		
⑩	LargeSizePMCount		1
⑪	LargeSizePMPaperDefinition		0
	Charge Counter:		
		Large	Small
	<Print Counter>		
	Full Color -----		
⑫	Copy	00000000	00000000
⑬	Print	00000000	00000000
	Twin Color -----		
⑭	Copy	00000000	00000000
	Black -----		
⑮	Copy	00000000	00000000
⑯	Print	00000000	00000000
⑰	List	00000000	00000000
⑱	FAX	00000000	00000000
	<Scan Counter>		
	Full Color -----		
⑲	Copy Scan	00000000	00000000
⑳	Net Scan	00000000	00000000
	Twin Color -----		
㉑	Copy Scan	00000000	00000000
	Black -----		
㉒	Copy Scan	00000000	00000000
㉓	FAX Scan	00000000	00000000
㉔	Net Scan	00000000	00000000
	<FAX Counter>		
㉕	Transmit	00000000	00000000
㉖	Receive	00000000	00000000

Fig.10-27

Periodical Maintenance Counter:			
		Pages	Drive Counts
27	K-EPU		
28	Setting	00000000	00000000
	Current	00000000	00000000
29	Y-EPU		
30	Setting	00000000	00000000
	Current	00000000	00000000
31	M-EPU		
32	Setting	00000000	00000000
	Current	00000000	00000000
33	C-EPU		
34	Setting	00000000	00000000
	Current	00000000	00000000
35	K-Dev		
36	Setting	00000000	00000000
	Current	00000000	00000000
37	Y-Dev		
38	Setting	00000000	00000000
	Current	00000000	00000000
39	M-Dev		
40	Setting	00000000	00000000
	Current	00000000	00000000
41	C-Dev		
42	Setting	00000000	00000000
	Current	00000000	00000000
43	Others		
44	Setting	00000000	00000000
	Current	00000000	00000000
45	Printer Error History:		
	Date	Time	ErrorCode Counter
	04/13/2008	16:44	F110 00000000
	04/12/2008	22:28	F110 00000000
	04/12/2008	22:23	F110 00000000
	03/15/2008	22:23	F110 00000000
	02/25/2008	11:12	F110 00000000
	(*)		
	Toner	Remaining Quantity (%)	
46	Yellow	00000000	
47	Magenta	00000000	
48	Cyan	00000000	
49	Black	00000000	

Fig.10-28

- ① Date
- ② Machine model name
- ③ Serial number
- ④ Total counter value
- ⑤ Supplier information
- ⑥ Customer information
- ⑦ Service technician information
- ⑧ Count setting of large-sized paper (Fee charging system counter)
- ⑨ Definition setting of large-sized paper (Fee charging system counter)
- ⑩ Count setting of large-sized paper (PM)
- ⑪ Definition setting of large-sized paper (PM)
- ⑫ Number of output pages in the Copier Function (FULL COLOR)
- ⑬ Number of output pages in the Printer Function (FULL COLOR)

- ⑭ Number of output pages in the Copier Function (TWIN COLOR)
- ⑮ Number of output pages in the Copier Function (BLACK)
- ⑯ Number of output pages in the Printer Function (BLACK)
- ⑰ Number of output pages at the List Print Mode (BLACK)
- ⑱ Number of output pages in the FAX Function (BLACK)
- ⑲ Number of scanning pages in the Copier Function (FULL COLOR)
- ⑳ Number of scanning pages in the Network Scanning Function (FULL COLOR)
- ㉑ Number of scanning pages in the Copier Function (TWIN COLOR)
- ㉒ Number of scanning pages in the Copier Function (BLACK)
- ㉓ Number of scanning pages in the FAX Function (BLACK)
- ㉔ Number of scanning pages in the Network Scanning Function (BLACK)
- ㉕ Number of transmitted pages in the FAX Function (BLACK)
- ㉖ Number of received pages in the FAX Function (BLACK)
- ㉗ PM count setting value / PM driving count setting value [EPU (K)]
- ㉘ PM count present value / PM driving count present value [EPU (K)]
- ㉙ PM count setting value / PM driving count setting value [EPU (Y)]
- ㉚ PM count present value / PM driving count present value [EPU (Y)]
- ㉛ PM count setting value / PM driving count setting value [EPU (M)]
- ㉜ PM count present value / PM driving count present value [EPU (M)]
- ㉝ PM count setting value / PM driving count setting value [EPU (C)]
- ㉞ PM count present value / PM driving count present value [EPU (C)]
- ㉟ PM count setting value / PM driving count setting value [Developer material (K)]
- ㊱ PM count present value / PM driving count present value [Developer material (K)]
- ㊲ PM count setting value / PM driving count setting value [Developer material (Y)]
- ㊳ PM count present value / PM driving count present value [Developer material (Y)]
- ㊴ PM count setting value / PM driving count setting value [Developer material (M)]
- ㊵ PM count present value / PM driving count present value [Developer material (M)]
- ㊶ PM count setting value / PM driving count setting value [Developer material (C)]
- ㊷ PM count present value / PM driving count present value [Developer material (C)]
- ㊸ PM count setting value / PM driving count setting value [Other parts]
- ㊹ PM count present value / PM driving count present value [Other parts]
- ㊺ History error

*1 The latest 20 errors are displayed.

- ④⑥ Toner remaining quantity (Yellow)
- ④⑦ Toner remaining quantity (Magenta)
- ④⑧ Toner remaining quantity (Cyan)
- ④⑨ Toner remaining quantity (Black)

2. Total Counter Transmit / PM Counter Transmit by FAX

*1 In case of the PM Counter Transmit, the title is replaced to "PERIODICAL MAINTENANCE NOTIFICATION".

Sheet 1

COUNTER NOTIFICATION (*1)

①	DATE	: 08/04/14 13:47
②	MACHINE MODEL	: TOSHIBA e-STUDIO3520C
③	SERIAL NUMBER	: 1234567890
④	TOTAL COUNTER	: 00004787
⑤	CUSTOMER NAME	: CUSTOMER_NAME
	CUSTOMER ADDRESS	: CUSTOMER_ADDRESS
	CUSTOMER TEL NUMBER	: 1234567890
	CUSTOMER E-MAIL ADDRESS	: customer_emailaddress@dddd.xxx
⑥	SERVICE TECHNICIAN NUMBER	: svc12
	SERVICE TECHNICIAN NAME	: SERVICE_TECHNICIAN_NAME
	SERVICE TECHNICIAN TEL NUMBER	: 0987654321
	SERVICE TECHNICIAN E-MAIL	: svc@toshibatec.co.jp
⑦	SUPPLIER NAME	: SUPPLIER_NAME
	SUPPLIER ADDRESS	: SUPPLIER_ADDRESS
	SUPPLIER FAX NUMBER	: 5544332211
	SUPPLIER E-MAIL	: supplier_emailaddress@cccc.xxx

Fig.10-29

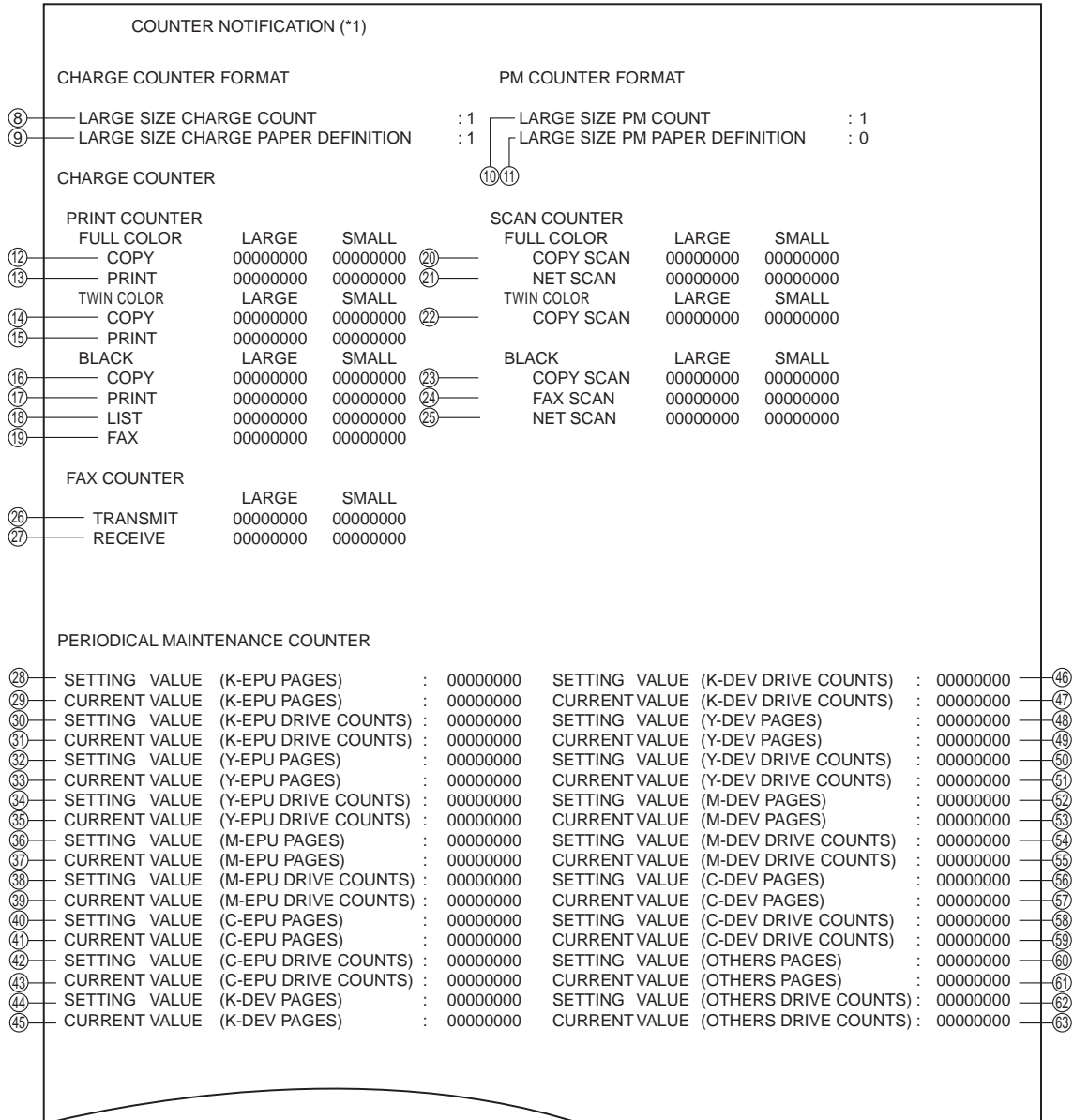


Fig.10-30

COUNTER NOTIFICATION (*1)							
PRINTER ERROR HISTORY							
DATE	TIME	ERROR CODE	COUNTER	DATE	TIME	ERROR CODE	COUNTER
08/04/13	16:44	F110	00000000	08/04/13	16:44	F110	00000000
08/04/12	22:28	F110	00000000	08/04/13	16:44	F110	00000000
08/04/12	22:23	F110	00000000	08/04/13	16:44	F110	00000000
08/03/15	22:23	F110	00000000	08/04/13	16:44	F110	00000000
08/02/25	11:12	F110	00000000	08/04/13	16:44	F110	00000000
TONER INFORMATION							
YELLOW REMAINING QUANTITY (%)			:	00000059			
MAGENTA REMAINING QUANTITY (%)			:	00000059			
CYAN REMAINING QUANTITY (%)			:	00000059			
BLACK REMAINING QUANTITY (%)			:	00000059			

Fig.10-31

- ① Date
- ② Machine model name
- ③ Serial number
- ④ Total counter value
- ⑤ Customer information
- ⑥ Service technician information
- ⑦ Supplier information
- ⑧ Count setting of large-sized paper (Fee charging system counter)
- ⑨ Definition setting of large-sized paper (Fee charging system counter)
- ⑩ Count setting of large-sized paper (PM)
- ⑪ Definition setting of large-sized paper (PM)
- ⑫ Number of output pages in the Copier Function (FULL COLOR)
- ⑬ Number of output pages in the Printer Function (FULL COLOR)
- ⑭ Number of output pages in the Copier Function (TWIN COLOR)
- ⑮ Number of output pages in the Printer Function (TWIN COLOR)
- ⑯ Number of output pages in the Copier Function (BLACK)
- ⑰ Number of output pages in the Printer Function (BLACK)
- ⑱ Number of output pages at the List Print Mode (BLACK)
- ⑲ Number of output pages in the FAX Function (BLACK)

- ②0 Number of scanning pages in the Copier Function (FULL COLOR)
- ②1 Number of scanning pages in the Network Scanning Function (FULL COLOR)
- ②2 Number of scanning pages in the Copier Function (TWIN COLOR)
- ②3 Number of scanning pages in the Copier Function (BLACK)
- ②4 Number of scanning pages in the FAX Function (BLACK)
- ②5 Number of scanning pages in the Network Scanning Function (BLACK)
- ②6 Number of transmitted pages in the FAX Function (BLACK)
- ②7 Number of received pages in the FAX Function (BLACK)
- ②8 PM count setting value [EPU (K)]
- ②9 PM count present value [EPU (K)]
- ③0 PM driving count setting value [EPU (K)]
- ③1 PM driving count present value [EPU (K)]
- ③2 PM count setting value [EPU (Y)]
- ③3 PM count present value [EPU (Y)]
- ③4 PM driving count setting value [EPU (Y)]
- ③5 PM driving count present value [EPU (Y)]
- ③6 PM count setting value [EPU (M)]
- ③7 PM count present value [EPU (M)]
- ③8 PM driving count setting value [EPU (M)]
- ③9 PM driving count present value [EPU (M)]
- ④0 PM count setting value [EPU (C)]
- ④1 PM count present value [EPU (C)]
- ④2 PM driving count setting value [EPU (C)]
- ④3 PM driving count present value [EPU (C)]
- ④4 PM count setting value [Developer material (K)]
- ④5 PM driving count present value [Developer material (K)]
- ④6 PM driving count setting value [Developer material (K)]
- ④7 PM driving count present value [Developer material (K)]
- ④8 PM count setting value [Developer material (Y)]
- ④9 PM driving count present value [Developer material (Y)]
- ⑤0 PM driving count setting value [Developer material (Y)]
- ⑤1 PM driving count present value [Developer material (Y)]
- ⑤2 PM count setting value [Developer material (M)]

- ⑤3 PM driving count present value [Developer material (M)]
- ⑤4 PM driving count setting value [Developer material (M)]
- ⑤5 PM driving count present value [Developer material (M)]
- ⑤6 PM count setting value [Developer material (C)]
- ⑤7 PM driving count present value [Developer material (C)]
- ⑤8 PM driving count setting value [Developer material (C)]
- ⑤9 PM driving count present value [Developer material (C)]
- ⑥0 PM count setting value (Other parts)
- ⑥1 PM driving count present value (Other parts)
- ⑥2 PM driving count setting value (Other parts)
- ⑥3 PM driving count present value (Other parts)
- ⑥4 History of error
 - *2 The latest 20 errors are displayed.
- ⑥5 Toner remaining quantity (Yellow)
- ⑥6 Toner remaining quantity (Magenta)
- ⑥7 Toner remaining quantity (Cyan)
- ⑥8 Toner remaining quantity (Black)

3. Toner near-empty notification by e-mail Subject: Toner Near-Empty Notification

```

1  Date       : 04/26/2008 12:34
2  Machine Model : TOSHIBA e-STUDIO655
3  SerialNumber : 1234567890
4  Total Counter : 00004787
5  Supplier:
   Name       : SUPPLIER_NAME
   Fax Number : 1122334455
   E-Mail     : Supplier_emailaddress@cccc.xxx
   Address    : SUPPLIER_ADDRESS
6  Customer:
   Name       : CUSTOMER_NAME
   Tel Number : 1234567890
   E-Mail     : customer_emailaddress@dddd.xxx
   Address    : CUSTOMER_ADDRESS
7  Service Technician:
   Number     : svc12
   Name       : SERVICE_TECHNICIAN_NAME
   Tel Number : 0987654321
   E-Mail     : svc@toshibatec.co.jp
   ChargeCounterFormat:
8  LargeSizeChargeCount      1
9  LargeSizeChargePaperDefinition  1
   PMCounterFormat:
10 LargeSizePMCount          1
11 LargeSizePMPaperDefinition  0
   Charge Counter:
           Large      Small
   <Print Counter>
   Black -----
12 Copy      00000000  00000000
13 Print     00000000  00000000
14 List      00000000  00000000
15 FAX       00000000  00000000
   <Scan Counter>
   Full Color -----
16 Net Scan  00000000  00000000
   Black -----
17 Copy Scan 00000000  00000000
18 FAX Scan  00000000  00000000
19 Net Scan  00000000  00000000
   <FAX Counter>
20 Transmit  00000000  00000000
21 Receive   00000000  00000000

```

Fig.10-32

Periodical Maintenance Counter:			
	Pages	Drive Counts	

K-EPU			
22	Setting	00000000	00000000
23	Current	00000000	00000000

K-EPU			
24	Setting	00000000	00000000
25	Current	00000000	00000000

Others			
26	Setting	00000000	00000000
27	Current	00000000	00000000

Printer Error History:			
28	Date	Time	ErrorCode Counter

	04/13/2008	16:44	F110 00000000
	04/12/2008	22:28	F110 00000000
	04/12/2008	22:23	F110 00000000
	03/15/2008	22:23	F110 00000000
	02/25/2008	11:12	F110 00000000
)(*1)

29 Toner Cartridge Information:			
Toner Near-Empty Counter			
30	Setting	00000000	
31	Current	00000000	
32	Color code	1	
33	Point Of Destination	0	

Toner Information:			
Toner			

35	Yellow	00000000	
36	Magenta	00000000	
37	Cyan	00000000	
38	Black	00000000	

Fig.10-33

1. Date
2. Machine model name
3. Serial number
4. Total counter value
5. Supplier information
6. Customer information
7. Service technician information
8. Count setting of large-sized paper (Fee charging system counter)
9. Definition setting of large-sized paper (Fee charging system counter)
10. Count setting of large-sized paper (PM)
11. Definition setting of large-sized paper (PM)
12. Number of output pages in the Copier Function (BLACK)
13. Number of output pages in the Printer Function (BLACK)
14. Number of output pages at the List Print Mode (BLACK)
15. Number of output pages in the FAX Function (BLACK)
16. Number of scanning pages in the Network Scanning Function (Full color)
17. Number of scanning pages in the Copier Function (BLACK)
18. Number of scanning pages in the FAX Function (BLACK)
19. Number of scanning pages in the Network Scanning Function (BLACK)
20. Number of transmitted pages in the FAX Function (BLACK)

21. Number of received pages in the FAX Function (BLACK)
22. PM count setting value / PM driving count setting value [EPU (K)]
23. PM count present value / PM driving count present value [EPU (K)]
24. PM count setting value / PM driving count setting value [Developer material (K)]
25. PM count present value / PM driving count present value [Developer material (K)]
26. PM count setting value / PM driving count setting value [Other parts]
27. PM count present value / PM driving count present value [Other parts]
28. History error
29. Toner cartridge information
30. Toner near-empty counter
31. Setting value of toner cartridge rotation time counter
32. Current value of toner cartridge rotation time counter
33. Color of toner cartridge
 - 1: Black
 - 2: Yellow
 - 3: Magenta
 - 4: Cyan
34. Destination setting of toner cartridge
 - *1. The latest 20 errors are displayed.
35. Toner remaining quantity (Yellow)
36. Toner remaining quantity (Magenta)
37. Toner remaining quantity (Cyan)
38. Toner remaining quantity (Black)

4. Toner near-empty notification by FAX

Sheet 1

TONER NEAR-EMPTY NOTIFICATION (*1)		
1	DATE	: 08/04/14 13:47
2	MACHINE MODEL	: TOSHIBA e-STUDIO655
3	SERIAL NUMBER	: 1234567890
4	TOTAL COUNTER	: 00004787
5	CUSTOMER NAME	: CUSTOMER_NAME
	CUSTOMER ADDRESS	: CUSTOMER_ADDRESS
	CUSTOMER TEL NUMBER	: 1234567890
	CUSTOMER E-MAIL ADDRESS	: customer_emailaddress@dddd.xxx
6	SERVICE TECHNICIAN NUMBER	: svc12
	SERVICE TECHNICIAN NAME	: SERVICE_TECHNICIAN_NAME
	SERVICE TECHNICIAN TEL NUMBER	: 0987654321
	SERVICE TECHNICIAN E-MAIL	: svc@toshibatec.co.jp
7	SUPPLIER NAME	: SUPPLIER_NAME
	SUPPLIER ADDRESS	: SUPPLIER_ADDRESS
	SUPPLIER FAX NUMBER	: 5544332211
	SUPPLIER E-MAIL	: supplier_emailaddress@ccccc.xxx

Fig.10-34

COUNTER NOTIFICATION (*1)											
CHARGE COUNTER FORMAT					PM COUNTER FORMAT						
8	LARGE SIZE CHARGE COUNT				: 1	LARGE SIZE PM COUNT				: 1	
9	LARGE SIZE CHARGE PAPER DEFINITION				: 1	LARGE SIZE PM PAPER DEFINITION				: 0	
CHARGE COUNTER					10	11					
PRINT COUNTER					SCAN COUNTER						
BLACK			LARGE	SMALL	FULL COLOR			LARGE	SMALL		
12	COPY				00000000	00000000	16	NET SCAN			
13	PRINT				00000000	00000000	BLACK			LARGE	SMALL
14	LIST				00000000	00000000	17	COPY SCAN			
15	FAX				00000000	00000000	18	FAX SCAN			
FAX COUNTER					LARGE			SMALL			
20	TRANSMIT				00000000	00000000	19	NET SCAN			
21	RECEIVE				00000000	00000000					
PERIODICAL MAINTENANCE COUNTER											
22	SETTING VALUE	(K-EPU PAGES)	:	00000000	SETTING VALUE	(K-DEV DRIVE COUNTS)	:	00000000	28		
23	CURRENT VALUE	(K-EPU PAGES)	:	00000000	CURRENT VALUE	(K-DEV DRIVE COUNTS)	:	00000000	29		
24	SETTING VALUE	(K-EPU DRIVE COUNTS)	:	00000000	SETTING VALUE	(OTHERS PAGES)	:	00000000	30		
25	CURRENT VALUE	(K-EPU DRIVE COUNTS)	:	00000000	CURRENT VALUE	(OTHERS PAGES)	:	00000000	31		
26	SETTING VALUE	(K-DEV PAGES)	:	00000000	SETTING VALUE	(OTHERS DRIVE COUNTS)	:	00000000	32		
27	CURRENT VALUE	(K-DEV PAGES)	:	00000000	CURRENT VALUE	(OTHERS DRIVE COUNTS)	:	00000000	33		
34	PRINTER ERROR HISTORY										
	DATE	TIME	ERROR CODE	COUNTER	DATE	TIME	ERROR CODE	COUNTER			
	08/04/13	16:44	F110	00000000	08/04/13	16:44	F110	00000000	(*2)		
	08/04/12	22:28	F110	00000000	08/04/13	16:44	F110	00000000			
	08/04/12	22:23	F110	00000000	08/04/13	16:44	F110	00000000			
	08/03/15	22:23	F110	00000000	08/04/13	16:44	F110	00000000			
	08/02/25	11:12	F110	00000000	08/04/13	16:44	F110	00000000			

Fig.10-35

COUNTER NOTIFICATION (*1)		
35	Toner Cartridge Information:	
36	Toner Near-Empty Counter	
37	Setting	00000000
38	Current	00000000
39	Color code	1
40	Point Of Destination	0

Fig.10-36

1. Date
2. Machine model name
3. Serial number
4. Total counter value
5. Customer information
6. Service technician information
7. Supplier information
8. Count setting of large-sized paper (Fee charging system counter)
9. Definition setting of large-sized paper (Fee charging system counter)
10. Count setting of large-sized paper (PM)
11. Definition setting of large-sized paper (PM)
12. Number of output pages in the Copier Function (BLACK)
13. Number of output pages in the Printer Function (BLACK)
14. Number of output pages at the List Print Mode (BLACK)
15. Number of output pages in the FAX Function (BLACK)
16. Number of scanning pages in the Network Scanning Function (Full color)
17. Number of scanning pages in the Copier Function (BLACK)
18. Number of scanning pages in the FAX Function (BLACK)
19. Number of scanning pages in the Network Scanning Function (BLACK)
20. Number of transmitted pages in the FAX Function (BLACK)
21. Number of received pages in the FAX Function (BLACK)
22. PM count setting value [EPU (K)]
23. PM count present value [EPU (K)]
24. PM driving count setting value [EPU (K)]
25. PM driving count present value [EPU (K)]
26. PM count setting value [Developer material (K)]

27. PM driving count present value [Developer material (K)]
 28. PM driving count setting value [Developer material (K)]
 29. PM driving count present value [Developer material (K)]
 30. PM count setting value (Other parts)
 31. PM driving count present value (Other parts)
 32. PM driving count setting value (Other parts)
 33. PM driving count present value (Other parts)
 34. History of error
 35. Toner cartridge information
 36. Toner near-empty counter
 37. Setting value of toner cartridge rotation time counter
 38. Current value of toner cartridge rotation time counter
 39. Color of toner cartridge
 - 1: Black
 - 2: Yellow
 - 3: Magenta
 - 4: Cyan
 40. Destination setting of toner cartridge
- *2 The latest 20 errors are displayed.

5. Service Call Transmit
 Subject: Service Call Notification

① Date: 04/14/2008 13:47
 Machine Name: e-STUDIO03520C SerialNumber:1234567890
 ② ③

④ Function: Printer
 ⑤ Severity: Error
 ⑥ Error Code: XXXX
 ⑦ Message:
 XXX

⑧ Supplier:
 Name : SUPPLIER_NAME
 Tel Number : 1122334455
 E-Mail : supplier_emailaddress@cccc.xxx
 Address : SUPPLIER_ADDRESS

⑨ Customer:
 Name : CUSTOMER_NAME
 Tel Number : 1234567890
 E-Mail : customer_emailaddress@dddd.xxx
 Address : CUSTOMER_ADDRESS

⑩ Service Technician:
 Number : svc12
 Name : SERVICE_TECHNICIAN_NAME
 Tel Number : 0987654321
 E-Mail : svc@toshibatec.co.jp

⑪ Printer Error History:

Date	Time	ErrorCode	Counter
04/13/2008	16:44	F110	
04/12/2008	22:28	F110	
04/12/2008	22:23	F110	
03/15/2008	22:23	F110	
02/25/2008	11:12	F110	

(*1)

Toner Information

Toner	Remaining Quantity(%)
⑫ Yellow	00000000
⑬ Magenta	00000000
⑭ Cyan	00000000
⑮ Black	00000000

Fig.10-37

- ① Date (When an error occurs)
- ② Machine model name
- ③ Serial number
- ④ Function: Fixed at "Printer"
- ⑤ Severity: Fixed at "Error"
- ⑥ Error code
- ⑦ Error message: The content of error is displayed.
- ⑧ Supplier information
- ⑨ Customer information
- ⑩ Service technician information
- ⑪ History of error
*1 The latest 20 errors are displayed.
- ⑫ Toner remaining quantity (Yellow)
- ⑬ Toner remaining quantity (Magenta)
- ⑭ Toner remaining quantity (Cyan)
- ⑮ Toner remaining quantity (Black)

11. FIRMWARE UPDATING

When you want to update the firmware to the latest one or the equipment becomes inoperable due to some defect in the firmware, updating can be performed as follows.

Equipment

Firmware	Updating method
Master data (HDD program data)	USB media
System ROM (OS data)	USB media
	Download jig (PWA-DWNLD-350-JIG1)
Engine ROM (Engine firmware)	USB media
	Download jig (PWA-DWNLD-350-JIG1)
Scanner ROM (Scanner firmware)	USB media
	Download jig (K-PWA-DLM-320)

Options

Model name	Firmware	Updating method
Reversing Automatic Document Feeder (RADF) (MR-3021/3022)	RADF firmware	USB media
		Download jig (K-PWA-DLM-320)
Finisher (MJ-1101)	Finisher firmware	Download jig (K-PWA-DLM-320)
	Converter firmware *	
Saddle Stitch Finisher (MJ-1106)	Finisher firmware	
	Saddle stitcher firmware	
	Converter firmware *	
Hanging Finisher (MJ-1031)	Finisher firmware	
Hole Punch Unit (MJ-6103)	Hole punch unit firmware	
Fax Unit (GD-1250)	FAX firmware	

* The harness jig for board connection (HRNS-CNV-DL-JIG) is necessary.

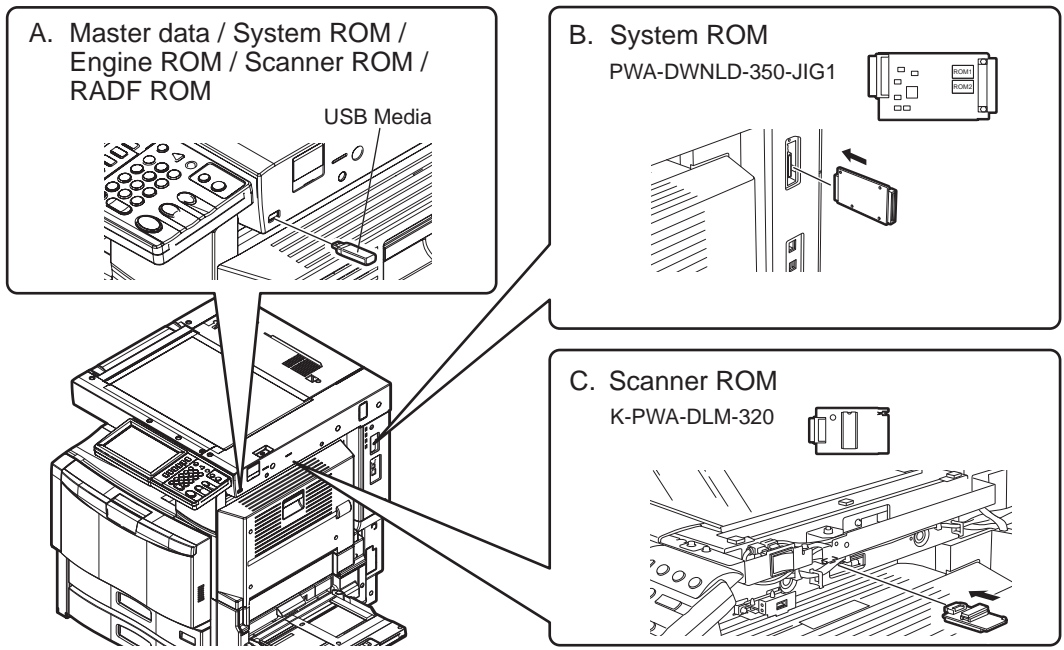


Fig.11-1

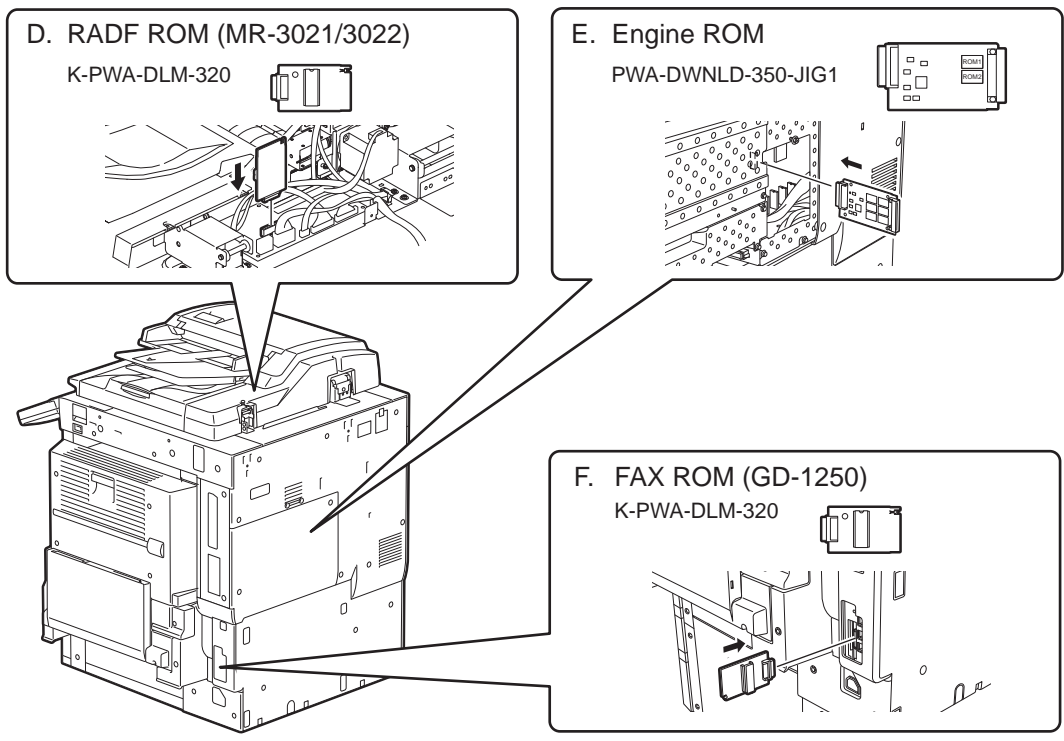


Fig.11-2

A	Master data, System ROM, Engine ROM, Scanner ROM, RADF ROM	P. 11-8
B	System ROM	P. 11-33
C	Scanner ROM	P. 11-39
D	RADF ROM (MR-3021/3022)	P. 11-41
E	Engine ROM	P. 11-35
F	FAX ROM (GD-1250)	P. 11-65

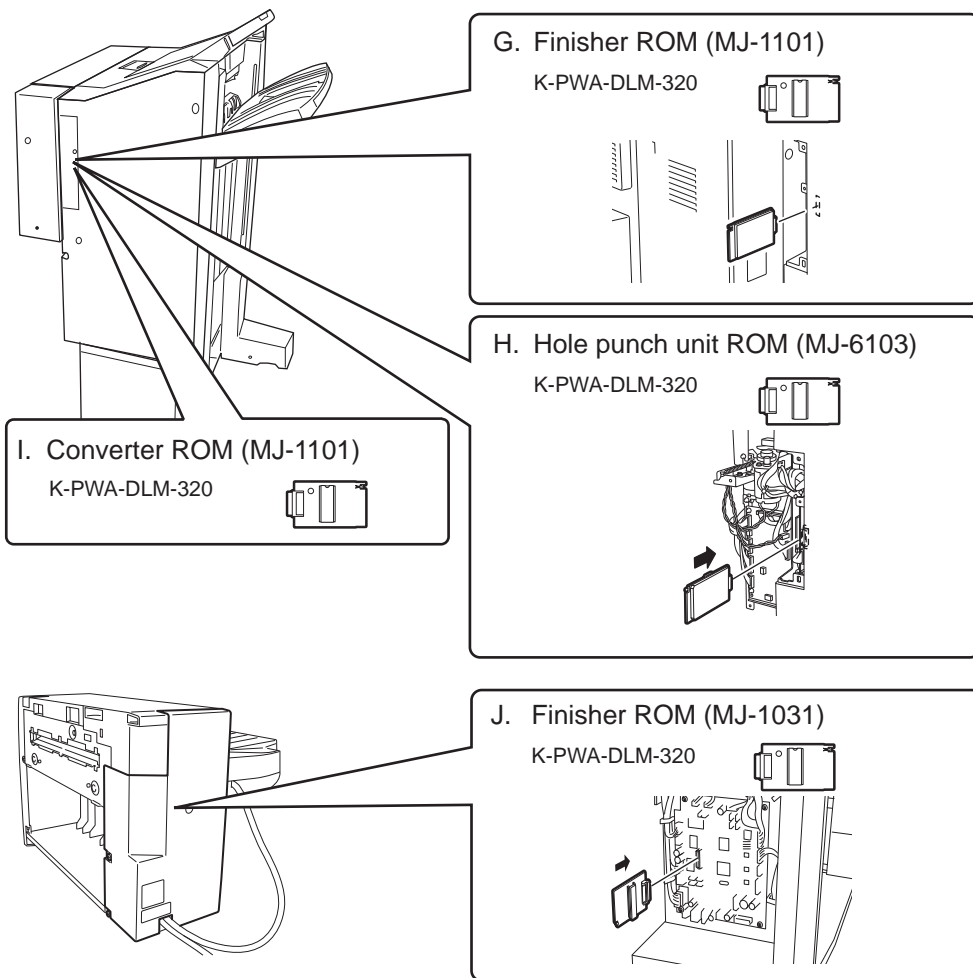


Fig.11-3

G	Finisher ROM (MJ-1101)	P. 11-46
H	Hole punch unit ROM (MJ-6103)	P. 11-60
I	Converter ROM(MJ-1101)	P. 11-50
J	Finisher ROM (MJ-1031)	P. 11-43

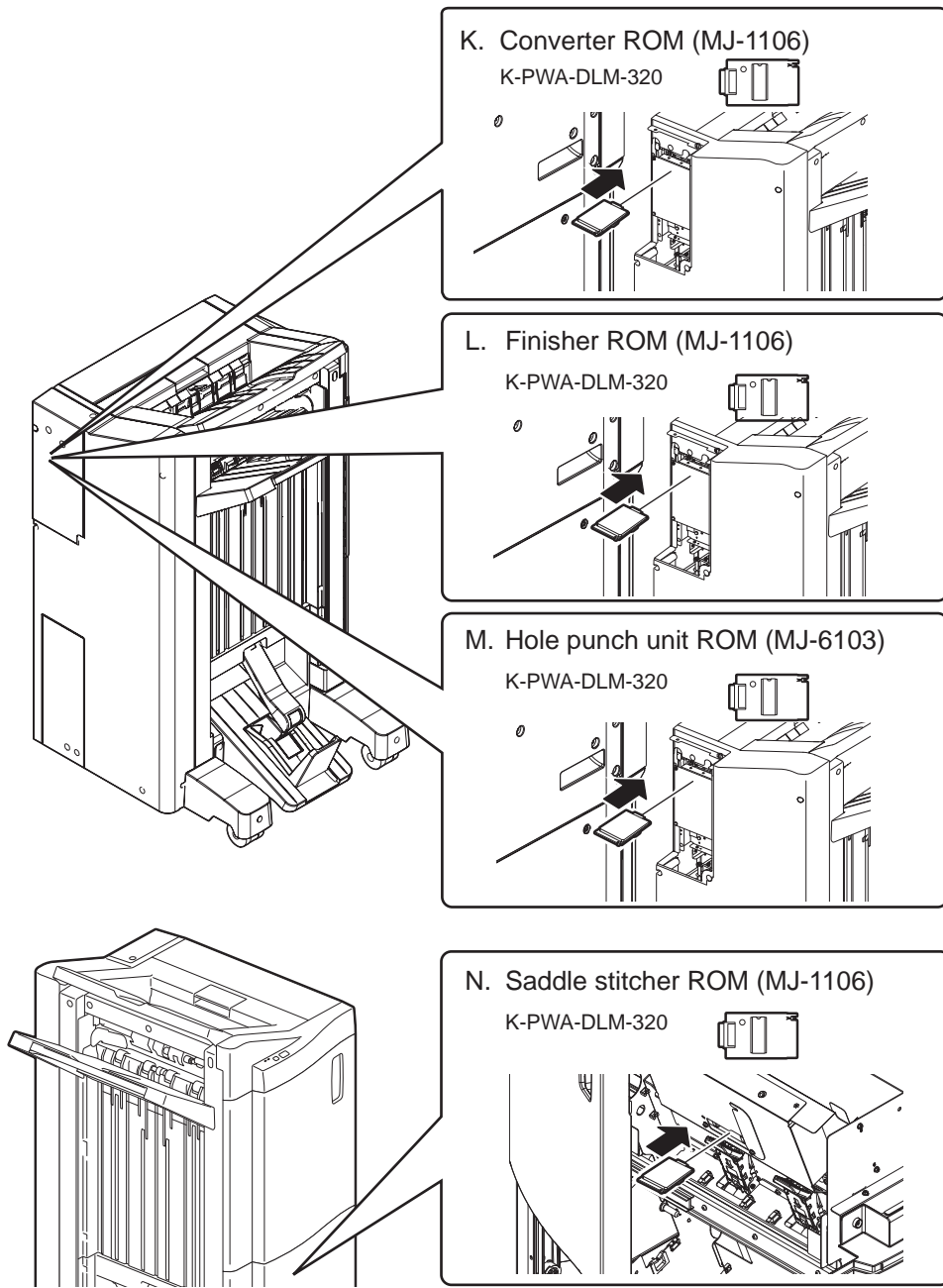


Fig.11-4

K	Converter ROM (MJ-1106)	P. 11-54
L	Finisher ROM (MJ-1106)	P. 11-48
M	Hole punch unit ROM (MJ-6103)	P. 11-60
N	Saddle stitcher ROM (MJ-1106)	P. 11-58

Notes:

- Written firmware varies depending on the kinds of the boards provided as service parts. For updating, only the minimum firmware is installed on the system control PC board, logic PC board, and scanning section control PC board. No firmware is installed on the FAX board. The latest version of the firmware at the time of delivery is written on the RADF control PC board and finisher control PC board.

When any of above boards is replaced with a new one in the field, check the other firmware version used and then update with a corresponding suitable version.

- The firmware (master data) is not installed on the hard disk provided as a service part. When the hard disk is replaced with a new one, check the other firmware version used and then write a corresponding suitable version.
- "Can't fetch Ver." is displayed in the Installed Version field when the version of the installed ROM cannot be acquired properly. If a normal power on is not performed after the firmware is updated and the [ON/OFF] button is pressed while simultaneously holding down the [4] and [9] buttons, "Can't fetch Ver." may be displayed on the control panel for some ROMS. A normal power on must be performed.

11.1 Firmware Updating with USB Media

To update firmware, store update program and firmware data files in the USB media. The update program is "signatures.sig", and it needs to be stored in the USB device. For the data file for each firmware, refer to the following tables.

Notes:

When performing the update, use the latest program.

Firmware type and data file name for updating Equipment

Firmware	Stored	Data file name	Display
Master data (HDD program data)	Hard disk	T140HD0Wxxxx.tar * xxx is version.	SYSTEM SOFTWARE (HD Data)
System ROM (OS data)	System control PC board (SYS board)	T140SF0Wxxxx.tar * xxx is version.	SYSTEM FIRMWARE (OS Data)
Engine ROM (Engine firmware)	Logic PC board (LGC board)	T140MWW.xxx * xxx is version.	ENGINE FIRMWARE
Scanner ROM (Scanner firmware)	Scanning section control PC board (SLG board)	T140SLGWW.xxx * xxx is version.	SCANNER FIRMWARE
RADF ROM (RADF firmware)	RADF board (MR-3021)	502DFWW.0xxx * xxx is version.	RADF FIRMWARE
	RADF board (MR-3022)	502DFWW.1xxx * xxx is version.	RADF FIRMWARE

Store the data file for updating in the model specific folder.

The RADF ROM data file that is written on the USB memory is different depending on the installed RADF.

Model specific folder name	2040C_3540C
----------------------------	-------------

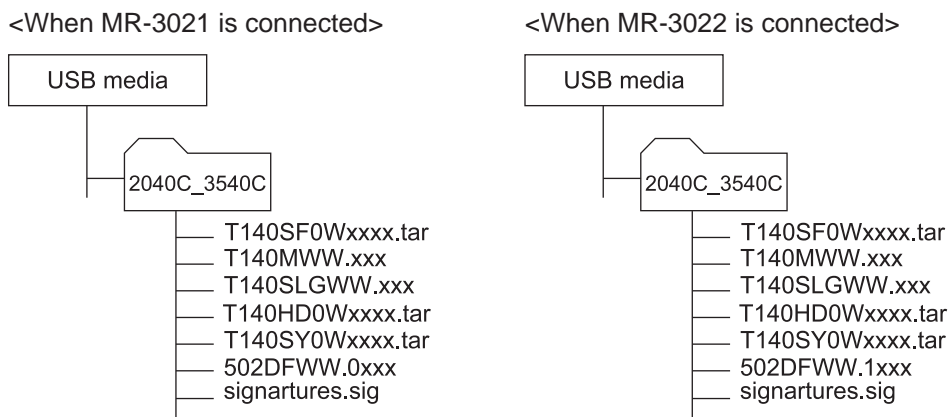


Fig.11-5

Notes:

- Since the date and time set in the equipment are recorded in the firmware update log, make sure that they are correct before updating the firmware.
- Never change the model specific folder name, since it is used for identifying the data file when the data files used for updating multiple models are stored in the USB media.

Important:

- Only the USB media which meet the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
 - A combination USB media with a flash memory (to be connected directly to the USB port) and its capacity is 1GB or more.
 - Operation of the USB media used for updating has been confirmed at the input check of this equipment (Test mode 03). (☞ P. 5-8 "5.3 Input check (Test mode 03)")
 - USB media which comply with the following standards regulated by USB-IF (USB Implementers Forum)
 - Class number: 8 (=08h) (Mass-storage class)
 - Sub-class number: 6 (=06h) (SCSI transfer command set)
 - Protocol number: 80 (=50h) (Bulk-Only)
- * Most common USB media comply with the specification above and can be used for updating. However, the operation in all the Multi Functional Digital Color Systems and Multi Functional Digital Systems is not necessarily guaranteed since the most of these devices are developed based on use in a PC environment (Windows or Macintosh). Therefore, check thoroughly that the device is operational in the equipment for which the updating will be performed when purchasing it.
- The USB media complying with USB2.0 can be used for updating.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk), since it is never guaranteed.

11.1.1 Master data/System ROM/Engine ROM/Scanner ROM / RADF ROM

Important:

- The file system of USB media should be formatted in the FAT or FAT32 format. Be careful since the devices formatted in NTFS or other format will not be able to be operated. The file system can be confirmed on the device properties in applications such as Explorer of Windows.
- Never shut down the equipment during the update. Firmware data and the following option data (if installed) could be damaged and may not be able to be operated properly.
 - Data Overwrite Enabler (GP-1070)
 - Meta Scan Enabler (GS-1010)
 - External Interface Enabler (GS-1020)
 - IPsec Enabler (GP-1080)

[A] Update procedure

- (1) Connect the USB media to the PC and write the model specific folder in which the data file is stored.
Store the data file for updating in the model specific folder.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Connect the USB media [1] to the USB port [2] on the right upper cover.

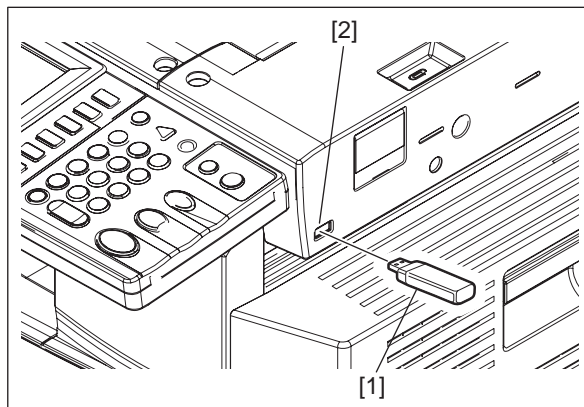


Fig.11-6

- (4) Press the [ON/OFF] button while simultaneously holding down the [4] and [9] buttons. Data in the USB media are checked and the checking status is displayed on the screen.
- (5) When the authentication screen appears, enter the password. (If the Enter Password is blank, it is unnecessary to enter anything.)

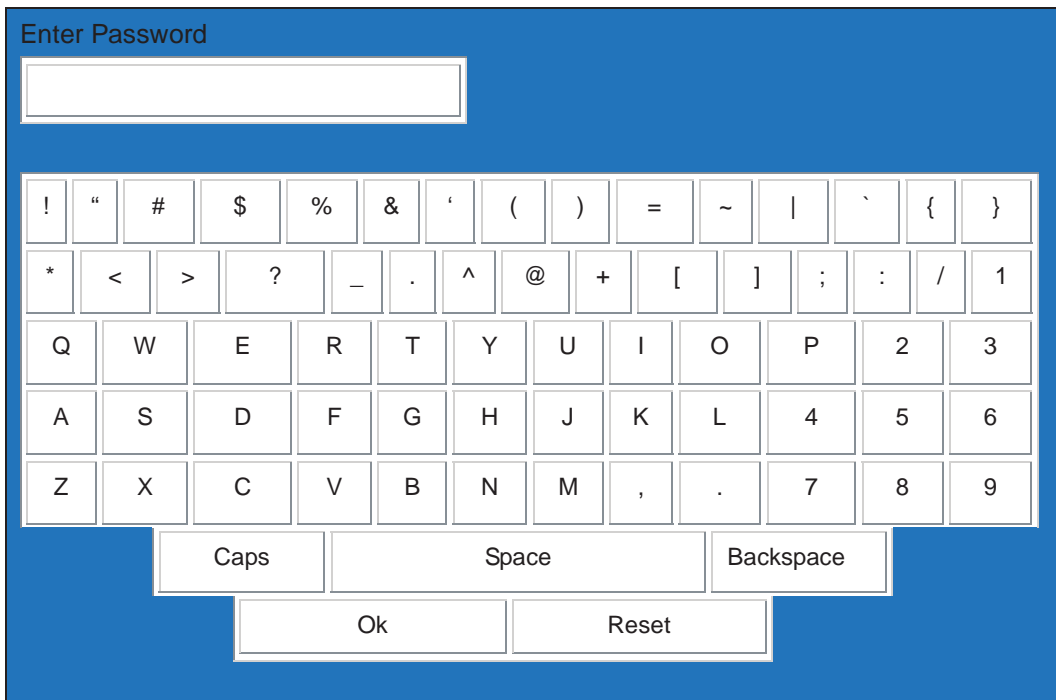


Fig.11-7

The screen for selecting items to be updated is displayed after approx. 3 minutes. On this screen, the current firmware version of this equipment and the firmware version of data to be updated are displayed.

Download Storage Firmware Update Mode	Firmware Version: x.x.x.x	
	Update Mode : USB Update	
Update Status	Updater Version	Installed Version
1. SYSTEM FIRMWARE(OS Data)	xxxxxxxxxxxx	xxxxxxxxxxxx
2. ENGINE FIRMWARE	xxxxxxx. xxx	xxxxxxx. xxx
3. SCANNER FIRMWARE	xxxxxxxxxxxx	xxxxxxxxxxxx
4. SYSTEM SOFTWARE(HD Data)	xxxxxxxxxxxx	xxxxxxxxxxxx
* FILE SYSTEM SOFTWARE	xxxxxxxxxxxx	xxxxxxxxxxxx
* APPLICATION SOFTWARE	xxxxxxxxxxxx	xxxxxxxxxxxx
5. RADF FIRMWARE	xxxxxxx. xxx	xxxxxxx. xxx

Fig.11-8

Notes:

- The display of items on this screen varies depending on the types of data written on the USB media. Each item is displayed only when each data file is written on the USB media in the following conditions.

Item	Condition
1. SYSTEM FIRMWARE(OS Data)	T140SF0Wxxxx.tar is written. (xxxx is version.)
2. ENGINE FIRMWARE	T140MWW.xxx is written. (xxx is version.)
3. SCANNER FIRMWARE	T140SLGWW.xxx is written. (xxx is version.)
4. SYSTEM SOFTWARE (HD Data)	T140HD0Wxxxx.tar and T140SY0Wxxxx.tar are written. (xxxx is version.)
5. RADF ROM	502DFWW.0xxx is written. (When MR-3021 is connected) 502DFWW.1xxx is written. (When MR-3022 is connected) * xxx is version.

- If the USB media are not recognized properly, "USB device Not detected" message is displayed. In this case, disconnect the USB media and connect again within 3 minutes, or shut down the equipment and connect the device properly. Then repeat the procedure from (4).
- If any of the error messages below is displayed, confirm if the data file in the USB media is correct. Then repeat the procedure from (4).

Error number	Error message	Cause
01	Error Loadmodule	Module loading failed.
02	Machine Model Get Error	Model information was not downloaded.
03	Copy Data with valid signature in USB Storage	Checking of data file failed.
04	Other models ROMDATA TXXXXXXXXX * The version name comes at "xxxx.xxx.x".	Master data of other model are stored.
05	Copy Signature File in USB Storage	Data files are not stored in the USB media.
06	Patch and Normal package in one folder of USB Storage	When both the system and patch update packages are in the USB media

- (6) Select the item with the digital keys.
 "*" is displayed next to the selected item. Display or delete the "*" by pressing the number of the item.

Item	Remarks
1. SYSTEM FIRMWARE(OS Data)	Updating OS data
2. ENGINE FIRMWARE	Updating Engine ROM
3. SCANNER FIRMWARE	Updating Scanner ROM
4. SYSTEM SOFTWARE (HD Data)	Updating Master data (HDD program data)
5. RADF FIRMWARE	Updating RADF ROM

- (7) Press the [START] button.
Updating starts and the processing status is displayed on the LCD screen.

Status display during update	Status display when update is completed
SYSTEM FIRMWARE(OS Data) update in progress	SYSTEM FIRMWARE(OS Data) Completed
ENGINE FIRMWARE update in progress	ENGINE FIRMWARE Completed
SCANNER FIRMWARE update in progress	CANNER FIRMWARE Completed
SYSTEM SOFTWARE (HD Data) update in progress	SYSTEM SOFTWARE (HD Data) Completed
RADF FIRMWARE update in progress	RADF FIRMWARE Completed

- (8) "Update successfully completed Restart the MFP" is displayed at the bottom of the LCD screen after the updating is completed properly.

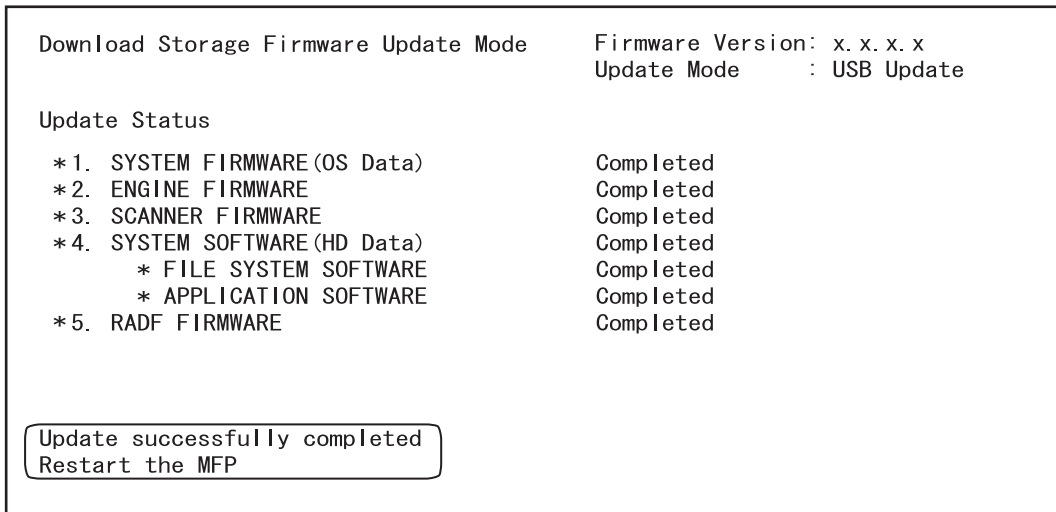


Fig.11-9

Notes:

- “Update Failed.” is displayed at the bottom of the LCD screen when the updating is not completed properly. “Failed” appears next to the failed item on the status display. Even though an update fails, do not turn the power OFF until other updates are finished. If “Update Failed” appears at the bottom of the screen, turn OFF the power and then check the following items. After confirming and clearing the problems, restart updating from the beginning.
 - Do the USB media meet the conditions to be used for updating?
 - Is the data file written properly on the USB media?
 - Are the USB media installed properly?
 - Do the USB media and equipment operate properly?
- The integrity check system is automatically operated before firmware updating. During this operation, “Verifying Signature...” and “Progress: **%” are displayed on the control panel. When the check is completed properly, no message for notifying the success will appear and the firmware updating will start. If it fails, “Invalid Signature” and “Copy Data with valid signature in USB” will be shown. In that case, firmware updating cannot be performed, so turn the power OFF and disconnect the USB device. Check the following, and reperform the update.
 - Check that the firmware data is not corrupted.
 - Check that the signature file is not corrupted.
 - Check that the combination of the firmware data and the signature file is correct.
- When an OS update error or HDD update error occurs, “Update Failed” or “Failed” appears on the screen and the error number appears next to the message. For details of each error, refer to the following tables.

OS update Error	
Error number	Error content
O01	FROM writing failed
O02	FROM verification error
O03	File operation error
O04	SRAM flag set error
O05	Electronic key data backup error
O06	Device error

HDD update Error	
Error number	Error content
H01	File creation error
H02	File decompression error
H03	Partition mount error
H04	Hard disk full error
H00	Other errors

- When an Engine update error, Scanner update error or RADF update error occurs, "Update Failed" or "Failed" appears on the screen and the error number and error message appear next to the message. For details of each error, refer to the following tables.

Engine update Error		
Error number	Error message	Error content
M01	Time out (When the download is requested)	Communication timeout (When the download is requested)
M02	Time out (When the download is written)	Communication timeout (When the download is written)
M03	Time out (When the download is finished)	Communication timeout (When the download is finished)
M04	Reception failed (When the download is requested)	Downloading request was denied. (When the download is requested)
M05	Deletion error (When the download is written)	Deletion error (When the download is written)
M06	Writing error (When the download is written)	Writing error (When the download is written)
M07	Checksum error (When the download is finished)	Checksum error (When the download is finished)
M08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
M09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
M10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
M00	Other error	Other error To troubleshoot this error, refer to the following section: 📖 P. 8-245 "8.4.8 Error code "M00" is displayed while updating firmware"


Scanner update Error		
Error number	Error message	Error content
S01	Time out (When the download is requested)	Communication timeout (When the download is requested)
S02	Time out (When the download is written)	Communication timeout (When the download is written)
S03	Time out (When the download is finished)	Communication timeout (When the download is finished)
S05	Deletion error (When the download is written)	Deletion error (When the download is written)
S06	Writing error (When the download is written)	Writing error (When the download is written)
S08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
S09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
S10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
S00	Other error	Other error

RADF update Error		
Error number	Error message	Error content
R01	Time out (When the download is requested)	Communication timeout (When the download is requested)
R02	Time out (When the download is written)	Communication timeout (When the download is written)
R03	Time out (When the download is finished)	Communication timeout (When the download is finished)
R05	Deletion error (When the download is written)	Deletion error (When the download is written)
R06	Writing error (When the download is written)	Writing error (When the download is written)
R08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
R09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
R10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
R21	RADF Uninstallation	RADF not installed
R23	RADF Firmware model mismatch	RADF ROM for different model data connected
R00	Other error	Other error

- (9) Press the [ON/OFF] button to shut down the equipment, and then remove the USB media.
- (10) Perform the initialization of the updating data.
- Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons.
 - Key in "9030", and then press the [START] button.
 - Press the [INITIALIZE] button.





[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

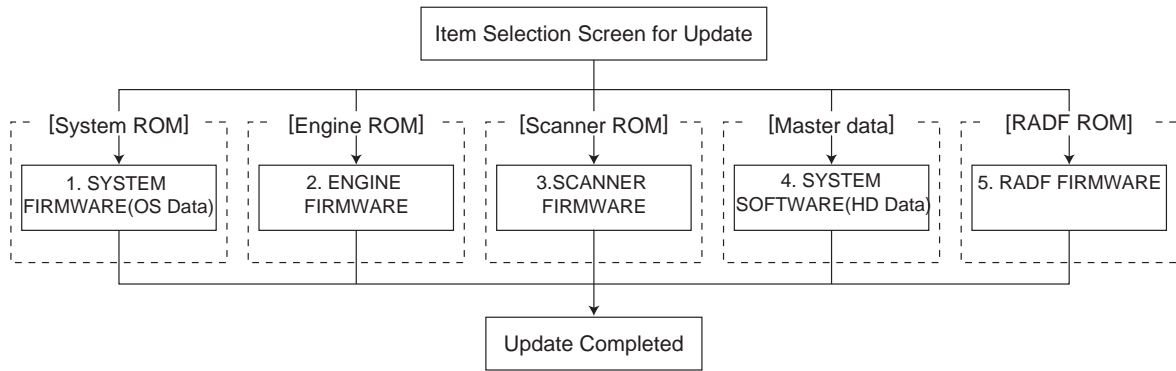
[C] Adjustment

Perform the adjustment of the equipment.

- Performing Image Quality Control (05-2742):
 P. 6-4 "6.1.3 Performing Image Quality Control"
- Adjustment of Color Registration Control (05-4719):
 P. 6-5 "6.1.4 Adjustment of Color Registration Control"
- Automatic gamma adjustment <PPC> (05-7869) (using [4][FAX] test pattern):
 P. 6-27 "6.2.1 Automatic gamma adjustment"
- Automatic gamma adjustment <PRT > (05-8008) (using [70][FAX] test pattern):
 P. 6-44 "6.3.1 Automatic gamma adjustment"

[D] Display during the update

Update is performed in parallel as shown in the transition diagram below.



Below is an example of the changes of the LCD screen during update.
System ROM

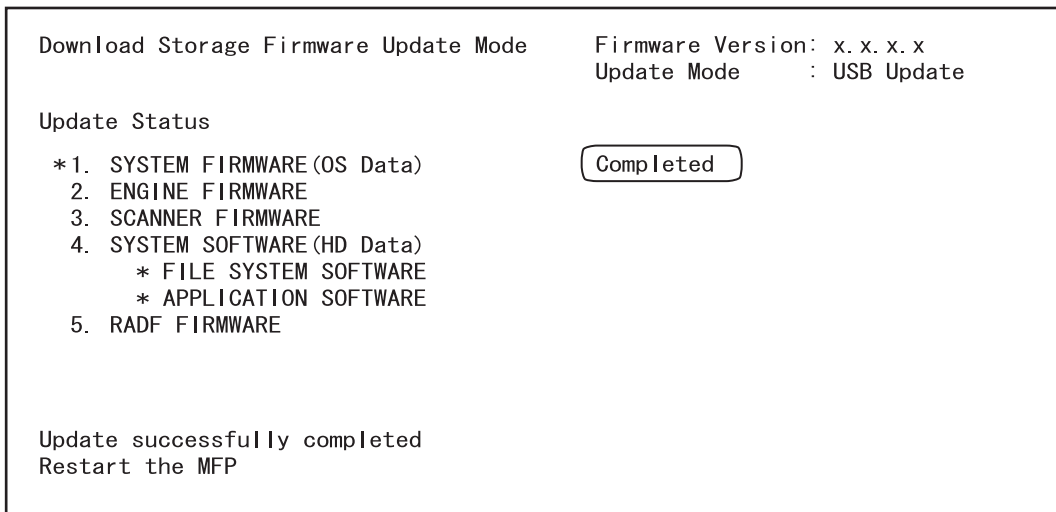
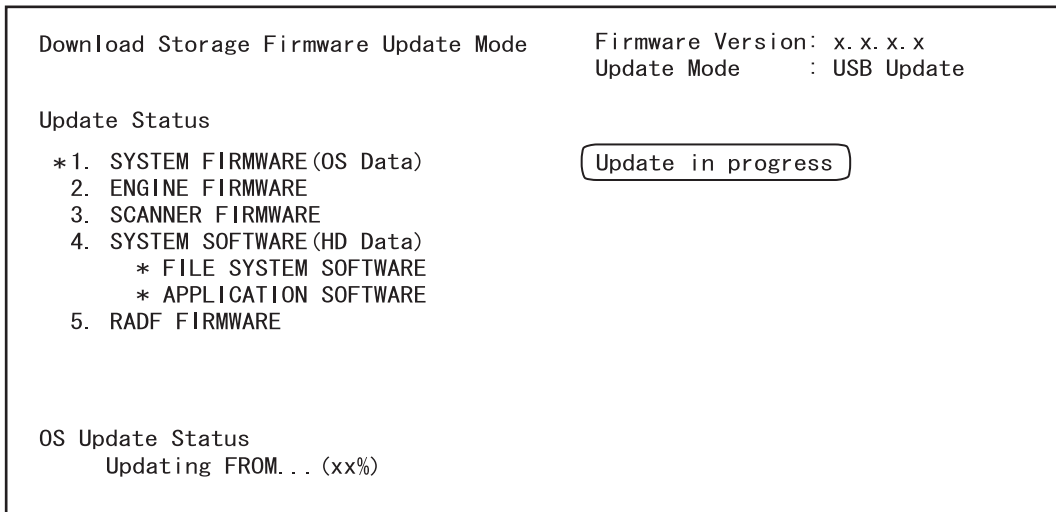


Fig.11-10

Engine ROM

Download Storage Firmware Update Mode	Firmware Version: x.x.x.x Update Mode : USB Update
Update Status	
1. SYSTEM FIRMWARE (OS Data)	Update in progress
* 2. ENGINE FIRMWARE	
3. SCANNER FIRMWARE	
4. SYSTEM SOFTWARE (HD Data) * FILE SYSTEM SOFTWARE * APPLICATION SOFTWARE	
5. RADF FIRMWARE	
Engine Update Status xxxxxx/xxxxxx byte (xx%)	



Download Storage Firmware Update Mode	Firmware Version: x.x.x.x Update Mode : USB Update
Update Status	
1. SYSTEM FIRMWARE (OS Data)	Completed
* 2. ENGINE FIRMWARE	
3. SCANNER FIRMWARE	
4. SYSTEM SOFTWARE (HD Data) * FILE SYSTEM SOFTWARE * APPLICATION SOFTWARE	
5. RADF FIRMWARE	
Update successfully completed Restart the MFP	

Fig.11-11

Scanner ROM

Download Storage Firmware Update Mode Firmware Version: x.x.x.x
Update Mode : USB Update

Update Status

1. SYSTEM FIRMWARE(OS Data)
2. ENGINE FIRMWARE
- *3. SCANNER FIRMWARE
4. SYSTEM SOFTWARE(HD Data)
 - * FILE SYSTEM SOFTWARE
 - * APPLICATION SOFTWARE
5. RADF FIRMWARE

Update in progress

Scanner Update Status
xxxxxx/xxxxxx byte(xx%)



Download Storage Firmware Update Mode Firmware Version: x.x.x.x
Update Mode : USB Update

Update Status

1. SYSTEM FIRMWARE(OS Data)
2. ENGINE FIRMWARE
- *3. SCANNER FIRMWARE
4. SYSTEM SOFTWARE(HD Data)
 - * FILE SYSTEM SOFTWARE
 - * APPLICATION SOFTWARE
5. RADF FIRMWARE

Completed

Update successfully completed
Restart the MFP

Fig.11-12

Master data (1/2)

Download Storage Firmware Update Mode	Firmware Version: x.x.x.x Update Mode : USB Update
Update Status	
1. SYSTEM FIRMWARE (OS Data)	
2. ENGINE FIRMWARE	
3. SCANNER FIRMWARE	
*4. SYSTEM SOFTWARE (HD Data)	Update in progress
* FILE SYSTEM SOFTWARE	Update in progress
* APPLICATION SOFTWARE	
5. RADF FIRMWARE	
File System Update Status Copying Files to HDD... (xx%)	



Download Storage Firmware Update Mode	Firmware Version: x.x.x.x Update Mode : USB Update
Update Status	
1. SYSTEM FIRMWARE (OS Data)	
2. ENGINE FIRMWARE	
3. SCANNER FIRMWARE	
*4. SYSTEM SOFTWARE (HD Data)	Update in progress
* FILE SYSTEM SOFTWARE	Completed
* APPLICATION SOFTWARE	Update in progress
5. RADF FIRMWARE	
Application Update Status Installing eBX	



Fig.11-13



Download Storage Firmware Update Mode Firmware Version: x.x.x.x
Update Mode : USB Update

Update Status

- 1. SYSTEM FIRMWARE (OS Data)
- 2. ENGINE FIRMWARE
- 3. SCANNER FIRMWARE
- *4. SYSTEM SOFTWARE (HD Data)
 - * FILE SYSTEM SOFTWARE
 - * APPLICATION SOFTWARE
- 5. RADF FIRMWARE

Update in progress
Completed
Update in progress

Application Update Status
Installing eBX. . (xx%)



Download Storage Firmware Update Mode Firmware Version: x.x.x.x
Update Mode : USB Update

Update Status

- 1. SYSTEM FIRMWARE (OS Data)
- 2. ENGINE FIRMWARE
- 3. SCANNER FIRMWARE
- *4. SYSTEM SOFTWARE (HD Data)
 - * FILE SYSTEM SOFTWARE
 - * APPLICATION SOFTWARE
- 5. RADF FIRMWARE

Completed
Completed
Completed

Update succesfully completed
Restart the MFP

Fig.11-14

RADF ROM

```
Download Storage Firmware Update Mode      Firmware Version: x.x.x.x
                                           Update Mode      : USB Update

Update Status

  1. SYSTEM FIRMWARE(OS Data)
  2. ENGINE FIRMWARE
  3. SCANNER FIRMWARE
  4. SYSTEM SOFTWARE(HD Data)
     * FILE SYSTEM SOFTWARE
     * APPLICATION SOFTWARE
*5. RADF FIRMWARE

Update in progress

RADF Update Status
xxxxxx/xxxxxx byte( xx%)
```



```
Download Storage Firmware Update Mode      Firmware Version: x.x.x.x
                                           Update Mode      : USB Update

Update Status

  1. SYSTEM FIRMWARE(OS Data)
  2. ENGINE FIRMWARE
  3. SCANNER FIRMWARE
  4. SYSTEM SOFTWARE(HD Data)
     * FILE SYSTEM SOFTWARE
     * APPLICATION SOFTWARE
*5. RADF FIRMWARE

Completed

Update successfully completed
Restart the MFP
```

Fig.11-15

11.2 Patch Updating with USB Media

Master data and system ROM can be updated in a shorter time than normal update using the data file for the patch update.

Notes:

When performing the update, use the latest program.

Firmware type and data file name for patch updating

Equipment

Firmware	Stored	Data file name	Display
Master data (HDD program data)	Hard disk	T140HDPWxxxx.tar * xxxx is version.	SYSTEM SOFTWARE (HD Data)
System ROM (OS data)	System control PC board (SYS board)	T140SFPWxxxx.tar * xxxx is version.	SYSTEM FIRMWARE(OS Data)

Store the data file for patch updating in the model specific folder.

Model specific folder name	2040C_3540C
----------------------------	-------------

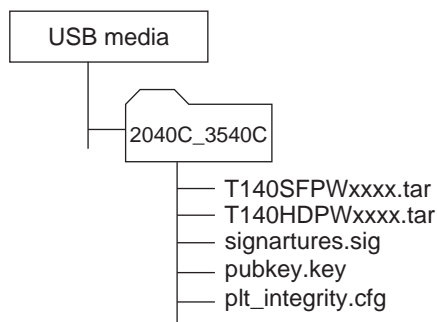


Fig.11-16

Notes:

- Since the date and time set in the equipment are recorded in the firmware update log, make sure that they are correct before updating the firmware.
- Never change the model specific folder name, since it is used for identifying the data file when the data files used for updating multiple models are stored in the USB media.

Important:

- Only the USB media which meet the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
 - A combination USB media with a flash memory (to be connected directly to the USB port) and its capacity is 1GB or more.
 - Operation of the USB media used for updating has been confirmed at the input check of this equipment (Test mode 03). (☞ P. 5-8 "5.3 Input check (Test mode 03)")
 - USB media which comply with the following standards regulated by USB-IF (USB Implementers Forum)
 - Class number: 8 (=08h) (Mass-storage class)
 - Sub-class number: 6 (=06h) (SCSI transfer command set)
 - Protocol number: 80 (=50h) (Bulk-Only)
- * Most common USB media comply with the specification above and can be used for updating. However, the operation in all the Multi Functional Digital Color Systems and Multi Functional Digital Systems is not necessarily guaranteed since the most of these devices are developed based on use in a PC environment (Windows or Macintosh). Therefore, check thoroughly that the device is operational in the equipment for which the updating will be performed when purchasing it.
- The USB media complying with USB2.0 can be used for updating.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk), since it is never guaranteed.
- It is possible to store the model specific update program and the data file for updating directly in the root directory when you store the updating data file for one specific model in the USB media. However, if the model specific folder for the same model as that of the data file stored in the root directory already exists, this will have priority.

11.2.1 Master data/System ROM

Important:

- The file system of USB media should be formatted in the FAT or FAT32 format. Be careful since the devices formatted in NTFS or other format will not be able to be operated. The file system can be confirmed on the device properties in applications such as Explorer of Windows.
- Never shut down the equipment during the update. Firmware data and the following option data (if installed) could be damaged and may not be able to be operated properly.
 - Data Overwrite Enabler (GP-1070)
 - Meta Scan Enabler (GS-1010)
 - External Interface Enabler (GS-1020)
 - IPSec Enabler (GP-1080)

[A] Update procedure

- (1) Connect the USB media to the PC and write the model specific folder in which the data file is stored.
Store the data file for updating in the model specific folder.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Connect the USB media [1] to the USB port [2] on the right upper cover.

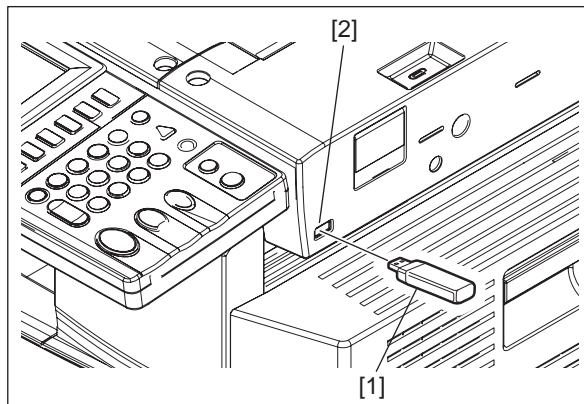


Fig.11-17

- (4) Press the [ON/OFF] button while simultaneously holding down the [4] and [9] buttons. Data in the USB media are checked and the checking status is displayed on the screen.
- (5) When the authentication screen appears, enter the password. (If the Enter Password is blank, it is unnecessary to enter anything.)

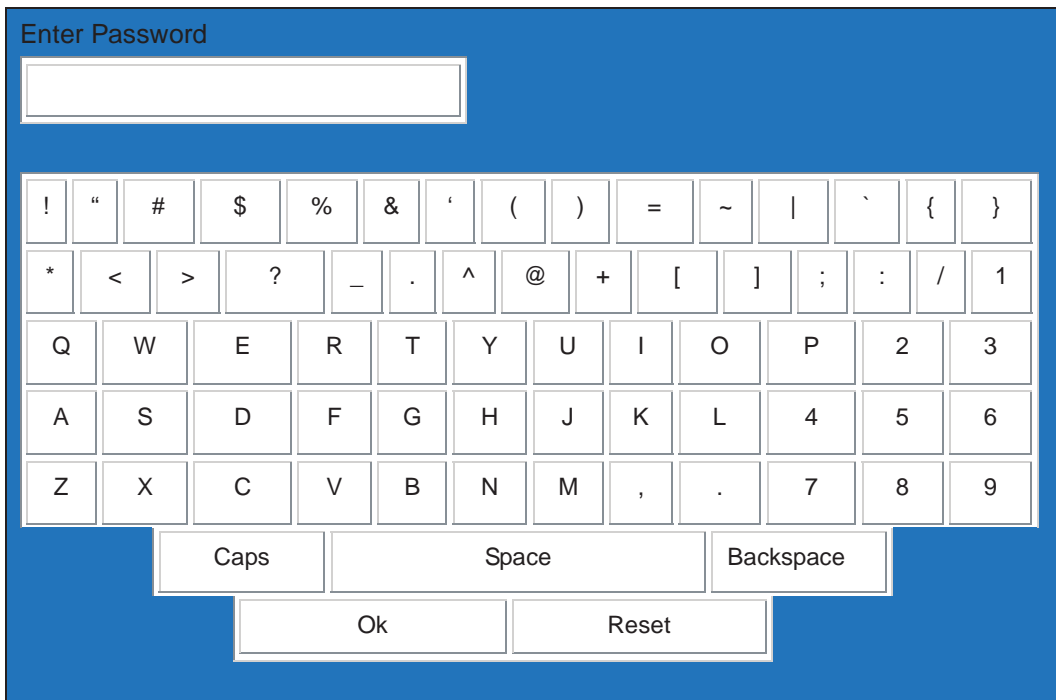


Fig.11-18

The screen for selecting items to be updated is displayed after approx. 3 minutes. On this screen, the current firmware version of this equipment and the firmware version of data to be updated are displayed.

Download Storage Firmware Update Mode	Firmware Version: x.x.x.x	
	Update Mode : USB Update	
Update Status	Updater Version	Installed Version
1. SYSTEM FIRMWARE (OS Data)	T140SFPWxxxx.tar	T140SFPWxxxx.tar
2. SYSTEM SOFTWARE (HD Data)	T140HDPWxxxx.tar	T140HDPWxxxx.tar

Fig.11-19

Notes:

- The display of items on this screen varies depending on the types of data written on the USB media. Each item is displayed only when each data file is written on the USB media in the following conditions.

Item	Condition
1. SYSTEM FIRMWARE(OS Data)	T140SFPWxxxx.tar is written. (xxxx is version.)
2. SYSTEM SOFTWARE (HD Data)	T140HDPWxxxx.tar is written. (xxxx is version.)

- If the USB media are not recognized properly, "USB device Not detected" message is displayed. In this case, disconnect the USB media and connect again within 3 minutes, or shut down the equipment and connect the device properly. Then repeat the procedure from (4).
- If any of the error messages below is displayed, confirm if the data file in the USB media is correct. Then repeat the procedure from (4).

Error number	Error message	Cause
01	Error Loadmodule	Module loading failed.
02	Machine Model Get Error	Model information was not downloaded.
03	Copy Data with valid signature in USB Storage	Checking of data file failed.
04	Other models ROMDATA TXXXXXXXXX * The version name comes at "xxxx.xxx.x".	Master data of other model are stored.
05	Copy Signature File in USB Storage	Data files are not stored in the USB media.
06	Patch and Normal package in one folder of USB Storage	When both the system and patch update packages are in the USB media

- (6) Select the item with the digital keys.
 "*" is displayed next to the selected item. Display or delete the "*" by pressing the number of the item.

Item	Remarks
1. SYSTEM FIRMWARE(OS Data)	Updating OS data
2. SYSTEM SOFTWARE (HD Data)	Updating Master data (HDD program)

- (7) Press the [START] button.
Updating starts and the processing status is displayed on the LCD screen.
The follow screen shows the display when selecting "1. SYSTEM FIRMWARE (OS Data)" in the update selection menu. "Update in progress" is displayed on the right side of the selected item, and then "Verfying Signature..." appears.

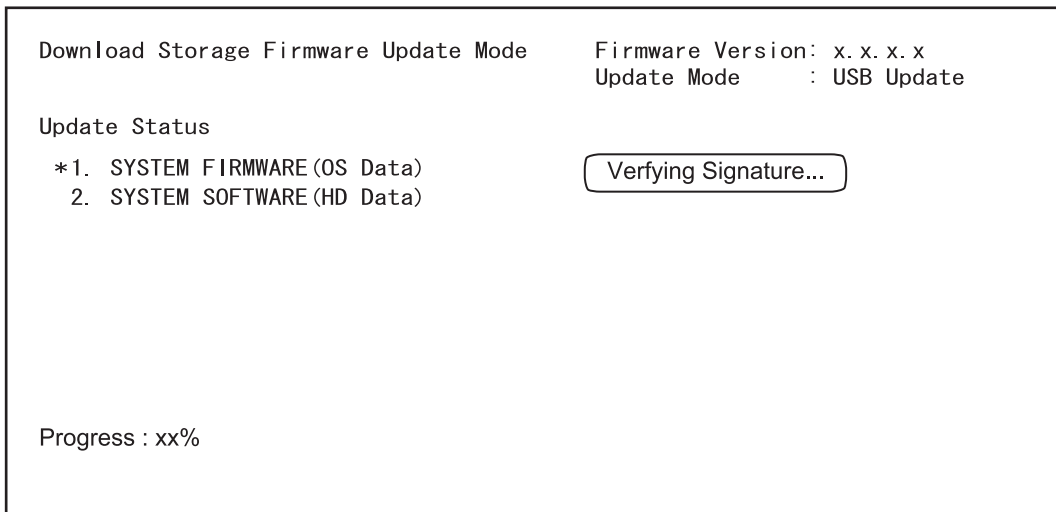
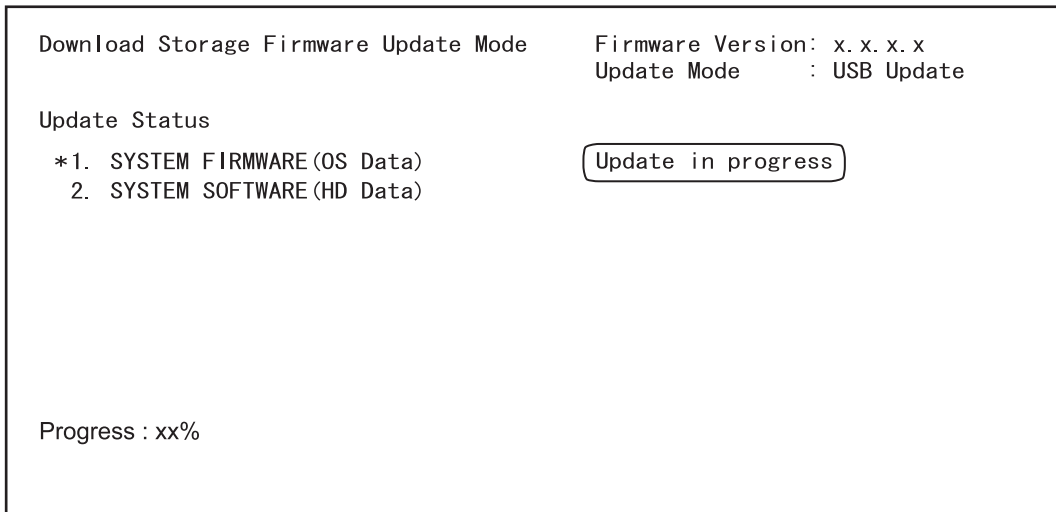


Fig.11-20

Notes:

- “Update Failed.” is displayed at the bottom of the LCD screen when the updating is not completed properly. “Failed” appears next to the failed item on the status display. Even though an update fails, do not turn the power OFF until other updates are finished. If “Update Failed” appears at the bottom of the screen, turn OFF the power and then check the following items. After confirming and clearing the problems, restart updating from the beginning.
 - Do the USB media meet the conditions to be used for updating?
 - Is the data file written properly on the USB media?
 - Are the USB media installed properly?
 - Do the USB media and equipment operate properly?
- When an OS update error or HDD update error occurs, “Update Failed” or “Failed” appears on the screen and the error number appears next to the message. For details of each error, refer to the following tables.


OS update Error	
Error number	Error content
O01	FROM writing failed
O02	FROM verification error
O03	File operation error
O04	SRAM flag set error
O05	Electronic key data backup error
O06	Device error

HDD update Error	
Error number	Error content
H01	File creation error
H02	File decompression error
H03	Partition mount error
H04	Hard disk full error
H00	Other errors

(9) Press the [ON/OFF] button to shut down the equipment, and then remove the USB media.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.3 Firmware Updating with PWA-DWNLD-350-JIG1

The data to be overwritten by this update are as follows.

Update the ROM data written on each board according to the need such as the case of replacing the system control PC board or logic PC board.

Equipment

Firmware	Stored
System ROM (OS data)	System control PC board (SYS board)
Engine ROM (Engine firmware)	Logic PC board (LGC board)

PWA-DWNLD-350-JIG1 (16MB)

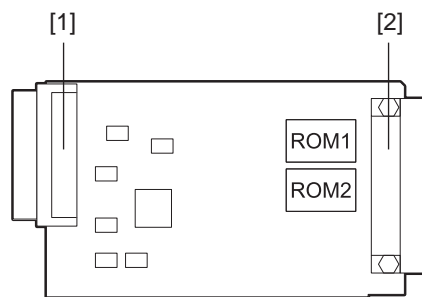


Fig.11-22

[1] Connector (for SYS board connection)

[2] Connector (for ROM writer adapter connection)

Important:

The download jig (PWA-DWNLD-350-JIG1) is the jig in which the Flash ROM is mounted on the board directly. Therefore, ROM writer adapter (PWA-DL-ADP-350) is required to write the data to these Flash ROMs. Refer to the following to write the data.

11.3.1 Writing the data to the download jig (PWA-DWNLD-350-JIG1)

The download jig (PWA-DWNLD-350-JIG1) is that in which the Flash ROM is mounted on the board directly. The ROM writer adapter (PWA-DL-ADP-350) is required to write data to these Flash ROMs. Connect the download jig with the ROM writer via ROM writer adapter to write data. For the procedure to write data, refer to the downloading procedure, instruction manual of each ROM writer, or other sources.

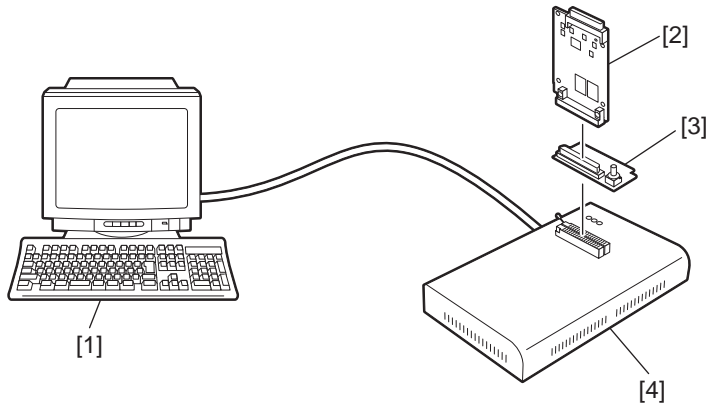


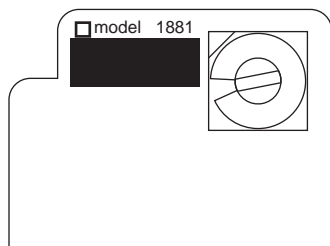
Fig.11-23

- [1] PC
- [2] Download jig (PWA-DWNLD-350-JIG1)
- [3] ROM writer adapter (PWA-DL-ADP-350)
- [4] ROM writer

Notes:

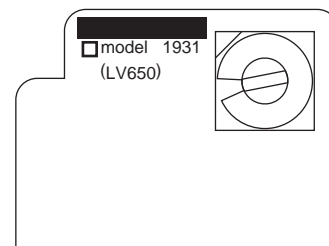
There are two types of the ROM writer adapter. Use the proper one according to the ROM writer to be used. Applicable type of the adapter for the ROM writer can be confirmed by the model name indicated on the board. Confirm that the adapter is available for the ROM writer to be used before connecting them. If an unapplied adapter is connected, the application of the ROM writer judges it as an error and writing the data cannot be implemented. Applicable combinations of the ROM writer and adapter are as follows.

ROM writer	ROM writer adapter
Minato Electronics MODEL 1881XP/ 1881UXP (or equivalent)	PWA-DL-ADP-350-1881 (model 1881)
Minato Electronics MODEL 1893/1895/ 1931/1940 (or equivalent)	PWA-DL-ADP-350-1931 (model 1931)



[PWA-DL-ADP-350-1881]

Fig.11-24



[PWA-DL-ADP-350-1931]

Fig.11-25

[A] Precautions when writing the System ROM data

- Set the writing voltage (VID) to 3.3 V.
When an error appears while the data are being written to the download jig, set the writing voltage (VID) to 12 V and then write them.
- When writing the data, set the address from 0 to 3FFFFFF. The data may not be written correctly if it is not set.
- Load the data file into the buffer by means of the following settings.

Auto Format Detected	Binary
From File	Normal
To Buffer	Normal
From File Address	0
To Buffer Address	0
Buffer Size	800100
Clear Buffer Before Loading the file	Clear buffer with blank state

[A-1] System ROM

System ROM		
Rotary Switch	File Name	Flash ROM
1	ex-bpmash_jig_1.bin	ROM1
2	ex-bpmash_jig_2.bin	ROM2
3	N/A	ROM3
4	N/A	ROM4
5	N/A	ROM5
6	N/A	ROM6

Notes:

Be sure not to confuse different ROM Versions since the file name is identical although the ROM version is different.

[B] Precautions when writing the Engine ROM data

- Clear the buffer of the ROM writer by means of the following settings.

To Buffer Address	To Address	Code
0	800000	FF
800000	8000FF	00

- Set the writing voltage (VID) to 3.3 V.
When an error appears while the data are being written to the download jig, set the writing voltage (VID) to 12 V and then write them.
- When writing the data, set the address from 0 to 3FFFFFF. The data may not be written correctly if it is not set.
- Load the data file into the buffer by means of the following settings.

Auto Format Detected	Binary
From File	Normal
To Buffer	Normal
From File Address	0
To Buffer Address	300000
Buffer Size	800000
Clear Buffer Before Loading the file	Clear buffer with blank state

[B-1] Engine ROM

System ROM		
Rotary Switch	File Name	Flash ROM
1	T140MWW.xxx	ROM1
2	N/A	ROM2
3	N/A	ROM3
4	N/A	ROM4
5	N/A	ROM5
6	N/A	ROM6

11.3.2 System ROM

The firmware of the system ROM can be updated individually by using WA-DWNLD-350-JIG1.

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be able to be operated properly.

[A] Update procedure

- (1) Write the ROM data to be updated to the download jig (PWA-DWNLD-350-JIG1).
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Take off the cover plate.

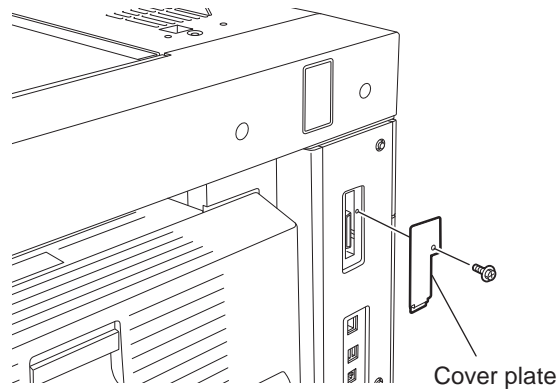


Fig.11-26

- (4) Connect the download jig with the jig connector (CN101) on the SYS board.

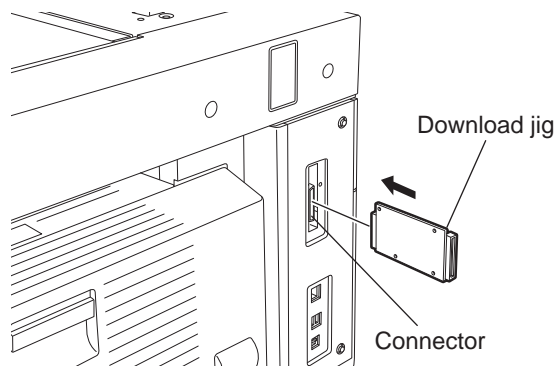


Fig.11-27

- (5) Press the [ON/OFF] button while simultaneously holding down the [8] and [9] buttons.
- (6) Press the [Firmware Update] button, then press the [1] key to select "1.SYSTEM FIRMWARE(OS Data)".
- (7) Select the item with the digital keys.
"*" is displayed next to the selected item. Display or delete the "*" by pressing the number of the item. All items are selected in the default settings.

- (8) Press the [START] button.
Updating starts and the processing status is displayed on the LCD screen.
- (9) "Update Completed." is displayed at the bottom of the LCD screen after the updating is completed properly. Turn the power OFF by pressing the [ON/OFF] button.


Notes:

"Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. "Failed" appears next to the failed item on the status display. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.

- Is the download jig connected properly?
 - Is the updating data written to the download jig properly?
 - Do the download jig and the equipment operate properly?
- (10) Turn the power OFF using the main power switch on the right-hand surface of the equipment, remove the download jig, and then install the cover plate.
 - (11) Turn the power ON using the main power switch while holding down the [3] and [C] keys simultaneously.
 - (12) Press the [5] key to select "5. Key Backup Restore", then press the [START] button.
 - (13) Restore the key and license data by following the steps below.
 - Restore the key data by pressing the [1] key to select "1. Key SRAM to FROM", then press the [START] button.
 - If the state of "FROM Licence Status" is "KeyMismatch", restore the license data by pressing the [3] key to select "3. License SRAM to FROM", then press the [START] button.
 - If ADI-HDD is installed, restore the encryption key data by pressing the [5] key to select "5. ADIKey SRAM to FROM", then press the [START] button.
 - (14) Press the [ON/OFF] button to shut down the equipment.
 - (15) Perform the initialization of the updating data.
 - Turn the power ON using the main power switch while pressing the [0] and [8] buttons simultaneously.
 - Key in "9030", and then press the [START] button.
 - Press the [INITIALIZE] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data was overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.3.3 Engine ROM

The firmware of the engine ROM can be updated individually by using PWA-DWNLD-350-JIG1.

Important:

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be able to be operated properly.

[A] Update Procedure

- (1) Write the ROM data to be updated to the download jig (PWA-DWNLD-350-JIG1).
- (2) Turn the power OFF using the main power switch on the right-hand surface of the equipment.
- (3) Unplug the power cable from the outlet.
- (4) Take off the rear cover-1.

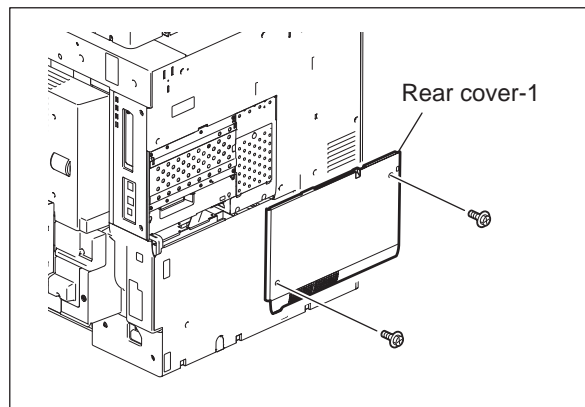


Fig.11-28

- (5) Remove the cover plate.

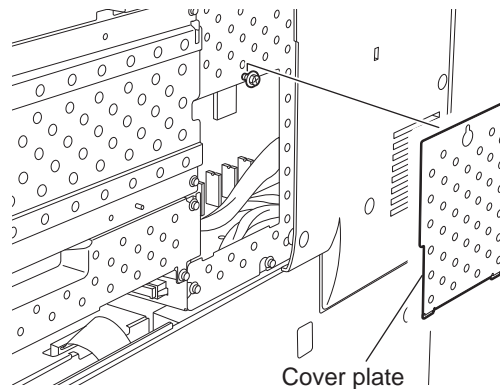


Fig.11-29

- (6) Connect the download jig with the jig connector (CN352) on the logic PC board (LGC board).

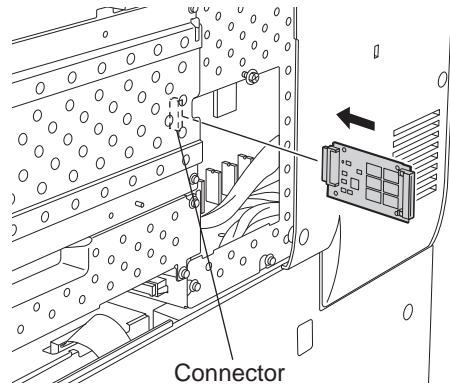



Fig.11-30

- (7) Open the front cover.
- (8) Plug the power cable into the outlet.
- (9) Turn the power ON using the main power switch while simultaneously holding down the [0] and [8] buttons.
Updating starts automatically and the LED on the download jig lights.
- (10) When the update is completed properly, the LED (END) on the download jig blinks.
The LED starts blinking approx. 15 sec. after the update starts. It is assumed that the update has failed if it does not start blinking even though 1 min. has passed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (11) Turn the power OFF using the main power switch on the right-hand surface of the equipment.
- (12) Unplug the power cable from the outlet and remove the download jig.
- (13) Install the cover plate and rear cover-1, and then close the front cover.
- (14) Plug the power cable into the outlet.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

[C] Adjustment

Perform the adjustment of the equipment

- Performing Image Quality Control (05-2742):
📖 P. 6-4 "6.1.3 Performing Image Quality Control"
- Adjustment of Color Registration Control (05-4719):
📖 P. 6-5 "6.1.4 Adjustment of Color Registration Control"
- Automatic gamma adjustment <PPC> (05-7869) (using [4][FAX] test pattern):
📖 P. 6-27 "6.2.1 Automatic gamma adjustment"
- Automatic gamma adjustment < PRT > (05-8008) (using [70][FAX] test pattern):
📖 P. 6-44 "6.3.1 Automatic gamma adjustment"

11.4 Firmware Updating with K-PWA-DLM-320

The firmware of the equipment (scanner ROM) and the option (RADF ROM, Finisher ROM, FAX ROM) can be updated individually by using K-PWA-DLM-320. Update the ROM data written on each board according to the need such as the case of replacing the board.

Equipment

Firmware	Stored
Scanner ROM (Scanner firmware)	Scanning section control PC board (SLG board)

Options

Model name	Firmware	Stored
Reversing Automatic Document Feeder (RADF) (MR-3021/3022)	RADF firmware	RADF control PC board
Finisher (MJ-1101)	Finisher firmware	Finisher control PC board
	Converter firmware	Converter PC board
Saddle Stitch Finisher (MJ-1106)	Finisher firmware	Finisher control PC board
	Saddle stitcher firmware	
	Converter firmware	
Hanging Finisher (MJ-1031)	Finisher firmware	Finisher control PC board
Hole Punch Unit (MJ-6103)	Hole punch unit firmware	Hole punch control PC board
Fax Unit (GD-1250)	Fax unit firmware	FAX board

K-PWA-DLM-320

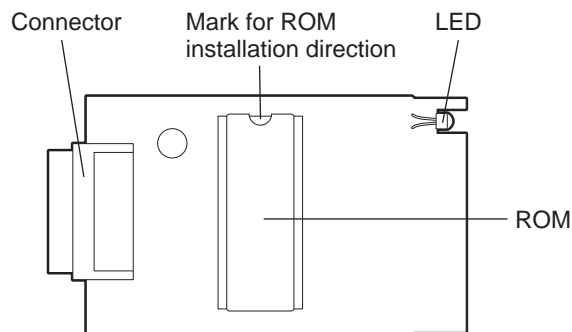


Fig.11-31

Important:

Pay attention to the direction of the ROM.

11.4.1 Scanner ROM

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Take off the right upper cover.

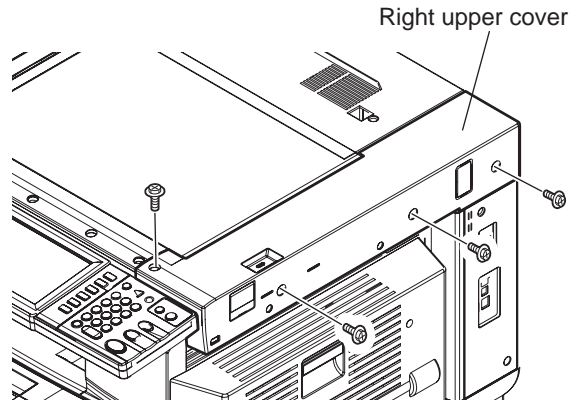


Fig.11-32

- (4) Remove the cover plate.

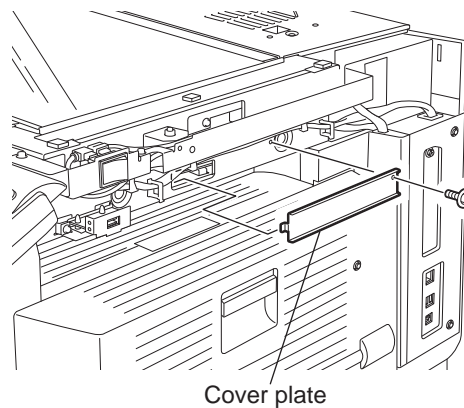


Fig.11-33

- (5) Connect the download jig with the jig connector (CN16) on the scanning section control PC board (SLG board).

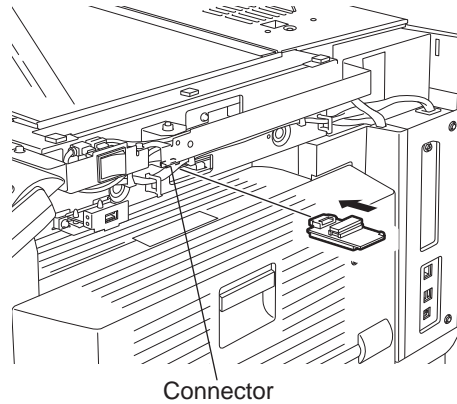


Fig.11-34

- (6) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. Updating starts automatically and the LED on the download jig lights.
- (7) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking approx. 20 sec. after the update starts. It is assumed that the update has failed if it does not start blinking even though 1 min. has passed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (8) Turn the power OFF using the main power switch on the right-hand surface of the equipment, remove the download jig, and then install the cover plate and the right upper cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

📖 P. 11-67 "11.5 Confirmation of the updated data"

Important:

If the exposure lamp blinks twice at the time of start-up and a "C270" error occurs, the model of the scanner ROM updated may be incorrect.

Check the model of the scanner ROM and retry updating.

11.4.2 RADF firmware (MR-3021/3022)

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Take off the RADF rear cover.

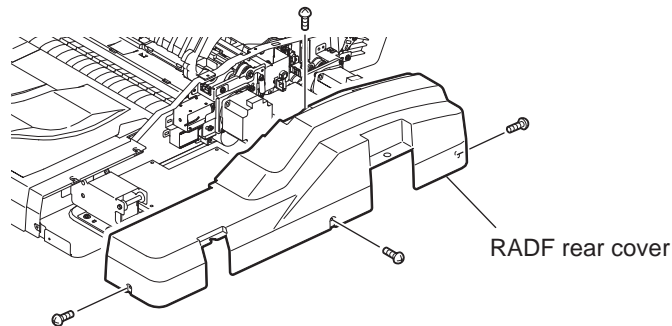


Fig.11-35

- (4) Connect the download jig with the jig connector (CN81) on the RADF control PC board.

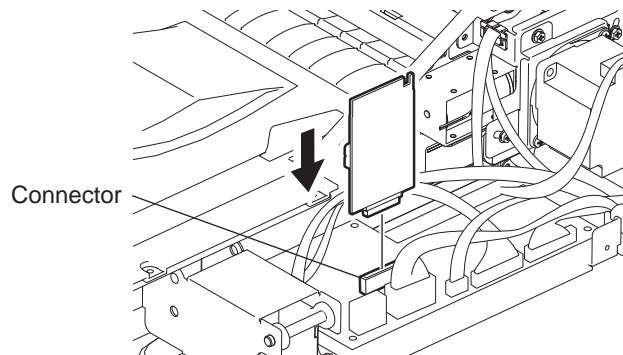



Fig.11-36

- (5) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons.
Updating starts automatically and the LED on the download jig lights.
- (6) After the update is completed properly, the LED on the download jig blinks slowly (at an interval of approx. 0.8 sec.).
The LED starts blinking approx. 15 sec. after the update starts. It is assumed that the update has failed if it does not start blinking even though 1 min. has passed or the LED blinks fast (at an interval of approx. 0.1 sec.). In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?

- (7) Turn the power OFF using the main power switch on the right-hand surface of the equipment, remove the download jig, and then install the RADF rear cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.3 Finisher firmware (MJ-1031)

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Take off the hanging finisher (MJ-1031) from the equipment.

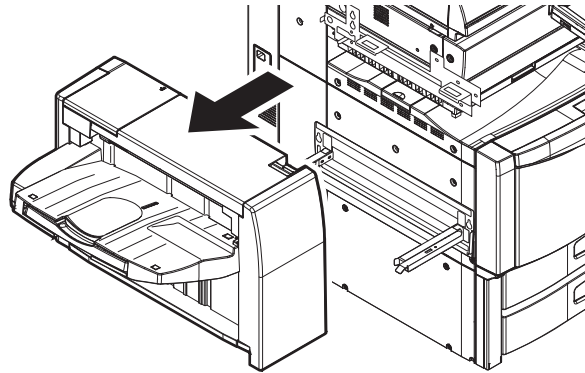


Fig.11-37

- (4) Take off the rear cover.

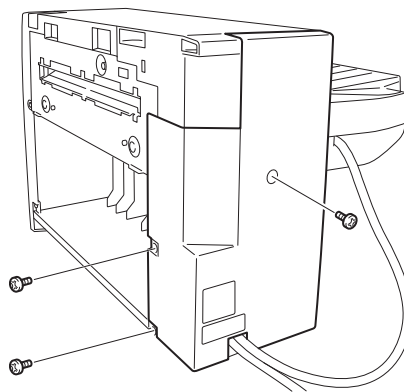


Fig.11-38

- (5) Install the hanging finisher in the equipment.

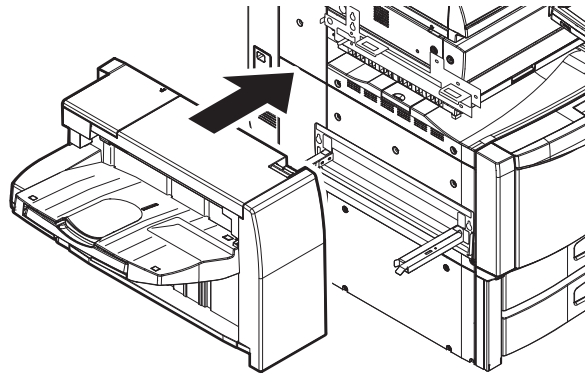


Fig.11-39

- (6) Connect the download jig with the jig connector on the Finisher control board.

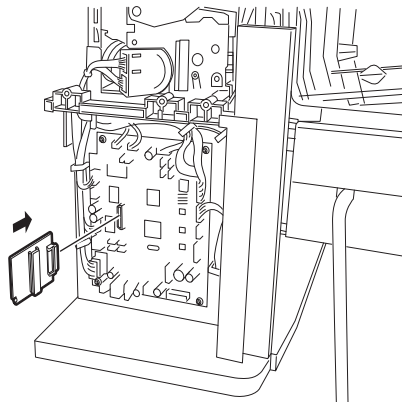



Fig.11-40

- (7) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. Updating starts and the LED on the download jig lights.
- (8) When the update completes normally, the LED on the download jig starts blinking. The LED on the download jig starts blinking approx. 12 seconds after the update started. It is assumed that the update has failed if the LED does not start blinking even after 20 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the downloading jig connected properly?
 - Is the ROM attached to the downloading jig properly?
 - Has the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
- (9) Turn the power OFF using the main power switch on the right-hand surface of the equipment and remove the download jig.
- (10) Take off the hanging finisher from the equipment.
- (11) Install the board access cover.
- (12) Install the hanging finisher in the equipment.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.4 Finisher firmware (MJ-1101)

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Remove 1 screw and take off the board access cover.

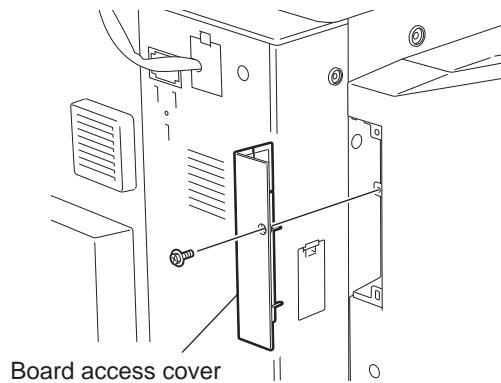


Fig.11-41

- (4) Connect the download jig with the jig connector (CN9) on the Finisher control board.

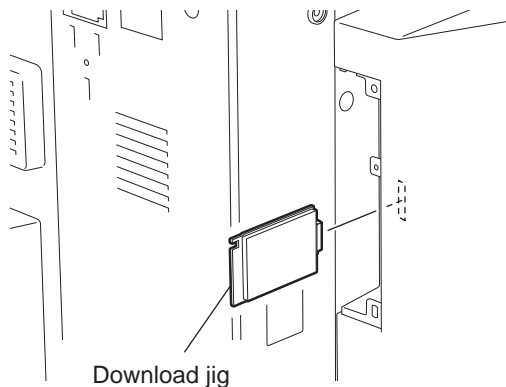



Fig.11-42

- (5) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons.
Updating starts and the LED on the download jig lights
- (6) When the update completes normally, the LED on the download jig starts blinking.
The LED on the download jig starts blinking approx. 12 seconds after the update started.
It is assumed that the update has failed if the LED does not start blinking even after 20 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
 - Is the downloading jig connected properly?

- Is the ROM attached to the downloading jig properly?
 - Has the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
- (7) Turn the power OFF using the main power switch on the right-hand surface of the equipment, remove the download jig, and then install the board access cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.5 Finisher firmware (MJ-1106)

[A] Update Procedure

- (1) Install the ROM to the download jig.
Make sure the direction is correct.

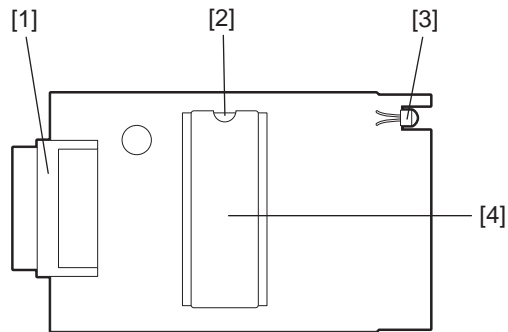


Fig.11-43

- [1] Connector
- [2] Mark for ROM installation direction
- [3] LED
- [4] ROM

- (2) Shut down the equipment.
- (3) Take off the finisher board access cover [1].

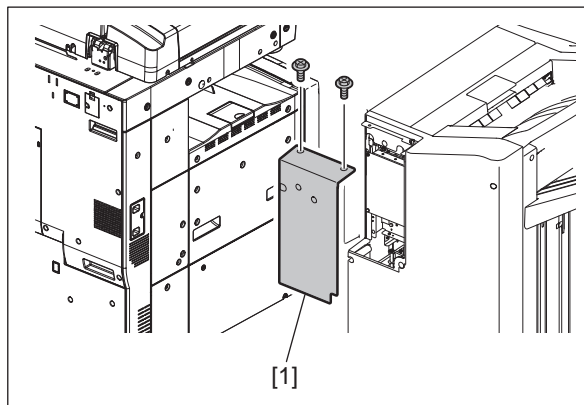


Fig.11-44

- (4) Connect the download jig [1] with the jig connector (CN28) on the Finisher control board.

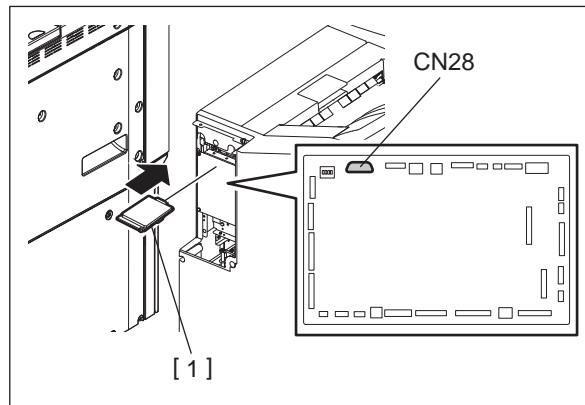



Fig.11-45

- (5) Turn ON the power while pressing [0] and [8] simultaneously. Updating starts and the LED on the download jig lights.
- (6) When the update completes normally, the LED on the download jig starts blinking. The LED on the download jig starts blinking approx. 12 seconds after the update started. It is assumed that the update has failed if the LED does not start blinking even after 20 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the downloading jig connected properly?
 - Is the ROM attached to the downloading jig properly?
 - Have the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
- (7) Turn the power OFF and remove the download jig.
- (8) Install the board access cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.6 Converter Firmware (MJ-1101)

The harness jig for board connection is required for updating the firmware of the converter PC board of the finisher (MJ-1101) as well as the download jig (K-PWA-DLM-320).

Name of the jig	Model name
Harness jig for board connection	HRNS-CNV-DL-JIG

Important:

- Be sure to connect the equipment and finisher (MJ-1101) before updating the converter firmware.
- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Take off the finisher board access cover [1].

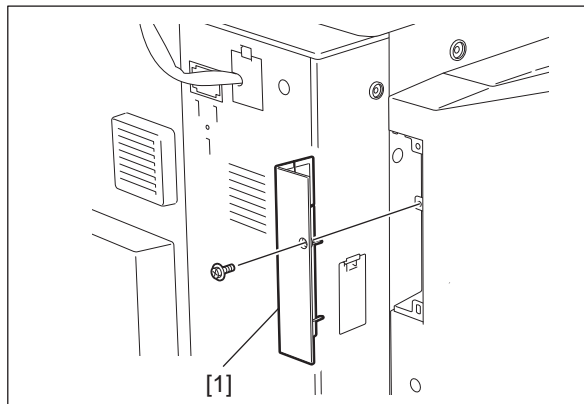


Fig.11-46

- (4) Take off the rear cover-1 of the equipment.

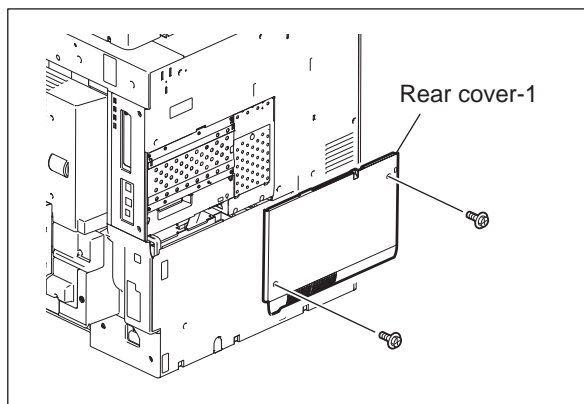


Fig.11-47

- (5) Remove the cover plate [1].

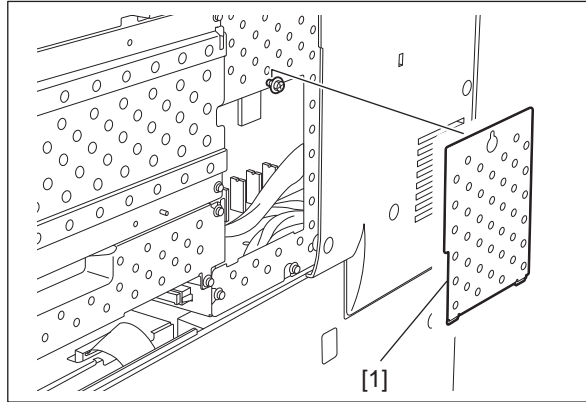


Fig.11-48

- (6) Take off the converter PC board [1] from the logic PC board (LGC board).

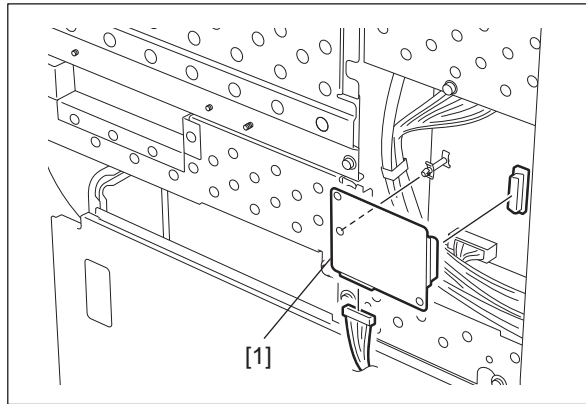


Fig.11-49

- (7) Connect the 10-pin side of the harness jig for board connection to the connector (CN2) of the converter PC board.

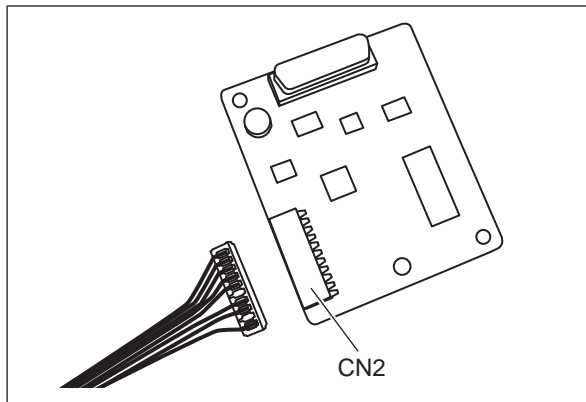


Fig.11-50

- (8) Connect the 15-pin side of the harness jig for board connection to the connector (CN15) of the finisher control PC board.

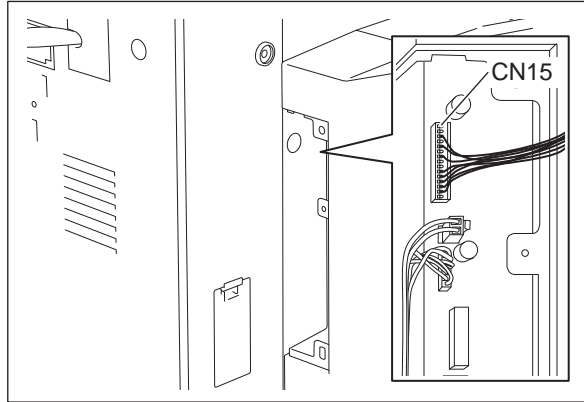


Fig.11-51

Notes:

- Be sure to release the connection cable from the connector (CN15) of the finisher control PC board when the hole punch unit (MJ-6103) has been installed.
- Be careful not to short-circuit any part of the converter PC board.

- (9) Connect the download jig [1] with the jig connector (CN9) on the Finisher control board.

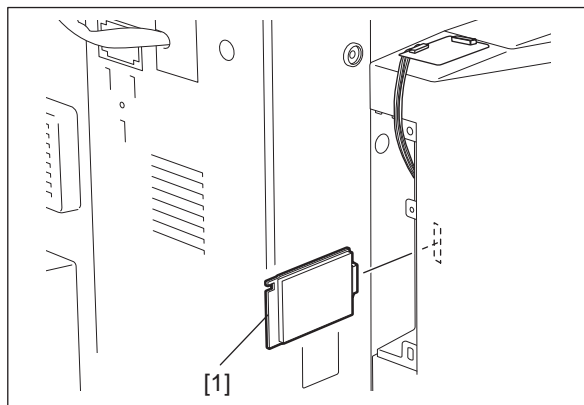


Fig.11-52

- (10) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. Updating starts and the LED on the download jig lights.
- (11) When the update completes normally, the LED on the download jig starts blinking. The LED on the download jig starts blinking approx. 20 seconds after the update started. It is assumed that the update has failed if the LED does not start blinking even after 30 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the downloading jig connected properly?
 - Is the ROM attached to the downloading jig properly?
 - Have the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
 - Is the harness jig for board connection connected to connector (CN2) of the converter PC board and the connector (CN15) of the finisher control PC board correctly?

- (12) Turn the power OFF using the main power switch on the right-hand surface of the equipment.
- (13) Remove the download jig and the harness jig for board connection from the finisher control PC board.

Notes:

Be sure to secure the connection cable in the connector (CN15) of the finisher control PC board when the hole punch unit (MJ-6103) has been installed.

- (14) Remove the harness jig for board connection from the converter PC board.
- (15) Install the converter PC board in the equipment.
- (16) Install the cover plate and the rear cover-1.
- (17) Install the board access cover.

[B] Confirmation of Firmware Version

Be sure to install the converter PC board in the equipment and connect the finisher (MJ-1101) before confirming the firmware version of the converter firmware.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.7 Converter Firmware (MJ-1106)

Important:

- The harness jig for board connection (HRNS-CNV-DL-JIG) is required for updating the firmware of the converter PC board of the finisher (MJ-1106) as well as the download jig (K-PWA-DLM-320).
- Be sure to connect the equipment and finisher (MJ-1106) before updating the converter firmware.
- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Update Procedure

- (1) Install the ROM to the download jig.
Make sure the direction is correct.

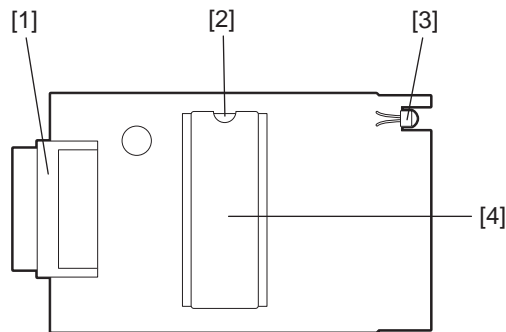


Fig.11-53

- [1] Connector
- [2] Mark for ROM installation direction
- [3] LED
- [4] ROM

- (2) Shut down the equipment.
- (3) Take off the finisher board access cover [1].

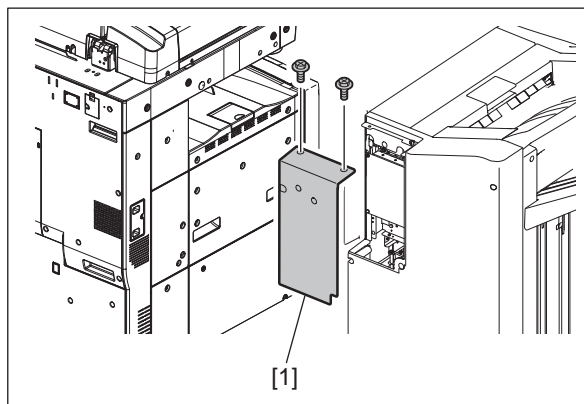


Fig.11-54

- (4) Connect the download jig [1] with the jig connector (CN28) on the Finisher control board.

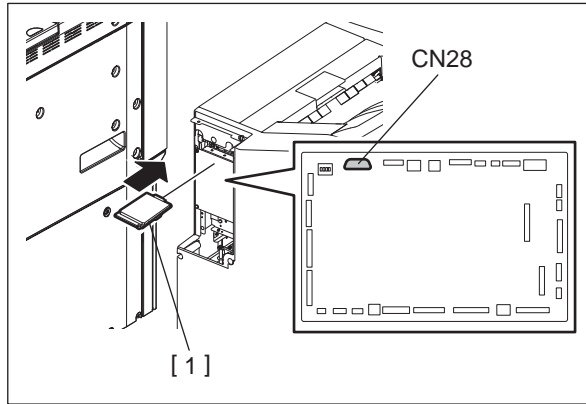


Fig.11-55

- (5) Take off the rear cover-1 [1] of the equipment

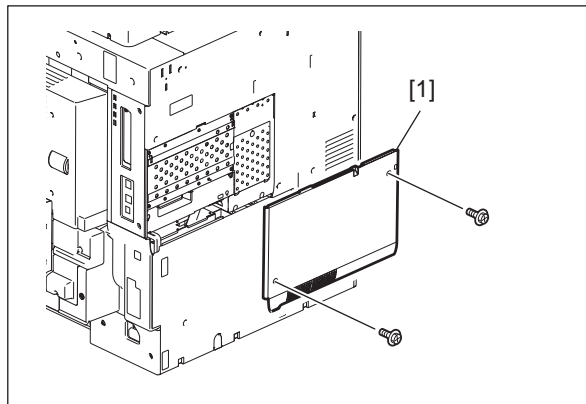


Fig.11-56

- (6) Remove the cover plate [1].

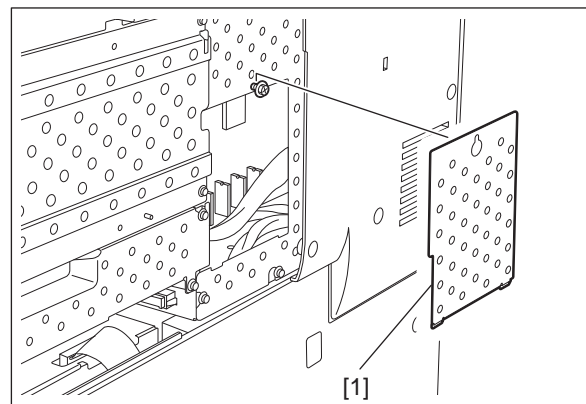


Fig.11-57

- (7) Take off the converter PC board from the logic PC board (LGC board)

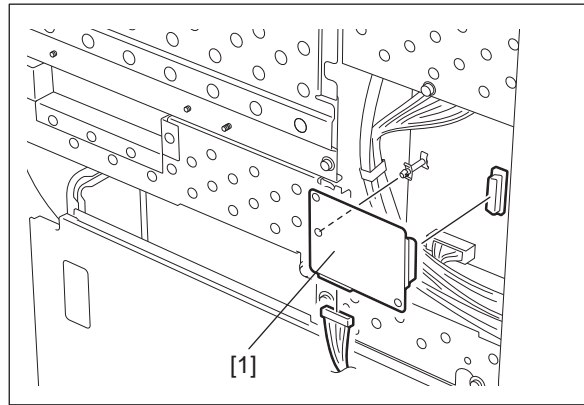


Fig.11-58

- (8) Connect the 10-pin side of the harness jig for board connection (HRNS-CN2-DL-JIG) to the connector (CN2) of the converter PC board [1].

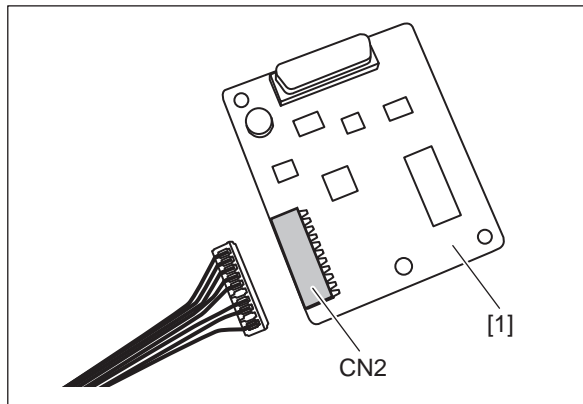


Fig.11-59

- (9) Connect the 15-pin side of the harness jig for board connection to the connector (CN4) of the IF board.

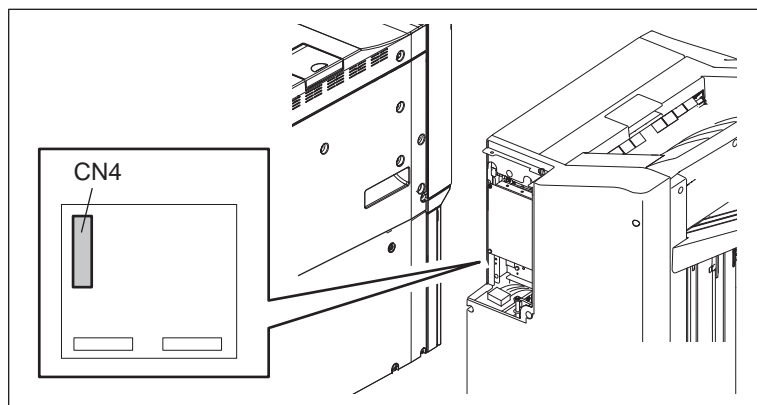


Fig.11-60

Notes:

- Be sure to release the connection cable from the connector (CN4) of the IF board when the hole punch unit (MJ-6103) has been installed.
- Be careful not to short-circuit any part of the converter PC board.

(10) Turn ON the power while [0] button and [8] button are pressed simultaneously. Updating starts and the LED on the download jig lights.

(11) When the update completes normally, the LED on the download jig starts blinking. The LED on the download jig starts blinking approx. 20 seconds after the update started. It is assumed that the update has failed if the LED does not start blinking even after 30 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.

- Is the downloading jig connected properly?
- Is the ROM attached to the downloading jig properly?
- Have the update data been written correctly to the ROM on the jig?
- Is the download jig or the equipment damaged?
- Is the harness jig for board connection connected to connector (CN2) of the IF board and the connector (CN4) of the finisher control PC board correctly?

(12) Shut down the equipment.

(13) Remove the download jig and the harness jig for board connection from the finisher control PC board.

Notes:

Be sure to secure the connection cable in the connector (CN4) of the IF board when the hole punch unit (MJ-6103) has been installed.

(14) Remove the harness jig for board connection from the converter PC board.


(15) Install the converter PC board in the equipment.

(16) Install the cover plate and the rear cover-1.

(17) Install the board access cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.8 Saddle stitcher firmware (MJ-1106)

[A] Update Procedure

- (1) Install the ROM to the download jig.
Make sure the direction is correct.

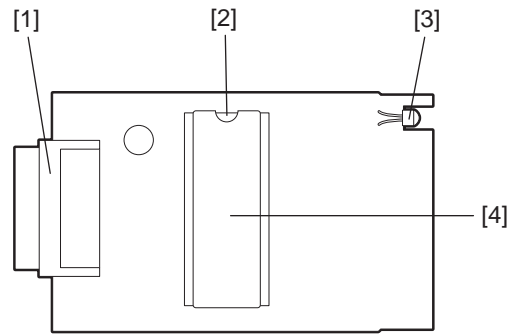


Fig.11-61

- [1] Connector
- [2] Mark for ROM installation direction
- [3] LED
- [4] ROM

- (2) Turn OFF the power of the equipment.
- (3) Open the front upper cover and then pull out the saddle stitch unit.
- (4) Loosen 2 screws and open the saddle control PC board access cover [1].

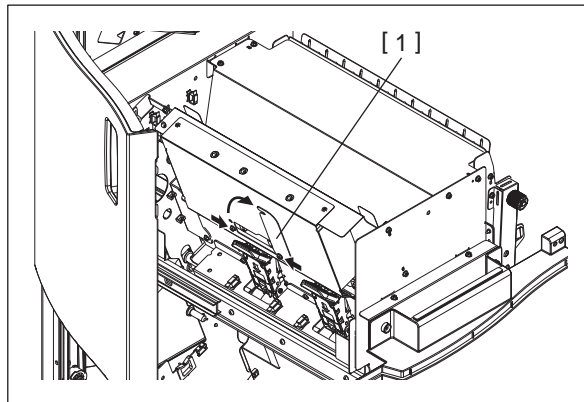


Fig.11-62

- (5) Connect the download jig [1] with the jig connector (CN16) on the Saddle control board.

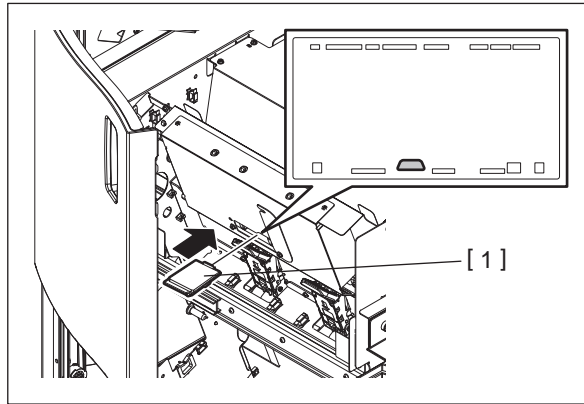



Fig.11-63

- (6) Turn ON the power while pressing [0] and [8] simultaneously. Updating starts and the LED on the download jig [1] lights.
- (7) When the update completes normally, the LED on the download jig [1] starts blinking. The LED on the download jig starts blinking in approx. 8 seconds after the update started. It is assumed that the update is failed if the LED does not start blinking even after 15 seconds have elapsed. In this case, turn the power OFF and check the following items. Then, clear the problem and restart updating from the beginning.
- Is the downloading jig connected properly?
 - Is the ROM attached to the downloading jig properly?
 - Have the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
- (8) Turn the power OFF and remove the download jig [1].
- (9) Install the saddle control PC board access cover.
- (10) Set the saddle stitch unit back to the main unit and then close the upper front cover.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.4.9 Hole punch unit firmware (MJ-6103)

Important:

- Be sure to shut down the equipment before installing and removing the download jig.
- Do not shut down the equipment during the update. The data could be damaged and not be operated properly.

[A] Checking the hole punch position

Follow the procedure below to check the stopping position of the paper transport during the punching operation before updating the firmware, as the value for the position is defaulted when the firmware is updated.

- (1) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (2) Remove the finisher board access cover and change the setting of the DIP-SW1 (SW1) on the finisher control PC board as shown in the figure below.

<When MJ-1101 is connected>

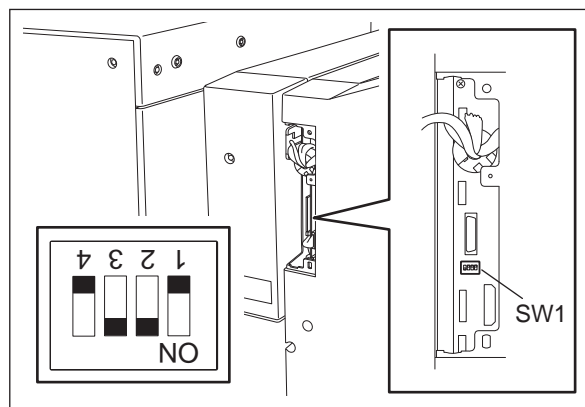


Fig.11-64

<When MJ-1106 is connected>

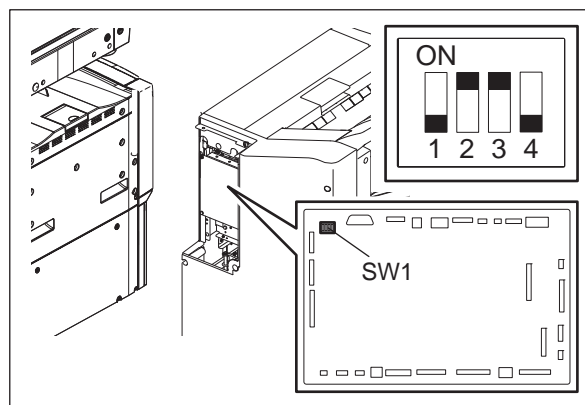


Fig.11-65

- (3) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. The [LED1] on the finisher control panel starts blinking. Count the number of times it blinks. If the number of blinks is "6", this indicates that the value for the stopping position is the default. If the number is other than "6", record it because the value needs to be reset after the firmware is updated.
- (4) Return the DIP-SW1 to the status before checking.

[B] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) When MJ-1101 is connected, remove 1 screw, take off the finisher board access cover [1].
When MJ-1106 is connected, remove 2 screws, take off the finisher board access cover [1].

<When MJ-1101 is connected>

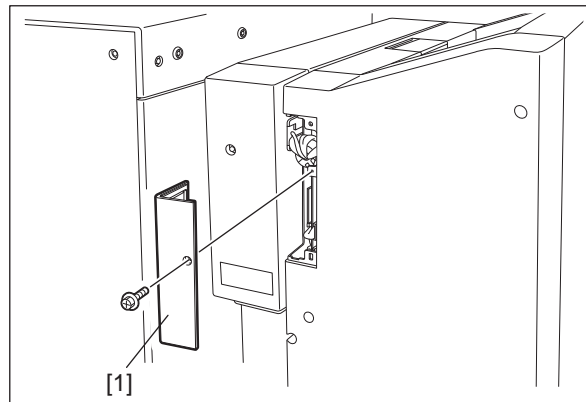


Fig.11-66

<When MJ-1106 is connected>

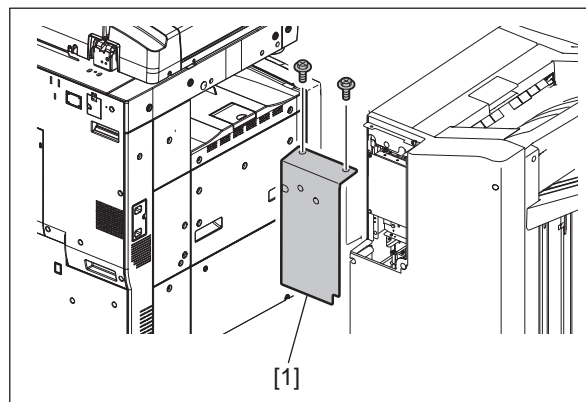


Fig.11-67

- (4) Release the latches and take off the rear lower cover of the hole punch unit.

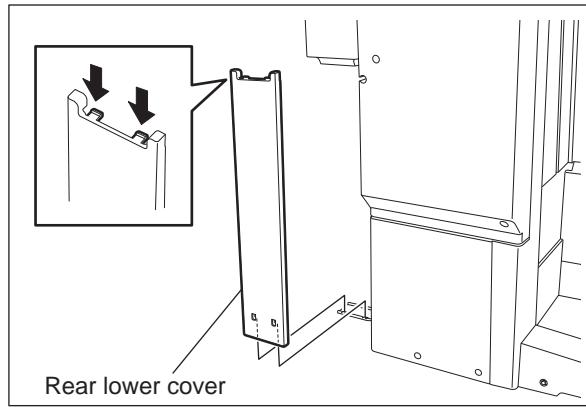


Fig.11-68

- (5) Remove 3 screws and take off the rear cover of the hole punch unit.

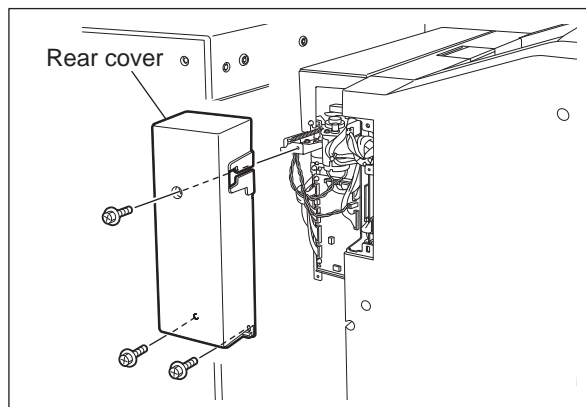


Fig.11-69

- (6) If MJ-1101 is connected, connect the download jig [1] with the jig connector (CN9) on the finisher control PC board.
If MJ-1106 is connected, connect the download jig [1] with the jig connector (CN28) on the finisher control PC board.

<MJ-1101 is connected>

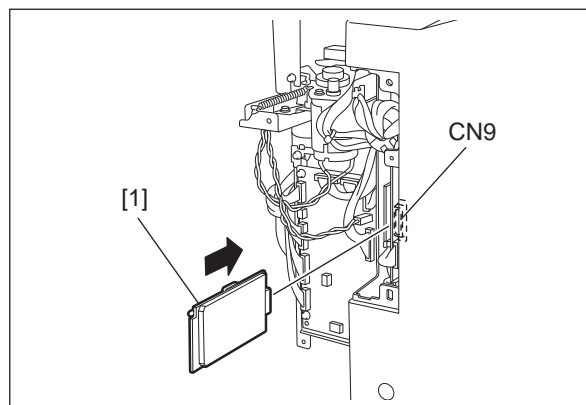


Fig.11-70

<MJ-1106 is connected>

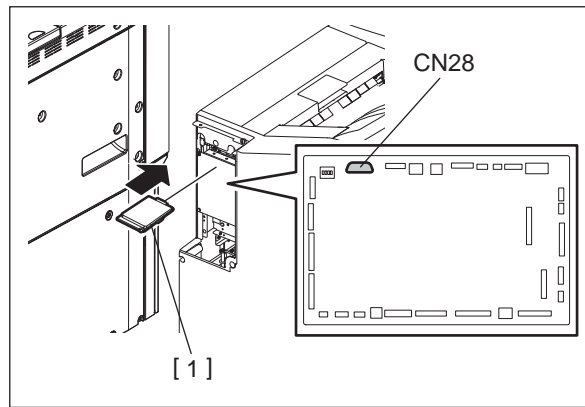


Fig.11-71

- (7) Set the DIP-SW4 on the hole punch control PC board to ON.

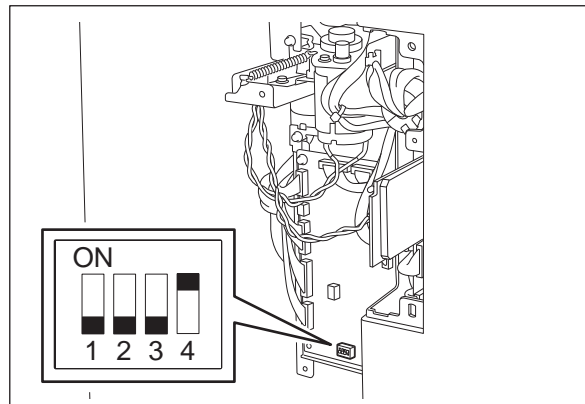


Fig.11-72

- (8) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. Updating starts and the LED on the download jig lights.
- (9) When the update is completed normally, the LED on the download jig starts blinking. The LED on the download jig starts blinking approx. 20 seconds after the update started. It is assumed that the update has failed if the LED does not start blinking even after 30 seconds have elapsed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
- Is the downloading jig connected properly?
 - Is the ROM attached to the downloading jig properly?
 - Is the DIP-SW4 on the hole punch control PC board set properly?
 - Has the update data been written correctly to the ROM on the jig?
 - Is the download jig or the equipment damaged?
 - Is the connector (CN12) on the finisher control PC board connected properly?
 - Are the connector (CN15) on the finisher control PC board and the connector (CN1) on the hole punch control PC board connected properly?
- (10) Turn the power OFF using the main power switch on the right-hand surface of the equipment and remove the download jig.

(11) Set the DIP-SW4 on the hole punch control PC board to OFF.

Notes:

When the number of blinks is other than “6” (which indicates that the adjustment value is “0”) at the section “[A]Checking the hole punch position”, follow the steps of “5.1 Stopping Position Adjustment” in the MJ-6101/6103 Service Manual to adjust the value to the one that has been set before the update.

(12) Change the settings of the DIP-SW1 and -SW2 on the hole punch control PC board according to the model as shown in the figure below.

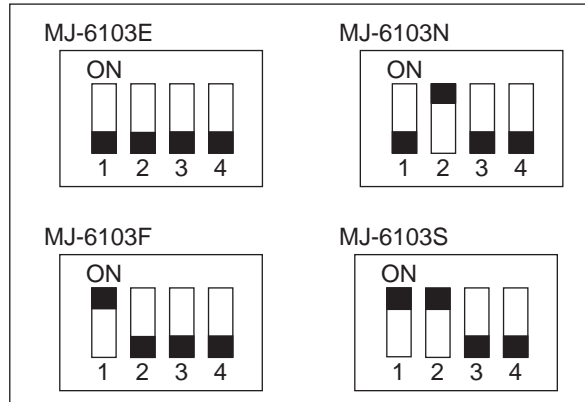


Fig.11-73

(13) Install the rear cover of the hole punch unit.

(14) Install the rear lower cover of the hole punch unit.

(15) Install the finisher board access cover.

[C] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

P. 11-67 "11.5 Confirmation of the updated data"

11.4.10 Fax unit firmware (GD-1250)

Important:

- Before updating the FAX ROM, make sure to print out the current Function list for maintenance, Function list (ADMIN), Address book list and Group number information. In case the updating is failed and the registered information of the users is lost for some reason, re-register the user information referring to the lists and recover it.
- Confirm the following items before turning OFF the power of the equipment. Turning OFF the power may clear the data below.
 - Confirm that the "MEMORY RX" LED is OFF and there are no memory reception data.
 - Print the "Mailbox/Relay box report" and then confirm that there are no F code data.
 - Press the [JOB STATUS] button to display the screen and then confirm that there are no memory transmission data.

[A] Update Procedure

- (1) Install the ROM to the download jig (K-PWA-DLM-320).
Make sure the direction is correct.
- (2) Press the [ON/OFF] button on the control panel to shut down the equipment.
- (3) Remove the cover plate.

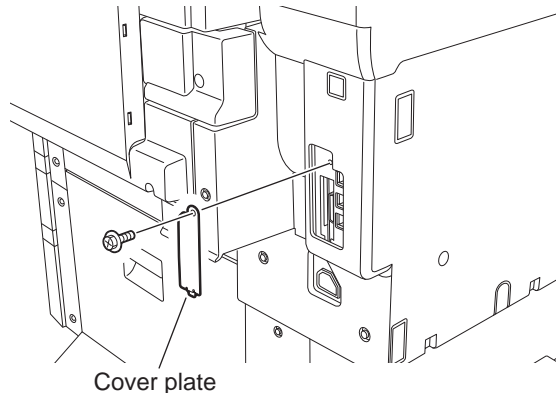


Fig.11-74

- (4) Connect the download jig with the jig connector on the FAX board.

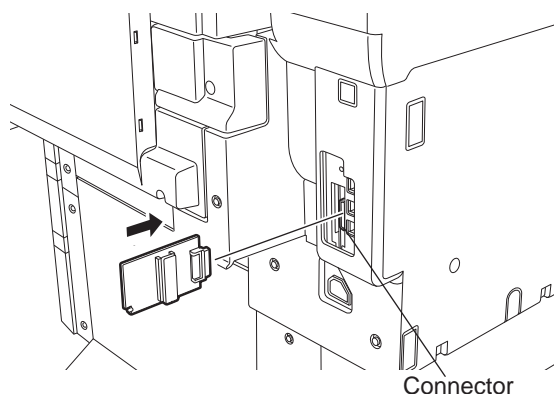


Fig.11-75

- (5) Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons. Updating starts automatically and the LED on the download jig lights.
- (6) After the update is completed properly, the LED on the download jig blinks. The LED starts blinking approx. 30 sec. after the update starts. It is assumed that the update has failed if it does not start blinking even though 1 min. has passed. In this case, shut down the equipment and check the following items. Then clear the problems and restart updating from the beginning.
 - Is the download jig connected properly?
 - Is the ROM installed to the download jig properly?
 - Is the updating data written on the ROM of the download jig properly?
 - Do the download jig and the equipment operate properly?
- (7) Turn the power OFF using the main power switch on the right-hand surface of the equipment, remove the download jig, and then install the cover plate.
- (8) In the FAX Clearing Mode, perform the "FAX Set Up".
 - Confirm the destination setting is correct in the Setting Mode (08).
08-9000: Destination setting of the equipment
08-9001: Destination setting of the FAX machine
 - Turn ON the power while [1] button and [*] button are pressed simultaneously.
 - Key in "100".
 - Press the [START] button.


Notes:

If the equipment does not work properly after the operation (8), follow the procedure below and then perform the "Clearing the image data" in the FAX Clearing Mode to erase the image data in the memory.

- Confirm the destination setting is correct in the Setting Mode (08).
08-9000: Destination setting of the equipment
08-9001: Destination setting of the FAX machine
- Turn ON the power while [1] button and [*] button are pressed simultaneously.
- Key in "102".
- Press the [START] button.

[B] Confirmation of the updated data

After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.

 P. 11-67 "11.5 Confirmation of the updated data"

11.5 Confirmation of the updated data



After the updating is completed, check each data version in Setting Mode (08) to confirm that the data were overwritten properly.



Firmware	Code	Remarks
Updating Master data (HDD program data)	08-8952	HD data external version
	08-9900	System software version
Updating System ROM (OS data)	08-9930	System ROM version
Updating Engine ROM (Engine firmware)	08-9901	Engine ROM version
Updating Scanner ROM (Scanner firmware)	08-9902	Scanner ROM version
Updating RADF ROM (RADF firmware)	08-9903	RADF ROM version
Updating Finisher ROM	08-9904	Finisher ROM version Saddle stitcher ROM version
	08-9944	Hole punch unit ROM version
	08-9945	Converter board ROM version
Updating FAX ROM	08-9905	FAX ROM version

11.6 When Firmware Updating Fails

When the equipment was shut down during firmware updating or it could not be started after updating for some reason, perform firmware updating again following the procedure below.

11.6.1 Procedure

- (1) Update "System ROM" of the system control PC board (SYS board) using the download jig (PWA-DWNLD-350-JIG1).
Updating with the USB media becomes possible only after the "System ROM" (OS data) has been updated.
See the updating procedure below for details.
 P. 11-29 "11.3 Firmware Updating with PWA-DWNLD-350-JIG1"
- (2) Update "Master Data", "Engine ROM", "Scanner ROM" and "RADF ROM" using the USB media.
See the updating procedure below for details.
 P. 11-6 "11.1 Firmware Updating with USB Media"
- (3) When the update with the USB media for "Scanner ROM" and "RADF ROM" failed, update these ROMs using the respective download jigs in the table below.

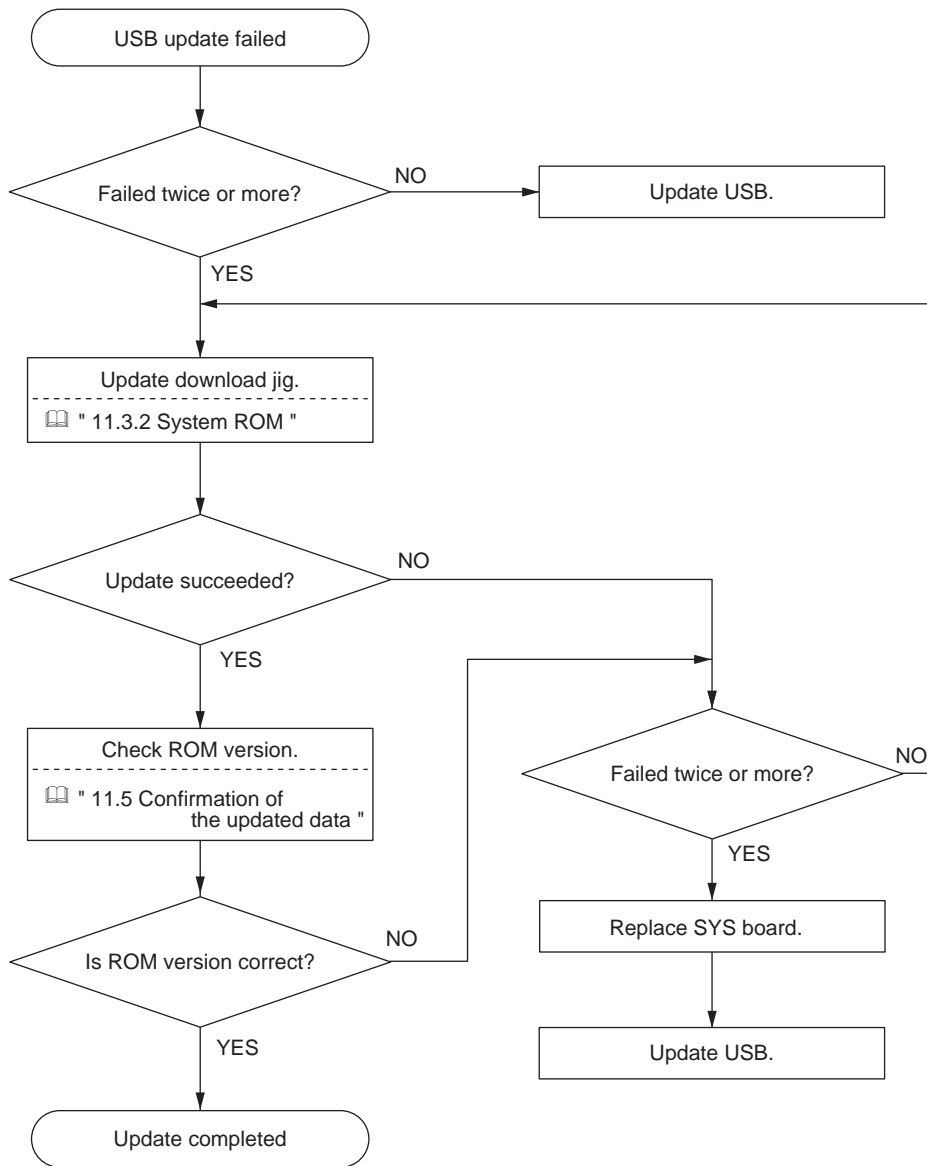
Firmware	Storage location	Download jig
Scanner ROM	Scanning section control PC board (SLG board)	K-PWA-DLM-320  P. 11-39 "11.4.1 Scanner ROM"
RADF ROM	RADF board	K-PWA-DLM-320  P. 11-41 "11.4.2 RADF firmware (MR-3021/3022)"

Important:

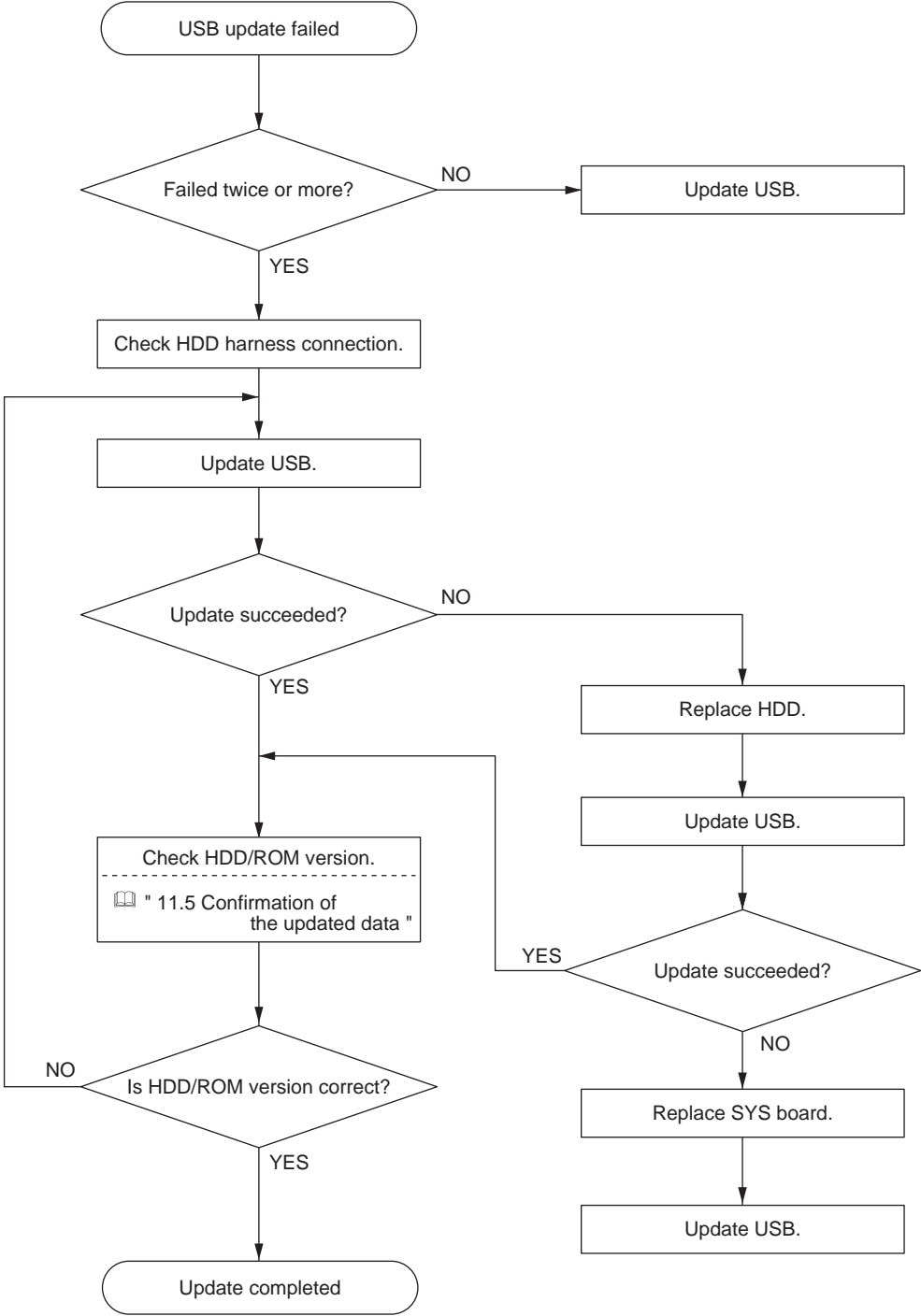
If the equipment cannot be started even when the above update has been performed, check that there is no damage to the "SYS board", "LGC board", "RADF board" or "SLG board". Replace them if necessary.

11.6.2 Flow chart for correcting USB update failure

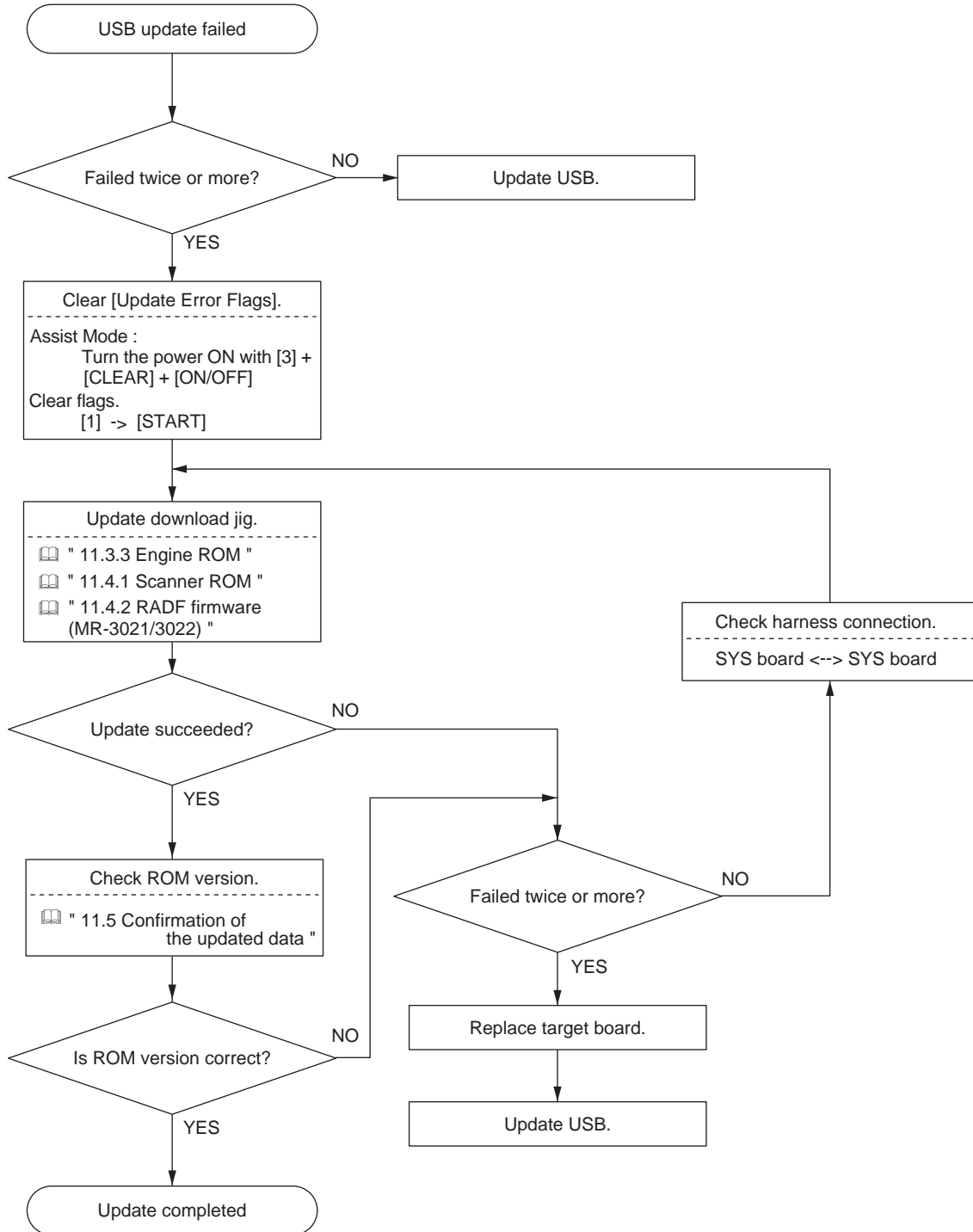
[A] When the update of the System ROM (OS data) failed



[B] When the update of master data (HDD program data) failed



[C] When the update of Engine ROM / Scanner ROM / RADF ROM failed



12. BACKUP FUNCTION

12.1 Data Cloning

12.1.1 General description

Data cloning is a function that backs up user data, setting data and SRAM data into a USB media and also restores these data into the equipment.

This function backs up or restores the data of the same equipment (same serial number), and is performed in the following cases.

- When the SYS board and the SRAM board are replaced at the same time.
- When the SRAM board is replaced.

12.1.2 Precautions

- It is assumed that data cloning is to be performed when equipment is installed or options are installed. If the address book has been registered, do not perform restore. Registered / set data are lost.
- The USB media for the data cloning must meet the following conditions. A data cloning operation with any devices other than the following will not be guaranteed.
 - A combination USB media with a flash memory (to be connected directly to the USB port) and its capacity is 1GB or more.
 - A device compliant with the following specifications established by USB-IF (USB Implementers Forum)

Class number:	8 (=08h)	(Mass storage class)
Sub-Class number:	6 (=06h)	(SCSI transfer command set)
Protocol number:	80 (=50h)	(Bulk-only)
 - Most of the common USB medias are compliant with the above specifications and are therefore applicable to this data cloning. However, most of these devices were originally developed to be used in an environment for PCs (e.g. Windows or Macintosh) and thus operations exclusively with this equipment have not been fully guaranteed. Therefore, the user must thoroughly check in advance whether there will be any problem in operating with this equipment when adopting one of these devices.
- The USB medias compliant with both USB 1.1 and USB 2.0 can be used for this data cloning.
- Data cloning with any storage devices other than a flash memory (e.g. USB-connectable memory card reader, CD/DVD drive, hard disk) will never be guaranteed. Therefore never use them for this operation.
- Be sure to unplug the LAN cable and Fax line before data are backed up / restored. Also, do not use the RADF and open the cover, drawer, etc. during the data cloning.
- Data can be backed up / restored only for the same model and version. If the version is different, update the firmware and back up / restore data in the same version.
- Restore data to equipment which has the same options as when the data are backed up.
- Delete the backed up data in the USB media after the data cloning.

12.1.3 Backup files

The following files are saved in the root directory of the USB media by backing up.

Filename	Remark
Modelname_MFPSerialNo_yyyy-MM-dd_hh-mm	E.g.: When backup was performed at 13:59 on October 1st, 2010. T140_CUK911379_2010-10-01_13-59

12.1.4 Cloning procedure

[A] Backup procedure

- (1) Shut down the equipment.
- (2) Connect the USB media [1] to the USB port [2] on the right upper cover.

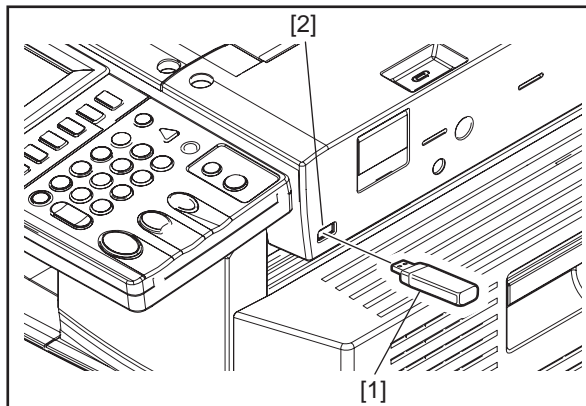


Fig.12-1

Notes:

Backing up cannot be performed with multiple USB media connected at the same time.

- (3) Turn the power ON while pressing the [5] and [9] buttons simultaneously.
- (4) Enter the password, and then press the [OK] button.
(If the password is not set for Service, press the [ENTER] button without entering anything.)
- (5) Select "1. Backup SRAM Data to USB", and then press the [START] button.
- (6) Enter a password (max. 15 characters) set for the backup data.
- (7) "Backup Successfully done" is displayed on the LCD screen when the backup has been properly completed.
- (8) Turn the power OFF after the backup is completed.

[B] Restore procedure

- (1) Shut down the equipment.
- (2) Connect the USB media [1] to the USB port [2] on the right upper cover.

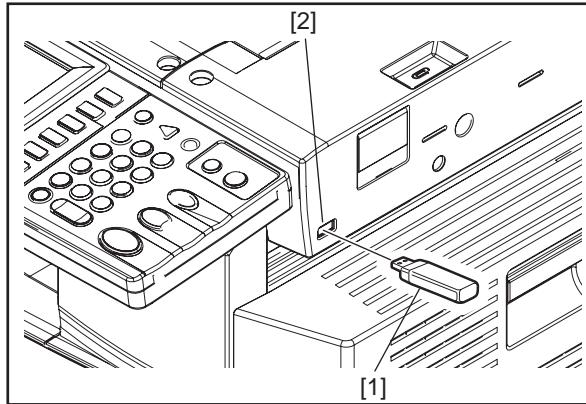


Fig.12-2

Notes:

Restoring cannot be performed with multiple USB media connected at the same time.

- (3) Turn the power ON while pressing the [5] and [9] buttons simultaneously.
- (4) If "3" is set for 08-8911, enter the password.
- (5) Select "2. Restore SRAM Data from USB", and then press the [START] button.
- (6) Enter a password (max. 15 characters) set for the backup data.
- (7) Enter the serial number of the equipment.
- (8) "Restore successfully done" is displayed on the LCD screen when the restoring has been properly completed.
- (9) Turn the power OFF after the restoring is completed.

Notes:

- When the back-up file is restored, do not perform HDD partition creation (Format HDD) before the normal start-up.
- To perform cloning with the SRAM data backed up before the ADI-HDD is initialized or replaced, follow the procedure below after the restoration is finished.
 1. Turn the power ON while pressing [3] and the [CLEAR] button simultaneously.
 2. Enter the password, and then press the [OK] button. (If no password is set for Service, press the [OK] button without entering anything.)
 3. Key in [5] to select "5. Key Backup Restore", and then press the [START] button.
 4. Key in [6] to select "6. ADIKey FROM to SRAM", and then press the [START] button.
 5. Wait until the restoring of the encryption key is completed. "Operation Complete" is displayed.
 6. Then turn the power OFF.

[C] Confirmation of the error

“Backup Failed” is displayed on the lower left part of the LCD screen when the data have not been properly backed up or restored.

Moreover, details of an error are displayed under the above message.

(The following is an example screen when “USB device not detected” is displayed.)

Download Storage Firmware Update Mode	Firmware Version : x. x. x. x
	Update Mode : 59 Mode
Select number (1-2) and press START key	
→ 1: Backup SRAM Data from USB	
Backup Failed USB device not detected	

Fig.12-3

In this case, turn the power OFF and then check the following items. After confirming and solving the problem, back up / restore the data again from the beginning.

- Does the USB media meet the conditions being used for this cloning?
- Is the updated program file written on the USB media properly?
- Is the USB media installed properly?
- Is the USB media or the equipment damaged?

Backup	
Display content	Error content
USB device not detected	The USB media has not been installed.
SRAM Device Not Connected	The SRAM board (for the SYS board) has not been installed.
Backup not created	Creation of the Backup file of data of the SRAM board (for the SYS board) has been failed.
Encryption Failed	An encryption of the backup file has been failed.
password Not Appended to Backup	Addition of the encryption password has been failed.
MFP Serial Number Not Set	Acquisition of the MFP Serial No. has been failed.

Restore	
Display content	Error content
USB device not detected	The USB media has not been installed.
SRAM Device Not Connected	The SRAM board (for the SYS board) has not been installed.
Invalid Backup File	The SYS board has not been recognized.
No Backup File Exists	Backup file has not existed in the USB media.
Invalid password	An incorrect password has been entered.
Decryption Failed	Decoding of the backup file has been failed.

Restore	
Display content	Error content
Invalid MFP Serial Number: xxxxxxxxx	An incorrect MFP Serial No. has been entered.
MFP Serial Number Not Set	Acquisition of the MFP Serial No. has been failed.
Backup File Corrupted	A backup file has been damaged.

12.2 AES Data Encryption Function Setting

12.2.1 General description

Data encryption is a function that encrypts data in the HDD to enhance the security. Note that this function may affect the equipment performance.

12.2.2 Precautions

When the data encryption function is set enabled, data currently stored in the HDD will not be retrieved. Therefore when data encryption function needs to be enabled after the installation of the equipment, it is necessary to back up the data in the HDD before setting this function and then recover them after the setting.

- To ensure security, ask the user (machine administrator) to back up or restore the user's data and information in the HDD. A service technician can back up or restore them only when the user (machine administrator) permits it.
- Some data in the HDD cannot be backed up and can be left only on printouts.

When the data encryption function is enabled, the following items are restricted.

- 08-9112 (Auto Shut Off Mode timer setting (Sleep Mode)) is automatically set to "20: Not used".
- 08-9113 (Screen setting for automatic energy saver/automatic power OFF) is automatically set to "0: OFF".
- When the [ENERGY SAVER] button is pressed on the control panel, the equipment does not enter the sleep mode.
- Since the energy saver mode cannot be set using the control panel, set it in TopAccess. However, the setting of "Sleep/Auto Shut Off" cannot be changed in TopAccess and "Disable" is displayed.

12.2.3 Setting procedure

A procedure for setting the data encryption function is shown below.

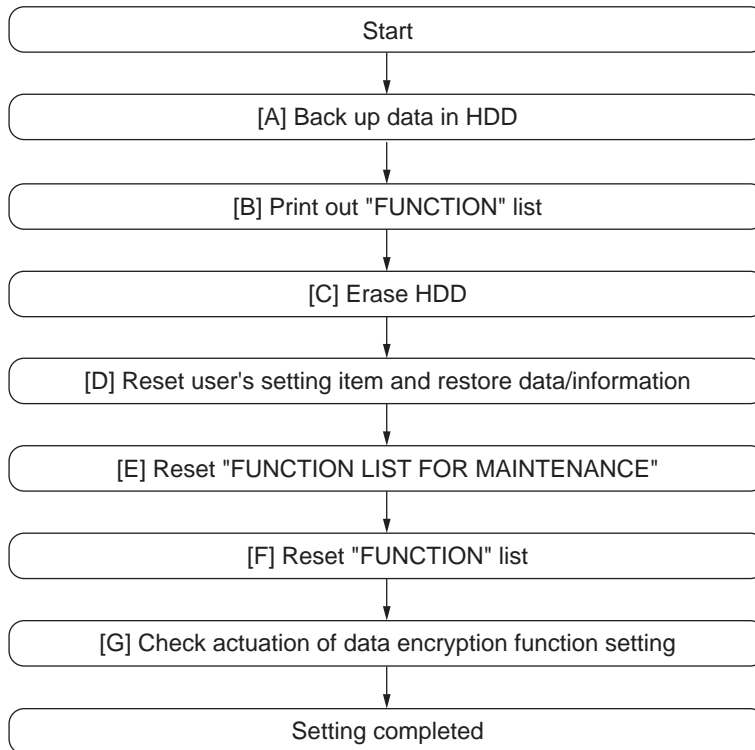



Fig.12-4

[A] Back up in HDD

Ask the user (machine administrator) to back up the data in the HDD. Refer to the table below for the type of data, availability and method of backup.

Type of data in HDD	Availability	Backup method
Image data in the e-Filing	Available	Archive them in the “e-Filing” of TopAccess. As for the backup in Box data, all data (selectable by the box) can be backed up / restored in one go by using “e-Filing Backup/Restore Utility”.
F-code information, Template registration information, Address book data	Available	Export them up in the “Administrator” menu of TopAccess.
Department management data	Available	Export them in “Administrator” menu of TopAccess.
Log data (Print, Scan, FAX (Transmission/Reception) / Message Log	Available	Export them in the “Log” menu of TopAccess. (Import cannot be performed.)
Data in the shared folder (Scanned data, Saved data of copy / FAX transmission)	Available	Copy them to the client computer via the network. (The data which have been copied to the client computer cannot be copied to the shared folder.)
Role information	Available	Export role information on the TopAccess menus. [User Management] tab > [Export]
Print waiting data (Copying data and FAX reception data that are waiting to be printed due to the paper run-out and jam, etc.)	Not available	Finish printing them after the paper supply and the jam release, etc. (The data cannot be kept.)
Print job (Private print data, Schedule print data)	Not available	If any jobs are left, print them. (The data cannot be backed up.)
FAX saved data (Confidential / Bulletin board data)	Not available	Print them. (The data cannot be backed up.)
Registration data for FAX transmission (Delayed transmission / Recovery transmission)	Not available	Print them. (The data cannot be backed up.)

[B] Print out “FUNCTION LIST FOR MAINTENANCE”

- (1) Enter the Service UI Mode.  P. 5-5 "5.2 Service UI"
- (2) Select “FAX LIST PRINT MODE” and then press [NEXT].
- (3) Select “Function list for Maintenance” and then press [PRINT].

[C] Print out “FUNCTION” list

- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.
- (3) Press the [LIST/REPORT] button and then the [LIST] button.
- (4) Press the [FUNCTION] button. The “FUNCTION” list is printed out.

Notes:

Explain the procedure to the user (machine administrator) and ask him/her to enter his/her password.

[D] Enable data encryption function

Perform the setting of the data encryption function in the code 08-9379. The setting values are shown below.

- 0: Encryption disabled
- 1: Encryption enabled (Security priority)
- 2: Encryption enabled (Performance priority)

Security priority: All user data are encrypted.

Performance priority: Encryption data are generated only in a copying or a printing process temporarily. All user data except files which are deleted in a corresponding process are encrypted.

[E] Reset user’s setting items and restore data/information

Ask the user (machine administrator) to reset the user’s setting items and to restore data or information. Refer to the following for the reset and restore:

Items to reset/restore	Method
Printer driver	Upload them in the “Administrator” menu of TopAccess.
F-code information, Template registering information, Address book data	Restore them in the “Administrator” menu of TopAccess.
Department management data	Import them in the “Administrator” menu of TopAccess.
Image data in the e-Filing	Restore them in the “e-Filing” of the TopAccess.
Role information	Import role information on the TopAccess menus. [User Management] tab > [User Confirm/Create/Modify] > [Role Information]

Notes:


- When the SSL is enabled, perform the setting of the following items again with “Create self-certificate” of TopAccess.
 - Country Name
 - State or Province Name
 - Locality Name
 - Organization Name
 - Organizational Unit Name
 - Common Name
 - Email Address

- When wireless LAN is used, perform the setting again on the LCD panel. (only when security with a certificate is used) Also, upload the following certificate file with “Install Certificate for Wireless LAN” of TopAccess.
 - CA certificate
 - User certificate

[F] Reset “FUNCTION LIST FOR MAINTENANCE”

- (1) Print out the “FUNCTION LIST FOR MAINTENANCE” list after the formatting.
- (2) While pressing [1] and [3] simultaneously, turn the power ON. (Function Mode)
- (3) Compare the lists which were printed before and after the formatting to check the setting items having the different setting values. Set the value which was set before the formatting
Turn the power OFF.
- (4) Turn the power OFF.

[G] Reset “FUNCTION” list

Reset the fax function by referring to the “function list” that was printed out in  P. 12-9 “[C] Print out “FUNCTION” list”.

- (1) Press the [USER FUNCTIONS] button.
- (2) Press the [ADMIN] button, enter the password, and then press the [ENTER] button.
- (3) Press the [FAX] button and then the [TERMINAL ID] button to set each item.
- (4) Press the [INITIAL SETUP] button to set each item.

Notes:

Explain to the user (machine administrator) about the next operation and ask him/her to enter his/her password.

[H] Check actuation of data encryption function setting

Check if the data encryption function is in operation.

Press the [COUNTER] button on the control panel. If a key-shaped icon is displayed at the top right of the screen, the data encryption function is in operation.

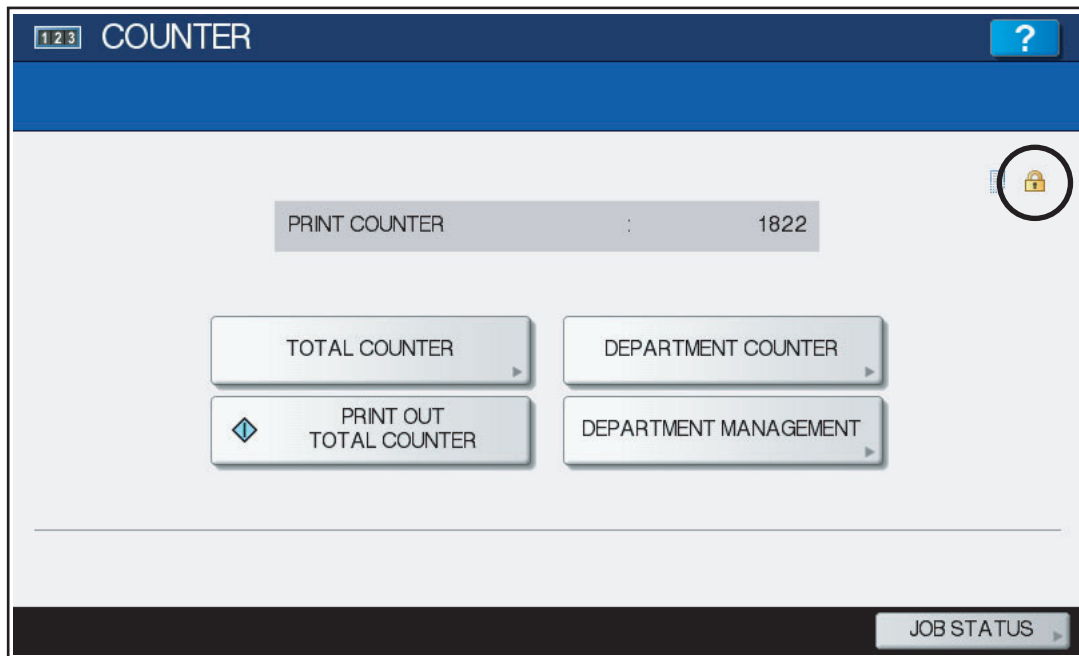




Fig.12-5

12.2.4 Procedure for disabling data encryption function

The basic procedure is the same as the one for enabling this function. To disable it, set "0 (Invalid)" in the code 08-9379 at step  P. 12-9 "[D] Enable data encryption function".

12.2.5 Procedure for discarding HDD when data encryption function is enabled


Set the data encryption function disabled following the procedure shown in  P. 12-12 "12.2.4 Procedure for disabling data encryption function". Then perform the code 3C->6: Erase HDD Securely (HDD securely erasing) to completely erase the data in the HDD.

12.3 High Security Mode

12.3.1 General description

The High Security Mode is a security mode complying with the IEEE2600.1 Security Standards Requirement. To have the equipment enter this mode, follow the procedure and the precautions below.

12.3.2 Prior confirmation

- Confirm that the administrator for the equipment is authorized and ask him/her to observe the installation.
- To have the equipment enter the High Security Mode, the Data Overwrite Enabler GP-1070 (optional) is required. Confirm that this option is installed in advance. Follow the Unpacking Instructions to install it.
- To avoid physical security problems, such as hardware removal or inappropriate disassembly at the installation site, take all necessary measures, such as checking who enters and leaves the site.
- Confirm that no received fax data or print jobs in progress exist. If there are any, be sure to print them all out before entering the High Security Mode.
- The HDD is initialized in the High Security Mode. Be sure first to back up user data such as documents, Address Book, templates or fax settings using the export function or the backup/restore utility of the TopAccess. Refer to items noted in  P. 12-6 "12.2 AES Data Encryption Function Setting".
- Make a note of the settings on the Administration tab page of the TopAccess in advance.
- Compatibility of cloning data is lost between the High Security Mode and the normal mode; therefore, cloning data cannot be imported.

Downloaded from	Downloaded to	Compatibility of cloning data
Normal mode	Normal mode	Yes
Normal mode	High Security Mode	No
High Security Mode	Normal mode	No
High Security Mode	High Security Mode	Yes

12.3.3 Procedure for entering the High Security Mode

- (1) Set the value of the code 08-8911 (Security mode level setting) to "3" (High). Then restart the equipment.
- (2) A key-shaped icon appears at the bottom of the touch panel, indicating that it is now in the High Security Mode.
- (3) Press [COUNTER] button on the control panel. If a key-shaped icon, indicating that the HDD data are being encrypted, a paper-shaped icon indicating that the Data Overwrite Enabler is operating normally and the version name of the installed system ROM (SYS V1.0) are displayed on the top right of the counter menu, this means the mode is operating normally.
- (4) Reset the user data backed up in advance.

12.3.4 Precautions

- In the High Security Mode, an integrity check system is operated at every restart. If F521 (integrity check error) is displayed, take the necessary measures following the troubleshooting procedure.
- When a self-diagnostic mode is started in the High Security Mode, an authentication screen appears. Enter the default user name and password as follows:
Default user name: service
Default password: #1048#
- If a password change screen appears, reset the password according to the rules below.
 - It must not include the user name.
 - It must be a combination of letters of the alphabet and numbers.
 - It must be 6 characters or more. (Maximum 64 characters)
 - The same character must not be repeated 4 times within the new password.
 - The old and the new passwords must not be the same.

- In the High Security Mode, restrictions are set to the following self-diagnostic codes:

Code	Contents
08-8910	The setting value is changed to "2". "0" is not settable.
08-8911	The setting value is changed to "3".
08-8924	The setting value is changed to "1". Values other than "1" are not settable.
08-9110	"0" is not settable.
08-9193	If "0" is set for the value, the setting will not comply with IEEE2600.1 Security Standards Requirement.
08-9379	The setting value is changed to "1".
08-9819	The setting value is changed to "1". If "0" is set for the value, the setting will not comply with IEEE2600.1 Security Standards Requirement.

- In the above case, the password is not reset. The password setting can be changed with the code 08-8919.
- The HDD is initialized (and the saved user data are deleted) when the equipment returns to the normal mode from the High Security Mode. Be sure to back up user data before having it do so.
- After the equipment enters the High Security Mode, ask the administrator for the equipment to select [FULL] and perform the Integrity check manually.

13. EXTERNAL COUNTERS

13.1 Outline

This specification describes the interface between external counters, such as Coin Controller and Key Counter.

13.2 Signal

Notes:

Use 24V supplied from the main equipment as power for the output signals (CTRON) from the transistor (MP6H1TR).

13.2.1 Pin Layout

1. Connector on the LGC board: CN336 (AMP-made 1-292252-6) (Coin Controller)

Pin No.	I/O	Signal name	Function	Voltage level	Remarks	GQ-1110
A1	Power	+24V	24V line	DC24V+10%, -5%	When cover opened: OFF	In use
A2	Out	CTRON	Total Counter On Signal	Open Collector (MP6H1TR)	L: ON	In use
A3	In	CTRCNT	Copy permission Signal 1	L=0V, H=DC5V	L: Allowed	In use
A4	Out	MCRUN	Ready to Copy Signal	Open Collector (Equiv. SN7407)	L: Operating	In use
A5	Out	EXTCTR	Exit Sensor On Signal	Open Collector (Equiv. SN7407)	L: ON	In use
A6	GND	PG	Power ground	0V		In use
A7	Out	BKCTR	Black mode Counter Signal	Open Collector (Equiv. SN7407)	L: ON	-
A8	Out	MNCTR	Mono color mode Counter Signal	Open Collector (Equiv. SN7407)	L: ON	-
B1	Out	FLCTR	Full color mode Counter On Signal	Open Collector (Equiv. SN7407)	L: ON	-
B2	GND	SG	Signal Ground	0V		-
B3	Out	SIZE3	Paper size Signal	Open Collector (Equiv. SN7407)	L: ON	-
B4	Out	SIZE2	Paper size Signal	Open Collector (Equiv. SN7407)	L: ON	-
B5	Out	SIZE1	Paper size Signal	Open Collector (Equiv. SN7407)	L: ON	-
B6	Out	SIZE0	Paper size Signal	Open Collector (Equiv. SN7407)	L: ON	-
B7	Power	+5V (Sleep)	5V line	DC5.1V±4%	At the sleep mode: OFF	In use
B8	-	N.C.	-	-		-

* Equiv. SN7407: 5 V, 24 V Interface

2. Connector on the SYS board: CN127 (JST-made B7B-PH-SM4) (Coin Controller)

Pin No.	I/O	Signal name	Function	Voltage level	Remarks	GQ-1110
1	Out	LARGE / SMALL	Paper size Signal	Open Drain (Equiv. LCX07)	L: Large size	In use
2	Out	FULL COLOR	Full color mode Signal	Open Drain (Equiv. LCX07)	L: Full color	In use
3	Out	TWN/ MON COLOR	Twin color / Mono color Mode Signal	Open Drain (Equiv. LCX07)	L: Twin colors	In use
4	Out	B/W	Black mode Signal	Open Drain (Equiv. LCX07)	L: Black	In use
5	-	N.C.	-	-		-
6	GND	GND	Signal Ground	-		In use
7	-	N.C.	-	-		-

* Equiv. LCX07: 5V interface

3. Connector on the LGC board: CN335 (AMP-made 292132-4) (Key Counter)

Pin No.	I/O	Signal name	Function	Voltage level	Remarks	GQ-1110
1	GND	SG	Signal Ground	0V		-
2	In	KCTRC	Key Counter Connection Signal	L=0V, H=DC5V	L: Connected H: Not connected	-
3	Power	+24V	24V line	DC24V+10%, -5%	When cover opened: OFF	-
4	Out	KCTRON	Key Counter On Signal	Open Collector (Equiv. MP6H1TR)	L: ON	-

* Equiv. MP6H1TR: 24V interface

13.2.2 Details of the signals

1. CTRON signal and KCTRON signal (output signals)

These signals are synchronized with electronic counter of the equipment and they become “Low” when one sheet of paper is counted up. They are the signals for coin controller, and output from the LGC board. Since the driver circuit is used, the mechanical counter can be driven directly. Only with the KCTRON signal, the counter will make “Double count” if 08-6010 (count setting of large size paper) is set to “1” or “2”.

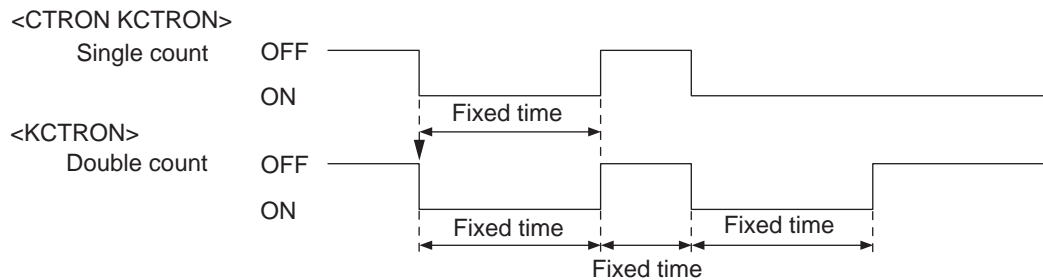


Fig.13-1

2. CTRCNT signal and KCTRC signal (input signals)

The CTRCNT signal enables to accept copies when the coin controller is connected, and copies can be accepted with “Low”. In case of “High”, “Set Key Counter” appears and copies cannot be made. The KCTRC signal enables to accept copies when the key counter is connected, and copies can be accepted with “Low”. In case of “High”, “Set Key Counter” appears and copies cannot be made.

3. MCRUN signal (output signal)

The MCRUN signal is changed to “Low” during copying. It becomes “Low” at 30 ms or more before the CTRON signal is turned ON, and “High” at 50 ms or more after the EXTCTR signal goes OFF. However, if copying is interrupted due to forced toner supply or similar, this signal is “High” until copying is made possible again. This is the signal for the coin controller.

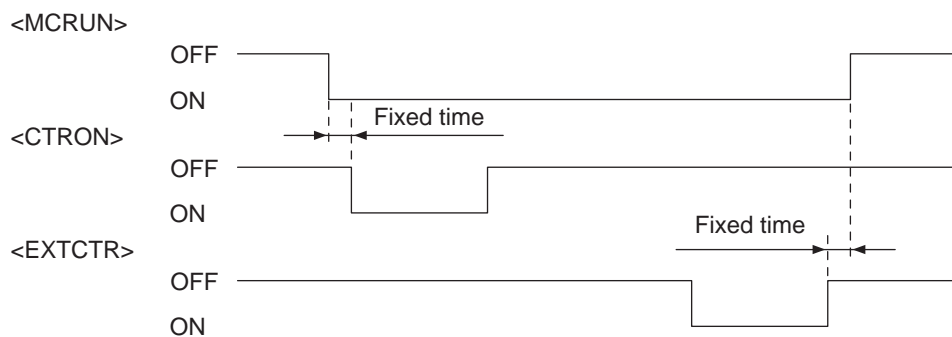


Fig.13-2

4. EXTCTR signal (output signal)

The EXTCTR signal is synchronized with "Exit sensor ON" and becomes "Low" (ON) for 200 ms. The coin controller counts the number of times with this signal. This is the signal only for the coin controller.

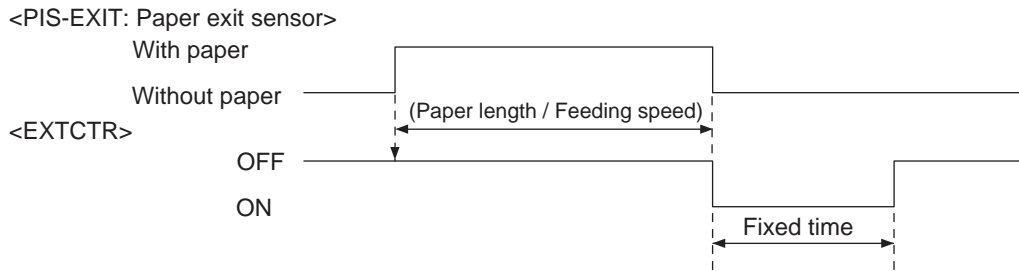


Fig.13-3

5. BKCTR signal, MNCTR signal, FLCTR signal (output signals)

These signals become "Low" (ON) synchronizing with the CTRON signal according to the copying mode used. The pulse width corresponds to the fixed time. Though the CTRON signal is set to "Double count", they are not outputted synchronizing with the second count signal.

6. SIZE3, SIZE2, SIZE1 and SIZE0 signals (output signals)

These 4 signals are outputted in the combination of 4 sizes for the paper to be copied. They are the signals for the coin controller, and are outputted from the LGC board.

7. LARGE/SMALL signal (output signal)

When large size paper (A3 / A3 wide / LD) is selected or paper size is not specified with the manual feeding, it outputs "Low" in real time. In other cases, it outputs "High". The setting change for large size paper is performed with F/W. This is the signal only for the coin controller.

8. FULL COLOR signal (output signal)

If the full color mode is selected, it outputs "Low" in real time. In other cases, it outputs "High". By default, it outputs "Low" since it is set as full color mode. This is the signal only for the coin controller.

9. TWN / MON COLOR signal (output signal)

If the twin color or mono color mode is selected, it outputs "Low" in real time. In other cases, it outputs "High". This is the signal only for the coin controller.

10. B/W signal (output signal)

If the black mode is selected, it outputs "Low" in real time. In other cases, it outputs "High". This is the signal only for the coin controller.

13.3 Notices

13.3.1 Setting code

Each signal will be enabled by configuring the setting code “08-9016” (Counter installed externally).

08-9016

- 0: No external counter (Default)
- 1: Coin controller
- 2: Card controller (For Japan only)
- 3: Key copy counter

13.3.2 Setting value change and restrictions when using the Card Controller

1. Setting value
 - 08-9016 (Counter installed externally): Set to “2” (Card controller).
 - 08-9017 (Setting for counter installed externally): It should be charged precisely according to the usage.
Example: To charge only when copies are made, set to “1”.
2. Restrictions
 - 08-6010 (Large size double count setting): Set to “0” (Single count).

13.3.3 Setting value change and restrictions when using the coin controller

1. Setting value
 - 08-9016 (Counter installed externally): Set to “1” (Coin controller).
 - 08-9017 (Setting for counter installed externally): It should be charged precisely according to the usage.
Example: To charge only when copies are made, set to “1”.
2. Restrictions

For 08-6011 (Large size double count setting), set to “0” when A3 and LD are specified as the large size, and set to “1” when B4, LG, FOLIO and COMP are specified as the large size in addition to A3 and LD.

13.3.4 Setting value change and restrictions when using the key counter

1. Setting value
 - 08-9016 (Counter installed externally): Set to “3” (key counter)
 - 08-9017 (Setting for counter installed externally): It should be charged precisely according to the usage.
Example: To charge only when copies are made, set to “1”.
2. Restrictions

For 08-6011 (Large size double count setting), set to “0” when A3 and LD are specified as the large size, and set to “1” when B4, LG, FOLIO and COMPUTER are specified as the large size in addition to A3 and LD.

13.3.5 Installation of External Counter

It is not allowed to install more than one external counter (Key Counter, Card Controller and Coin Controller) at the same time. Physically, the card controller and coin controller cannot be installed together since the output signals are in common.

14. WIRE HARNESS CONNECTION

14.1 AC Wire Harness

- e-STUDIO2040C/2540C/3040C/3540C

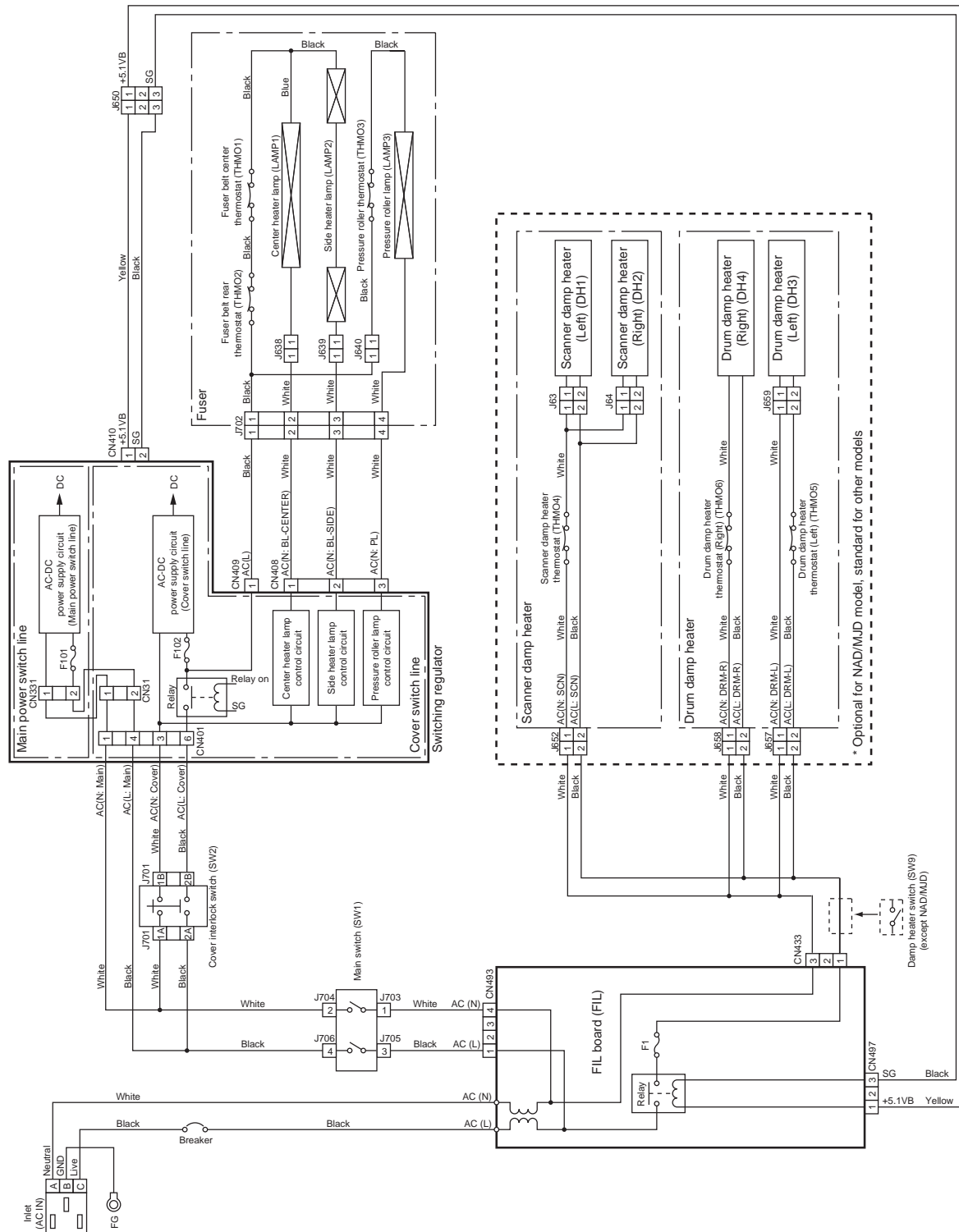


Fig.14-1

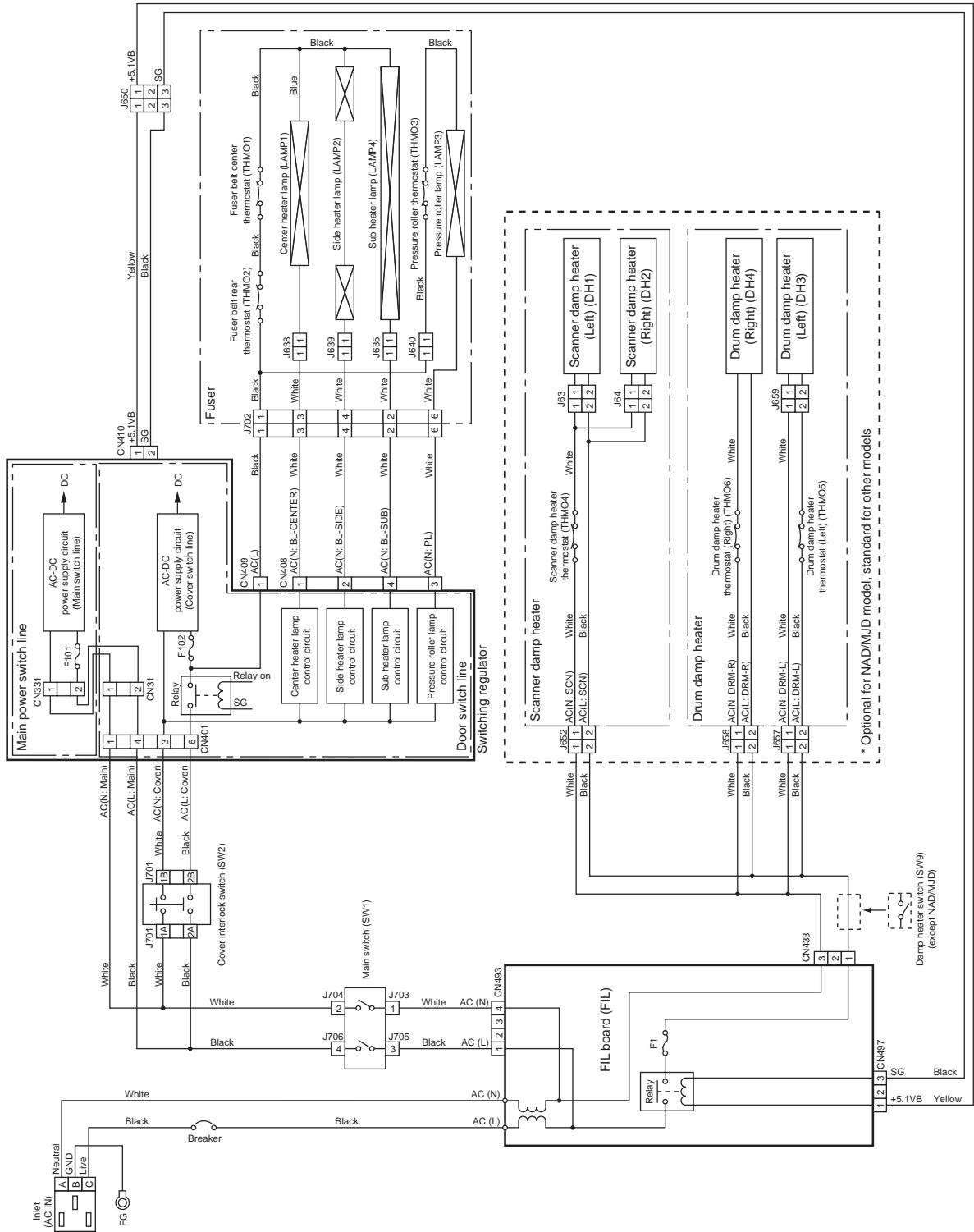
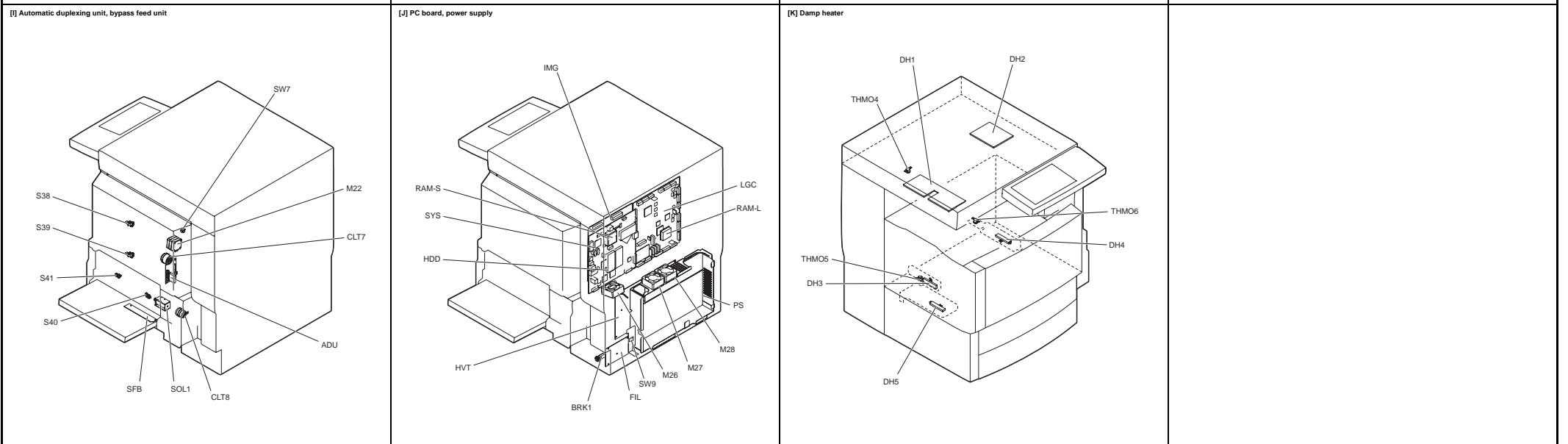
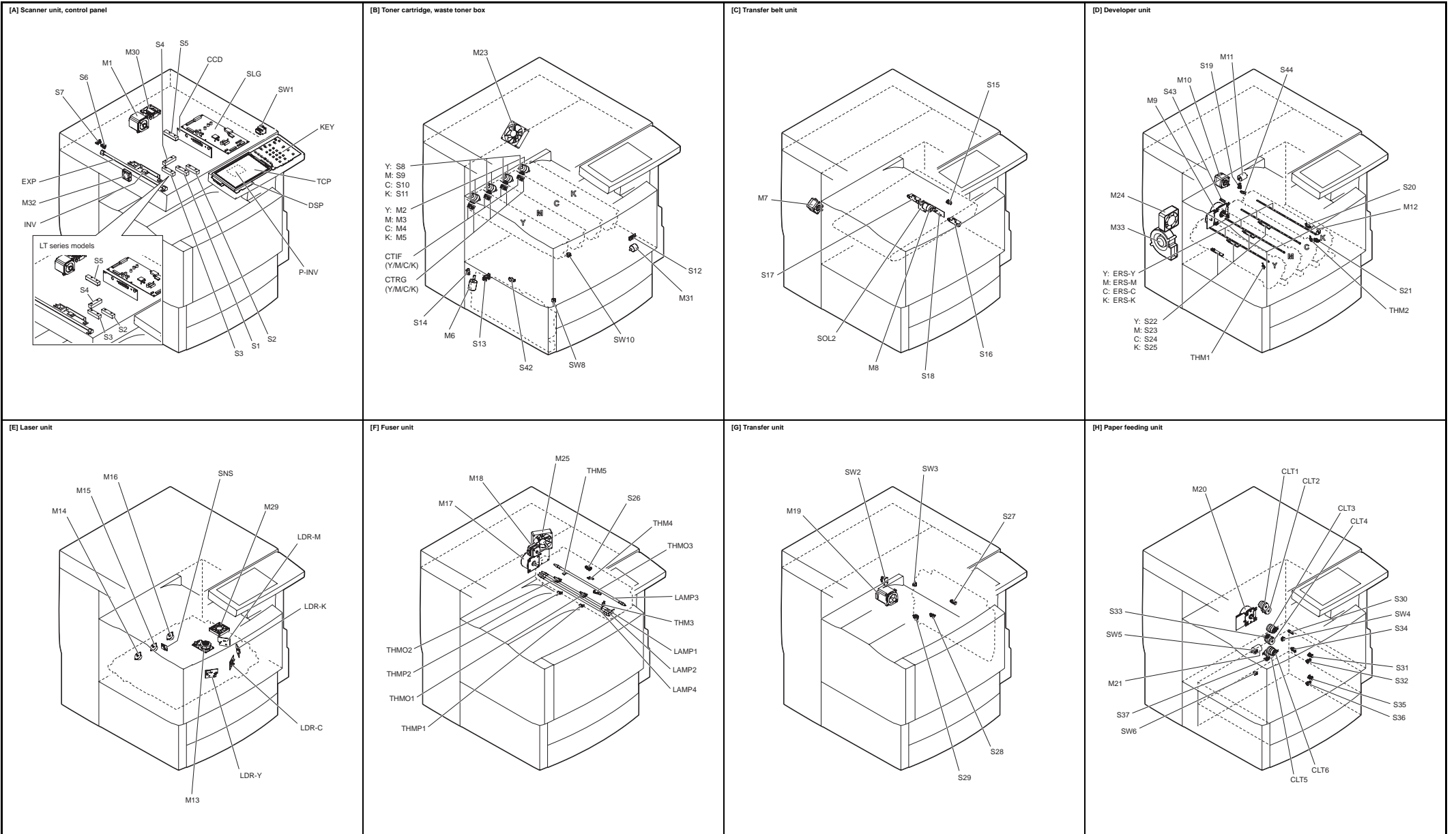


Fig.14-2

14.2.2 Electric Parts Layout



Symbol	Name	Figure	Wire harness location
M1	SCAN-MOT Scan motor	[A]	3-H
M2	TNR-MOT-Y Toner motor-Y	[B]	5-A
M3	TNR-MOT-M Toner motor-M	[B]	5-B
M4	TNR-MOT-C Toner motor-C	[B]	5-B
M5	TNR-MOT-K Toner motor-K	[B]	5-B
M6	USD-TNR-MOT Waste toner paddle motor	[B]	6-C
M7	TBU-MOT Transfer belt motor	[C]	6-B / 7-B
M8	TR1-CAM-MOT 1st transfer roller cam motor	[C]	7-D
M9	DEV-MOT Developer unit motor	[D]	7-D
M10	DRM-MOT Drum motor	[D]	6-B / 7-B
M11	DRM-SW-MOT Drum switching motor	[D]	7-D
M12	SHUT-MOT Shutter motor	[D]	6-D
M13	POL-MOT Polygonal motor	[E]	5-C
M14	MIR-MOT-M Mirror motor-M	[E]	5-B
M15	MIR-MOT-C Mirror motor-C	[E]	5-C
M16	MIR-MOT-K Mirror motor-K	[E]	5-D
M17	FUS-MOT Fuser motor	[F]	6-D
M18	EXIT-MOT Exit motor	[F]	6-A / 7-A
M19	RGST-MOT Registration motor	[G]	6-B / 7-B
M20	FEED-TRNS-MOT Feed/transport motor	[H]	7-E
M21	CST-TRY-MOT Tray-up motor	[H]	8-E
M22	ADU-MOT ADU motor	[I]	8-A
M23	INTRNL-FAN-MOT Internal cooling fan	[B]	6-G
M24	OZN-FAN-MOT Ozone exhaust fan	[D]	7-C
M25	FUS-EXIT-FAN-MOT Fuser/exit section cooling fan	[F]	6-F
M26	SYS-FAN-MOT SYS board cooling fan	[J]	2-G
M27	PS-FAN-MOT-1 Switching regulator cooling fan-1	[J]	2-H
M28	PS-FAN-MOT-2 Switching regulator cooling fan-2	[J]	2-H
M29	LSU-FAN-MOT Laser unit cooling fan	[E]	7-C
M30	SCAN-FAN-MOT Scanner unit cooling fan	[A]	3-H
M31	UTC-CARRY-MOT Waste toner transport motor	[B]	7-C
M32	FANFRONT Exposure lamp cooling fan	[B]	3-E
M33	EPU-FAN EPU cooling fan	[D]	6-G

Symbol	Name	Figure	Wire harness location
S1-5	AP51-3, AP5-C, AP5-R Automatic original detection sensor	[A]	3-E 3-F
S6	HOME-SNR Carriage home position sensor	[A]	3-E
S7	PLTN-SNR Platen sensor	[A]	3-E
S8	TNR-SNR-Y Toner cartridge detection sensor-Y	[B]	5-B
S9	TNR-SNR-M Toner cartridge detection sensor-M	[B]	5-B
S10	TNR-SNR-C Toner cartridge detection sensor-C	[B]	5-B
S11	TNR-SNR-K Toner cartridge detection sensor-K	[B]	5-B
S12	TEMP/HUM-SNR Temperature/humidity sensor	[B]	7-C
S13	USD-TNR-FLL-SNR Waste toner box full detection sensor	[B]	6-C
S14	USD-TNR-LCK-SNR Waste toner paddle motor lock detection sensor	[B]	6-C
S15	TR1-SNR 1st transfer roller status detection sensor	[C]	7-D
S16	IMG-POS-SNR-F Image position aligning sensor (Front)	[C]	7-B
S17	IMG-POS-SNR-R Image position aligning sensor (Rear)	[C]	7-B
S18	TNR-LVL-SNR Image quality sensor	[C]	7-A
S19	ATNR-SW-SNR Drum switching detection sensor	[D]	7-E
S20	SHUT-SNR Shutter status detection sensor	[D]	6-D
S21	CH-CLN-SNR Needle electrode cleaner detection sensor	[D]	6-C
S22	ATNR-SNR-Y Auto-toner sensor-Y	[D]	7-F
S23	ATNR-SNR-M Auto-toner sensor-M	[D]	7-F
S24	ATNR-SNR-C Auto-toner sensor-C	[D]	7-G
S25	ATNR-SNR-K Auto-toner sensor-K	[D]	7-F
S26	EXIT-SNR Exit sensor	[F]	7-H
S27	CLNG-SNR Paper clinking detection sensor	[G]	7-B
S28	RGST-SNR Registration sensor	[G]	7-B
S29	TR2-SNR 2nd transfer roller position detection sensor	[G]	7-B
S30	CST1-FEED-SNR 1st drawer feed sensor	[H]	7-C
S31	CST1-TRY-SNR 1st drawer tray-up sensor	[H]	8-C
S32	CST1-EMP-SNR 1st drawer empty sensor	[H]	8-C
S33	CST1-NEP-SNR 1st drawer paper stock sensor	[H]	8-D
S34	CST2-FEED-SNR 2nd drawer feed sensor	[H]	8-E
S35	CST2-TRY-SNR 2nd drawer tray-up sensor	[H]	8-D
S36	CST2-EMP-SNR 2nd drawer empty sensor	[H]	8-D
S37	CST2-NEP-SNR 2nd drawer paper stock sensor	[H]	8-E
S38	ADU-U-SNR ADU entrance sensor	[I]	8-A
S39	ADU-L-SNR ADU exit sensor	[I]	8-A
S40	SFB-SNR Bypass paper sensor	[I]	8-B

Symbol	Name	Figure	Wire harness location
S41	SFB-FEED-SNR Bypass feed sensor	[I]	8-C
S42	TRTRK Auger lock detection sensor	[B]	6-D
S43	DRM-SNR Color drum phase sensor	[D]	7-E
S44	DRM-SNR2 K drum phase sensor	[D]	7-E
SW1	MAIN-SW Main switch	[A]	AC Wire Harness
SW2	COV-INTLCK-SW Cover interlock switch	[G]	AC Wire Harness
SW3	TR-COV-SW Transfer cover switch	[G]	8-C
SW4	SIDE-COV-SW Side cover switch	[H]	8-E
SW5	CST1-SW 1st drawer detection switch	[H]	8-D
SW6	CST2-SW 2nd drawer detection switch	[H]	8-D
SW7	ADU-SET-SW ADU opening/closing switch	[I]	8-B
SW8	UTN-COVER Waste toner cover open/close detection switch	[B]	6-C
SW9	DAMP-COV-SW Damp cover switch	[J]	
SW10	FRT-COV-SW Front cover switch	[B]	7-D

Symbol	Name	Figure	Wire harness location
CLT1	CST1-TR-H-CLT 1st drawer transport clutch (High speed)	[H]	7-C
CLT2	CST1-TR-L-CLT 1st drawer transport clutch (Low speed)	[H]	7-C
CLT3	CST1-FEED-CLT 1st drawer feed clutch	[H]	8-C
CLT4	CST2-TR-L-CLT 2nd drawer transport clutch (Low speed)	[H]	8-D
CLT5	CST2-TR-H-CLT 2nd drawer transport clutch (High speed)	[H]	8-D
CLT6	CST2-FEED-CLT 2nd drawer feed clutch	[H]	8-D
CLT7	ADU-CLT ADU clutch	[I]	8-B
CLT8	SFB-FEED-CLT Bypass feed clutch	[I]	8-B

Symbol	Name	Figure	Wire harness location
SOL1	SFB-SOL Bypass pickup solenoid	[I]	8-B
SOL2	SNR-SHUT-SOL Sensor shutter solenoid	[C]	7-B

Symbol	Name	Figure	Wire harness location
CCD	PWA-F-CCD CCD driving PC board (CCD board)	[A]	4-F
SLG	PWA-F-SLG Scanning section control PC board (SLG board)	[A]	4-G
INV	INV Lamp inverter board	[A]	3-H
DSP	PWA-F-DSP Display PC board (DSP board)	[A]	1-B
KEY	PWA-F-KEY Key PC board (KEY board)	[A]	1-C
P-INV	P-INV Panel inverter board	[A]	1-A
LDR-Y	PWA-F-LDR-Y Laser driving PC board-Y (LDR-Y board)	[E]	5-E
LDR-M	PWA-F-LDR-M Laser driving PC board-M (LDR-M board)	[E]	5-D
LDR-C	PWA-F-LDR-C Laser driving PC board-C (LDR-C board)	[E]	5-E
LDR-K	PWA-F-LDR-K Laser driving PC board-K (LDR-K board)	[E]	5-D
SNS	PWA-F-SNS H-sync detection PC board (SNS board)	[E]	5-D
ADU	PWA-F-ADU ADU control PC board (ADU board)	[I]	8-A
SFB	PWA-F-SFB Paper width detection PC board (SFB board)	[I]	8-B
SYS	PWA-F-SYS System control PC board (SYS board)	[J]	3-A
LGC	PWA-F-LGC Logic PC board (LGC board)	[J]	6-A
IMG	PWA-F-IMG Image processing PC board (IMG board)	[J]	4-D
FIL	PWA-F-FIL Filter PC board (FIL board)	[J]	3-G
RAM-S	PWA-F-SRAM-S SRAM board <for SYS board>	[J]	3-A
RAM-L	PWA-F-SRAM-L SRAM board <for LGC board>	[J]	5-A

Symbol	Name	Figure	Wire harness location
EXP	LP-EXP Exposure lamp	[A]	3-H
ERS-Y	LP-ERS-Y Discharge LED-Y	[D]	5-B
ERS-M	LP-ERS-M Discharge LED-M	[D]	5-B
ERS-C	LP-ERS-C Discharge LED-C	[D]	5-B
ERS-K	LP-ERS-K Discharge LED-K	[D]	5-B
LAMP1	LP-HTR-C Center heater lamp	[F]	AC Wire Harness
LAMP2	LP-HTR-S Side heater lamp	[F]	AC Wire Harness
LAMP3	LP-PR Pressure roller lamp	[F]	AC Wire Harness
LAMP4	LAMP-TRIPLE Sub heater lamp	[F]	AC Wire Harness
DH1	SCN-DHL Scanner damp heater (Left)	[K]	AC Wire Harness
DH2	SCN-DHR Scanner damp heater (Right)	[K]	AC Wire Harness
DH3	DRM-DHL Drum damp heater (Left)	[K]	AC Wire Harness
DH4	DRM-DHR Drum damp heater (Right)	[K]	AC Wire Harness
DH5	CST-DHR Drawer damp heater * Only for PD models	[K]	AC Wire Harness

Symbol	Name	Figure	Wire harness location
THM1	THMS-DRM-Y Drum thermostat-Y	[D]	7-F
THM2	THMS-DRM-K Drum thermostat-K	[D]	7-F
THM3	THMS-FBLT-F Fuser belt front thermostat	[F]	6-F / 6-H / 7-H AC Wire harness
THM4	THMS-PR-C Pressure roller center thermostat	[F]	6-F / 6-G / 7-G AC Wire harness
THM5	THMS-PR-R Pressure roller rear thermostat	[F]	6-E / 6-G / 7-G AC Wire harness
THMP1	THMP-FBLT-C Fuser belt center thermopile	[F]	6-F / 6-G / 7-G AC Wire harness
THMP2	THMP-FBLT-R Fuser belt rear thermopile	[F]	6-F / 6-H / 7-H AC Wire harness
THMO1	THERMO-FBLT-C Fuser belt center thermostat	[F]	AC Wire harness
THMO2	THERMO-FBLT-S Fuser belt rear thermostat	[F]	AC Wire harness
THMO3	THERMO-PR Pressure roller thermostat	[F]	AC Wire harness
THMO4	THERMO-SCN-DH Scanner damp heater thermostat	[K]	AC Wire harness
THMO5	THERMO-DRM-DHL Drum damp heater thermostat (Left)	[K]	AC Wire harness
THMO6	THERMO-DRM-DHR Drum damp heater thermostat (Right)	[K]	AC Wire harness



Symbol	Name	Figure	Wire harness location
HVT	PS-HVT High-voltage transformer	[J]	8-G

Symbol	Name	Figure	Wire harness location
TCP	TCP Touch panel	[A]	1-B
FS1	FUSE-FUS Fuser unit fuse	[F]	6-F
HDD	HDD Hard disk	[J]	3-E
PS	PS-ACC Switching regulator	[J]	4-H
BRK	BRK Breaker	[J]	AC Wire harness

Input check (Test mode 03)



Items to be checked and the condition of the equipment when the buttons [A] to [H] are highlighted are listed on the following pages.

[FAX] button: OFF/[COPY] button: OFF ([FAX] LED: OFF/[COPY] LED: OFF)

Digital key	Button	Items to check	Contents	
			Highlighted display e.g. 	Normal display e.g. 
[1]	A	-	-	-
	B	-	-	-
	C	Used toner paddle motor lock detection sensor	Sensor blocked	Sensor not blocked
	D	PWA-F-SRAM connection detection	Not connected	Connected
	E	K drum phase sensor	Sensor blocked	Sensor not blocked
	F	Color drum phase sensor	Sensor blocked	Sensor not blocked
	G	-	-	-
	H	Waste toner cover open/close detection switch	OPEN	CLOSE
[2]	A	-	-	-
	B	PFP upper drawer detection switch	Drawer not installed	Drawer present
	C	PFP upper drawer paper stock sensor	No paper	Paper present
	D	PFP upper drawer feed sensor	Paper present	No paper
	E	PFP connection	Not connected	Connected
	F	PFP side cover open/close switch	Cover opened	Cover closed
	G	PFP upper drawer empty sensor	No paper	Paper present
	H	PFP upper drawer tray-up sensor	Tray at upper limit position	Other than upper limit position
[3]	A	-	-	-
	B	-	-	-
	C	IMG board connection	Not connected	Connected
	D	Front cover opening/closing switch	Front cover opened	Front cover closed
	E	-	-	-
	F	IPC board connection	Not connected	Connected
	G	-	-	-
	H	HSYNC error	Error	Normal
[4]	A	2nd drawer tray-up sensor	Tray at upper limit position	Other than upper limit position
	B	1st drawer tray-up sensor	Tray at upper limit position	Other than upper limit position
	C	2nd drawer paper stock sensor	Paper almost empty	Paper present
	D	1st drawer paper stock sensor	Paper almost empty	Paper present
	E	2nd drawer detection switch	Drawer not installed	Drawer present
	F	1st drawer detection switch	Drawer not installed	Drawer present
	G	2nd drawer empty sensor	No paper	Paper present
	H	1st drawer empty sensor	No paper	Paper present
[5]	A	High voltage control leak detection	Normal	Abnormal
	B	Fuser unit thermistor connection	Connected	Not connected
	C	Fuser unit new BAM judging signal-1	Old	New BAM
	D	Bridge unit transport sensor-2 (Exit sensor)	Paper present	No paper
	E	Bridge unit cover open/close detection switch	Cover opened	Cover closed
	F	Bridge unit transport sensor-1 (Entrance sensor)	Paper present	No paper
	G	Bridge unit paper full detection sensor	Paper full	Paper not full
	H	Bridge unit connection	Not connected	Connected

[6]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-
[7]	A	K process unit connection signal	Not connected	Connected
	B	C process unit connection signal	Not connected	Connected
	C	M process unit connection signal	Not connected	Connected
	D	Y process unit connection signal	Not connected	Connected
	E	Paper clinging detection sensor	Paper present	No paper
	F	Registration sensor	Paper present	No paper
	G	Image position aligning sensor (rear)		Toner pattern detection
	H	Image position aligning sensor (front)		Toner pattern detection
[8]	A	-	-	-
	B	PFP lower drawer detection switch	Drawer not installed	Drawer present
	C	PFP lower drawer paper stock sensor	Paper almost empty	Paper present
	D	PFP lower drawer feed sensor	Paper present	No paper
	E	PFP motor rotation status (Motor is rotating at output mode (03))	Abnormal rotation	Normal rotation
	F	-	-	-
	G	PFP lower drawer empty sensor	No paper	Paper present
	H	PFP lower drawer tray-up sensor	Tray at upper limit position	Other than upper limit position
[9]	A	LCF tray bottom sensor	Tray at bottom position	Other than bottom position
	B	LCF standby side paper misload detection sensor	Properly loaded	Paper misload
	C	LCF drawer detection switch	Drawer not installed	Drawer present
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	Paper stock sensor at LCF feed side	Paper almost empty	Paper present
[0]	A	LCF end fence home position sensor	Fence home position	Other than home position
	B	LCF end fence stop position sensor	Fence stop position	Other than stop position
	C	Empty sensor at LCF standby side	No paper	Paper present
	D	LCF side cover open/close switch	Cover closed	Cover opened
	E	LCF motor rotation status (Motor is rotating at output mode (03))	Normal rotation	Abnormal rotation
	F	LCF tray-up sensor	Tray at upper limit position	Other than upper limit position
	G	LCF feed sensor	No paper	Paper present
	H	Empty sensor at LCF feed side	Paper present	No paper

[FAX] button: ON/[COPY] button: OFF ([FAX] LED: ON/[COPY] LED: OFF)

Digital key	Button	Items to check	Contents	
			Highlighted display e.g. 	Normal display e.g. 
[1]	A	LCF connection	Not connected	Connected
	B	Exit sensor	Paper present	No paper
	C	-	-	-
	D	-	-	-
	E	Transfer belt installation detection	Not connected	Connected
	F	2nd drawer feeding sensor	Paper present	No paper
	G	1st drawer feeding sensor	Paper present	No paper
	H	-	-	-
[2]	A	Polygonal motor ready signal		Ready
	B	24V Power supply	Power ON	Power OFF
	C	ADU opening/closing switch	ADU opened	ADU closed
	D	Laser shutter open/close detection	ON	OFF
	E	Waste toner box full detection sensor	Waste toner box full	Not full
	F	2nd transfer roller position detection	Released	Contacted
	G	Used toner motor lock detection sensor	Sensor blocked	Sensor not blocked
	H	Belt contact position detection sensor	Color	Black
[3]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	Transfer cover switch	Cover opened	Cover closed
	E	Toner cartridge detection sensor-K	Shielded	Not shielded
	F	Toner cartridge detection sensor-C	Shielded	Not shielded
	G	Toner cartridge detection sensor-M	Shielded	Not shielded
	H	Toner cartridge detection sensor-Y	Shielded	Not shielded
[4]	A	ADU exit sensor	Paper present	No paper
	B	ADU entrance sensor	Paper present	No paper
	C	Bypass feed paper existence sensor	No paper	Paper present
	D	Bypass feed sensor	No paper	Paper present
	E	Bypass feed paper width sensor 3 (Refer to table1)	Bit 1	Bit 0
	F	Bypass feed paper width sensor 2 (Refer to table1)	Bit 1	Bit 0
	G	Bypass feed paper width sensor 1 (Refer to table1)	Bit 1	Bit 0
	H	Bypass feed paper width sensor 0 (Refer to table1)	Bit 1	Bit 0
[5]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	RADF connection	Connected	Not connected
	G	Platen sensor	Platen cove opened	Platen cover closed
	H	Carriage home position sensor	Home position	Other than home position

[6]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	APS sensor (APS-R)	No original	Original present
	E	APS sensor (APS-C)	No original	Original present
	F	APS sensor (APS-3)	No original	Original present
	G	APS sensor (APS-2)	No original	Original present
	H	APS sensor (APS-1)	No original	Original present
[7]	A	RADF tray sensor	Original present	No original
	B	RADF empty sensor	Original present	No original
	C	RADF jam access cover sensor	Cover opened	Cover closed
	D	RADF open/close sensor	RADF opened	RADF closed
	E	RADF exit sensor	Original present	No original
	F	RADF intermediate sensor	Original present	No original
	G	RADF read sensor	Original present	No original
	H	RADF registration sensor	Original present	No original
[8]	A	RADF original tray width sensor (TWID0S) (Refer to table2)	OFF(H)	ON(L)
	B	RADF original tray width sensor (TWID1S) (Refer to table2)	OFF(H)	ON(L)
	C	RADF original tray width sensor (TWID2S) (Refer to table2)	OFF(H)	ON(L)
	D	-	-	-
	E	RADF original length sensor	Original present	No original
	F	RADF original width sensor 1	Original present	No original
	G	RADF original width sensor 2	Original present	No original
	H	-	-	-
[9]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	Needle electrode cleaner detection sensor	Cleaner limit position	Other than cleaner limit position
	F	-	-	-
	G	-	-	-
	H	-	-	-
[0]	A	-	-	-
	B	Side cover open/close switch	Cover opened	Cover closed
	C	-	-	-
	D	-	-	-
	E	Drum mode detection signal	Color	Black
	F	-	-	-
	G	Fuser unit connection	Connected	Not connected
	H	Key copy counter connection	Not connected	Connected

Table 1. Relation between the status of the bypass paper width sensor and paper size (width).



Bypass paper width sensor				Paper width size
3	2	1	0	
0	1	1	1	A3/LD
1	0	1	1	A4-R/LT-R
1	1	0	1	A5-R/ST-R
1	1	1	0	Card size
0	0	1	1	B4-R/LG
1	0	0	1	B5-R

Table 2. Relation between the status of the original tray width sensor and paper size (width).

Original tray width sensor			Paper width size (LT series)	Paper width size (A4 series)
TWID2S	TWID1S	TWID0S		
L	H	H	-	B5-R
H	L	H	ST-R	A5-R
L	L	H	LD / LT	A3 / A4
L	H	L	8.5" x 8.5" / LT-R LG / 13"LG	A4-R / FOLIO
L	L	L	COMPUTER	B4 / B5

H (= high level): Open L (= low level): Short

[FAX] button: OFF/[COPY] button: ON ([FAX] LED: OFF/[COPY] LED: ON)

Digital key	Button	Items to check	Contents	
			Highlighted display e.g. 	Normal display e.g. 
[1]	-	Temperature/humidity sensor (displays temperature inside of the equipment)	-	Temperature [°C]
[2]	-	Temperature/humidity sensor (displays humidity inside of the equipment)	-	Humidity [%RH]
[3]	-	Drum thermistor-K (displays temperature on the drum surface of K color)	-	Temperature [°C]
[4]	-	Drum thermistor-Y (displays temperature on the drum surface of Y color)	-	Temperature [°C]
[5]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-
[6]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-
[7]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-
[8]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-
[9]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	-	-	-
	E	-	-	-
	F	-	-	-
	G	-	-	-
	H	-	-	-

[0]	A	-	-	-
	B	-	-	-
	C	-	-	-
	D	Security enabler	Connectable	Not connectable
	E	Judgement for acceptable USB storage device (*1)	Acceptable	Not acceptable
	F	-	-	-
	G	-	-	-
	H	-	-	-

*1

- Be sure to install the USB storage device to the equipment and check if the device can be used with this code.
- Be sure to turn OFF the write protection (the function to prevent data from erasure by the accidental recording or deleting) of the USB storage device before performing the check, otherwise this code cannot be used.
- It may take some time (2 sec. to 10 sec.) before this check is completed depending on the USB storage device.

Output check (test mode 03)

Code	Function	Procedure
101	Drum motor ON + Transfer belt motor ON(Operational without process unit Y/M/C/K)	1
103	Polygonal motor (600dpi) ON	1
108	Registration motor ON	1
109	PFP motor ON	1
110	ADU motor ON	1
111	Developer unit motor Y/M/C/K ON(Operational without process unit Y/M/C/K)	1
112	Developer unit motor K ON (Operational without process unit K)	1
113	Fuser motor ON	1
114	Developer unit motor (M9) ON + Drum motor (M10) ON	1
115	ADU motor ON (high speed during transport within ADU)	1
116	Exit motor (reversal rotation) ON (high speed)	1
118	Laser ON	1
119	ADU motor ON (transport speed)	1
120	Exit motor (normal rotation) ON	1
121	Exit motor (reversal rotation) ON	1
122	LCF motor ON	1
123	Transport motor ON	1
125	Sensor shutter solenoid ON (open)	1
126	Image position aligning sensor (front/rear) LED ON	1
151	Code No.101 function OFF	1
153	Code No.103 function OFF	1
158	Code No.108 function OFF	1
159	Code No.109 function OFF	1
160	Code No.110 function OFF	1
161	Code No.111 function OFF	1
162	Code No.112 function OFF	1
163	Code No.113 function OFF	1
164	Code No.114 function OFF	1
165	Code No.115 function OFF	1
166	Code No.116 function OFF	1
168	Code No.118 function OFF	1
169	Code No.119 function OFF	1
170	Code No.120 function OFF	1
171	Code No.121 function OFF	1
172	Code No.122 function OFF	1
173	Code No.123 function OFF	1
175	Code No.125 function OFF	1
176	Code No.126 function OFF	1
201	1st drawer feed clutch ON/OFF	3
202	2nd drawer feed clutch ON/OFF	3
204	Bypass feed clutch ON/OFF	3
206	LCF pickup solenoid ON/OFF	3
207	LCF end fence reciprocating movement	2
208	LCF end fence motor ON/OFF	3
209	LCF feed clutch ON/OFF	3
210	LCF transport clutch ON/OFF	3
218	Key copy counter count up	2
222	ADU clutch ON/OFF	3
225	PFP transport clutch ON/OFF	3
226	PFP upper drawer feed clutch ON/OFF	3
228	PFP lower drawer feed clutch ON/OFF	3
229	Middle roller (upper) transport speed drive clutch ON/OFF	3
230	Middle roller (lower) transport speed drive clutch ON/OFF	3

231	Middle roller (upper) process speed drive clutch ON/OFF	3
232	Bridge unit gate solenoid ON/OFF	3
233	Middle roller (lower) process speed drive clutch ON/OFF	3
234	Bypass pickup solenoid ON/OFF	3
235	Discharge LED (K) ON/OFF (Do not let it radiate to the photoconductive drum for a long time.)	3
236	Discharge LED (Y/M/C) ON/OFF (Do not let it radiate to the photoconductive drum for a long time.)	3
239	Switching contact/release of 2nd transfer roller	2
240	Drum switching motor (switches position in the black/color mode)	2
241	1st transfer roller cam motor (switches contact/release of transfer belt)	2
242	1st drawer tray-up motor ON (tray up)	2
243	2nd drawer tray-up motor ON (tray up)	2
248	Developer bias (K) [DC] ON/OFF (Operational without process unit K)	3
249	Developer bias (K) [AC] ON/OFF (Operational without process unit K)	3
252	Main charger (K) ON/OFF (Operational without process unit K)	3
253	Main charger (Y/M/C) ON/OFF (Operational without process unit Y/M/C)	3
254	Developer bias (Y) [DC] ON/OFF (Operational without process unit Y)	3
255	Developer bias (M) [DC] ON/OFF (Operational without process unit M)	3
256	Developer bias (C) [DC] ON/OFF (Operational without process unit C)	3
257	Developer bias (Y/M/C) [AC] ON/OFF (Operational without process unit Y/M/C)	3
261	Scan motor ON (Automatically stops at limit position)	2
264	Scanner fan motor (high speed) ON/OFF	3
265	Scanner fan motor (low speed) ON/OFF	3
267	Scanner exposure lamp ON/OFF	3
271	LCF tray-up motor UP/DOWN	2
278	PFP upper drawer tray-up motor ON (tray up)	2
280	PFP lower drawer tray-up motor ON (tray up)	2
281	RADF feed motor ON/OFF (normal rotation)	3
282	RADF feed motor ON/OFF (reverse rotation)	3
283	RADF read motor ON/OFF	3
284	RADF exit/reverse motor ON/OFF (normal rotation)	3
285	RADF exit/reverse motor ON/OFF (reverse rotation)	3
294	Reverse/exit solenoid ON/OFF	3
295	Power OFF mode	4
297	RADF fan motor ON/OFF	3
301	Modem test 2100Hz	2
302	Modem test 14.4KBPS(V17)	2
303	Modem test 9.6KBPS(V29)	2
304	Modem test 4.8KBPS(V27)	2
305	Modem test 300BPS	2
306	Modem test 1850Hz	2
307	Modem test 1650Hz	2
308	Modem test 1100Hz	2
309	Modem test 462Hz	2
310	Modem test 1300Hz	2
311	Modem test 33.6KBPS(V.34)	2

312	Modem test 28.8KBPS(V.34)	2
313	Modem test 24.0KBPS(V.34)	2
314	Modem test 16.8KBPS(V.34)	2
315	Dial test 10PPS	5
316	Dial test 20PPS	5
317	Dial test PB	5
318	Modem test 12.0KBPS(V.17)	2
319	Modem test 7.2KBPS(V.29)	2
320	Modem test 2.4KBPS(V.27ter)	2
321	FAX image memory test	2
322	CML relay ON	2
410	Toner motor (K) ON/OFF (Operational without toner cartridge K)	3
411	Toner motor (C) ON/OFF (Operational without toner cartridge C)	3
412	Toner motor (M) ON/OFF (Operational without toner cartridge M)	3
413	Toner motor (Y) ON/OFF (Operational without toner cartridge Y)	3
414	Used toner motor ON/OFF	3
415	Waste toner transport motor ON/OFF	3
417	Laser shutter (open/close)	2
433	K drum cleaning blade bias ON/OFF	3
434	YMC drum cleaning blade bias ON/OFF	3
439	EPU cooling fan (low speed) ON/OFF	3
440	EPU cooling fan (high speed) ON/OFF	3
441	Fuser/exit section cooling fan (low speed) ON/OFF	3
442	Fuser/exit section cooling fan (high speed) ON/OFF	3
443	Ozone exhaust fan (low speed) ON/OFF	3
444	Ozone exhaust fan (high speed) ON/OFF	3
445	Laser unit cooling fan (low speed) ON/OFF	3
446	Laser unit cooling fan (high speed) ON/OFF	3
448	Switching regulator cooling fan ON/OFF	3
449	Internal cooling fan (low speed) ON/OFF	3
450	Internal cooling fan (high speed) ON/OFF	3

Test print mode (test mode 04)

Code	Types of test pattern	Remarks	Remarks	Output from
33	Overall halftone for printer (Image)		5	SYS
142	Grid pattern (black)	Pattern width: 2 dots, Pitch: 10 mm	1	LGC
204	Grid pattern (color)	Pattern width: 1 dot, Pitch: 10 mm	2	LGC
219	6% test pattern		2	LGC
220	8% test pattern		2	LGC
231	Secondary scanning direction 33 gradation steps	3 pixels standard, Width: 10 mm	2	LGC
237	Halftone		2	LGC
262	Ladder pattern (4 lines ON/ 4 lines OFF)	For color deviation confirmation	2	LGC
270	Image quality control test pattern	For checking the image quality control	2	LGC
285	Field curvature deviation check pattern	For secondary scanning position fine adjustment	1	LGC

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Development	Auto adj. for dev. material supply and ATS		2400		Adjustment for All (Y,M,C,K)	-	0-255	M	The value starts changing approx. 3minutes after this adjustment is started. The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.)	5	Yes
05	Adjustment mode	Process	Development	Auto adj. for dev. material supply and ATS		2401		Adjustment for Y	-	0-255	M	The value starts changing approx. 3minutes after this adjustment is started. The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.)	5	Yes
05	Adjustment mode	Process	Development	Auto adj. for dev. material supply and ATS		2402		Adjustment for M	-	0-255	M	The value starts changing approx. 3minutes after this adjustment is started. The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.)	5	Yes
05	Adjustment mode	Process	Development	Auto adj. for dev. material supply and ATS		2403		Adjustment for C	-	0-255	M	The value starts changing approx. 3minutes after this adjustment is started. The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.)	5	Yes
05	Adjustment mode	Process	Development	Auto adj. for dev. material supply and ATS		2404		Adjustment for K	-	0-255	M	The value starts changing approx. 3minutes after this adjustment is started. The value is automatically set during this adjustment (approx. 2 minutes). (As the value increases, the sensor output increases correspondingly.)	5	Yes
05	Adjustment mode	Process	Development	Adjustment of auto-toner initial adjustment reference setting value (YMCK)		2405	0	Adjustment of (YMCK) Y	130	0-255	M		4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Development	Adjustment of auto-toner initial adjustment reference setting value (YMCK)		2405	1	Adjustment of (YMCK) M	130	0-255	M		4	Yes
05	Adjustment mode	Process	Development	Adjustment of auto-toner initial adjustment reference setting value (YMCK)		2405	2	Adjustment of (YMCK) C	130	0-255	M		4	Yes
05	Adjustment mode	Process	Development	Adjustment of auto-toner initial adjustment reference setting value (YMCK)		2405	3	Adjustment of (YMCK) K	130	0-255	M		4	Yes
05	Adjustment mode	Process	Development	Initialization of auto-toner		2406		Automatic adjustment (Y, M, C)	-	0-255	M		5	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	Y	2627	0	Lower limit	200	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	Y	2627	1	Upper limit	900	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	M	2628	0	Lower limit	200	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	M	2628	1	Upper limit	900	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	C	2629	0	Lower limit	200	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	C	2629	1	Upper limit	900	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	K	2630	0	Lower limit	200	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Development	Developer bias DC(-) calibration voltage	K	2630	1	Upper limit	900	0-1000	M	(Unit: V)	4	Yes
05	Adjustment mode	Process	Image control	Target value of high density control		2662	0	Y	310	0-999	M	Sets the target value of high density control for image control.	4	
05	Adjustment mode	Process	Image control	Target value of high density control		2662	1	M	310	0-999	M	Sets the target value of high density control for image control.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Image control	Target value of high density control		2662	2	C	300	0-999	M	Sets the target value of high density control for image control.	4	
05	Adjustment mode	Process	Image control	Target value of high density control		2662	3	K	318	0-999	M	Sets the target value of high density control for image control.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control contrast voltage correction	Mode 2 maximum number of time corrected	2670	0	Y	3	0-16	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control contrast voltage correction	Mode 2 maximum number of time corrected	2670	1	M	3	0-16	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control contrast voltage correction	Mode 2 maximum number of time corrected	2670	2	C	3	0-16	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control contrast voltage correction	Mode 2 maximum number of time corrected	2670	3	K	3	0-16	M	Sets the maximum correction number of time of the contrast voltage in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control laser power correction	Mode 2 maximum number of time corrected	2671	0	Y	2	0-16	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control laser power correction	Mode 2 maximum number of time corrected	2671	1	M	2	0-16	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control laser power correction	Mode 2 maximum number of time corrected	2671	2	C	2	0-16	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Image quality closed-loop control laser power correction	Mode 2 maximum number of time corrected	2671	3	K	2	0-16	M	Sets the maximum correction number of time of the laser power in the closed-loop control mode 2.	4	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2729	-	When the light source is OFF	0	0-1023	M	Displays the output value of image quality sensor when the sensor light source is OFF.	2	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2730	-	Transfer belt surface	0	0-1023	M	Displays the output value of image quality sensor (when there is no test pattern) on the transfer belt.	2	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2731	0	Y	0	0-1023	M	Displays the output value of image quality sensor when a high-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2731	1	M	0	0-1023	M	Displays the output value of image quality sensor when a high-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	Yes
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2731	2	C	0	0-1023	M	Displays the output value of image quality sensor when a high-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	Yes
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2731	3	K	0	0-1023	M	Displays the output value of image quality sensor when a high-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	Yes
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2732	0	Low density pattern Y	0	0-1023	M	Displays the output value of image quality sensor when a low-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2732	1	Low density pattern M	0	0-1023	M	Displays the output value of image quality sensor when a low-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2732	2	Low density pattern C	0	0-1023	M	Displays the output value of image quality sensor when a low-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	
05	Adjustment mode	Process	Image control	Output value display of image quality sensor		2732	3	Low density pattern K	0	0-1023	M	Displays the output value of image quality sensor when a low-density test pattern is written. The larger the value, the smaller the toner amount adhered becomes.	10	
05	Adjustment mode	Process	Image control			2734	-	Light amount adjustment result of image quality sensor	0	0-255	M	The LED light amount adjustment value of this sensor is the reference value to set the reflected light from the belt surface.	2	
05	Adjustment mode	Process	Image control			2737	-	Relative humidity display during latest closed-loop control	0	0-100	M	Displays the relative humidity at the latest performing of the closed-loop control.(Unit: %)	2	
05	Adjustment mode	Process	Image control			2742		Enforced performing of image quality control	-	-	M	Performs the image quality control.	6	Yes
05	Adjustment mode	Process	Transfer			2761	-	Temperature/humidity sensor temperature display	23	0-100	M	Displays the temperature value set at the image quality open-loop control transfer correction.	2	
05	Adjustment mode	Process	Transfer			2762	-	Temperature/humidity sensor humidity display	50	0-100	M	Displays the humidity value set at the image quality open-loop control transfer correction.	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Charger			2763	-	Drum thermistor temperature display (K)	23	0-100	M	(Unit: °C)	2	
05	Adjustment mode	Process	Charger			2764	-	Drum thermistor temperature display (Y)	23	0-100	M	(Unit: °C)	2	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	0	Y normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	1	M normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	2	C normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	3	K normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	4	CK normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	5	BK Normal speed	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	6	Y decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	7	M decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	8	C decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	9	K decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	10	CK decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	1st transfer bias resistance detection offset		2905	11	BK decelerating	5	0-10	M	Sets the offset amount of the 1st transfer bias. Offsetting level 0: 0.75 1: 0.80 2: 0.85 3: 0.90 4: 0.95 5: 1.00 6: 1.05 7: 1.10 8: 1.15 9: 1.20 10: 1.25 (Unit: Correcting factor)	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	0	Y normal speed	Refer to contents	0-208	M	Unit: bit <Default value> e-STUDIO2040C/2540C/3040C/3540C: 60 e-STUDIO4540C: 66	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	1	M normal speed	Refer to contents	0-208	M	Unit: bit <Default value> e-STUDIO2040C/2540C/3040C/3540C: 60 e-STUDIO4540C: 66	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	2	C normal speed	Refer to contents	0-208	M	Unit: bit <Default value> e-STUDIO2040C/2540C/3040C/3540C: 60 e-STUDIO4540C: 66	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	3	K normal speed	Refer to contents	0-208	M	Unit: bit <Default value> e-STUDIO2040C/2540C/3040C/3540C: 60 e-STUDIO4540C: 66	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	5	BK normal speed	Refer to contents	0-208	M	Unit: bit <Default value> e-STUDIO2040C/2540C/3040C/3540C: 60 e-STUDIO4540C: 66	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	6	Y decelerating	40	0-208	M	Unit: bit	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	7	M decelerating	40	0-208	M	Unit: bit	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	8	C decelerating	40	0-208	M	Unit: bit	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	9	K decelerating	40	0-208	M	Unit: bit	4	
05	Adjustment mode	Process	Transfer	Default value of 1st transfer restraining bias		2918	11	BK decelerating	40	0-208	M	Unit: bit	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	0	Plain paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	1	Thick paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	2	Thick paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

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05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	3	Thick paper 3	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	4	Overhead transparencies	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	5	Special paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	6	Special paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	7	Recycled paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Top side)		2934	8	Thick paper 4	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	0	Plain paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	1	Thick paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	2	Thick paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	3	Thick paper 3	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	5	Special paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	6	Special paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	7	Recycled paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the color mode (Back side)		2935	8	Thick paper 4	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the color mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	0	Plain paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	1	Thick paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	2	Thick paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	3	Thick paper 3	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	4	Overhead transparencies	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	5	Special paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	6	Special paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	7	Recycled paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Top side)		2936	8	Thick paper 4	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Top side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	0	Plain paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	1	Thick paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	2	Thick paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	3	Thick paper 3	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	5	Special paper 1	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	6	Special paper 2	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	7	Recycled paper	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Bias offset in the black mode (Back side)		2937	8	Thick paper 4	5	0-10	M	Sets the bias offset amount of the 2nd transfer bias in the black mode (Back side). Offsetting level 0: 0 1: 0.2 2: 0.4 3: 0.6 4: 0.8 5: 1.0 6: 1.2 7: 1.4 8: 1.6 9: 1.8 10: 2.0	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	0	Plain paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	1	Thick paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	2	Thick paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	3	Thick paper 3	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	4	Overhead transparencies	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	5	Special paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	6	Special paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	7	Recycled paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the color mode)		2938	8	Thick paper 4	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	0	Plain paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	1	Thick paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	2	Thick paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	3	Thick paper 3	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	5	Special paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	6	Special paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	7	Recycled paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the color mode)		2939	8	Thick paper 4	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the color mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	0	Plain paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	1	Thick paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	2	Thick paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	3	Thick paper 3	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	4	Overhead transparencies	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	5	Special paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	6	Special paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	7	Recycled paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Top side in the black mode)		2940	8	Thick paper 4	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Top side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	0	Plain paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	1	Thick paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	2	Thick paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	3	Thick paper 3	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	5	Special paper 1	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	6	Special paper 2	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	7	Recycled paper	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	2nd transfer leading/trailing edge bias correction factor(Back side in the black mode)		2941	8	Thick paper 4	0	0-16	M	Corrects the 2nd transfer leading/trailing edge bias (Back side in the black mode). Offsetting level 0: 1.00 1: 0.95 2: 0.90 3: 0.85 4: 0.80 5: 0.75 6: 0.70 7: 0.65 8: 0.60 9: 0.55 10: 0.50 11: 0.45 12: 0.40 13: 0.35 14: 0.30 15: 0.25 16: 0.20	4	
05	Adjustment mode	Process	Transfer	Number of time of cleaning at printing end		2961	0	Normal speed / High speed	0	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Number of time of cleaning at printing end		2961	1	Decelerating	0	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Process	Transfer	Number of time of cleaning at jam recovery / bypass non-standard printing / tab paper printing.		2962	0	Normal speed / High speed	5	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Number of time of cleaning at jam recovery / bypass non-standard printing / tab paper printing.		2962	1	Decelerating	5	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Number of time of cleaning at image quality control end		2963	0	Normal speed / High speed	0	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Number of time of cleaning at image quality control end		2963	1	Decelerating	0	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Enforced toner supply / Number of time of cleaning at the end of fusing-wait period		2966	0	Normal speed / High speed	2	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Process	Transfer	Enforced toner supply / Number of time of cleaning at the end of fusing-wait period		2966	1	Decelerating	2	0-7	M	0: once 1: twice 2: 3times 3: 5times 4: 7times 5: 10times 6: 12times 7: 15times	4	
05	Adjustment mode	Scanner	Scanner			3009	-	Log table switching for RADF copying (color)	2	0-4	SYS	0: Same log table as the one used at copying with original glass 1: Background reproduction - Light 2 2: Background reproduction - Light 1 3: Background reproduction - Dark 1 4: Background reproduction - Dark 2	1	
05	Adjustment mode	Scanner	Scanner	Image location adjustment		3030		Primary scanning direction	113	0-255	SYS	When the value increases by "1", the image shifts by approx. 0.0423 mm toward the front side of the paper.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Scanner	Scanner	Image location adjustment		3031		Secondary scanning direction	124	68-188	SYS	When the value increases by "1", the image shifts by approx. 0.09 mm toward the trailing edge of the paper.	1	Yes
05	Adjustment mode	Scanner	Scanner	Reproduction ratio adjustment		3032		Adj. secondary scan.direction	128	0-255	SYS	When the value increases by "1", the reproduction ratio in the secondary scanning direction (vertical to paper feeding direction) increases by approx. 0.017%.	1	Yes
05	Adjustment mode	Scanner	Scanner	Distortion mode		3033		Distortion mode	-	-	SYS	Moves carriages to the adjustment position.	6	Yes
05	Adjustment mode	Scanner	Scanner	Shading position adjustment		3034	-	Original glass	117	68-188	SYS	0.08333 mm/step	1	
05	Adjustment mode	Scanner	Scanner	Shading position adjustment		3035	-	RADF	133	68-188	SYS	0.08333 mm/step	1	
05	Adjustment mode	Scanner	RADF	Adjustment of RADF paper alignment		3040	-	for single sided original	10	0-20	SYS	When the value increases by "1", the aligning amount increases by approx. 0.4 mm.	1	
05	Adjustment mode	Scanner	RADF	Adjustment of RADF paper alignment		3041	-	for double sided original	10	0-20	SYS	When the value increases by "1", the aligning amount increases by approx. 0.5 mm.	1	
05	Adjustment mode	Scanner	RADF			3042		Fine adjustment of transport speed	50	0-100	SYS	When the value increases by "1", the reproduction ratio of the secondary scanning direction on original (fed from the RADF) increases by approx. 0.1%.	1	Yes
05	Adjustment mode	Scanner	RADF			3043		Sideways deviation adjustment	128	0-255	SYS	When the value increases by "1", the image of original fed from the RADF shifts toward the rear side of paper by approx. 0.0423 mm.	1	Yes
05	Adjustment mode	Scanner	RADF	Leading edge position adjustment		3044		Front side	50	0-100	SYS	When the value increases by "1", the copied image of original fed from the RADF shifts toward the trailing edge of paper by approx. 0.2 mm.	1	Yes
05	Adjustment mode	Scanner	RADF	Leading edge position adjustment		3045		Back side	50	0-100	SYS	When the value increases by "1", the copied image of original fed from the RADF shifts toward the trailing edge of paper by approx. 0.2 mm.	1	Yes
05	Adjustment mode	Scanner	Scanner	Carriage position adjustment during scanning from RADF		3046	-	Carriage position adjustment during scanning from RADF (black)	128	0-255	SYS	When the value increases by "1", the carriage position shifts by approx. 0.1 mm toward the exit side when using the RADF.	1	
05	Adjustment mode	Scanner	Scanner	Carriage position adjustment during scanning from RADF		3047	-	Carriage position adjustment during scanning from RADF (color)	128	0-255	SYS	When the value increases by "1", the carriage position shifts by approx. 0.1 mm toward the exit side when using the RADF.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Scanner	Scanner	Data transfer of characteristic value		3203		SLG board -> SYS board	-	-	SYS	Transfers the characteristic values of the scanner (shading correction factor / RGB color correction / reproduction ratio color deviation correction / shading position correction factor / reproduction ratio correction value in primary scanning direction)	6	Yes
05	Adjustment mode	Scanner	Scanner			3209	-	Data transfer of characteristic value of scanner / SYS board -> SLG board	-	-	SYS	Transfers the characteristic values of the scanner (shading correction factor / RGB color correction / reproduction ratio color deviation correction / shading position correction factor / reproduction ratio correction value in primary scanning direction) from the SRAM of the SYS board to the SRAM of the SLG board.	6	
05	Adjustment mode	Scanner	Scanner			3218	-	Shading correction plate Automatic dust detection adjustment	-	-	-	Performs adjustment for automatic dust detection with the shading correction plate. If dust is detected, shading correction is performed by avoiding the dust.	6	
05	Adjustment mode	Printer	Image	Fine adjustment of polygonal motor rotation speed	Reproduction ratio adjustment	4000		PPC	128	0-255	M	When the value increases by "1", the reproduction ratio of primary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/step)	1	Yes
05	Adjustment mode	Printer	Image	Fine adjustment of polygonal motor rotation speed	Reproduction ratio adjustment	4001		PRT	128	0-255	M	When the value increases by "1", the reproduction ratio of primary scanning direction increases by approx. 0.07%. (approx. 0.1 mm/step)	1	Yes
05	Adjustment mode	Printer	Image	Adj. of primary scan. laser writing start		4005		PPC	128	0-255	M	When the value increases by "1", the writing start position shifts to the front side by approx. 0.0423 mm.	1	Yes
05	Adjustment mode	Printer	Image	Adj. of primary scan. laser writing start		4006		PRT	128	0-255	M	When the value increases by "1", the writing start position shifts to the front side by approx. 0.0423 mm.	1	Yes
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	PRT	4016	0	Transport speed: Normal speed	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	FAX	4016	1	Transport speed: Normal speed	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	PPC	4016	2	Transport speed: Normal speed	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	PRT	4016	3	Transport speed: Decelerating	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	FAX	4016	4	Transport speed: Decelerating	128	0-255	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed	PPC	4016	5	Transport speed: Decelerating	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed		4016	9	Transport speed: Normal speed	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed		4016	10	Transport speed: Decelerating	128	0-255	M		4	
05	Adjustment mode	Printer	Drive system	Fine adjustment of ADU motor rotational speed		4016	11	Transport speed: High speed	128	0-255	M		4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	0	1st drawer	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	1	2nd drawer	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	2	PFP upper drawer	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	3	PFP lower drawer	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	4	LCF	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adjustment of drawer sideways deviation		4018	5	Bypass feeding	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	
05	Adjustment mode	Printer	Image	Adj. of primary scan. laser writing start	Duplex feeding	4019	0	Long size	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	Yes
05	Adjustment mode	Printer	Image	Adj. of primary scan. laser writing start	Duplex feeding	4019	1	Short size	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	Yes
05	Adjustment mode	Printer	Image	Adj. of primary scan. laser writing start	Duplex feeding	4019	2	Middle size	128	0-255	M	When the value increases by "1", the image shifts toward the front side by 0.0423 mm.	4	Yes
05	Adjustment mode	Printer	Image	Margin adjustment	PPC	4050		Top margin adjustment	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	Yes
05	Adjustment mode	Printer	Image	Margin adjustment	PPC	4051	-	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	
05	Adjustment mode	Printer	Image	Margin adjustment	PPC	4052		Right margin adjustment	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Image	Margin adjustment	PPC	4053		Bottom margin adjustment	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	Yes
05	Adjustment mode	Printer	Image	Margin adjustment	PRT	4054	-	Top margin adjustment (blank area at the leading edge of the paper)	24	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	
05	Adjustment mode	Printer	Image	Margin adjustment	PRT	4055	-	Left margin adjustment (blank area at the left of the paper along the paper feeding direction)	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	
05	Adjustment mode	Printer	Image	Margin adjustment	PRT	4056	-	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	
05	Adjustment mode	Printer	Image	Margin adjustment	PRT	4057	-	Bottom margin adjustment (blank area at the trailing edge of the paper)	0	0-255	M	When the value increases by "1", the blank area becomes wider by approx. 0.0423 mm.	1	
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4058		1st drawer	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4059		2nd drawer	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4060		PPF upper drawer	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4061		Bypass feeding	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4062		Duplex feeding	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image			4064	0	Bottom margin adjustment (blank area at the trailing edge of the paper)/Reverse side at duplexing	24	0-255	M	When the value increases, the blank area becomes wider.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Image			4064	1	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)/Reverse side at duplexing	18	0-255	M	When the value increases, the blank area becomes wider.	4	
05	Adjustment mode	Printer	Image			4064	2	Bottom margin adjustment (blank area at the trailing edge of the paper)/Reverse side at duplexing (black)	24	0-255	M	When the value increases, the blank area becomes wider.	4	
05	Adjustment mode	Printer	Image			4064	3	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)/Reverse side at duplexing (color)	18	0-255	M	When the value increases, the blank area becomes wider.	4	
05	Adjustment mode	Printer	Image			4064	4	Bottom margin adjustment (blank area at the trailing edge of the paper)/Reverse side at duplexing (color)	18	0-255	M	When the value increases, the blank area becomes wider.	4	
05	Adjustment mode	Printer	Image			4064	5	Right margin adjustment (blank area at the right of the paper along the paper feeding direction)/Reverse side at duplexing (Thick paper 1)	12	0-255	M	When the value increases, the blank area becomes wider.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4065		Common items	100	0-200	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4100	0	Plain paper; Long size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4100	1	Plain paper; Middle size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4100	2	Plain paper; Short size1	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 25 e-STUDIO4540C: 15	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4100	3	Plain paper; :Short size2	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 22 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4100	4	Plain paper; :Short size3	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 22 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4101	0	Plain paper; Long size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4101	1	Plain paper; Middle size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4101	2	Plain paper; Short size1	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4101	3	Plain paper; :Short size2	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4101	4	Plain paper; :Short size3	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4103	0	Plain paper; Long size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 15	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4103	1	Plain paper; Middle size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 15	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4103	2	Plain paper; Short size1	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 15	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4103	3	Plain paper; ;Short size2	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 22 e-STUDIO4540C: 15	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4103	4	Plain paper; ;Short size3	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 22 e-STUDIO4540C: 15	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4104	0	Thick paper1 ;Long size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4104	1	Thick paper1 ;Middle size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4104	2	Thick paper1 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4104	3	Thick paper1 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4104	4	Thick paper1 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4105	0	Thick paper2 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4105	1	Thick paper2 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4105	2	Thick paper2 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4105	3	Thick paper2 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4105	4	Thick paper2 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4106	0	Thick paper3 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4106	1	Thick paper3 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4106	2	Thick paper3 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4106	3	Thick paper3 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4106	4	Thick paper3 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4107	0	OHP film ;Long size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4107	1	OHP film ;Middle size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4107	2	OHP film ;Short size1	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4107	3	OHP film ;Short size2	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4107	4	OHP film ;Short size3	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4108	0	Plain paper; Long size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4108	1	Plain paper; Middle size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4108	2	Plain paper; Short size1	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4108	3	Plain paper; :Short size2	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4108	4	Plain paper; :Short size3	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4109	0	Plain paper; Long size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4109	1	Plain paper; Middle size	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 20 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4109	2	Plain paper; Short size1	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4109	3	Plain paper; ;Short size2	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Printer transport	Paper aligning amount adjustment	PFP lower drawer	4109	4	Plain paper; :Short size3	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases as follows: e-STUDIO2040C/2540C/3040C/3540C: Approx. 0.6 mm e-STUDIO4540C: Approx. 0.8 mm <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	4	Yes
05	Adjustment mode	Printer	Feeding system/Printer transport	Paper aligning amount adjustment	ADU	4110	0	Plain paper; Long size	19	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Printer transport	Paper aligning amount adjustment	ADU	4110	1	Plain paper; Middle size	19	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4110	2	Plain paper; Short size1	15	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4110	3	Plain paper; ;Short size2	15	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4110	4	Plain paper; ;Short size3	15	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	LCF	4111		Plain paper	Refer to content	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 10	1	Yes
05	Adjustment mode	Printer	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		4113	0	Plain paper	0	0-255	M	When the value increases by "1", the paper pushing amount at duplex feeding increases by approx. 0.8 mm.	4	
05	Adjustment mode	Printer	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		4113	1	Thick paper 1	0	0-255	M	When the value increases by "1", the paper pushing amount at duplex feeding increases by approx. 0.4 mm.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		4113	2	Thick paper 2	0	0-255	M	When the value increases by "1", the paper pushing amount at duplex feeding increases by approx. 0.4 mm.	4	
05	Adjustment mode	Printer	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		4113	3	Thick paper 3	0	0-255	M	When the value increases by "1", the paper pushing amount at duplex feeding increases by approx. 0.4 mm.	4	
05	Adjustment mode	Printer	Paper feeding	Adjustment of paper pushing amount/Duplex feeding (short size)		4113	4	Special paper	20	0-255	M	When the value increases by "1", the paper pushing amount at duplex feeding increases by approx. 0.4 mm.	4	
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4115	0	Thick paper1 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4115	1	Thick paper1 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4115	2	Thick paper1 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4115	3	Thick paper1 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	1st drawer	4115	4	Thick paper1 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4116	0	Thick paper1 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4116	1	Thick paper1 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4116	2	Thick paper1 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4116	3	Thick paper1 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	2nd drawer	4116	4	Thick paper1 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4117	0	Thick paper1 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4117	1	Thick paper1 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4117	2	Thick paper1 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4117	3	Thick paper1 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP upper drawer	4117	4	Thick paper1 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4118	0	Thick paper1 ;Long size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4118	1	Thick paper1 ;Middle size	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4118	2	Thick paper1 ;Short size1	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4118	3	Thick paper1 ;Short size2	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	PFP lower drawer	4118	4	Thick paper1 ;Short size3	35	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4120	0	Thick paper/Special paper; Long size	23	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4120	1	Thick paper/Special paper; Middle size	23	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4120	2	Thick paper/Special paper; Short size1	26	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4120	3	Thick paper/Special paper; Short size2	26	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	ADU	4120	4	Thick paper/Special paper; Short size3	26	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.8 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4128	0	Special paper1 ;Long size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4128	1	Special paper1 ;Middle size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4128	2	Special paper1 ;Short size1	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4128	3	Special paper1 ;Short size2	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4128	4	Special paper1 ;Short size3	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4129	0	Special paper2 ;Long size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4129	1	Special paper2 ;Middle size	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4129	2	Special paper2 ;Short size1	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4129	3	Special paper2 ;Short size2	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment	Bypass feeding	4129	4	Special paper2 ;Short size3	30	0-63	M	When the value increases by "1", the aligning amount increases by approx. 0.6 mm. <Paper length> Long size: 330 mm or longer Middle size: 220 mm to 329 mm Short size 1: 205 mm to 219 mm Short size 2: 160 mm to 204 mm Short size 3: 159 mm or shorter	4	Yes
05	Adjustment mode	Printer	Laser	Secondary scanning position Fine adjustment		4350	0	Y	128	118-138	M	Performs secondary scanning position fine adjustment to make field curvature deviation less noticeable.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Laser	Secondary scanning position Fine adjustment		4350	1	M	128	118-138	M	Performs secondary scanning position fine adjustment to make field curvature deviation less noticeable.	4	
05	Adjustment mode	Printer	Laser	Secondary scanning position Fine adjustment		4350	2	C	128	118-138	M	Performs secondary scanning position fine adjustment to make field curvature deviation less noticeable.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4402		Common items	100	0-200	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	PRT	4520	0	Transport speed: Normal speed	128	0-255	M	PRT (ref. velocity)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	FAX	4520	1	Transport speed: Normal speed	128	0-255	M	FAX (ref. velocity)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	PPC	4520	2	Transport speed: Normal speed	128	0-255	M	PPC (ref. velocity)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	PRT	4520	3	Transport speed: Decelerating	128	0-255	M	PRT (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	FAX	4520	4	Transport speed: Decelerating	128	0-255	M	FAX (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of drum motor rotational speed	PPC	4520	5	Transport speed: Decelerating	128	0-255	M	PPC (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	PRT	4523	0	Transport speed: Normal speed	Refer to contents	0-255	M	PRT (ref. velocity) When the value increases, the motor speed becomes faster. (0.05%/step) <Default value> e-STUDIO2040C: 136 e-STUDIO2540C/3040C/3540C/4540C: 134	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	FAX	4523	1	Transport speed: Normal speed	128	0-255	M	FAX (ref. velocity) When the value increases, the motor speed becomes faster. (0.05%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	PPC	4523	2	Transport speed: Normal speed	128	0-255	M	PPC (ref. velocity) When the value increases, the motor speed becomes faster. (0.05%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	PRT	4523	3	Transport speed: Decelerating	126	0-255	M	PRT (75mm/s) When the value increases, the motor speed becomes faster. (0.05%/step)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	FAX	4523	4	Transport speed: Decelerating	128	0-255	M	FAX (75mm/s) When the value increases, the motor speed becomes faster. (0.05%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	PPC	4523	5	Transport speed: Decelerating	128	0-255	M	PPC(75mm/s) When the value increases, the motor speed becomes faster. (0.05%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of registration motor rotational speed	PRT	4523	6	Transport speed: Decelerating	Refer to contents	0-255	M	PRT(for long size 75mm/s) When the value increases, the motor speed becomes faster. (0.05%/step) <Default value> e-STUDIO2040C: 120 e-STUDIO2540C/3040C/3540C/4540C: 122	4	
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	PRT	4526	0	Transport speed: Normal speed	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	FAX	4526	1	Transport speed: Normal speed	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	PPC	4526	2	Transport speed: Normal speed	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	PRT	4526	3	Transport speed: Decelerating	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	FAX	4526	4	Transport speed: Decelerating	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adj. of transfer belt motor speed	PPC	4526	5	Transport speed: Decelerating	128	0-255	M	When the value increases, the motor speed becomes faster. (0.05%/step)	4	Yes
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	PRT	4529	0	Transport speed: Normal speed	132	0-255	M	0.05%/step	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	FAX	4529	1	Transport speed: Normal speed	128	0-255	M	0.05%/step	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	PPC	4529	2	Transport speed: Normal speed	128	0-255	M	0.05%/step	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	PRT	4529	3	Transport speed: Decelerating	Refer to contents	0-255	M	0.05%/step <Default value> e-STUDIO2040C/2540C/3040C/3540C: 132 e-STUDIO4540C: 133	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	FAX	4529	4	Transport speed: Decelerating	128	0-255	M	0.05%/step	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	PPC	4529	5	Transport speed: Decelerating	128	0-255	M	0.05%/step	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of fuser roller rotational speed	PRT	4529	6	Transport speed: Decelerating	Refer to contents	0-255	M	0.05%/step <Default value> e-STUDIO2040C/2540C/3040C/3540C: 136 e-STUDIO4540C: 135	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	PRT	4532	0	Transport speed: Normal speed	128	0-255	M	PRT (ref. velocity) (0.06%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	FAX	4532	1	Transport speed: Normal speed	128	0-255	M	FAX (ref. velocity) (0.06%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	PPC	4532	2	Transport speed: Normal speed	128	0-255	M	PPC (ref. velocity) (0.06%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	PRT	4532	3	Transport speed: Decelerating	128	0-255	M	PRT (75mm/s) (0.03%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	FAX	4532	4	Transport speed: Decelerating	128	0-255	M	FAX (75mm/s) (0.03%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	PPC	4532	5	Transport speed: Decelerating	128	0-255	M	PPC (75mm/s) (0.03%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of feed/transport motor rotational speed	PRT	4532	6	Transport speed: Decelerating	32	0-255	M	PRT (for long size 75mm/s) (0.03%/step)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	PRT	4535	0	Transport speed: Normal speed	128	0-255	M	PRT (ref. velocity)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	FAX	4535	1	Transport speed: Normal speed	128	0-255	M	FAX (ref. velocity)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	PPC	4535	2	Transport speed: Normal speed	128	0-255	M	PPC (ref. velocity)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	PRT	4535	3	Transport speed: Decelerating	128	0-255	M	PRT (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	FAX	4535	4	Transport speed: Decelerating	128	0-255	M	FAX (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	PPC	4535	5	Transport speed: Decelerating	128	0-255	M	PPC (75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed	PRT	4535	6	Transport speed: Decelerating	128	0-255	M	PRT (for long size 75mm/s)	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed		4535	9	Reverse rotation: Normal speed	128	0-255	M	Reverse: Normal	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed		4535	10	Reverse rotation: Decelerating	128	0-255	M	Reverse: Low	4	
05	Adjustment mode	Printer	Drive	Fine adjustment of exit motor rotational speed		4535	11	Reverse rotation: High speed	128	0-255	M	Reverse: High	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4560		PPF lower drawer	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment	Normal speed	4561		T-LCF	50	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	Yes
05	Adjustment mode	Printer	Image	Leading edge position adjustment correction item on each media type (when decelerating)		4562	-	1st drawer	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	
05	Adjustment mode	Printer	Image	Leading edge position adjustment correction item on each media type (when decelerating)		4563	-	2nd drawer	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	
05	Adjustment mode	Printer	Image	Leading edge position adjustment correction item on each media type (when decelerating)		4564	-	PPF upper drawer	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	
05	Adjustment mode	Printer	Image	Leading edge position adjustment correction item on each media type (when decelerating)		4565	-	PPF lower drawer	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	0	Thick paper 1	51	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	1	Thick paper 2	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	2	Thick paper 3	54	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	3	OHP film	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	4	Special paper 1	54	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment (Decelerated)		4567	5	Special paper 2	54	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	4	
05	Adjustment mode	Printer	Image	Leading edge position adjustment correction item on each media type (when decelerating)		4568	-	ADU	52	0-100	M	When the value increases by "1", the image shifts toward the trailing edge of the paper by approx. 0.1 mm.	1	
05	Adjustment mode	Printer	Feeding system/Paper transport	Paper aligning amount adjustment		4579		Using icons	-	-	M	Press the button on the LCD.	4	Yes
05	Adjustment mode	Printer	Image control			4719		Forced color registration control	-	-	M	Forcibly performs the color registration control adjustment in order to eliminate the color deviation of Y, M, C and K colors.	6	Yes
05	Adjustment mode	Printer	Image control			4720		Displaying parameters for color regist.	-	0-255	M	Checks the cause of a "CA00" error when it occurs.	2	Yes
05	Adjustment mode	Printer	Maintenance			4721		Mirror motor initial excitation setting	-	-	M	Perform this adjustment when the laser unit or the SRAM on the LGC board has been replaced.	6	Yes
05	Adjustment mode	Printer	Image	Image void correction code	PPC (black)	4731	0	Top margin	29	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PPC (color)	4731	1	Top margin	48	0-48	M	(0.4mm/10step)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Image	Image void correction code	PRT (black)	4731	2	Top margin	29	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PRT (color)	4731	3	Top margin	29	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PPC (black)	4731	4	Bottom margin	24	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PPC (color)	4731	5	Bottom margin	24	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PRT (black)	4731	6	Bottom margin	0	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Image void correction code	PRT (color)	4731	7	Bottom margin	0	0-48	M	(0.4mm/10step)	4	
05	Adjustment mode	Printer	Image	Displaying corrected values of leading edge adjustment		4732	0	Absolute humidity reference value	255	0-255	M		10	
05	Adjustment mode	Printer	Image	Displaying corrected values of leading edge adjustment		4732	1	Absolute humidity RMS value	255	0-255	M		10	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Plain paper		4808	0	Drawer	0	-20-20	M	e-STUDIO2040C/2540C/3040C/3540C: 0.6 mm/step e-STUDIO4540C: 0.8 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Plain paper		4808	1	Bypass feeding	0	-20-20	M	e-STUDIO2040C/2540C/3040C/3540C: 0.6 mm/step e-STUDIO4540C: 0.8 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Plain paper		4808	2	ADU	0	-20-20	M	1.0 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 1		4809	0	Drawer	0	-20-20	M	0.6 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 1		4809	1	Bypass feeding	0	-20-20	M	0.6 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 1		4809	2	ADU	0	-20-20	M	0.8 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 2		4810	0	Drawer	0	-20-20	M	0.6 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 2		4810	1	Bypass feeding	0	-20-20	M	0.6 mm/step	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 2		4810	2	ADU	0	-20-20	M	0.8 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 3		4811	0	Drawer	0	-20-20	M	0.6 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 3		4811	1	Bypass feeding	0	-20-20	M	0.6 mm/step	4	
05	Adjustment mode	Printer	Aligning adjustment	Batch conversion/Thick paper 3		4811	2	ADU	0	-20-20	M	0.8 mm/step	4	
05	Adjustment mode	Image Processing	Background offset adjustment	PPC(black)		7025		ADF	128	0-255	SYS	The larger the adjustment value is, the lighter the background becomes. The smaller the adjustment value is, the darker the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Automatic density adjustment	7033		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Automatic density adjustment	7034		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Manual density adjustment	7041		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Manual density adjustment	7042		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Automatic density adjustment	7043		Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Automatic density adjustment	7044		Gray scale	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Manual density adjustment	7048		Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Manual density adjustment	7049		Gray scale	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(black)	Black	7056		Text/Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(black)		7057		Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(black)		7058		Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PPC(black)		7097		Text/Photo	2	0-4	SYS	0: Faint text is suppressed most. 4: Smudged text is suppressed most.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PPC(black)		7098		Text	2	0-4	SYS	0: Faint text is suppressed most. 4: Smudged text is suppressed most.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PPC(auto color)	Auto color & black	7102		Text/Photo	2	0-4	SYS	0: Faint text is suppressed most. 4: Smudged text is suppressed most.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PPC(auto color)	Auto color & black	7103		Text	2	0-4	SYS	0: Faint text is suppressed most. 4: Smudged text is suppressed most.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Center value	7114		Text/Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Center value	7115		Text	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Light step value	7117		Text/Photo	20	0-255	SYS	The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Light step value	7118		Text	20	0-255	SYS	The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Dark step value	7120		Text/Photo	20	0-255	SYS	The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Dark step value	7121		Text	20	0-255	SYS	The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Automatic density adjustment	7123		Text/Photo	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Automatic density adjustment	7124		Text	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	ADF scan noise reduction	PPC(black)		7150		User custom	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-7617) becomes larger. When the value increases, the effect of reducing streaks (set with 08-7617) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	PPC(black)		7151		Text/Photo	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-7617) becomes larger. When the value increases, the effect of reducing streaks (set with 08-7617) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	PPC(black)		7152		Text	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-7617) becomes larger. When the value increases, the effect of reducing streaks (set with 08-7617) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(black)		7165		All media types	-	-	-	When color deviation is found in gradation reproduction, the gradation reproduction of color K can be corrected with the automatic gamma adjustment. The result of the correction above will be applied to all media types.	7	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text/Photo	7190	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text/Photo	7190	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text/Photo	7190	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text	7191	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text	7191	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Text	7191	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Photo	7192	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Photo	7192	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Photo	7192	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	PPC(black)		7212	0	Beam level 0/4	0	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	PPC(black)		7212	1	Beam level 1/4	63	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	PPC(black)		7212	2	Beam level 2/4	127	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	PPC(black)		7212	3	Beam level 3/4	191	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	PPC(black)		7212	4	Beam level 4/4	255	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Automatic density adjustment	7236		User custom	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Manual density adjustment	7237		User custom	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(black)		7249		User custom	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PPC(black)		7252		User custom	2	0-4	SYS	0: Faint text is suppressed most. 4: Smudged text is suppressed most.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Center value	7258		User custom	128	0-255	SYS	The larger the value, the darker the image of the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Light step value	7261		User custom	20	0-255	SYS	The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Manual adjustment/Dark step value	7264		User custom	20	0-255	SYS	The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	PPC(black)	Automatic density adjustment	7267		User custom	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	User custom	7276	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	User custom	7276	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	User custom	7276	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Automatic density adjustment	7279		User custom	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Black/Manual density adjustment	7280		User custom	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Automatic density adjustment	7283		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Automatic density adjustment	7284		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Manual density adjustment	7286		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Manual density adjustment	7287		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Automatic density adjustment	7295		Gray scale	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(black)	Black/Manual density adjustment	7296		Gray scale	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Image	Setting beam level conversion	Black	7300	0	Beamlevel 0/4	0	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	
05	Adjustment mode	Image Processing	Image	Setting beam level conversion	Black	7300	1	Beamlevel 1/4	63	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	
05	Adjustment mode	Image Processing	Image	Setting beam level conversion	Black	7300	2	Beamlevel 2/4	127	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	
05	Adjustment mode	Image Processing	Image	Setting beam level conversion	Black	7300	3	Beamlevel 3/4	191	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	
05	Adjustment mode	Image Processing	Image	Setting beam level conversion	Black	7300	4	Beamlevel 4/4	255	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT(black/600dpi)		7307	0	PS	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT(black/600dpi)		7307	1	PCL	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT(black/600dpi)		7307	2	XPS	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Smooth/600dpi	7315	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Smooth/600dpi	7315	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Smooth/600dpi	7315	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Detail/600dpi	7316	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Detail/600dpi	7316	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PS/Detail/600dpi	7316	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Smooth/600dpi	7317	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Smooth/600dpi	7317	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Smooth/600dpi	7317	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Detail/600dpi	7318	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Detail/600dpi	7318	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	PCL/Detail/600dpi	7318	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Smooth/600dpi	7319	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Smooth/600dpi	7319	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Smooth/600dpi	7319	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Detail/600dpi	7320	0	Low density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Detail/600dpi	7320	1	Medium density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PRT(black)	XPS/Detail/600dpi	7320	2	High density	128	0-255	SYS	When the value increases, the density in the target area becomes higher.	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(black)	7322	0	PS	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(black)	7322	1	PCL	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(black)	7322	2	XPS	1	0-1	SYS	0: OFF 1: ON	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Fine line enhancement switchover	EFI	PRT(black)	7323	0	PS	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	EFI	PRT(black)	7323	1	PCL	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(black)		7340		PS	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(black)		7341		PCL	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(black)		7342		XPS	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/text	7360	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/text	7360	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/text	7360	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/graphics	7361	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/graphics	7361	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/graphics	7361	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/image	7362	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/image	7362	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PS/image	7362	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/text	7363	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/text	7363	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/text	7363	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/graphics	7364	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/graphics	7364	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/graphics	7364	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/image	7365	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/image	7365	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	PCL/image	7365	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/text	7366	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/text	7366	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/text	7366	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/graphics	7367	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/graphics	7367	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/graphics	7367	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/image	7368	0	Low density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/image	7368	1	Medium density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	Gamma balance adjustment	Monochrome/600dpi/Auto	XPS/image	7368	2	High density	128	0-255	SYS	Larger the value, the density value increases, and smaller the value, the density value decreases.	4	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(black)		7400		User custom	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(black)		7401		Text/Photo	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(black)		7402		Text	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(black)		7403		Photo	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(black)		7404		Gray scale	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Automatic density adjustment	7416		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Automatic density adjustment	7417		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Automatic density adjustment	7418		Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Automatic density adjustment	7419		Gray scale	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Manual density adjustment	7421		Text/Photo	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Manual density adjustment	7422		Text	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Manual density adjustment	7423		Photo	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Manual density adjustment	7424		Gray scale	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(black)	Black/Automatic density adjustment	7425		User custom	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Image	Range correction adjustment(Black / Manual density adjustment)		7426	-	User custom	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(black)		7430		Text/Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(black)		7431		Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(black)		7432		Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(black)		7433		Gray scale	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Manual adjustment/Center value	7444		Text/Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Manual adjustment/Center value	7445		Text	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Manual adjustment/Center value	7446		Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Manual adjustment/Center value	7447		Gray scale	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Automatic density adjustment	7456		Text/Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Automatic density adjustment	7457		Text	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Automatic density adjustment	7458		Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Automatic density adjustment	7459		Gray scale	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(black)		7470		User custom	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Manual adjustment/Center value	7475		User custom	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(black)	Automatic density adjustment	7478		User custom	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	User custom	7480	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	User custom	7480	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	User custom	7480	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Text/Photo	7485	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Text/Photo	7485	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Text/Photo	7485	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Photo	7487	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Photo	7487	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Photo	7487	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Gray scale	7488	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Gray scale	7488	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	SCN(black)	Gray scale	7488	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Image			7489	—	Amount of surrounding void (network scanning)	0	0-255	SYS	When the value increases, the blank area around the scanned image becomes wider. (e.g.: In network scanning with 600 dpi, if the setting value is "1", the blank area increases by 1 dot.)	1	
05	Adjustment mode	Image Processing	Density adjustment	FAX(black)	Manual adjustment/Center value	7533		Text/Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	FAX(black)	Manual adjustment/Center value	7534		Text	128	0-255	SYS	The larger the value, the lighter the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	FAX(black)	Manual adjustment/Center value	7535		Photo	128	0-255	SYS	The larger the value, the darker the image at the center value becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	FAX(black)	Automatic density adjustment	7542		Text/Photo	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	FAX(black)	Automatic density adjustment	7543		Text	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	FAX(black)		7594	0	Beam level 0/4	0	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Setting beam level conversion	FAX(black)		7594	1	Beam level 1/4	63	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	FAX(black)		7594	2	Beam level 2/4	127	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	FAX(black)		7594	3	Beam level 3/4	191	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Setting beam level conversion	FAX(black)		7594	4	Beam level 4/4	255	0-255	SYS	The smaller the value, the narrower the beam width becomes and the smaller the dots are reproduced.	4	Yes
05	Adjustment mode	Image Processing	Blank page judgment threshold adjustment			7618		PPC/SCN	128	0-255	SYS	The larger the value, the more the original tends to be judged as a blank page.	1	Yes
05	Adjustment mode	Image Processing	ACS judgment threshold			7630		PPC/SCN	70	0-255	SYS	The larger the value, the more the original tends to be judged as black even in the auto color mode. The smaller value, the more it tends to be judged as color.	1	Yes
05	Adjustment mode	Image Processing	Printer LUT color transformation selection	PPC(color)		7640		User custom	Refer to contents	0-3	SYS	Sets the color conversion table which focuses on the reproduction of vermilion ink to the User mode. Use this code to improve the reproduction of vermilion ink. This code is enabled only when the value of 08-7614 is "1". 0: Text/Photo, Printed photo, text, map 1: Photo (developing paper) 2: Reproduction of vermilion ink (lighter) 3: Reproduction of vermilion ink (darker) <Default value> CND: 2 Others: 0	1	
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Selected 2colors	7641	0	High density	128	0-255	SYS	The larger the value, the larger the area recognized as black in the original becomes. The smaller the value, the larger the area recognized as colors other than black becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Selected 2colors	7641	1	Medium density	128	0-255	SYS	The larger the value, the larger the area recognized as black in the original becomes. The smaller the value, the larger the area recognized as colors other than black becomes.	4	Yes
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Selected 2colors	7641	2	Low density	128	0-255	SYS	The larger the value, the larger the area recognized as black in the original becomes. The smaller the value, the larger the area recognized as colors other than black becomes.	4	Yes
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Black and red	7642	0	High density	128	0-255	SYS	The larger the value, the larger the area recognized as red in the original becomes. The smaller the value, the larger the area recognized as colors other than red becomes.	4	Yes
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Black and red	7642	1	Medium density	128	0-255	SYS	The larger the value, the larger the area recognized as red in the original becomes. The smaller the value, the larger the area recognized as colors other than red becomes.	4	Yes
05	Adjustment mode	Image Processing	Black area adj. in twin color copy mode	PPC(color)	Black and red	7642	2	Low density	128	0-255	SYS	The larger the value, the larger the area recognized as red in the original becomes. The smaller the value, the larger the area recognized as colors other than red becomes.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Magenta	7644	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Magenta	7644	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Magenta	7644	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Magenta	7644	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Yellow	7645	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Yellow	7645	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Yellow	7645	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Yellow	7645	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Yellow green	7646	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Yellow green	7646	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Yellow green	7646	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Yellow green	7646	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Cyan	7647	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Cyan	7647	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Cyan	7647	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Cyan	7647	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Pink	7648	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Pink	7648	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Pink	7648	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Pink	7648	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Red	7649	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Red	7649	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Red	7649	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Red	7649	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Orange	7650	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Orange	7650	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Orange	7650	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Orange	7650	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Green	7651	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Green	7651	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Green	7651	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Green	7651	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Blue	7652	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Blue	7652	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Blue	7652	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color / twin color	Blue	7652	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying / twin color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Purple	7653	0	Y	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Purple	7653	1	M	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Purple	7653	2	C	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Copy color adjustment	Mono color	Purple	7653	3	K	128	0-255	SYS	Performs the density adjustment for the specified color during mono color copying. The larger the value, the darker the density. The smaller the value, the lighter the density.	4	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7656		Text/Photo	128	0-255	SYS		1	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7657		Text	128	0-255	SYS		1	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7658		Photo	128	0-255	SYS		1	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7659		Photo (developing paper)	128	0-255	SYS		1	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7660		Map	128	0-255	SYS		1	Yes
05	Adjustment mode	Image Processing	Background color transformation fine adjustment	Full color / auto color		7661		User custom	128	0-255	SYS		1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(auto color)	Auto color & black/Auto density adjustment	7667		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(auto color)	Auto color & black/Auto density adjustment	7668		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(auto color)	Auto color & black/Manual density adjustment	7669		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(auto color)	Auto color & black/Manual density adjustment	7670		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Auto color & black/Auto density adjustment	7676		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Auto color & black/Auto density adjustment	7677		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Auto color & black/Manual density adjustment	7678		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(black)	Auto color & black/Manual density adjustment	7679		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	ADF scan noise reduction	PPC(color)	User custom	7693		Enable/Disable setting	1	0-1	SYS	0: Disabled 1: Enabled	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	PPC(color)	Text/Photo	7694		Enable/Disable setting	1	0-1	SYS	0: Disabled 1: Enabled	1	
05	Adjustment mode	Image Processing	Density adjustment	Mono color	Automatic/Manual adjustment/Center value	7727		Text/Photo	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	Mono color	Automatic/Manual adjustment/Center value	7728		Text	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	Mono color	Automatic/Manual adjustment/Center value	7729		Printed image	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Density adjustment	Mono color	Automatic/Manual adjustment/Center value	7730		Photo (developing paper)	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	Mono color	Automatic/Manual adjustment/Center value	7731		Map	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Automatic density adjustment	7744		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Automatic density adjustment	7745		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Automatic density adjustment	7746		Printed image	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Automatic density adjustment	7747		Photo (developing paper)	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Automatic density adjustment	7748		Map	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Manual density adjustment	7749		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Manual density adjustment	7750		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Manual density adjustment	7751		Printed image	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Manual density adjustment	7752		Photo (developing paper)	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Full color/Manual density adjustment	7753		Map	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7754		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7755		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7756		Printed image	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7757		Photo (developing paper)	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7758		Map	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Twin color/Manual density adjustment	7759		Text/Photo	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Twin color/Manual density adjustment	7760		Text	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Twin color/Manual density adjustment	7761		Printed image	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Automatic density adjustment	7762		User custom	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	PPC(color)	Monocolor/Manual density adjustment	7763		User custom	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	PPC(color)	Full color	7764		ADF	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	PPC(color)	Mono color	7765		ADF	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	PPC(color)	Twin color	7766		ADF	128	0-255	SYS	The larger the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7767		Text/Photo	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7768		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7769		Printed image	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7770		Photo (developing paper)	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7771		Map	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7772		Text/Photo	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7773		Text	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7774		Printed image	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7775		Photo (developing paper)	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7776		Map	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Automatic density adjustment	7777		User custom	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	PPC(color)	Full color/Manual density adjustment	7778		User custom	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7795		User custom	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7796		Text/Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7797		Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7798		Printed image	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7799		Photo (developing paper)	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Full color	7800		Map	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Auto color	7806		Text/Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Auto color	7807		Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(color)	Auto color	7808		Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PPC(black)		7809		Gray scale	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Black header density level adjustment	PPC(color)		7811		Text/Photo	0	0-8	SYS	The larger the value, the darker the header becomes. The smaller the value, the lighter the header becomes	1	Yes
05	Adjustment mode	Image Processing	Black header density level adjustment	PPC(color)		7812		Text	0	0-8	SYS	The larger the value, the darker the header becomes. The smaller the value, the lighter the header becomes	1	Yes
05	Adjustment mode	Image Processing	Black header density level adjustment	PPC(color)		7816		User custom	0	0-8	SYS	The larger the value, the darker the header becomes. The smaller the value, the lighter the header becomes	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Text/Photo reproduction level adjustment	PPC(color)		7840		Text/Photo	0	0-5	SYS	0: Default 1: Photo-oriented 2 (The reproduction level of printed image is higher than that of the Photo-oriented 1) 2: Photo-oriented 1 (The reproduction level of printed image is higher than that of the default setting) 3: Equivalent to the default setting 4: Text-oriented 1 (The reproduction level of text is higher than that of the default setting) 5: Text-oriented 2 (The reproduction level of text is higher than that of text-oriented 1)	1	Yes
05	Adjustment mode	Image Processing	Text/Photo reproduction level adjustment	PPC(color)		7841		User custom	0	0-5	SYS	0: Default 1: Photo-oriented 2 (The reproduction level of printed image is higher than that of the Photo-oriented 1) 2: Photo-oriented 1 (The reproduction level of printed image is higher than that of the default setting) 3: Equivalent to the default setting 4: Text-oriented 1 (The reproduction level of text is higher than that of the default setting) 5: Text-oriented 2 (The reproduction level of text is higher than that of text-oriented 1)	1	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	0	PPC(color) "Y"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	1	PPC(color) "M"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	2	PPC(color) "C"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	3	PPC(color) "R"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	4	PPC(color) "G"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes
05	Adjustment mode	Image Processing	Marker color adjustment			7850	5	PPC(color) "B"	3	0-6	SYS	The color of the one-touch adjustment "Marker" can be adjusted.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7869		All media types	-		SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied to all media types.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	0	Plain paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	2	Recycled paper	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	3	Thick paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	4	Thick paper2	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	5	Thick paper3	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	6	Thick paper4	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	7	Special paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied to all media types.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PPC(color)	Color/Black	7871	8	Special paper2	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Maximum text density adjustment	PPC(color)		7889	Y		5	0-10	SYS	The larger the value, the darker the text becomes.	1	Yes
05	Adjustment mode	Image Processing	Maximum text density adjustment	PPC(color)		7890	M		5	0-10	SYS	The larger the value, the darker the text becomes.	1	Yes
05	Adjustment mode	Image Processing	Maximum text density adjustment	PPC(color)		7891	C		5	0-10	SYS	The larger the value, the darker the text becomes.	1	Yes
05	Adjustment mode	Image Processing	Maximum text density adjustment	PPC(color)		7892	K		8	0-10	SYS	The larger the value, the darker the text becomes.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7902		Plain paper1	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7904		Recycled paper	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7905		Thick paper1	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7906		Thick paper2	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7907		Thick paper3	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7908		Thick paper4	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7909		Special paper1	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7910		Special paper2	255	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PPC(color)		7911		OHP film	240	0-255	SYS	The smaller the value, the less toner is adhered to the high-density section of the image.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	0	Plain paper 1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	2	Recycled paper	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	3	Thick paper 1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	4	Thick paper 2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	5	Thick paper 3	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	6	Thick paper 4	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	7	Special paper 1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	8	Special paper 2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	
05	Adjustment mode	Image Processing	Maximum toner density threshold setting	PPC(color)		7913	9	OHP film	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Gray scale	7956	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Gray scale	7956	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(black)	Gray scale	7956	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text/Photo	7957	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text/Photo	7957	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text/Photo	7957	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text	7958	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text	7958	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Text	7958	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Photo	7959	0	Low density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Photo	7959	1	Medium density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Gamma balance adjustment	PPC(auto color & black)	Photo	7959	2	High density	128	0-255	SYS	The larger the value, the darker the image of the area surrounding the target area becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text/Photo	7960	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text/Photo	7960	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text/Photo	7960	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text	7961	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text	7961	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Text	7961	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Printed image	7962	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Printed image	7962	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Printed image	7962	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Photo (developing paper)	7963	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Photo (developing paper)	7963	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Photo (developing paper)	7963	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Map	7964	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Map	7964	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	Map	7964	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text/Photo	7965	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text/Photo	7965	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text/Photo	7965	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text	7966	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text	7966	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Text	7966	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Printed image	7967	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Printed image	7967	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Printed image	7967	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Photo (developing paper)	7968	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Photo (developing paper)	7968	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Photo (developing paper)	7968	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Map	7969	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Map	7969	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	Map	7969	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text/Photo	7970	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text/Photo	7970	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text/Photo	7970	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text	7971	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text	7971	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Text	7971	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Printed image	7972	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Printed image	7972	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Printed image	7972	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Photo (developing paper)	7973	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Photo (developing paper)	7973	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Photo (developing paper)	7973	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Map	7974	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Map	7974	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	Map	7974	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text/Photo	7975	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text/Photo	7975	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text/Photo	7975	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text	7976	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text	7976	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Text	7976	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Printed image	7977	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Printed image	7977	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Printed image	7977	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Photo (developing paper)	7978	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Photo (developing paper)	7978	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Photo (developing paper)	7978	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Map	7979	0	Low density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Map	7979	1	Medium density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	Map	7979	2	High density	128	0-255	SYS	The target color, mode and density area become darker as the value increases.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	User custom mode	7980	0	L	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	User custom mode	7980	1	M	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "Y"	User custom mode	7980	2	H	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	User custom mode	7981	0	L	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	User custom mode	7981	1	M	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "M"	User custom mode	7981	2	H	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	User custom mode	7982	0	L	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	User custom mode	7982	1	M	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "C"	User custom mode	7982	2	H	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	User custom mode	7983	0	L	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	User custom mode	7983	1	M	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Color balance adjustment	PPC(color) "K"	User custom mode	7983	2	H	128	0-255	SYS	The target color, mode and density area become darker as the value increases. L: Low density area M: Medium density area H: High density area	4	
05	Adjustment mode	Image Processing	Image			8002		Color reproduction level switchover for twin color	0	0~1	SYS	Selecting "0" gives the priority to the gradation level, but the density level of color texts becomes lighter. Selecting "1" gives the priority to the density level of color texts, but the gradation level becomes worse. 0: Gradation priority 1: Text reproduction priority	1	
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	0	Plain paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	2	Recycled paper	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	3	Thick paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	4	Thick paper2	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	5	Thick paper3	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	6	Thick paper4	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	7	Special paper1	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color)	600dpi	8004	8	Special paper2	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Automatic gamma adjustment	PRT(color/600 dpi)		8008		All media types	-	-	SYS	When color deviation is found in gradation reproduction, the gradation reproduction of 4 colors can be corrected with the automatic gamma adjustment. The result of the correction above will be applied for each media type.	7	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Color/600dpi	8010	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Color/600dpi	8010	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Color/600dpi	8010	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Twin color/600dpi	8011	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Twin color/600dpi	8011	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Twin color/600dpi	8011	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Monocolor/600dpi	8012	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Monocolor/600dpi	8012	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Smooth/Monocolor/600dpi	8012	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Color/600dpi	8013	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Color/600dpi	8013	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Color/600dpi	8013	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Twin color/600dpi	8014	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Twin color/600dpi	8014	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Twin color/600dpi	8014	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Monocolor/600dpi	8015	0	PS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Monocolor/600dpi	8015	1	PCL	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	PRT(color)	Detail/Monocolor/600dpi	8015	2	XPS	128	0-255	SYS	The larger the value, the darker the background becomes. The smaller the value, the lighter the background	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Smooth/600dpi	8026	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Smooth/600dpi	8026	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Smooth/600dpi	8026	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Smooth/600dpi	8027	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Smooth/600dpi	8027	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Smooth/600dpi	8027	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Smooth/600dpi	8028	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Smooth/600dpi	8028	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Smooth/600dpi	8028	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Smooth/600dpi	8029	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Smooth/600dpi	8029	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Smooth/600dpi	8029	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Detail/600dpi	8030	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Detail/600dpi	8030	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PS/Detail/600dpi	8030	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Detail/600dpi	8031	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Detail/600dpi	8031	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PS/Detail/600dpi	8031	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Detail/600dpi	8032	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Detail/600dpi	8032	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PS/Detail/600dpi	8032	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Detail/600dpi	8033	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Detail/600dpi	8033	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PS/Detail/600dpi	8033	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Smooth/600dpi	8034	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Smooth/600dpi	8034	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Smooth/600dpi	8034	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Smooth/600dpi	8035	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Smooth/600dpi	8035	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Smooth/600dpi	8035	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Smooth/600dpi	8036	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Smooth/600dpi	8036	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Smooth/600dpi	8036	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Smooth/600dpi	8037	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Smooth/600dpi	8037	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Smooth/600dpi	8037	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Detail/600dpi	8038	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Detail/600dpi	8038	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	PCL/Detail/600dpi	8038	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Detail/600dpi	8039	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Detail/600dpi	8039	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	PCL/Detail/600dpi	8039	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Detail/600dpi	8040	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Detail/600dpi	8040	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	PCL/Detail/600dpi	8040	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Detail/600dpi	8041	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Detail/600dpi	8041	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	PCL/Detail/600dpi	8041	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Smooth/600dpi	8042	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Smooth/600dpi	8042	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Smooth/600dpi	8042	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Smooth/600dpi	8043	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Smooth/600dpi	8043	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Smooth/600dpi	8043	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Smooth/600dpi	8044	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Smooth/600dpi	8044	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Smooth/600dpi	8044	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Smooth/600dpi	8045	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Smooth/600dpi	8045	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Smooth/600dpi	8045	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Detail/600dpi	8046	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Detail/600dpi	8046	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	XPS/Detail/600dpi	8046	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Detail/600dpi	8047	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Detail/600dpi	8047	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	XPS/Detail/600dpi	8047	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Detail/600dpi	8048	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Detail/600dpi	8048	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	XPS/Detail/600dpi	8048	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Detail/600dpi	8049	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Detail/600dpi	8049	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	XPS/Detail/600dpi	8049	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Smooth/600dpi	8050	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Smooth/600dpi	8050	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Smooth/600dpi	8050	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Smooth/600dpi	8051	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Smooth/600dpi	8051	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Smooth/600dpi	8051	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Smooth/600dpi	8052	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Smooth/600dpi	8052	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Smooth/600dpi	8052	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Smooth/600dpi	8053	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Smooth/600dpi	8053	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Smooth/600dpi	8053	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Detail/600dpi	8054	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Detail/600dpi	8054	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PS/Detail/600dpi	8054	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Detail/600dpi	8055	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Detail/600dpi	8055	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PS/Detail/600dpi	8055	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Detail/600dpi	8056	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Detail/600dpi	8056	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PS/Detail/600dpi	8056	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Detail/600dpi	8057	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Detail/600dpi	8057	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PS/Detail/600dpi	8057	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Smooth/600dpi	8058	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Smooth/600dpi	8058	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Smooth/600dpi	8058	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Smooth/600dpi	8059	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Smooth/600dpi	8059	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Smooth/600dpi	8059	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Smooth/600dpi	8060	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Smooth/600dpi	8060	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Smooth/600dpi	8060	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Smooth/600dpi	8061	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Smooth/600dpi	8061	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Smooth/600dpi	8061	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Detail/600dpi	8062	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Detail/600dpi	8062	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "Y"	PCL/Detail/600dpi	8062	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Detail/600dpi	8063	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Detail/600dpi	8063	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "M"	PCL/Detail/600dpi	8063	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Detail/600dpi	8064	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Detail/600dpi	8064	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "C"	PCL/Detail/600dpi	8064	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Detail/600dpi	8065	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Detail/600dpi	8065	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	PRT(color) "K"	PCL/Detail/600dpi	8065	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Image			8066	-	Color balance adjustment mode switchover (Network print)	0	0-1	SYS	Switches the image processing method for color balance adjustment for network printing by changing the default value "0" to "1" so that the density of solid images will become lighter along with the adjustment. 0: Adjusts color balance with the solid image density fixed 1: Adjusts color balance with the solid image density varied	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	0	Plain paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	2	Recycled paper	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	3	Thick paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	4	Thick paper2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	5	Thick paper3	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	6	Thick paper4	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	7	Special paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	8	Special paper2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Detail	8070	9	OHP film	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	0	Plain paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	2	Recycled paper	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	3	Thick paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	4	Thick paper2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	5	Thick paper3	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	6	Thick paper4	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	7	Special paper1	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	8	Special paper2	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Maximum toner density threshold adj.	PRT(color/600 dpi)	Smooth	8071	9	OHP film	128	0-255	SYS	The larger the value, the larger the maximum amount of toner to be adhered becomes. The smaller the value, the smaller the maximum amount of toner to be adhered becomes.	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(color)	8102	0	PS	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(color)	8102	1	PCL	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	e-BRIDGE	PRT(color)	8102	2	XPS	1	0-1	SYS	0: OFF 1: ON	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Fine line enhancement switchover	EFI	PRT(color)	8103	0	PS	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Fine line enhancement switchover	EFI	PRT(color)	8103	1	PCL	1	0-1	SYS	0: OFF 1: ON	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/General	8110	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/General	8110	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/General	8110	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Photograph	8111	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Photograph	8111	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Photograph	8111	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Presentation	8112	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Presentation	8112	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Presentation	8112	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Line art	8113	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Line art	8113	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(color)	e-BRIDGE/PS/Line art	8113	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	e-BRIDGE/PS	8118	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes. If the value of 05-7322 is "0", the adjustment is applied to text, and if the value is "1", the adjustment is applied to text and others. 0: No adjustment	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	e-BRIDGE/PS	8118	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes. If the value of 05-7322 is "0", the adjustment is applied to graphics, and if the value is "1", the adjustment is applied to thin text. 0: No adjustment	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	e-BRIDGE/PS	8118	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	EFI/PS	8119	0	Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	EFI/PS	8119	1	Graphics	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	PRT(black)	EFI/PS	8119	2	Photo	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes.	4	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(color)		8130		PS	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(color)		8131		PCL	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Smudged/faint text adjustment	PRT(color)		8132		XPS	0	0-8	SYS	The larger the value, the darker the small text and fine lines become and the more faint text is suppressed.	1	Yes
05	Adjustment mode	Image Processing	Maximum toner density adjustment	PRT(color/600 dpi)		8145		OHP film	200	0-255	SYS	The larger the value, the darker the image becomes. The smaller the value, the lighter the image becomes. * Image offset may occur if the value is too large.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Smooth/600dpi	8150	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Smooth/600dpi	8150	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Smooth/600dpi	8150	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Smooth/600dpi	8151	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Smooth/600dpi	8151	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Smooth/600dpi	8151	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Smooth/600dpi	8152	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Smooth/600dpi	8152	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Smooth/600dpi	8152	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Smooth/600dpi	8153	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Smooth/600dpi	8153	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Smooth/600dpi	8153	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Detail/600dpi	8154	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Detail/600dpi	8154	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "Y"	XPS/Detail/600dpi	8154	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Detail/600dpi	8155	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Detail/600dpi	8155	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "M"	XPS/Detail/600dpi	8155	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Detail/600dpi	8156	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Detail/600dpi	8156	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "C"	XPS/Detail/600dpi	8156	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Detail/600dpi	8157	0	Low density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Detail/600dpi	8157	1	Medium density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Color balance adjustment	2 color printing/PRT(color) "K"	XPS/Detail/600dpi	8157	2	High density	128	0-255	SYS	The larger the value, the darker only the target color becomes.	4	Yes
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT color/two-color (600 dpi)		8160	0	PS	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT color/two-color (600 dpi)		8160	1	PCL	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes
05	Adjustment mode	Image Processing	Upper limit value in toner saving mode	PRT color/two-color (600 dpi)		8160	2	XPS	176	0-255	SYS	The smaller the value, the lighter the printed image becomes.	4	Yes
05	Adjustment mode	Image Processing	Screen switchover	e-BRIDGE		8176		PRT(color)	0	0-1	SYS	0: High screen ruling value (smoother image) 1: Low screen ruling value (rougher image)	1	Yes
05	Adjustment mode	Image Processing	Screen switchover	EFI		8179		PRT(color)	0	0-1	SYS	0: High screen ruling value (smoother image) 1: Low screen ruling value (rougher image)	1	Yes
05	Adjustment mode	Image Processing	Screen switchover	e-BRIDGE		8187	-	Graphics/Black	3	3,11	SYS	3: High screen ruling value (smoother image) 11: Low screen ruling value (rougher image)	1	
05	Adjustment mode	Image Processing	Screen switchover	e-BRIDGE		8188	-	Image/Black	3	3,11	SYS	3: High screen ruling value (smoother image) 11: Low screen ruling value (rougher image)	1	
05	Adjustment mode	Image Processing	Screen switchover	EFI		8190		Graphics/Black	3	3,11	SYS	3: High screen ruling value (smoother image) 11: Low screen ruling value (rougher image)	1	
05	Adjustment mode	Image Processing	Screen switchover	EFI		8191		Image/Black	3	3,11	SYS	3: High screen ruling value (smoother image) 11: Low screen ruling value (rougher image)	1	
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Text	8210	0	General	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Text	8210	1	Photo	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Text	8210	2	Presentation	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Text	8210	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Graphic	8211	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Graphic	8211	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Graphic	8211	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Graphic	8211	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Image	8212	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Image	8212	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Image	8212	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PCL/Image	8212	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	Twin color print/General	8213		Text	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	1	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	Twin color print/General	8214		Graphics	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	1	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	Twin color print/General	8215		Image	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	1	Yes
05	Adjustment mode	Image Processing	Black selection	PRT(color)	Twin color print	8218		Photo	0	0-1	SYS	Sets whether the image on an original is printed in the color or the black mode. 0: OFF (printed in color) 1: ON (printed in black)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Stroke adjustment	PS/PDF automatic stroke adjustment	600dpi	8239	0	Default setting	0	0-3	SYS	This code is used to change the width of fine lines in PS and PDF printing. Automatic stroke adjustment is the function that prevents the width from changing according to the position. This code sets whether automatic stroke adjustment is enabled or disabled if it is not included in the print data. If this setting is disabled, there will be an increase in cases in which the width of fine lines becomes thicker by 1 dot when they are printed. 0: Disabled 1: Enabled 2: Forcibly disabled (Ignores command in printing data) 3: Forcibly enabled (Ignores command in printing data)	4	
05	Adjustment mode	Image Processing	Stroke adjustment	PS/PDF automatic stroke adjustment	600dpi	8239	1	Minimum stroke width when disabled	2	1-2	SYS	This code is used to change the width of fine lines in PS and PDF printing. Automatic stroke adjustment is the function that prevents the width from changing according to the position. This code sets the minimum width of fine lines when the automatic stroke adjustment is disabled. For example, if automatic stroke adjustment is disabled and the width of fine lines is set to "0" in the PS command, the width of the lines becomes 1 dot if the value of this code is set to "1"; equally, if it is set to "2", the width of the lines becomes 2 dots. 1: 1 dot 2: 2 dots	4	
05	Adjustment mode	Image Processing	Line width minimum value adjustment	PRT(color)		8240		600dpi	2	1-9	SYS	The larger the value, the darker the fine lines become.	1	Yes
05	Adjustment mode	Image Processing	Auto Trapping setting	PRT (color)	PS/Text, PS/Graphic	8244	0	Trapping width (dot)	3	1-3	SYS	Sets the value of width for Auto Trapping. When the value increases, the bigger gap is suppressed, but the overlap part becomes more visible. 1: 1 dot 2: 2 dot 3: 3 dot	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Auto Trapping setting	PRT (color)	PS/Text, PS/Graphic	8244	1	Trapping density (%)	0	0-3	SYS	Sets the value of density for Auto Trapping. When the value increases, the bigger gap is suppressed, but the overlap part becomes more visible. 0: 100% 1: 75% 2: 50% 3: 25%	4	
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Text	8249	0	General	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Text	8249	1	Photo	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Text	8249	2	Presentation	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Text	8249	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Text	8249	4	Advanced	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Graphic	8250	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Graphic	8250	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Graphic	8250	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Graphic	8250	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Graphic	8250	4	Advanced	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Image	8251	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Image	8251	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Image	8251	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Image	8251	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	XPS/Image	8251	4	Advanced	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Text	8252	0	General	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Text	8252	1	Photo	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Text	8252	2	Presentation	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Text	8252	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Text	8252	4	Advanced	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Graphic	8253	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Graphic	8253	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Graphic	8253	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Graphic	8253	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Graphic	8253	4	Advanced	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Image	8254	0	General	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Image	8254	1	Photo	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Image	8254	2	Presentation	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Image	8254	3	Line art	8	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Pure Black/Gray threshold adjustment	PRT(color)	PS/Image	8254	4	Advanced	1	1-255	SYS	The larger the value, the wider the range of colors to be replaced with black becomes. The smaller the value, the narrower the range becomes.	4	Yes
05	Adjustment mode	Image Processing	Background adjustment	SCN(color)		8310		Text	50	0-50	SYS	The smaller the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	SCN(color)		8311		Printed image	50	0-50	SYS	The smaller the value, the lighter the background becomes.	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	SCN(color)		8312		Photo (developing paper)	50	0-50	SYS	The smaller the value, the lighter the background becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Fine adjustment of black density	SCN(color)		8315		Text	0	0-4	SYS	The larger the value, the darker the black side of the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Fine adjustment of black density	SCN(color)		8316		Printed image	0	0-4	SYS	The larger the value, the darker the black side of the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Fine adjustment of black density	SCN(color)		8317		Photo (developing paper)	0	0-4	SYS	The larger the value, the darker the black side of the image becomes.	1	Yes
05	Adjustment mode	Image Processing	RGB conversion method selection	SCN(color)		8320		Text	0	0-3	SYS	Sets the color space format of the output image. 0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB	1	Yes
05	Adjustment mode	Image Processing	RGB conversion method selection	SCN(color)		8321		Printed image	0	0-3	SYS	Sets the color space format of the output image. 0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB	1	Yes
05	Adjustment mode	Image Processing	RGB conversion method selection	SCN(color)		8322		Photo (developing paper)	0	0-3	SYS	Sets the color space format of the output image. 0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB	1	Yes
05	Adjustment mode	Image Processing	Saturation adjustment	SCN(color)		8325		Text	128	0-255	SYS	The larger the value, the brighter the image becomes. The smaller the value, the duller the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Saturation adjustment	SCN(color)		8326		Printed image	128	0-255	SYS	The larger the value, the brighter the image becomes. The smaller the value, the duller the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Saturation adjustment	SCN(color)		8327		Photo	128	0-255	SYS	The larger the value, the brighter the image becomes. The smaller the value, the duller the image becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Automatic density adjustment	8330		Text	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Automatic density adjustment	8331		Printed image	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Automatic density adjustment	8332		Photo (developing paper)	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Automatic density adjustment	8334		User custom	1	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(color)	Full color	8335		Text	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(color)	Full color	8336		Printed image	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(color)	Full color	8337		Photo (developing paper)	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Center value	8340		Text	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Center value	8341		Printed image	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Center value	8342		Photo (developing paper)	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Light step value	8344		Text	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Light step value	8345		Printed image	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the lighter the image of the "light" step becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Light step value	8346		Photo (developing paper)	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Dark step value	8348		Text	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Dark step value	8349		Printed image	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Dark step value	8350		Photo (developing paper)	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Manual density adjustment	8361		Text	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Manual density adjustment	8362		Printed image	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Manual density adjustment	8363		Photo (developing paper)	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Range correction adjustment	SCN(color)	Full color/Manual density adjustment	8365		User custom	0	0-1	SYS	0: Background peak - Fixed 1: Background peak - Varied	1	Yes
05	Adjustment mode	Image Processing	Background adjustment	SCN(color)		8370		User custom	50	0-50	SYS	When the value increases, the background becomes darker.	1	Yes
05	Adjustment mode	Image Processing	Fine adjustment of black density	SCN(color)		8371		User custom	0	0-4	SYS	The larger the value, the darker the black side of the image becomes.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	RGB conversion method selection	SCN(color)		8372		User custom	0	0-3	SYS	Sets the color space format of the output image. 0: sRGB 1: AppleRGB 2: ROMMRGB 3: AdobeRGB	1	Yes
05	Adjustment mode	Image Processing	Saturation adjustment	SCN(color)		8373		User custom	128	0-255	SYS	The larger the value, the brighter the image becomes. The smaller the value, the duller the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Sharpness adjustment	SCN(color)	Full color	8375		User custom	128	0-255	SYS	The larger the value, the sharper the image becomes. The smaller the value, the softer the image becomes and the less moire appears.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Center value	8380		User custom	128	0-255	SYS	The larger the value, the darker the image becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Light step value	8381		User custom	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the lighter the image of the "light" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Density adjustment	SCN(color)	Manual adjustment/Dark step value	8382		User custom	20	0-255	SYS	Sets the changing amount per step of the density adjustment buttons on the control panel. The larger the value, the darker the image of the "dark" step becomes.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Automatic density adjustment	8385		Text	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Automatic density adjustment	8386		Printed image	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Automatic density adjustment	8387		Photo (developing paper)	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Automatic density adjustment	8389		User custom	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Manual density adjustment	8390		Text	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Manual density adjustment	8391		Printed image	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Manual density adjustment	8392		Photo (developing paper)	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(color)	Manual density adjustment	8394		User custom	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Automatic density adjustment	8400		Text/Photo	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Automatic density adjustment	8402		Photo	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Automatic density adjustment	8403		Gray scale	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Automatic density adjustment	8404		User custom	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Manual density adjustment	8405		Text/Photo	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Manual density adjustment	8407		Photo	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Manual density adjustment	8408		Gray scale	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	Background offset adjustment	SCN(black)	Manual density adjustment	8409		User custom	128	0-255	SYS	The larger the value, the less easily the background (low density area) is printed. The smaller the value, the more easily the background (low density area) is printed.	1	Yes
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(color)		8412		User custom	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(color)		8414		Text	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(color)		8415		Printed image	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
05	Adjustment mode	Image Processing	ADF scan noise reduction	SCN(color)		8416		Photo (developing paper)	100	0-200	SYS	When the value decreases, the effect of reducing streaks (set with 08-8300) becomes larger. When the value increases, the effect of reducing streaks (set with 08-8300) becomes smaller. When the value is too small, text might be blurry. When "0" is set, this function is disabled.	1	
05	Adjustment mode	System	Maintenance			9043	-	Equipment number (serial number) display	-	-	SYS	If this code is performed, 08-9601 is performed. 7 digits out of 9 digits can be entered except for upper 2 digits (fixed digits).	1	
05	Adjustment mode	System	Image			9104	-	Compression quality of SLIM PDF background processing	5	0-10	SYS	0-10 0: High compression, low image quality 10: Low compression, high image quality	1	
05	Adjustment mode	System	Image			9107	-	Resolution of SLIM PDF background processing	1	0-3	SYS	0: 75dpi 1: 100dpi 2: 150dpi 3: 200dpi	1	
05	Adjustment mode	System	Maintenance			9960		Display of equipment information (SRAM)	Refer to contents	0-2	SYS	Displays the equipment information in SRAM. 0: Not set 1: Destinations other than NAD 2: NAD <Default value> NAD: 2 Others: 1	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser			2002		Fuser unit error status counter	0	0-51	M	0: No error, 1: C411, 2: C412, 3: C443, 4: Not used, 5: C445/C465, 6: C446/C466, 7: C447, 8: C468, 9: C449, 10 to 17: Not used, 18: C468, 19: C449, 20: C468, 21: C449, 22: C449, 23: C449, 24: C447, 25: C449, 26: C468, 27: C449, 28: C468, 29: C449, 30: Not used, 31: C4D0, 32: C448, 33: C467, 34: C467, 35 to 37: Not used, 38: C450, 39: C450, 40: Not used, 41: C451, 42: C451, 43 to 47: Not used, 48: C450, 49: C450, 50: C452, 51: C452	1	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Plain paper)	black	2010	0	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Plain paper)	color	2010	1	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Plain paper)	black	2010	2	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 7 e-STUDIO4540C: JPD: 8 Others: 9	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Plain paper)	color	2010	3	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 7 e-STUDIO4540C: JPD: 8 Others: 9	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature (Center / Special paper)		2017	0	Special paper 1 / Normal	4	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Center / Special paper)		2017	1	Special paper 2 / Normal	4	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Center / Special paper)		2017	2	Special paper 1 / Extra long size paper	9	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature (Center / Special paper)		2017	3	Special paper 2 / Extra long size paper	9	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Side / Special paper)		2018	0	Special paper 1 / Normal	4	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Side / Special paper)		2018	1	Special paper 2 / Normal	4	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature (Side / Special paper)		2018	2	Special paper 1 / Extra long size paper	9	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Side / Special paper)		2018	3	Special paper 2 / Extra long size paper	9	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Pressure roller / Special paper)		2019	0	Special paper 1 / Normal	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature (Pressure roller / Special paper)		2019	1	Special paper 2 / Normal	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Pressure roller / Special paper)		2019	2	Special paper 1 / Extra long size paper	8	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature (Pressure roller / Special paper)		2019	3	Special paper 2 / Extra long size paper	8	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Special paper)		2020	0	Special paper 1 / Normal	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Special paper)		2020	1	Special paper 2 / Normal	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Special paper)		2020	2	Special paper 1 / Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Special paper)		2020	3	Special paper 2 / Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 3)		2028	0	Normal length paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 3)		2028	1	Extra long size paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 3)		2031	0	Normal length paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 3)		2031	1	Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting Mode	Process	Fuser	Fusing temperature in the low power mode		2042		Center	3	0-25	M	0: OFF 1: 40°C 2: 45°C 3: 50°C 4: 55°C 5: 60°C 6: 65°C 7: 70°C 8: 75°C 9: 80°C 10: 85°C 11: 90°C 12: 95°C 13: 100°C 14: 105°C 15: 110°C 16: 115°C 17: 120°C 18: 125°C 19: 130°C 20: 135°C 21: 140°C 22: 145°C 23: 150°C 24: 155°C 25: 160°C	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 1)	black	2049	0	Normal length paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 1)	black	2049	1	Extra long size paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 2)		2050	0	Normal length paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Thick paper 2)		2050	1	Extra long size paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / OHP film)		2051		Fusing temperature during printing (Center / OHP film)	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	1	
08	Setting mode	Process	Fuser	Pre-running time for first printing (OHP film)		2052		Pre-running time for first printing (OHP film)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Plain paper / At low temperatures)	black	2053	0	Pre-running time for first printing (Plain paper / At low temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Plain paper / At low temperatures)	color	2053	1	Pre-running time for first printing (Plain paper / At low temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 1)		2054	0	Normal length paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 1)		2054	1	Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 2)		2055	0	Normal length paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 2)		2055	1	Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting Mode	Process	Fuser			2060		Threshold value for low temperature 1	7	0-11	M	0: 0 degrees C 1: 5 degrees C 2: 9 degrees C 3: 10 degrees C 4: 12 degrees C 5: 14 degrees C 6: 15 degrees C 7: 16 degrees C 8: 17 degrees C 9: 18 degrees C 10: 19 degrees C 11: 20 degrees C	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Abnormality process starting temperature setting Plain paper/ Normal temperature (Center & side thermistors)	black	2080	0	Abnormality process starting temperature setting Plain paper/ Normal temperature (Center & side thermistors)	Refer to contents	0-12	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: Disable <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	
08	Setting mode	Process	Fuser	Abnormality process starting temperature setting Plain paper/ Normal temperature (Center & side thermistors)	color	2080	1	Abnormality process starting temperature setting Plain paper/ Normal temperature (Center & side thermistors)	Refer to contents	0-12	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: Disable <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	
08	Setting mode	Process	Fuser			2084		Pre-running control setting when recovering to warming-up	Refer to contents	0-8	M	0: Invalid 1: 5sec. 2: 7sec. 3: 10sec. 4: 15sec. 5: 20sec. 6: 25sec. 7: 30sec. 8: warming-up control <Default value> e-STUDIO2040C/2540C/3040C/3540C: 0 e-STUDIO4540C: 5	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At low temperatures)	black	2085	0	Plain paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At low temperatures)	color	2085	1	Plain paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At low temperatures)	black	2085	2	Recycled paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At low temperatures)	color	2085	3	Recycled paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Pre-running time	At normal temperatures	2111	0	At warm-up	0	0-6	M	0: Invalid 1: 5 sec. 2: 10 sec. 3: 15 sec. 4: 20 sec. 5: 25 sec. 6: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time	At normal temperatures	2111	1	At recovery from sleep mode	0	0-6	M	0: Invalid 1: 5 sec. 2: 10 sec. 3: 15 sec. 4: 20 sec. 5: 25 sec. 6: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Process	Fuser	Threshold value for low temperature 2		2128	0	Threshold value for low temperature/normal temperature 1	7	0-19	M	0: 0 degrees C 1: 5 degrees C 2: 9 degrees C 3: 10 degrees C 4: 12 degrees C 5: 14 degrees C 6: 15 degrees C 7: 16 degrees C 8: 17 degrees C 9: 18 degrees C 10: 19 degrees C 11: 20 degrees C 12: 21 degrees C 13: 22 degrees C 14: 23 degrees C 15: 24 degrees C 16: 25 degrees C 17: 26 degrees C 18: 27 degrees C 19: 28 degrees C	4	Yes
08	Setting Mode	Process	Fuser	Threshold value for low temperature 2		2128	1	Threshold value for normal temperature 1/normal temperature 2	14	0-19	M	0: 0 degrees C 1: 5 degrees C 2: 9 degrees C 3: 10 degrees C 4: 12 degrees C 5: 14 degrees C 6: 15 degrees C 7: 16 degrees C 8: 17 degrees C 9: 18 degrees C 10: 19 degrees C 11: 20 degrees C 12: 21 degrees C 13: 22 degrees C 14: 23 degrees C 15: 24 degrees C 16: 25 degrees C 17: 26 degrees C 18: 27 degrees C 19: 28 degrees C	4	Yes
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Plain paper)	black	2140	0	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Plain paper)	color	2140	1	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Plain paper)	black	2140	2	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 7 e-STUDIO4540C: JPD: 8 Others: 9	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Plain paper)	color	2140	3	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 7 e-STUDIO4540C: JPD: 8 Others: 9	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 1)		2141	0	Normal length paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 1)		2141	1	Extra long size paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 2)		2142	0	Normal length paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 2)		2142	1	Extra long size paper	6	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser			2143		Fusing temperature during printing (Side / Overhead transparencies)	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Plain paper)	black	2151	0	At normal temperatures	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Plain paper)	color	2151	1	At normal temperatures	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Plain paper)	black	2151	2	At low temperatures	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Plain paper)	color	2151	3	At low temperatures	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 1)		2153	0	Normal length paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 1)		2153	1	Extra long size paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 2)		2155	0	Normal length paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 2)		2155	1	Extra long size paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 3)		2159	0	Normal length paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Thick paper 3)		2159	1	Extra long size paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Overhead transparencies)		2161		Fusing temperature during printing (Pressure roller / Overhead transparencies)	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	1	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 3)		2192	0	Normal length paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Thick paper 3)		2192	1	Extra long size paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting Mode	Process	Fuser	Fusing temperature in the low power mode		2250		Side	3	0-25	M	0: OFF 1: 40°C 2: 45°C 3: 50°C 4: 55°C 5: 60°C 6: 65°C 7: 70°C 8: 75°C 9: 80°C 10: 85°C 11: 90°C 12: 95°C 13: 100°C 14: 105°C 15: 110°C 16: 115°C 17: 120°C 18: 125°C 19: 130°C 20: 135°C 21: 140°C 22: 145°C 23: 150°C 24: 155°C 25: 160°C	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Process	Fuser	Fusing temperature in the low power mode		2255		Pressure roller	Refer to contents	0-25	M	0: OFF 1: 40°C 2: 45°C 3: 50°C 4: 55°C 5: 60°C 6: 65°C 7: 70°C 8: 75°C 9: 80°C 10: 85°C 11: 90°C 12: 95°C 13: 100°C 14: 105°C 15: 110°C 16: 115°C 17: 120°C 18: 125°C 19: 130°C 20: 135°C 21: 140°C 22: 145°C 23: 150°C 24: 155°C 25: 160°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 17 e-STUDIO4540C: 19	1	Yes
08	Setting mode	Process	Transfer			2307		Setting of 2nd transfer bias table (for each destination/paper thickness)	Refer to contents	0-5	M	0: 80 g/m2 (21.3 lb.)/EUR 1: 75 g/m2 (20 lb.)/UC 2: 64 g/m2 (17.1 lb.)/JPN 3: - 4: - 5: - <Default value> MJD: 0 NAD: 1 Others: 2	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Process	Main charger			2365		Main charger wire cleaning - cycle setting	5	0-9	M	0: Invalid 1: 3000 pages 2: 5000 pages 3: 7500 pages 4: 10000 pages 5: 15000 pages 6: 20000 pages 7: 25000 pages 8: 30000 pages 9: 35000 pages	1	Yes
08	Setting mode	Process	Cleaner			2370		Exhaust fan high-speed rotation period in ready status	6	0-10	M	0: No control 1: 10 sec. 2: 20 sec. 3: 30 sec. 4: 40 sec. 5: 50 sec. 6: 1 min. 7: 2 min. 8: 3 min. 9: 7 min. 10: 15 min.	1	Yes
08	Setting mode	Process	Cleaner			2380		Prevention of drum rotation without fusing in standby mode	1	0-1	M	0: OFF 1: ON	1	
08	Setting mode	Process	Cleaner	Control of photoconductive drum idling in standby mode		2381		Rotation starting time	0	0-6	M	0: 10 sec. 1: 20 sec. 2: 30 sec. 3: 1 min. 4: 2 min. and 50 sec. 5: 6 min. and 50 sec. 6: 9 min. and 50 sec.	1	Yes
08	Setting mode	Process	Cleaner	Control of photoconductive drum idling in standby mode		2382		Time interval	2	0-7	M	0: 10 sec. 1: 20 sec. 2: 30 sec. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Cleaner	Control of photoconductive drum idling in standby mode		2383		Maximum number	5	0-6	M	0: Once 1: Twice 2: 3 times 3: 4 times 4: 5 times 5: 7 times 6: 10 times	1	Yes
08	Setting mode	Process	Cleaner	Control of photoconductive drum idling in standby mode		2384		Humidity setting	0	0-5	M	0: All humidity area 1: 60%RH or less 2: 50%RH or less 3: 40%RH or less 4: 30%RH or less 5: 20%RH or less	1	Yes
08	Setting Mode	Process	Development	Setting of the number of sheets to shift to sleep mode for the drum drive	Setting of the number of sheets to shift to sleep mode for the drum drive	2385		Setting of the number of sheets to shift to sleep mode for the drum drive	7	1-255	M	Setting value x 10 (sheets)	1	
08	Setting Mode	Process	Image control	Image quality	Image quality closed-loop control	2486		Contrast voltage	1	0-1	M	Sets whether or not correcting the contrast voltage in image quality control. 0: Invalid 1: Valid	1	Yes
08	Setting mode	Process	Image control	Image quality closed-loop control/Laser power	Image quality closed-loop control/Laser power	2487		Image quality closed-loop control/Laser power	1	0-1	M	Sets whether or not correcting the laser power in closed-loop control. 0: Invalid 1: Valid	1	
08	Setting mode	Process	Image control			2496		Image quality closed-loop control automatic start-up/ Period of time unattended	2	0-2	M	Sets whether or not performing closed-loop control automatically at the operation start when the equipment has not been used for a specified period of time in the energy saving mode. 0: Invalid 1: Valid (mode1: for Quick Image Quality Control) 2: Valid (mode2: for Standard Image Quality Control)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control			2498		Image quality closed-loop control automatic start-up/Accumulated print volume	2	0-2	M	Sets whether or not performing closed-loop control automatically when the specified number of sheets has been printed out from the previous control. 0: Invalid 1: Valid (mode1: for Quick Image Quality Control) 2: Valid (mode2: for Standard Image Quality Control)	1	
08	Setting mode	Process	Image control			2500		Image quality closed-loop control automatic start-up/When recovered from "Toner empty"	2	0-2	M	Sets whether or not performing closed-loop control automatically when recovered from "Toner empty". 0: Invalid 1: Valid (mode1: for Quick Image Quality Control) 2: Valid (mode2: for Standard Image Quality Control)	1	
08	Setting Mode	Process	Image control	Image quality		2505		Auto start/Relative humidity difference	2	0-6	M	0: 0% 1: 5% 2: 10% 3: 15% 4: 20% 5: 25% 6: 30%	1	Yes
08	Setting Mode	Process	Image control	Image quality		2507		Auto start/Period of time unattended	10	0-15	M	Sets the unattended period of time to perform closed-loop control automatically at the start of operation when the equipment has not been used for a specified period of time in the energy saving mode. 0: 3 1: 5 2: 7 3: 10 4: 15 5: 20 6: 30 7: 45 8: 60 9: 90 10: 120 11: 150 12: 180 13: 240 14: 300 15: 360 (Unit: minute)	1	Yes
08	Setting mode	Process	Image control			2509		Image quality closed-loop control automatic start-up/Setting of accumulated print volume	1000	0-9999	M	Sets the number of accumulated print volume to perform closed-loop control when "1" or "2" (valid) is set in 08-2498. Image problems may occur if the value extremely smaller than the default value is set to the equipment whose print ratio of monochrome is relatively high. (unit: pages)	1	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Normal speed	2513	0	Y	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Normal speed	2513	1	M	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Normal speed	2513	2	C	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Normal speed	2513	3	K	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Decelerating	2514	0	Y	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Decelerating	2514	1	M	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Decelerating	2514	2	C	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Contrast voltage offset correction setting	Decelerating	2514	3	K	5	0-10	M	0: -100 1: -80 2: -60 3: -40 4: -20 5: 0 6: +20 7: +40 8: +60 9: +80 10: +100 (Unit: V)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Normal speed)	Y	2525	0	Y	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Normal speed)	M	2525	1	M	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control	Laser power offset correction setting (Normal speed)	C	2525	2	C	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Normal speed)	K	2525	3	K	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Decelerating)	Y	2526	0	Y	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Decelerating)	M	2526	1	M	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting mode	Process	Image control	Laser power offset correction setting (Decelerating)	C	2526	2	C	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control	Laser power offset correction setting (Decelerating)	K	2526	3	K	5	0-10	M	0: -50 1: -40 2: -30 3: -20 4: -10 5: 0 6: +10 7: +20 8: +30 9: +40 10: +50 (Unit: W)	4	
08	Setting Mode	Process	Image control	Abnormality detection		2528		(Y)Display/0 clearing	0	0-16	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1	Yes
08	Setting Mode	Process	Image control	Abnormality detection		2529		(M)Display/0 clearing	0	0-16	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1	Yes
08	Setting Mode	Process	Image control	Abnormality detection		2530		(C)Display/0 clearing	0	0-16	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1	Yes
08	Setting Mode	Process	Image control	Abnormality detection		2531		(K)Display/0 clearing	0	0-16	M	Counts the abnormality detection of image quality control. Accumulating total of [CE10], [CE20] and [CE40]	1	Yes
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Normal speed	2548	0	Y	6	0-12	M	Normal speed 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Normal speed	2548	1	M	6	0-12	M	Normal speed 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Normal speed	2548	2	C	6	0-12	M	Normal speed 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Normal speed	2548	3	K	6	0-12	M	Normal speed 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Reduced speed	2549	0	Y	6	0-12	M	Deceleration 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Reduced speed	2549	1	M	6	0-12	M	Deceleration 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Reduced speed	2549	2	C	6	0-12	M	Deceleration 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Image control	Potential on white background/Correction setting	Reduced speed	2549	3	K	6	0-12	M	Deceleration 0: -30 1: -25 2: -20 3: -15 4: -10 5: -5 6: 0 7: 5 8: 10 9: 15 10: 20 11: 25 12: 30	4	
08	Setting mode	Process	Development			2692		Prevention of color toner low density / ON/OFF setting	0	0-1	M	Prevents color toner low density which occurs when the black print ratio is high. Since toner density in the color developer unit is checked at every number of sheets set in 08-2693, the performance will be lowered. 0: OFF 1: ON (Set this value if the black print ratio is 95% or more.)	1	
08	Setting mode	Process	Development			2693		Prevention of color toner low density / Judged number of sheets setting	20	1-255	M	Sets the timing to check toner density in the color developer unit when the value of 08-2692 is "1" (ON). Setting value x 10 sheets	1	
08	Setting Mode	Scanner				3015		Pre-scan setting switchover	0	0-1	SYS	0: Not performing pre-scanning 1: Performing pre-scanning	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Scanner	RADF			3021		Set for switchback-mixed size copy	0	0-1	SYS	<p>This setting is whether the original length is detected or not by transporting without scanning in reverse when A4-R/FOLIO paper or LT-R/LG paper is detected in a mixed size copying.</p> <p>0: Disabled -</p> <p>AMS:</p> <p>A series - Judges as A4-R without transporting in reverse with no scanning.</p> <p>LT series - Judges whether it is LT-R or LG by its length without transporting in reverse with no scanning.</p> <p>APS:</p> <p>A series - Judges whether it is A4-R or FOLIO without transporting in reverse with no scanning.</p> <p>LT series - Judges whether it is LT-R or LG without transporting in reverse with no scanning.</p> <p>1: Enable 1</p> <p>AMS:</p> <p>A series - Judges whether it is A4-R or FOLIO by Transporting without scanning in reverse to detect its length.</p> <p>LT series - Judges whether it is LT-R or LG by transporting without scanning in reverse to detect its length.</p> <p>APS:</p> <p>The same as that of APS in 0: Disabled.</p>	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Card reading device		3500		Device setting	0	0-429496729 5	SYS	To enable the e-Bridge ID Gate, a card reading device should be set in the order of "ABYYZZZZ". (Enter the corresponding values to "A", "B", "YY" and "ZZZZ".) - AB: Special setting - A: Debugging NIC 0: Not used 1: Used - B: Interface 0: USB connection 1: Serial connection (KP-2003 only) - YY: Authentication 00: No authentication using card 03: Mifare (KP-2005 only) 04: HID (KP-2004 only) 06: KB Emulation I/F Reader 07: 3Track Magnetic Swipe Reader 09: 2Track Magnetic Swipe Reader - ZZZZ: Sub-code (Specifies the usage type of card ID) 0000: No authentication using card 0001: IDm (Felica/NFC-Felica) and (or) UID (Mifare/NFC-Mifare) 0002: Data (Felica/NFC-Felica/Mifare/NFC-Mifare) 0003: SSFC mode	5	Yes
08	Setting Mode	System	User interface	Card reading device		3501		Card reader format information -1	0	0-429496729 5	SYS	To access the data in the noncontact IC card, the Key Information "LLLL" and the Sector Number "MMMM" should be set. The "LLLL" should be set first, and then "MMMM". <KP-2005> LLLL: Key information MMMM: Sector number (hexadecimal number)	5	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Card reading device		3502		Card reader format information -2	0	0-4294967295	SYS	The data of the block number in the noncontact IC is set. <KP-2005> RRBSEbse (hexadecimal number) RR: 00 (Fixed) B: 1st area block number S: 1st area beginning byte offset E: 1st area ending byte offset b: 2nd area block number s: 2nd area beginning byte offset e: 2nd area ending byte offset * If the 2nd block/area is not used, set the SSTU to "FFFF" (hexadecimal number), the bse to "FFF" (hexadecimal number).	5	Yes
08	Setting Mode	System	User interface	Card reading device		3503		Card reader format information -3	0	Refer to contents	SYS	Security key "KKKKKKKKKKKK" (12 digits) <hexadecimal number> in the [Key Information] of the [Sector Number] set in the code 08-3501 should be entered. <Acceptable value> 0-0xFFFFFFFFFFFFFFFF	5	Yes
08	Setting Mode	System	User interface	Card reading device		3504		Card authentication LDAP server	0	0-100	SYS	LDAP server number for the card authentication when a noncontact IC card is used should be set.	1	
08	Setting mode	System	General	Available profile display	PRT	3600	0	MS_IS34_00.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	1	MS_IS34_01.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	2	MS_IS34_02.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	3	MS_IS34_03.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	4	MS_IS34_04.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	5	MS_IS34_05.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	6	MS_IS34_06.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Available profile display	PRT	3600	7	MS_IS34_07.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	8	MS_IS34_08.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	9	MS_IS34_09.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	10	MS_IS34_10.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	11	MS_IS34_11.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	12	MS_IS34_12.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	13	MS_IS34_13.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	14	MS_IS34_14.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	15	MS_IS34_15.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	16	MS_IS34_16.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	17	MS_IS34_17.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	18	MS_IS34_18.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	19	MS_IS34_19.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	20	MS_IS34_20.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	21	MS_IS34_21.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	22	MS_IS34_22.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	23	MS_IS34_23.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Available profile display	PRT	3600	24	MS_IS34_24.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	25	MS_IS34_25.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	26	MS_IS34_26.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	27	MS_IS34_27.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	28	MS_IS34_28.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	29	MS_IS34_29.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	30	MS_IS34_30.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	31	MS_IS34_31.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	32	MS_IS34_32.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	33	MS_IS34_33.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	34	MS_IS34_34.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	
08	Setting mode	System	General	Available profile display	PRT	3600	35	MS_IS34_35.icc	-	-	SYS	Displays PG Device Pure Gray TRC attribute for the current RGB Ink Sim profile and the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Recovery of the profile at the shipment	PRT	3601		Recovery of the profile at the shipment	0	0-35	SYS	Recovers the default RGB Ink Sim profile and PG Device Pure Gray TRC in the same sub-code. 0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35	1	
08	Setting mode	System	General	Copying the profile at the shipment to USB memory	PRT	3602		Copying the profile at the shipment to USB memory	0	0-35	SYS	Copies the default RGB Ink Sim profile and PG Device Pure Gray TRC in the same sub-code to the USB memory. 0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Updating the profile at the shipment from UBS memory	PRT	3603		Updating the profile at the shipment from UBS memory	0	0-35	SYS	Uploads the default RGB Ink Sim profile and PG Device PureGray TRC in the same sub-code from the USB memory. 0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35	1	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	0	MS_IS34_00.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	1	MS_IS34_01.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	2	MS_IS34_02.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	3	MS_IS34_03.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	4	MS_IS34_04.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	5	MS_IS34_05.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	6	MS_IS34_06.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	7	MS_IS34_07.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	8	MS_IS34_08.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	9	MS_IS34_09.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	10	MS_IS34_10.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	11	MS_IS34_11.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	12	MS_IS34_12.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	13	MS_IS34_13.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	14	MS_IS34_14.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	15	MS_IS34_15.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	16	MS_IS34_16.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	17	MS_IS34_17.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	18	MS_IS34_18.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	19	MS_IS34_19.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	20	MS_IS34_20.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	21	MS_IS34_21.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	22	MS_IS34_22.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	23	MS_IS34_23.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	24	MS_IS34_24.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	25	MS_IS34_25.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	26	MS_IS34_26.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	27	MS_IS34_27.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	28	MS_IS34_28.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	29	MS_IS34_29.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	30	MS_IS34_30.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	31	MS_IS34_31.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	32	MS_IS34_32.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	33	MS_IS34_33.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	34	MS_IS34_34.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3604	35	MS_IS34_35.000	-	-	SYS	Displays the default RGB Ink Sim profile and PG Device PureGray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Making the profile available	PRT	3605		Making the profile available	0	0-35	SYS	<p>Selecting a profile Overwrites the adjusted RGB Ink Sym profile on the current area (PG CIE Based PureGray TRC in the same sub-code is overwritten to the current area.)</p> <p>0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35</p>	1	
08	Setting mode	System	General	Copying the adjusted profile to USB memory	PRT	3606		Copying the adjusted profile to USB memory	0	0-35	SYS	<p>Copies the adjusted RGB Ink Sim profile and PG CIE Based Pure Gray TRC in the same sub-code to USB memory.</p> <p>0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Uploading the adjusted profile from USB memory	PRT	3607		Uploading the adjusted profile from USB memory	0	0-35	SYS	Uploads the adjusted RGBInkSim profile and PG CIE Based PureGray TRC in the same sub-code from the USB memory. 0: MS_IS34_00 1: MS_IS34_01 2: MS_IS34_02 3: MS_IS34_03 4: MS_IS34_04 5: MS_IS34_05 6: MS_IS34_06 7: MS_IS34_07 8: MS_IS34_08 9: MS_IS34_09 10: MS_IS34_10 11: MS_IS34_11 12: MS_IS34_12 13: MS_IS34_13 14: MS_IS34_14 15: MS_IS34_15 16: MS_IS34_16 17: MS_IS34_17 18: MS_IS34_18 19: MS_IS34_19 20: MS_IS34_20 21: MS_IS34_21 22: MS_IS34_22 23: MS_IS34_23 24: MS_IS34_24 25: MS_IS34_25 26: MS_IS34_26 27: MS_IS34_27 28: MS_IS34_28 29: MS_IS34_29 30: MS_IS34_30 31: MS_IS34_31 32: MS_IS34_32 33: MS_IS34_33 34: MS_IS34_34 35: MS_IS34_35	1	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	0	MS_IS34_00.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	1	MS_IS34_01.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	2	MS_IS34_02.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	3	MS_IS34_03.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	4	MS_IS34_04.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	5	MS_IS34_05.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	6	MS_IS34_06.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	7	MS_IS34_07.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	8	MS_IS34_08.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	9	MS_IS34_09.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	10	MS_IS34_10.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	11	MS_IS34_11.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	12	MS_IS34_12.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	13	MS_IS34_13.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	14	MS_IS34_14.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	15	MS_IS34_15.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	16	MS_IS34_16.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	17	MS_IS34_17.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	18	MS_IS34_18.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	19	MS_IS34_19.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	20	MS_IS34_20.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	21	MS_IS34_21.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	22	MS_IS34_22.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	23	MS_IS34_23.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	24	MS_IS34_24.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	25	MS_IS34_25.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	26	MS_IS34_26.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	27	MS_IS34_27.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	28	MS_IS34_28.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	29	MS_IS34_29.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	30	MS_IS34_30.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	31	MS_IS34_31.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	32	MS_IS34_32.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	33	MS_IS34_33.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	34	MS_IS34_34.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	3608	35	MS_IS34_35.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure Gray TRC attribute in the same sub-code.	14	
08	Setting Mode	System	General			3612		Date of unpacking	-	13 digits	SYS	Year/month/date/day/hour/minute/second Example:03 07 01 3 13 27 48 "Day" - "0" is for "Sunday". Proceeds Monday through Saturday from "1" to "6".	11	Yes
08	Setting mode	System	General	List print USB storage setting		3615		List print USB storage setting	0	0-1	SYS	0: Enable (USB storage available) 1: Disable (USB storage not available)	1	
08	Setting mode	System	General	Clearing of service history list file		3619		Clearing of service history list file	-	-	SYS	Initializes the service history list file.	3	
08	Setting mode	System	General	Real time log notification function		3623		Job filtering setting	0	0-65535	SYS	Changes the target type of jobs for notification in real time log notification function.	1	
08	Setting mode	System	General	Real time log notification function		3624		Log item filtering setting	214748392 1	0- 429496729 5	SYS	Changes the target type of logs for notification in real time log notification function.	5	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	General	Real time log notification function		3626		Department information transmission setting of real time log notification function	0	0-1	SYS	Sets whether the department information (number, name, code) is transmitted or not in the real time log notification function. 0: Department number, department name, department code 1: Department number, department name	1	
08	Setting mode	System	General			3628		Enable/Disable setting of standard data overwrite function	1	0-1	SYS	0: Disabled 1: Enabled * This code is valid for the following model: e-STUDIO2040CSE/2540CSE/3040CSE/3540CSE/4540CSE	1	
08	Setting mode	System	General			3629		Enable/Disable setting of standard EWB function	1	0-1	SYS	0: Disabled 1: Enabled * This code is valid for the following model: - e-STUDIO2040CSE/2540CSE/3040CSE/3540CSE/4540CSE - e-STUDIO2040C/2540C/3040C/3540C/4540C for MJD	1	
08	Setting mode	System	Network			3631		Remote Access (SNMP)	1	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface			3635		Trial copy function	1	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Network	InternetFax		3637		Addition of transmission header	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Network	InternetFax		3638		Addition of receiving record	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Network	InternetFax		3639		Adding method of transmission header	1	1-2	SYS	1: Overwriting inside the image (5 mm from the top) 2: Adding outside the image (5 mm from the top)	1	
08	Setting mode	System	Network	MDS	Authentication	3640		Authentication of MDS system	0	0-1	SYS	0: Disabled (Normal mode) 1: Enabled (MDS authentication mode) * If the EWB license has not been installed at startup, this code becomes "0".	1	
08	Setting mode	System	Network	MDS	Authentication	3641		Display in TopAccess	0	0-1	SYS	Sets whether the information of MDS Authentication will be displayed or not in TopAccess and control panel. 0: Non display 1: Display * When "1" is set in 3640, the setting value of this code becomes "1" accordingly. The setting value cannot be changed to "0".	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			3642	0	User authentication setting for NW print/NW fax/Internet fax function	0	0-3	SYS	0: Authentication with user name and domain name 1: No authentication control in the equipment 2: Authentication with user name 3: Authentication with domain participation information	4	
08	Setting mode	System	Network	WS scan		3642	2	Disabling job authentication/permission check/Quota check	0	0-1	SYS	0: OFF 1: ON	4	
08	Setting mode	System	User interface			3643		Filtering condition for job list on the panel	1	0-1	SYS	0: Filtered with user name 1: Filtered with domain name and user name * This code is valid only when the value of 08-3642-0 is "1".	1	
08	Setting mode	System	General			3644		Login restriction for reissued card	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	User authentication		3646		Copy	1	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	User authentication		3647		FAX	1	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	User authentication		3648		Printer/e-Filing	1	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	User authentication		3649		Scanning	1	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	User authentication		3650		List print	1	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface			3651		Authentication method for administrator	1	0-1	SSDK	0: Only password 1: User name and password	1	
08	Setting mode	System	User interface			3652		Switchover of card reader display on the control panel	0	0-1	SYS	Switches the display on the control panel (authentication screen) depending on the connected card reader. 0: Non-contact type 1: Card insertion type	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			3653		Judgment timing for continuous printing	0	0-1	SYS	Sets the timing for judging whether following job is printed continuously or not. 0: Consumable life priority (Judging whether the following job exists or not by printing of last page of preceding job) 1: Printing performance priority (Judging whether the following job exists or not by ejection of last page of preceding job) * Although continuous printing is performed more frequently when the value of this code is set to "1", the life of consumables may be affected. This setting is not applied to printing with the EFI controller.	1	
08	Setting mode	System	Paper feeding			3657		List/report printing from the drawer specified for "FAX"	0	0-1	SYS	Sets to feed the paper from a drawer whose attribute is specified to "FAX" when a list or report is printed. 0: Disabled 1: Enabled	1	Yes
08	Setting mode	System	Network	InternetFax		3658		To/Bcc Destination	0	0-1	SYS	Switches the destination of an internet fax to be sent to To or Bcc. 0: To 1: Bcc	1	
08	Setting mode	System	FAX			3659		Image position and size setting at the time of forwarding received fax jobs	1	0-2	SYS	This setting is applied only when a received fax job is forwarded with a pdf format file. 0: Sets to select the paper size from the drawers in which paper is loaded by corresponding to an image size. The image position is the upper part of the paper. 1: Sets to select the paper size from the drawers in which paper is loaded by corresponding to an image size. The image position is the center part of the paper. 2: Sets to select a standard size paper corresponding to an image size. The image position is the upper part of the paper. - If "FAX" has been set as the attribute of a drawer, its paper size will be applied when "0" or "1" is selected.	1	Yes
08	Setting mode	System	FAX			3661		Fax operation setting during off-hook transmission	1	0-2	SYS	0: Transmission is not operable during off-hook 1: Direct transmission is operable during off-hook 2: Transmission is operable during off-hook	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Scanning			3662		Waiting period for continue after the RADF scanning	0	0-1	SYS	0: Disabled 1: Enabled * When "Enabled" is set, the screen to notify continuity appears for 1 second after RADF scanning has been completed.	1	
08	Setting mode	System				3666		Process of user authentication(Shim pleBind)	0	0-1	SSD K	0: Normal process 1: Special process	1	
08	Setting mode	System	Network			3702		Logon User Name of Windows Domain Authentication	MFP's serial number	-	-	Maximum 128 letters "MFP's serial number" is set as default. Perform 08-9083 to set the default value.	12	
08	Setting mode	System	Network			3704		PDC2 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3705		BDC2 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3706		PDC3 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3707		BDC3 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3719		Windows domain No. 2 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3720		Windows domain No. 3 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			3721		AppleTalk device name	MFP's serial number	-	-	Maximum 32 letters "MFP's serial number" is set as default. Perform 08-9083 to set the default value.	12	
08	Setting mode	System	Network			3722		PDC/BDC timeout value of Windows Domain Authentication (Unit: Seconds)	60	1-180	NIC	Applied to the device authentication	12	
08	Setting mode	System	Network			3723		User authentication PDC/BDC time-out period (Unit: Seconds)	30	1-180	NIC	Applied to the user authentication	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			3724		Windows Domain Authentication method of Windows Domain/User Authentication	1	1-4	NIC	<p>Sets the Windows domain authentication method for device authentication, Scan to SMB, and user authentication. When the setting of the domain authentication method is unknown, it's strongly recommended to set the value of this code to "1" (Auto).</p> <p>1: Auto 2: Kerberos 3: NTLMv2 4: NTLMv1</p> <p>* Note that the internal processing is different between user authentication and Windows logon authentication/Scan to SMB as follows.</p> <p>- User authentication "1" (Auto): Auto (Kerberos -> NTLMv2) "4" (NTLMv1): NTLMv2</p> <p>- Windows logon authentication/Scan to SMB "1" (Auto): Auto (Kerberos -> NTLMv1) "4" (NTLMv1): NTLMv1</p>	12	
08	Setting mode	System	Network			3725		IPP max connection	16	1-16	NIC		12	
08	Setting mode	System	Network			3726		IPP active connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3727		LPD max connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3728		LPD active connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3729		ATalk PS max Connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3730		ATalk PS active Connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3731		Raw TCP max Connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3732		Raw TCP active connection	10	1-16	NIC		12	
08	Setting mode	System	Network			3736		DNS client TimeOut	5	1-180	NIC	Use when a timeout occurred at DNS client connection	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			3739		FTP Client TimeOut (SCAN)	30	1-180	NIC	Use when a timeout occurred at DNS client connection	12	
08	Setting mode	System	Network			3743		LDAP client TimeOut	5	1-180	NIC	Use when a timeout occurred at LDAP client connection	12	
08	Setting mode	System	Network	DPWS		3754		Switching printer setting	1	1-2	NIC	DPWS printer function is switched. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network	DPWS (EFI)		3754		Switching printer setting (EFI)	2	1-2	NIC	DPWS printer function is switched. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network	DPWS		3755		Switching scanner setting	1	1-2	NIC	DPWS scanner function is switched. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network	DPWS (EFI)		3755		Switching scanner setting (EFI)	2	1-2	NIC	DPWS scanner function is switched. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			3757		DPWS Discovery Port Number	3702	1-65535	NIC	Port number used for DPWS Discovery	12	
08	Setting mode	System	Network			3758		DPWS Metadata Exchange Port Number	50081	1-65535	NIC	Port number used for DPWS Metadata Exchange	12	
08	Setting mode	System	Network			3759		DPWS Print Port Number	50082	1-65535	NIC	Port number used for DPWS Print	12	
08	Setting mode	System	Network			3760		DPWS Scan Port Number	50083	1-65535	NIC	Port number used for DPWS Scan	12	
08	Setting mode	System	Network			3765		DPWS Print Max numbers of connection	10	1-20	NIC	Maximum numbers received from more than one connection request in the DPWS print	12	
08	Setting mode	System	Network			3766		DPWS Print Max numbers of reception	10	1-20	NIC	Maximum numbers of data received from more than one clients in the DPWS print	12	
08	Setting mode	System	Network			3767		Switching IPv6 setting	2	1-2	NIC	IPv6 function is switched. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			3767		Switching IPv6 setting (EFI)	2	1-2	NIC	IPv6 function is switched. 1: Enabled 2: Disabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network	IPv6		3768		Switching address acquisition	2	1-3	NIC	IP (IPv6) address acquisition setting is switched. 1: Manual 2: Stateless 3: Stateful	12	
08	Setting mode	System	Network	IPv6		3770		IPv6 Address	-	-	-	Displays IPv6 address. Maximum 40 characters (byte).	12	
08	Setting mode	System	Network	IPv6		3771		Prefix display setting	-	-	-	Sets the length of the displayed prefix. Maximum 3 characters (byte).	12	
08	Setting mode	System	Network	IPv6		3772		Default Gateway setting	-	-	-	Sets the default gateway for IPv6 address. Maximum 40 characters (byte).	12	
08	Setting mode	System	Network			3774		DHCPv6 Option setting	2	1-2	NIC	DHCPv6 Option is switched when the Manual is set. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			3777		Stateless Address setting	2	1-2	NIC	IP Address is acquired by both Stateless and State full Address. 1: Enabled2: Disabled	12	
08	Setting mode	System	Network			3778		Acquiring DHCPv6 Option	2	1-2	NIC	When Stateless Address is selected, an option is acquired from DHCPv6 server. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			3779		Stateful Address setting	1	1-2	NIC	IP Address is acquired from DHCPv6 server. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			3780		Stateful Option setting	1	1-2	NIC	An option is acquired from DHCPv6 server. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network	IPv6		3781		Primary DNS Server Address Registration (IPv6)	-	-	-	Registration of Primary DNS Server Address. Maximum 40 characters (byte).	12	
08	Setting mode	System	Network	IPv6		3782		Secondary DNS Server Address Registration (IPv6)	-	-	-	Registration of Secondary DNS Server Address. Maximum 40 characters (byte).	12	
08	Setting mode	System	Network			3793		LLTD function setting	1	1-2	NIC	Sets the LLTD function. 1: Enabled 2: Disabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Extra long size paper count	Count switching setting		3800	0	Feeding direction 461-800 mm	2	1-30	SYS	Sets the number of multiples. A sheet is counted as N sheets when extra long size paper is used for printing.	4	Yes
08	Setting Mode	Counter	Extra long size paper count	Count switching setting		3800	1	Feeding direction 801-1200 mm	3	1-30	SYS	Sets the number of multiples. A sheet is counted as N sheets when extra long size paper is used for printing.	4	Yes
08	Setting mode	System	General			3802		USB media direct printing Paper size	NAD: 2 Others: 6	0-13	SYS	0: ledger 1: legal 2: letter 3: computer 4: statement 5: A3 6: A4 7: A5 9: B4 10: B5 11: Folio 12: Legal13" 13: LetterSquare	1	
08	Setting mode	System	General			3803		USB media direct printing function setting	1	0-1	SYS	Sets the USB media direct printing function. 0: Disabled1: Enabled	1	
08	Setting mode	System	Scanner			3805		Department Management setting by Remote Scan	3	0-3	SYS	Sets the department management with remote scanning as follows: 0: w/o GUI OFF, w/ GUI OFF 1: w/o GUI ON, w/ GUI OFF 2: w/o GUI OFF, w/ GUI ON 3: w/o GUI ON, w/ GUI ON w/o GUI: Remote scanning is operated on SSOP application of eCOPY Inc. w/ GUI: Remote scanning is operated on TTEC-specific GUI. This setting is only for department management with remote scanning. When GUI is set ON, a department code dialog is displayed at the start-up of remote scanning. This code is valid only when the code 08-9120 is set "1 (Valid)".	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network	Direct SMTP		3810		Communication setting	0	0-1	SYS	When an Internet Fax is sent, Direct SMTP communication is set. 0: Disabled 1: Enabled When "0: Disabled" is set, an Internet Fax is sent using an SMTP server. When "1: Enabled" is set, direct SMTP communication is enabled and an Internet Fax is sent to MFPs If "1: Enabled" is set in 08-3810, set "1: Enabled" in 08-3812 as well.	1	Yes
08	Setting Mode	System	Network	Direct SMTP		3811		Image encrypting at the Direct SMTP	0	0-1	SYS	When Direct SMTP communication is performed, an attached image is encrypted. 0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	Network	Internet Fax		3812		Dummy full mode at I-Fax transmission	0	0-1	SYS	When an Internet Fax is sent, the resolution ratio and the paper size of an attached image are set to the full mode. 0: Disabled 1: Enabled If "1: Enabled" is set in 08-3810, set "1: Enabled" in 08-3812 as well.	1	Yes
08	Setting mode	System	Scanner			3815		XPS file thumbnail addition	1	0-1	SYS	Thumbnail is added to the XPS file produced by the Scan function. 0: Not added 1: Only the top page added	1	
08	Setting mode	System	Scanner			3816		XPS file paper size setting	1	0-1	SYS	The paper size of the XPS file produced by the Scan function is set. 0: Scanned image size 1: Standard size	1	
08	Setting mode	System	Scanner			3817		PDF file version setting	0	0-1	SYS	The version of PDF file produced by the Scan function is set. 0: PDF V1.3 1: PDF V1.4 4: PDF V1.7	1	
08	Setting Mode	System	e-BRIDGE CloudConnect			3820		Function setting	0	0-1	SYS	0: Disabled 1: Enabled	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	GSI			3821		Setting to prevent communication converging	0	0~1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	e-BRIDGE CloudConnect			3822		Function setting of Proxy Server	0	0~1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	e-BRIDGE CloudConnect			3823		IP Address setting of Proxy Server	Refer to contents	Refer to contents	SYS	<Default value> 0.0.0.0 <Acceptable value> 0.0.0.0-255.255.255.255	11	Yes
08	Setting Mode	System	e-BRIDGE CloudConnect			3824		Port number setting of Proxy Server	80	1~65535	SYS		1	Yes
08	Setting Mode	System	e-BRIDGE CloudConnect			3825		Account ID setting of Proxy Server	-	Refer to contents	SYS	Maximum 30 characters.	11	Yes
08	Setting Mode	System	e-BRIDGE CloudConnect			3826		Account password setting of Proxy Server	-	Refer to contents	SYS	Maximum 30 characters.	11	Yes
08	Setting mode	System	General			3833		Home directory function	0	0-1	SYS	Function to store a file in the user's home directory 0: Disabled 1: Enabled	1	
08	Setting mode	System	General			3837		Display switching for the machine name shown in the notification	0	0-1	SYS	The display method of the machine name shown in the event related notification is switched. 0: IP address 1: NetBIOS name	1	
08	Setting mode	System	General			3840		Electronic key registration	-	-	-	Registers electronic keys for setting related optional items (e.g. when the equipment is delivered). Returns the license file having the same ID as that in the one-time dongle. Displays all the electronic keys stored in a USB media connected to the equipment in a list. Displays electronic keys registered in the equipment.	3	
08	Setting Mode	System	Option	FAX		3847		FAX mis-transmission prevention	0	0-1	SYS	FAX mis-transmission prevention function is switched. 0: OFF (Disabled) 1: ON (Enabled)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Option	FAX		3848		Restriction on Address Book destination	0	0-1	SYS	Sets whether the address in the address book is selectable or not for the FAX mis-transmission prevention function. 0: OFF (Disabled) 1: ON (Enabled)	1	Yes
08	Setting Mode	System	Option	FAX		3849		Restriction on destination direct entry	0	0-1	SYS	Sets whether the direct entry of the FAX number is available or not for the FAX mis-transmission prevention function. 0: OFF (Disabled) 1: ON (Enabled)	1	Yes
08	Setting mode	System	General			3851		Template display	0	0-1	SYS	0: ID number order 1: Alphabetical order	1	
08	Setting mode	System	General	Summer time function		3852		Summer time Automatic change function	Refer to contents	0-1	SYS	0: Disabled 1: Enabled <Default value> MJD, NAD: 1 Others: 0	1	
08	Setting mode	System	General	Summer time function		3853		Offset value	2	0-7	SYS	0: +2:00 1: +1:30 2: +1:00 3: +0:30 4: -0:30 5: -1:00 6: -1:30 7: -2:00	1	
08	Setting mode	System	General	Summer time function setting	Start	3854		Month	Refer to contents	1-12	SYS	1: Jan 2: Feb 3: Mar 4: Apr 5: May 6: Jun 7: Jul 8: Aug 9: Sep 10: Oct 11: Nov 12: Dec <Default value> MJD, NAD: 3 Others: 1	1	
08	Setting mode	System	General	Summer time function setting	Start	3855		Week	Refer to contents	1-5	SYS	1: 1st 2: 2nd 3: 3rd 4: 4th 5: Last <Default value> MJD: 5 NAD: 2 Others: 1	1	
08	Setting mode	System	General	Summer time function setting	Start	3856		Day of the week	0	0-6	SYS	0: Sun 1: Mon 2: Tue 3: Wed 4: Thu 5: Fri 6: Sat	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Summer time function setting	Start	3857		Hours	Refer to contents	0-23	SYS	0 to 23 <Default value> MJD, NAD: 2 Others: 0	1	
08	Setting mode	System	General	Summer time function setting	Start	3858		Minutes	0	0-59	SYS	0 to 59	1	
08	Setting mode	System	General	Summer time function setting	End	3859		Month	Refer to contents	1-12	SYS	1: Jan 2: Feb 3: Mar 4: Apr 5: May 6: Jun 7: Jul 8: Aug 9: Sep 10: Oct 11: Nov 12: Dec <Default value> MJD: 10 NAD: 11 Others: 1	1	
08	Setting mode	System	General	Summer time function setting	End	3860		Week	Refer to contents	1-5	SYS	1: 1st 2: 2nd 3: 3rd 4: 4th 5: Last <Default value> MJD: 5 Others: 1	1	
08	Setting mode	System	General	Summer time function setting	End	3861		Day of the week	0	0-6	SYS	0: Sun1: Mon2: Tue3: Wed4: Thu5: Fri6: Sat	1	
08	Setting mode	System	General	Summer time function setting	End	3862		Hours	Refer to contents	0-23	SYS	0 to 23 <Default value> MJD: 3 NAD: 2 Others: 0	1	
08	Setting mode	System	General	Summer time function setting	End	3863		Minutes	0	0-59	SYS	0 to 59	1	
08	Setting mode	System	Network			3864		Disclosure of telnet function	0	0-1	SYS	0: Not disclosed 1: Disclosed When this value is set at "0", the value of code 08-3865 must be "2".	1	
08	Setting mode	System	Network			3865		Availability of telnet server	2	1-2	NIC	1: Enable2: Disable	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Fax			3875		Address confirmation for multiple destinations	Refer to contents	0-1	SYS	Enable this setting to display the address confirmation screen before sending fax to prevent wrong transmission when multiple destination addresses are specified. 0: Disabled 1: Enabled <Default value> JPC: 1 Others: 0	1	
08	Setting mode	Printer	Laser			4002		Judged number of polygonal motor rotation error (Normal rotation)	0	0-2	M	Displays the error [CA10] when the set number of rotation error has been detected. 0: 2 times 1: 10 times 2: 20 times	1	
08	Setting mode	Printer	Laser			4004		Polygonal motor rotation number on standby	3	0-3	M	0: 26574.8rpm 1: 2000rpm 2: 1500rpm 3: 1000rpm	1	
08	Setting mode	Printer	Laser			4005		Polygonal motor rotation in the energy saving mode	0	0-3	M	0: Stopped 1: 1000rpm. 2: 1500rpm. 3: 2000rpm.	1	
08	Setting mode	Printer	Paper feeding	Default setting of paper source	PPC	4010		Default setting of paper source	0	0-5	SYS	0: A4/LT 1: LCF 2: 1st drawer 3: 2nd drawer 4: PFP upper drawer 5: PFP lower drawer	1	
08	Setting Mode	Printer	Paper feeding	Automatic change of paper source	Auto	4011	PPC		1	1-2	SYS	Sets whether the drawer is changed automatically if the paper runs out in the selected drawer and the paper of the same size is in other drawer. 1: ON (Changes to the drawer with the same paper direction and size: ex. A4 to A4) 2: ON (Changes to the drawer with the same paper size. Paper with the different direction is acceptable as long as the size is the same: ex., A4 to A4-R, LT-R to LT. "1" is applied when the staple/hole punch is specified.)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Laser			4012		Pre-running rotation of polygonal motor	0	0-2	SYS	Sets whether or not switching the polygonal motor from the standby rotation to the normal rotation when the original is set on the RADF or the platen cover is opened. 0: Valid (when using RADF and the original is set manually) 1: Invalid 2: Valid (when using RADF only)	1	
08	Setting mode	Printer	Laser			4013		Polygonal motor rotational status switching at the Auto Clear Mode	0	0-1	SYS	Sets whether or not switching the polygonal motor from the normal rotation to the standby rotation at the Auto Clear Mode. 0: Valid 1: Invalid	1	
08	Setting mode	Printer	Laser			4014		Rotational status of polygonal motor on standby	0	0-1	SYS	Sets the rotational status of polygonal motor on standby. 0: Rotated (The rotational speed is set at 08-4005.) 1: Stopped	1	
08	Setting mode	Printer	Laser			4015		Timing of auto-clearing of polygonal motor pre-running rotation	3	0-6	SYS	Switches the polygonal motor to the standby rotation when a certain period of time has passed from the pre-running. At this code, the period to switch the status to the standby rotation is set. 0: 15 sec.1: 20 sec.2: 25 sec.3: 30 sec.4: 35 sec.5: 40 sec.6: 45 sec. This setting is effective when "0" or "2" is set at 08-4012.	1	
08	Setting Mode	Printer	Paper feeding	Automatic change of paper source	When a drawer is specified	4016	0	PPC	0	0-1	SYS	Sets whether the automatic change of paper source is performed or not if the drawer is specified as the paper source and the paper in the specified drawer runs out when coping. 0: Does not change the paper source automatically 1: Changes the paper source automatically	4	Yes
08	Setting Mode	Printer	Paper feeding	Automatic change of paper source	When a drawer is specified	4016	1	Printing/BOX printing	0	0-1	SYS	Sets whether the automatic change of paper source is performed or not if the drawer is specified as the paper source and the paper in the specified drawer runs out when printing/BOX printing. 0: Does not change the paper source automatically 1: Changes the paper source automatically	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer				4017		Polygonal motor stop function when the [FUNCTION CLEAR] button is pressed	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	1st drawer	4020	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the 1st drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	1st drawer	4020	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the 1st drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	2nd drawer	4021	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the 2nd drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	2nd drawer	4021	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the 2nd drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	PFP upper drawer	4022	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the PFP upper drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	PFP upper drawer	4022	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the PFP upper drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	PFP lower drawer	4023	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the PFP lower drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	PFP lower drawer	4023	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the PFP lower drawer.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	Bypass feed	4024	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the bypass tray.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	Bypass feed	4024	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the bypass tray.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	LCF	4025	0	Plain paper	5	0-5	M	Sets the number of times feeding retry occurs from the LCF.	4	Yes
08	Setting Mode	Printer	Paper feeding	Feeding retry number setting	LCF	4025	1	Others paper	5	0-5	M	Sets the number of times feeding retry occurs from the LCF.	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Paper feeding	Paper size setting		4100		1st drawer	Refer to contents	0-255	M	Press the button on the LCD to select the size. This code is reset every time a paper size is detected automatically. 4: A4 64: LT <Default value> NAD: 64 Others: 4	9	
08	Setting mode	Printer	Paper feeding	Paper size setting		4101		2nd drawer	Refer to contents	0-255	M	Press the button on the LCD to select the size. This code is reset every time a paper size is detected automatically. 19: A3 81: LD <Default value> NAD: 81 Others: 19	9	
08	Setting mode	Printer	Paper feeding	Paper size setting		4102		PFP upper drawer	Refer to contents	0-255	M	Press the button on the LCD to select the size. This code is reset every time a paper size is detected automatically. 20: A4-R 80: LT-R <Default value> NAD: 80 Others: 20	9	
08	Setting mode	Printer	Paper feeding	Paper size setting		4103		PFP lower drawer	Refer to contents	0-255	M	Press the button on the LCD to select the size. This code is reset every time a paper size is detected automatically. 4: A4 52: B4 82: LG <Default value> NAD: 82 JPD: 52 Others: 4	9	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Paper feeding	Paper size setting		4104		LCF	Refer to contents	0-255	M	Press the button on the LCD to select the size. This code is reset every time a paper size is detected automatically. 4: A4 64: LT <Default value> NAD: 64 Others: 4	9	
08	Setting mode	Printer	Paper feeding	PFP/LCF installation		4105		PFP/LCF installation	0	0-4	M	0: Automatic 1: PFP single-drawer type installed 2: PFP dual-drawer type installed 3: LCF installed 4: Not installed	1	
08	Setting mode	Printer	Paper feeding			4106		Paper size (A3-R) feeding/widthwise direction	420/297	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4107		Paper size (A4-R) feeding/widthwise direction	297/210	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4108		Paper size (A5-R) feeding/widthwise direction	210/148	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4109		Paper size (B4-R) feeding/widthwise direction	364/257	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4110		Paper size (B5-R) feeding/widthwise direction	257/182	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4111		Paper size (LT-R) feeding/widthwise direction	279/216	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4112		Paper size (LD-R) feeding/widthwise direction	432/279	182-432/140-297	M		10	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Paper feeding			4113		Paper size (LG-R) feeding/widthwise direction	356/216	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4114		Paper size (ST-R) feeding/widthwise direction	216/140	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4115		Paper size (COMPUTER-R) feeding/widthwise direction	356/257	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4116		Paper size (FOLIO-R) feeding/widthwise direction	330/210	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4117		Paper size (13"LG-R) feeding/widthwise direction	330/216	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4118		Paper size (8.5"X8.5"-R) feeding/widthwise direction	216/216	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4119		Paper size (Non-standard) feeding/widthwise direction	432/279	148-432/105-297	SYS		10	
08	Setting mode	Printer	Paper feeding			4120		Paper size (8K-R) feeding/widthwise direction	390/270	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4121		Paper size (16K-R) feeding/widthwise direction	270/195	182-432/140-297	M		10	
08	Setting mode	Printer	Paper feeding			4122		Paper size (A3-wide-R) feeding/widthwise direction	457/305	182-457/140-305	M		10	
08	Setting mode	Printer	Paper feeding	Paper size (A6-R) feeding/widthwise direction	PRT	4123		Paper size (A6-R) feeding/widthwise direction	148/105	148-432/105-297	M		10	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Paper feeding			4131		Feeding retry setting	0	0-1	M	0: ON 1: OFF *Default value =1 when EFI is installed	1	Yes
08	Setting mode	Printer	Paper feeding	Feeding retry setting (EFI)	Feeding retry setting (EFI)	4131		Feeding retry setting (EFI)	1	0-1	M	0: ON 1: OFF	1	
08	Setting mode	Printer	Paper feeding	Paper size for bypass feed	PPC	4140		Paper size for bypass feed	255	0-255	SYS	Press the button on the LCD to select the size. 255: UNDEF	9	
08	Setting mode	Printer	Paper feeding			4205		Paper size (LD-wide) feeding/widthwise direction	457/305	148-457/105-305	M		10	
08	Setting mode	Printer	Paper feeding			4206		Paper size (Post card) feeding/widthwise direction	148/100	148-432/100-297	M	Post card is supported only for JPN model.	10	
08	Setting mode	Printer	Fuser			4530		Fusing error temperature (Temperature of the fuser roller center thermopiles)	0	0-255	M		1	
08	Setting mode	Printer	Fuser			4531		Fusing error temperature (Temperature of the fuser roller rear thermopiles)	0	0-255	M		1	
08	Setting mode	Printer	Fuser			4532		Fusing error temperature (Temperature of the fuser roller front thermopiles)	0	0-255	M		1	
08	Setting mode	Printer	Fuser			4533		Fusing error temperature (Temperature of the pressure roller center thermopiles)	0	0-255	M		1	
08	Setting Mode	Printer	Paper feeding			4542		Switching for incorrect size jam detection	0	0-1	M	0: Enabled 1: Disabled	1	Yes
08	Setting mode	Printer	Fuser			4545		Fusing error temperature (Temperature of the pressure roller rear thermistor)	0	0-255	M		1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Paper transport	Color registration control		4546		Execution mode setting	5	0-5	M	0: Not performed automatically 1: (a) 2: (b) 3: (a) + (b) 4: (b) + (c) 5: (a) + (b) + (c) [Description] (a) Performs the adjustment automatically at warming-up. (b) Performs the adjustment automatically when printing after a specified period of time has been completed. (c) Performs the adjustment automatically at ready status after a specified period of time, or at a forcible interruption of large amount of printing.	1	Yes
08	Setting mode	Printer	Paper feeding			4547		Manual stapling time-out period	15	0-30	M	3-30sec. (In increments of 1sec.)	1	
08	Setting mode	Printer	Paper feeding			4548		Finisher model switching setting value	1	0-1	M	0: MJ-1031 1: MJ-1101/MJ-1106	1	
08	Setting Mode	Printer	Paper transport	Color registration control	Start-up time set for color registration	4550	0	1st startup	3	3-255	M	1st color registration control start-up time [unit: minute] automatically set when the color registration control has not been performed automatically at power ON, recovery from the ready status or recovery from the sleep mode.	4	Yes
08	Setting Mode	Printer	Paper transport	Color registration control	Start-up time set for color registration	4550	1	2nd or subsequent startups	30	3-255	M	Start-up time [unit: minute] for 2nd or subsequent color registration control start-ups automatically set when the color registration control has been automatically performed after a specified period of time.	4	Yes
08	Setting mode	Printer	Development	Used toner mixing paddle setting (during printing)		4551	0	Mixing start	1	0-6	M	0: 600 counts 1: 1200 counts 2: 2400 counts 3: 3000 counts 4: 3600 counts 5: 6000 counts 6: 300 counts	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Development	Used toner mixing paddle setting (during printing)		4551	1	Rotation period	3	0-6	M	0: Not agitated 1: Agitated for 1 sec. 2: Agitated for 2 sec. 3: Agitated for 3 sec. 4: Agitated for 4 sec. 5: Agitated for 5 sec. 6: Agitated for 6 sec.	4	
08	Setting mode	Printer	Paper feeding	Pausing of pushing paper		4553	0	1st drawer	1	0-3	M	0: Disabled 1: Enabled (recycled paper only) 2: Enabled (plain paper only) 3: Enabled (plain paper and recycled paper)	4	
08	Setting mode	Printer	Paper feeding	Pausing of pushing paper		4553	1	2nd drawer	1	0-3	M	0: Disabled 1: Enabled (recycled paper only) 2: Enabled (plain paper only) 3: Enabled (plain paper and recycled paper)	4	
08	Setting mode	Printer	Paper feeding	Pausing of pushing paper		4553	2	PPF upper drawer	1	0-3	M	0: Disabled 1: Enabled (recycled paper only) 2: Enabled (plain paper only) 3: Enabled (plain paper and recycled paper)	4	
08	Setting mode	Printer	Paper feeding	Pausing of pushing paper		4553	3	PPF lower drawer	1	0-3	M	0: Disabled 1: Enabled (recycled paper only) 2: Enabled (plain paper only) 3: Enabled (plain paper and recycled paper)	4	
08	Setting mode	Printer	Paper feeding	Pausing of pushing paper		4553	4	Bypass feed	1	0-3	M	0: Disabled 1: Enabled (recycled paper only) 2: Enabled (plain paper only) 3: Enabled (plain paper and recycled paper)	4	
08	Setting mode	Printer	Development	Used toner mixing paddles setting (during warming-up)		4554	0	At normal status	3	0-5	M	0: Not mixing 1: Mix for 1 second 2: Mix for 2 seconds 3: Mix for 3 seconds 4: Mix for 5 seconds 5: Mix for 8 seconds	4	
08	Setting mode	Printer	Development	Used toner mixing paddles setting (during warming-up)		4554	1	During warming-up after used toner full status detection	2	0-5	M	0: Not mixing 1: Mix for 5 second 2: Mix for 8 seconds 3: Mix for 10 seconds 4: Mix for 15 seconds 5: Mix for 20 seconds	4	
08	Setting mode	Printer	Paper transport	Color registration control		4562		Time of pausing continuous printing	5	1-60	M	Sets the time from reaching the start-up for color registration control to pausing the printing. (Unit: minute)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Development	Duplex reversing position correction control	Duplex reversing position correction control	4564		Duplex reversing position correction control	0	0-1	M	0: No correction 1: Correction	1	
08	Setting mode	Printer	Paper feeding			4567		Paper size (SRA3)feeding/widthwise direction	450/320	148-460/105-320	M		10	
08	Setting mode	Printer	Paper feeding			4568		Paper size (460 mm x 320 mm) feeding/widthwise direction	460/320	148-460/105-320	M		10	
08	Setting mode	Printer	General			4586		Checking of SRAM board data on LGC board No. 1 (Models)	Refer to contents	140-144	M	<Default value> 140: H140 (TOSHIBA e-STUDIO2040C) 141: H141 (TOSHIBA e-STUDIO2540C) 142: H142 (TOSHIBA e-STUDIO3040C) 143: H143 (TOSHIBA e-STUDIO3540C) 144: H144 (TOSHIBA e-STUDIO4540C)	2	
08	Setting mode	Printer	Fuser			4591		Fuser unit voltage determination	Refer to contents	0-1	M	0: 100 V series 1: 200 V series <Default value> NAD, JPD, TWD: 0 Others: 1	2	
08	Setting mode	Printer	Laser			4604		Polygonal motor standby rotation Shift waiting time after warm-up	6	0-9	M	0: 0 sec. 1 to 9: Setting value x 5 sec.	1	
08	Setting Mode	Printer	Paper transport	Color registration control		4605		Accumulated counter value	0	8 digits	M	Counts the number of color registration control for each starting mode. Color registration operations other than those performed at the specified timing are counted as 2.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	General	Destination		4608		Destination categorized code (for SRAM board on LGC board)	Refer to contents	0-9	M	0: NAD 1: MJD 2: JPD 3: ASD 5: TWD 6: CND 8: AUD 9: ARD <Default value> MJD: 1 NAD: 0 JPD: 2 ASD: 3 AUD: 8 TWD: 5 CND: 6 ARD: 9	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	0	Latest	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	1	Once earlier	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	2	Twice earlier	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	3	3 times earlier	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	4	4 times earlier	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Counter	History storing area of fusing error counter		4616	5	5 times earlier	0	0-255	M	0:No error 1: C411 error 2: C412 error 3: C443 error 4: Not used 5: C445, C465 error 6: C446, C466 error 7: C447 error 8: C468 error 9: C449 error 10 to 17: Not used 18: C468 error 19: C449 error 20: C468 error 21: C449 error 22: C449 error 23: C449 error 24: C447 error 25: C449 error 26: C468 error 27: C449 error 28: C468 error 29: C449 error 30: Not used 31: C4D0 error 32: C448 error 33: C467 error 34: C467 error 35 to 37: Not used 38: C450 error 39: C450 error 40: Not used 41: C451 error 42: C451 error 43 to 47: Not used 48: C450 error 49: C450 error 50: C452 error 51: C452 error 52 to 255: Not used	14	
08	Setting mode	Printer	Paper feeding			4621		Bypass paper size detection setting	0	0-1	M	<p>Detects whether the size of paper fed by bypass feeding is the same as the paper size set on the control panel. If the sizes are not the same, the warning message is displayed (Paper jam does not occur).</p> <p>When the bypass paper size detection is broken, the equipment can be used without the size detection by disabling this setting. After repair, enable this setting.</p> <p>0: Enabled 1: Disabled</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Printer	Paper feeding			4621		Bypass paper size detection setting (EFI)	1	0-1	M	<p>Detects whether the size of the paper fed by bypass feeding is the same as that set on the control panel. If the sizes are not the same, a warning message is displayed (no paper jam occurs).</p> <p>If the bypass paper size detection is not working, the equipment can be used without any size detection by disabling this setting. After repair, re-enable this setting.</p> <p>0: Enabled 1: Disabled</p> <p>Default value: 0: With EFI Default value: 1: Without EFI</p>	1	
08	Setting mode	Printer	Paper feeding	Bypass paper size detection counter	PPC/PRT	4622		Bypass paper size detection counter	0	0-65535	M	<p>This is a counter for bypass paper size detection setting. If the printing is executed with the paper size that differs from the paper size set on the control panel, the counter is counted up.</p>	1	
08	Setting mode	Printer	All clear	Destination		4659		Storing area for SYS destination information	Refer to contents	0-255	M	<p>Stores SYS-SRAM destination data when code 08-9090 is performed.</p> <p>0: MJD 1: NAD 2: JPD 3: AUD 4: CND 5: KRD 6: TWD 7: SAD 8: ASU 9: ASD 10: ARD 11: BMJ</p> <p><Default value> JPD: 2 NAD: 1 MJD: 0 ASD: 9 AUD: 3 TWD: 6 CND: 4 ARD: 10</p>	2	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Paper feeding			4675		Paper ejection setting for size error of bypass feeding	2	0-2	M	0: Disabled 1: Position change of jammed paper 2: Ejects paper	1	
08	Setting Mode	Printer	Paper feeding			4675		Paper ejection setting for size error of bypass feeding (EFI)	0	0-2	M	0: Disabled 1: Position change of jammed paper 2: Ejects paper	1	
08	Setting Mode	Printer	Paper feeding			4676		Counter of paper ejection for size error of bypass feeding	0	0-65535	M	Number of paper ejection	1	
08	Setting Mode	Printer	General			4686		Printer ROM version display at printer all clear	-	-	M	Displays the low 2 or 3 digits of the printer ROM version (08-9901) when printer all clear (08-9090) is performed. The version number is described by alphanumeric characters.	2	
08	Setting Mode	Printer	IC chip	Board information of toner cartridge		4689	0	Y	0	0-255	M	0: Normal 1: Connection error 2: Information checking abnormality 3: Access abnormality 4: Occurrence of C910 5: Occurrence of C911	4	
08	Setting Mode	Printer	IC chip	Board information of toner cartridge		4689	1	M	0	0-255	M	0: Normal 1: Connection error 2: Information checking abnormality 3: Access abnormality 4: Occurrence of C910 5: Occurrence of C911	4	
08	Setting Mode	Printer	IC chip	Board information of toner cartridge		4689	2	C	0	0-255	M	0: Normal 1: Connection error 2: Information checking abnormality 3: Access abnormality 4: Occurrence of C910 5: Occurrence of C911	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	IC chip	Board information of toner cartridge		4689	3	K	0	0-255	M	0: Normal 1: Connection error 2: Information checking abnormality 3: Access abnormality 4: Occurrence of C910 5: Occurrence of C911	4	
08	Setting Mode	Printer	Paper feeding			4691		Switching of the display of jam location in the drawer when paper feed jam occurs	1	0-1	M	0: Disabled 1: Enabled	1	
08	Setting Mode	Printer	Image control			4744		Self check interval Setting	0	0-2	M	0: STANDARD 1: LONGER 2: LONGEST * Select "0" to give higher priority to the image	1	
08	Setting mode	Printer	Image control			4766		DRAM phase adjustment control setting	1	0-1	M	0: Invalid 1: Valid	1	
08	Setting mode	Process	Development	Toner near empty		5155		Toner near empty threshold setting	1	0-5	M	0: The period from the appearance of the toner near-empty sign to the actual complete consumption of the toner is set to long. 1: Normal (Default) 2: The period from the appearance of the toner near-empty sign to the actual complete consumption of the toner is set to short. 4: Toner near-empty status threshold value: (%)* 5: Toner near-empty status threshold value: (Number of sheets)* * The toner near-empty status is displayed if the remaining amount of toner is equal to or less than the amount set in 08-5810/5811 (percentage or number of sheets).	1	Yes
08	Setting mode	Process	Development	Toner near empty	Fine adjustment of threshold for displaying remaining toner and toner near empty	5156	0	Y	83	50-150	M	Adjusts the threshold value for displaying remaining amount of toner and toner near empty. Display threshold value = default threshold value x setting value/100 (unit: %)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Development	Toner near empty	Fine adjustment of threshold for displaying remaining toner and toner near empty	5156	1	M	83	50-150	M	Adjusts the threshold value for displaying remaining amount of toner and toner near empty. Display threshold value = default threshold value x setting value/100 (unit: %)	4	
08	Setting mode	Process	Development	Toner near empty	Fine adjustment of threshold for displaying remaining toner and toner near empty	5156	2	C	83	50-150	M	Adjusts the threshold value for displaying remaining amount of toner and toner near empty. Display threshold value = default threshold value x setting value/100 (unit: %)	4	
08	Setting mode	Process	Development	Toner near empty	Fine adjustment of threshold for displaying remaining toner and toner near empty	5156	3	K	83	50-150	M	Adjusts the threshold value for displaying remaining amount of toner and toner near empty. Display threshold value = default threshold value x setting value/100 (unit: %)	4	
08	Setting Mode	Process				5212		Control for recovery from the sleep mode	1	0-1	M	0: Disabled 1: Enabled	1	
08	Setting Mode	Process	Fuser	Paper correction of allowed temp. at READY after recovery from sleep mode	Paper correction of allowed temp. at READY after recovery from sleep mode	5244		Paper correction of allowed temp. at READY after recovery from sleep mode	Refer to contents	0-3	M	0: Invalid 1: 64 to 70g paper 2: 71 to 80g paper 3: 81 to 90g paper <Default value> JPD: 1 NAD/TWD: 0 Others: 2	1	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	0	Center / Normal length paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	1	Side / Normal length paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	2	Fuser roller / Normal length paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	3	Center / Extra long size paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	4	Side / Extra long size paper	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Thick paper 4)	black	5277	5	Fuser roller / Extra long size paper	6	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 4)		5280	0	Normal length paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Thick paper 4)		5280	1	Extra long size paper	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Sub heater)	black	5285	0	At normal temperatures	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Sub heater)	color	5285	1	At normal temperatures	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Sub heater)	black	5285	2	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> JPD: 8 Others: 9	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Sub heater)	color	5285	3	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> JPD: 8 Others: 9	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Recycled paper)	black	5293	0	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Recycled paper)	color	5293	1	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Recycled paper)	black	5293	2	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Center / Recycled paper)	color	5293	3	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Recycled paper)	black	5294	0	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Recycled paper)	color	5294	1	At normal temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 4 e-STUDIO4540C: 5	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Recycled paper)	black	5294	2	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Side / Recycled paper)	color	5294	3	At low temperatures	Refer to contents	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C <Default value> e-STUDIO2040C/2540C/3040C/3540C: 6 e-STUDIO4540C: 7	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing/ Recycled paper (Sub heater)	black	5295	0	At normal temperatures	5	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing/ Recycled paper (Sub heater)	color	5295	1	At normal temperatures	5	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing/ Recycled paper (Sub heater)	black	5295	2	At low temperatures	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing/ Recycled paper (Sub heater)	color	5295	3	At low temperatures	7	0-16	M	0: 120°C 1: 125°C 2: 130°C 3: 135°C 4: 140°C 5: 145°C 6: 150°C 7: 155°C 8: 160°C 9: 165°C 10: 170°C 11: 175°C 12: 180°C 13: 185°C 14: 190°C 15: 195°C 16: 200°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Recycled paper)	black	5296	0	At normal temperatures	4	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Recycled paper)	color	5296	1	At normal temperatures	4	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Recycled paper)	black	5296	2	At low temperatures	4	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Fusing temperature during printing (Pressure roller / Recycled paper)	color	5296	3	At low temperatures	4	0-16	M	0: 90°C 1: 95°C 2: 100°C 3: 105°C 4: 110°C 5: 115°C 6: 120°C 7: 125°C 8: 130°C 9: 135°C 10: 140°C 11: 145°C 12: 150°C 13: 155°C 14: 160°C 15: 165°C 16: 170°C	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Recycled paper / At low temperatures)	black	5299	0	Pre-running time for first printing (Recycled paper / At low temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Recycled paper / At low temperatures)	color	5299	1	Pre-running time for first printing (Recycled paper / At low temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Plain paper / At normal temperatures)	black	5308	0	Pre-running time for first printing (Plain paper / At normal temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Plain paper / At normal temperatures)	color	5308	1	Pre-running time for first printing (Plain paper / At normal temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Pre-running time for first printing (Recycled paper / At normal temperatures)	black	5309	0	Pre-running time for first printing (Recycled paper / At normal temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Pre-running time for first printing (Recycled paper / At normal temperatures)	color	5309	1	Pre-running time for first printing (Recycled paper / At normal temperatures)	0	0-16	M	0: Invalid 1: 0 sec. 2: 2 sec. 3: 3 sec. 4: 4 sec. 5: 5 sec. 6: 6 sec. 7: 7 sec. 8: 8 sec. 9: 10 sec. 10: 12 sec. 11: 14 sec. 12: 16 sec. 13: 18 sec. 14: 20 sec. 15: 25 sec. 16: 30 sec.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At normal temperatures)	black	5310	0	Plain paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At normal temperatures)	color	5310	1	Plain paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At normal temperatures)	black	5310	2	Recycled paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Fuser	Applicable period of pre-running time for first printing (At normal temperatures)	color	5310	3	Recycled paper	8	0-11	M	0: Invalid (always ON) 1: 0 min. 2: 0.5 min. 3: 1 min. 4: 2 min. 5: 3 min. 6: 5 min. 7: 7 min. 8: 10 min. 9: 15 min. 10: 30 min. 11: 60 min.	4	
08	Setting Mode	Counter	Maintenance	PM counter	M	5550		Setting value	Refer to contents	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed <Default> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit: page]	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	M	5551		Setting value	187000	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed [Unit: count]	1	Yes
08	Setting Mode	Counter	Maintenance	PM counter	C	5552		Setting value	Refer to contents	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed <Default> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit: page]	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	C	5553		Setting value	187000	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed [Unit: count]	1	Yes
08	Setting mode	Counter	Maintenance		black	5554		Setting value of PM counter / Developer material (K)	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit: page]	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Maintenance	Setting value of PM time counter display/0 clearing / Developer material (K)	black	5555		Setting value of PM time counter display/0 clearing / Developer material (K)	138000	8 digits	M	Time accumulating counter	1	
08	Setting mode	Counter	Maintenance	Setting value of PM counter / Developer material (Y)	color	5556		Setting value of PM counter / Developer material (Y)	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit. page]	1	
08	Setting mode	Counter	Maintenance	Setting value of PM time counter display/0 clearing / Developer material (Y)	color	5557		Setting value of PM time counter display/0 clearing / Developer material (Y)	138000	8 digits	M	Time accumulating counter	1	
08	Setting mode	Counter	Maintenance	Setting value of PM counter / Developer material (M)	color	5558		Setting value of PM counter / Developer material (M)	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit. page]	1	
08	Setting mode	Counter	Maintenance	Setting value of PM time counter display/0 clearing / Developer material (M)	color	5559		Setting value of PM time counter display/0 clearing / Developer material (M)	138000	8 digits	M	Time accumulating counter	1	
08	Setting mode	Counter	Maintenance	Setting value of PM counter / Developer material (C)	color	5560		Setting value of PM counter / Developer material (C)	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit. page]	1	
08	Setting mode	Counter	Maintenance	Setting value of PM time counter display/0 clearing / Developer material (C)	color	5561		Setting value of PM time counter display/0 clearing / Developer material (C)	138000	8 digits	M	Time accumulating counter	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Maintenance	Setting value of PM counter / Parts	color	5562		Setting value of PM counter / Parts	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80000 e-STUDIO2540C: 100000 e-STUDIO3040C: 120000 e-STUDIO3540C/4540C: 140000 [Unit. page]	1	
08	Setting mode	Counter	Maintenance	Setting value of PM time counter display/0 clearing / Parts	color	5563		Setting value of PM time counter display/0 clearing / Parts	340000	8 digits	M	Time accumulating counter	1	
08	Setting Mode	Counter	Maintenance	PM counter	M	5564		Current value	0	8 digits	M	Counts up when the registration sensor is ON. 0: clear (Unit: page) same as 08-6254-0	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	M	5565		Current value	0	8 digits	M	Counts the drum driving time. 0: clear (Unit: 1 count = 2 seconds) *Decelerating/Accelerating mode; 1 count = 4 seconds Same as 08-6254-3	1	Yes
08	Setting Mode	Counter	Maintenance	PM counter	C	5566		Current value	0	8 digits	M	Counts up when the registration sensor is ON. 0: clear (Unit: page) same as 08-6256-0	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	C	5567		Current value	0	8 digits	M	Counts the drum driving time. 0: clear (Unit: 1 count = 2 seconds) *Decelerating/Accelerating mode; 1 count = 4 seconds Same as 08-6256-3	1	Yes
08	Setting mode	Counter	Maintenance	Current value of PM counter Display/0 clearing / Developer material (K)	black	5568		Current value of PM counter Display/0 clearing / Developer material (K)	0	8 digits	M	Counts up when the registration sensor is ON.	1	
08	Setting mode	Counter	Maintenance	Current value of PM time counter / Developer material (K)	black	5569		Current value of PM time counter / Developer material (K)	0	8 digits	M	Counts the drum driving time.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Maintenance	Current value of PM counter Display/0 clearing / Developer material (Y)	color	5570		Current value of PM counter Display/0 clearing / Developer material (Y)	0	8 digits	M	Counts up when the registration sensor is ON.	1	
08	Setting mode	Counter	Maintenance	Current value of PM time counter / Developer material (Y)	color	5571		Current value of PM time counter / Developer material (Y)	0	8 digits	M	Counts the drum driving time.	1	
08	Setting mode	Counter	Maintenance	Current value of PM counter Display/0 clearing / Developer material (M)	color	5572		Current value of PM counter Display/0 clearing / Developer material (M)	0	8 digits	M	Counts up when the registration sensor is ON.	1	
08	Setting mode	Counter	Maintenance	Current value of PM time counter / Developer material (M)	color	5573		Current value of PM time counter / Developer material (M)	0	8 digits	M	Counts the drum driving time.	1	
08	Setting mode	Counter	Maintenance	Current value of PM counter Display/0 clearing / Developer material (C)	color	5574		Current value of PM counter Display/0 clearing / Developer material (C)	0	8 digits	M	Counts up when the registration sensor is ON.	1	
08	Setting mode	Counter	Maintenance	Current value of PM time counter / Developer material (C)	color	5575		Current value of PM time counter / Developer material (C)	0	8 digits	M	Counts the drum driving time.	1	
08	Setting mode	Counter	Maintenance	Current value of PM counter Display/0 clearing / Parts	color	5576		Current value of PM counter Display/0 clearing / Parts	0	8 digits	M	Counts up when the registration sensor is ON.	1	
08	Setting mode	Counter	Maintenance	Current value of PM time counter / Parts	color	5577		Current value of PM time counter / Parts	0	8 digits	M	Counts the drum driving time.	1	
08	Setting mode	Counter	Maintenance			5578		Switching of output pages/ driving counts at PM / Y	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Maintenance			5579		Switching of output pages/ driving counts at PM / M	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5580		Switching of output pages/ driving counts at PM / C	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5581		Switching of output pages/ driving counts at PM / Developer material (K)	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5582		Switching of output pages/ driving counts at PM / Developer material (Y)	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5583		Switching of output pages/ driving counts at PM / Developer material (M)	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5584		Switching of output pages/ driving counts at PM / Developer material (C)	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Maintenance			5585		Switching of output pages/ driving counts at PM / Parts	0	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5600	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (K)		5601	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5602	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (Y)		5603	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5604	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (M)		5605	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5606	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer filter (C)		5607	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (%)	5810	0	K	3	1-99	M	This code is used when the value of 08-5155 is set to "4". Use this code to specify the threshold value (unit: %) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (%)	5810	1	Y	3	1-99	M	This code is used when the value of 08-5155 is set to "4". Use this code to specify the threshold value (unit: %) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (%)	5810	2	M	3	1-99	M	This code is used when the value of 08-5155 is set to "4". Use this code to specify the threshold value (unit: %) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (%)	5810	3	C	3	1-99	M	This code is used when the value of 08-5155 is set to "4". Use this code to specify the threshold value (unit: %) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (number of sheets)	5811	0	K	1000	1-9999	M	This code is used when the value of 08-5155 is set to "5". Use this code to specify the threshold value (unit: number of sheets) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (number of sheets)	5811	1	Y	1000	1-9999	M	This code is used when the value of 08-5155 is set to "5". Use this code to specify the threshold value (unit: number of sheets) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (number of sheets)	5811	2	M	1000	1-9999	M	This code is used when the value of 08-5155 is set to "5". Use this code to specify the threshold value (unit: number of sheets) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting mode	Process	Development	Toner near empty	Toner near-empty status threshold value setting (number of sheets)	5811	3	C	1000	1-9999	M	This code is used when the value of 08-5155 is set to "5". Use this code to specify the threshold value (unit: number of sheets) for displaying the toner near-empty status. The accuracy of value is influenced by usage environment or originals.	4	
08	Setting Mode	Counter	Double count	For fee charging	Paper size	6010		Large-sized paper	Refer to contents	0-2	M	0: Counted as 1 1: Counted as 2 2: Counted as 1 (Mechanical counter is double counter) <Default value> JPD: 0 Others: 1	1	Yes
08	Setting Mode	Counter	Double count	For fee charging	Paper size	6011		Definition setting of large sized paper	0	0-1	M	0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP	1	Yes
08	Setting Mode	Counter	Double count	For PM	Paper size	6012		Large-sized paper	1	0-1	M	0: Counted as 1 1: Counted as 2	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Double count	For PM	Paper size	6013		Definition setting of large sized paper	1	0-1	M	0: A3/LD 1: A3/LD/B4/LG/FOLIO/COMP	1	Yes
08	Setting Mode	Counter	Double count	For PM	Paper type	6014		Thick paper	1	0-1	M	0: Counted as 1 1: Counted as 2	1	Yes
08	Setting Mode	Counter	Double count	For PM	Paper type	6015		OHP	1	0-1	M	0: Counted as 1 1: Counted as 2	1	Yes
08	Setting Mode	Counter	Double count	For PM	Paper type	6017		Tab paper	1	0-1	M	0: Counted as 1 1: Counted as 2	1	Yes
08	Setting Mode	Counter	Double count	For PM	Paper type	6018		Count setting of special paper	1	0-1	M	0: Counted as 1 1: Counted as 2	1	Yes
08	Setting mode	Counter	Counter	Display of number of output pages at Full Color Mode in Copier Function		6060	0	Large	0	8 digits	SYS	Counts the number of output pages at the Full Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Full Color Mode in Copier Function		6060	1	Small	0	8 digits	SYS	Counts the number of output pages at the Full Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Full Color Mode in Printer Function		6061	0	Large	0	8 digits	SYS	Counts the number of output pages at the Full Color Mode in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Counter	Display of number of output pages at Full Color Mode in Printer Function		6061	1	Small	0	8 digits	SYS	Counts the number of output pages at the Full Color Mode in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Twin Color / Monocolor Mode in Copier Function		6062	0	Large	0	8 digits	SYS	Counts the number of output pages at the Twin Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Twin Color / Monocolor Mode in Copier Function		6062	1	Small	0	8 digits	SYS	Counts the number of output pages at the Twin Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Black Mode in Copier Function		6063	0	Large	0	8 digits	SYS	Counts the number of output pages at the Black Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Black Mode in Copier Function		6063	1	Small	0	8 digits	SYS	Counts the number of output pages at the Black Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Counter	Display of number of output pages at Black Mode in Printer Function		6064	0	Large	0	8 digits	SYS	Counts the number of output pages at the Black Mode in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at Black Mode in Printer Function		6064	1	Small	0	8 digits	SYS	Counts the number of output pages at the Black Mode in the Printer Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at List Print Mode		6065	0	Large	0	8 digits	SYS	Counts the number of output pages at the List Print Mode Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages at List Print Mode		6065	1	Small	0	8 digits	SYS	Counts the number of output pages at the List Print Mode Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of output pages in FAX Function		6066	0	Large	0	8 digits	SYS	Counts the number of output pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Counter	Display of number of output pages in FAX Function		6066	1	Small	0	8 digits	SYS	Counts the number of output pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Full Color Mode in Copier Function		6067	0	Large	0	8 digits	SYS	Counts the number of scanning pages at the Full Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Full Color Mode in Copier Function		6067	1	Small	0	8 digits	SYS	Counts the number of scanning pages at the Full Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Color Mode in Network Scanning Function		6068	0	Large	0	8 digits	SYS	Counts the number of scanning pages at the Full Color Mode in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Color Mode in Network Scanning Function		6068	1	Small	0	8 digits	SYS	Counts the number of scanning pages at the Full Color Mode in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Counter	Display of number of scanning pages at Twin Color / Monocolor Mode in Copier Function		6069	0	Large	0	8 digits	SYS	Counts the number of scanning pages at the Twin Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Twin Color / Monocolor Mode in Copier Function		6069	1	Small	0	8 digits	SYS	Counts the number of scanning pages at the Twin Color Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Black Mode in Copier Function		6070	0	Large	0	8 digits	SYS	Counts the number of scanning pages at the Black Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages at Black Mode in Copier Function		6070	1	Small	0	8 digits	SYS	Counts the number of scanning pages at the Black Mode in the Copier Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages in FAX Function		6071	0	Large	0	8 digits	SYS	Counts the number of scanning pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Counter	Display of number of scanning pages in FAX Function		6071	1	Small	0	8 digits	SYS	Counts the number of scanning pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages in Network Scanning Function		6072	0	Large	0	8 digits	SYS	Counts the number of scanning pages in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of scanning pages in Network Scanning Function		6072	1	Small	0	8 digits	SYS	Counts the number of scanning pages in the Scanning Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of received pages in FAX Function		6074	0	Large	0	8 digits	SYS	Counts the number of received pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	
08	Setting mode	Counter	Counter	Display of number of received pages in FAX Function		6074	1	Small	0	8 digits	SYS	Counts the number of received pages in the FAX Function according to its size (large/small). Large: Number of output pages of large-sized paper defined at 08-6011 Small: Number of output pages other than set as large-sized paper	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Custom counter	For dealer		6080		Enabling/Disabling custom counter	0	0-1	SYS	When this setting is enabled, the custom counter of total counter is enabled. Related code: 08-6088, 6089. When this setting is enabled, 08-6010 does not affect the total counter. Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0: Disabled 1: Enabled	1	Yes
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Scanning	6081	0	Black/Gray	0	0-9999	SYS	Weights subtraction of scanning from department/user Job Quota and addition of Scan Counter to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	Yes
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Scanning	6081	1	Full Color	0	0-9999	SYS	Weights subtraction of scanning from department/user Job Quota and addition of Scan Counter to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	Yes
08	Setting Mode	Counter	Double count setting for paper type			6083	1	Thick1/2/3/4 (Back)	Refer to contents	0-1	SYS	Sets the weight of fee charging count for printing per page. Scan counter and fax counter are not influenced. 0: Single 1: Double <Default value> JPD/CND: 0 Others: 1	4	Yes
08	Setting Mode	Counter	Double count setting for paper type			6083	2	Special1/2 (Back)	Refer to contents	0-1	SYS	Sets the weight of fee charging count for printing per page. Scan counter and fax counter are not influenced. 0: Single 1: Double <Default value> JPD/CND: 0 Others: 1	4	Yes
08	Setting Mode	Counter	Double count setting for paper type			6083	3	Transparency	Refer to contents	0-1	SYS	Sets the weight of fee charging count for printing per page. Scan counter and fax counter are not influenced. 0: Single 1: Double <Default value> JPD/CND: 0 Others: 1	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Double count setting for paper type			6083	4	Envelope	Refer to contents	0-1	SYS	Sets the weight of fee charging count for printing per page. Scan counter and fax counter are not influenced. 0: Single 1: Double <Default value> JPD/CND: 0 Others: 1	4	Yes
08	Setting Mode	Counter	Double count setting for paper type			6083	5	Tab paper	Refer to contents	0-1	SYS	Sets the weight of fee charging count for printing per page. Scan counter and fax counter are not influenced. 0: Single 1: Double <Default value> JPD/CND: 0 Others: 1	4	Yes
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator		6084		Enabling/Disabling custom counter/Job Quota	0	0-1	SYS	When this setting is enabled, the custom counter and Job Quota of department/user are enabled. Related code: 08-6081, 6085. When this setting is enabled, 08-6010 does not affect the counter/Quota of department/user. 0: Disabled 1: Enabled	1	Yes
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	0	Black/Small	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	1	Black/Large	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	2	Full color/Small	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	3	Full color/Large	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	4	Twin Color/Monocolor/Small	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter/Job Quota	For administrator	Weighting/Print	6085	5	Twin Color/Monocolor/Large	100	0-9999	SYS	Weights subtraction of printing from department/user Job Quota and addition of printing to Custom Counter. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Counter Settings			6087		Color/Black quota selection at twin/mono color count	0	0-1	SYS	When the pages are counted for twin/mono color counter, this code sets whether the pages are subtracted from ColorQuota or BlackQuota. Not all the pages of TwinColor/MonoColor are subtracted. The pages assigned to twin/mono color counter are subtracted. The setting of this code is enabled only in the Color/BlackQuota mode and not enabled in the JobQuota mode. If the value of this code is set to "0" (ColorQuota), an error occurs if a user without color permission performs twin color printing. Note that the same error occurs in the JobQuota mode. 0: ColorQuota 1: BlackQuota Related code: 08-6084, 08-9128, 08-9892	1	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Scanning	6088	0	Black/Gray	0	0-9999	SYS	Weights addition of Scan Counter to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Scanning	6088	1	Full Color	0	0-9999	SYS	Weights addition of Scan Counter to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	0	Black/Small	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	1	Black/Large	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	2	Full color/Small	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	3	Full color/Large	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	4	Twin Color/Monocolor/Small	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	
08	Setting Mode	Counter	Custom counter	For dealer	Weighting/Print	6089	5	Twin Color/Monocolor/Large	100	0-9999	SYS	Weights addition of print to Custom Counter (Total Counter). Since the count is calculated based on the existing Large/Small counter, the count before changing this setting is also included in the count. 0 (weight: 0.00) – 9999 (weight: 99.99)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Custom counter	For dealer		6090		Truncation after decimal point of custom counter value	0	0-1	SYS	Sets the display method of custom counter value of total counter. When the value is displayed as integer, the total counter value (total value of each color) is sum of the truncated custom counter value of each color. Note that the value is slightly decreases compared to display with decimal point. 0: Displays 2 decimal places. 1: Displays integer (Truncation after decimal point)	1	
08	Setting Mode	Counter	Custom counter	For dealer		6091		Output of annotation for custom counter	1	0-1	SYS	Sets whether the annotation "Custom Counter is result of..." for custom counter of total counter is output or not. 0: Annotation is not output 1: Annotation is output	1	
08	Setting Mode	Counter	Counter of Paper feed			6110		1st drawer	0	8 digits	M	Counts the number of sheets fed from 1st drawer.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6111		2nd drawer	0	8 digits	M	Counts the number of sheets fed from 2nd drawer.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6112		Bypass feed	0	8 digits	M	Counts the number of sheets fed from bypass feed.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6113		LCF	0	8 digits	M	Counts the number of sheets fed from LCF.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6114		PFP upper drawer	0	8 digits	M	Counts the number of sheets fed from PFP upper drawer.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6115		PFP lower drawer	0	8 digits	M	Counts the number of sheets fed from PFP lower drawer.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6116		ADU	0	8 digits	M	Counts the number of output pages of duplex printing.	2	Yes
08	Setting Mode	Counter	Counter of Paper feed			6117		RADF	0	8 digits	SYS	Counts the number of originals fed from RADF.	2	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Maintenance	PM counter	K	6190		Setting value	Refer to contents	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed <Default> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit: page]	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	K	6191		Setting value	187000	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed [Unit: count]	1	Yes
08	Setting Mode	Counter	Maintenance	PM counter	Y	6192		Setting value	Refer to contents	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed <Default> e-STUDIO2040C: 44000 e-STUDIO2540C: 55000 e-STUDIO3040C: 66000 e-STUDIO3540C/4540C: 77000 [Unit: page]	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	Y	6193		Setting value	187000	8 digits	M	Sets the threshold for displaying a message for PM timing. 0: Not displayed [Unit: count]	1	Yes
08	Setting Mode	Counter	Maintenance	PM counter	K	6194		Current value	0	8 digits	M	Counts up when the registration sensor is ON. 0: clear (Unit: page) same as 08-6250-0	1	Yes
08	Setting Mode	Counter	Maintenance	PM drive counter	K	6195		Current value	0	8 digits	M	Counts the drum driving time. 0: clear (Unit: 1 count = 2 seconds) *Decelerating/Accelerating mode; 1 count = 4 seconds Same as 08-6250-3	1	Yes
08	Setting Mode	Counter	Maintenance	PM counter	Y	6196		Current value	0	8 digits	M	Counts up when the registration sensor is ON. 0: clear (Unit: page) same as 08-6252-0	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Maintenance	PM drive counter	Y	6197		Current value	0	8 digits	M	Counts the drum driving time. 0: clear (Unit: 1 count = 2 seconds) *Decelerating/Accelerating mode; 1 count = 4 seconds Same as 08-6252-3	1	Yes
08	Setting mode	Counter	Maintenance	Switching of output pages/ driving counts at PM	Switching of output pages/ driving counts at PM	6198		Switching of output pages/ driving counts at PM	1	0-2	M	Selects the reference to notify the PM timing. (The message is displayed on the LCD screen.) 0: PM counter (The number of output pages is set at 08-6190.) 1: PM time counter (The timing is set at 08-6191.) 2: Whichever comes faster	1	
08	Setting mode	Counter	Image processing			6211		Accumulated counter of output pages since the performing of image quality control	0	4 digits	M	Cleared to "0" by the image quality closed-loop control. Counts up with the number of printing job received after this control.	2	
08	Setting mode	Counter	Image processing			6223		Number of output pages (Thick paper 4)	0	8 digits	M	Counts up when the registration sensor is ON in the thick paper 4 mode.	1	
08	Setting mode	Counter	Image processing			6225		Number of output pages (Thick paper 1)	0	8 digits	M	Counts up when the registration sensor is ON in the thick paper 1 mode.	1	
08	Setting mode	Counter	Image processing			6226		Number of output pages (Thick paper 2)	0	8 digits	M	Counts up when the registration sensor is ON in the thick paper 2 mode.	1	
08	Setting mode	Counter	Image processing			6227		Number of output pages (Thick paper 3)	0	8 digits	M	Counts up when the registration sensor is ON in the thick paper 3 mode.	1	
08	Setting mode	Counter	Image processing			6228		Number of output pages (OHP film)	0	8 digits	M	Counts up when the registration sensor is ON in the OHP film mode.	1	
08	Setting mode	Counter	Main charger			6229		Main charger needle electrode cleaning counter display/0 clearing	0	8 digits	M	Does not count up when cleaning is not effective.	1	
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6230		1st drawer	0	8 digits	M	Counts the number of times of the feeding retry from the 1st drawer.	1	Yes
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6231		2nd drawer	0	8 digits	M	Counts the number of times of the feeding retry from the 2nd drawer.	1	Yes
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6232		PPF upper drawer	0	8 digits	M	Counts the number of times of feeding retries from the PPF upper drawer.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6233		PFP lower drawer	0	8 digits	M	Counts the number of times of feeding retries from the PFP upper drawer.	1	Yes
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6234		Bypass feed	0	8 digits	M	Counts the number of times of the feeding retry from the bypass tray.	1	Yes
08	Setting Mode	Counter	Paper feeding	Feeding retry counter		6235		LCF	0	8 digits	M	Counts the number of times of the feeding retry from the LCF.	1	Yes
08	Setting mode	Counter	Paper feeding			6236		Feeding retry counter upper limit value (1st drawer)	10	8 digits	M	<p>When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value.</p> <p>* Feeding retry counter upper limit value</p> <p>In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed.</p> <p>Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Paper feeding			6237		Feeding retry counter upper limit value (2nd drawer)	10	8 digits	M	<p>When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value.</p> <p>* Feeding retry counter upper limit value In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed.</p> <p>Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Paper feeding			6238		Feeding retry counter upper limit value (PFP upper drawer)	10	8 digits	M	<p>When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value.</p> <p>* Feeding retry counter upper limit value In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed.</p> <p>Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Paper feeding			6239		Feeding retry counter upper limit value (PFP lower drawer)	10	8 digits	M	<p>When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value.</p> <p>* Feeding retry counter upper limit value</p> <p>In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed.</p> <p>Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Paper feeding			6240		Feeding retry counter upper limit value (bypass feed)	20	8 digits	M	<p>When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value.</p> <p>* Feeding retry counter upper limit value</p> <p>In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed.</p> <p>Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.</p>	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Paper feeding			6241		Feeding retry counter upper limit value (LCF)	10	8 digits	M	When the number of feeding retry (08-6230 to 6235) exceeds the setting value, the feeding retry will not be performed subsequently. In case "0" is set as a setting value, however, the feeding retry continues regardless of the counter setting value. * Feeding retry counter upper limit value In this equipment, a toner image is formed on the transfer belt prior to a paper feeding. When the feeding retry occurs and the transport timing is delayed, the toner image on the transfer belt is cleaned off without the 2nd transfer since the paper cannot be reached for the 2nd transfer process. After that, the toner image formation is retried while the paper is waited. In this case, the toner for this image formation is consumed wastefully since the toner image on the transfer belt is already cleaned off, even though the printing is normally completed. Therefore, note that the excessive toner will be consumed consequently when the upper limit value of feeding retry counter is set larger or set as "0" (no limit). The toner is also consumed wastefully when the paper misfeeding occurs. Replace the roller at earlier timing if the paper misfeedings have occurred frequently.	1	
08	Setting mode	Counter	Counter			6243		Counter for special paper	0	8 digits	M	Counts up when the registration sensor is ON in the special paper mode.	1	
08	Setting mode	Counter	Counter			6244		Counter for tab paper	0	8 digits	M	Counts up when the registration sensor is ON in the tab paper mode.	1	
08	Setting mode	Counter	Counter	Counter for period of toner cartridge rotation time		6246	0	Y	0	8 digits	M	Counts up the period of rotation time of toner cartridge.	4	
08	Setting mode	Counter	Counter	Counter for period of toner cartridge rotation time		6246	1	M	0	8 digits	M	Counts up the period of rotation time of toner cartridge.	4	
08	Setting mode	Counter	Counter	Counter for period of toner cartridge rotation time		6246	2	C	0	8 digits	M	Counts up the period of rotation time of toner cartridge.	4	
08	Setting mode	Counter	Counter	Counter for period of toner cartridge rotation time		6246	3	K	0	8 digits	M	Counts up the period of rotation time of toner cartridge.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	Toner	Backup counter for rotation time of toner refill motor		6249	0	Y	0	8 digits	M	The rotation time of toner refill motor is stored when the toner cartridge becomes empty.	14	
08	Setting mode	Counter	Toner	Backup counter for rotation time of toner refill motor		6249	1	M	0	8 digits	M	The rotation time of toner refill motor is stored when the toner cartridge becomes empty.	14	
08	Setting mode	Counter	Toner	Backup counter for rotation time of toner refill motor		6249	2	C	0	8 digits	M	The rotation time of toner refill motor is stored when the toner cartridge becomes empty.	14	
08	Setting mode	Counter	Toner	Backup counter for rotation time of toner refill motor		6249	3	K	0	8 digits	M	The rotation time of toner refill motor is stored when the toner cartridge becomes empty.	14	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6250	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum		6251	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6252	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(Y)		6253	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6254	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(M)		6255	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6256	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Photoconductive drum(C)		6257	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6258	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(K)		6259	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6260	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(Y)		6261	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6262	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(M)		6263	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6264	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Drum cleaning blade(C)		6265	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 160,000 e-STUDIO2540C: 200,000 e-STUDIO3040C: 240,000 e-STUDIO3540C/4540C: 280,000	4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	4	Recommended driving counts to be replaced	680000	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6270	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer facing roller cleaning mylar		6271	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6274	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(K)		6275	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6276	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(Y)		6277	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6278	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(M)		6279	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6280	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger grid(C)		6281	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6282	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(K)		6283	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6284	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(Y)		6285	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6286	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(M)		6287	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6288	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger (Wire/needle)(C)		6289	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6290	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(K)		6291	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6292	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(Y)		6293	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6294	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(M)		6295	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6296	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Charger cleaning pad(C)		6297	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	4	Recommended driving counts to be replaced	187000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6298	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Ozone filter (Rear)		6299	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer material(K)		6300	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6300	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(K)		6301	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6302	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(Y)		6303	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6304	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(M)		6305	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Developer material(C)		6306	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 44,000 e-STUDIO2540C: 55,000 e-STUDIO3040C: 66,000 e-STUDIO3540C/4540C: 77,000	4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	4	Recommended driving counts to be replaced	138000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6306	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Developer material(C)		6307	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 400,000 e-STUDIO2540C: 500,000 e-STUDIO3040C: 600,000 e-STUDIO3540C/4540C: 700,000	4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	4	Recommended driving counts to be replaced	1700000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6314	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer K roller)		6315	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 400,000 e-STUDIO2540C: 500,000 e-STUDIO3040C: 600,000 e-STUDIO3540C/4540C: 700,000	4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	4	Recommended driving counts to be replaced	1700000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6316	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer Y roller)		6317	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 400,000 e-STUDIO2540C: 500,000 e-STUDIO3040C: 600,000 e-STUDIO3540C/4540C: 700,000	4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	4	Recommended driving counts to be replaced	1700000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6318	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer M roller)		6319	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 400,000 e-STUDIO2540C: 500,000 e-STUDIO3040C: 600,000 e-STUDIO3540C/4540C: 700,000	4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	4	Recommended driving counts to be replaced	1700000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6320	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer (Wire/Roller/1st transfer C roller)		6321	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Transfer belt		6328	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 400,000 e-STUDIO2540C: 500,000 e-STUDIO3040C: 600,000 e-STUDIO3540C/4540C: 700,000	4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	4	Recommended driving counts to be replaced	1700000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6328	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt		6329	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 160,000 e-STUDIO2540C: 200,000 e-STUDIO3040C: 240,000 e-STUDIO3540C/4540C: 280,000	4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	4	Recommended driving counts to be replaced	680000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6332	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Transfer belt cleaning blade		6333	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 160,000 e-STUDIO2540C: 200,000 e-STUDIO3040C: 240,000 e-STUDIO3540C/4540C: 280,000	4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	4	Recommended driving counts to be replaced	680000	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6340	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	2nd transfer roller		6341	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pressure roller		6350	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80,000 e-STUDIO2540C: 100,000 e-STUDIO3040C: 120,000 e-STUDIO3540C/4540C: 140,000	4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	4	Recommended driving counts to be replaced	340000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6350	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller		6351	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80,000 e-STUDIO2540C: 100,000 e-STUDIO3040C: 120,000 e-STUDIO3540C/4540C: 140,000	4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	4	Recommended driving counts to be replaced	340000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6370	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pressure roller separation finger		6371	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Fuser belt		6372	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80,000 e-STUDIO2540C: 100,000 e-STUDIO3040C: 120,000 e-STUDIO3540C/4540C: 140,000	4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	3	Present driving counts	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Fuser belt		6372	4	Recommended driving counts to be replaced	340000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6372	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt		6373	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Fuser roller		6374	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80,000 e-STUDIO2540C: 100,000 e-STUDIO3040C: 120,000 e-STUDIO3540C/4540C: 140,000	4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	4	Recommended driving counts to be replaced	340000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6374	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser roller		6375	-	Date of previous replacement	0	8 digits	M		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	1	Recommended number of output pages for replacement	Refer to contents	8 digits	M	<Default value> e-STUDIO2040C: 80,000 e-STUDIO2540C: 100,000 e-STUDIO3040C: 120,000 e-STUDIO3540C/4540C: 140,000	4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	3	Present driving counts	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	4	Recommended driving counts to be replaced	340000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	5	Driving counts at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	6	Present output pages for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	7	Present driving counts for control	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6376	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Fuser belt guide		6377	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (RADF)		6382	0	Present number of output pages	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Pickup roller (RADF)		6382	1	Recommended number of output pages for replacement	120000	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Pickup roller (RADF)		6382	2	Number of output pages at the last replacement	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Pickup roller (RADF)		6382	8	Number of times replaced	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Pickup roller (RADF)		6383	-	Date of previous replacement	0	8 digits	SYS		2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Feed roller (RADF)		6384	0	Present number of output pages	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Feed roller (RADF)		6384	1	Recommended number of output pages for replacement	120000	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Feed roller (RADF)		6384	2	Number of output pages at the last replacement	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Feed roller (RADF)		6384	8	Number of times replaced	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Feed roller (RADF)		6385	-	Date of previous replacement	0	8 digits	SYS		2	
08	Setting mode	Counter	PM counter	Separation roller (RADF)		6386	0	Present number of output pages	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Separation roller (RADF)		6386	1	Recommended number of output pages for replacement	120000	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Separation roller (RADF)		6386	2	Number of output pages at the last replacement	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Separation roller (RADF)		6386	8	Number of times replaced	0	8 digits	SYS		4	
08	Setting mode	Counter	PM counter	Separation roller (RADF)		6387	-	Date of previous replacement	0	8 digits	SYS		2	
08	Setting mode	Counter	PM counter	Pickup roller (1st drawer)		6390	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (1st drawer)		6390	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (1st drawer)		6390	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (1st drawer)		6390	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (1st drawer)		6391	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (2nd drawer)		6392	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Pickup roller (2nd drawer)		6392	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (2nd drawer)		6392	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (2nd drawer)		6392	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (2nd drawer)		6393	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (LCF)		6394	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (LCF)		6394	1	Recommended number of output pages for replacement	160000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (LCF)		6394	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (LCF)		6394	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (LCF)		6395	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (1st drawer)		6398	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (1st drawer)		6398	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (1st drawer)		6398	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (1st drawer)		6398	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (1st drawer)		6399	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (2nd drawer)		6400	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Feed roller (2nd drawer)		6400	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (2nd drawer)		6400	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (2nd drawer)		6400	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (2nd drawer)		6401	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (LCF)		6402	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (LCF)		6402	1	Recommended number of output pages for replacement	160000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (LCF)		6402	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (LCF)		6402	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (LCF)		6403	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (1st drawer)		6406	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (1st drawer)		6406	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (1st drawer)		6406	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (1st drawer)		6406	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (1st drawer)		6407	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (2nd drawer)		6408	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Separation roller (2nd drawer)		6408	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (2nd drawer)		6408	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (2nd drawer)		6408	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (2nd drawer)		6409	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (LCF)		6410	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (LCF)		6410	1	Recommended number of output pages for replacement	160000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (LCF)		6410	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (LCF)		6410	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (LCF)		6411	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (PFP upper drawer)		6412	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP upper drawer)		6412	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP upper drawer)		6412	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP upper drawer)		6412	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP upper drawer)		6413	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (PFP lower drawer)		6414	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Separation roller (PFP lower drawer)		6414	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP lower drawer)		6414	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP lower drawer)		6414	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (PFP lower drawer)		6415	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Separation roller (Bypass unit)		6416	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (Bypass unit)		6416	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (Bypass unit)		6416	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (Bypass unit)		6416	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Separation roller (Bypass unit)		6417	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (PFP upper drawer)		6420	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP upper drawer)		6420	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP upper drawer)		6420	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP upper drawer)		6420	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP upper drawer)		6421	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (PFP lower drawer)		6422	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Feed roller (PFP lower drawer)		6422	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP lower drawer)		6422	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP lower drawer)		6422	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (PFP lower drawer)		6423	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Feed roller (Bypass unit)		6424	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (Bypass unit)		6424	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (Bypass unit)		6424	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (Bypass unit)		6424	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Feed roller (Bypass unit)		6425	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (PFP upper drawer)		6428	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP upper drawer)		6428	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP upper drawer)		6428	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP upper drawer)		6428	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP upper drawer)		6429	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (PFP lower drawer)		6430	0	Present number of output pages	0	8 digits	M		4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Counter	PM counter	Pickup roller (PFP lower drawer)		6430	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP lower drawer)		6430	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP lower drawer)		6430	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (PFP lower drawer)		6431	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Counter	PM counter	Pickup roller (Bypass unit)		6432	0	Present number of output pages	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (Bypass unit)		6432	1	Recommended number of output pages for replacement	80000	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (Bypass unit)		6432	2	Number of output pages at the last replacement	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (Bypass unit)		6432	8	Number of times replaced	0	8 digits	M		4	
08	Setting mode	Counter	PM counter	Pickup roller (Bypass unit)		6433	-	Date of previous replacement	0	8 digits	M		2	
08	Setting mode	Pixel counter	Pixel counter			6500		Standard paper size setting	Refer to contents	0-1	SYS	Selects the standard paper size to convert it into the pixel count (%). 0: A4 1: LT <Default value> NAD: 1 Others: 0	1	
08	Setting mode	Pixel counter	Pixel counter			6501		Pixel counter all clearing	-	-	SYS	Clears all information related to the pixel counter.	3	
08	Setting mode	Pixel counter	Pixel counter			6502		Service technician reference counter clearing	-	-	SYS	Clears all information related to the service technician reference pixel counter.	3	
08	Setting mode	Pixel counter	Pixel counter			6503		Toner cartridge reference counter clearing	-	-	SYS	Clears all information related to the toner cartridge reference pixel counter.	3	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter			6504		Pixel counter display setting	1	0-1	SYS	Selects whether or not to display the pixel counter on the LCD screen. 0: Displayed 1: Not displayed	1	
08	Setting mode	Pixel counter	Pixel counter			6505		Displayed reference setting	0	0-1	SYS	Selects the reference when displaying the pixel counter on the LCD screen. 0: Service technician reference1: Toner cartridge reference	1	
08	Setting mode	Pixel counter	Pixel counter			6506		Toner empty determination counter setting	0	0-1	SYS	Selects the counter to determine toner empty. 0: Output pages 1: Pixel counter	1	
08	Setting mode	Pixel counter	Pixel counter			6507		Threshold setting for toner empty determination (Output pages)	500	0-999	SYS	Sets the number of output pages to determine toner empty. This setting is valid when "0" is set at 08-6506.	1	
08	Setting mode	Pixel counter	Pixel counter			6508		Threshold setting for toner empty determination (Pixel counter)	21500	0-60000	SYS	Sets the number of output pages to determine toner empty. This setting is valid when "1" is set at 08-6506.	1	
08	Setting mode	Pixel counter	Pixel counter			6509		Pixel counter clear flag/Service technician reference	0	0-1	SYS	Becomes "1" when 08-6502 is performed.	2	
08	Setting mode	Pixel counter	Pixel counter			6510		Service technician reference cleared date	-	-	SYS	Displays the date on which 08-6502 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference cleared date (Y)	color	6511		Toner cartridge reference cleared date (Y)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference cleared date (M)	color	6512		Toner cartridge reference cleared date (M)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference cleared date (C)	color	6513		Toner cartridge reference cleared date (C)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter			6514		Toner cartridge reference cleared date (K)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference count started date (Y)	color	6519		Toner cartridge reference count started date (Y)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference count started date (M)	color	6520		Toner cartridge reference count started date (M)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge reference count started date (C)	color	6521		Toner cartridge reference count started date (C)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter			6522		Toner cartridge reference count started date (K)	-	-	SYS	Displays the date on which 08-6503 was performed.	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color	PPC (color)	6557		Number of output pages/full color	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode and service technician reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Service technician reference)	PPC (black)	6558		Number of output pages/black (Service technician reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, black mode and service technician reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (Service technician reference)	PRT (color)	6559		Number of output pages/full color (Service technician reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode and service technician reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Service technician reference)	PRT (black)	6560		Number of output pages/black (Service technician reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, black mode and service technician reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Service technician reference)	FAX (black)	6561		Number of output pages/black (Service technician reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the FAX function, black mode and service technician reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (K) (Toner cartridge reference)	PPC (color)	6562		Number of output pages/full color (K) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner K and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Toner cartridge reference)	PPC (black)	6563		Number of output pages/black (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, black mode and toner cartridge reference. [Unit. page]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (K) (Toner cartridge reference)	PRT (color)	6564		Number of output pages/full color (K) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner K and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Toner cartridge reference)	PRT (black)	6565		Number of output pages/black (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, black mode and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/black (Toner cartridge reference)	FAX (black)	6566		Number of output pages/black (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the FAX function, black mode and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (Y) (Toner cartridge reference)	PPC (color)	6567		Number of output pages/full color (Y) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner Y and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (Y) (Toner cartridge reference)	PRT (color)	6568		Number of output pages/full color (Y) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner Y and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (M) (Toner cartridge reference)	PPC (color)	6569		Number of output pages/full color (M) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner M and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (M) (Toner cartridge reference)	PRT (color)	6570		Number of output pages/full color (M) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner M and toner cartridge reference. [Unit. page]	2	
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (C) (Toner cartridge reference)	PPC (color)	6571		Number of output pages/full color (C) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the copy function, full color mode, toner C and toner cartridge reference. [Unit. page]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Number of output pages/full color (C) (Toner cartridge reference)	PRT (color)	6572		Number of output pages/full color (C) (Toner cartridge reference)	0	8 digits	SYS	Counts the number of output pages converted to the standard paper size in the printer function, full color mode, toner C and toner cartridge reference. [Unit: page]	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge Y replacement counter	color	6573		Toner cartridge Y replacement counter	0	3 digits	SYS	Counts the number of time of the toner cartridge Y replacement.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge M replacement counter	color	6574		Toner cartridge M replacement counter	0	3 digits	SYS	Counts the number of time of the toner cartridge M replacement.	2	
08	Setting mode	Pixel counter	Pixel counter	Toner cartridge C replacement counter	color	6575		Toner cartridge C replacement counter	0	3 digits	SYS	Counts the number of time of the toner cartridge C replacement.	2	
08	Setting mode	Pixel counter	Pixel counter			6576		Toner cartridge K replacement counter	0	3 digits	SYS	Counts the number of time of the toner cartridge K replacement.	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PPC (color)	6587		Average pixel count/full color (Y+M+C+K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PPC (color)	6588		Average pixel count/full color (Y) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PPC (color)	6589		Average pixel count/full color (M) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PPC (color)	6590		Average pixel count/full color (C) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PPC (color)	6591		Average pixel count/full color (K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PRT (color)	6592		Average pixel count/full color (Y+M+C+K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PRT (color)	6593		Average pixel count/full color (Y) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PRT (color)	6594		Average pixel count/full color (M) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PRT (color)	6595		Average pixel count/full color (C) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PRT (color)	6596		Average pixel count/full color (K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y+M+C+K) (Service technician reference)	PPC/PRT (color)	6597		Average pixel count/full color (Y+M+C+K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Service technician reference)	PPC/PRT (color)	6598		Average pixel count/full color (Y) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Service technician reference)	PPC/PRT (color)	6599		Average pixel count/full color (M) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Service technician reference)	PPC/PRT (color)	6600		Average pixel count/full color (C) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K) (Service technician reference)	PPC/PRT (color)	6601		Average pixel count/full color (K) (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Service technician reference)	PPC (black)	6602		Average pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Service technician reference)	PRT (black)	6603		Average pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Service technician reference)	FAX (black)	6604		Average pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the FAX function, black mode and service technician reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Service technician reference)	PPC/PRT/FAX (black)	6605		Average pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer/FAX function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y+M+C+K) (Service technician reference)	PPC (color)	6606		Latest pixel count/full color (Y+M+C+K) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y) (Service technician reference)	PPC (color)	6607		Latest pixel count/full color (Y) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (M) (Service technician reference)	PPC (color)	6608		Latest pixel count/full color (M) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (C) (Service technician reference)	PPC (color)	6609		Latest pixel count/full color (C) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (K) (Service technician reference)	PPC (color)	6610		Latest pixel count/full color (K) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y+M+C+K) (Service technician reference)	PRT (color)	6611		Latest pixel count/full color (Y+M+C+K) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, all toner and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y) (Service technician reference)	PRT (color)	6612		Latest pixel count/full color (Y) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner Y and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (M) (Service technician reference)	PRT (color)	6613		Latest pixel count/full color (M) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner M and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (C) (Service technician reference)	PRT (color)	6614		Latest pixel count/full color (C) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner C and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (K) (Service technician reference)	PRT (color)	6615		Latest pixel count/full color (K) (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner K and service technician reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Service technician reference)	PPC (black)	6616		Latest pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Service technician reference)	PRT (black)	6617		Latest pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Service technician reference)	FAX (black)	6618		Latest pixel count/black (Service technician reference)	0	0-10000	SYS	Displays the latest pixel count in the FAX function, black mode and service technician reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PPC (color)	6619		Average pixel count/full color (Y) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PPC (color)	6620		Average pixel count/full color (M) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PPC (color)	6621		Average pixel count/full color (C) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K) (Toner cartridge reference)	PPC (color)	6622		Average pixel count/full color (K) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Toner cartridge reference)	PPC (black)	6623		Average pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K)+black (Toner cartridge reference)	PPC	6624		Average pixel count/full color (K)+black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy function, full color/black mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PRT (color)	6625		Average pixel count/full color (Y) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PRT (color)	6626		Average pixel count/full color (M) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PRT (color)	6627		Average pixel count/full color (C) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K) (Toner cartridge reference)	PRT (color)	6628		Average pixel count/full color (K) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Toner cartridge reference)	PRT (black)	6629		Average pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K)+black (Toner cartridge reference)	PRT	6630		Average pixel count/full color (K)+black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the printer function, full color/black mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (Y) (Toner cartridge reference)	PPC/PRT (color)	6631		Average pixel count/full color (Y) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (M) (Toner cartridge reference)	PPC/PRT (color)	6632		Average pixel count/full color (M) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (C) (Toner cartridge reference)	PPC/PRT (color)	6633		Average pixel count/full color (C) (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/full color (K)+black (Toner cartridge reference)	PPC/PRT/FAX	6634		Average pixel count/full color (K)+black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the copy/printer/FAX function, black mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Average pixel count/black (Toner cartridge reference)	FAX (black)	6635		Average pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the average pixel count in the FAX function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y) (Toner cartridge reference)	PPC (color)	6636		Latest pixel count/full color (Y) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner Y and toner cartridge reference. [Unit:0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (M) (Toner cartridge reference)	PPC (color)	6637		Latest pixel count/full color (M) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (C) (Toner cartridge reference)	PPC (color)	6638		Latest pixel count/full color (C) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (K) (Toner cartridge reference)	PPC (color)	6639		Latest pixel count/full color (K) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (Y) (Toner cartridge reference)	PRT (color)	6640		Latest pixel count/full color (Y) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner Y and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (M) (Toner cartridge reference)	PRT (color)	6641		Latest pixel count/full color (M) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner M and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (C) (Toner cartridge reference)	PRT (color)	6642		Latest pixel count/full color (C) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner C and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/full color (K) (Toner cartridge reference)	PRT (color)	6643		Latest pixel count/full color (K) (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, full color mode, toner K and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Toner cartridge reference)	FAX (black)	6644		Latest pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the FAX function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PPC (color)	6713	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PPC (color)	6714	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PPC (color)	6715	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PPC (color)	6716	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (Y)	PRT (color)	6717	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner Y are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (M)	PRT (color)	6718	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner M are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (C)	PRT (color)	6719	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner C are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/full color (K)	PRT (color)	6720	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function, full color mode and toner K are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PPC (black)	6721	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the copy function and black mode are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	PRT (black)	6722	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the printer function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	0	0-5%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	1	5.1-10%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	2	10.1-15%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	3	15.1-20%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	4	20.1-25%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	5	25.1-30%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	6	30.1-40%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	7	40.1-60%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	8	60.1-80%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Pixel count distribution/black	FAX (black)	6723	9	80.1-100%	0	8 digits	SYS	The pixel count data are divided into 10 ranges. The number of output pages in each range is displayed. In this code, the distributions in the FAX function and black mode are displayed. [Unit: page]	14	
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Toner cartridge reference)	PPC (black)	6724		Latest pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the copy function, black mode and toner cartridge reference. [Unit: 0.01%]	2	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Pixel counter	Pixel counter	Latest pixel count/black (Toner cartridge reference)	PRT (black)	6725		Latest pixel count/black (Toner cartridge reference)	0	0-10000	SYS	Displays the latest pixel count in the printer function, black mode and toner cartridge reference. [Unit: 0.01%]	2	
08	Setting mode	Counter	Counter			6817		Calibration counter	0	8 digits	SYS	Displays the number of times a calibration chart is printed. When "0" is set for this code, and also when in the line adjustment mode or when the fee charging counter is reset, this counter is reset. The counter value goes up every time a calibration chart is printed, regardless of the setting value of the code 08-9894 (Calibration chart charging method).	1	
08	Setting mode	Image Processing	Image	Clearing of adjustment values of all image process 05/08 codes		7000		PPC	-	-	SYS	Clears the gamma correction table values and the values of the following codes: 05-7000 to 05-7296 05-7618 to 05-7983 08-7031 to 08-7034 08-7612 to 08-7625	3	
08	Setting mode	Image Processing	Image			7001		Clearing of all gamma correction table values (PPC related areas only)	-	-	SYS	Clears PPC related areas of the HDD. Clears the values of the following codes: 05-8801 to 8804 05-8805 to 8849 05-8940	3	
08	Setting mode	Image Processing	Image	Process switching for image smoothing (Text/Photo)	PPC (black)	7031		Process switching for image smoothing (Text/Photo)	1	0-1	SYS	Sets whether or not performing a smoothing process (primary scanning direction, 2,400 dpi or equivalent). 0: Invalid 1: Valid	1	
08	Setting mode	Image Processing	Image	Process switching for image smoothing (Text)	PPC (black)	7032		Process switching for image smoothing (Text)	1	0-1	SYS	Sets whether or not performing a smoothing process (primary scanning direction, 2,400 dpi or equivalent). 0: Invalid 1: Valid	1	
08	Setting mode	Image Processing	User interface	User custom mode setting	PPC	7034		Black	0	0-1	SYS	0: Unused 1: TEXT/PHOTO base	1	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	0	Plain paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	1	Plain paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	2	Recycled paper	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	3	Thick paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	4	Thick paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	5	Thick paper3	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	6	Thick paper4	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	7	Special paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Monochrome PPC	7051	8	Special paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	0	Plain paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	1	Plain paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	2	Recycled paper	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	3	Thick paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	4	Thick paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	5	Thick paper3	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	6	Thick paper4	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	7	Special paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	Color PPC	7052	8	Special paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting mode	Image Processing	Image	Clearing of adjustment values of all image process 05/08 codes		7300		NW PRT	-	-	SYS	Clears the gamma correction table values and the values of the following codes: 05-7300 to 05-7368 05-8004 to 05-8254 08-8011	3	
08	Setting mode	Image Processing	Image			7301		Clearing of all gamma correction table values (PRT)	-	-	SYS	Clears print related area in HDD. Clears the values of the following codes: 05-8801 to 8804 05-8850 to 8921 05-8940	3	
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	0	Plain paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	1	Plain paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	2	Recycled paper	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	3	Thick paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	4	Thick paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	5	Thick paper3	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	6	Thick paper4	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	7	Special paper1	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting Mode	Image Processing	Automatic tone correction data	Last updated date and time	NW printer/600dpi	7352	8	Special paper2	0	0-4212312359	SYS	Last updated date and time of automatic tone correction data. YYMMDDHHMM YY: year, MM: month, DD: day, HH: hour, MM: minute	14	Yes
08	Setting mode	Image Processing	Image	Clearing of adjustment values of all image process 05/08 codes		7400		NW SCN	-	-	SYS	Clears the values of the following codes: 05-7400 to 05-7499 05-8300 to 05-8399 08-7401 08-8301 to 08-8304	3	
08	Setting mode	Image Processing	User interface	User custom mode setting	NW SCN	7401		Black	0	0-3	SYS	0: Unused 1: Black TEXT/PHOTO base 2: Black TEXT base 3: Black PHOTO base	1	Yes
08	Setting mode	Image Processing	Image	Clearing of adjustment values of all image process (Fax) related 05 codes	FAX	7500		Clearing of adjustment values of all image process (Fax) related 05 codes	-	-	SYS	Clears the adjustment values of the following codes: 05-7500 to 7599	3	
08	Setting mode	Image Processing	Image	Image repeat gap	Image repeat gap	7612		Image repeat gap	5	0-10	SYS	Unit: mm	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Image Processing	User interface	User custom mode setting	PPC	7614		Color	0	0-5	SYS	0: Unused 1: TEXT/PHOTO base 2: TEXT base 3: Printed image base 4: Photo base 5: Map base	1	Yes
08	Setting mode	Image Processing	Image	PPC		7617		ADF noise reduction	3	0-3	SYS	Sets the adjustment level for reducing color streaks when the RADF is used. 3: Disabled (default) 2: Noise reduction level - Low 1: Noise reduction level - Middle (recommended) 0: Noise reduction level - High * The setting of this code is applied only when the Text/Photo mode is selected.	1	
08	Setting mode	Image Processing	Image	Scanning operation switching at automatic calibration	PPC (color)	7625		Scanning operation switching at automatic calibration	0	0-1	SYS	0: Scanning color/black integrated pattern 1: Scanning color pattern only	1	
08	Setting mode	Image Processing	Image	SCN		8300		ADF noise reduction	3	0-3	SYS	Sets the adjustment level for reducing color streaks when the RADF is used. 3: Disabled (default) 2: Noise reduction level - Low 1: Noise reduction level - Middle (recommended) 0: Noise reduction level - High	1	
08	Setting mode	Image Processing	User interface	User custom mode setting	NW SCN	8303		Color	0	0-4	SYS	0: Unused 1: TEXT base 2: Printed image base 3: Photo base 4: e-document base * e-document: This is the mode that corresponds to the law in Japan. This mode is used to clarify area where changes were made with such as a correction fluid.	1	Yes
08	Setting mode	Image Processing	Image	Quantized coefficient correction value / Standard JPEG images	SCN (color)	8304	0	High quality	128	0-255	SYS	Changes the JPEG compression ratio. The smaller the value, the higher the compression ratio becomes and the larger the value, the lower the compression ratio becomes.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	Image Processing	Image	Quantized coefficient correction value / Standard JPEG images	SCN (color)	8304	1	Standard	128	0-255	SYS	Changes the JPEG compression ratio. The smaller the value, the higher the compression ratio becomes and the larger the value, the lower the compression ratio becomes.	4	
08	Setting mode	Image Processing	Image	Quantized coefficient correction value / Standard JPEG images	SCN (color)	8304	2	Low quality	128	0-255	SYS	Changes the JPEG compression ratio. The smaller the value, the higher the compression ratio becomes and the larger the value, the lower the compression ratio becomes.	4	
08	Setting mode	System	General			8504		Feeding method of odd page number in duplex printing (Raw print)	0	0-1	SYS	0: One side 1: Both sides	1	
08	Setting mode	System	General			8506		Forcible mode change in cartridge empty status	0	0-2	SYS	0: SLEEP MODE 1: AUTO POWER SAVE 2: READY	1	
08	Setting mode	System	General	Controlling method for print image position adjustment in secondary scanning direction	PRT	8508		Controlling method for print image position adjustment in secondary scanning direction	2	0-2	SYS	0: No control 1: Cuts the image 2: Shifts the image	1	
08	Setting mode	System	General	Controlling method for print image position adjustment in secondary scanning direction (EFI)	PRT	8508		Controlling method for print image position adjustment in secondary scanning direction	0	0-2	SYS	0: No control 1: Cuts the image 2: Shifts the image	1	
08	Setting mode	System	General	Controlling amount for print image position adjustment in secondary scanning direction	PRT	8509		Controlling amount for print image position adjustment in secondary scanning direction	12	0-36	SYS	0-36	1	
08	Setting mode	System	General	Controlling amount for print image position adjustment in secondary scanning direction (EFI)	PRT	8509		Controlling amount for print image position adjustment in secondary scanning direction	0	0-36	SYS	0-36	1	
08	Setting mode	System	General	Menu display for controlling print image position adjustment in secondary scanning direction	PRT	8510		Menu display for controlling print image position adjustment in secondary scanning direction	0	0-1	SYS	0: Menu not displayed 1: Menu displayed	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Menu display for controlling print image position adjustment in secondary scanning direction (EFI)	PRT	8510		Menu display for controlling print image position adjustment in secondary scanning direction	0	0-1	SYS	0: Menu not displayed 1: Menu displayed	1	
08	Setting mode	System	General	Wide A4 Mode (for PCL)	PRT	8511		Wide A4 Mode (for PCL)	0	0-1	SYS	0: Disable 1: Enable	1	
08	Setting mode	System	General			8512		Number of jobs in batch processing	10	2-10	SYS	2-10: From 2 to jobs can be specified	1	
08	Setting mode	System	General	Overprint function setting		8513	0	For PDF printing	2	0-2	SYS	Enables or disables the overprinting function setting when printing PDF files. 0: OFF 1: ON 2: ON (only for PDF/X files)	4	
08	Setting mode	System	General	Overprint function setting		8513	1	For PostScript printing	0	0-1	SYS	Enables or disables the overprinting function setting for PostScript printing. 0: OFF 1: ON	4	
08	Setting mode	System	General			8514		Threshold value setting for RIP standard paper judgment	20	5-30	SYS	This code is used for changing the range in which non-standard paper sizes are judged as standard ones. If the page size data are within the standard paper size \pm the setting value, the page size is judged as a standard paper size in PS/PDF printing. If the page size data are out of the range, the page size is judged as a non-standard paper size. The unit for the setting value is PS points. 1 PS point is approx. 0.35 mm.	1	Yes
08	Setting mode	System	General	Outside erase Judgment threshold (Default)		8515		PPC	0	-3-3	SYS	The larger the value, area to be erased increases. The smaller the value, area to be erased decreases.	1	
08	Setting mode	System	General	Outside erase Judgment threshold (Default)		8516		SCN	0	-3-3	SYS	The larger the value, area to be erased increases. The smaller the value, area to be erased decreases.	1	
08	Setting mode	System	General			8517		Remote Scan User authentication automatic login	1	0-1	SYS	0: OFF (A user always enters manually (current method)) 1: ON (Previous authentication information will be used)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			8518		Overwriting mode for scanned files	0	0-3	SYS	0: Always OFF 1: Meta Scan function ON / Normal scan function OFF 2: Meta Scan function OFF / Normal scan function ON 3: Always ON	1	
08	Setting mode	System	General			8519		Scan PDF file Paper size	1	0-1	SYS	0: Equivalent to scan image size 1: Fitted into any standard size	1	
08	Setting mode	System	General			8520		Underscore conversion of prohibited character in filename	1	0-1	SYS	Sets the prohibited characters in filename to covert to underscore. 0: \ / > < ; " ? * : ; = [] + 1: \ / > < " ? * : * 0: Existing model standard 1: Windows standard Since setting the value to "1" allows some prohibited characters, filename might not be processed in external application or server.	1	
08	Setting mode	System	General			8521		Switchover of output format of Service Notification attachment	Refer to contents	0-1	SYS	Switches the output format of date in attachment of Service Notification. 0: YYYY.MM.DD 1: YYYY-MM-DDTHH:MM:SS <Default value> NAD: 1 Others: 0	1	
08	Setting Mode	System	User interface	Screen setting		8523		Toner near-empty status Message	Refer to contents	0-1	SYS	0: ON 1: OFF <Default value> JPD/NAD/MJD/AUD/ARD: 1 Others: 0	1	Yes
08	Setting mode	System	General			8524		No paper Message display	0	0-1	SYS	0: ON 1: OFF	1	
08	Setting mode	System	General			8526		Scan Preview Default setting	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting mode	System	General			8527		Scan Preview Default display type	0	0-1	SYS	0: Page Fit 1: Width Fit	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Transfer belt release threshold in ACS (Short size)	PPC	8529	0	Number of pages released (Copier)	Refer to contents	0-9	SYS	Sets a threshold (the number of pages) for switching from ACS to the black mode. When the specified number of pages has been printed in the black mode only, the transfer belt is released and ACS shifts to the black mode. <Default value> e-STUDIO2040C/2540C: 4 e-STUDIO3040C/3540C: 5 e-STUDIO4540C: 6 [Unit. page]	4	
08	Setting mode	System	General	Transfer belt release threshold in ACS (Short size)	PRT	8529	1	Number of pages released (Printer)	Refer to contents	0-9	SYS	Sets a threshold (the number of pages) for switching from ACS to the black mode. When the specified number of pages has been printed in the black mode only, the transfer belt is released and ACS shifts to the black mode. <Default value> e-STUDIO2040C/2540C: 4 e-STUDIO3040C/3540C: 5 e-STUDIO4540C: 6 [Unit. page]	4	
08	Setting mode	System	General	Transfer belt release threshold in ACS (Short size)	PRT	8529	2	Number of pages released (Box print)	Refer to contents	0-9	SYS	Sets a threshold (the number of pages) for switching from ACS to the black mode. When the specified number of pages has been printed in the black mode only, the transfer belt is released and ACS shifts to the black mode. <Default value> e-STUDIO2040C/2540C: 4 e-STUDIO3040C/3540C: 5 e-STUDIO4540C: 6 [Unit. page]	4	
08	Setting mode	System	General			8532		Control panel Brightness level adjustment	4	1-7	SYS	1-7: Brightness level	1	
08	Setting mode	System	General	1st transfer roller contact/release setting when printing thick paper (countermeasure against image jittering in the black mode)	PRT	8533		1st transfer roller contact/release setting when printing thick paper (countermeasure against image jittering in the black mode)	0	0-2	SYS	When jittering occurs during the printing of thick paper in the black mode with the 2nd transfer roller released from the transfer belt, this setting makes the roller contact. 0: Disabled 1: Enabled only for thick paper and special paper 2: Enabled for all media types	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	1st transfer roller contact/release setting when printing thick paper (countermeasure against image jittering in the black mode)	PPC	8534		1st transfer roller contact/release setting when printing thick paper (countermeasure against image jittering in the black mode)	0	0-2	SYS	When jittering occurs during the printing of thick paper in the black mode with the 2nd transfer roller released from the transfer belt, this setting makes the roller contact. 0: Disabled 1: Enabled only for thick paper and special paper 2: Enabled for all media types	1	
08	Setting mode	System	General	Sorting method for displaying private/hold print jobs	PRT	8537		Sorting method for displaying private print jobs	0	0-1	SYS	Changes the sorting order for print jobs on the private/hold print list. 0: Descending order 1: Ascending order	1	
08	Setting mode	System	User interface			8538		Toner near empty notification setting	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Scanner			8540		Date/time format in the Meta Scan XML file	1	0-1	SYS	0: YYYY/MM/DDhh:mm:ss.mmm 1: YYYY-MMDDThh:mm:ss.mmmTZD	1	
08	Setting mode	System	User interface			8543		Switching to the low power consumption mode in the Sleep mode	1	0-1	SYS	0: Not switched 1: Switched under certain conditions	1	Yes
08	Setting mode	System	User interface			8544		Tolerance for switching to Super Sleep mode	5	5-600	SYS	Sets the range of tolerance in which the equipment returns to the Super Sleep mode after the system is started during that mode. Unit: Second	1	Yes
08	Setting mode	System	User interface			8546		Input setting of minus value for image shift when copying	0	0-1	SYS	0: Inputting a minus value is disabled. 1: Inputting a minus value is enabled.	1	Yes
08	Setting mode	System	Paper feeding			8548		Operation of drawer size change when printing is interrupted by size mismatch	0	0-1	SYS	0: Operation of cassette size change is disabled. 1: Operation of cassette size change is enabled.	1	
08	Setting mode	System	Counter			8549		Hardware key control when external counter is installed	0	0-1	SYS	0: No control 1: Mode switch key is disabled.	1	
08	Setting Mode	System	Network			8585		Edit setting of e-mail subject	1	0-1	SYS	0: Not allowed 1: Allowed	1	
08	Setting Mode	System	Network			8586		Addition of date and time to email subject	1	0-1	SYS	0: Not added 1: Added	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network			8587		Character string of email subject	0	0-1	SYS	Switches the default character string of subject. 0: Character string at the shipment 1: Character string specified by users	1	
08	Setting Mode	System	LDAP user authentication	Attribute value setting		8592		Sender address	mail	-	SYS	Sets the default attribute value of sender address. Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	LDAP user authentication	Attribute value setting		8593		Sender name	uid	-	SYS	Sets the default attribute value of sender name. Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface			8597		Automatic update of private/hold print job list	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface			8598		Template icon layout on the control panel	0	0-1	SYS	0: Pattern 1 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) 1: Pattern 2 (1) (2) (9) (10) (3) (4) (11) (12) (5) (6) (13) (14) (7) (8) (15) (16)	1	
08	Setting Mode	System	General	Outside erase		8600		Change of default value	0	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface			8603		Special usage of external options I/F	0	0-2	SYS	0: None 1: Usage 1 2: Usage 2	1	
08	Setting Mode	System	Network	Prioritized authentication server		8608		Windows	0	0-100	SYS	Sets the prioritized authentication server to be searched (0 to 100). The servers displayed on the screen accessed by TopAccess -> Administration -> Maintenance -> Directory Service are numbered beginning at the top (0 to 100).	1	Yes
08	Setting Mode	System	Network	Prioritized authentication server		8609		LDAP	0	0-100	SYS	Sets the prioritized authentication server to be searched (0 to 100). The servers displayed on the screen accessed by TopAccess -> Administration -> Maintenance -> Directory Service are numbered beginning at the top (0 to 100).	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network	Prioritized authentication server		8610		Card	0	0-100	SYS	Sets the prioritized authentication server to be searched (0 to 100). The servers displayed on the screen accessed by TopAccess -> Administration -> Maintenance -> Directory Service are numbered beginning at the top (0 to 100).	1	Yes
08	Setting	System	User interface			8622		Date and time addition setting to file name of scan to file/e-mail	1	0-1	SYS	0: Not added 1: Added	1	
08	Setting Mode	System	General			8623	0	RIP function setting	1	0-1	SYS	Enables/Disables the function related to Excel boarder rendering of PCL6. The function is to prevent missing lines when scaling down and inconsistent line width when scaling up. 0: Disabled (No correction. Compliant with PCL6 language) 1: Enabled	4	
08	Setting	System	User interface			8624		Switchover of display method of filename	3	0-3	SYS	Switches the display method of filename. 0: Displays the filename from the beginning 1: Displays the trailing characters 2: Displays the beginning and trailing characters 3: Displays the filename without abbreviation	1	
08	Setting mode	System	User interface			8628		Job operation on the COPY screen when the coin controller is connected	0	0-1	SYS	This setting enables user to move from the COPY screen to JOB STATUS screen, and then operate jobs during printing when the coin controller is connected. This code is valid when the value of 08-9016 is "1". 0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface			8631		Filename creation at fax reception and forwarding	0	0-1	SYS	0: Use address name (family-name/first-name) as filename if multiple names are found by address book search of TSI (sender information). 1: Use address name (family-name/first-name) as filename only when single name is found by address book search of TSI (sender information).	1	
08	Setting mode	System	User interface			8640		Job build operation when the coin controller is connected	0	0-1	SYS	This setting enables user to use the job build function when the coin controller is connected. This code is valid when the value of 08-9016 is "1". 0: Disabled 1: Enabled	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	General			8641		Notification setting for job cancel	1	0-1	SYS	Sets the notification setting for job cancel. This setting is effective for the following codes: 1CC0, 2BB0, 2CC0, 2DC0, 2EC0 0: Disabled (Not notified) 1: Enabled (Notified)	1	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8642		LDAP attribute name settings 2	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8643		LDAP attribute name settings 3	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8644		LDAP attribute name settings 4	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8645		LDAP attribute name settings 5	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8646		LDAP attribute name settings 6	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8647		LDAP attribute name settings 7	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8648		LDAP attribute name settings 8	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8649		LDAP attribute name settings 9	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8650		LDAP attribute name settings 10	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8651		LDAP attribute name settings 11	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8652		LDAP attribute name settings 12	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8653		LDAP attribute name settings 13	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8654		LDAP attribute name settings 14	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8655		LDAP attribute name settings 15	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	8656		LDAP attribute name settings 16	eBMUserCard	-	SYS	Maximum 32 characters (ASCII).	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Sound		8657		Placing original	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8658		Pressing [INTERRUPT] button	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8659		Switchover of function	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8660		Completion of job (except for FAX)	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8661		End of warming-up/prewarming/sleep	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8662		Job interrupt (out of paper)	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound		8663		Fax transmission error	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Sound	Hours for mute	8664	0	Enable/Disable setting of mute	0	0-1	SYS	0: Mute is disabled 1: Mute is enabled	4	
08	Setting Mode	System	User interface	Sound	Hours for mute	8664	1	Starting time	0	0-2359	SYS	(Hour/Hour/Minute/Minute)	4	
08	Setting Mode	System	User interface	Sound	Hours for mute	8664	2	Ending time	0	0-2359	SYS	(Hour/Hour/Minute/Minute)	4	
08	Setting Mode	System	General			8667		Saving image log	0	0-1	SSDK	0: Disabled 1: Enabled	1	
08	Setting Mode	System	General			8668		Number of pages saved as image log	1	0-1	SSDK	0: First page 1: All pages	1	
08	Setting Mode	System	General			8670		e-Filing print setting when key counter/totalizer is installed	0	0-1	SYS	0: Not allowed 1: Allowed	1	
08	Setting Mode	System	Network	Number of retry for file transfer		8671	0	FTP	3	0-10	SYS	The transmission may succeed when the number of retry increases. However, it takes longer time to complete the job.	4	
08	Setting Mode	System	Network	Number of retry for file transfer		8671	1	SMB	3	0-10	SYS	The transmission may succeed when the number of retry increases. However, it takes longer time to complete the job.	4	
08	Setting Mode	System	Network	Number of retry for file transfer		8671	2	NetWare	3	0-10	SYS	The transmission may succeed when the number of retry increases. However, it takes longer time to complete the job.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network	Retry interval for file transfer		8672	0	FTP	180	0-999	SYS	The transmission may succeed when the retry interval becomes longer. However, it takes longer time to complete the job. (Unit: sec.)	4	
08	Setting Mode	System	Network	Retry interval for file transfer		8672	1	SMB	180	0-999	SYS	The transmission may succeed when the retry interval becomes longer. However, it takes longer time to complete the job. (Unit: sec.)	4	
08	Setting Mode	System	Network	Retry interval for file transfer		8672	2	NetWare	180	0-999	SYS	The transmission may succeed when the retry interval becomes longer. However, it takes longer time to complete the job. (Unit: sec.)	4	
08	Setting Mode	System	General			8673		Disclosure of image log function	0	0-1	SSDK	0: Not opened to public 1: Opened to public	1	
08	Setting Mode	System	General			8674		Prohibition of transition to sleep mode during network initialization	0	0-1	SYS	0: Allowed 1: Prohibited	1	
08	Setting	System	FAX			8700		Secret reception setting	0	0-2	SYS	When the value of 08-8924 is "0", the value of this code can be set to "1" or "2". 0: Always Off 1: Always On 2: Scheduled reception	1	
08	Setting Mode	System	User interface			8704		Email/FAX address restriction	0	0-1	SYS	0: No restriction 1: Search for external LDAP only Use this code to restrict address of email/fax to specified LDAP server. If the value of this code is set to "1", the addresses of email/fax are restricted to the LDAP server specified with TopAccess, and the direct input of addresses and selecting addresses from the local address book are not available. If the value of this code is set to "1", this setting is given priority over the setting value of 08-9299, 08-3848, 08-3849.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface			8709		Display setting of Service Notification	Refer to contents	0-1	SYS	Sets whether the [SERVICE NOTIFICATION] button is displayed on the screen accessed by [USER FUNCTIONS] -> [ADMIN] -> [SERVICE]. 0: Disabled 1: Enabled <Default value> JPD/NAD/MJD: 1 Others: 0	1	Yes
08	Setting Mode	System	Scanning			8710		Setting of character code for Scan to FTP	0	0-2	SYS	0: Automatic selection 1: UTF8 2: Shift-JIS	1	
08	Setting Mode	System	General	Hardcopy security printing		8711		Enable/Disable setting of watermark information tracking application	1	0-1	SYS	Set this code to "1: Disabled" to disable the watermark information tracking application at hardcopy security printing. When this code is set to "1: Disabled", a license error occurs even if the license for hardcopy security printing is enabled. If this error occurs, hardcopy security printing is available, but copy prohibition function and tracking application are not available. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface			8712		Display setting of the drawer setting button	1	0-1	SYS	Sets whether the drawer button in USER FUNCTIONS is displayed or not. 0: Not displayed 1: Displayed	1	Yes
08	Setting Mode	System	User interface			8713		Setting of web upload/web printing	1	0-1	SYS	Sets whether the web upload and web printing function is enabled or disabled. - Web upload is a function which uploads the image data created on the equipment to the web page displayed on EWB. - Web printing is a function which prints the web page displayed on EWB or the PDF file included in the web page displayed on EWB. 0: Disabled 1: Enabled	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Service notification information		8715		Password for zip file with password	#1048109	-	SYS	Password for zip file with password of service notification information. Minimum number of digits: 0, maximum number of digits: 20 Available character: alphanumeric characters and symbols	11	
08	Setting Mode	System	User interface			8718		Selection for caching the screen of control panel at start-up	0	0-17	SYS	Use this code to shorten the time to switch the function on the control panel for the first time immediately after start-up. However, the start-up time becomes longer (about 1 to 3 seconds per screen). When selecting multiple screens, enter the total value. 0: Disabled 1: Copy 16: Fax	1	
08	Setting Mode	System	Network			8719		MTU setting of network communication	1500	576-1500	NIC	Normally there's no need to change the MTU value. However, set the proper MTU value when MFP is connected to the Internet using broadband router and so on.	12	
08	Setting Mode	System	User interface			8720		Department code display with asterisk	0	0-1	SYS	0: Displays department code with asterisk when inputting it. 1: Displays department code as it is when inputting it.	1	Yes
08	Setting Mode	System	FAX			8721		Automatic FAX sending at AutoClear when scanning original put on the glass	0	0-1	SYS	Sets whether the job is sent or canceled when AutoClear is executed on the interruption screen to confirm the next original displayed after scanning the original put on the glass. Use this code to cancel job when the equipment is left unattended while the interruption screen is displayed. 0: Sends job 1: Cancels job	1	Yes
08	Setting Mode	System	User interface			8722		Display method of "Cannot find the Home Directory" on the control panel	0	0-1	SYS	Sets the display method of error if the Home Directory for user cannot be obtained from the server when setting the Home Directory for scanning. Use this code to disable the pop-up display when the Home Directory cannot be obtained depending on the user. 0: Displays the pop-up dialog when user logs in 1: Displays the message in the guidance area when the Scan to File screen is displayed	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface			8723		Pop-up display of logging out of user authentication and department management on the control panel	1	0-1	SYS	Sets whether the pop-up dialog of confirmation for logging out is displayed when logging out user or department by pressing [FUNCTION CLEAR] button twice or pressing [ACCESS] button. 0: Logs out without displaying pop-up dialog 1: Displays pop-up dialog when logging out	1	Yes
08	Setting Mode	System	User interface			8724		Display setting of Edit From Address button for Scan to email	1	0-1	SYS	0: Not displayed (From Address cannot be edited) 1: Displayed (From Address can be edited)	1	Yes
08	Setting Mode	System	User interface			8725		Display setting of [USER FUNCTIONS] -> [CHANGE LANGUAGE] button	1	0-1	SYS	Sets whether the [CHANGE LANGUAGE] button accessed from [USER FUNCTIONS] button is displayed or not. Use this code to prohibit users from changing the language displayed on the control panel. Administrators can change the language. 0: Not displayed 1: Display	1	Yes
08	Setting Mode	System	General			8726		Job deletion on the Job Status screen	0	0-1	SYS	Use this code to enable the job deletion on the [Job Status] screen. When "3: High level" is set for code 08-8911, be sure to disable this setting. 0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface	Card reading device		8727		Display of dedicated screen for card authentication	0	0-1	SYS	Switches whether the message to hold a card over the card reader is displayed on the login screen when the card authentication is enabled. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	Forced printing of user name			8728	0	Display/Non-display setting in TopAccess	0	0-1	SYS	0: Disabled 1: Enabled	4	
08	Setting Mode	System	Forced printing of user name			8728	1	Enable/Disable setting of forced printing	0	0-1	SYS	Normally this setting is made in TopAccess. 0: Disabled 1: Enabled	4	
08	Setting Mode	System	Forced printing of user name			8728	2	Prioritizing printer driver setting	1	0-1	SYS	Normally this setting is made in TopAccess. 0: Disabled 1: Enabled	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Forced printing of user name			8728	3	Application to network fax job	0	0-1	SYS	Normally this setting is made in TopAccess. 0: Disabled 1: Enabled	4	
08	Setting Mode	System	Forced printing of user name			8728	4	Enable/Disable setting of prefix/suffix	0	0-1	SYS	Normally this setting is made in TopAccess. 0: Disabled 1: Enabled	4	
08	Setting Mode	System	Forced printing of user name			8728	6	White background setting	1	0-1	SYS	Normally this setting is made in TopAccess. 0: Disabled 1: Enabled	4	
08	Setting Mode	System	Forced printing of user name			8728	7	Print position	0	0-3	SYS	Normally this setting is made in TopAccess. 0: Bottom left 1: Top left 2: Bottom right 3: Top right	4	
08	Setting Mode	System	Forced printing of user name			8728	8	Fine adjustment of print position (X)	3	0-100	SYS	Adjusts the print position in X direction. The print position shifts toward inside of original when the value increases. Unit: pt. 1pt = 0.35mm.	4	
08	Setting Mode	System	Forced printing of user name			8728	9	Fine adjustment of print position (Y)	3	0-100	SYS	Adjusts the print position in Y direction. The print position shifts toward inside of original when the value increases. Unit: pt. 1pt = 0.35mm.	4	
08	Setting Mode	System	Forced printing of user name			8728	10	Font setting	0	0-9	SYS	Normally this setting is made in TopAccess. 0: Helvetica 1: AlbertusMT 2: Chicago 3: Eurostile 4: Geneva 5: GillSans 6: LetterGothic 7: Monaco 8: Taffy 9: TimesNewRomanPSMT	4	
08	Setting Mode	System	Forced printing of user name			8728	11	Font size setting	8	6-16	SYS	Normally this setting is made in TopAccess. 6-16pt.	4	
08	Setting Mode	System	Forced printing of user name			8728	12	Font color setting	0	0-7	SYS	Normally this setting is made in TopAccess. 0: Black 1: Gray 2: Red 3: Green 4: Blue 5: Light red 6: Light green 7: Light blue	4	
08	Setting Mode	System	Forced printing of user name			8728	13	Density setting of light font color	40	10-90	SYS	Sets the density when the font color is set to gray, light red, light green, or light blue.	4	
08	Setting Mode	System	Forced printing of user name			8729		Prefix setting	Printed by	-	SYS	Normally this setting is made in TopAccess. Maximum 64 characters.	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Forced printing of user name			8730		Suffix setting	-	-	SYS	Normally this setting is made in TopAccess. Maximum 64 characters.	11	
08	Setting mode	System	User interface			8732		Default Menu Screen Setting	0	0-1	SYS	Switches the default screen of MENU 0: User 1: Public	1	
08	Setting Mode	System	Scanning			8735		Sending setting of ScanToURL	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	System	Scanning			8736		Maximum size for ScanToURL attachment	5	0-100	SYS	Sets the maximum size of attachment that can be sent with ScanToURL. 0: Always sends URL 1-100: Maximum size (MB)	1	
08	Setting Mode	System	General	Display setting		8738		E-mail address direct input button	1	0-1	SYS	Switches the display setting of the [INPUT @] button. 0: Not displayed 1: Displayed	1	
08	Setting Mode	System	User interface	Display setting		8744		Switchover of pop-up display during scanning	1	0-1	SYS	Switches the pop-up display during scanning 0: Not displayed 1: Displayed	1	
08	Setting Mode	System	User interface	Display setting		8745		Enable/Disable setting of EWB history	0	0-1	SYS	Sets whether part of the cookie, password, and form data of user who logs in to EWB is saved or not. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	Network			8746		Port number setting of destination 10 for sending trap	162	1-65535	NIC	Sets the port number of destination 10 for sending SNMP trap. If the port is used when using the real time log notification function, change the port number.	12	
08	Setting Mode	System	General			8747		Switchover of screen transition at self-copying	0	0-1	SYS	Switches the screen transition at the end of job when using self-copying. 0: Traditional 1: New	1	
08	Setting Mode	System	User interface			8748		Input of department code at user authentication	0	0-1	SYS	0: Not required 1: Required	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network			8749		User authentication by logon information to domain (external authentication)	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface			8754		Error sheet output at reception of non-supported PDL	1	0-1	SYS	0: Error sheet is not output 1: Error sheet is output	1	
08	Setting Mode	System	Maintenance	Notification of remaining amount of toner		8755		Enable/Disable setting	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	System	Maintenance	Notification of remaining amount of toner		8756	0	Remaining amount at first notification	25	0-100	SYS	0 to 100%	4	
08	Setting Mode	System	Maintenance	Notification of remaining amount of toner		8756	1	Notification interval	10	1-25	SYS	1 to 25%	4	
08	Setting Mode	System	User interface	Card reading device		8758		Overwriting of login at authentication	0	0-1	SYS	Switches the enable/disable setting for the function to overwrite the login information at the card authentication. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	General			8761		Retention of print (spooling) data	0	0-1	SYS	Use this code to retain and obtain the print data (spooling data) if problem occurs. After obtaining the data, be sure to disable the setting. 0: Disabled (print data is deleted) 1: Enabled (print data is retained)	1	
08	Setting Mode	System	Maintenance	Display of remaining amount of toner (for RDMS/MMDT)		8762	0	K	0	0-100	SYS	0 to 100%	14	
08	Setting Mode	System	Maintenance	Display of remaining amount of toner (for RDMS/MMDT)		8762	1	C	0	0-100	SYS	0 to 100%	14	
08	Setting Mode	System	Maintenance	Display of remaining amount of toner (for RDMS/MMDT)		8762	2	M	0	0-100	SYS	0 to 100%	14	
08	Setting Mode	System	Maintenance	Display of remaining amount of toner (for RDMS/MMDT)		8762	3	Y	0	0-100	SYS	0 to 100%	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			8771		Account setting for access to Home Directory	0	0-1	SYS	0: Setting of Remote1 is used 1: Setting of Remote1 and Remote2 is used	1	
08	Setting mode	System	Network			8774		Password authentication for print job	0	0-1	SYS	Sets whether the user authentication for network printing/FAX/InternetFAX using the user information and password input on the printer driver is enabled or disabled. When this setting is enabled, the setting of 08-8749 is automatically disabled. 0: Disabled 1: Enabled	1	
08	Setting mode	System	Network	PIN code		8775		PIN code authentication setting at user authentication	0	0-2	SYS	0: Disabled 1: PIN code 2: Card+PIN code	1	
08	Setting mode	System	Network	PIN code		8776		Logging setting of PIN code	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Network	PIN code		8777		Attribute value setting of LDAP PIN authentication server 1	eBMUserPIN	-	SYS	Attribute name of PIN code	11	
08	Setting mode	System	Network	PIN code		8778		Attribute value setting of LDAP PIN authentication server 2	eBMUserPIN	-	SYS	Attribute name of PIN code	11	
08	Setting mode	System	Network	PIN code		8779		Attribute value setting of LDAP PIN authentication server 3	eBMUserPIN	-	SYS	Attribute name of PIN code	11	
08	Setting mode	System	Network	PIN code		8780		Prioritized authentication server	1	1-3	SYS	Sets the prioritized authentication server to be searched.	1	
08	Setting mode	System	User interface	Display setting		8781		Default setting of print screen when USB is inserted	0	0-1	SYS	0: Disabled (The setting of 08-9236 is used) 1: USB print screen	1	
08	Setting mode	System	General	Interval setting	Transition to Super Sleep	8782		For fax	15	15-600	SYS	Sets the interval to shift to Super Sleep again after recovery from Super Sleep. (Unit: seconds)	1	
08	Setting mode	System	General			8783		Switchover of document sorting order of e-Filing Box	1	0-1	SYS	0: Sorted by saved date 1: Sorted by document name	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface			8785		Display/Non-display of pop-up for card authentication	Refer to contents	0-1	SYS	Sets whether the pop-up is displayed or not after the success of card authentication. This code is effective when the value of 08-8727 is "1" (Enabled). 0: Does not display pop-up 1: Displays pop-up <Default value> JPD: 0 Others: 1	1	
08	Setting mode	System	User interface	Default keyboard setting for inputting user name		8786	0	Japanese	3	0-4	SYS	0: Romaji 1: Hiragana 2: Katakana (one-byte) 3: Alphabetical character (one-byte) 4: Symbol (one-byte)	4	
08	Setting mode	System	User interface	Default keyboard setting for inputting user name		8786	1	Chinese	0	0-2	SYS	0: Alphabetical character (one-byte) 1: Pinyin 2: Symbol (one-byte)	4	
08	Setting Mode	System	Network			8788		Detection interval when authentication server is down	60	1-1440	SSD K	Sets the interval to access the authentication server again after the detection of server down. 1-1440 (min.)	1	
08	Setting mode	System	User interface			8789		Display/Non-display of pop-up for automatic output of jobs	1	0-1	SYS	Sets whether the pop-up is displayed or not when jobs are automatically released after user authentication. This code is effective when the value of 08-8915 is "1" (Enabled). 0: Does not display pop-up 1: Displays pop-up	1	
08	Setting Mode	System	Network			8790		Switchover of server when authentication server is down	0	0-1	SSD K	Enables/disables the function that switches the access to another authentication server when it is detected that the authentication server is down. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	Network			8792		Format of host name used for Scan To URL	0	0-2	SYS	0: IP address 1: Host name (FQDN) 2: NetBIOS name	1	
08	Setting Mode	System	User interface			8795		Default setting of duplex mode for printer driver	Refer to contents	0-1	SYS	0: Single-sided 1: Duplex <Default value> JPD: 0 Others: 1	1	
08	Setting Mode	System	Maintenance	General		8797		Reboot setting for resource check	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting mode	System	Network			8800		Enabling / Disabling of 802.1X	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			8800		Enabling / Disabling of 802.1X (EFI)	2	1-2	NIC	1: Enabled 2: Disabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			8802		Enabling / Disabling of IPsec	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			8802		Enabling / Disabling of IPsec (EFI)	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			8803		Enabling / Disabling of SNMPv3	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			8804		Enabling / Disabling of IP filtering	2	1-2	SYS	1: Enabled 2: Disabled	1	
08	Setting mode	System	Network			8804		Enabling / Disabling of IP filtering (EFI)	2	1-2	SYS	1: Enabled 2: Disabled	1	
08	Setting mode	System	Network			8805		Enabling / Disabling of MAC address filtering	2	1-2	SYS	1: Enabled 2: Disabled	1	
08	Setting mode	System	Network			8805		Enabling / Disabling of MAC address filtering (EFI)	2	1-2	SYS	1: Enabled 2: Disabled	1	
08	Setting mode	System	Network			8820		IPsec NAT-Traversal setting	1	1-3	NIC	1: Default (IKEv1: Disabled, IKEv2: Enabled) 2: Enable IKEv1 & IKEv2 3: Disable IKEv1 & IKEv2	12	
08	Setting mode	System	Network			8821		IPsec CRL setting	2	1-2	NIC	1: Enable CRL 2: Disable CRL	12	
08	Setting mode	System	Network			8824		FTP client mode	0	0-2	NIC	Sets the FTP transfer mode when FTP is selected for "FILE" to save the scanned data. 0: Automatic 1: Passive mode 2: Active mode	12	
08	Setting mode	System	Network			8825		Sending of host announcement in Super Sleep mode	1	1-2	NIC	Since MFP is deleted from the master browser of Windows network if MFP is in the Super Sleep mode for 36 minutes or more, enable this setting to always display MFP in the browse list. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network	Dynamic update of DNS server		8826		Enable/Disable setting	1	1-2	NIC	Sets whether the function that gets the secondary DNS server to work as the primary DNS server temporarily is enabled or not when the primary DNS server is not available. 1: Enabled 2: Disabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network	Dynamic update of DNS server		8827		Operating interval	60	1-1440	NIC	Sets the operating interval of dynamic update. 1-1440 (min.)	12	
08	Setting mode	System	Network			8831		Time-out period for EWB network connection	60	1-300	SYS	1 to 300 (sec.)	1	
08	Setting mode	System	Network			8833		SMB server protocol	1	1-2	NIC	1: SMB1.0 2: SMB2.0	12	
08	Setting mode	System	Network			8835		Link down detection of network cable	1	0-1	NIC	0: Disabled 1: Enabled	12	
08	Setting mode	System	Network			8836		Time-out period for SMB client connection	30	1-180	NIC	Sets the time-out period for the SMB client connection to a server. 1 to 180 (seconds) * If a small value is set, connection to an SMB server may fail. * If the time-out is carried out while a connection to No. 445 port of an SMB server is set, the connection request is switched to No. 139 port.	12	
08	Setting mode	System	General	Registration number for workflow		8900	0	Total	2000	1000-2000	SYS	Changes the maximum number for workflow that is registrable.	4	
08	Setting mode	System	General	Registration number for workflow		8900	1	Number of interrupt copy	1	1	SYS	Changes the maximum number for workflow that is registrable.	4	
08	Setting mode	System	General	Registration number for workflow		8900	2	Number of transmission and calling of Fax/InternetFax	100	10-100	SYS	Changes the maximum number for workflow that is registrable.	4	
08	Setting mode	System	General	Registration number for workflow		8900	3	Number of printing	1000	150-1000	SYS	Changes the maximum number for workflow that is registrable.	4	
08	Setting Mode	System	Fax			8901		Default setting of Fax preview	0	0-1	SYS	Sets whether the preview function is enabled or disabled by default when using the Fax function. 0: OFF 1: ON	1	
08	Setting Mode	System	Fax			8902		Default display method of Fax preview	0	0-1	SYS	Sets the default display method on the preview screen when using the Fax function. 0: Fit to page 1: Fit to width	1	
08	Setting mode	System				8904		Job jump instruction setting	0	0-1	SYS	0: Disabled 1: Enabled	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System				8904		Job jump instruction setting (EFI)	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System				8905		Forcible printing against unacceptable paper error	0	0-1	SYS	0: OFF (printing not continued) 1: ON (printing continued by automatically selecting the available exit tray)	1	
08	Setting mode	System	Continuous print setting when punching dust box is full			8906		Copy	0	0-1	SYS	0: OFF (copying not continued) 1: ON (copying continued by canceling punching setting)	1	
08	Setting mode	System	Continuous print setting when punching dust box is full			8907		Printer/e-Filing	1	0-1	SYS	0: OFF (copying not continued) 1: ON (copying continued by canceling punching setting)	1	
08	Setting Mode	System	General			8910		Time to auto-clearing when in the self-diagnostic mode	0	0-5	SYS	0: None 1: 1 min. 2: 5 min. 3: 10 min. 4: 30 min. 5: 99 min.	1	
08	Setting Mode	System	General			8911		Security mode (level) setting	1	1-4	SYS	Level setting for security function 1: Low level 2: - 3: High level 4: -	1	
08	Setting Mode	System	Maintenance	General		8912		Serial number display of finisher	-	-	-	FIN S/N: XXXXXXXXX	2	Yes
08	Setting Mode	System	Maintenance	General		8913		Warning display for password expiration	15	0-30	SYS	0: None 1-30: Remaining days until the password expiration for warning start.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	MFP function setting			8914	0	Copy	1	0-1	SYS	Sets whether the Copier function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	1	e-Filing	1	0-1	SYS	Sets whether the filing function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	2	Fax	1	0-1	SYS	Sets whether the Fax function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	3	InternetFAX	1	0-1	SYS	Sets whether the InternetFAX function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	4	Email	1	0-1	SYS	Sets whether the email function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	5	Save as Local HDD	1	0-1	SYS	Sets whether the function that saves data to HDD in the equipment is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	6	Save as Local HDD from Print	1	0-1	SYS	Sets whether the function that saves data to HDD in the equipment using print function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	7	Save as Local HDD from Fax	1	0-1	SYS	Sets whether the function that saves data to HDD in the equipment using Fax function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	8	Save to USB Media	1	0-1	SYS	Sets whether the function that saves scanned data of originals to USB media is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	9	Save as FTP	1	0-1	SYS	Sets whether the function that saves scanned data of originals to FTP server is enabled or disabled. 0: Disabled 1: Enabled	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	MFP function setting			8914	10	Save as FTPS	1	0-1	SYS	Sets whether the function that saves scanned data of originals to FTP server using SSL is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	11	Save as SMB	1	0-1	SYS	Sets whether the function that saves scanned data of originals to the SMB server is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	12	Save as Netware	1	0-1	SYS	Sets whether the function that saves scanned data of originals to the Netware server is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	13	Web Service Scanning (WS Scan)	1	0-1	SYS	Sets whether the WS scanning function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	14	Twain Scanning (Remote Scan)	1	0-1	SYS	Sets whether the remote scanning function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	MFP function setting			8914	15	Send to External Controller	1	0-1	SYS	Sets whether the function that saves data to the external server is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting mode	System	MFP function setting			8914	16	Network Fax	1	0-1	SYS	Sets whether the Network Fax function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting mode	System	MFP function setting			8914	17	Network InternetFAX	1	0-1	SYS	Sets whether the Network InternetFAX function is enabled or disabled. 0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Network			8915		Automatic output of jobs at login	0	0-1	SYS	Sets whether jobs registered in the hold queue of user are automatically output or not when the user logs in. 0: Disabled 1: Enabled	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Network			8915		Automatic output of jobs at login (EFI)	0	0-1	SYS	Sets whether jobs registered in the hold queue of user are automatically output or not when the user logs in. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	General			8919		Service password	-	-	SYS	Sets the password to log into the self-diagnostic mode and Service UI.	11	Yes
08	Setting Mode	System	Option	FAX		8920		Output tray for FAX/InternetFAX/e-mail printing	0	0-2	SYS	Selects the bin/tray onto which the received document exits. 0: Inner receiving tray 1: Finisher 1st bin 2: Finisher 2nd bin * When the Job Separator is installed, the setting is as follows: 0: Job Separator tray 1: Exit tray 2: Job Separator tray	1	Yes
08	Setting mode	System	Department management			8921		Clearing of the user/department counter	1	0-1	SYS	0: Not allowed 1: Allowed	1	Yes
08	Setting mode	System	User interface			8922		Email header print setting	0	0-1	SYS	Sets whether the header of an Email or an Internet Fax is printed or not as they are received. 0: Not printed 1: Printed	1	
08	Setting mode	System	User interface			8923		Email body print setting	1	0-1	SYS	Sets whether the body of an Email or an Internet Fax is printed or not as they are received. 0: Not printed 1: Printed	1	
08	Setting mode	System	User interface			8924		Registration of the received FAX / Internet Fax / Email jobs to hold queue	0	0-1	SYS	Registers the received Fax / Internet Fax / Email jobs to the hold queue instead of printing immediately. Data in the hold queue are not printed unless the user allows printing by means of the control panel. 0: Not registered (normal printing) 1: Registered	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System				8925		Data tampering checking at start-up	0	0-1	SYS	Sets whether data tampering is checked or not at startup. 0: Not checked 1: Checked	1	
08	Setting mode	System	Department management			8926		Clearing of all department counters	-	-	SYS	In cases when the administrator has prohibited the clearing of department counter data using code 08-8921, a service technician can clear the data using this code.	3	Yes
08	Setting mode	System	Department management			8927		Clearing of all user counter	-	-	SYS	In cases when the administrator has prohibited the clearing of user counter data using code 08-8921, a service technician can clear the data using this code.	3	Yes
08	Setting mode	System	Finisher	Maximum setting for saddle stitching		8928	0	Plain paper / recycled paper	0	-25-25	SYS	-25 to +25	4	
08	Setting mode	System	Finisher	Maximum setting for saddle stitching		8928	1	Thick paper 1	0	-25-25	SYS	-25 to +25	4	
08	Setting mode	System	Finisher	Maximum setting for saddle stitching		8928	2	Thick paper 2	0	-25-25	SYS	-25 to +25	4	
08	Setting mode	System	Finisher	Maximum setting for saddle stitching		8928	3	Thick paper 3	0	-25-25	SYS	-25 to +25	4	
08	Setting mode	System	Password			8929		Administrator password reset	-	-	SYS	The default password is set. When "3: High level" is set for code 08-8911, the default password is set as a temporary password.	3	
08	Setting mode	System	User interface	Off Device Customization Architecture		8931		Output Management Service setting	1	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface			8932		Availability of Netware	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	User interface			8933		SSL setting (SSL SMTP Client Off/on)	2	1-3	NIC	1: Enabled (accepts all server certificates) 2: Disabled 3: Enabled (uses the imported CA certificate)	12	
08	Setting mode	System	User interface			8934		SSL setting (SMTP Client SSL/TLS)	1	1-2	NIC	1: STARTTLS 2: Over SSL	12	
08	Setting mode	System	User interface			8935		Remote scanning	1	0-1	NIC	0: Disabled 1: Enabled	12	
08	Setting mode	System	User interface			8936		Remote scanning with SSL	0	0-1	NIC	0: Disabled 1: Enabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface			8937		Port number of remote scanning	20080	0-65535	NIC		12	
08	Setting mode	System	User interface			8938		SSL port number of remote scanning	20443	0-65535	NIC		12	
08	Setting mode	System				8942		Debug level setting	2	0, 2	-	Sets the output volume of debug log. When the value is set to "0", the performance may decrease. 0: Debug log level - high 2: Debug log level - normal	1	
08	Setting mode	System	Maintenance	Remote service		8946	0	Acquisition starting time for RDMS	0	0-99999999	SYS	Month/day/hour/minute of starting time	14	
08	Setting mode	System	Maintenance	Remote service		8946	1	Acquisition ending time for RDMS	0	0-99999999	SYS	Month/day/hour/minute of ending time	14	
08	Setting mode	System	User interface	Card reader		8947		Automatic user registration for card authentication	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface			8948		Language package information	-	-	-	Displays the information of the installed language package.	2	Yes
08	Setting Mode	System	Version			8952		External version of HD data	-	-	-	External version of file system for system software	2	
08	Setting Mode	Printer	Feeding system / Paper transport			8967		Rotation printing by guides width of bypass feed tray	1	0-1	SYS	If the printing size and the guides width of the bypass feed tray are different, it is judged that paper is set in the wrong direction. The occurrence frequency of interruption by the error of the guides width may be decreased. However, this code does not work depending on the conditions, such as when stapling is selected. Set this code when requested by user or the guides width sensor is broken. Related code: 08-4621. 0: Invalid 1: Valid	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Feeding system / Paper transport			8967		Rotation printing by guides width of bypass feed tray (EFI)	0	0-1	SYS	If the printing size and the guides width of the bypass feed tray are different, it is judged that paper is set in the wrong direction. The occurrence frequency of interruption by the error of the guides width may be decreased. However, this code does not work depending on the conditions, such as when stapling is selected. Set this code when requested by user or the guides width sensor is broken. Related code: 08-4621. 0: Invalid 1: Valid	1	
08	Setting Mode	System	User interface	General		8968		Language package information (Panel Help)	-	-	-	Displays the language package information of the installed Panel Help.	2	Yes
08	Setting Mode	System	User interface	General		8969		Language package information (WebHelp)	-	-	-	Displays the language package information of the installed WebHelp.	2	Yes
08	Setting Mode	System	User interface	General		8970		Language package information (Service UI)	-	-	-	Displays the language package information of the installed Service UI.	2	Yes
08	Setting Mode	System	User interface	General		8971		Installation of language package	-	-	-	Installs the language package.	3	Yes
08	Setting Mode	System	General	Self-certificate		8973		Length of public key	1	0-1	SYS	0: 1024 bit 1: 2048 bit	1	
08	Setting Mode	System	General	Self-certificate		8974		Signature algorithm	0	0-4	SYS	0: SHA1 1: SHA224 2: SHA256 3: SHA384 4: SHA512	1	
08	Setting Mode	System	Network			8975		Data clearing of Point and Print	-	-	SYS	Point and Print in the equipment is deleted when this code is performed. Perform this code when a trouble occurs such as when uploading Point and Print is not possible. After performing this code, upload Point and Print from [Maintenance] menu in the [Administration] menu of TopAccess.	3	
08	Setting Mode	System	General	Detection of originals prohibited from duplication		8977	0	Copy	1	0-1	SYS	Sets whether the originals that are prohibited from duplication are detected or not. 0: Detection disabled 1: Detection enabled	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	General	Detection of originals prohibited from duplication		8977	1	Scan	1	0-1	SYS	Sets whether the originals that are prohibited from duplication are detected or not. 0: Detection disabled 1: Detection enabled	4	
08	Setting Mode	System	General	Detection of originals prohibited from duplication		8977	2	FAX	1	0-1	SYS	Sets whether the originals that are prohibited from duplication are detected or not. 0: Detection disabled 1: Detection enabled	4	
08	Setting Mode	System	Scanning			8980		Execution of Remote Scan while control panel is operated	0	0-1	NIC	Sets whether the remote scanning is enabled or disabled if the user is logged in using the control panel when user authentication or department management is enabled. 0: Disabled 1: Enabled	12	
08	Setting Mode	System	General	Scheduled automatic reboot		8981		Day of the week	0	0-255	SYS	Sets the condition and day of the week for scheduled automatic reboot. The condition and day of the week are assigned to each bit as follows. Input the sum of each bit as setting value. <Input value> bit1: Monday 0: Disabled 1: Enabled bit2: Tuesday 0: Disabled 2: Enabled bit3: Wednesday 0: Disabled 4: Enabled bit4: Thursday 0: Disabled 8: Enabled bit5: Friday 0: Disabled 16: Enabled bit6: Saturday 0: Disabled 32: Enabled bit7: Sunday 0: Disabled 64: Enabled bit8: Set the condition of reboot 0: Reboots only when in the sleep or super sleep mode 128: Reboots regardless of the sleep mode <Example> - Reboots every day regardless of the sleep mode: 255 (1+2+4+8+16+32+64+128=255) - Reboots on Sundays: 192 (0+0+0+0+0+64+128=192) - Reboots every day only when in the sleep or super sleep mode: 127 (1+2+4+8+16+32+64+0=127) - Reboots on Sundays only when in the sleep or super sleep mode: 64 (0+0+0+0+0+64+0=64)	1	
08	Setting Mode	System	General	Scheduled automatic reboot		8982		Time (Hour)	0	0-23	SYS	Sets time (hour) for scheduled automatic reboot.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	General	Scheduled automatic reboot		8983		Time (Minute)	0	0-59	SYS	Sets time (minute) for scheduled automatic reboot.	1	
08	Setting Mode	System	User interface	NFC reader		8986		Usage type	0	0-4294967295	SYS	0011ZZZZ (First 4 digits are fixed) -ZZZZ: Sub code 0000: No authentication using card 0001: IDm (Felica/NFC-FeliCa) and (or) UID (Mifare/NFC-Mifare) are used 0002: Data (Felica/NFC-FeliCa/Mifare/NFC-Mifare) 0003: SSFC mode	5	Yes
08	Setting Mode	System	User interface	NFC reader		8987		Format information 1	0	0-4294967295	SYS	000ASSSS (hexadecimal, first 3 digits are fixed) -A: 0: A key 1: B key -SSSS: Sector number (first 2 digits are fixed to "0")	5	Yes
08	Setting Mode	System	User interface	NFC reader		8988		Format information 2	0	0-4294967295	SYS	00BSEbse (hexadecimal, first 2 digits are fixed) -B: Block number of first block -S: Starting offset of first block -E: Ending offset of first block -b: Block number of second block -s: Starting offset of second block -e: Ending offset of second block	5	Yes
08	Setting Mode	System	User interface	NFC reader		8989		Format information 3	0	0-0xFFFFFFFFFFFFFFFF	SYS	0000KKKKKKKKKKKK (hexadecimal, first 4 digits are fixed) -KKKKKKKKKKKK: key (12 digits)	5	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8991		Notification setting	0	0-1	SYS	0: Disabled 1: Enabled	2	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8992		Notification day 1	0	0-31	SYS	1st to 31th. Input "0" to disable this setting.	1	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8993		Notification day 2	0	0-31	SYS	1st to 31th. Input "0" to disable this setting.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Maintenance	Notification of equipment information		8994		Notification day of the week	0	0-127	SYS	Input the value which corresponds to the day of the week. Input "0" to disable this setting. Sunday: 64 Monday: 32 Tuesday: 16 Wednesday: 8 Thursday: 4 Friday: 2 Saturday: 1 e.g.) Monday: 32 Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday: 127 (64+32+16+8+4+2+1=127)	1	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8995		Notification time	300	0-2359	SYS	(Hour/Hour/Minute/Minute)	1	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8996		Email address 1 for notification	-	-	SYS	Maximum 192 characters.	11	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8997		Email address 2 for notification	-	-	SYS	Maximum 192 characters.	11	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8998		Email address 3 for notification	-	-	SYS	Maximum 192 characters.	11	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8999	1	Adjustment mode (05) data list	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8999	2	Setting mode (08) data list	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information		8999	3	PM support mode data list	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Pixel counter list	8999	4	Toner cartridge reference	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Pixel counter list	8999	5	Service engineer reference	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Error history list	8999	6	Maximum 1000 items	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Error history list	8999	7	Latest 80 items	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Maintenance	Notification of equipment information	Firmware upgrade log	8999	8	Maximum 200 items	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Power ON/OFF log	8999	9	Power ON/OFF log	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Version list	8999	10	Version list	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Engine firmware log	8999	11	Engine firmware log	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting Mode	System	Maintenance	Notification of equipment information	Total counter list	8999	12	Total counter list	0	0-1	SYS	0: Disabled 1: Enabled	4	Yes
08	Setting mode	System	General			9000		Destination selection	Refer to contents	0-3	M	0: Europe 1: North America 2: Japan 3: Others <Default value> NAD/NAC: 1 JPC: 2 Others: 0	1	
08	Setting Mode	System	Option	FAX		9001		Destination setting	Refer to contents	0-25	SYS	0: Japan 1: Asia 2: Australia 3: Hong Kong 4: U.S.A./Canada 5: Germany 6: U.K. 7: Italy 8: Belgium 9: Netherlands 10: Finland 11: Spain 12: Austria 13: Switzerland 14: Sweden 15: Denmark 16: Norway 17: Portugal 18: France 19: Greece 20: Poland 21: Hungary 22: Czech 23: Turkey 24: South Africa 25: Taiwan <Default value> NAD: 4 MJD: 5 JPD: 0 Others: 1	1	Yes
08	Setting mode	System	General			9010		Line adjustment mode	0	0-1	M	0: For factory shipment 1: For line Field: "0" must be selected	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			9012		Language selection to be displayed at power-ON	Refer to contents	-	SYS	<Default value> JPD: Japanese CND: Simplified Chinese TWD: Traditional Chinese Others: English	11	
08	Setting mode	System	User interface			9016		Externally installed counter	0	0-5	M	0: No external counter 1: Coin controller (If the value of 08-9979 is "0" (ACS), it is changed to "2" (Full color).) 2: Totalizer/Key card (This value is valid only when "2" is set for 08-9000.) 3: Key counter 5: Coin controller supporting ACS/mixed-size (The value of 08-4131 is set to "1") * "4" cannot be set.	1	
08	Setting mode	System	Counter			9017		Setting for counter installed externally	1	0-7	M	Selects the job to count up for the external counter. 0: Not selected 1: Copier 2: Fax 3: Copier/Fax 4: Printer 5: Copier/Printer 6: Fax/Printer 7: Copier/Fax/Printer	1	
08	Setting Mode	System	General	Memory		9020		Size information of memory	-	-	SYS	Displays the sizes of the main memory and page memory. Enables to check if each memory is properly	2	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	General			9022		Production process management status for easy setup	99	0-99	SYS	Perform this code when an error occurs during the easy setup (unpacking manual adjustment) and you want to finish the easy setup, or when you want to restart the unpacking manual adjustment from the beginning. Only 0 to 7 and 99 are available for this code. 0: Packing mode completed (before starting to unpack) 1: Auto toner adjustment completed 2: Installation of toner cartridge confirmed 3: Installation of toner cartridge completed 4: Forced image quality control completed 5: Forced registration completed 6: Auto gamma adjustment (PPC) completed 7: Auto gamma adjustment (PRT 600 dpi) completed 99: Unpacking and adjustment completed	1	
08	Setting Mode	System	Initialization			9030		Initialization after software version up	-	-	SYS	Perform this code when the software in this equipment has been upgraded.	3	Yes
08	Setting Mode	System	User interface			9036		On/Off setting of self-copy function	0	0-1	SYS	Sets whether the self-copy function is enabled or disabled. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface	Counter installed externally		9037		Job handling-short paid-coin controller	1	0-1	SYS	Sets whether pause or stop the printing job when it is short paid using a coin controller. 0: Pause the job 1: Stop the job	1	Yes
08	Setting Mode	System	Maintenance	General		9050		Performing panel calibration	-	-	SYS	Performs the calibration of the pressing position on the touch panel (LCD screen). The calibration is performed by pressing 4 reference positions after this code is started up.	1	Yes
08	Setting Mode	System	User interface	Screen setting		9051		Panel calibration setting value	0	0-1	SYS	Switches whether the screen for displaying panel calibration setting values is displayed or not. 0: Disabled (screen not displayed) 1: Enabled (screen displayed)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Maintenance	General		9059		Operation switching at calibration	Refer to contents	0-1	SYS	Switches whether a menu for selecting paper in user calibration (automatic gamma adjustment) is displayed or not. 0: Not displayed 1: Displayed (copy/print) <Default value> MJD: 1 Others: 0	1	Yes
08	Setting mode	System				9060		Destination display at SRAM initialization	Refer to contents	0-255	SYS	0: MJD 1: NAD 2: JPD 3: AUD 4: CND 5: Not defined 6: TWD 7: Not defined 8: Not defined 9: ASD 10: ARD 11: Not defined <Default value> JPD: 2 NAD: 1 MJD: 0 ASD: 9 AUD: 3 TWD: 6 CND: 4 ARD: 10	2	
08	Setting Mode	System	HDD			9065		HDD diagnostic menu display	-	-	SYS	Display the HDD information.	2	Yes
08	Setting Mode	System	HDD			9072		Performing HDD testing	-	-	SYS	Checks the bad sector. It may take more than 30 minutes to finish the checking.	3	Yes
08	Setting mode	System	General			9081		Initialization of department management information	-	-	SYS	Initializing of the department management information Enter the code with the digital keys and press the [INITIALIZE] button to perform the initialization. If the area storing the department management information is destroyed for some reason, "Enter Department Code" is displayed on the control panel even if the department management function is not set on. In this case, initialize the area with this code. This area is normally initialized at the factory.	3	
08	Setting Mode	System	Initialization			9083		Initialization of NIC information	-	-	SYS	Returns the value to the factory shipping default value.	3	Yes
08	Setting mode	System	All clear	LGC-SRAM board		9090		Printer all clear	-	-	M	Initializes the SRAM board (for LGC board).	3	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			9100		Date and time setting	-	13 digits	-	Year/month/date/day/hour/minute/second Example: 03 07 01 3 13 27 48 "Day" - "0" is for "Sunday". Proceeds Monday through Saturday from "1" to "6".	1	
08	Setting mode	System	User interface			9102		Date display format	Refer to contents	0-2	SYS	0: YYYY.MM.DD 1: DD.MM.YYYY 2: MM.DD.YYYY <Default value> MJD: 1 JPD: 0 Others: 2	1	
08	Setting mode	System	General			9103		Time differences	Refer to contents	0-47	SYS	0: +12.0h 1: +11.5h 2: +11.0h 3: +10.5h 4: +10.0h 5: +9.5h 6: +9.0h 7: +8.5h 8: +8.0h 9: +7.5h 10: +7.0h 11: +6.5h 12: +6.0h 13: +5.5h 14: +5.0h 15: +4.5h 16: +4.0h 17: +3.5h 18: +3.0h 19: +2.5h 20: +2.0h 21: +1.5h 22: +1.0h 23: +0.5h 24: 0.0h 25:- 0.5h 26: -1.0h 27: -1.5h 28: -2.0h 29: -2.5h 30: - 3.0h 31: -3.5h 32: -4.0h 33: -4.5h 34: -5.0h 35: - 5.5h 36: -6.0h 37: -6.5h 38: -7.0h 39: -7.5h 40: - 8.0h 41: -8.5h 42: -9.0h 43: -9.5h 44: -10.0h 45: - 10.5h 46: -11.0h 47: -11.5h <Default value> MJD: 24 NAD: 40 JPD: 6 Others: 0	1	
08	Setting mode	System	User interface			9110		Auto-clear timer setting	3	0-10	SYS	Timer to return the equipment to the default settings when the [START] button is not pressed after the function and the mode are set 0: Not cleared 1 to 10: Set number x 15 sec.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface			9111		Auto power save mode timer setting	4	0, 4, 6-15	SYS	Timer to automatically switch to the auto power save mode when the equipment has not been used 0: Invalid 4: 1 min. 6: 3 min. 7: 4 min. 8: 5 min. 9: 7 min. 10: 10 min. 11: 15 min. 12: 20 min. 13: 30 min. 14: 45 min. 15: 60 min.	1	Yes
08	Setting Mode	System	User interface			9112		Auto Shut Off timer setting (Sleep Mode)	MJD: 2 Others: 21	0-21	SYS	Timer to automatically switch to the auto sleep mode when the equipment has not been used 0: 3 min. 1: 5 min. 2: 10 min. 3: 15 min. 4: 20 min. 5: 25 min. 6: 30 min. 7: 40 min. 8: 50 min. 9: 60 min. 10: 70 min. 11: 80 min. 12: 90 min. 13: 100 min. 14: 110 min. 15: 120 min. 16: 150 min. 17: 180 min. 18: 210 min. 19: 240 min. 20: Invalid 21: 1 min.	1	Yes
08	Setting Mode	System	User interface	Power save		9113		Setting for turning the screen OFF for Auto Power Save mode or the Auto Shut Off mode	Refer to contents	0-1	SYS	0: OFF 1: ON <Default value> JPD/NAD/MJD: 1 Others: 0	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	General		9116		Black-free function	0	0-1	SYS	0: Disabled 1: Enabled When "1" (enabled) is set at this code, "1" (black) is automatically set at the code 08-9979. In this case "0" (ACS) and "2" (full color) are not selectable for 08-9979. When "0" (OFF) is set at 08-9120 and "1" (ON) is set at 08-9264, the value for this code becomes "0" (disabled) automatically ("1" is not selectable). When the value of 08-6084 is "1" (Quota type = Job Quota), the value of this code cannot be set to "1".	1	Yes
08	Setting mode	System	General			9117		Raw printing job Do not Print Blank Pages	0	0-1	SYS	0: OFF 1: ON	1	
08	Setting Mode	System	User interface	Department setting		9120		Department setting	0	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	User interface	Department setting		9121		Print setting without department code	1	0-2	SYS	0: Printed forcibly 1: Not printed 2: Deleted forcibly	1	Yes
08	Setting Mode	System	User interface	Department setting		9122		Copy	1	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface	Department setting		9123		FAX	1	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface	Department setting		9124		Printer	1	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface	Department setting		9125		Scanning	1	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting Mode	System	User interface	Department setting		9126		List print	1	0-1	SYS	0: Disabled 1: Enabled	1	Yes
08	Setting mode	System	Counter	Counting method in Twin Color Mode	PPC	9128		Counting method in Twin Color Mode	0	0-2	SYS	Sets the counting method of fee charging or duplexing count in the Twin Color Mode. 0: Count as Twin Color Mode 1: Count as Black Mode 2: Count as Full Color Mode	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	External counter		9129		Duplex print setting when coin controller is used	1	0-1	SYS	Sets whether duplex printing is allowed or not (only permitting single printing) when a coin controller is used. 0: Invalid (printing only one side) 1: Valid (printing both sides)	1	Yes
08	Setting mode	System	User interface			9130		Highlighting display on LCD	0	0-1	SYS	0: Black letter on white background 1: White letter on black background	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting	9132		Default setting of screen (Function)	0	0-99	SYS	Sets the screen to be displayed after the auto-clear time has passed or it has recovered from the energy saving mode or sleep mode. 0: Copier 1: Fax 2: Scan 3: Box 4: Print 5: Template 6: Menu 7: Job status 99: EWB * Only 0 to 7, and 99 can be entered.	1	Yes
08	Setting mode	System	User interface			9133		Default setting for APS/AMS	0	0-2	SYS	0: APS (Automatic Paper Selection) 1: AMS (Automatic Magnification Selection) 2: Not selected	1	
08	Setting Mode	System	User interface	Default setting of RADF mode		9134		Default setting	0	0-1	SYS	0: Continuous feeding (by pressing the [START] button) 1: Single feeding (by setting original on the tray)	1	Yes
08	Setting mode	System	User interface	Book type original priority	PPC	9135		Book type original priority	0	0-1	SYS	0: Left page to right page 1: Right page to left page	1	
08	Setting mode	System	User interface	Maximum number of copy volume	PPC	9136		Maximum number of copy volume	1	1-3	SYS	1: 999 2: 99 3: 9	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting	9137		Setting for automatic duplexing mode	0	0-3	SYS	0: Invalid 1: Single-sided to duplex copying 2: Two-sided to duplex copying 3: User selection	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface	Paper size selection for [OTHER] button	PPC	9140		Paper size selection for [OTHER] button	Refer to contents	-	SYS	Press the icon on the LCD to select the size. <Default value> NAD: COMP JPD: A5-R Others: FOLIO	9	
08	Setting Mode	System	User interface	Default setting of RADF mode		9142		Default setting of RADF original size	0	0-1	SYS	0: Same size originals 1: Mixed size originals	1	Yes
08	Setting mode	System	Paper feeding			9143		Time lag before auto-start of bypass feeding	4	0-10	SYS	Sets the time taken to add paper feeding when paper in the bypass tray has run out during the bypass feed copying. 0: Paper is not drawn in unless the [START] button is pressed. 1-10: Setting value x 0.5sec.	1	
08	Setting mode	System	User interface	Blank copying prevention mode during RADF jamming	PPC	9144		Blank copying prevention mode during RADF jamming	0	0-1	SYS	0: OFF 1: ON (Start printing when the scanning of each page is finished)	1	
08	Setting Mode	System	User interface	Rotation printing		9146		Rotation printing at the non-sorting	0	0-1	SYS	0: Not rotating 1: Rotating	1	Yes
08	Setting mode	System	User interface	Direction priority of original image	PPC	9147		Direction priority of original image	0	0-1	SYS	0: Automatic 1: Portrait	1	
08	Setting mode	System	User interface			9148		Inner receiving tray priority at Non-sort Mode	0	0-1	SYS	0: Normal 1: Inner receiving tray	1	
08	Setting mode	System	User interface	Width setting for image shift copying (linkage of front side and back side)	PPC	9149		Width setting for image shift copying (linkage of front side and back side)	0	0-1	SYS	0: ON 1: OFF	1	
08	Setting mode	System	User interface	Automatic Sorting Mode setting (RADF)	PPC	9150		Automatic Sorting Mode setting (RADF)	2	0-4	SYS	0: Invalid 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT	1	
08	Setting mode	System	User interface	Default setting of Sorter Mode	PPC	9151		Default setting of Sorter Mode	0	0-4	SYS	0: NON-SORT 1: STAPLE 2: SORT 3: GROUP 4: ROTATE SORT	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface	Correction of reproduction ratio in editing copy	PPC	9152		Correction of reproduction ratio in editing copy	10	0-10	SYS	Sets the reproduction ratio for the "X in 1" printing (including magazine sort) to the "Reproduction ratio x Correction ratio". 0: 90% 1: 91% 2: 92% 3: 93% 4: 94% 5: 95% 6: 96% 7: 97% 8: 98% 9: 99% 10: 100%	1	
08	Setting mode	System	User interface			9153		Image position in editing	2	0-3	SYS	Sets the page pasted position for "X in 1" to the upper left corner/center. 0: Cornering (PPC)/Cornering (PRT) 1: Centering (PPC)/Cornering (PRT) 2: Cornering (PPC)/Centering (PRT) 3: Centering (PPC)/Centering (PRT)	1	
08	Setting mode	System	User interface			9155		Magazine sort setting	0	0-1	SYS	0: Left page to right page 1: Right page to left page	1	
08	Setting mode	System	User interface	2 in 1/4 in 1 page allocating order setting	PPC	9156		2 in 1 / 4 in 1 page allocating order setting	0	0-1	SYS	0: Horizontal 1: Vertical	1	
08	Setting mode	System	User interface	Printing format setting for Time Stamp and Page Number	PPC	9157		Printing format setting for Time Stamp and Page Number	0	0-1	SYS	Hyphen 0: OFF 1: ON Note: Hyphen printing format ON: -1- OFF: 1	1	
08	Setting mode	System	User interface	Cascade operation setting	PPC / FAX	9158	0	Enable/Disable setting	0	0-1	SYS	0: Disabled 1: Enabled	4	
08	Setting mode	System	User interface	Cascade operation setting	PPC / FAX	9158	1	Operation setting	0	0-1	SYS	0: Once 1: Circulation (Loop)	4	
08	Setting mode	System	User interface	Cascade operation setting	Printer/Box	9159	0	Enable/Disable setting	0	0-1	SYS	0: Disabled 1: Enabled	4	
08	Setting mode	System	User interface	Cascade operation setting	Printer/Box	9159	1	Operation setting	0	0-1	SYS	0: Once 1: Circulation (Loop)	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface			9163		Default setting of printing direction for Time Stamp and Page Number	0	0-1	SYS	0: Short edge 1: Long edge	1	
08	Setting Mode	System	User interface	Paper Feed		9164		Auto-start setting for bypass feed printing	0	0-1	SYS	Sets whether or not feeding a paper automatically into the copier when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding)	1	Yes
08	Setting mode	System	User interface	Auto-start setting for bypass feed printing (Local)	PPC	9165		Auto-start setting for bypass feed printing (Local)	1	0-1	SYS	Sets whether or not feeding a paper automatically into the copier when it is placed on the bypass tray. 0: OFF (Press the [START] button to start feeding.) 1: ON (Automatic feeding)	1	
08	Setting mode	System	User interface	Color 1 at twin color selection (Select what color black in original is copied)	PPC (color)	9178		Color 1 at twin color selection (Select what color black in original is copied)	0	0-6	SYS	0: K 1: Y 2: M 3: C 4: R 5: G 6: B	1	
08	Setting mode	System	User interface	Color 2 at twin color selection (Select what color other than black in original is copied)	PPC (color)	9179		Color 2 at twin color selection (Select what color other than black in original is copied)	4	0-6	SYS	0: K 1: Y 2: M 3: C 4: R 5: G 6: B	1	
08	Setting Mode	System	Option	FAX		9183		Adaptation of paper source	0	0-1	SYS	0: Not subjected for APS judgment 1: Subjected for APS judgment	1	Yes
08	Setting mode	System	User interface			9184		Centering printing of primary/secondary direction at AMS	1	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	User interface	Feeding paper media		9185	0	Copier	3	1-3	SYS	Sets a media type for APS drawer searching in the copier functions. <Acceptable value (decimal number)> 1, 2, 3 Each bit 0: Excluded from feeding target media Each bit 1: Feeding target media bit 0: Plain paper bit 1: Recycled paper	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface	Feeding paper media		9185	1	Printer/Box	1	1-3	SYS	Sets a media type to print on plain paper in the printer/box functions. This setting is used for drawer searching or media type inconsistency judgment. The setting result does not affect other media types, other than plain paper. <Acceptable value (decimal number)> 1 only Each bit 0: Excluded from feeding target media Each bit 1: Feeding target media bit 0: Plain paper bit 1: N/A (Always set "0")	4	
08	Setting Mode	System	Network	Retention period		9193		Web data retention period	10	3 digits	SYS	When a certain period of time has passed without operation after accessing TopAccess, the data being registered is automatically reset. This period is set at this code. (Unit: minute)	1	Yes
08	Setting mode	System	General			9199		Automatic interruption page number setting for printing	500	0-9999	SYS	Sets the number of pages to interrupt printing automatically. If "1" or more is set to this code, printing is interrupted at the set value. If "0" is set, printing is not interrupted automatically. By the combination of this code and 08-2509, performing image quality control is possible while processing jobs. Even if the number of jobs exceeds the set value of 08-2509, image quality control can be performed around the set value of 08-2509 by interrupting printing automatically with this code, and the change of image density can be suppressed. However, image problems may occur if the value extremely smaller than the default value is set to the equipment whose print ratio of monochrome is relatively high. (unit: pages)	1	
08	Setting Mode	System	Network	Retention period		9200		File retention period	30	0-999	SYS	0: No limits 1 to 999: 1 to 999 days	1	Yes
08	Setting Mode	System	Network	E-mail		9201		Max. size in email/InternetFAX transmission	30	2-100	SYS	2 to 100 MB	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Electronic filing			9203		e-Filing document guarantee mode	1	0-1	SYS	Sets the file retention level during edition in e-Filing (when the document cut/save command is used) 0: Not retained (Documents could be lost due to We session timeout / electricity cutoff during document cut/save.) 1: Full retained - Documents are retained until cut/save command completion. When "1" is set, documents are not lost even if disk full occurs during command execution.	1	
08	Setting mode	System	User interface			9204		Binarizing level selection (When judging as black in the ACS Mode)	3	1-5	SYS	1: Step -2 2: Step -1 3: Step 0 (center) 4: Step 1 5: Step 2 The binarizing level of each step is set at 08-9230.	1	
08	Setting mode	System	Electronic filing			9207		Default setting of user box retention period	0	0-999	SYS	Sets the data retention period when creating a user box. 0: Not deleted 1 to 999: Retention period (Unit: Day)	1	
08	Setting Mode	System	HDD			9208		Warning notification-File Share/e-Filing	90	0-100	SYS	Sets the percentage of HDD partition filled when warning notification is sent. 0 to 100: 0 to 100% * Checks the remaining amount of HDD with the searching interval set at 08-9225.	1	Yes
08	Setting mode	System	Scanning			9209		Notification setting of E-mail saving time limit	3	0-99	SYS	Sets the days left the notification of E-mail saving time limit appears 0 to 99: 0 to 99 days	1	
08	Setting mode	System	Scanning			9210		Default setting of partial size when transmitting E-mail	0	0-6	SYS	Sets the default value for the partial size of E-mail to be transmitted when creating a template. 0: Not divided 1: 64 2: 128 3: 256 4: 512 5: 1024 6: 2048 (Unit: KB)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Option	FAX		9211		Default setting of page by page-I FAX	0	0-4	SYS	Sets the default value for the page by page of Internet FAX to be transmitted when creating a template. 0: Not divided 1: 256 2: 512 3: 1024 4: 2048 (Unit: KB)	1	Yes
08	Setting Mode	System	User interface	Default mode setting	Default setting (SCN)	9213		Default set of density adjust (Black)	0	0-11	SYS	0: Automatic density 1: Step -5 2: Step -4 3: Step -3 4: Step -2 5: Step -1 6: Step 0 (center) 7: Step +1 8: Step +2 9: Step +3 10: Step +4 11: Step +5 (1 to 11: Manual density)	1	Yes
08	Setting mode	System	User interface	Default setting of background adjustment (Full Color)	SCN (color)	9214		Default setting of background adjustment (Full Color)	5	1-9	SYS	1: Step -4 2: Step -3 3: Step -2 4: Step -1 5: Step 0 (center) 6: Step +1 7: Step +2 8: Step +3 9: Step +4	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting (SCN)	9215		Color mode	0	0-4	SYS	0: Black 1: Gray Scale 2: Unused 3: Full Color 4: Auto Color	1	Yes
08	Setting Mode	System	User interface	Default mode setting	Default setting of resolution (SCN)	9216		Full Color	2	0-5	SYS	0: 100 dpi 1: 150 dpi 2: 200 dpi 3: 300 dpi 4: 400 dpi 5: 600 dpi	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Default mode setting	Default setting of resolution (SCN)	9217		Gray Scale	2	0-5	SYS	0: 100 dpi 1: 150 dpi 2: 200 dpi 3: 300 dpi 4: 400 dpi 5: 600 dpi	1	Yes
08	Setting Mode	System	User interface	Default mode setting	Default setting of resolution (SCN)	9218		Black	1	0-5	SYS	0: 150 dpi 1: 200 dpi 2: 300 dpi 3: 400 dpi 4: 600 dpi 5: 100 dpi	1	Yes
08	Setting Mode	System	User interface	Default mode setting	Default setting (SCN)	9219		Original mode (Full color)	0	0-3	SYS	0: Text 1: Photo 2: Print 3: Custom (Valid only when a setting other than "0" is set for 08-8303)	1	Yes
08	Setting Mode	System	User interface	Default mode setting	Default setting (SCN)	9220		Original mode (Black)	0	0-3	SYS	0: Text 1: Text/Photo 2: Photo 3: Custom The value other than "0" needs to be set for 08-7401 to select "3: Custom."	1	Yes
08	Setting mode	System	User interface	Default setting of scanning mode	SCN	9221		Default setting of scanning mode	0	0-2	SYS	0: Single 1: Book 2: Tablet	1	
08	Setting mode	System	User interface	Default setting of rotation mode	SCN	9222		Default setting of rotation mode	0	0-3	SYS	0: 0 degree 1: 90 degrees 2: 180 degrees 3: 270 degrees	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface	Default setting of original paper size	SCN	9223		Default setting of original paper size	0	0-22	SYS	0: Automatic 1: A3 2: A4 3: LD 4: LT 5: A4-R 6: A5-R 7: LT-R 8: LG 9: B4 10: B5 11: ST-R 12: COMP 13: B5-R 14: FOLIO 15: 13"LG 16: 8.5"x 8.5" 18: A6-R 19: Size mixed20: 8K 21: 16K 22: 16K-R	1	
08	Setting mode	System	General	Searching interval of deleting expired files and checking capacity of HDD partitions	SCN	9225		Searching interval of deleting expired files and checking capacity of HDD partitions	12	1-24	SYS	Sets the search interval of deleting expired files and checking capacity of HDD partitions. (Unit: Hour) Related code 08-9208	1	
08	Setting mode	System	User interface	Default setting of background adjustment (Gray Scale)	SCN	9226		Default setting of background adjustment (Gray Scale)	5	1-9	SYS	1: Step -4 2: Step -3 3: Step -2 4: Step -1 5: Step 0 (Center) 6: Step +1 7: Step +2 8: Step +3 9: Step +4	1	
08	Setting Mode	System	User interface	Default setting of filing format	E-mail	9227		Black	1	0-6	SYS	0: TIFF (Multi) 1: PDF (Multi) 2: Not used 3: TIFF (Single) 4: PDF (Single) 5: XPS (Multi) 6: XPS (Single)	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Default setting of filing format	Storing files	9228		Color/ACS	1	0-8	SYS	0: TIFF (Multi) 1: PDF (Multi) 2: JPG 3: TIFF (Single) 4: PDF (Single) 5: SLIM PDF (Multi) 6: SLIM PDF (Single) 7: XPS (Multi) 8: XPS (Single)	1	Yes
08	Setting Mode	System	User interface	Default setting of filing format	Storing files	9229		Black	MJD: 1 Others: 0	0-6	SYS	0: TIFF (Multi) 1: PDF (Multi) 2: Not used 3: TIFF (Single) 4: PDF (Single) 5: XPS (Multi) 6: XPS (Single)	1	Yes
08	Setting mode	System	Image	Binarizing level setting (When judging as black in the ACS Mode)		9230	0	Step -2	115	0-255	SYS	Sets the binarizing level of each step. When the value increases, the image becomes darker. When the value decreases, the image becomes lighter. Refer to 08-9204.	4	
08	Setting mode	System	Image	Binarizing level setting (When judging as black in the ACS Mode)		9230	1	Step -1	145	0-255	SYS	Sets the binarizing level of each step. When the value increases, the image becomes darker. When the value decreases, the image becomes lighter. Refer to 08-9204.	4	
08	Setting mode	System	Image	Binarizing level setting (When judging as black in the ACS Mode)		9230	2	Step 0 (center)	175	0-255	SYS	Sets the binarizing level of each step. When the value increases, the image becomes darker. When the value decreases, the image becomes lighter. Refer to 08-9204.	4	
08	Setting mode	System	Image	Binarizing level setting (When judging as black in the ACS Mode)		9230	3	Step +1	205	0-255	SYS	Sets the binarizing level of each step. When the value increases, the image becomes darker. When the value decreases, the image becomes lighter. Refer to 08-9204.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Image	Binarizing level setting (When judging as black in the ACS Mode)		9230	4	Step +2	235	0-255	SYS	Sets the binarizing level of each step. When the value increases, the image becomes darker. When the value decreases, the image becomes lighter. Refer to 08-9204.	4	
08	Setting mode	System	Scanning			9233		Equipment name and user name setting to a folder when saving files	0	0-2	SYS	Sets whether or not adding the equipment name and user name to the folder when saving files.0: Not add 1: Add the equipment name 2: Add the user name	1	
08	Setting mode	System	User interface			9236		Default setting of print screen	1	1-4	SYS	1: Private print screen (Job list of log-in user is displayed if user authentication is enabled.) 2: Hold print screen (Job list of log-in user is displayed if user authentication is enabled.) 3: Private print screen (If the private print screen is displayed when user authentication is enabled, user list is displayed if user logs in as GUEST, and job list of log-in user is displayed if user logs in as general user.) 4: Hold print screen (If the private print screen is displayed when user authentication is enabled, user list is displayed if user logs in as GUEST, and job list of log-in user is displayed if user logs in as general user.) * If user data department management (08-9264) is changed from OFF to ON, the value in this code changes from "1" to "2", and "3" to "4". The value does not change if it is "2" or "4". Reset this value as necessary when changing user data department management (08-9264) from OFF to ON.	1	
08	Setting mode	System	User interface			9236		Default setting of print screen (EFI)	2	1-2	SYS	Sets the default screen when the [PRINT] key is pressed. 1: Private 2: Hold	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Data overwrite enabler			9240		HDD data overwriting type setting	3	0-3	SYS	Select the type of the overwriting level for deleting HDD data. (This setting is enabled only when the GP-1070 is installed.) 0: LOW Standard overwriting method. 1: MEDIUM More secure overwriting method than LOW. The overwriting time is between LOW and HIGH. 2: HIGH The most secure overwriting method. The overwriting time is the longest. 3: SIMPLE Simple overwriting method. The time for overwriting is the shortest.	1	
08	Setting mode	System	Paper feeding			9248		Tab paper / Inserter paper automatic feeding setting (Remote)	1	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	User interface			9250		Image setting for Electronic Filing printing (Only for color image)	0	0-3	SYS	0: General 1: Photograph 2: Presentation 3: Line art	1	
08	Setting mode	System	User interface			9251		Access code entry for Electronic Filing printing	0	0-1	SYS	0: Renewed automatically 1: Enter every time	1	
08	Setting mode	System	User interface			9252		Clearing timing for files and Electronic Filing Agent	1	0-1	SYS	0: Immediately after the completion of scanning 1: Cleared by Auto Clear	1	
08	Setting mode	System	Paper feeding			9253		Setting of paper size switching to 13" LG	0	0-2	SYS	0: Not switched 1: LG -> 13"LG 2: FOLIO -> 13"LG	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Option	FAX		9255		FOLIO/A4-R judgment when mixed width of paper is enabled	0	0-1	SYS	This code is effective when the value of 08-9254 is "1". When the value of this code is "0", the paper size is judged by performing switchback. When the value of this code is "1" and the paper size is AB-series, FOLIO is judged as A4-R and switchback is not performed. When the paper size is LT-series, the switchback is always performed. When the value of this code is set to "1", the scanning performance increases at fax transmission. However, the whole image cannot be output since FOLIO is judged as A4-R. 0: Judgment is enabled 1: Judgment is disabled	1	
08	Setting mode	System	User interface			9261		Maximum number of time job build performed	1000	5-1000	SYS	Sets the maximum number of time a job build has been performed. 5-1000: 5 to 1000 times	1	
08	Setting mode	System	General			9264		User data department management	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	Paper feeding			9267		Detection method of 13" LG for single-size document	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting Mode	System	Option	FAX		9268		Inbound FAX function (Forwarding by TSI)	1	0-1	SYS	0: OFF (Function disabled) 1: ON (Function enabled)	1	Yes
08	Setting Mode	System	Option	FAX		9269		Tab/cover sheet-FAX Printing stop function	0	0-1	SYS	Sets ON or OFF of the printing function of special sheets such as tab or cover sheet of FAX, Email or list print. 0: Function OFF 1: Function ON	1	Yes
08	Setting mode	System	Network			9271		Authentication method of "Scan to Email"	0	0-2	SYS	0: Disabled 1: SMTP authentication 2: LDAP authentication	1	
08	Setting mode	System	Network			9272		Setting whether use of the Internet FAX is permitted at the time of authentication	0	0-1	SYS	0: Not permitted 1: Permitted	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9274		"From" address assignment method at the time of authentication	0	0-2	SYS	0: User name + @ + Domain name 1: LDAP searching 2: Use the address registered at "From" field of E-mail setting	1	
08	Setting mode	System	Network			9276		Setting for "From" address edit at "Scan to Email"	0	0-1	SYS	0: Not permitted 1: Permitted	1	
08	Setting mode	System	Network			9278		E-mail domain name	-	-	SYS	96 + 2 (delimiter) character ASCII sequence only	11	
08	Setting Mode	System	User interface	Sound		9280		Error sound	1	0-1	SYS	0: OFF 1: ON	1	Yes
08	Setting Mode	System	User interface	Sound		9281		Sound setting -- Energy Saving	Refer to contents	0-1	SYS	0: OFF 1: ON <Default value> JPD: 0 Others: 1	1	Yes
08	Setting mode	System	General	User data management limitation setting	black	9288		User data management limitation setting	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	General	User data management limitation Setting by number of printouts	color	9289		User data management limitation Setting by number of printouts	0	7 digits	SYS	0-9,999,999: 0-9,999,999 sheets	1	
08	Setting mode	System	General			9293		User authentication method	0	0-2	SYS	0: Local authentication 1: Windows domain authentication 2: LDAP authentication	1	
08	Setting Mode	System	General			9294		Automatic user registration for external authentication	1	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	General	User data management limitation setting	black	9295		User data management limitation setting	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	General	User data management limitation Setting by number of printouts	color	9296		User data management limitation Setting by number of printouts	0	7 digits	SYS	0-9,999,999: 0-9,999,999 sheets	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9298		Restriction on Address book operation by administrator	0	0-1	SYS	Some restrictions can be given on the administrator for operating the Address book. 0: No restriction 1: Can be operated only under the administrator's authorization	1	
08	Setting mode	System	Network			9299		Restriction on "To" ("cc") address	0	0-3	SYS	0: No restriction 1: Can be set from both of the Address book and LDAP server 2: Can be set only from the Address book 3: Can be set only from the LDAP server	1	
08	Setting mode	System	Paper feeding			9300		Drawer 1Paper information	0	0-8	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 8: Recycled paper Only "0", "1", "2", "3" and "8" are acceptable.	1	
08	Setting mode	System	Paper feeding			9301		Drawer 2Paper information	0	0-8	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 8: Recycled paper Only "0", "1", "2", "3" and "8" are acceptable.	1	
08	Setting mode	System	Paper feeding			9302		PFP 1Paper information	0	0-8	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 8: Recycled paper Only "0", "1", "2", "3" and "8" are acceptable.	1	
08	Setting mode	System	Paper feeding			9303		PFP 2Paper information	0	0-8	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 8: Recycled paper Only "0", "1", "2", "3" and "8" are acceptable.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Paper feeding			9304		LCF Paper information	0	0-8	SYS	0: Plain paper 8: Recycled paper Only "0" and "8" are acceptable.	1	
08	Setting mode	System	Paper feeding			9305		Bypass tray Paper information	0	0-135	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 4: Thick paper 4 6: Special paper 1 7: Special paper 2 8: Recycled paper 16: OHP film 129: Thick paper 1 / reverse 130: Thick paper 2 / reverse 131: Thick paper 3 / reverse 132: Thick paper 4 / reverse 134: Special paper 1 / reverse 135: Special paper 2 / reverse Only "0-4", "6-8", "16", "129-132" and "134-135" are acceptable.	1	
08	Setting mode	System	Paper feeding	LT <---> A4/LD <---> A3	PRT	9306		LT <----> A4/LD <----> A3	0	0-1	SYS	Sets to whether to print a document in a different paper size from the one selected if there is no drawer which has the same size setting. 0: Enabled Prints a document specified in an LT/LD size with an A4/A3 one, or vice versa. 1: Disabled: Sets to display a message notifying that the same paper size as the one selected should be used.	1	
08	Setting Mode	System	Network	Retention period		9307		Storage period at trail and private	14	0-53	SYS	0: No limits 1 to 30: 1 to 30 days 31: 1 hour 32: 2 hours 33: 4 hours 34: 8 hours 35: 12 hours 50: 5 min. 51: 10 min. 52: 15 min. 53: 30 min.	1	Yes
08	Setting mode	System	Network	Raw printing job (Duplex)	PRT	9308		Raw printing job (Duplex)	1	0-1	SYS	0: Valid 1: Invalid	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network	Raw printing job (Paper size)	PRT	9309		Raw printing job (Paper size)	Refer to contents	0-13	SYS	0: LD 1: LG 2: LT 3: COMP 4: ST 5: A3 6: A4 7: A5 8: A6 9: B4 10: B5 11: FOLIO 12: 13"LG 13: 8.5" x 8.5" <Default value> NAD: 2 Others: 6	1	
08	Setting mode	System	Network	Raw printing job (Paper type)	PRT	9310		Raw printing job (Paper type)	0	0-7	SYS	0: Plain paper 1: Thick paper 1 2: Thick paper 2 3: Thick paper 3 4: OHP film 5: Thick paper 4 7: Recycled paper	1	
08	Setting mode	System	Network	Raw printing job (Paper direction)	PRT	9311		Raw printing job (Paper direction)	0	0-1	SYS	0: Portrait 1: Landscape	1	
08	Setting mode	System	Network	Raw printing job (Staple)	PRT	9312		Raw printing job (Staple)	1	0-1	SYS	0: Valid 1: Invalid	1	
08	Setting mode	System	Network	Raw printing job (Exit tray)	PRT	9313		Raw printing job (Exit tray)	0	0-6	SYS	0: Inner Tray 1: Finisher Tray1 2: Finisher Tray2 3: Unused 4: Job Separator Upper 5: Job Separator Lower 6: Exit Tray	1	
08	Setting mode	System	Network	Raw printing job (Number of form lines)	PRT	9314		Raw printing job (Number of form lines)	1200	500-12800	SYS	Sets the number of form lines from 5 to 128. (A hundredfold of the number of form lines is defined as the setting value.)	1	
08	Setting mode	System	Network	Raw printing job (PCL font pitch)	PRT	9315		Raw printing job (PCL font pitch)	1000	44-9999	SYS	Sets the font pitch from 0.44 to 99.99. (A hundredfold of the font pitch is defined as the setting value.)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network	Raw printing job (PCL font size)	PRT	9316		Raw printing job (PCL font size)	1200	400-99975	SYS	Sets the font size from 4 to 999.75. (A hundredfold of the font size is defined as the setting value.)	1	
08	Setting mode	System	Network			9317		Raw printing job (PCL font number)	0	0-9999	SYS	Sets the PCL font number.	1	
08	Setting mode	System	Paper feeding			9318		Memory 1 Paper size (bypass feeding/non-standard type) feeding/widthwise direction	148/100	148-432/100-297	SYS	Registers the paper size of bypass feed (non-standard type) into [MEMORY 1].	10	
08	Setting mode	System	Paper feeding			9319		Memory 2 Paper size (bypass feeding/non-standard type) feeding/widthwise direction	148/100	148-432/100-297	SYS	Registers the paper size of bypass feed (non-standard type) into [MEMORY 2].	10	
08	Setting mode	System	Paper feeding			9320		Memory 3 Paper size (bypass feeding/non-standard type) feeding/widthwise direction	148/100	148-432/100-297	SYS	Registers the paper size of bypass feed (non-standard type) into [MEMORY 3].	10	
08	Setting mode	System	Paper feeding			9321		Memory 4 Paper size (bypass feeding/non-standard type) feeding/widthwise direction	148/100	148-432/100-297	SYS	Registers the paper size of bypass feed (non-standard type) into [MEMORY 4].	10	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Paper feeding	Coated Paper Mode setting for paper source		9322	0	1st drawer	0	0-1	SYS	Sets whether or not applying the Coated Paper Mode to each paper source. 0: Normal mode 1: Coated Paper Mode Coated Paper Mode - This mode is selected when the paper which often causes the misfeeding (ex. coated paper) is used. The occurrence of misfeeding is reduced by lengthening the jam detection time. However, the printing speed is lowered since the printing cycle is also lengthened with the lengthened jam detection time.	4	
08	Setting mode	System	Paper feeding	Coated Paper Mode setting for paper source		9322	1	2nd drawer	0	0-1	SYS	Sets whether or not applying the Coated Paper Mode to each paper source. 0: Normal mode 1: Coated Paper Mode Coated Paper Mode - This mode is selected when the paper which often causes the misfeeding (ex. coated paper) is used. The occurrence of misfeeding is reduced by lengthening the jam detection time. However, the printing speed is lowered since the printing cycle is also lengthened with the lengthened jam detection time.	4	
08	Setting mode	System	Paper feeding	Coated Paper Mode setting for paper source		9322	2	PPF upper drawer	0	0-1	SYS	Sets whether or not applying the Coated Paper Mode to each paper source. 0: Normal mode 1: Coated Paper Mode Coated Paper Mode - This mode is selected when the paper which often causes the misfeeding (ex. coated paper) is used. The occurrence of misfeeding is reduced by lengthening the jam detection time. However, the printing speed is lowered since the printing cycle is also lengthened with the lengthened jam detection time.	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Paper feeding	Coated Paper Mode setting for paper source		9322	3	PPF lower drawer	0	0-1	SYS	Sets whether or not applying the Coated Paper Mode to each paper source. 0: Normal mode 1: Coated Paper Mode Coated Paper Mode - This mode is selected when the paper which often causes the misfeeding (ex. coated paper) is used. The occurrence of misfeeding is reduced by lengthening the jam detection time. However, the printing speed is lowered since the printing cycle is also lengthened with the lengthened jam detection time.	4	
08	Setting mode	System	Paper feeding	Coated Paper Mode setting for paper source		9322	4	LCF	0	0-1	SYS	Sets whether or not applying the Coated Paper Mode to each paper source. 0: Normal mode 1: Coated Paper Mode Coated Paper Mode - This mode is selected when the paper which often causes the misfeeding (ex. coated paper) is used. The occurrence of misfeeding is reduced by lengthening the jam detection time. However, the printing speed is lowered since the printing cycle is also lengthened with the lengthened jam detection time.	4	
08	Setting Mode	System	User interface	Sound		9325		Key touch sound of control panel	1	0-1	SYS	0: OFF 1: ON	1	Yes
08	Setting Mode	System	User interface	Screen setting		9326		Size indicator	0	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting mode	System	General	Setting of banner advertising display		9327		Setting of banner advertising display	0	0-1	SYS	Sets whether or not displaying the banner advertising. The setting contents of 08-9328 and 9329 are displayed at the time display section on the right top of the screen. When both are set, each content is displayed alternately. 0: Not displayed 1: Displayed	1	
08	Setting mode	System	General	Banner advertising display 1		9328		Banner advertising display 1	-	-	SYS	Maximum 27 letters (one-byte character)	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Banner advertising display 2		9329		Banner advertising display 2	-	-	SYS	Maximum 27 letters (one-byte character)	11	
08	Setting mode	System	General	Display of [BANNER MESSAGE] button		9330		Display of [BANNER MESSAGE] button	0	0-1	SYS	0: Not displayed 1: Displayed This button enables the entry of "Banner advertising display 1 (08-9328)" and "Banner advertising display 2 (08-9329)" on the control panel.	1	
08	Setting mode	System	Network			9331		Local I/F time-out period	6	1-50	SYS	Sets the period of time when the job is judged as completed in local I/F printing (USB or parallel). 1: 1.0 sec. 2: 1.5 sec. 50: 25.5 sec. (in increments of 0.5 sec.)	1	
08	Setting mode	System	User interface	Original counter display	PPC	9332		Original counter display	Refer to contents	0-4	SYS	Sets whether the original counter is displayed or not. 0: Not displayed 2: Displayed 4: Displayed (Double sized original is counted as 2.) <Default value> MJD: 2 Others: 0	1	
08	Setting mode	System	Network	PCL line feed code setting	PRT	9334		PCL line feed code setting	0	0-3	SYS	Sets the PCL line feed code. 0: Automatic setting 1: CR=CR, LF=LF 2: CR=CR+LF, LF=LF 3: CR=CR, LF=CR+LF	1	
08	Setting mode	System	Paper feeding			9336		Default setting of drawers (Printer/BOX)	1	1-5	SYS	1: LCF 2: 1st drawer 3: 2nd drawer 4: PFP upper drawer 5: PFP lower drawer	1	
08	Setting mode	System	User interface			9337		Restriction of the template function with the administrator privilege	0	0-1	SYS	Selects the restriction of the template function usage setting. 0: No restriction 1: Only available with the administrator privilege.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network	Raw printing job (Paper feeding drawer)	PRT	9338		Raw printing job (Paper feeding drawer)	0	0-5	SYS	0: AUTO 1: 1st drawer 2: 2nd drawer 3: PFP upper drawer 4: PFP lower drawer 5: LCF	1	
08	Setting mode	System	Network	Raw printing job (PCL symbol set)	PRT	9339		Raw printing job (PCL symbol set)	0	0-39	SYS	0: Roman-8 1: ISO 8859/1 Latin 1 2: ISO 8859/2 Latin 2 3: ISO 8859/9 Latin 5 4: PC-8, Code Page 437 5: PC-8 D/N, Danish/Norwegian 6: PC-850, Multilingual 7: PC-852, Latin2 8: PC-8 Turkish 9: Windows 3.1 Latin 1 10: Windows 3.1 Latin 2 11: Windows 3.1 Latin 5 12: DeskTop 13: PS Text 14: Ventura International 15: Ventura US 16: Microsoft Publishing 17: Math-8 18: PS Math 19: Ventura Math 20: Pi Font 21: Legal 22: ISO 4: United Kingdom 23: ISO 6: ASCII 24: ISO 11 25: ISO 15: Italian 26: ISO 17 27: ISO 21: German 28: ISO 60: Danish/Norwegian 29: ISO 69: French 30: Windows 3.0 Latin 1 31: MC Text 32: PC Cyrillic 33: ITC Zapf Dingbats 34: ISO 8859/10 Latin 6 35: PC-775 36: PC-1004 37: Symbol 38: Windows Baltic 39: Wingdings	1	
08	Setting mode	System	User interface	Binding margin setting		9341	0	Left binding front (Right binding back)	7	0-100	SYS	Sets the binding margin displayed as default on the setting screen for the top/bottom/left/right binding function when copying.	4	Yes
08	Setting mode	System	User interface	Binding margin setting		9341	1	Left binding back (Right binding front)	7	0-100	SYS	Sets the binding margin displayed as default on the setting screen for the top/bottom/left/right binding function when copying.	4	Yes
08	Setting mode	System	User interface	Binding margin setting		9341	2	Top binding front (Bottom binding back)	7	0-100	SYS	Sets the binding margin displayed as default on the setting screen for the top/bottom/left/right binding function when copying.	4	Yes
08	Setting mode	System	User interface	Binding margin setting		9341	3	Top binding back (Bottom binding front)	7	0-100	SYS	Sets the binding margin displayed as default on the setting screen for the top/bottom/left/right binding function when copying.	4	Yes
08	Setting mode	System	User interface			9342		Margin width (Bookbinding margin)	14	0-30	SYS		1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	Printer	Paper feeding	Automatic change of paper source	Auto	9343		Printing/BOX printing	1	1-2	SYS	Sets whether the drawer is changed automatically if the paper runs out in the selected drawer and the paper of the same size is in other drawer. 1: ON (Changes to the drawer with the same paper direction and size: ex. A4 to A4) 2: ON (Changes to the drawer with the same paper size. Paper with the different direction is acceptable as long as the size is the same: ex., A4 to A4-R, LT-R to LT. "1" is applied when the staple/hole punch is specified.)	1	Yes
08	Setting mode	System	Network			9344		Private-print-only mode	0	0-3	SYS	0: Normal 1: Private-print-only mode 2: Hold-print-only mode 3: Private/Hold-print-only mode	1	
08	Setting mode	System	User			9352		Display of paper size setting by installation operation of drawers	Refer to contents	0-1	SYS	0: Not displayed 1: Displayed <Default value> MJD, JPD: 0 Others: 1	1	
08	Setting mode	System	General	Enhanced bold for PCL6	PRT	9357		Enhanced bold for PCL6	0	0-1	SYS	0: OFF 1: ON (Enhanced bold for PCL6.)	1	
08	Setting Mode	System	User interface	Paper Feed setting		9359		Printing resume after jam releasing	1	0-1	SYS	0: Auto resume 1: Resume by users	1	Yes
08	Setting mode	System	General	Available profile display	PRT	9361	0	MS_OP_00.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	1	MS_OP_01.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	2	MS_OP_02.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	3	MS_OP_03.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Available profile display	PRT	9361	4	MS_OP_04.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	5	MS_OP_05.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	6	MS_OP_06.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	7	MS_OP_07.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	8	MS_OP_08.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	9	MS_OP_09.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	10	MS_OP_10.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	11	MS_OP_11.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	12	MS_OP_12.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	13	MS_OP_13.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	14	MS_OP_14.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Available profile display	PRT	9361	15	MS_OP_15.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	16	MS_OP_16.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	17	MS_OP_17.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	18	MS_OP_18.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	19	MS_OP_19.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	20	MS_OP_20.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	21	MS_OP_21.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	22	MS_OP_22.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	23	MS_OP_23.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	24	MS_OP_24.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	25	MS_OP_25.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Available profile display	PRT	9361	26	MS_OP_26.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	27	MS_OP_27.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	28	MS_OP_28.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	29	MS_OP_29.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	30	MS_OP_30.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	31	MS_OP_31.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	32	MS_OP_32.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	33	MS_OP_33.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	34	MS_OP_34.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Available profile display	PRT	9361	35	MS_OP_35.icc	-	-	SYS	Displaying the current Output Profile and PG CIE Based Pure GrayTRC attribute (PG CIE Based PureGray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Recovery of the profile at the shipment	PRT	9362		Recovery of the profile at the shipment	0	0-35	SYS	Recovers the default Output Profile and PG CIE Based Pure GrayTRC (PG CIE Based PureGray TRC in the same sub-code is recovered to the default.) 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	
08	Setting mode	System	General	Copying the profile at the shipment to USB memory	PRT	9363		Copying the profile at the shipment to USB memory	0	0-35	SYS	Copies the default Output Profile and PG CIE Based Pure Gray TRC to the USB memory. 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Uploading the profile at the shipment from UBS memory	PRT	9364		Uploading the profile at the shipment from UBS memory	0	0-35	SYS	Uploads the default Output Profile and PG CIE Based Pure GrayTRC from the USB memory. 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	0	MS_OP_00.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	1	MS_OP_01.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	2	MS_OP_02.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	3	MS_OP_03.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	4	MS_OP_04.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	5	MS_OP_05.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	6	MS_OP_06.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	7	MS_OP_07.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	8	MS_OP_08.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	9	MS_OP_09.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	10	MS_OP_10.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	11	MS_OP_11.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	12	MS_OP_12.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	13	MS_OP_13.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	14	MS_OP_14.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	15	MS_OP_15.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	16	MS_OP_16.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	17	MS_OP_17.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	18	MS_OP_18.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	19	MS_OP_19.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	20	MS_OP_20.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	21	MS_OP_21.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	22	MS_OP_22.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	23	MS_OP_23.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	24	MS_OP_24.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	25	MS_OP_25.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	26	MS_OP_26.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	27	MS_OP_27.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	28	MS_OP_28.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	29	MS_OP_29.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	30	MS_OP_30.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	31	MS_OP_31.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	32	MS_OP_32.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	33	MS_OP_33.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	34	MS_OP_34.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9365	35	MS_OP_35.000	-	-	SYS	Displays the default Output Profile and PG CIE Based Pure Gray TRC attribute. (PG CIE Based Pure Gray TRC attribute in the same sub-code is displayed at the same time.)	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Making the profile available	PRT	9366		Making the profile available	0	0-35	SYS	Selecting a profile Overwrites the adjusted Output Profile on the current area (PG CIE Based Pure Gray TRC in the same sub-code is replaced with the adjusted profile at the same time.) 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	
08	Setting mode	System	General	Copying the adjusted profile to USB memory	PRT	9367		Copying the adjusted profile to USB memory	0	0-35	SYS	Copies the adjusted Output Profile and PG CIE Based Pure GrayTRC to the USB memory. (PG CIE Based PureGray TRC in the same sub-code is copied to the USB memory at the same time.) 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Uploading the adjusted profile from USB memory	PRT	9368		Uploading the adjusted profile from USB memory	0	0-35	SYS	Uploads the Output Profile and PG CIE Based Pure Gray TRC from the USB memory. 0: MS_OP_00 1: MS_OP_01 2: MS_OP_02 3: MS_OP_03 4: MS_OP_04 5: MS_OP_05 6: MS_OP_06 7: MS_OP_07 8: MS_OP_08 9: MS_OP_09 10: MS_OP_10 11: MS_OP_11 12: MS_OP_12 13: MS_OP_13 14: MS_OP_14 15: MS_OP_15 16: MS_OP_16 17: MS_OP_17 18: MS_OP_18 19: MS_OP_19 20: MS_OP_20 21: MS_OP_21 22: MS_OP_22 23: MS_OP_23 24: MS_OP_24 25: MS_OP_25 26: MS_OP_26 27: MS_OP_27 28: MS_OP_28 29: MS_OP_29 30: MS_OP_30 31: MS_OP_31 32: MS_OP_32 33: MS_OP_33 34: MS_OP_34 35: MS_OP_35	1	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	0	MS_OP_00.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	1	MS_OP_01.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	2	MS_OP_02.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	3	MS_OP_03.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	4	MS_OP_04.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	5	MS_OP_05.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	6	MS_OP_06.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	7	MS_OP_07.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	8	MS_OP_08.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	9	MS_OP_09.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	10	MS_OP_10.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	11	MS_OP_11.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	12	MS_OP_12.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	13	MS_OP_13.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	14	MS_OP_14.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	15	MS_OP_15.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	16	MS_OP_16.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	17	MS_OP_17.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	18	MS_OP_18.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	19	MS_OP_19.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	20	MS_OP_20.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	21	MS_OP_21.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	22	MS_OP_22.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	23	MS_OP_23.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	24	MS_OP_24.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	25	MS_OP_25.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	26	MS_OP_26.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	27	MS_OP_27.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	28	MS_OP_28.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	29	MS_OP_29.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	30	MS_OP_30.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	31	MS_OP_31.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	32	MS_OP_32.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	33	MS_OP_33.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	34	MS_OP_34.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	General	Displaying the attribute of the profile at the shipment	PRT	9369	35	MS_OP_35.001	-	-	SYS	Displays the adjusted Output Profile and PG CIE Based Pure GrayTRC attribute in the same sub-code.	14	
08	Setting mode	System	User interface			9379		AES data encryption function setting (Except for CND)	0	0-2	SYS	0: Encryption invalid 1: Encryption valid (Security priority) Encrypts all of the user's data. 2: Encryption valid (Performance priority) Encrypts the user's data except the files temporarily created and deleted in the image processing such as copying or printing.	1	
08	Setting mode	System	General			9381		Custom size (Photo size) Feeding / Widthwise	148/100	10-434/10-300	SYS	Feeding Widthwise	10	
08	Setting mode	System	Image			9382		Erasing leading edge shade on A3-wide (full-page copying)	0	0-1	SYS	0: Whole page copied (No void) 1: Leading edge masked	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	User interface	Default setting of filing format	E-mail	9384		Color/ACS	1	0-8	SYS	0: TIFF (Multi) 1: PDF (Multi) 2: JPG 3: TIFF (Single) 4: PDF (Single) 5: SLIM PDF (Multi) 6: SLIM PDF (Single) 7: XPS (Multi) 8: XPS (Single)	1	Yes
08	Setting mode	System	Network	Notification of scan job		9386	0	When job completed	0	0-1	SYS	Sets the notification method of scan job completion. 0: Invalid 1: Valid	4	
08	Setting mode	System	Network	Notification of scan job		9386	1	On error	0	0-1	SYS	Sets the notification method of scan job completion. 0: Invalid 1: Valid	4	
08	Setting mode	System	Network			9387		File name format of "Save as file" and Email transmission	0	0-6	SYS	Sets the file naming method for "Save as file" and Email transmission. 0: [FileName]-[Data]-[Page] 1: [FileName]-[Page]-[Data] 2: [Data]-[FileName]-[Page] 3: [Data]-[Page]-[File-Name] 4: [Page]-[FileName]-[Data] 5: [Page]-[Data]-[File-Name] 6: [HostName]_[Data]-[Page]	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9388		Date display format of the file name of "Save as file" and Email transmission	0	0-5	SYS	Sets the data display format of the file for "Save as file" and Email transmission. 0: [YYYY][MM][DD][HH][mm][SS] 1: [YY][MM][DD][HH][mm][SS] 2: [YYYY][MM][DD] 3: [YY][MM][DD] 4: [HH][mm][SS] 5: [YYYY][MM][DD][HH][mm][SS][mm0] The order of [YY], [MM] and [DD] varies depending on the setting of the code 08-9102 (Data display format).	1	
08	Setting mode	System	Network			9389		Single page data saving directory at "Save as file"	0	0-1	SYS	Sets the directory where the file of "Save as file" is saved. 0: Save it under a subfolder 1: Save it without creating a subfolder	1	
08	Setting mode	System	Network			9390		Page number display format of the file of "Save as file" and Email transmission	4	3-6	SYS	Sets the digit of a page number attached on the file. 3-6: 3-6 digits	1	
08	Setting mode	System	Network			9391		Extension (suffix) format of the file of "Save as file"	3	3-6	SYS	Sets the extension digits of the file to be saved. 3: Auto 4: 4 digits 5: 5 digits 6: 6 digits	1	
08	Setting mode	System	Network			9394		Single-page option for storing File and sending Email	0	0-1	SYS	0: Sets 1 page as 1 file 1: Makes a file based on the original	1	
08	Setting mode	System	Network			9397		Execution of user authentication when the user ID is not entered	2	0-2	SYS	0: Forcible execution 1: Execution impossible (pooled in the invalid queue) 2: Forcible deletion	1	
08	Setting Mode	System	User interface	Card reading device	LDAP authentication	9398		LDAP attribute name settings 1	eBMUserCard	-	SYS	Maximum 32 characters	11	
08	Setting mode	System	Network			9399		Role Based Access LDAP search index	0	0-4294967295	SYS	This code is used to specify the ID for the LDAP server to implement Role-Based Access Control.	5	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9403		Communication speed and settings of Ethernet	1	1-7	-	1: Auto 2: 10MBPS Half Duplex 3: 10MBPS Full Duplex 4: 100MBPS Half Duplex 5: 100MBPS Full Duplex 6: Not used 7: 1000MBPS Full Duplex	12	
08	Setting Mode	System	Network	Address		9406		Address Mode	2	1-3	NIC	1: Fixed IP address 2: Dynamic IP address 3: Dynamic IP address without Auto IP	12	
08	Setting mode	System	Network			9406		Address Mode (EFI)	1	1-3	NIC	1: Fixed IP address 2: Dynamic IP address 3: Dynamic IP address without Auto IP The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting Mode	System	Network	Address		9408		IP address	Refer to contents	Refer to contents	NIC	<Default value> 0.0.0.0 <Acceptable value> 0.0.0.0-255.255.255.255	12	Yes
08	Setting mode	System	Network			9408		IP address (EFI)	-	-	NIC	000.000.000.000-255.255.255.255 (Default value 10.250.250.249) The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting Mode	System	Network	Address		9409		Subnet mask	Refer to contents	Refer to contents	NIC	<Default value> 0.0.0.0 <Acceptable value> 0.0.0.0-255.255.255.255	12	Yes
08	Setting mode	System	Network			9409		Subnet mask (EFI)	-	-	NIC	000.000.000.000-255.255.255.255 (Default value 255.255.255.252) The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting Mode	System	Network	Address		9410		Gateway	Refer to contents	Refer to contents	NIC	<Default value> 0.0.0.0 <Acceptable value> 0.0.0.0-255.255.255.255	12	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9410		Gateway (EFI)	-	-	NIC	000.000.000.000-255.255.255.255 (Default value 10.250.250.250) The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9411		Enable/disable setting of IPX/SPX	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			9411		Enable/disable setting of IPX/SPX (EFI)	2	1-2	NIC	1: Enabled 2: Disabled The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9414		Availability of AppleTalk	2	1-2	NIC	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			9414		Availability of AppleTalk (EFI)	2	1-2	NIC	1: Enabled 2: Disabled The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9416		Availability of LDAP	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting Mode	System	Network	DNS		9417		Availability of DNS	1	1-2	NIC	1: Available 2: Not available	12	Yes
08	Setting Mode	System	Network	Address		9418		IP address to DNS server (Primary)	-	Refer to contents	NIC	<Acceptable value> 0.0.0.0-255.255.255.255	12	Yes
08	Setting Mode	System	Network	Address		9419		IP address to DNS server (Secondary)	-	Refer to contents	NIC	<Acceptable value> 0.0.0.0-255.255.255.255	12	Yes
08	Setting mode	System	Network			9421		Availability of SLP	1	1-2	NIC	Sets the availability of SLP on NetWare. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			9426		Availability of Bindery	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9427		Availability of NDS	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9430		Availability of HTTP server	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9437		Availability of SMTP client	1	1-2	NIC	1: Available 2: Not available	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9440		Availability of SMTP server	1	1-2	UTY	1: Available 2: Not available	12	
08	Setting mode	System	Network			9446		Availability of POP3 clients	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9459		Availability of FTP server	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9463		MIB function	1	1-2	NIC	1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9473		Availability of Raw/TCP	1	1-2	NIC	1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9473		Availability of Raw/TCP (EFI)	2	1-2	NIC	1: Valid 2: Invalid The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9475		Availability of LPD client	1	1-2	NIC	1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9475		Availability of LPD client (EFI)	2	1-2	NIC	1: Valid 2: Invalid The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9478		Availability of IPP	1	1-2	NIC	1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9478		Availability of IPP (EFI)	2	1-2	NIC	1: Valid 2: Invalid The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9481		IPP printer name	MFPserial	-	NIC	Maximum 127 letters The network-related serial number of the equipment appears at "serial"	12	
08	Setting mode	System	Network			9486		IPP printer "Make and Model"	Refer to contents	-	NIC	Maximum 127 letters <Default value> mfp model name	12	
08	Setting mode	System	Network			9487		IPP printer information (more) MFGR	-	-	NIC	Maximum 127 letters	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9488		IPP message from operator	-	-	NIC	Maximum 127 letters	12	
08	Setting mode	System	Network			9489		Availability of FTP print	1	1-2	NIC	1: Available 2: Not available	12	
08	Setting mode	System	Network			9489		Availability of FTP print (EFI)	2	1-2	NIC	1: Available 2: Not available The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9499		Page number limitation for printing text of received Email	5	1-99	SYS		1	
08	Setting mode	System	Network			9505		Bonjour setting	1	1-2	NIC	1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9505		Bonjour setting (EFI)	2	1-2	NIC	1: Valid 2: Invalid The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting mode	System	Network			9515		Windows domain No.1 of user authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			9516		PDC (Primary Domain Controller) name No.1 of authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting mode	System	Network			9517		BDC (Backup Domain Controller) name No.1 of authentication	-	-	UTY	Maximum 128 letters	12	
08	Setting Mode	System	Network	Address		9525		Display of MAC address	-	-	SYS	(**.*.*.*.*.*.**) The address is displayed as above. 6-byte data is divided by colon.	2	Yes
08	Setting mode	System	Network			9548		SSL setting SSL ftp server OFF/ON	2	1-2	-	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			9550		SSL setting IPP server OFF/ON setting	2	1-2	-	1: Enabled 2: Disabled	12	
08	Setting mode	System	Network			9552		SSL setting SSL ftp server OFF/ON	2	1-2	-	OFF/ON1: Valid2: Invalid	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9556		SSL setting SSL POP3 Client OFF/ON	2	1-3	-	OFF/ON 1: Valid (Accepts all the certification of the server) 2: Invalid 3: Use the imported certification.	12	
08	Setting mode	System				9563		IP Conflict Detect	1	1-2	-	OFF/ON 1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9564		SNTP Enable	2	1-2	-	OFF/ON 1: Valid 2: Invalid	12	
08	Setting mode	System	Network			9580		Enabling server's IP address acquired by DHCP	1	1-2	-	Domain Name Server option (6) 1: Enabled 2: Disabled This value is used only when DHCP is enabled.	12	
08	Setting mode	System	Network			9581		Enabling server's IP address acquired by DHCP	1	1-2	-	NetBIOS over TCP/IP Name Server option (44) = Primary and Secondary Wins NAME 1: Enabled 2: Disabled This value is used only when DHCP is enabled.	12	
08	Setting mode	System	Network	Enabling server's IP address acquired by DHCP		9584		SMTP Server Option (69) Simple Mail Server Address	2	1-2	-	OFF/ON1: Valid2: Invalid	12	
08	Setting mode	System	Network	Enabling server's IP address acquired by DHCP		9585		POP3 Server Option (70) Post Office Server Address	2	1-2	-	OFF/ON1: Valid2: Invalid	12	
08	Setting mode	System	Network			9587		Enabling server's IP address acquired by DHCP	2	1-2	-	SNTP Server Option (42) NTP Server Address 1: Enabled 2: Disabled This value is used only when DHCP is enabled.	12	
08	Setting mode	System	Network			9599		Samba server ON/OFF setting	1	1-4	NIC	1: Samba enabled 2: Samba disabled 3: Print Share disabled 4: File Share disabled	12	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9599		Samba server ON/OFF setting (EFI)	2	1-4	NIC	1: Samba enabled 2: Samba disabled 3: Print Share disabled 4: File Share disabled The default value is reflected by performing 08-9951 when the EFI Printer Board is connected.	12	
08	Setting Mode	System	Maintenance	General		9601		Equipment number (serial number) display	-	9 digits	SYS	First digit: Production country (fixed) Second digit: Model (fixed) Third digit: Month (variable) Fourth to ninth digit: serial number (variable) This can be also entered with 05-9043.	11	Yes
08	Setting mode	System	Maintenance			9602		Dealer's name	-	-	SYS	Maximum 100 letters Needed at initial registration	11	
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9603		Login name	-	20 letters	SYS	Maximum 20 letters Needed at initial registration	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	Call /Display function	9604		Display set of Service Notification button	Refer to contents	0-1	SYS	0: Not displayed 1: Displayed <Default value> NAD/MJD: 1 Others: 0	1	Yes
08	Setting mode	System	Maintenance (Remote)			9605		Sending error contents of equipment	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance (Remote)			9606		Setting total counter transmission interval (Hour/Minute/Minute)	-	-	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9607		Destination E-mail address 2	-	-	SYS	Maximum 192 letters	11	
08	Setting mode	System	Maintenance (Remote)			9608		Destination E-mail address 3	-	-	SYS	Maximum 192 letters	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance			9610		Remote-controlled service polling day selection Day-1	0	0-31	SYS	0: OFF 1 to 31: 1st to 31st of a month	1	
08	Setting mode	System	Maintenance			9611		Remote-controlled service polling day selection Day-2	0	0-31	SYS	0: OFF 1 to 31: 1st to 31st of a month	1	
08	Setting mode	System	Maintenance			9612		Remote-controlled service polling day selection Day-3	0	0-31	SYS	0: OFF 1 to 31: 1st to 31st of a month	1	
08	Setting mode	System	Maintenance			9613		Remote-controlled service polling day selection Day-4	0	0-31	SYS	0: OFF 1 to 31: 1st to 31st of a month	1	
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9614		Sunday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9615		Monday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9616		Tuesday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9617		Wednesday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9618		Thursday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9619		Friday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting Mode	System	Maintenance	RDMS	Remote-controlled service polling day	9620		Saturday	1	0-1	SYS	0: Invalid 1: Valid	1	Yes
08	Setting mode	System	Maintenance			9621		Information of supplies setting of toner cartridge C	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance			9622		Information of supplies setting of toner cartridge M	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance			9623		Information of supplies setting of toner cartridge Y	0	0-1	SYS	0: Invalid 1: Valid	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance			9624		Information of supplies setting of toner cartridge K	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance			9625		Information of supplies setting of waste toner box	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance	RDMS	Long interval polling	9626		Setting of polling at the end of month	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Network			9627		Sending mail text of Internet FAX	1	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Network			9628		From Name Creation setting in SMTP authentication	0	0-2	SYS	0: Not edited 1: Account name of From Address +Device name 2: LDAP searching	1	
08	Setting mode	System	Wireless LAN			9649		Wireless LAN setting	2	1-2	NIC	Sets whether the wireless LAN connection is enabled or disabled. 1: Enabled 2: Disabled	12	
08	Setting mode	System	Bluetooth			9680		Bluetooth ON/OFF setting	1	0-1	SYS	0: OFF 1: ON	1	
08	Setting mode	System	Bluetooth			9681		Bluetooth Device name	Refer to contents	-	SYS	Maximum 32 letters. Only alphanumeric characters, spaces, and symbols are acceptable. <Default value> MFPserial	11	
08	Setting mode	System	Bluetooth			9682		Bluetooth Discovery	1	0-1	SYS	0: Not allowed 1: Allowed	1	
08	Setting mode	System	Bluetooth			9683		Bluetooth Security	1	0-1	SYS	0: Security function OFF 1: Security function ON	1	
08	Setting mode	System	Bluetooth			9684		Bluetooth PIN	0	-	SYS	Maximum 8 digits (8-digit sequence) This setting is valid only when the bluetooth security function is ON.	11	
08	Setting mode	System	Bluetooth			9685		Bluetooth Data encryption	1	0-1	SYS	0: Not encrypted 1: Encrypted This setting is valid only when the bluetooth security function is ON.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9694		Enabling server's IP address acquired by DHCP	1	1-2	-	DNS domain name Option (15) DNS domain name of the client 1: Enabled 2: Disabled This value is used only when DHCP is enabled.	12	
08	Setting mode	System	User interface			9698		Color mode notification setting at ACS	0	0-1	SYS	0: Color 1: Black	1	
08	Setting Mode	System	Maintenance	General		9700		Service technician telephone number	0	32 digits	SYS	A telephone number can be entered up to 32 digits. Use the [MONITOR/PAUSE] button to enter a hyphen(-).	11	Yes
08	Setting mode	System	User interface			9702		Automatic calibration disclosure level	1	0-2	SYS	Sets the disclosing level of automatic calibration. 0: Service technician 1: Administrator 2: User	1	
08	Setting Mode	System	Maintenance	General		9703		Error history display	-	-	SYS	Displays the latest 20 errors data	2	Yes
08	Setting mode	System	Network			9709		Default data saving directory of "Scan to File"	0	0-2	SYS	0: Local directory 1: REMOTE 1 2: REMOTE 2	1	
08	Setting mode	System	Network			9709		Default data saving directory of "Scan to File" (EFI)	0	0-2	SYS	0: Local directory 1: REMOTE 1 2: REMOTE 2 This setting will not be initialized after performing the code 08-9952.	1	
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9710		Remote-controlled service function	2	0-2	SYS	0: Valid (Remote-controlled server) 1: Valid (L2) 2: Invalid	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9711		Remote-controlled service URL setting	-	-	SYS	Maximum 256 letters	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9715		Initially-registered server URL setting	Refer to contents	-	SYS	Maximum 256 letters <Default value> https://device.mfp-support.com:443/device/firstregist.ashx	11	Yes
08	Setting mode	System	Maintenance (Remote)			9718		Short time interval setting of recovery from Emergency Mode	24	1-48	SYS	Sets the time interval to recover from the Emergency Mode to the Normal Mode. (Unit: Hour)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance			9719		Short time interval setting of Emergency Mode	60	30-360	SYS	Unit: Minute	1	
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9723		Periodical polling timing	1600	0-2359	SYS	(Hour/Hour/Minute/Minute) 0 (0:00) to 2359 (23:59)	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9724		Writing data of self-diagnostic code	0	0-1	SYS	0: Prohibited 1: Accepted	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9726		Remote-service initial registration	0	0-3	SYS	0: OFF 1: Start 2: Only certification is scanned 3: RDMS communication starts	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9727		Remote-controlled service tentative password	-	10 letters	SYS	Maximum 10 letters	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	General	9729		Status of remote-service initial regist	0	0-1	SYS	0: Not registered 1: Registered	2	Yes
08	Setting Mode	System	Maintenance	RDMS	Call /Display function	9730		Service center call function	1	0-2	SYS	0: OFF 1: Notifies all service calls 2: Notifies all but paper jams	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9732		Service center call HTTP server URL setting	-	-	SYS	Maximum 256 letters	11	Yes
08	Setting mode	System	Counter			9736		Validity of interrupt copying when external counters are installed	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting Mode	System	Maintenance	Remote-controlled service	Call /Display function	9739		Toner-end notification	0	0-2	SYS	0: RDMS toner empty notified immediately 1: RDMS toner empty notified once a day 2: RDMS toner empty not notified	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9740		HTTP proxy setting	1	0-1	SYS	0: Valid 1: Invalid	1	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9741		HTTP proxy IP address setting	Refer to contents	-	SYS	Input IP address or FQDN. <Default value> 0.0.0.0	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9742		HTTP proxy port number setting	0	0-65535	SYS		1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9743		HTTP proxy ID setting	-	-	SYS	Maximum 30 letters	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9744		HTTP proxy password setting	-	-	SYS	Maximum 30 letters	11	Yes
08	Setting Mode	System	Maintenance	Remote-controlled service	HTTP	9745		HTTP proxy panel display	1	0-1	SYS	0: Valid 1: Invalid	1	Yes
08	Setting mode	System	Network			9746		802.1X/Dynamic WEP selecting button display	1	0-1	SYS	Switches whether a selecting button for Security mode 802.1X/Dynamic WEP is displayed or not. 1: Not displayed 2: Displayed	1	
08	Setting mode	System	Network	WIA Scan Driver	SCN	9749		WIA Scan Driver	1	1-2	NIC	Selects WIA Scan Driver. 1: TTEC 2: Microsoft	12	
08	Setting mode	System	Maintenance (Remote)			9750		Automatic ordering function of supplies	3	0-3	SYS	0: Ordered by FAX 1: Ordered by E-mail 2: Ordered by HTTP 3: OFF	1	
08	Setting mode	System	Maintenance (Remote)			9751		Automatic ordering function of supplies FAX number	-	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11	
08	Setting mode	System	Maintenance (Remote)			9752		Automatic ordering function of supplies E-mail address	-	-	SYS	Maximum 192 letters List: 256 digits	11	
08	Setting mode	System	Maintenance (Remote)			9756		Automatic ordering function of supplies User's name	-	-	SYS	Maximum 50 letters	11	
08	Setting mode	System	Maintenance (Remote)			9757		Automatic ordering function of supplies User's telephone number	-	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11	
08	Setting mode	System	Maintenance (Remote)			9758		Automatic ordering function of supplies User's E-mail address	-	-	SYS	Maximum 192 letters List: 256 digits	11	
08	Setting mode	System	Maintenance (Remote)			9759		Automatic ordering function of supplies User's address	-	-	SYS	Maximum 100 letters	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance (Remote)			9760		Automatic ordering function of supplies Service number	-	-	SYS	Maximum 5 digits	11	
08	Setting mode	System	Maintenance (Remote)			9761		Automatic ordering function of supplies Service technician's name	-	-	SYS	Maximum 50 letters	11	
08	Setting mode	System	Maintenance (Remote)			9762		Automatic ordering function of supplies Service technician's telephone number	-	-	SYS	Maximum 32 digits Enter hyphen with the [Monitor/Pause] button	11	
08	Setting mode	System	Maintenance (Remote)			9763		Automatic ordering function of supplies Service technician's E-mail address	-	-	SYS	Maximum 192 letters List: 256 digits	11	
08	Setting mode	System	Maintenance (Remote)			9764		Automatic ordering function of supplies Supplier's name	-	-	SYS	Maximum 50 letters	11	
08	Setting mode	System	Maintenance (Remote)			9765		Automatic ordering function of supplies Supplier's address	-	-	SYS	Maximum 100 letters	11	
08	Setting mode	System	Maintenance (Remote)			9766		Automatic ordering function of supplies Notes	-	-	SYS	Maximum 128 letters	11	
08	Setting mode	System	Maintenance (Remote)			9767		Information about supplies Part number of toner cartridge C	-	-	SYS	Maximum 20 digits	11	
08	Setting mode	System	Maintenance (Remote)			9768		Information about supplies Order quantity of toner cartridge C	1	1-99	SYS		1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance (Remote)			9769		Information about supplies Condition number of toner cartridge C	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9770		Information about supplies Part number of toner cartridge M	-	-	SYS	Maximum 20 digits	11	
08	Setting mode	System	Maintenance (Remote)			9771		Information about supplies Order quantity of toner cartridge M	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9772		Information about supplies Condition number of toner cartridge M	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9773		Information about supplies Part number of toner cartridge Y	-	-	SYS	Maximum 20 digits	11	
08	Setting mode	System	Maintenance (Remote)			9774		Information about supplies Order quantity of toner cartridge Y	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9775		Information about supplies Condition number of toner cartridge Y	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9776		Information about supplies Part number of toner cartridge K	-	-	SYS	Maximum 20 digits	11	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance (Remote)			9777		Information about supplies Order quantity of toner cartridge K	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9778		Information about supplies Condition number of toner cartridge K	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9779		Information about supplies Part number of waste toner box	-	-	SYS	Maximum 20 digits	11	
08	Setting mode	System	Maintenance (Remote)			9780		Information about supplies Order quantity of waste toner box	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9781		Information about supplies Condition number of waste toner box	1	1-99	SYS		1	
08	Setting mode	System	Maintenance (Remote)			9782		Automatic ordering supplies Result table printout	1	0-2	SYS	0: OFF 1: Always 2: ON Error	1	
08	Setting Mode	System	Maintenance	Remote-controlled service	Call /Display function	9783		Automatic supply ordering display	Refer to contents	0-2	SYS	0: Valid (FAX/Internet FAX) 1: Valid (FAX/Internet FAX/HTTP) 2: Invalid <Default value> NAD: 0 Others: 2	1	Yes
08	Setting mode	System	Maintenance (Remote)			9784		Counter notification Remote FAX setting	-	-	SYS	Maximum 32 digits Enter a hyphen with the [MONITOR/PAUSE] button.	11	
08	Setting Mode	System	General			9787		Suspend when quota is empty	0	0-1	SYS	Sets whether the process is suspended immediately or suspended after the job is completed if quota is used up. 0: Suspended immediately 1: Suspended after the job is finished	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Maintenance			9788		Service call checking period setting	6	0-12	SYS	0: No checking period specified (= Calls service technician immediately) 1: 10 minutes 2: 30 minutes 3: 1 hour 4: 6 hours 5: 12 hours 6: 24 hours 7: 48 hours 8: 7 days 9: 1 month 10: 1 year 11: 5 years 12: Not limited (= Calls service technician if such error has occurred in the past even once or more)	1	
08	Setting mode	System	General			9789		Default repeat count	2	2-8	SYS	Unit: times	1	
08	Setting mode	System	Maintenance (Remote)			9793		Service Notification setting	0	0-2	SYS	Enables to set up to 3 E-mail addresses to be sent. (08-9794, 9607, 9608) 0: Invalid 1: Valid (E-mail) 2: Valid (FAX)	1	
08	Setting mode	System	Maintenance (Remote)			9794		Destination E-mail address 1	-	-	SYS	Maximum 192 letters	11	
08	Setting mode	System	Maintenance (Remote)			9795		Total counter information transmission setting	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	Maintenance (Remote)			9796		Total counter transmission date setting	0	0-31	SYS	0 to 31	1	
08	Setting mode	System	Maintenance (Remote)			9797		PM counter notification setting	0	0-1	SYS	0: Invalid 1: Valid	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9798		Temporary communication password setting	99999	-	SYS	Sets a temporary communication password. The password can be entered in alphanumeric characters (A to Z, a to z, 0 to 9) up to 10 digits. The entered password is displayed with "*" on the touch panel and the self-diagnostic lists. (Maximum 10 digits, minimum 5 digits)	11	
08	Setting mode	System	General			9799		Local authentication mode switchover	0	0-1	SYS	Sets the authentication mode when "0: (Internal authentication)" is selected in the code 08-9293. 0: Card ID differs from the User ID 1: Card ID is the same as the User ID	1	
08	Setting mode	System	Image processing			9804		Forcible mode change in toner empty status	0	0-2	SYS	0: SLEEP MODE 1: AUTO POWER SAVE 2: READY	1	
08	Setting mode	System	Laser			9805		Polygonal motor standby rotation Shift waiting time at job end	3	0-9	SYS	0: 0 sec. (current setting) (Polygonal motor ready rotation at job end) 1 to 9: Setting value x 5 sec.	1	
08	Setting mode	System	User interface	Interruption of stapling operation (no staple)		9810	0	Copying	1	0-1	SYS	When staple runs out while printing in the stapling mode, sets whether printing is interrupted or printing is continued by switching to sorting. This code is valid only when printing in the stapling mode. However, printing is always interrupted when staple for saddle stitch runs out. 0: Continues printing by switching to sort setting 1: Interrupts printing	4	
08	Setting mode	System	User interface	Interruption of stapling operation (no staple)		9810	1	Printing / BOX printing	0	0-1	SYS	When staple runs out while printing in the stapling mode, sets whether printing is interrupted or printing is continued by switching to sorting. This code is valid only when printing in the stapling mode. However, printing is always interrupted when staple for saddle stitch runs out. 0: Continues printing by switching to sort setting 1: Interrupts printing	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Finisher	Stapling setting Maximum number of sheets acceptable exceeding upper limit / Long size		9811	0	Plain/Recycled	0	-50-50	SYS	-50 to 50	4	
08	Setting mode	System	Finisher	Stapling setting Maximum number of sheets acceptable exceeding upper limit / Long size		9811	1	Thick1	0	-50-50	SYS	-50 to 50	4	
08	Setting mode	System	Finisher	Stapling setting Maximum number of sheets acceptable exceeding upper limit / Long size		9811	2	Thick2	0	-50-50	SYS	-50 to 50	4	
08	Setting mode	System	Finisher	Stapling setting Maximum number of sheets acceptable exceeding upper limit / Long size		9811	3	Thick3	0	-50-50	SYS	-50 to 50	4	
08	Setting mode	System	General	Number of output pages for pausing continuous printing for 2nd transfer resistance detection control		9814		At normal temperatures	4	0-100	SYS	When the setting value of this code is "1" or higher, the 2nd transfer resistance detection is performed every time the number of pages of (setting value X 100) have output.	1	
08	Setting mode	System	General	Number of output pages for pausing continuous printing for 2nd transfer resistance detection control		9815		At low temperatures	10	0-100	SYS	When the setting value of this code is "1" or higher, the 2nd transfer resistance detection is performed every time the number of pages of (setting value X 10) have output.	1	
08	Setting mode	System	General			9816		Addition of the page number to the multi-page file name of File	0	0-1	SYS	Only when job is executed with TimeStamp enabled for file storage, page number is added with the format set at 08-9387. 0: Invalid (Page number not added) 1: Valid (Page number added)	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			9817		Maximum number of decimals in the extension fields	2	0-6	SYS	0 to 6 digits	1	
08	Setting mode	System	General			9818		The default value of the stored/attached file name of a File/Email	0	0-1	SYS	0: DOCYMMDD1: NetBios name	1	
08	Setting mode	System	User interface	Off Device Customization Architecture		9819		STAGE SSL	0	0-1	SYS	Sets whether SSL communication is enabled or disabled for remote scanning. 0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	Off Device Customization Architecture		9820		STAGE I/F	1	0-1	SYS	Sets whether interface is enabled or disabled for remote scanning. 0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface	Off Device Customization Architecture		9821		Port number	49629	0-65535	SYS	Sets a port number for the remote scanning.	1	
08	Setting mode	System	User interface	Off Device Customization Architecture		9822		SSL port number	49630	0-65535	SYS	Sets an SSL port number for remote scanning using SSL communication.	1	
08	Setting mode	System	Network			9823		User name and password at user authentication or "Save as file"	0	0-2	SYS	0: User name and password of the device 1: User name and password at the user authentication (Template registration information comes first when a template is retrieved.) 2: User name and password at the user authentication (User information of the authentication comes first when a template is retrieved.)	1	
08	Setting mode	System	Image			9825		Image quality of the black part in the ACS mode	0	0-1	SYS	0: Black 1: Gray scale	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			9829		Department management limitation setting	0	0-3	SYS	Decide the default limitation setting when the new department code is created. 0: No limit 1: Limited only in the black mode 2: Limited in the color mode 3: Limited in the black/color mode	1	
08	Setting mode	System	Bluetooth			9841		Bluetooth BIP Print type	0	0-3	SYS	0: Fit page 1: 1/2 size 2: 1/4 size 3: 1/8 size	1	
08	Setting mode	System	Bluetooth			9846		Bluetooth BIP Paper size	Refer to contents	0-13	SYS	0: ledger 1: legal 2: letter 3: computer 4: statement 5: A3 6: A4 7: A5 9: B4 10: B5 11: Folio 12: Legal13" 13: LetterSquare <Default value> NAD: 2 Others: 6	1	
08	Setting mode	System	Finisher			9847		Hole punching setting	0	0-1	SYS	0: Invalid 1: Valid	1	
08	Setting mode	System	General			9848		Registration disclosure level setting	1	0-2	SYS	0: Displays no icons 1: ADMIN 2: USER	1	
08	Setting mode	System	General			9880		Total counter data transmission date 2	0	0-31	SYS	0 to 31	1	
08	Setting mode	System	General			9881		Day of the total counter data transmission	0	0-127	SYS	1 byte 00000000(0)-01111111(127)From the 2nd bit - Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday	1	
08	Setting mode	System	General			9883		Hardcopy security printing	0	0-1	SYS	0: Disabled 1: Enabled	1	
08	Setting mode	System	General			9884		Hardcopy security printing / Counting method switchover	0	0-1	SYS	0: Counted as 1 1: Counted as 2	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General			9886		Decimal point indication for Enhanced Scan Template	Refer to contents	0-1	SYS	0: Comma 1: Full stop <Default value> MJD: 0 Others: 1	1	
08	Setting mode	System	General			9888		Permission setting for changing the scan parameter when recalling an extension	0	0-1	SYS	0: Prohibited 1: Accepted	1	
08	Setting Mode	System	General	Data cloning		9889		Status display for USB cloning	0	0-1	SYS	0: Accepted 1: Prohibited	2	Yes
08	Setting Mode	System	User interface	Screen setting		9891		Warning message when PM time has come	1	0-1	SYS	0: No warning notification 1: Warning notification	1	Yes
08	Setting mode	System	General			9892		Monocolor counting method	0	0-2	SYS	Sets the counting method of fee charging or duplexing count in the Monocolor mode. Department and user counters are not applicable. 0: Mono/Twin Color 1: Black 2: Full Color	1	
08	Setting mode	System	General			9894		Calibration chart charging method	0	0-1	SYS	Decide whether the calibration chart printing is charged or not 0: No charge 1: Charge	1	
08	Setting mode	System	Image			9897		Default value setting of background peak adjustment (Black)	5	1-9	SYS	1: -4 2: -3 3: -2 4: -1 5: 0 6: +1 7: +2 8: +3 9: +4	1	
08	Setting mode	System	Image	Default value setting	Density in the scan mode	9898		Color	6	0-11	SYS	0: Auto 1: -5 2: -4 3: -3 4: -2 5: -1 6: 0 7: +1 8: +2 9: +3 10: +4 11: +5	1	
08	Setting mode	System	Image	Default value setting	Density in the scan mode	9899		Grayscale	6	0-11	SYS	0: Auto 1: -5 2: -4 3: -3 4: -2 5: -1 6: 0 7: +1 8: +2 9: +3 10: +4 11: +5	1	
08	Setting Mode	System	Version	System		9900		System firmware ROM version	-	-	-	T140SY0WXXXX	2	
08	Setting Mode	System	Version	Engine		9901		Engine ROM version	-	-	-	140M-XXX	2	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Version	Engine		9902		Scanner ROM version	-	-	-	140S-XXX	2	Yes
08	Setting Mode	System	Version	Engine		9903		RADF ROM version	-	-	-	DF-XXXX	2	Yes
08	Setting Mode	System	Version	Finisher		9904		Finisher ROM version	-	-	-	SDL-XXX FIN-XXX	2	Yes
08	Setting Mode	System	Version	FAX		9905		FAX board ROM version	-	-	-	F670-XXX	2	Yes
08	Setting Mode	System	Version	HDD		9930		System software OS version	-	-	-	T140SF0WXXXX	2	Yes
08	Setting mode	System	Network			9933		Domain participation confirmation of printing when LDAP authentication is used	1	0-1	SYS	Sets whether domain participation of a client computer for print job authentication is confirmed or not when LDAP is selected as the authentication method for user authentication. This function is enabled only when department management is enabled. 0: Disabled 1: Enabled	1	
08	Setting mode	System	General	S-ACS operation setting		9934	0	Copy	1	1-9	SYS	1: The number of contact control: 1 Continuous color control: 1 sheet 2: The number of contact control: 2 Continuous color control: 2 sheets 3: The number of contact control: 3 Continuous color control: 3 sheets 4: The number of contact control: 4 Continuous color control: 4 sheets 5: The number of contact control: 5 Continuous color control: 5 sheets 6: The number of contact control: 6 Continuous color control: 6 sheets 7: The number of contact control: 7 Continuous color control: 7 sheets 8: The number of contact control: 8 Continuous color control: 8 sheets 9: The number of contact control: 9 Continuous color control: 9 sheets	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	S-ACS operation setting		9934	1	Print	1	1-9	SYS	1: The number of contact control: 1 Continuous color control: 1 sheet 2: The number of contact control: 2 Continuous color control: 2 sheets 3: The number of contact control: 3 Continuous color control: 3 sheets 4: The number of contact control: 4 Continuous color control: 4 sheets 5: The number of contact control: 5 Continuous color control: 5 sheets 6: The number of contact control: 6 Continuous color control: 6 sheets 7: The number of contact control: 7 Continuous color control: 7 sheets 8: The number of contact control: 8 Continuous color control: 8 sheets 9: The number of contact control: 9 Continuous color control: 9 sheets	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	General	S-ACS operation setting		9934	2	Box, Others	1	1-9	SYS	1: The number of contact control: 1 Continuous color control: 1 sheet 2: The number of contact control: 2 Continuous color control: 2 sheets 3: The number of contact control: 3 Continuous color control: 3 sheets 4: The number of contact control: 4 Continuous color control: 4 sheets 5: The number of contact control: 5 Continuous color control: 5 sheets 6: The number of contact control: 6 Continuous color control: 6 sheets 7: The number of contact control: 7 Continuous color control: 7 sheets 8: The number of contact control: 8 Continuous color control: 8 sheets 9: The number of contact control: 9 Continuous color control: 9 sheets	4	
08	Setting mode	System	Finisher	Stapling setting Acceptable number of sheets exceeding upper limit / Short size		9937	0	Plain/Recycled	0	-100-100	SYS	-100 to 100	4	
08	Setting mode	System	Finisher	Stapling setting Acceptable number of sheets exceeding upper limit / Short size		9937	1	Thick1	0	-100-100	SYS	-100 to 100	4	
08	Setting mode	System	Finisher	Stapling setting Acceptable number of sheets exceeding upper limit / Short size		9937	2	Thick2	0	-100-100	SYS	-100 to 100	4	
08	Setting mode	System	Finisher	Stapling setting Acceptable number of sheets exceeding upper limit / Short size		9937	3	Thick3	0	-100-100	SYS	-100 to 100	4	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Finisher	Stapling Acceptable number of sheets exceeding upper limit / Saddle stitch		9938	0	Plain/Recycled	0	-15-15	SYS	-15 to 15	4	
08	Setting mode	System	Finisher	Stapling Acceptable number of sheets exceeding upper limit / Saddle stitch		9938	1	Thick1	0	-15-15	SYS	-15 to 15	4	
08	Setting mode	System	Finisher	Stapling Acceptable number of sheets exceeding upper limit / Saddle stitch		9938	2	Thick2	0	-15-15	SYS	-15 to 15	4	
08	Setting mode	System	Finisher	Stapling Acceptable number of sheets exceeding upper limit / Saddle stitch		9938	3	Thick3	0	-15-15	SYS	-15 to 15	4	
08	Setting Mode	System	Version	Finisher		9944		Finisher punch ROM version	-	-	-	PUN-XXX	2	Yes
08	Setting mode	System	Version			9945		Finisher Converter ROM version	-	-	-	CNV-XXX	2	
08	Setting Mode	System	Network	E-mail		9946		Number of Email transmission retries	3	0-14	SYS	0 to 14 times	1	Yes
08	Setting Mode	System	Network	E-mail		9947		E-mail transmission retry interval	1	0-15	SYS	0 to 15 min.	1	Yes
08	Setting Mode	System	Option	EFI		9950		Printer Board settings confirmation	0	0-1	SYS	Confirms whether the default settings of the EFI printer board are made or not. If 08-9951 is executed, the value becomes "1", and if 08-9952 is executed, the value becomes "0". 0: Not initialized 1: Initialization completed	2	Yes
08	Setting Mode	System	Option	EFI		9951		Default settings of the Printer Board	-	-	-	When connecting the EFI printer board, makes the default settings for the printer board.	3	Yes
08	Setting mode	System	Option	EFI		9952		Printer board restoring setting	-	-	-	When disconnecting the EFI printer board, restores the default settings for without EFI printer board.	3	Yes
08	Setting mode	System	General			9954		Counter / job list printing operation	0	0-1	SYS	0: Invalid 1: Valid	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface			9955		Name of [EXTENSION] button	EXTENSION	-	SYS	Sets the name of " EXTENSION" button displayed on the MENU screen. Maximum 10 characters with alphanumeric characters and symbols.	11	
08	Setting mode	System	Network			9958		Bcc address display ON/OFF setting (Job Log / Job Status)	0	0-1	SYS	Sets whether the Bcc address is displayed or not on the Job Log or Job Status when "1: To/Bcc" is selected in the code 08-9957. 0: OFF (Bcc address not displayed) 1: ON (Bcc address displayed)	1	
08	Setting mode	System	Network			9959		Bcc address display ON/OFF setting (Job Notification)	1	0-1	SYS	Sets whether the Bcc address is displayed or not on all the Job Notifications except for the administrator when "1: To/Bcc" is selected in the code 08-9957. 0: OFF (Bcc address not displayed) 1: ON (Bcc address displayed)	1	
08	Setting Mode	System	Maintenance			9960		Display of equipment information (SRAM)	Refer to contents	0-2	SYS	Displays the equipment information in SRAM. 0: Not set 1: Destinations other than NAD 2: NAD <Default value> NAD: 2 Others: 1	2	
08	Setting Mode	System	User interface			9963		Display of receiving job on JOB STATUS screen	0	0-1	SYS	This setting is automatically disabled in the high security mode. 0: Disabled 1: Enabled	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting (PPC)	9970		Original mode (Black)	0	0-4	SYS	0: Text/Photo 1: Text 2: Photo 3: Gray Scale 4: User custom mode	1	Yes
08	Setting mode	System	General	Image quality density adjustment at power-ON Default setting	PPC (black)	9971		Image quality density adjustment at power-ON Default setting	0	0-1	SYS	0: Auto 1: Manual	1	
08	Setting mode	System	General	Blank page judgment at power-ON Default setting	PPC	9972		Blank page judgment at power-ON Default setting	0	-3-3	SYS	The larger the value, the more the paper is judged as a blank page. The smaller the value, the less the paper is judged as a blank page.	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	User interface	Blank page judgment Default setting	SCN (color/black)	9973		Blank page judgment Default setting	0	-3-3	SYS	The larger the value, the more the paper is judged as a blank page. The smaller the value, the less the paper is judged as a blank page.	1	
08	Setting mode	System	User interface	ACS judgment adjustment Default setting	PPC (color/black)	9974		ACS judgment adjustment Default setting	2	-3-3	SYS	The larger the value, the more the original is judged as color data. The smaller the value, the less the original is judged as black data.	1	
08	Setting mode	System	User interface	ACS judgment adjustment Default setting	SCN (color/black)	9975		ACS judgment adjustment Default setting	2	-3-3	SYS	The larger the value, the more the original is judged as color data. The smaller the value, the less the original is judged as black data.	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting (PPC)	9976		Original mode (Color)	0	0-5	SYS	0: Text/Photo 1: Text 2: Printed image 3: Photo 4: Map 5: Custom	1	Yes
08	Setting mode	System	General	ACS original mode Default setting	PPC (color)	9977		ACS original mode Default setting	0	0-2	SYS	0: Text/Photo 1: Text 2: Printed image	1	
08	Setting mode	System	General	Image quality density adjustment at power-ON (ACS& full color) (PPC)	PPC (color)	9978		Image quality density adjustment at power-ON (ACS& full color) (PPC)	1	0-1	SYS	0: Auto 1: Manual	1	
08	Setting Mode	System	User interface	Default mode setting	Default setting (PPC)	9979		Color mode	2	0-2	SYS	0: Auto color 1: Black 2: Full color When the value of the code 08-9116 is "1: Enabled", "1: Black" is automatically set for this code and "0: ACS" and "2: Full color" become unselectable.	1	Yes

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting mode	System	Network			9980		Address setting for TO/CC/BCC at authentication	0	0-4	SYS	Sets address of TO/CC/BCC when the user authentication and E-mail authentication are enabled. When the value of this code is set to "1", the address specified as From Address is input to TO destination field. TO/CC/BCC field cannot be edited. When the value of this code is set to "2 to 4", the address specified as From Address is input to each field. TO/CC/BCC field can be edited by pressing the TO/CC/BCC button. 0: Disabled 1: Fixed to TO field. 2: Added to TO field. 3: Added to CC field. 4: Added to BCC field.	1	
08	Setting mode	System	Network	Sending body text of email		9981		Sending body text of email	1	0-1	SYS	Sets whether the job information is output in the body of e-mail when executing e-mail send job. 0: Disabled 1: Enabled	1	
08	Setting mode	System	User interface			9982		Switch of display attribute of [EXTENSION] icon	0	0-1	SYS	0: Touch is invalid when authentication is not completed. 1: Touch is valid when authentication is not completed.	1	
08	Setting Mode	System	User interface			9984		Document or file name display form for the PRINT screen, JOB STATUS screen, Job Status tab and Logs tab	0	0-1	SYS	0: Displays with the document or file name 1: Does not display the document or file name	1	
08	Setting Mode	System	User interface			9985		Screen displayed by pressing MENU button	0	0-1	SYS	0: MENU screen 1: EWB screen	1	

05/08	Mode	Element	Sub element	Item	Subitem	Code	Sub-code	Details	Default value	Acceptable value	RAM	Contents	Procedure	Service UI
08	Setting Mode	System	Fax			9987		Retention of fax sending settings	0	0-3	SYS	<p>Sets whether the fax sending settings are retained or not.</p> <p>0: Clears all settings (The authentication screen is displayed if user authentication or department management is enabled.)</p> <p>1: Clears all</p> <p>2: Clears only addresses</p> <p>3: Retains all settings</p> <p>* When the value of this code is set to "3", the value of 08-3847 (FAX mistransmission prevention) is automatically set to "1" (Enabled).</p>	1	

REVISION RECORD

Ver.07

Ver.07 <2015.01.16>	
Page	Contents
Precautions	"General Precautions at Service" has been added.
3-20	Page and item No. information has been corrected.
3-21	Page and item No. information has been corrected.
3-50	The illustration has been changed. Notes have been added.
4-31	The illustration and notes have been added.
5-19 to 5-20	The Note for the "Assist Mode (3C)" has been added.
5-24	The description for the "HDD Assist Mode (4C)" has been changed.
5-28	The Note for the "File System Recovery Mode (5C)" has been added.
5-32	The Note for the "SRAM Clear Mode (6C)" has been added.
6-43	The description of the "ADF scan noise reduction (Copying Function)" has been added.
6-68	The description of the "ADF scan noise reduction (Scanning Function)" has been added.
6-80 to 6-82	The description for "Separation roller pressure force adjustment of the bypass unit" has been added.
8-15	The description for the "C370" error has been changed.
8-35	The description for the "6014" error has been added.
8-108	The descriptions have been added to the troubleshooting for C270.
8-118	The descriptions have been added to the troubleshooting for C900.
8-121	The descriptions have been added to the troubleshooting for C962.
8-122	The descriptions have been added to the troubleshooting for C9E0.
8-162	The descriptions have been deleted to the troubleshooting for CE20.
8-164	The descriptions have been deleted to the troubleshooting for CE40.
8-169	The descriptions have been corrected to the troubleshooting for C370.
8-189	The descriptions have been added to the troubleshooting for F101_9.
8-191 to 8-193	The descriptions have been added to the troubleshooting for F106_1 to F106_10 and F106_UNDEF.
8-202	The descriptions have been changed to the troubleshooting for F130.
8-226	The troubleshooting has been added for 6014.
8-248	The sub-code has been corrected for 05-4529.
8-278	The sub-code has been corrected for 05-4064.
8-289	The sub-code has been corrected for 05-4532.
9-19	The note has been added.
9-29	The note has been added.
10-27	The illustration has been corrected for Fig10-28.
11-6	The description has been corrected.
11-68	The description has been corrected.
11-28	Error code H04 has been added.
12-3	The note has been added.
Chapter 15	<05 Code> Added 3009, 7150~7152, 7400~7404, 7693, 7694, 8412, 8414~8416 <08 Code> Added 3640, 3641, 3642-0, 3642-2, 3643, 3646~3651, 3653, 3657~3659, 3661, 3662, 3666, 3820~3826, 3875, 4017, 4744, 8732, 8737, 8797, 8835, 8836 Details is changed: 7617, 8300, 8710 Contents is changed: 9306 Details and Contents are changed: 8537

Ver.06

Ver.06 <2014.01.31>	
Page	Contents
Trademarks	Windows 8, Windows Server 2003, Windows Server 2008, and Windows Server 2012 have been added. The trademark sentence for Microsoft has been changed. The official company name of "Apple" has been corrected.
2-10	"SYS version" has been deleted from the operator's manual name. "CD-ROM" has been changed to "DVD-ROM".
5-10	The description has been changed. "Procedure 5" has been added."
5-33	The descriptions for (05) adjustment value difference, (08) setting value difference, and Job log/Message log have been added.
5-34	The descriptions for (05) adjustment value difference, (08) setting value difference, and Job log/Message log have been added. The CSV file names for (05) adjustment value difference, (08) setting value difference, and Job log/Message log have been added.
5-43	The format of "VERSION LIST" has been corrected.
5-46	The list for (05) adjustment value/(08) setting value difference has been added.
5-59	08-8735 has been added.
6-37	The description has been changed.
6-47	05-8806 has been corrected to 05-8066.
8-35	Error code 6013 has been added.
8-225	The troubleshooting for 6013 has been added.
8-243	The troubleshooting for H04 has been added.
8-250	Step 1 has been added. The description has been changed.
8-251	The description has been changed.
10-1	The description has been changed.
10-11	The description has been changed.
10-15	The toner remaining information has been added.
10-17	The toner remaining information has been added.
10-18	The toner remaining information has been added.
10-27	The toner remaining information has been added.
10-29	The toner remaining information has been added.
10-32	The toner remaining information has been added.
10-34	The toner remaining information has been added.
10-36	The toner remaining information has been added.
10-37	The toner remaining information has been added.
10-42	The toner remaining information has been added.
10-43	The toner remaining information has been added.
11-6	The description has been changed.
11-7	The note has been deleted.
11-12	Note for the "Invalid Signature" error has been added. Error code H04 has been added.
11-28	Error code H04 has been added.

Ver.06 <2014.01.31>	
Page	Contents
Chapter 15	Added 03-301~322 05-3009, 7150~7152, 7400~7404, 7693, 7694, 8412, 8414~8416 08-3637, 3639, 3644, 3652, 6088-0~1, 6089-0~5, 6090, 6091, 7617, 8300, 8598, 8642, 8643~8663, 8664-0~2, 8667~8670, 8671-0~2, 8672-0~2, 8673, 8674, 8727, 8735, 8736, 8754, 8755, 8756-0~1, 8758, 8762-0~3, 8771, 8774, 8781, 8785, 8786-0~1, 8788~8790, 8792, 8795, 8826, 8827, 8831, 9255, 9963 Deleted 08-4661, 6086 Changed:Default value 08-8520 Changed:Acceptable value, Contents 08-9016, 9017 Changed:Contents 08-4105, 8981, 9379 Changed:Details 08-9398 Changed:Details, Contents 08-7001, 7301 Changed:Item, Details, Contents 08-6080, 7000 Changed:Sub element, Item, Subitem, Details, Default value, Contents 08-6081-0 Changed:Sub element, Item, Subitem, Default value, Contents 08-6081-1 Changed:Sub element, Item, Subitem, Details, Contents 08-6085-0~5 Changed:Sub element, Item, Details, Contents 08-6084

Ver.05

Ver.05 <2013.10.15>	
Page	Contents
General Precautions	"3. General operations" has been added.
3-19	The description has been changed.
3-74, 3-75	The description has been changed.
3-86	The description has been changed.
4-131 to 4-134	The note has been added.
4-193 to 4-196	The note has been added.
5-11	The operation flow of Procedure 5 has been corrected.
5-22	The description has been changed.
5-24	The description has been changed.
5-27	The description has been changed.
5-28	The description has been changed.
5-54, 5-55	The list format has been corrected.
5-58	The description has been corrected.
6-2	Toner density ratio manual offset control (08-2707) has been deleted.
6-28	The description has been corrected.
6-39	Black reproduction switching at the Twin color copy mode (05-7937) has been deleted.
6-41	ACS Black (05-7675) has been deleted.
6-42	The description has been corrected.
6-45	The description has been corrected.
6-46	The description has been corrected.
6-47	The description has been corrected.
6-59	The original mode "Text" (05-7486-0, 05-7486-1, 05-7486-2) has been deleted.

Ver.05 <2013.10.15>	
Page	Contents
6-66	The density adjustment of background for RADF scanning (05-7468, 05-8395) has been deleted.
7-42	"Product name" has been changed to "P-I" of the parts list.
8-2	The description has been added.
8-21	The contents of F101 have been changed.
8-22	The contents of F106 have been changed.
8-34	Error codes (5030 and 50FF) have been added.
8-39	The description has been corrected.
8-40	The description has been corrected and added.
8-107	The troubleshooting for C260 has been changed.
8-108	The troubleshooting for C270 and C280 has been changed.
8-109	The troubleshooting for C290 has been changed.
8-115	The descriptions of the troubleshooting for C550 have been changed.
8-116	A description of the troubleshooting for F070/F110/F111 has been added.
8-151	The wrong numbering has been corrected.
8-182 to 8-188	Contents of the troubleshooting for F101 have been added.
8-191, 8-192	The contents of F106 have been changed.
8-221	Troubleshooting items (5030 and 50FF) have been added.
8-242	Troubleshooting items have been added.
9-21	The description has been changed.
11-13	The description has been added.
Chapter 15	<p>The description for digital key [3] for input check has been changed.</p> <p>03-301 to 322 have been added.</p> <p>05-2670-0 to 3, 2671-0 to 3, 4732-0 to 1, and 8244-0 to 1 have been added.</p> <p>The items of 05-7249 and 7252 have been changed.</p> <p>05-7468, 7486-0A`2, 7675, 7937, and 8395 have been deleted.</p> <p>08-2513-0 to 3, 2514-0 to 3, 5156-0 to 3, 5810-0 to 3, 5811-0 to 3, 6060-1, 6061-0 to 1, 6062-1, 6063-0 to 1, 6064-1, 6065-0 to 1, 6066-1, 6067-0 to 1, 6068-1, 6069-0 to 1, 6070-1, 6071-0 to 1, 6072-0 to 1, 6074-0 to 1, 6244, 6246-0 to 3, 6249-0 to 3, 8521, 8623-0, 8628, 8640, 8641, 8761, 8775, 8776, 8777, 8778, 8779, 8780, 8782, 8783, 8825, 8942, and 9036 have been added.</p> <p>08-2707-0 to 3, 4615-0 to 27, 6020-1 to 2, 6021-1, 6022-2, 6023-2, 6024-8, 6025-0, 6026-1, 6040-1, 6041-2, 6042-2, 6043-7, 6044-8, 6045-0, 6050-1 to 2, 6051-2, 8011, 8530-0 to 2, 8531-0 to 2, 9380, 9482A`C 9483, 9484, 9485, and 9520 have been deleted.</p> <p>The contents of 08-2525-0 to 3, 2526-0 to 3, 3500, 3501, and 3502 have been changed.</p> <p>The acceptable values of 08-3623, and 6500 have been changed.</p> <p>The acceptable values and contents of 08-3724, 5155, and 9307 have been changed.</p> <p>The contents of 08-3864, and 9987 have been changed.</p> <p>The details of 08-6081 have been changed.</p> <p>The subitem and details of 08-9398 have been changed.</p> <p>The default values of 08-3015, 3780, 5600-1, 5602-1, 5604-1, 5606-1, 6250-1, 6252-1, 6254-1, 6256-1, 6258-1, 6260-1, 6262-1, 6264-1, 6270-1, 6274-1, 6276-1, 6278-1, 6280-1, 6282-1, 6284-1, 6286-1, 6288-1, 6290-1, 6292-1, 6294-1, 6296-1, 6298-1, 6300-1, 6302-1, 6304-1, 6306-1, 6314-1, 6316-1, 6318-1, 6320-1, 6328-1, 6332-1, 6340-1, 6350-1, 6370-1, 6372-1, 6374-1, 6376-1, 8523, 8738, and 9486 have been changed.</p>

Ver.04

Ver.04 <2012.07.06>	
Page	Contents
2-8	"Bluetooth" has been deleted.
2-10	The items in the accessory list has been changed.
2-11	<p>"Hardcopy Security Kit" has been added to Fig. 2-1.</p> <p>"Bluetooth Module" has been deleted from Fig. 2.1.</p> <p>"Bluetooth Module" has been deleted from the notes.</p>

Ver.04 <2012.07.06>	
Page	Contents
2-12	Toner cartridges for China have been added.
3-24	"M1" has been deleted from the table of 3.3.7.
4-11	The procedure of "4.2 Control Panel" has been changed.
5-1	An explanation about "Appendix" has been added to "[A] Starting each mode" in 5.1.
5-5	"CHART PRINT MODE" has been added to the list in 5.2.1.
5-20	"Password" has been added to the title of step (8).
5-59	"5.15 PM support mode related code" has been deleted.
8-2	"8.1.2 Collection of debug log with USB media" has been added.
8-19	F101_0 to F101_3 have been added and the description of F101 has been corrected.
8-20	F109_5 and F109_6 have been added.
8-21	F140 has been added. F120 and F800 have been added. The descriptions of F121 and F122 have been corrected. F131 has been added.
8-32	4F10 has been added.
8-180	The descriptions of F100_0 to F100_2 have been corrected.
8-182	Descriptions of F101_0 and F101_1 have been added. Descriptions of F101_2 and F101_3 have been added. F101 has been added.
8-183	F101 has been removed. The descriptions of F102 to F105 have been corrected.
8-187	The descriptions of F109_0 to F109_2 have been corrected.
8-188	The description of F109_3 has been corrected.
8-189	The description of F109_4 has been corrected.
8-190	Descriptions of F109_5 to F120 have been added.
8-194	The descriptions of F121 and F122 have been corrected.
8-195	The "Replacement parts" table of F124 has been deleted. A description of F131 has been added.
8-196	A description of F140 has been added.
8-199	A description of F800 has been added.
8-212	A description of 4F10 has been added.
9-1	"9.1.1 Hard disk (HDD)" has been corrected.
9-19	A note has been added to 9.2.3.
9-24	The "Notes" in "[A] Return License" has been corrected.
9-27	"Note" has been added to "[I] Check ROM versions".
9-34	The description of "[L] Enable HDD encryption" has been corrected.
9-44	The description of 9.3.1 has been corrected and a description of 9.3.2 has been added.
11-1	The "Updating method" column of the engine ROM has been changed.
11-2	The ROM table has been changed.
11-29	A description of the engine ROM has been added to the table.
11-33	The update procedure of the system ROM has been corrected.
11-37	"11.3.3 Engine ROM" has been added.
14-3	"14.2.1 DC Wire Harness" has been changed.

Ver.04 <2012.07.06>	
Page	Contents
Appendix	08-6087, 6250-0 to 8, 6251, 6258-0 to 8, 6259, 6272-0 to 8, 6273, 6274-0 to 8, 6275, 6282-0 to 8, 6283, 6298-0 to 8, 6299, 6300-0 to 8, 6301, 6314-0 to 8, 6315, 6346-0 to 8, 6347, 6350-0 to 8, 6351, 6368-0 to 8, 6369, 6382-0 to 2,-8, 6383, 6384-0 to 2,-8, 6385, 6386-0 to 2,-8, 6387, 6390-0 to 2,-8, 6391, 6392-0 to 2,-8, 6393, 6394-0 to 2,-8, 6395, 6398-0 to 2,-8, 6399, 6400-0 to 2,-8, 6401, 6402-0 to 2,-8, 6403, 6406-0 to 2,-8, 6407, 6408-0 to 2,-8, 6409, 6410-0 to 2,-8, 6411, 6412-0 to 2,-8, 6413, 6414-0 to 2,-8, 6415, 6416-0 to 2,-8, 6417, 6420-0 to 2,-8, 6421, 6422-0 to 2,-8, 6423, 6424-0 to 2,-8, 6425, 6428-0 to 2,-8, 6429, 6430-0 to 2,-8, 6431, 6436-0 to 8, 6437, 8303, 8624, 8631, 8713, 8738, 8744, 8745, 8746, 8748, 8749, 8824, 8952, 9294, 9954, 9985 have been added. The default values of 08-9484, 9485, 9487, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9730, 3631 have been changed. The acceptable value and contents of 08-9132 have been changed. The acceptable values of 08-3500, 3501, 3502, 3503 have been changed. The contents of 08-4548 have been changed.

Ver.03

Ver.03 <2011.12.22>	
Page	Contents
2-9	The message size limitation is corrected to 100 MB from 30 MB.
5-19	The menu explanation in 3C mode has been added.
5-22	The item of 4C mode explanation has been changed into a bullet from a number.
5-31	The item of 6C mode explanation has been changed into a bullet from a number.
8-19	The "F124" has been added.
8-188	The "F124" has been added.
8-190	In [F600], the contents of the measures have been changed.
8-191	In [F900], the contents of the measures have been changed.
9-23	Procedures of the SYS board replacement had been changed.
9-24	Procedures of the SYS board replacement had been changed.
9-25	Procedures of the SYS board replacement had been changed.
9-26	Procedures of the SYS board replacement had been changed.
9-27	Procedures of the SYS board replacement had been changed.
9-28	Procedures of the SYS board replacement had been changed.
9-30	Procedures of the SYS board replacement had been changed.
9-31	Procedures of the SYS board replacement had been changed.
9-40	Explanation of the master data has been changed.
11-63	Explanation of the master data has been changed.
Appendix	The illustration of PM sticker was added.

Ver.02

Ver.02 <2011.11.30>	
Page	Contents
2-12	The drum for China has been added. Toner cartridges for Argentina have been added.
5-1	"Assist mode", "HDD assist mode", "File system recovery mode", and "SRAM clear mode" have been added to the list of modes.
5-2	The Note text has been added to the list of modes. The illustration for Fig. 5-1 has been changed.
5-3	The "Assist mode (3C)" section has been added. The "HDD assist mode (4C)" section has been added. The "SRAM clear mode (6C)" section has been added.
5-5	Step (3) has been changed.

Ver.02 <2011.11.30>	
Page	Contents
5-19-5-21	The "Assist Mode" section was moved from 12.3 to 5.9.
	The title for 5.9 was changed from "Assist Mode" to "Assist Mode (3C)".
	Item (1) was deleted.
	Items (2)-(9) were changed to items (1)-(8).
	In item (1), "Clear Update Error Flags" has been changed to "Clear Error Flag in Software Installation".
	In item (2), "Format Loader Partition" has been changed to "Format Root Partition".
	In item (2), "HDD data must be installed after performing this function" has been added.
	In item (3), "All Partition Delete and Create Loader Partition" has been changed to "Format HDD".
	The title for 5.9.2 has been changed from "Operating Procedure of Assist Mode" to "Operating Procedure".
	The illustration for Fig. 5-6 has been changed.
	In 5.9.2, the Notes text has been deleted.
5-22-5-25	Section 5.10 HDD Assist Mode (4C) has been added.
5-26-5-30	In 5.11, all of the text has been changed.
5-31-5-32	Section 5.12 SRAM Clear Mode (6C) has been added.
5-43	The Note text has been added.
8-14	"C8E0" error code has been added.
8-19	The "F106_0", "F106_1", "F106_2", "F106_3", "F106_4", and "F106_5" error codes have been added.
8-20	In [F510], "Software boot-up error" has been changed to "Application start error".
	In [F520], "Software boot-up error" has been changed to "Operating system start error".
8-116	The "[C8E0] RADF communication protocol abnormality" item has been added.
8-181-8-184	The troubleshooting for [F106_0], [F106_1], [F106_2], [F106_3], [F106_4], and [F106_5] has been added.
8-187	"Recover the license on the SYS board" has been changed to "Transfer license from SRAM to FROM".
	"Recover the license on the SRAM board" has been changed to "Transfer license from FROM to SRAM".
	In the troubleshooting for [F121], "[START]" has been changed to "[POWER]".
8-188	In the troubleshooting for [F122], "[START]" has been changed to "[POWER]".
8-189	In the troubleshooting for [F500], "[START]" has been changed to "[POWER]".
	In [F510], "Software start error" has been changed to "Application start error".
	In [F510], the contents of the measures have been changed.
	In [F520], "Software start error" has been changed to "Operating system start error".
	In [F520], the contents of the measures have been changed.
8-211	In the troubleshooting for [6121], "[START]" has been changed to "[POWER]".
8-214	In the troubleshooting for [71AC], "[START]" has been changed to "[POWER]".
9-29	"If there are backup data of the SRAM" has been changed to "If there is SRAM backup data".
	The Remarks text in [E] Restore SRAM has been changed.
	Step (11) in [E] Restore SRAM has been changed.
9-42	"(for SYS board)" has been added to SRAM board.
	Section 9.3.4 has been added.
11-6	The storage locations and data file names for the RADF ROM (RADF firmware) have been changed.
	"The RADF ROM data file that is written on the USB memory is different depending on the installed RADF" has been added to the text.
	The illustration for Fig. 11-5 has been changed.

Ver.02 <2011.11.30>	
Page	Contents
11-10	In the table in step (5), the item name "5. RADF FIRMWARE" and the display conditions have been changed.
Appendix	08-6080, 6081-0, 6081-1, 6085-0, 6085-1, 6085-2, 6085-3, 6085-4, 6085-5, 6086, and 9279 have been deleted. 08-6817, 8718, and 8719 have been added. The contents of 08-3629 and 9987 have been changed.

Ver.01

Ver.01 <2011.09.30>	
Page	Contents
Cover	The illustration has been changed.
Trademarks	Text has been deleted from the copyright information.
2-10	A description of the manual types and quantities has been added. Notes text has been added.
2-11	System List has been changed.
2-12	"28" has been changed to "25". Toner cartridges for Singapore have been added.
3-77	The chapter description has been deleted.
3-97	In 3.17.3, "sub heater lamp and" has been added to the text in item 3.
3-101	"12VB" has been deleted from the voltage for CN402.
3-102	The voltage for the fuse has been added.
3-103	Information has been added to the +24VD3 section of the table.
4-190	Section 4.12.9 has been added in pages 4-190–4-223.
5-4–6	In 5.2, all of the text has been changed.
5-56	The "Setting mode" title has been deleted. "05" has been added before "2662". "08" has been added before the codes.
7-13	"40,000" has been changed to "44,000", "50,000" has been changed to "55,000", and "70,000" has been changed to "77,000".
7-42	The kit names and the component names have been changed.
8-5	"(paper is remaining on the transport path when CRUN is OFF)" has been deleted from E550.
8-19	F120 has been deleted.
8-32	In 8.2.6, 6131 has been added.
8-35	The 8.2.9 text has been deleted.
8-41	"Registration roller front guide" has been changed to "Registration guide". "Registration roller front (right) guide" has been changed to "Registration guide".
8-52	"Registration roller front (right) guide" has been changed to "Registration guide".
8-54	The jamming area table and its contents have been completely changed.
8-55	In the [E090] table, the Page memory item has been added.
8-56	"(paper is remaining on the transport path when CRUN is OFF)" has been deleted from the [E550] title.
8-57	The [E550] jamming area table and its contents have been completely changed.
8-58	The [E551]/[E552] jamming area table and its contents have been completely changed.
8-120	In measure 2, "SRAM ERROR DOES IT INITIALIZE" has been changed to "SRAM REQUIRES INITIALIZATION".
8-178	"[3]+[CLEAR] → Power ON" has been changed to "[3] + [C] + [POWER]".
8-179	"[3]+[CLEAR] → Power ON" has been changed to "[3] + [C] + [POWER]". "Replace the equipment" has been deleted.
8-180	One sentence has been deleted from the Remarks.

Ver.01 <2011.09.30>	
Page	Contents
8-181	One sentence has been deleted from the Remarks. "Equipment replacement" has been deleted. "[START]" has been changed to "[POWER]".
8-182	"Replace the equipment" has been deleted.
8-183	One sentence has been deleted from the Remarks. "[START]" has been changed to "[POWER]". "Replace the equipment" has been deleted. The contents for [F120] have been deleted.
8-184	"Equipment replacement" has been deleted.
8-185	One sentence has been deleted from the Remarks. "Equipment replacement" has been deleted. The contents for [F120] have been deleted. "[START]" has been changed to "[POWER]".
8-187	For Key Null, the text enclosed by parentheses has been added.
8-188	For Key Null, the text enclosed by parentheses has been added.
8-189	In [F900], the contents of the measures for the encryption item have been changed. One sentence has been deleted from the Remarks. In the table, the reference page text has been added.
8-190	In the table, the reference page text has been added.
8-188	"08-9070" has been changed to "([5]+[C]+[POWER] ON → [3] → [1])".
8-190	"08-9070" has been changed to "([5]+[C]+[POWER] ON → [3] → [1])".
8-192	"08-9070" has been changed to "([5]+[C]+[POWER] ON → [3] → [1])".
8-194	"08-9070" has been changed to "([5]+[C]+[POWER] ON → [3] → [1])".
8-195	"08-9070" has been changed to "([5]+[C]+[POWER] ON → [3] → [1])".
8-205	The contents for the Setting have been changed. "Administrator" has been deleted.
8-207	The section for [6131] has been added.
8-209	"[START]" has been changed to "[POWER]".
8-224	The contents for section 8.3.30 have been deleted.
8-245	"Pre registration guide" has been changed to "registration guide".
8-258	"Pre registration guide" has been changed to "registration guide".
9-15	The explanation for the display has been added. Some of the contents for 1. Display has been changed. "F120" has been changed to "F121 or F122".
9-19	In [B], the contents have been changed.
9-29	[E] has been changed to [F].
9-30	In (2), "SRAM ERROR DOES IT INITIALIZE" has been changed to "SRAM REQUIRES INITIALIZATION".
9-34	Some of the Notes text has been deleted.
10-3	In (3), the text has been changed.
11-1	"Download jig" has been deleted from Engine ROM in the Equipment table.
11-2	The Engine ROM illustration has been deleted. Item E, Engine ROM, has been deleted from the table.
11-29	The "Engine ROM" item has been deleted.
11-32	Section B has been deleted.
11-33	Section 11.3.3 has been deleted.
11-64	The "Engine ROM" item has been deleted from the table.

Ver.01 <2011.09.30>	
Page	Contents
12-3	In 7), "backup file" has been revised to "equipment".
12-8	In [B], the contents of the procedures have been completely changed.
12-13	"and scrambler board" has been deleted.
12-16	In 12.4.2, text has been added.
12-17	Text has been added.
14-1	The wire harness diagram has been changed.
14-2	The wire harness diagram has been changed.
Appendix	<p>05-7640 has been added.</p> <p>The acceptable values and contents of 08-2692, 9628 have been changed.</p> <p>08-3628, 3629, 6085-0, 6085-1, 6085-2, 6085-3, 6085-4, 6085-5, 6086, 7051-0, 7051-1, 7051-2, 7051-3, 7051-4, 7051-5, 7051-6, 7051-7, 7051-8, 7052-0, 7052-1, 7052-2, 7052-3, 7052-4, 7052-5, 7052-6, 7052-7, 7052-8, 7352-0, 7352-1, 7352-2, 7352-3, 7352-4, 7352-5, 7352-6, 7352-7, 7352-8, 8585, 8586, 8587, 8592, 8593, 8597, 8600, 8603, 8710, 8711, 8712, 8977-0, 8977-1, 8977-2, 8981, 8982, 8983, 9984 have been added.</p> <p>The default values of 08-9379, 9380 have been changed.</p> <p>The default value and acceptable value of 08-9723 have been changed.</p> <p>08-9127, 9294, 9893 have been deleted.</p>

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