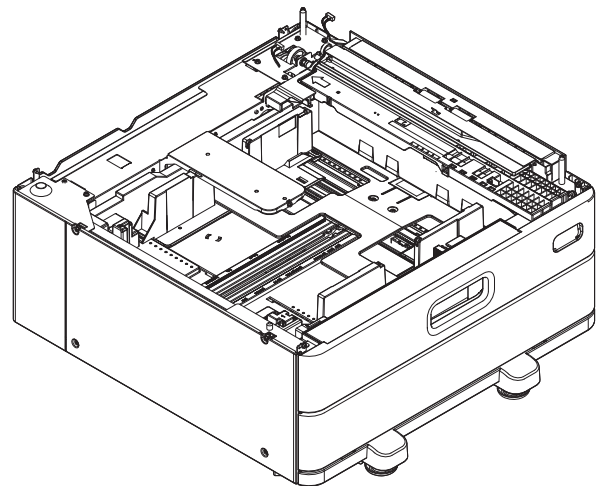


TOSHIBA

SERVICE MANUAL

Paper Feed Pedestal

KD-1032/1058



Model: KD-1032/1058
Publish Date: April 2012
File No. SME120012C0
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Ver03 F_2018_06

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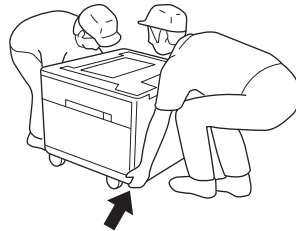
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General Precautions for Installation/Service/Maintenance for the equipment

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

1. When installing the equipment to the MFP, be sure to follow the instructions described in the "Unpacking/Set-Up Procedure for the equipment" booklet which comes with each unit of the equipment.
2. The equipment should be installed by an authorized/qualified person.
3. When transporting/installing the equipment, employ two persons and be sure to use the positions as indicated below.
The equipment is fairly heavy and weights approximately 21 kg (46.3 lb.), therefore pay full attention when handling it.



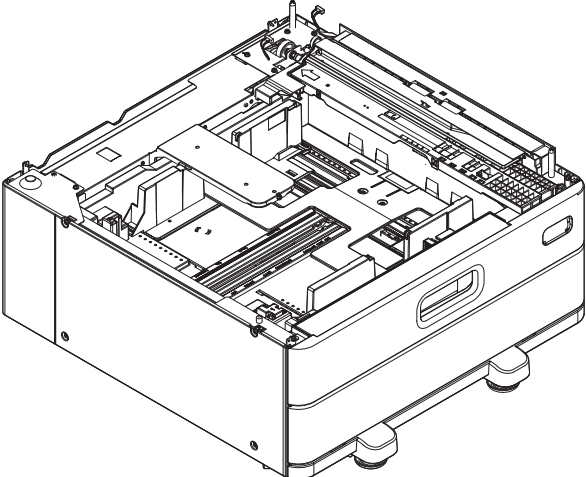
4. Both the Paper Feed Pedestal and the Large Capacity Feeder have 4 adjusters (antiskid devices) underneath. After the equipment has been moved and installed, be sure to turn and lower them to fix it since the drawers may not be opened or closed smoothly depending on floor conditions.
5. The equipment must be grounded for safety.
6. Before starting installation, servicing or maintenance work, be sure to turn off and unplug the equipment first.
7. The equipment shall be installed near the socket outlet and shall be accessible.
8. Be sure to fix and plug in the power cable securely after the installation so that no one trips over it.
9. 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.
10. The equipment is supplied with power from the equipment, requiring no additional power source.
11. The equipment should be grounded to the specified positions on the machine frame.
12. When servicing or maintaining the equipment, be careful about the rotating or operating sections such as gears, pulleys, sprockets, cams, belts, etc.
13. When parts are disassembled, reassembly is basically the reverse of disassembly unless otherwise noted in this manual or other related materials. Be careful not to reassemble small parts such as screws, washers, pins, E-rings, toothed washers to the wrong places.
14. Basically, the machine should not be operated with any parts removed or disassembled.
15. When servicing the machines with the power turned ON, be sure not to touch live sections and rotating/operating sections.

16. Delicate parts for preventing safety hazard problems (such as breakers, thermofuses, fuses, door switches, sensors, etc. if any) should be handled/installed/adjusted correctly.
17. Use suitable measuring instruments and tools.
18. During servicing or maintenance work, be sure to check the nameplate and other cautionary labels (if any) to see if they are clean and firmly stuck. If not, take appropriate actions.
19. The PC board must be stored in an anti-electrostatic bag and handled carefully using a wristband, because the ICs on it may be damaged due to static electricity. Before using the wrist band, pull out the power cord plug of the equipment and make sure that there is no uninsulated charged objects in the vicinity.
20. For the recovery and disposal of used equipment, consumable parts and packing materials, follow the relevant local regulations/rules.
21. After completing installation, servicing and maintenance of the equipment, return the equipment to its original state, and check operation.
22. Check the procedures and perform them as described in the Service Manual.
23. Make sure you do not lose your balance.
24. Avoid exposure to your skin and wear protective gloves as needed.
25. 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.

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1. SPECIFICATIONS

Item	KD-1032	KD-1058
Appearance		
Feeding method	Automatic feeding: 1 drawer installed from the front	
Paper	Size: A3, B4, A4, A4-R, B5, B5-R, A5-R, LD, LG, LT, LT-R, ST-R, 8K, 16K, 16K-R, FOLIO, COMPUTER, 13"LG, 8.5" × 8.5" Thickness: 60 g/m ² to 163 g/m ² (16 lb. Bond to 90 lb. Cover)	Size: A3, A4, A4-R, A5-R, FOLIO, 8K, 16K, 16K-R, 320 × 460mm, SRA3(320 × 450mm), A3-wide (305 × 357mm/12" × 18"), COMPUTER, LD, LG, LT, LT-R, ST-R, 13"LG, 8.5" × 8.5" Thickness: 60 g/m ² to 256g/m ² (16 lb. Bond to 140 lb. Cover) * L/LL: Thickness: 60 g/m ² to 163g/m ² (16 lb. Bond to 90 lb. Cover)
Capacity of drawer	Plain/Thick paper: Stack height: 60.5 mm (Approx. 550 sheets: 80 g/m ² (22 lb. Bond)) Reused paper: Stack height: 52.0 mm (Approx. 400 sheets: 80 g/m ² (22 lb. Bond))	
Dimensions	575 (W) × 583 (D) × 292 (H) mm / 22.64 (W) × 22.95 (D) × 11.50 (H) inch (Height - Floor to top of the front cover) 668 (W) × 701 (D) × 292 (H) mm / 26.30 (W) × 27.60 (D) × 11.50 (H) inch (Including the stabilizer cover)	
Weight	Approx. 21 kg (46.3 lb.)	Approx. 16.3kg (35.15 lb.)
Power supply	5 V, 24 V (supplied from the equipment)	
Accessory	Unpacking Instructions (1) Connecting plates (4) Screws for connecting plates M3 × 6 (6) Fixing screw for ground wire M3 × 6 (1) Paper size indicator sheets (2) Stabilizer brackets (4) Feeding side stabilizer foot (1) Screw for feeding side stabilizer foot M3 × 14 (1) Rear side stabilizer covers (2) Front side stabilizer cover (1) Screws for stabilizer M3 × 6 (4)	Unpacking Instructions (1) Connecting plates (4) Screws for connecting plates M3 × 6 (6) Fixing screw for ground wire M3 × 6 (1) Paper size indicator sheets (2) Stabilizer brackets (4) Feeding side stabilizer foot (1) Screw for feeding side stabilizer foot M3 × 14 (1) Rear side stabilizer covers (2) Front side stabilizer cover (1) Screws for stabilizer M3 × 6 (5)
Appearance color	Fair white	Jet black
Option	Drawer module: MY-1033 (With this option, 2 drawers become available for feeding).	Drawer module: MY-1048 (With this option, 2 drawers become available for feeding).

Notes:

This manual explains on the premise that 2 drawers are available (that is, the optional drawer module is installed).

Comparison of KD-1058 and KD-1058-B

Model Name	KD-1058	KD-1058-B
European safety standards complied with	Safety standard: EN60950-1 RoHS2: 2011/65/EU	Safety standard: EN60950-1, EN62368-1 RoHS2: 2011/65/EU 2011/65/EU+(EU)2015/863
Rating label <for identification>	No mark applied	 <p>Black dot mark and “-B” applied The 2nd digit of the serial number differs</p>
Applicable models	e-STUDIO2005AC/2500AC e-STUDIO2505AC/3005AC/3505AC/4505AC/5005AC e-STUDIO2008A/2508A/3008A/3508A/4508A/5008A e-STUDIO3508LP/4508LP/5008LP	e-STUDIO2005AC/2500AC e-STUDIO2505AC/3005AC/3505AC/4505AC/5005AC e-STUDIO2008A/2508A/3008A/3508A/4508A/5008A e-STUDIO3508LP/4508LP/5008LP e-STUDIO 2010AC/2510AC e-STUDIO 2015AC/2515AC/3015AC/3515AC/4515AC/5015AC e-STUDIO2018A/2518A/3018A/3518A/3518A/4518A/5018A
Notes	Purchasing this is not possible after June, 2019.	

2. OVERVIEW

2.1 Front Sectional View

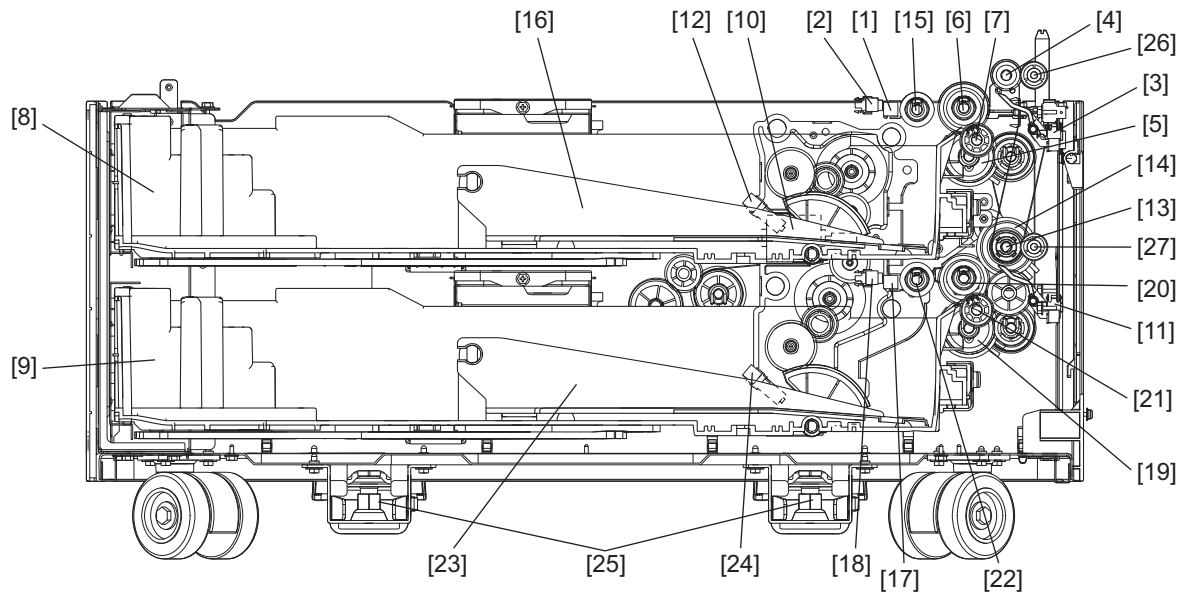


Fig. 2-1

Symbol	Name	Symbol	Name
1	Upper drawer tray-up sensor (S3)	15	Upper drawer pickup roller
2	Upper drawer empty sensor (S5)	16	Upper drawer tray
3	Upper drawer feed sensor (S1)	17	Lower drawer tray-up sensor (S4)
4	Upper transport roller	18	Lower drawer empty sensor (S6)
5	Upper drawer feed clutch (CLT2)	19	Lower drawer feed clutch (CLT3)
6	Upper drawer feed roller	20	Lower drawer feed roller
7	Upper drawer separation roller	21	Lower drawer separation roller
8	Upper drawer	22	Lower drawer pickup roller
9	Lower drawer	23	Lower drawer tray
10	Tray-up motor (M2)	24	Lower drawer paper stock sensor (S8)
11	Lower drawer feed sensor (S2)	25	Adjuster
12	Upper drawer paper stock sensor (S7)	26	Upper idling roller
13	Lower transport roller	27	Lower idling roller
14	Transport clutch (CLT1)		

2.2 Layout of Electrical Parts

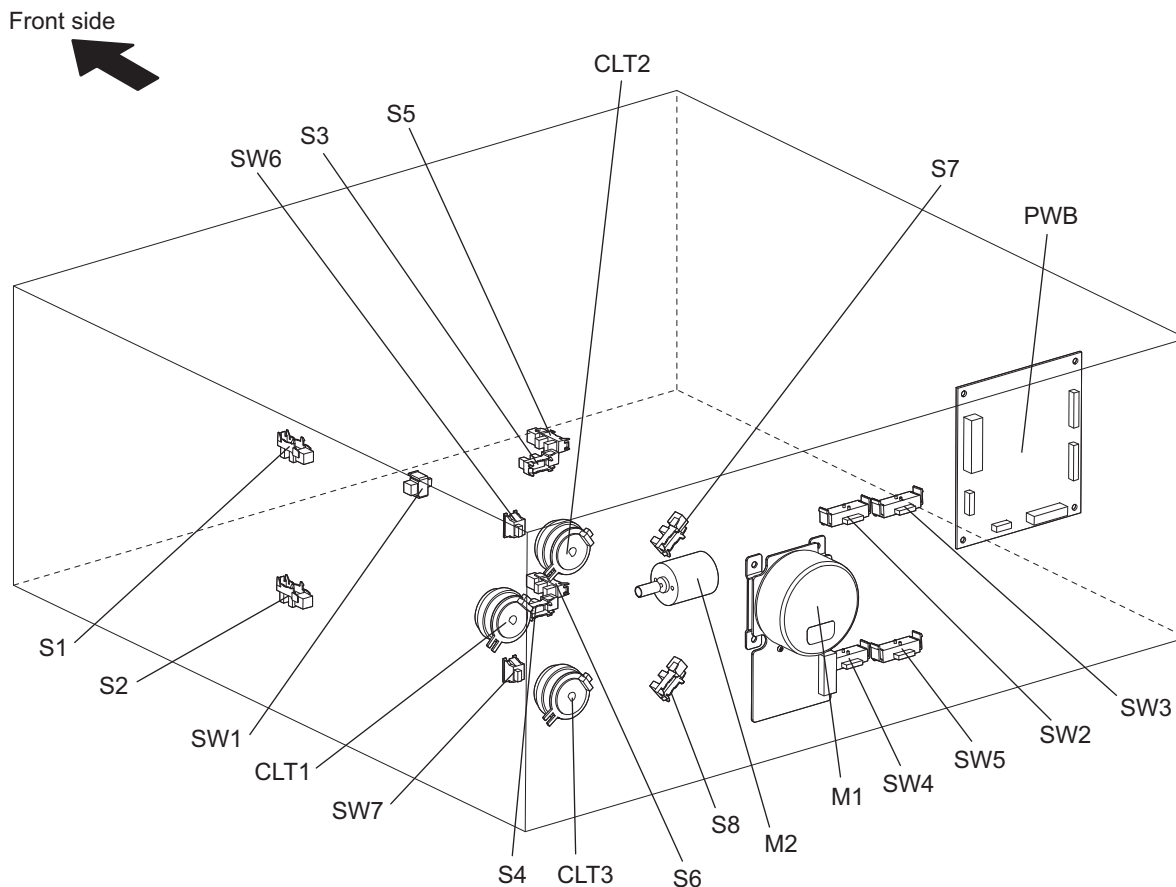


Fig. 2-2

Symbol	Name	Symbol	Name
M1	PFP motor	S1	Upper drawer feed sensor
M2	Tray-up motor	S2	Lower drawer feed sensor
CLT1	Transport clutch	S3	Upper drawer tray-up sensor
CLT2	Upper drawer feed clutch	S4	Lower drawer tray-up sensor
CLT3	Lower drawer feed clutch	S5	Upper drawer empty sensor
SW1	Side cover open/close switch	S6	Lower drawer empty sensor
SW2	Upper drawer paper size detection switch (width)	S7	Upper drawer paper stock sensor
SW3	Upper drawer paper size detection switch (length)	S8	Lower drawer paper stock sensor
SW4	Lower drawer paper size detection switch (width)	PWB	PFP board
SW5	Lower drawer paper size detection switch (length)		
SW6	Upper drawer detection switch		
SW7	Lower drawer detection switch		

2.3 Electrical Parts

1. Motor

Symbol	Name	Function	Remarks
M1	PFP motor	Drives feeding and transport	Brushless motor
M2	Tray-up motor	Lifts up the upper and lower drawer trays	Brush motor

2. Electromagnetic clutch

Symbol	Name	Function	Remarks
CLT1	Transport clutch	Drives transport	
CLT2	Upper drawer feed clutch	Drives roller to pick up paper from the upper drawer	
CLT3	Lower drawer feed clutch	Drives roller to pick up paper from the lower drawer	

3. Switches and Sensors

Symbol	Name	Function	Remarks
SW1	Side cover open/close switch	Side cover open/close detection	Push switch
SW2	Upper drawer paper size detection switch (width)	Detects the paper width of the upper drawer	Push switch
SW3	Upper drawer paper size detection switch (length)	Detects the paper length of the upper drawer	Push switch
SW4	Lower drawer paper size detection switch (width)	Detects the paper width of the lower drawer	Push switch
SW5	Lower drawer paper size detection switch (length)	Detects the paper length of the lower drawer	Push switch
SW6	Upper drawer detection switch	Detects the presence/absence of the lower drawer	Push switch
SW7	Lower drawer detection switch	Detects the presence/absence of the lower drawer	Push switch
S1	Upper drawer feed sensor	Detects timing to feed paper/ misfeeding	Photo interrupter
S2	Lower drawer feed sensor	Detects timing to feed paper/ misfeeding	Photo interrupter
S3	Upper drawer tray-up sensor	Detects if the upper drawer has lifted up	Photo interrupter
S4	Lower drawer tray-up sensor	Detects if the lower drawer has lifted up	Photo interrupter
S5	Upper drawer empty sensor	Detects presence/absence of paper in the upper drawer	Photo interrupter
S6	Lower drawer empty sensor	Detects presence/absence of paper in the lower drawer	Photo interrupter
S7	Upper drawer paper stock sensor	Detects that the paper stock is insufficient in the upper drawer	Photo interrupter
S8	Lower drawer paper stock sensor	Detects that the paper stock is insufficient in the lower drawer	Photo interrupter

4. PC board

Symbol	Name	Function	Remarks
PWB	PFP board	Control of PFP devices	

3. GENERAL OPERATION

3.1 Driving System and Feeding Operation

The Paper Feed Pedestal (PFP) mainly consists of the drawer, pickup roller, feed roller, separation roller, transport roller, and drive systems for these components.

- Feeding/Transport system
The PFP motor drives the pickup roller, feed roller, and transport roller which are located in the feeding area.
- Drawer tray system
This system raises and lowers the tray.

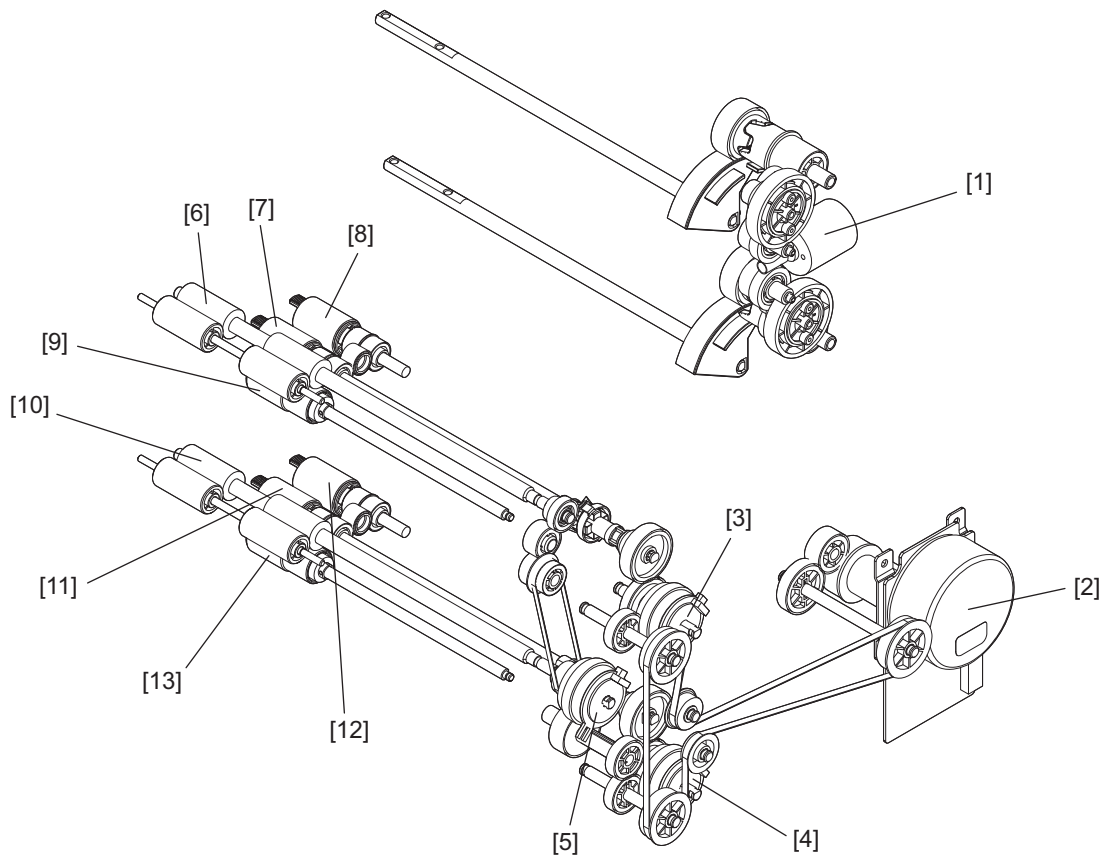


Fig. 3-1

[1]	Tray-up motor (M2)	[8]	Upper drawer pickup roller
[2]	PFP motor (M1)	[9]	Upper drawer separation roller
[3]	Upper drawer feed clutch (CLT2)	[10]	Lower transport roller
[4]	Lower drawer feed clutch (CLT3)	[11]	Lower drawer feed roller
[5]	Transport clutch (CLT1)	[12]	Lower drawer pickup roller
[6]	Upper transport roller	[13]	Lower drawer separation roller
[7]	Upper drawer feed roller		

3.2 Description of Operations

[A] From power ON to ready

- (1) When the equipment is turned ON, the power is also supplied to the feeder unit. And when the power is supplied, the feeder unit detects and judges the clock frequency output from the PFC board on the equipment to control transport speed of the unit.
- (2) After that, the tray-up motor (M2) is turned ON to raise the corresponding tray. When the tray-up sensor (S3)/(S4) is turned ON correspondingly, the tray-up motor (M2) is turned OFF to stop the tray. If the empty sensor (S5)/(S6) is OFF (H) at this time, it is judged that there is no paper in the drawer. If the empty sensor is ON (L), it is assumed that there is paper in the drawer, and the tray stays in the raised position until the drawer is pulled out.
- (3) If the power is turned ON when the drawer has been pulled out, the tray-up motor for that drawer is not turned ON. The tray is raised as soon as the drawer is installed, and it detects if there is paper in the drawer.
- (4) If either of the drawer feed sensors (S1), (S2) is ON (there is paper in the transport path) when the power is turned ON, that means paper jam has occurred and operation is disabled until the paper is removed.
*When a drawer is inserted, the paper size is automatically determined by the drawer paper size detection switch. (For details, refer to the instruction manual for this equipment.)

[B] Ready status

- (1) Trays detect the paper as described above, and the equipment goes into ready status.
- (2) The tray goes down automatically when the drawer is removed and it is raised as soon as the drawer is installed again and checks if there is paper in the drawer.

[C] From the start to the end of copying

- (1) When the [START] button is pressed, the feed/transport and exit motors of the equipment and the PFP motor (M1) are turned ON at the same time.
- (2) When the equipment judges that PFP is ready for feeding paper, it turns ON the feed clutch (CLT2)/(CLT3) of the selected drawer. This clutches drive the pickup roller and feed roller to feed paper from the tray.
- (3) When the drawer feed sensor (S1)/(S2) comes ON, the transport clutch (CLT1) is turned ON to drive the PFP transport roller.
- (4) A fixed time after the drawer feed sensor (S1)/(S2) comes ON, the feed clutch (CLT2)/(CLT3) is turned OFF and feeding from the drawer is completed.
- (5) The paper is transported to the equipment by the PFP transport roller. A fixed time after the leading edge of the paper reaches the drawer feed sensor (S1), if the trailing edge of the previously sent sheet still remains at the copier feed sensor, the transport clutch (CLT1) is turned OFF to stop the transport of the paper.
- (6) A fixed time after the paper turns the resist clutch ON, PFP becomes ready for feeding the next sheet of paper, and the procedures (1) to (5) are repeated.
- (7) When the copying operation is completed, the feed/transport motor, exit motor, PFP motor (M1), and transport clutch (CLT1) are turned OFF and the transport roller is stopped.

3.3 Error Detection

[A] Jam detection

- (1) Paper jams (E150), (E160) and (E300 to E360) occur in the following cases.
 - Feed sensor (S1)/(S2) is not turned ON within a specified period of time after the feeding is started.
 - The leading edge of the paper does not pass the feed sensor (S1)/(S2) in the transport path within a specified period of time.
- (2) Open the side cover of the PFP and remove all the paper remaining on the transport path and close the side cover to clear the paper jam. If either of the drawer feed sensors (S1)/(S2) is still ON when the side cover is closed, it is determined that there is still paper on the transport path and the paper jam status is not cleared.
- (3) When a paper jam occurs in the PFP during continuous copying, the paper that was fed before the jam is copied normally.

[B] Call for Service

- (1) The tray is raised when the power is turned ON or the drawer is inserted or pulled out. If the tray-up sensor (S3)/(S4) is not turned ON within a specified period of time after the tray has started to raise, a message that the selected drawer cannot be used is displayed on the control panel.
- (2) The state (1) is cleared by opening the drawer and solving the problems.

4. DISASSEMBLY AND REPLACEMENT OF EACH PART

Notes:

The covers of actual equipment and a picture differs in color.

4.1 Installation and Removal of Drawers and Covers

[A] Drawer

- (1) Fully pull out the drawer and take it out.

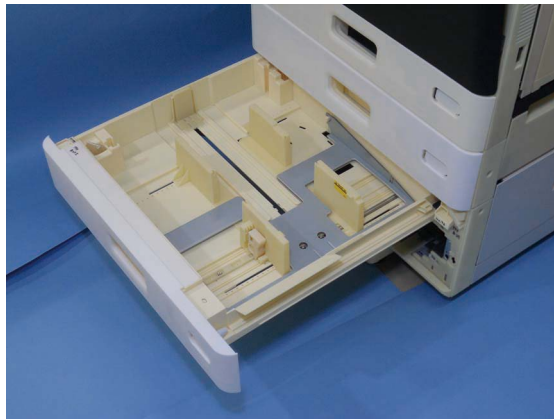



Fig. 4-1

[B] Drawer cover

- (1) Pull out the drawer.
 P. 4-1 "[A] Drawer"
- (2) Remove the 6 latches and take off the drawer cover [1].

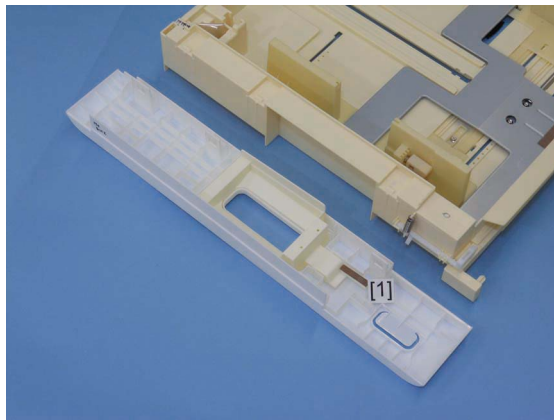


Fig. 4-2

[C] Stabilizer cover

- (1) Pull out the drawer.
📖 P. 4-1 "[A] Drawer"

Notes:

- The drawer must be taken out only when taking off the front side stabilizer cover.
- (2) Remove the 2 screws and take off the front side stabilizer cover [1].
 - (3) Remove the screw and take off the feeding side stabilizer foot [2].



Fig. 4-3



Fig. 4-4

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

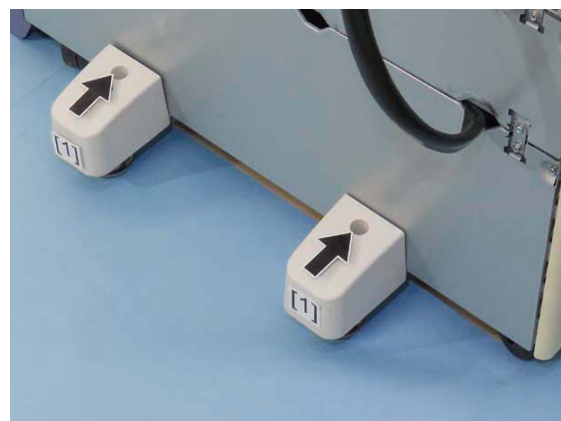


Fig. 4-5

[D] Rear cover

- (1) Remove the rear side stabilizer cover.
☞ P. 4-2 “[C] Stabilizer cover”
- (2) Remove the 2 screws on the rear cover.
- (3) Remove the rear cover [1].



Fig. 4-6

[E] Feeding side front side cover

- (1) Pull out the drawer.
☞ P. 4-1 “[A] Drawer”
- (2) Remove the screw and take off the feeding side front side cover [1].



Fig. 4-7

[F] Feeding side front cover

- (1) Remove the feeding side front side cover.
📖 P. 4-3 “[E] Feeding side front side cover”
- (2) Take out the drawer feeding unit.
📖 P. 4-16 “[A] Drawer feeding unit”
- (3) Remove the screw, and then take off the lock lever [1] and the feeding side front cover [2].

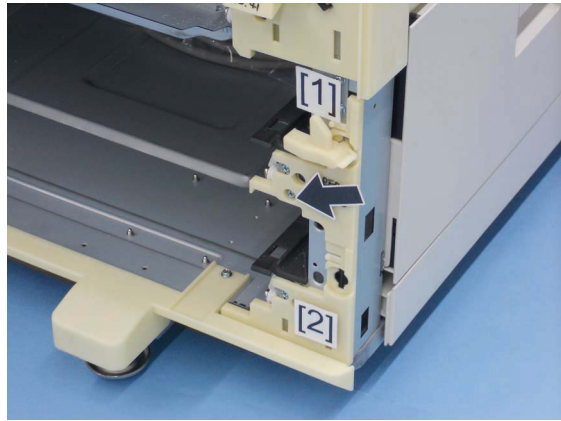


Fig. 4-8

[G] Feeding side rear cover

- (1) Remove the feeding side stabilizer foot.
📖 P. 4-2 “[C] Stabilizer cover”
- (2) Open the side cover [1].
- (3) Remove the 2 screws and take off the feeding side rear cover [2].

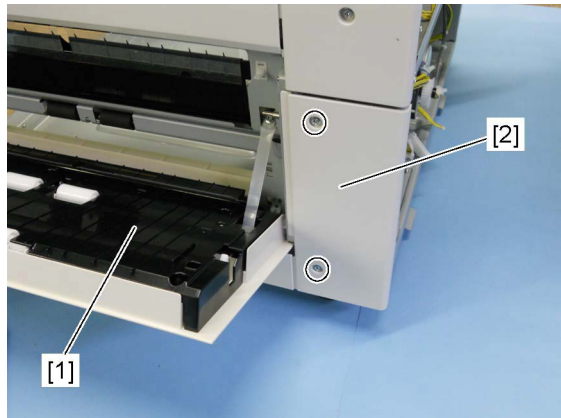


Fig. 4-9

[H] Side cover

- (1) Open the side cover [1], remove 1 screw, and take off the band [2].

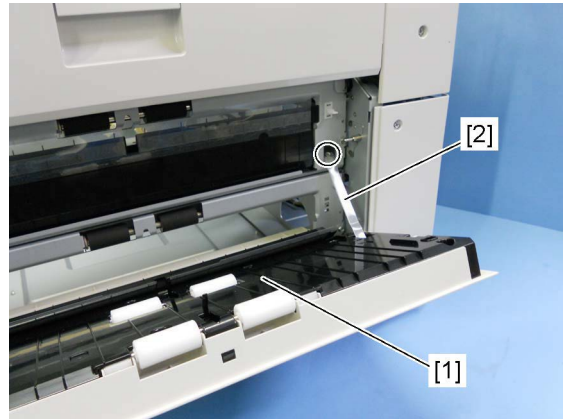


Fig. 4-10

- (2) While pressing the latch on the slit section, remove the block [1].
- (3) Remove the side cover while pushing the front side of the side cover inward.

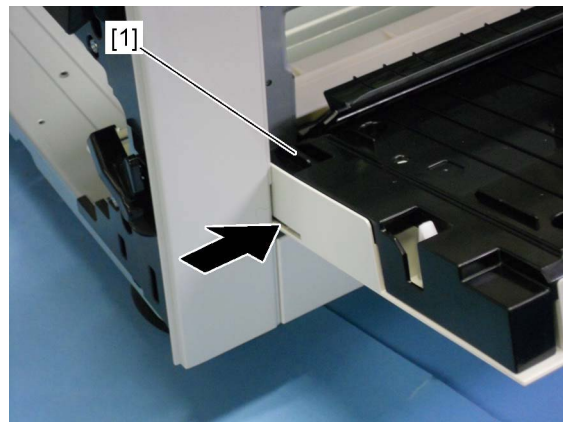


Fig. 4-11

- (4) Unplug the connector [1].

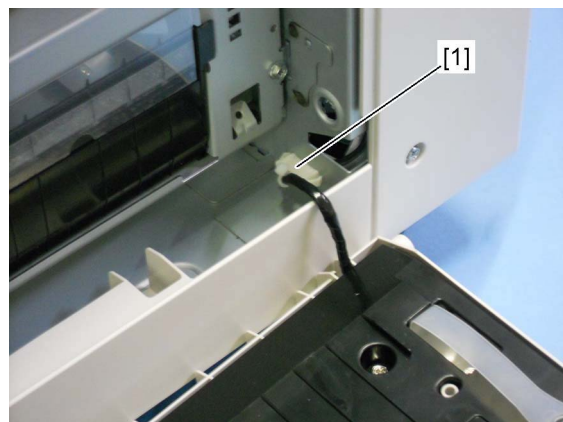


Fig. 4-12

4.2 PFP Board (PWB)

- (1) Remove the rear cover.
📖 P. 4-3 “[D] Rear cover”
- (2) Unplug the 8 connectors, remove the 2 screws, disconnect the ground cable, and take off the 2 locking supports to take off the PFP board.

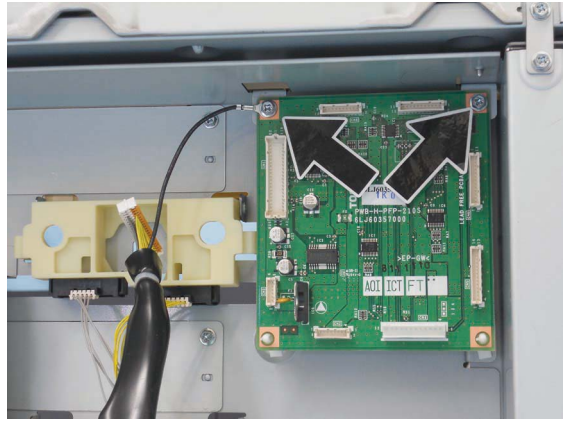


Fig. 4-13

4.3 Upper and Lower Transport Rollers

[A] Upper transport roller

- (1) Remove the upper drawer feed unit.
P. 4-16 "[A] Drawer feeding unit"
- (2) Open the side cover.
- (3) Remove the 3 screws and take off the transport roller unit [1].

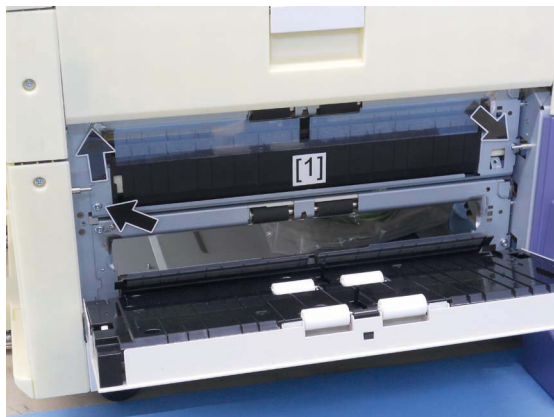


Fig. 4-14

- (4) Remove the 2 screws from the transport roller unit [1].

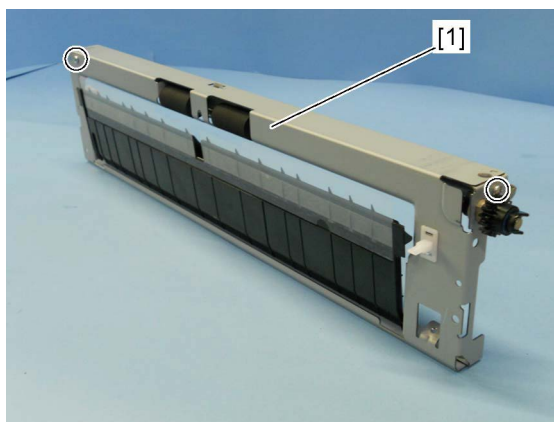


Fig. 4-15

- (5) Slide the stay [1] and take it off.
- (6) Remove the clip, and take off the gear [2] and collar [3].

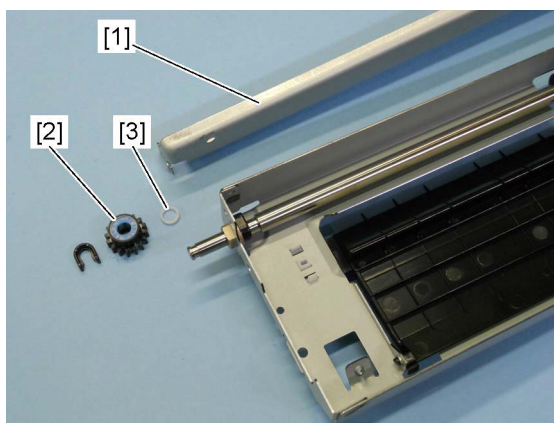


Fig. 4-16

Notes:

Install the gear so that it is positioned on the inside.

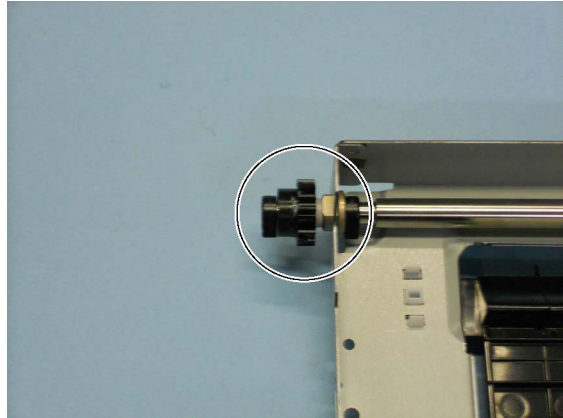


Fig. 4-17

(7) Remove 1 clip and slide 2 bushings [1] to take off the transport roller [2].



Fig. 4-18

[B] Lower transport roller

- (1) Remove the lower drawer feed unit.
📖 P. 4-16 “[A] Drawer feeding unit”
- (2) Remove the bracket of the feeding gear.
📖 P. 4-11 “4.4 Feed Clutch”
- (3) Remove 1 clip [1], take off the transport clutch [2], and disconnect 1 connector [3].
- (4) Remove the gears [4] and [5].

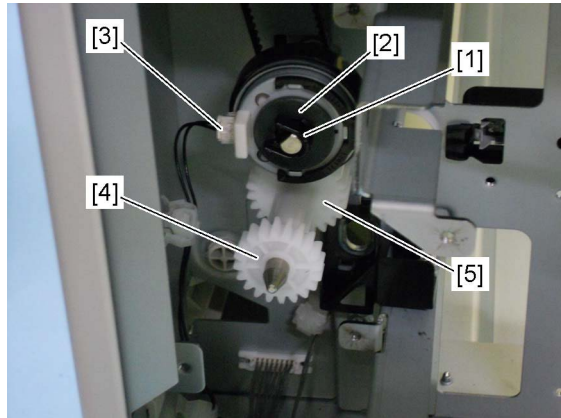


Fig. 4-19

- (5) Remove 1 pulley [1] and the belt [2].

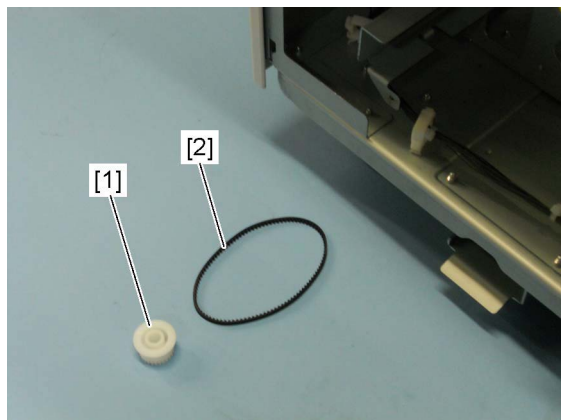


Fig. 4-20

- (6) Remove the side cover.
📖 P. 4-5 “[H] Side cover”
- (7) Remove the 3 screws and take off the transport roller unit [1].

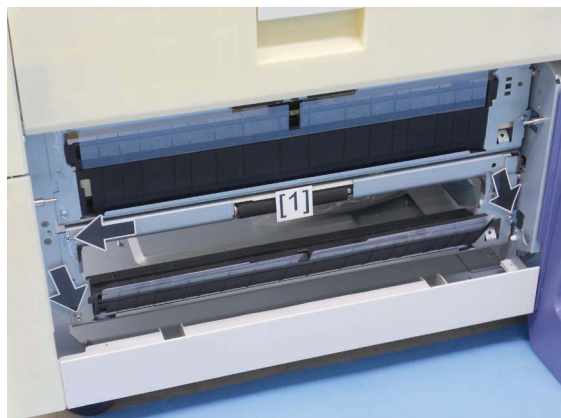


Fig. 4-21

(8) Remove the 2 screws from the transport roller unit [1].

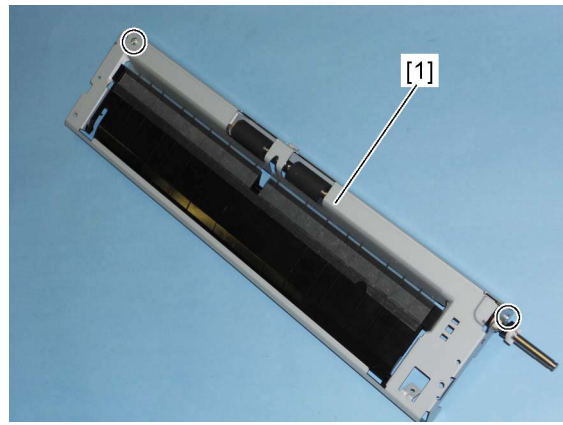


Fig. 4-22

(9) Slide the stay [1] and take it off.

(10) Remove 1 clip, and take off the pin [2] and coupling [3].

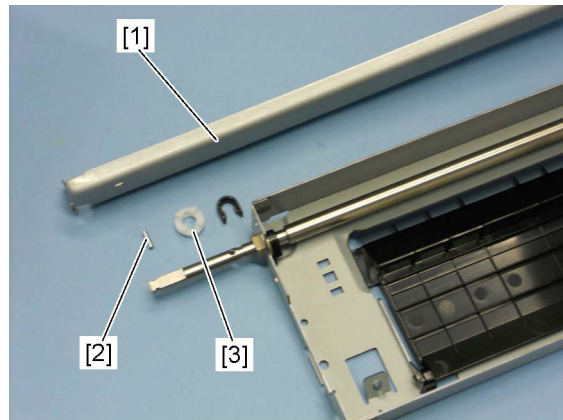


Fig. 4-23

(11) Remove the clip and slide the 2 bushings [1] to take off the transport roller [2].

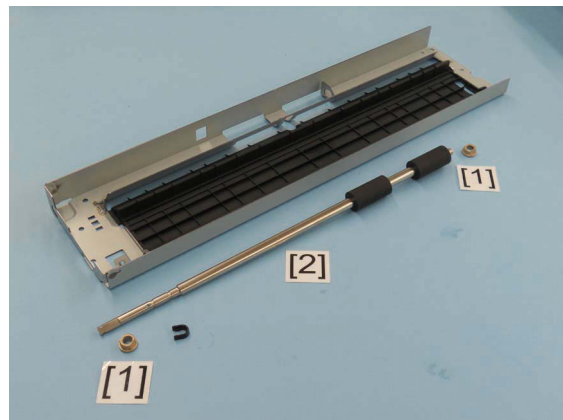


Fig. 4-24

4.4 Feed Clutch

- (1) Remove the tray-up motor unit.
P. 4-13 "[A] Tray-up motor"
- (2) Remove the 4 screws and take off the feeding gear bracket [1].

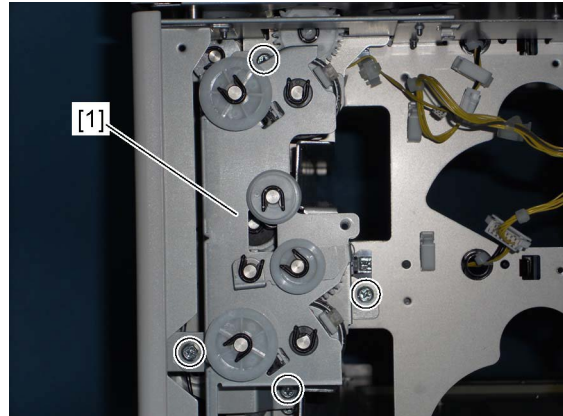


Fig. 4-25

Notes:

The gear [2] comes away from the lower stud [1]. Be careful not to drop it.

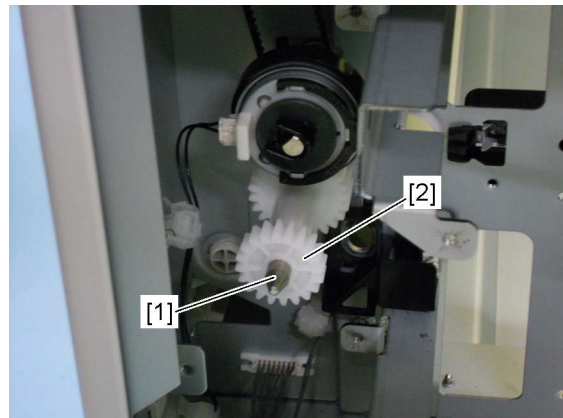


Fig. 4-26

- (3) Remove the 3 clips, and take off the bushing [1], shaft [2], pin [3], gear [4], and the upper drawer feed clutch [5].

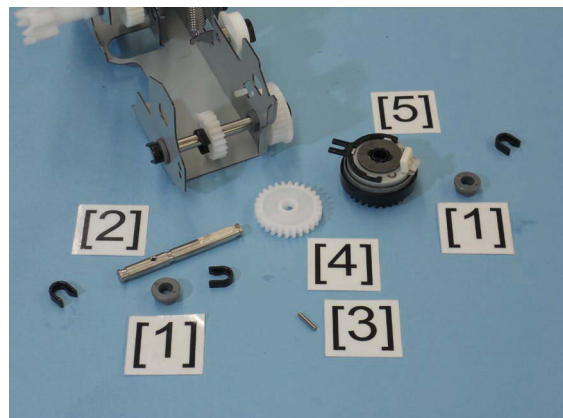


Fig. 4-27

Notes:

When installing the upper drawer feed clutch [5], make sure that the stopper of the clutch is firmly engaged with the protrusion on the frame.

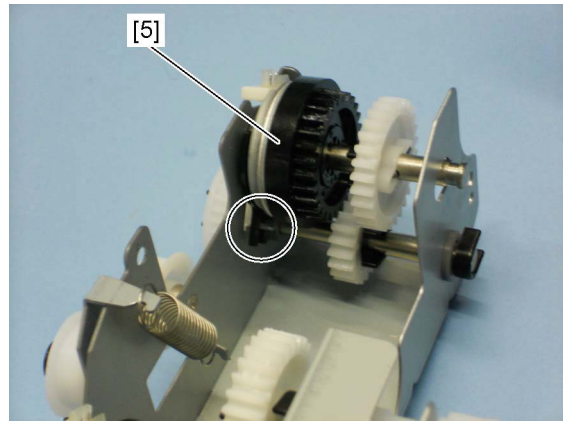


Fig. 4-28

- (4) Remove the 3 clips, and take off the bushing [1], shaft [2], pin [3], gear [4], and the lower drawer feed clutch [5].

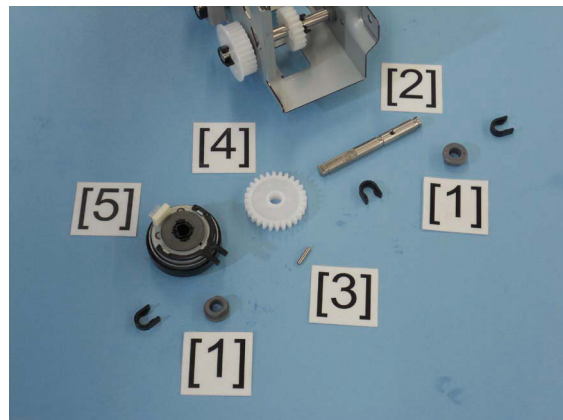


Fig. 4-29

Notes:

When installing the lower drawer feed clutch [5], make sure that the stopper of the clutch is firmly engaged with the protrusion on the frame.

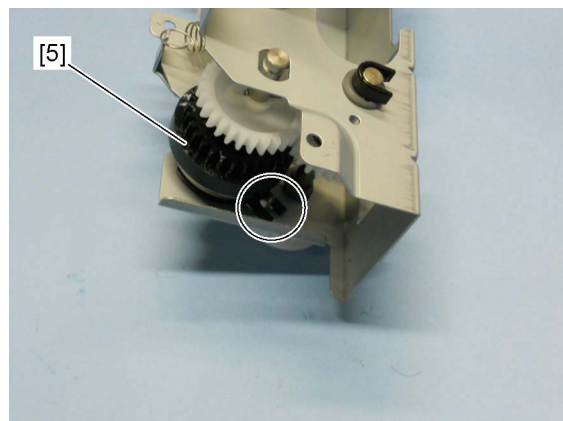


Fig. 4-30

4.5 Motors

[A] Tray-up motor

- (1) Remove the rear cover.
📖 P. 4-3 "[D] Rear cover"
- (2) Lower the auto tensioner roller [1] and remove the belt [2].

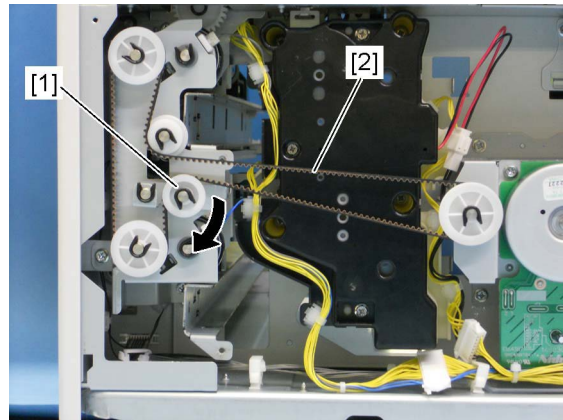


Fig. 4-31

- (3) Remove the 4 screws and take off the tray-up motor unit [1].
- (4) Unplug the 5 connectors [2].

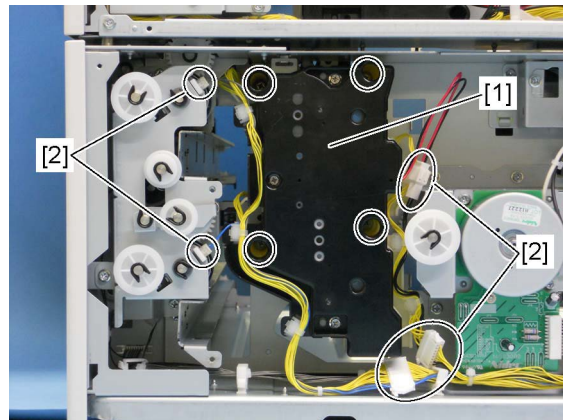


Fig. 4-32

- (5) Remove the harness [1] from the tray-up motor unit [2] guide.

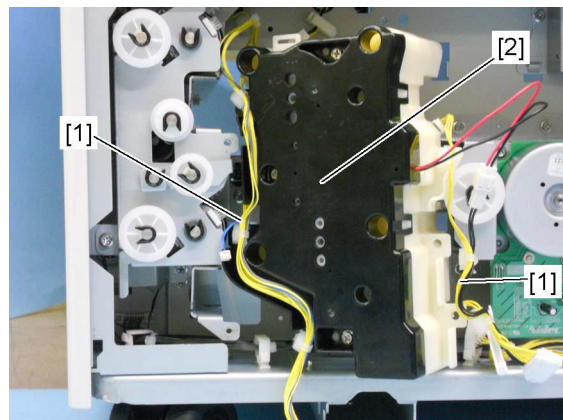


Fig. 4-33

- (6) Remove the 3 screws.

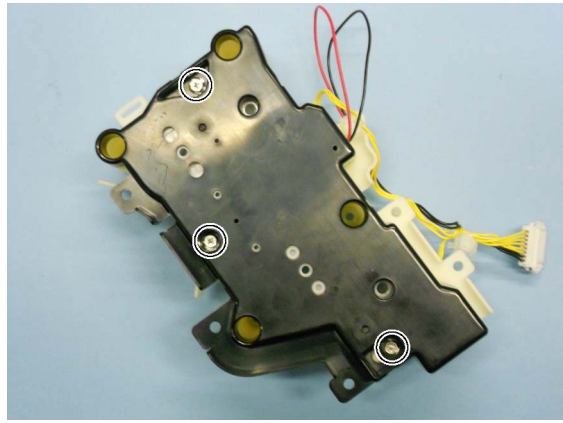


Fig. 4-34

- (7) Remove the 6 latches and take off the cover [1].
(8) Remove the tray-up motor [2] from the case [3].

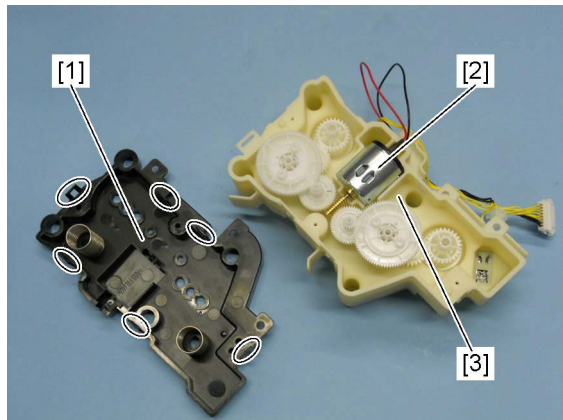


Fig. 4-35

[B] PFP motor

- (1) Remove the rear cover.
 📖 P. 4-3 "[D] Rear cover"
(2) Disconnect 1 connector [1] of the PFP motor.
(3) Remove the 2 screws and take off the PFP motor [2].

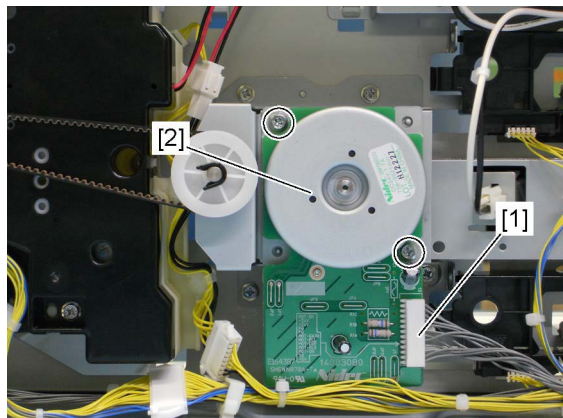


Fig. 4-36

[C] PFP motor gear case

- (1) Remove the rear cover.
📖 P. 4-3 "[D] Rear cover"
- (2) Lower the auto tensioner roller [1] and remove the belt [2].

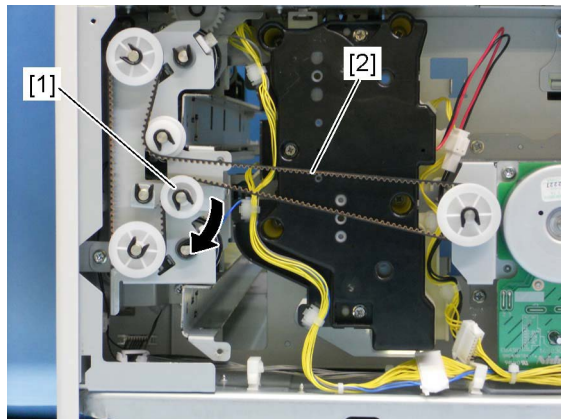


Fig. 4-37

- (3) Remove the clip [1], and then take off the pulley [2], pin [3] and bushing [4].

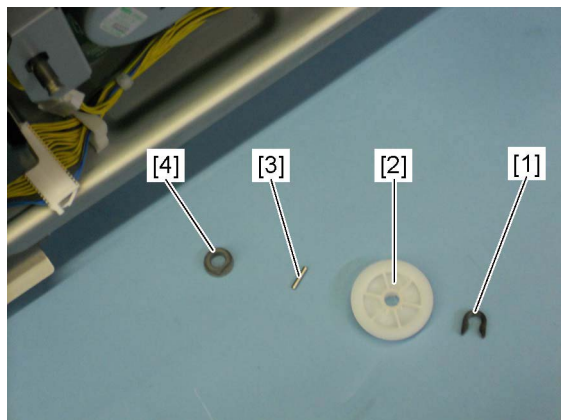


Fig. 4-38

- (4) Disconnect 1 connector [1], remove 4 screws, and take off the gear case [2].

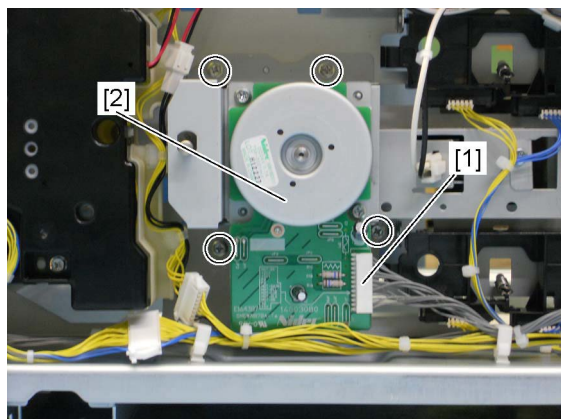


Fig. 4-39

4.6 Feed Roller, Separation Roller, and Pickup Roller

[A] Drawer feeding unit

- (1) Pull out the drawer from which the drawer feeding unit will be taken from, and the drawer immediately above it.
📖 P. 4-1 "[A] Drawer"
- (2) Turn the lock lever clockwise and pull out the drawer feeding unit.

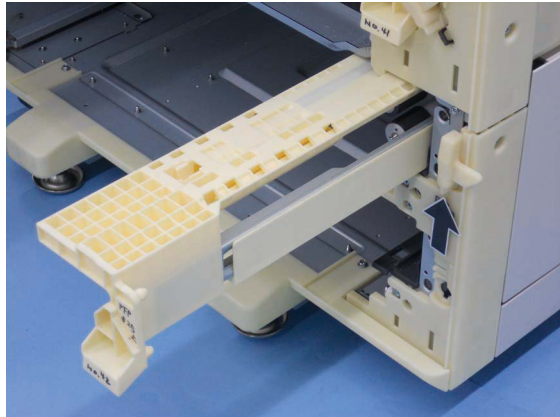


Fig. 4-40

Notes:

When installing, insert the drawer feeding unit into the equipment while aligning its arrow with the guide.

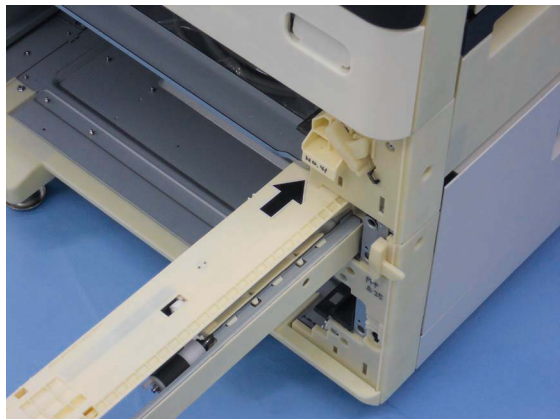



Fig. 4-41

[B] Feed roller, separation roller, and pickup roller (KD-1032) (PM)

- (1) Remove the drawer feeding unit.
( P. 4-16 “[A] Drawer feeding unit”)
- (2) Press the roller latch, and then take off the separation roller [1], feed roller [2], and pickup roller [3].

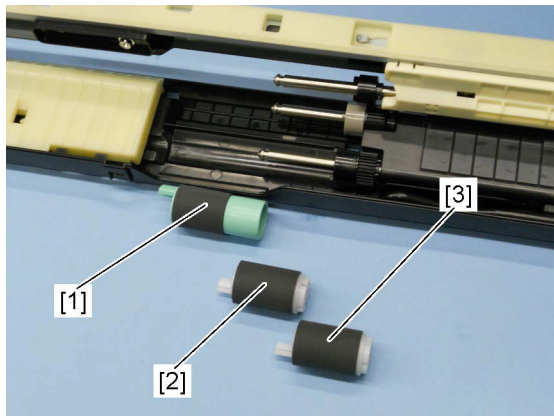



Fig. 4-42

[C] Feed roller, separation roller, and pickup roller (KD-1058) (PM)

- (1) Remove the drawer feeding unit.
( P. 4-16 “[A] Drawer feeding unit”)
- (2) Remove the clip [1] and take off the separation roller [2].
Remove the clip [3] and take off the feed roller [4].
Release the latch and take off the pickup roller [5].

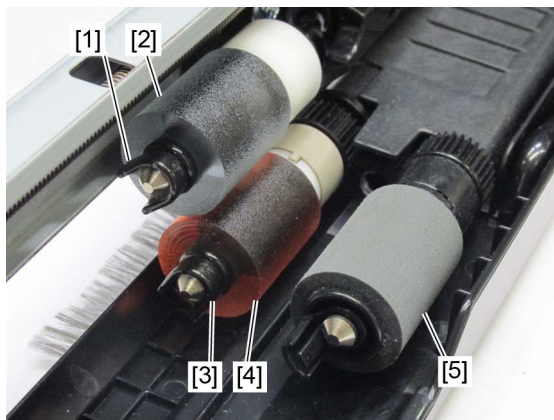


Fig. 4-43

4.7 Switches and Sensors

[A] Tray-up sensor (S3/S4)/paper empty sensor (S5/S6)

- (1) Remove the drawer feeding unit.
(📖 P. 4-16 “[A] Drawer feeding unit”)
- (2) Remove the tray-up motor unit.
(📖 P. 4-13 “[A] Tray-up motor”)
- (3) Unplug the connector and remove the latch to take off the sensor holder from the front side.

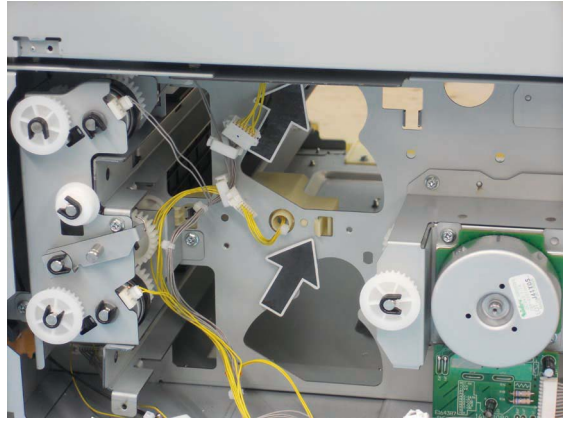


Fig. 4-44

- (4) Unplug the connector and remove the latch to take off the tray-up sensor [1].
- (5) Unplug the connector and remove the latch to take off the empty sensor [2].

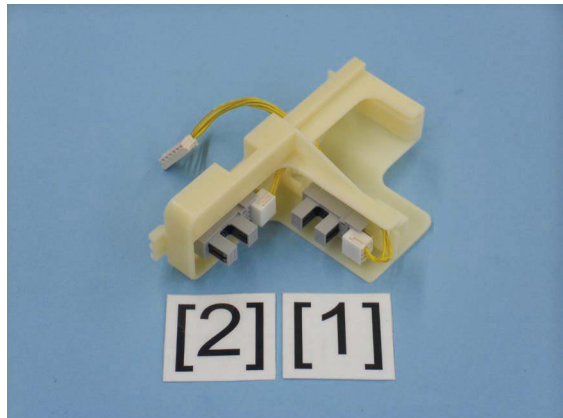


Fig. 4-45

[B] Upper/lower drawer paper stock sensor (S7/S8)

- (1) Remove the tray-up motor unit.
(📖 P. 4-13 “[A] Tray-up motor”)
- (2) Remove the 3 screws and the 6 latches and take off the cover.
(📖 P. 4-13 “[A] Tray-up motor”)
- (3) Remove the latches and take off the 2 paper stock sensors [1].

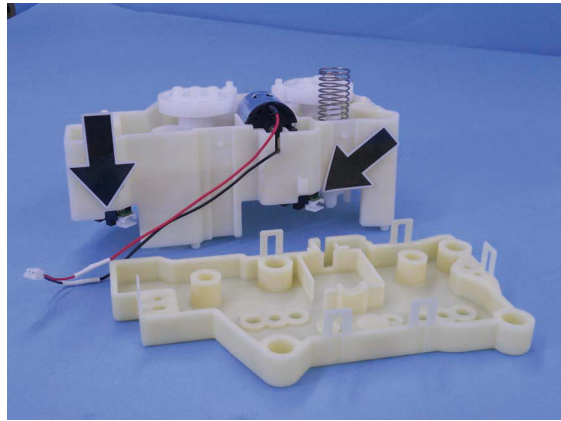


Fig. 4-46

[C] Upper/lower drawer feed sensor (S1/S2)

- (1) Remove the side cover.
(📖 P. 4-5 “[H] Side cover”)
- (2) Remove the 6 screws and take off the guide.

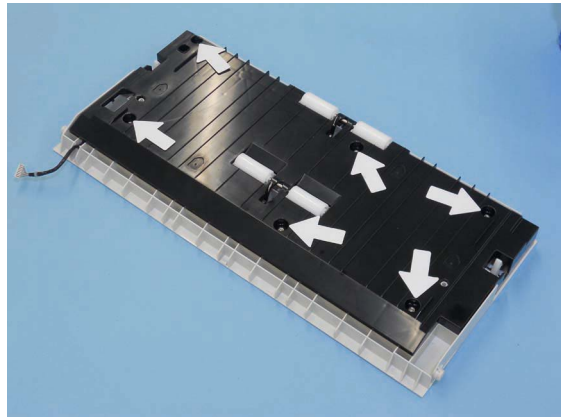


Fig. 4-47

- (3) Unplug the connector.
- (4) Remove the latches, and then take off the upper drawer feed sensor [1] and the lower drawer feed sensor [2].

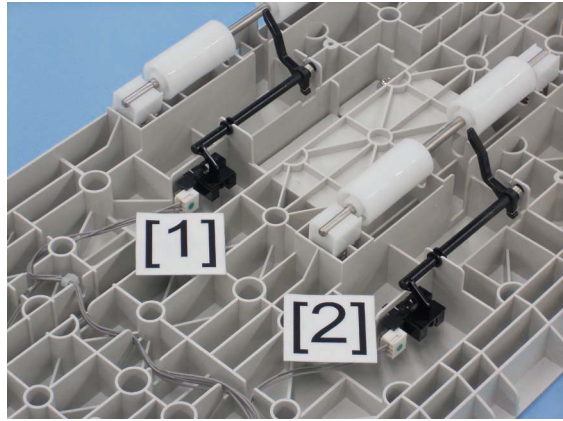



Fig. 4-48

[D] Side cover open/close switch (SW1)

- (1) Remove the side cover.
 P. 4-5 “[H] Side cover”
- (2) Remove the 6 screws and take off the guide.

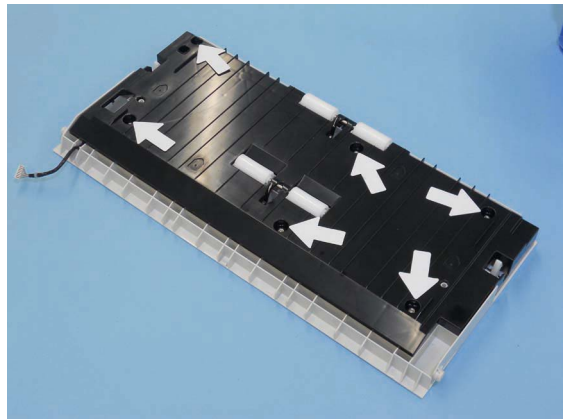


Fig. 4-49

- (3) Remove the latches and take off the side cover open-close switch.
- (4) Unplug the connector.

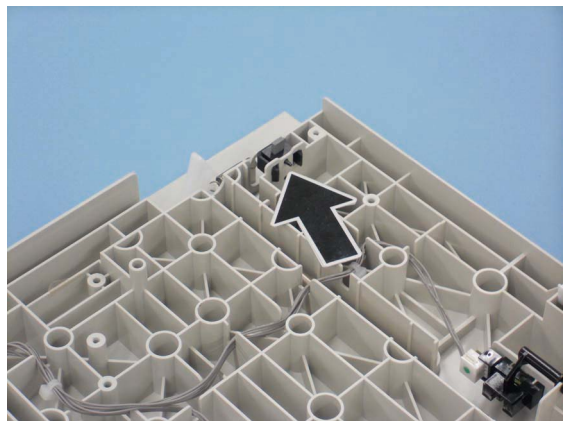





Fig. 4-50

[E] Upper/lower drawer detection switch (SW6/SW7)

- (1) Take out the drawer.
 P. 4-1 "[A] Drawer"
- (2) Remove the rear cover.
 P. 4-3 "[D] Rear cover"
- (3) Remove the feeding gear bracket.
 P. 4-11 "4.4 Feed Clutch"
- (4) Remove the harness cover [1].
- (5) Unplug the connectors connected to the drawer detection switch [2].
- (6) Remove the latches and take off the drawer detection switch [2] from the front side.

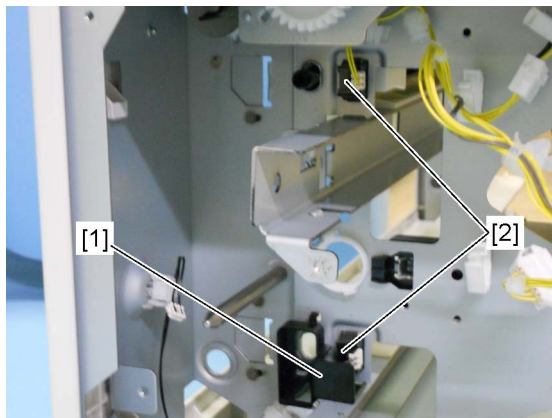




Fig. 4-51

[F] Upper drawer paper size detection switch (width/length) (SW2/SW3)

- (1) Take out the drawer.
 P. 4-1 "[A] Drawer"
- (2) Remove the rear cover.
 P. 4-3 "[D] Rear cover"
- (3) Unplug the 2 connectors.
- (4) Remove the spring [1] and take off the upper drawer paper size detection switch holder [2].

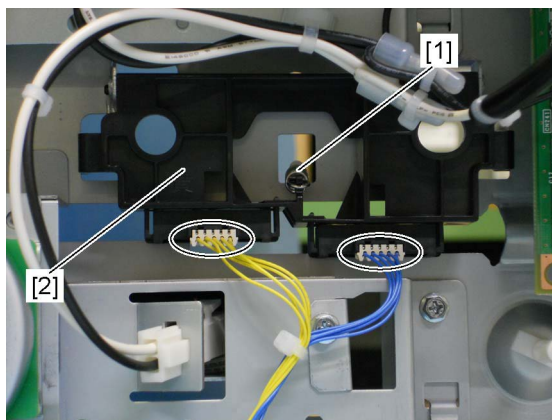


Fig. 4-52

- (5) Remove the latches and take off the upper drawer paper size detection switch (length) [1], (width) [2].

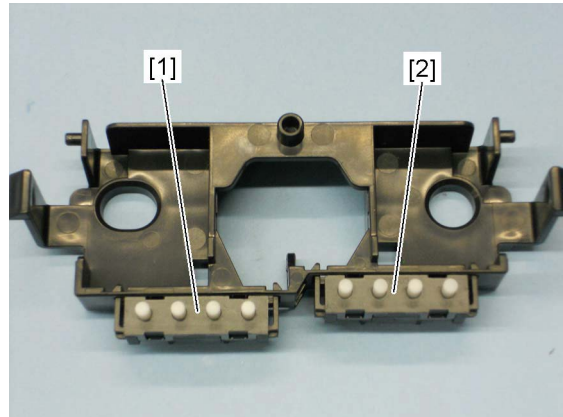


Fig. 4-53

[G] Lower drawer paper size detection switch (width/length) (SW4/SW5)

- (1) Take out the drawer.
P. 4-1 "[A] Drawer"
- (2) Remove the rear cover.
P. 4-3 "[D] Rear cover"
- (3) Unplug the 2 connectors.
- (4) Remove the spring [1] and take off the lower drawer paper size detection switch holder [2].

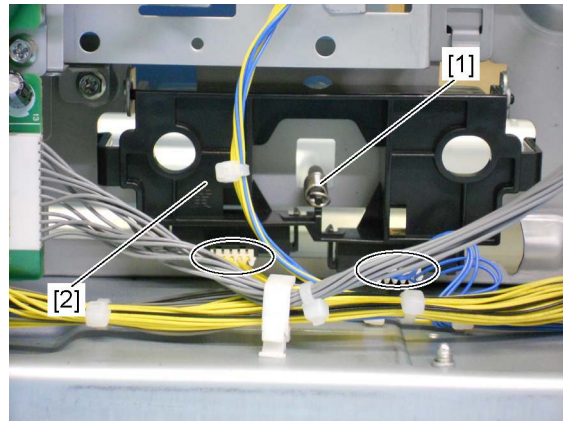


Fig. 4-54

- (5) Remove the latches and take off the lower drawer paper size detection switch (length) [1], (width) [2].

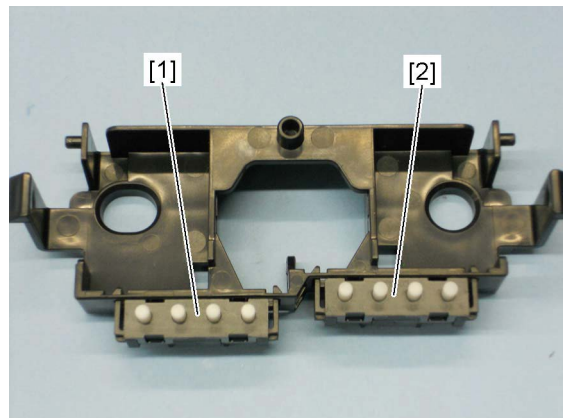


Fig. 4-55

5. ELECTRIC CIRCUIT

5.1 Harness Diagram

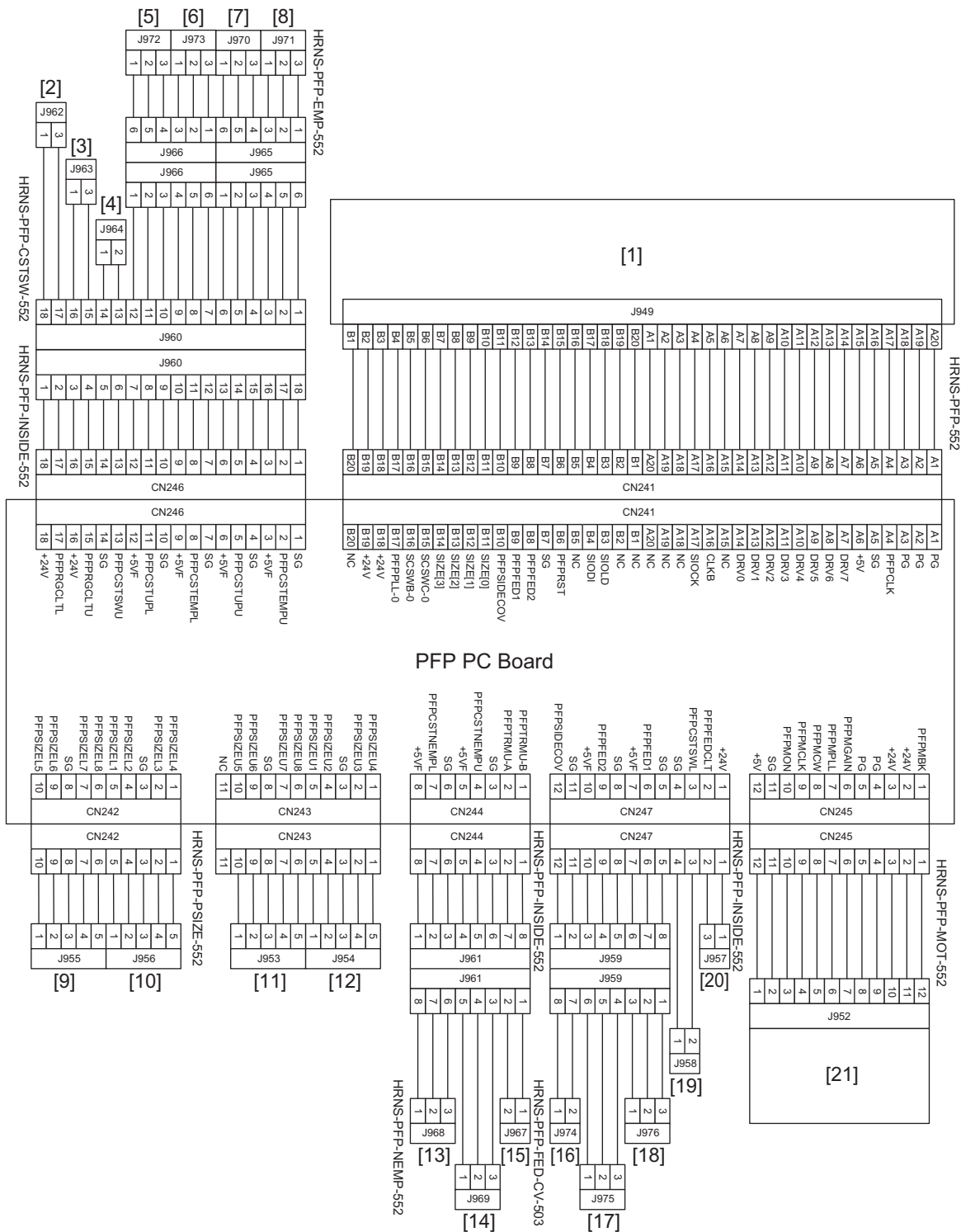


Fig.5-1

[1]	MFP	[12]	Upper drawer paper size length detection switch
[2]	Upper drawer feed clutch	[13]	Lower drawer paper stock sensor
[3]	Lower drawer feed clutch	[14]	Upper drawer paper stock sensor
[4]	Upper drawer detection switch	[15]	Tray-up motors (Upper and lower sides)
[5]	Lower drawer tray-up sensor	[16]	Side cover open/close switch
[6]	Lower drawer empty sensor	[17]	Upper drawer feed sensor
[7]	Upper drawer tray-up sensor	[18]	Lower drawer feed sensor
[8]	Upper drawer empty sensor	[19]	Lower drawer detection switch
[9]	Lower drawer paper size width detection switch	[20]	Transport clutch
[10]	Lower drawer paper size length detection switch	[21]	PFP motor
[11]	Upper drawer paper size width detection switch		

5.2 Circuit Diagram

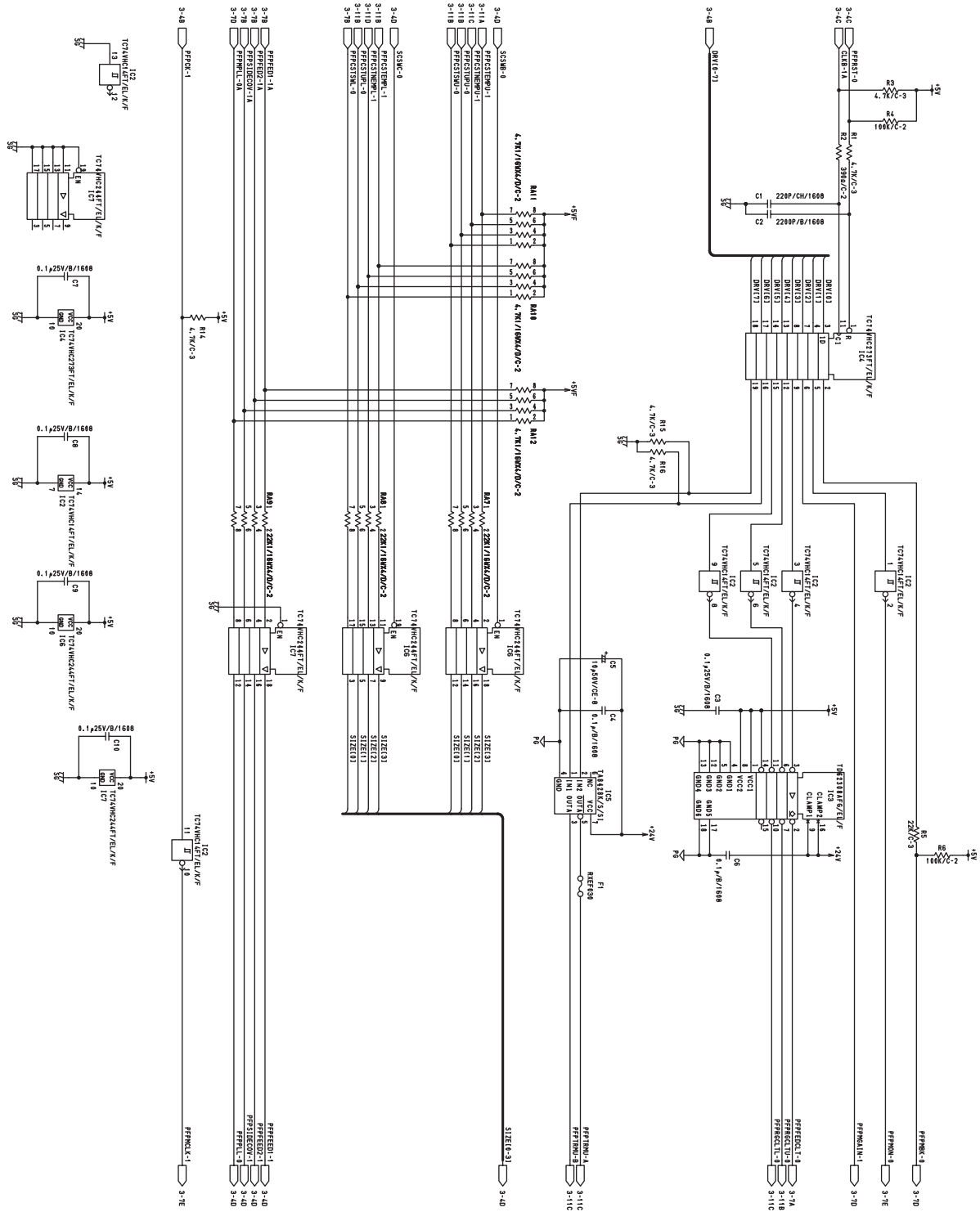


Fig.5-2

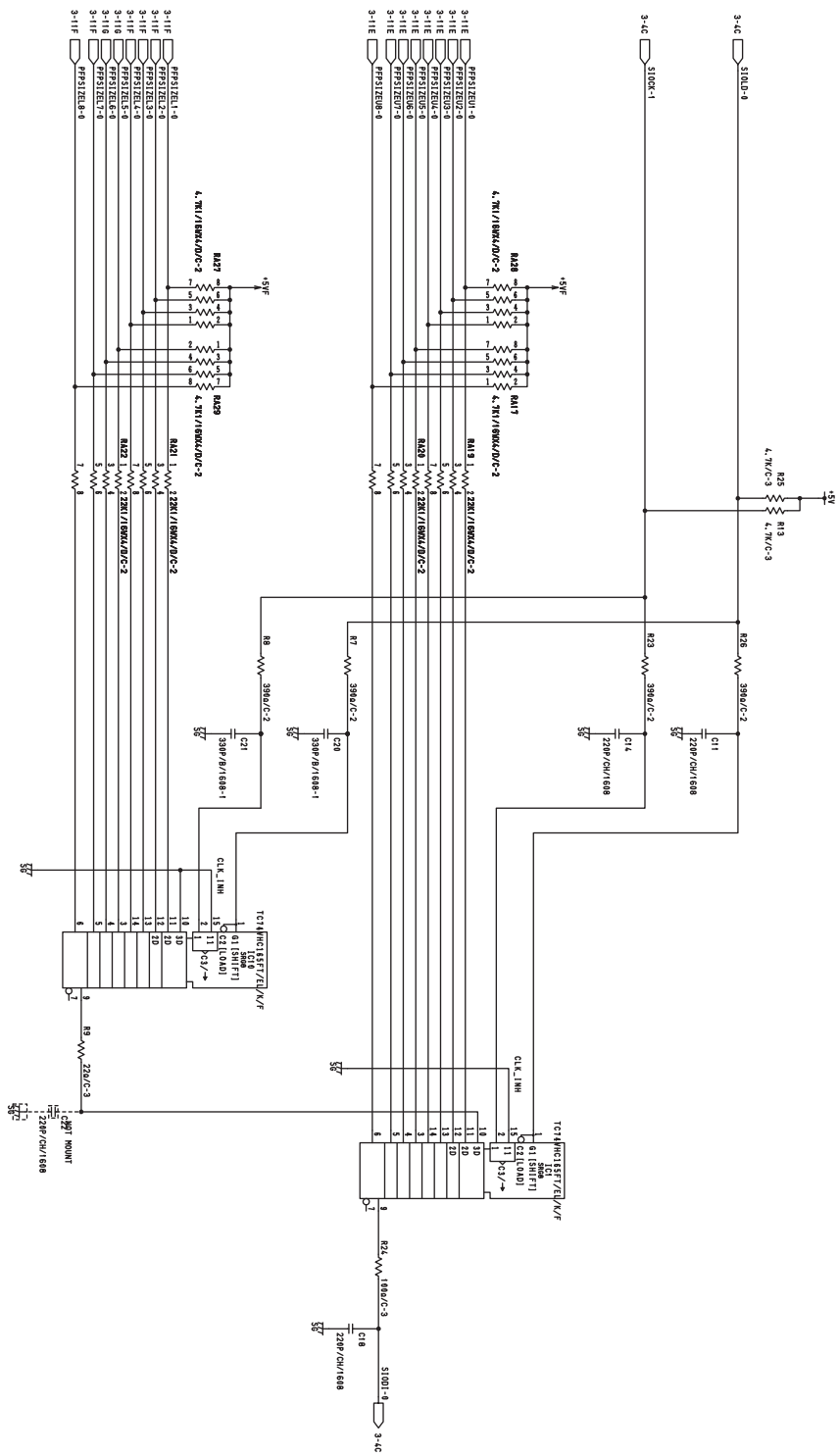


Fig. 5-3

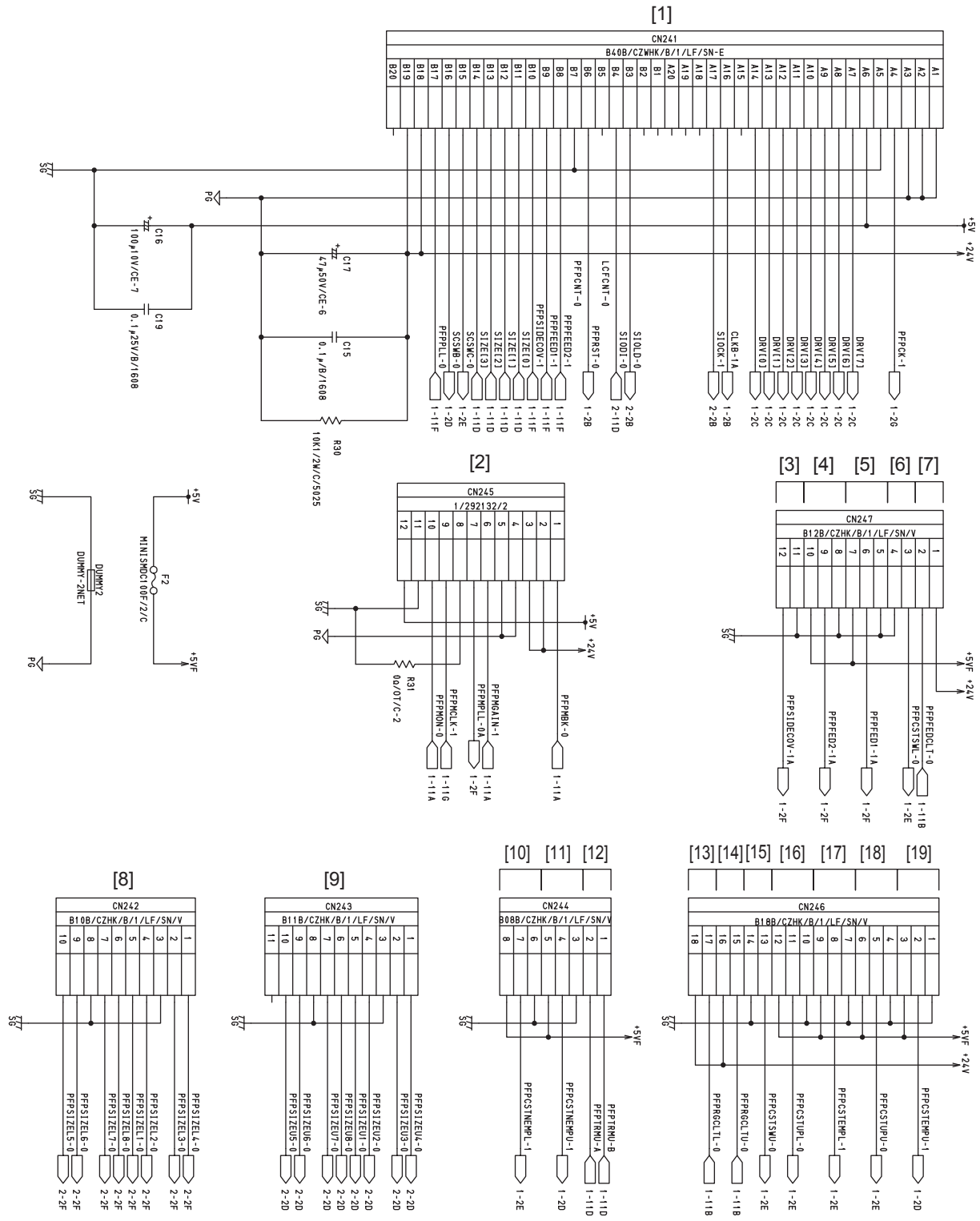


Fig.5-4

[1]	MFP	[11]	Upper drawer paper stock sensor
[2]	PFP motor	[12]	Tray-up motors (Upper and lower sides)
[3]	Side cover opening/closing switch	[13]	Lower drawer feed clutch
[4]	Upper drawer feed sensor	[14]	Upper drawer feed clutch
[5]	Lower drawer feed sensor	[15]	Upper drawer detection switch
[6]	Lower drawer detection switch	[16]	Lower drawer tray-up sensor
[7]	Transport clutch	[17]	Lower drawer empty sensor
[8]	Lower drawer paper size detection switch	[18]	Upper drawer tray-up sensor
[9]	Upper drawer paper size detection switch	[19]	Upper drawer empty sensor
[10]	Lower drawer paper stock sensor		

6. PERIODIC MAINTENANCE

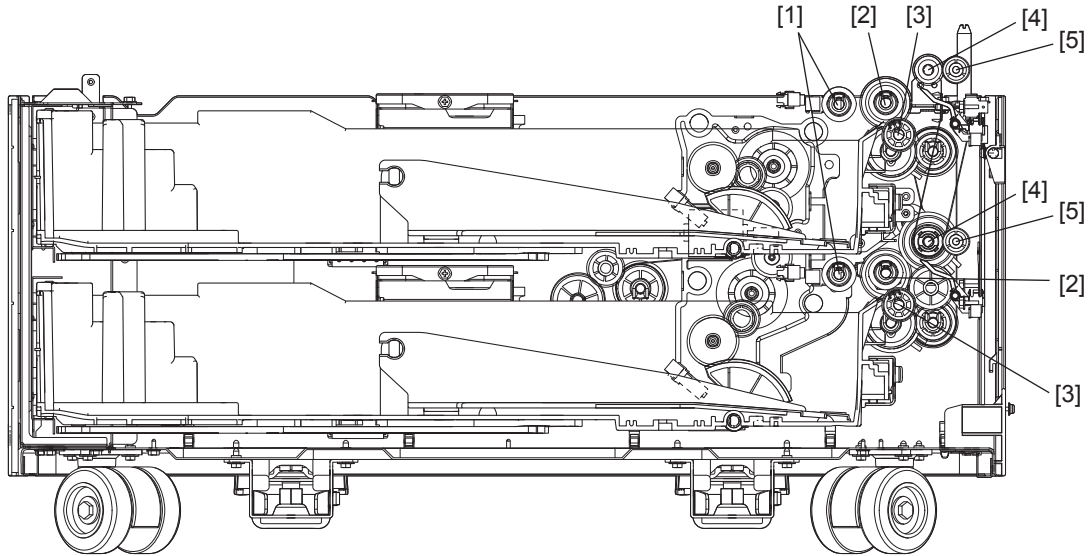


Fig.6-1

Symbols used in the checklist

Cleaning	Lubrication/Coating	Replacement	Operation check
A: Clean with alcohol O: Clean with soft pad, cloth or vacuum cleaner	W: White grease (Molykote EM-30L)	Value: Replacement cycle R: Replace if deformed or damaged	O: After cleaning or replacement, confirm there is no problem.

Preventive Maintenance Checklist

Notes:

Page-Item (P-I) is described in the column of the Parts list.

Items to check		Cleaning	Replacement (x 1,000 sheets)	Operation check	Parts list <P-I>	Remarks
1	Pickup roller (upper/lower)	A	80 or every 2.5 years, whichever comes first		5-26	
2	Feed roller (upper/lower)	A	80 or every 2.5 years, whichever comes first		5-36	
3	Separation roller (upper/lower)	A	80 or every 2.5 years, whichever comes first		5-30	
4	Transport roller (upper/lower)	A	R		2-35, 2-40	
5	Idling roller (upper/lower)	A			4-2	Clean the inner diameter of the idle roller and the shaft.
6	Paper guide	O			4-1, 4-11	

REVISION RECORD

Ver.03a

Ver03 <2018.06.20>	
Page	Contents
6-1	Item #2 (P-I) has been corrected

Ver.03

Ver03 <2018.06.20>	
Page	Contents
1-2	The description of KD-1058-B has been added

Ver.02

Ver.02 <2017.03.31>	
Page	Contents
1-1	The description has been added.

Ver.01

Ver.01 <2016.03.11>	
Page	Contents
Cover	KD-1058 has been added.
General Precautions	The notes have been added.
1-1	KD-1058 has been added.
2-1	The description has been changed.
3-4	"3.4 Flow Chart" has been deleted.
4-1	The notes have been added.
4-17	KD-1058 has been added.
6-1	The description has been changed.

TOSHIBA

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