

CX2032/CX2033 MFP Service & Troubleshooting Guide

080309A

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Self Diagnostics

LCD Message List

When the printer detects an irrecoverable error, it displays a service call error in the LCD like the one given below: When a service call error is issued, an error code is displayed in the lower line of the LCD, accompanied by the relevant error information. Be sure to make a note of this error information (numeric values representing an address, etc.) since such information will be required for the subsequent trouble analysis/solution. The error codes and their meanings, as well as the related remedial methods for Operator Alarms and Service Codes are given in the following Tables.

Service call

nnn: error

Note! "nnn" is an error code.

Self Diagnostic Operator Alarms

Display on OP Panel	Error Code	Description
LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% MEDIA MISMATCH	461 462	The size of paper or media type in the tray does not match the print data. Load paper in tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) Error 461 : Tray1 Error 462 : Tray2 The paper size displaying form of the custom mode is the same as above. If the ONLINE key is pressed, the printer will ignore this error and print the print job.
LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% MEDIA MISMATCH	460	The size of paper or media type in the tray does not match the print data. Load paper in tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) Error 460 : MP Tray The paper size displaying form of the custom mode is the same as above. A user needs to press ONLINE key after changing the paper.
DOWNLOAD MESSAGE PROCESSING	Error Varies	Indicates that message data to be updated is being processed.
DOWNLOAD MESSAGE WRITING	Error Varies	Indicates that message data to be updated is being written.
DOWNLOAD MESSAGE SUCCESS	Error Varies	Indicates that message data to be updated has been written successfully.
DOWNLOAD MESSAGE FAILED %CODE%	Error Varies	Indicates that writing of message data to be uploaded has been failed. %CODE% is a decimal value (one digit) and represents the cause of failure in writing. = 1 ... Unknown: Cause of failure unknown = 2 ... DATA_ERROR: Hash check error in data reading/writing, or abnormal FLASH = 3 ... OVERFLOW: Downloading failure due to FLASH memory full at starting or during writing in a language file = 4 ... MEMORYFULL: Memory reservation failure = 5 ... UNSUPPORTED_DATA: Downloading data unsupported on the Printer
NETWORK CONFIG WRITING	Error Varies	This appears during the NIC configuration data is storing into the flash memory, as the setting was changed.

WAIT A MOMENT NETWORK INITIAL	Error Varies	This appears when the NIC initialization is occurred, as the setting was changed.
LOAD %MEDIA_SIZE% %ERRCODE%:%TRAY% EMPTY	491 492	Printing request is issued to an empty tray. Load paper. (It takes a while until the status disappears after you have closed the tray and the lever lifted.) Error 491 : Tray1 Error 492 : Tray2 The paper size displaying form of the custom mode is the same as above. In this state, Leisus I/F : corresponding bits of both LFTERR and LFTERR2 should be '0' (except MP Tray).
LOAD %MEDIA_SIZE% AND PRESS ONLINE SWITCH %ERRCODE%:MP TRAY EMPTY	490	Printing request is issued to an empty MP Tray. If it goes through a definite period of time (PU firmware holds time(3 sec)) after a user places paper, a printer will lift up the multipurpose tray, and will perform re-feeding. If a user pushes the ONLINE button before timeout, the printer perform also re-feeding. Error 490 : MP Tray In this state, Leisus I/F : corresponding bits of both LFTERR and LFTERR2 should be '0'. Programmer's note: When the ONLINE button was pressed, the controller (CU) should send MPTPECLR command to the engine (PU). The engine would clear this state after receiving that command. This error is occurred, when the MP Tray is in the home position and the sensor "PE SNS2" cannot detect papers.
INSTALL PAPER CASSETTE %ERRCODE%:TRAY1 OPEN	440	Indicates removal of the paper cassette of Tray 1 that is a paper path in attempting to print from Tray 2.
INSTALL PAPER CASSETTE %ERRCODE%:%TRAY% MISSING	430	Indicates that paper feed is unavailable in attempting to print from Tray 1 due to removal of the paper cassette of Tray 1. (Occurs only when Tray 2 has been installed.)
ADD MORE MEMORY %ERRCODE%:MEMORY OVERFLOW	420	Memory capacity overflows due to the following reason. Press ON-LINE switch so that it continues. Install expansion RAM or decrease the data amount. - Too much print data in a page. - Too much Macro data. - Too much DLL data. - After frame buffer compression, over flow occurred.
PROTEC PAPER %ERRCODE%:ERROR	421	This error occurs if a received job does not meet the security level designated by a printer administrator. A printing operator is not using the printer driver that is specified by a security manager of the printer. Displays a warning on the operation panel as waiting for key press. Does not print the job that is being processed. (The same operation as job reset) (C6100/C5900/C5700)
PROTEC PAPER %ERRCODE%:ERROR	422	Density of the destination image for a woven pattern is greater than that of the woven pattern. A user must take measures such as increasing density of the woven pattern or decreasing density of the input image. Displays a warning on the operation panel as waiting for key press. Does not print the job that is being processed. (The same operation as job reset)
TRUST PAPER %ERRCODE%:ERROR	423	This error occurs when capacity of specified information to be embedded exceeds the capacity that can be embedded in the woven pattern. A printing operator must reduce data to be embedded in the woven pattern. Displays a warning on the operation panel as waiting for key press. Does not print the job that is being processed. (The same operation as job reset)

TRUST PAPER %ERRCODE%:ERROR	424	Density of the destination image for woven pattern is greater than that of the woven pattern. A user must take measures such as increasing density of the woven pattern or decreasing density of the input image. Displays a warning on the operation panel as waiting for key press. Does not print the job that is being processed. (The same operation as job reset)
TRUST PAPER %ERRCODE%:ERROR	425	The area specified for tampering verification is incorrect. This error occurs when an image is pushed away or the unprintable area is specified.
PROTEC PAPER %ERRCODE%:ERROR	426	Size of information to be embedded is greater than paper size. It is required to reduce information to be embedded or increase print paper size to make prints.
PROTEC PAPER %ERRCODE%:ERROR	427	NTP server setting is not correct. Print JOB is canceled because it is judged that the correct time is impossible to enter. Users need to change the setting of NT server.
REPLACE TONER %ERRCODE%:%COLOR% WASTE TONER FULL	414 415 416	Indicates that a waste toner box represented by %COLOR% has become full and needs to be replaced. Error 414 : Y Error 415 : M Error 416 : C (Does not occur for K.) Warning status takes effect at Cover Open/Close and printing of about 50 copies becomes available.
REPLACE TONER %ERRCODE%:%COLOR% TONER EMPTY	410 411 412 413	Toner ends. Error 410 : Y Error 411 : M Error 412 : C Error 413 : K Warning status takes effect at Cover Open/Close.
REPLACE TONER %ERRCODE%:%COLOR% TONER REGIONAL MISMATCH	554 555 556 557	The signature ID of toner cartridge is not proper to the distribution channel, but the group of signature ID is proper (OKI regional mismatch). As probably missing to measure the amount of toner, the printer notifies error status and stop printing. Error 554 : Y Error 555 : M Error 556 : C Error 557 : K Four following behavior is carried out by mode of operation. 1. Only warning display .(This error is not displayed). 2. Warning status takes effect at Cover Open/Close. 3. With no automatic concentration compensation. 4. This error is displayed and it stops.
REPLACE TONER %ERRCODE%:INCOMPATIBLE %COLOR% TONER	614 615 616 617	The signature ID of toner cartridge is not proper to the distribution channel, and the group of signature ID is not proper (OEM channel mismatch). Error 614 : Y Error 615 : M Error 616 : C Error 617 : K
REPLACE TONER %ERRCODE%:INCOMPATIBLE %COLOR% TONER	620 621 622 623	The signature ID of toner cartridge is not proper to the distribution channel, and the group of signature ID is protected (OEM mismatch). Error 620 : Y Error 621 : M Error 622 : C Error 623 : K

GENUINE TONER IS RECOMMENDED %ERRCODE%:NON GENUINE %COLOR% TONER	550 551 552 553	The signature ID of toner cartridge can not be recognized (Unauthorized third party). As probable missing to measure the amount of toner, the printer notifies error status and stop printing. Error 550 : Y Error 551 : M Error 552 : C Error 553 : K Four following behavior is carried out by mode of operation. 1. Only warning display .(This error is not displayed). 2. Warning status takes effect at Cover Open/Close. 3. With no automatic concentration compensation. 4. This error is displayed and it stops.
INSTALL TONER %ERRCODE%:%COLOR% TONER MISSING	610 611 612 613	The toner cartridge is not installed. Error 610 : Y Error 611 : M Error 612 : C Error 613 : K Four following behavior is carried out by mode of operation. 1. Only warning display .(This error is not displayed). 2. Warning status takes effect at Cover Open/Close. 3. With no automatic concentration compensation. 4. This error is displayed and it stops.
CHECK TONER CARTRIDGE %ERRCODE%:%COLOR% TONER SENSOR ERROR	540 541 542 543	Something is wrong with the toner sensor. This status is indicated in Shipping Mode only. If the same error is detected in FACTORY Mode, it is indicated as service call of 163. Error 540 : Y Error 541 : M Error 542 : C Error 543 : K
OPEN FRONT COVER %ERRCODE%:PAPER SIZE ERROR	400	Inappropriate size paper was fed from a tray. Check the paper in the tray or check for Multiple-feed. Open and close the cover to perform recovery printing, and continue. In this state, Leisus I/F : OPJAM bit #7 should be '0'.
CHECK MP TRAY %ERRCODE%:PAPER JAM	390	Paper jam occurred during paper feeding from tray. Error 390 : MP Tray
OPEN FRONT COVER %ERRCODE%:PAPER JAM	391 392	Paper jam occurred during paper feeding from tray. Error 391 : Tray1 Error 392 : Tray2
OPEN FRONT COVER %ERRCODE%:PAPER JAM	380	Jam has occurred in paper path. Error 380 : Feed
OPEN FRONT COVER %ERRCODE%:PAPER JAM	381 382 383 385 389	Jam has occurred in paper path. Error 381 : Transport Error 382 : Exit Error 383 : Duplex Entry Error 385 : Around Fuser Unit Error 389 : Printing Page Lost
OPEN DUPLEX COVER %ERRCODE%:PAPER JAM	370 371 373	Jam has occurred nearby DUPLEX unit. Error 370 : Duplex Reversal Error 371 : Duplex Input Error 373 : Multifeed into Duplex (Duplex Remain Jam)
OPEN TOP COVER %ERRCODE%:PAPER JAM	372	Jam has occurred nearby DUPLEX unit. Error 372 : Misfeed from Duplex
INSTALL DUPLEX UNIT %ERRCODE%:DUPLEX UNIT OPEN	360	Duplex unit is open (removed). When this error is detected, printing stops.

REPLACE IMAGE DRUM %ERRCODE%:%COLOR% DRUM LIFE	350 351 352 353	The life of the image drum (Alarm) Error 350 : Y Error 351 : M Error 352 : C Error 353 : K Warning status takes effect at Cover Open/Close.
REPLACE IMAGE DRUM %ERRCODE%:%COLOR% DRUM LIFE	560 561 562 563	The toner empty error is occurred after the image drum reached its life. Error 560 : Y Error 561 : M Error 562 : C Error 563 : K This is displayed until a user exchanges the image drum.
REPLACE FUSER %ERRCODE%:FUSER LIFE	354	Notifies the fuser has reached its life. This is the error displayed based on the counter to indicate that the fuser has reached its life, and printing will stop. Warning status takes effect at Cover Open/Close. This error will occur on some user setting mode.
REPLACE BELT %ERRCODE%:BELT LIFE	355	Notifies the transfer belt has reached its life. This is the error displayed based on the counter to indicate that the belt has reached its life, and printing will stop. Warning status takes effect at Cover Open/Close.
REPLACE BELT %ERRCODE%:BELT LIFE	356	Indicates waste toner full. Warning status takes effect only once at Cover Open/Close, and the error occurs again when about 500 copies have been printed.
CHECK TONER CARTRIDGE %ERRCODE%:%COLOR% IMPROPER LOCK LEVER POSITION	544 545 546 547	Shows that the toner cartridge lever has not been locked. Error 544 : Y Error 545 : M Error 546 : C Error 547 : K
CHECK IMAGE DRUM %ERRCODE%:%COLOR% DRUM MISSING	340 341 342	The image drum is not correctly installed. Error 340 : Y Error 341 : M Error 342 : C
CHECK IMAGE DRUM & BELT LOCK %ERRCODE%:K DRUM MISSING	343	Indicates that the belt is unlocked or the black image drum is not set properly.
CHECK FUSER %ERRCODE%:FUSER MISSING	320	The fuser unit is not correctly installed. (This error is likely issued when the printer is cool at 0 degrees C or lower. Turn on the power again after the printer has warmed up.)
CHECK BELT %ERRCODE%:BELT MISSING	330	The belt unit is not correctly installed.
POWER OFF AND WAIT FOR A WHILE %ERRCODE%:MOTOR OVERHEAT	321	Motor Driver IC overheat is detected.
CLOSE COVER %ERRCODE%:COVER OPEN	310 311	The cover is open. Error 310 : Top Cover Error 311 : Front Cover
CLOSE COVER %ERRCODE%:DUPLEX COVER OPEN	316	The cover is open. Error 316 : Duplex Unit

CHECK DATA REC DATA ERROR <%DLCODE%>		An error has happened while the printer is receive processing the download data. %DLCODE% 1: File size error 2: Check-sum error 3: Invalid printer model number 4: Invalid module I/F version 5: Invalid FAT version
WAIT A MOMENT DATA WRITING		The printer is writing the download data.
POWER OFF/ON DATA WRITTEN OK		The printer finished writing the download data.
CHECK DATA DATA WRITE ERROR <%DLCODE%>		An error has happened while the printer is writing the download data. %DLCODE% 1: Memory allocation error 2: Download file error 3: Device allocation error 4: No device space 5: File writing failure 6: CU-F/W mismatch
POWER OFF/ON %ERRCODE%:NETWORK ERROR	300	A network error is occurring.
REBOOTING %CODE%		Rebooting of the controller unit. %CODE% is a decimal value (one digit) and represents the reason to reboot. = 0 ...Reboot due to a reason other than the followings. = 1 ... Reboot due to PjL Command. = 2 ... Reboot in accordance with a menu change. = 3 ... Reboot due to quit operator of PostScript Language. = 4 ... reboot by Network Utility (including Web).
SHUTTING DOWN		It is shown that a printer is shutting down.
SHUTDOWN		Indicates that the printer has completed shutting down.
PLEASE POW OFF SHUTDOWN COMP		It is shown that the printer completed shutdown processing. (The backlight of LCD puts out the light)
POWER OFF AND WAIT FOR A WHILE%ERRCODE%:CONDENSING ERROR	Fatal 126	A dew is formed. (Reserved; T.B.D.)
POWER OFF/ON %ERRCODE%:FATAL ERROR	Fatal <nnn>	A fatal error occurred. For more information, see attached 'Fatal Errors List'.
SERVICE CALL %ERRCODE%:FATAL ERROR	Fatal <nnn>	A fatal error occurred. For more information, see "Service Calls List."
SERVICE CALL %ERRCODE%:FATAL ERROR *	Fatal 096 231 128 168 169	A fatal error occurred. For more information, see "Service Calls List."

POWER OFF/ON %ERRCODE%:FATAL_ERROR	Fatal 002 011 F0C F0D FFE FFF	A fatal error occurred. For more information, see "Service Calls List."
POWER OFF/ON %ERRCODE%:DOWNLOAD ERROR	Fatal 209	Downloading Media Table to PU has failed. (Related to Custom Media Type.)

Error Messages

Error message during initializing

Error Message	Meaning
Hardware Error Check Scanner	Hardware Error
Lamp Error Check Scanner	Lamp Error
Home Sensor/Lock Error Check Scanner	Home Sensor or Lock Error Release the Lock
ADF Paper Jam Check Scanner	ADF Paper Jam Remove the paper
PIN ID Error Please Re-input	Please Re-input
Failed to Detect Printer	Failed to detect printer. 90second Time-out Check the printer is on line or cable is connected
Failed to get Printer Information	Failed to get printer information
Check The Printer Press Stop key	Failed to detect printer or failed to get printer information.

Error message during printing and copying

Error Message	Meaning
Printer is off-line Check The Printer	Shows off-line status Press ONLINE button of printer
10007 Check The Printer	Check The Printer
Optimizing Temperature Check The Printer	Because the drum temperature is high, printing is temporarily suspended. Or, the printer is waiting for implementation of heat measure for media switch from narrow paper to wide paper.
10058 Check The Printer	Auto registration adjusting in progress
10988 Check The Printer	Auto tone adjusting in progress
10994 Check The Printer	Auto density adjusting in progress
Black Toner Low Order K Toner	Toner low.
Yellow Toner Low Order Y Toner	
Magenta Toner Low Order M Toner	
Cyan Toner Low Order C Toner	
Waste Toner Full Replace Y Toner	The printer can still print. Allows printing about 50 pages of A4 size at 5% density, then stops with Waste Toner Full Error again. The LCD message indicates that the Waste Toner box is full.
Waste Toner Full Replace M Toner	
Waste Toner Full Replace C Toner	
Toner Empty Replace K Toner	If a toner empty occurs and a user opens/closes the cover or reboots the printer, this phenomenon happens. When the printer printed approx. 50 pages (A4, density 5%), the error occurs again.
Y Toner Empty Replace Y Toner	
M Toner Empty Replace M Toner	
C Toner Empty Replace C Toner	
K Drum Near Life Order K Drum	Drum near life.
Y Drum Near Life Order Y Drum	
M Drum Near Life Order M Drum	
C Drum Near Life Order C Drum	
Fuser Unit Near Life Order Fuser	Fuser unit near life.
Belt Unit Near Life Order Belt	Belt unit near life.

Error Message	Meaning
K Drum Life Replace K Drum	If a drum life error occurs and a user opens/closes the cover or reboots the printer, this phenomenon happens. When the printer printed 500 pages, the error occurs again.
Y Drum Life Replace Y Drum	
M Drum Life Replace M Drum	
C Drum Life Replace C Drum	
Fuser Unit Life Replace Fuser	If a fuser life error occurs and a user opens/closes the cover or reboots the printer, this phenomenon happens. When the printer printed 500 pages, the error occurs again.
Belt Unit Life Replace Belt	If a belt life error occurs and a user opens/closes the cover or reboots the printer, this phenomenon happens. When the printer printed 500 pages, the error occurs again.
10053 Check The Printer	Belt Reflex Check error. This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10976 Check The Printer	This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10975 Check The Printer	This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10050 Check The Printer	Registration error. This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10054 Check The Printer	Sensor calibration error. This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10051 Check The Printer	Gamma error. This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10052 Check The Printer	Registration sensor error. This is not a user-level error. (If it happens, change the mode to Shipping mode. See the Maintenance Manual.)
10944 Check The Printer	Adjusting data of LED HEAD is not written in PU FLASH (only when VE LED Head without EEPROM is used)
10945 Check The Printer	
10946 Check The Printer	
10947 Check The Printer	
MP Tray Empty Load Paper in MP Tray	MP tray, or tray1 is empty. Treated as Warning until printing to the empty tray is designated. "MP Tray Empty" is displayed when paper feed from MP tray is attempted, but the tray is empty. When printing of the job is completed, this warning disappears if a user opens/closes the cover or reboots the printer.
Tray1 Empty Load Paper in Tray1	
40994 Check The Printer	The data of COPY is memory-full.

Error Message	Meaning
10982 Check The Printer	Job cancelled because of no permission for printing (Related to JobAccount) Cleared by pressing ON-LINE switch.
30114 Check The Printer	Invalid data was received. Press the On-line switch and eliminate the warning. Displayed when unsupported PDL command is received or a spool command is received without HDD.
411yy Check The Printer	Manual paper feed is required. Manually insert the paper shown by mmm.
480yy Media Mismatch Check The Printer	The media type in the tray does not match the print data. Load mmm/ppp paper in MP Tray, or Tray1.
482yy Media Mismatch Check The Printer	
483yy Media Mismatch Check The Printer	
30993 Check The Printer	Network initializing.
472yy Tray1 Empty Load mmm in Tray1	Printing request is issued to an empty tray1.
470yy MP Tray Empty Load mmm in MP Tray	Paper feed from MPTRAY is attempted, but the tray is empty. Loading mmm paper and pressing the On-line switch will start printing.
30097 Check The Printer	Memory capacity overflows. Press ON-LINE switch so that printing continues. Install expansion RAM or decrease data size.
Waste Toner Full Replace Y Toner	* waste toner will fill up the box.Toner replacement is necessary.
Waste Toner Full Replace M Toner	
Waste Toner Full Replace C Toner	
K Toner Empty Replace K Toner	* toner empty * = K, Y, M or C Warning status takes effect at Cover Open/Close, while allowing printing approx 50 pages (T.B.D). (A4, density 5%).
Y Toner Empty Replace Y Toner	
M Toner Empty Replace M Toner	
C Toner Empty Replace C Toner	
Have You Replaced Y Toner? Yes / No	Displayed to confirm whether the user has replaced the * toner after Cover Open/Close (after Waste Toner Full error). The selection of "Yes" will reset the toner counter while clearing Waste Toner Full error. The selection of "No" will bring the printer to waste toner full warning status.
Have You Replaced M Toner? Yes / No	
Have You Replaced C Toner? Yes / No	
Paper Size Error Open Front Cover	Inappropriate size paper was fed from a tray. Usually paper is automatically exit out, and error message is displayed. After Cover open and close , error is recovered. If paper is remained in the printer, remove paper and close cover. Open and close the cover to perform recovery printing, and continue.

Error Message	Meaning
Paper Jam-MP Tray Open Front Cover	JAM has occurred. MP Tray
Paper Jam-Tray1 Open Front Cover	JAM has occurred. Tray1
Paper Jam-Feed Open Front Cover	JAM has occurred. Feed
Paper Jam-Transport Open Top Cover	JAM has occurred in paper path. Transport
Paper Jam-Exit Open Top Cover	JAM has occurred in paper path. Exit
40980 Check The Printer	Displayed if jam is occurring in Duplex Unit and the Duplex unit is removed. If a user removes the Duplex Unit when jam is not occurring in the Duplex unit, Service Call Error 181 occurs.
K Drum Life Replace K Drum	Drum life. Warning status takes effect at cover open/close. When the printer printed 500 pages, the error occurs again.
Y Drum Life Replace Y Drum	
M Drum Life Replace M Drum	
C Drum Life Replace C Drum	
Fuser Unit Life Replace Fuser	Fuser life. Warning status occurs at cover open/close. When the printer printed 500 pages, the error occurs again.
Belt Unit Life Replace Belt	Belt life. Warning status takes effect at cover open/dose. When the printer printed 500 pages, the error occurs again.
Waste Toner Full Replace Belt	Waste toner full. Warning status takes effect at cover open/close. When the printer printed 500 pages, the error occurs again.
40034 Check The Printer	Drum is not correctly installed.
40035 Check The Printer	
40036 Check The Printer	
40033 Check The Printer	Belt is unlocked or black drum is not correctly installed.
40037 Check The Printer	Belt unit is not correctly installed.
40992 Check The Printer	Fuser unit is not correctly installed.
Printer Top Cover Open Close Cover	Cover is open. Top Cover
Printer Front Cover Open Close Cover	Cover is open. Front Cover
Duplex Cover Open Close Cover	Cover is open. Duplex
40967 Check The Printer	Download mode when download data is received in normal operation. Show download data is receiving.

Error Message	Meaning
30027 Check The Printer	A network error is occurring.
40057 Check The Printer	Service Calls.
Copy is Unusable	Color & Mono copy are unusable.
Color Copy is Unusable	Mono copy only
Setting Failed Setup isn't changed	Setup isn't changed
Warning Failed to the Updated	Failed to the Updated
Set Supported Paper	Set Supported Paper
Got Un-support Value Confirm Printer Setting	Confirm Printer Setting
Set Letter Paper	Set Letter Paper
Set A4 Paper	Set A4 Paper
Paper Empty	Paper Empty
Menu Map Printing Failed	Printing Failed
Demo Page Printing Failed	Printing Failed
Job Counting Printing Failed	
Consumable Remaining Printing Failed	
Scan To Log Report Printing Failed	
Printer Error Check The Printer	Check the Printer
Adjust Density Failed	
Adjust Registration Failed	
Printer is OFFLINE Check the Printer	Check the Printer

Information codes during networking

Error Message	Meaning
Connection failed Check network settings	The connection failed.
Address is invalid Check network settings	The destination address is invalid.
Network is down Check network settings	Network is down.
Network is unreachable Check network settings	Network is unreachable.
Connection aborted by server Check network settings	The connection aborted by the server.
Connection reset by server Check network settings	The connection reset by the server.
Connection time out Check network settings	Connection timed out.
Connection failure Check network settings	The attempt to connect failed.
Host is not able to reach Check network settings	The destination host is not able to reach.
Fail to connect E-mail server Check network environment	Fail to connect Email Server
SMTP Sever is empty Please setup SMTP Server in Admin	Please input IP or domain name for SMTP Server into SMTP server item of network configuration in Admin.
SMTP Server address is Wrong	Please make sure SMTP Server's domain name or IP is correct.
TIFF or MTIFF compression fail	Please select raw data format or select text mode or reduce resolution.
Check DNS server's IP	Please input the IP of DNS server into DNS server item of network configuration in Admin.
Fail to get filing server's IP	Please make sure the filing server's domain name in Target URL is correct and DNS server's IP is correct.
Fail to create socket for DHCP	Reboot the machine, and try again. If the error is still there, contact dealer.
Failed to search DHCP Server	Failed to send DHCP discover packet. Please check network environment. If there is no DHCP Server in your network environment. Please turn off the setup of DHCP, and input Subnet Mask, Gateway IP, and IP on network configuration in Admin key.
Failed to get network setup by DHCP	Failed to get network setting (DHCP Server's IP, Subnet Mask, Gateway IP) from DHCP Server. Please check DHCP Server.
Failed to get IP from DHCP Server	Failed to get IP from DHCP Server. Please check DHCP Server.
Failed to renew IP from DHCP Server	There is no response from DHCP Server after sent a renew IP request. Please check DHCP Server.

Error message during E-mailing

Error Message	Meaning
Device internal failure Reboot the scanner	Device internal failure
Fail to connect Mail server Contact network administrator	Fail to connect Mail server
Fail to get Mail server response Contact network administrator	Fail to get Mail server response
Unpredicted error Contact network administrator	Unpredicted error
Service unavailable Contact network administrator	Service not available, closing transmission channel. The Server is going to shut down.
No support SMTP Login extension Contact network administrator	Mail server doesn't support SMTP Login extension
No support SMTP Login authentication Contact network administrator	Mail server doesn't support SMTP Login authentication
SMTP Login error Check Login name	SMTP Login user name error
Mailbox unavailable Check "To" address	Requested mail action not taken: mailbox unavailable
Processing error Contact network administrator	Requested action aborted: local error in processing
Insufficient system storage Contact network administrator	Requested action not taken: insufficient system storage
Temporary authentication failure Contact network administrator	Temporary authentication failure: The authentication failed due to a temporary server failure.
Command error Restart Scanner	Syntax error, command unrecognized
Parameter or argument error Check Network Settings	Syntax error in parameters or arguments
Sequence error Restart Scanner	Bad sequence of commands
Command parameters not implemented Check Network Settings	Command parameters not implemented

Error Message	Meaning
Authentication required Contact network administrator	Authentication required: Mail server requires authentication in order to perform the requested action.
Action not taken Check "To" address	Requested action not taken: mailbox name not allowed.
User not local Check "To" address	User not local: please try again.
Exceeded storage Allocation Check "To" address	Requested mail action aborted: exceeded storage allocation
Mailbox name not allowed Check "To" address	Requested action not taken: mailbox name not allowed
Transaction failed Contact network administrator	Transaction failed
Connection error Check network environment	Connection broken during data transmission.
File size is to large	File size is larger then the size that is set in "scan size limit" of menu

Error message during filing

Error Message	Meaning
Fail to connect FTP server Contact server administrator	Fail to connect FTP server
Unpredicted error Contact server administrator	Unpredicted error
FTP Login error Check Login name	FTP Login name error
FTP Password error Check Password in folder	FTP password incorrect
Can't enter directory Make sure privilege	FTP can't enter this directory
Can't check file Make sure privilege	FTP can't check file existed or not
Can't change data transfer type Contact server administrator	FTP can't change data transfer type
Store file error Make sure privilege	FTP store file error
Insufficient storage space in system Contact server administrator	Insufficient storage space in system
File name not allowed Change file name	File name not allowed
Can't create directory Make sure privilege	FTP can't create directory
CIFS Login fail Check ID & Password	CIFS (User level) login fail
Can't make subdirectory Check the account	CIFS (User level) can not make subdirectory
CIFS fail to connect Check server supports CIFS	CIFS fail to connect
Network share name incorrect Check directory in folder	CIFS Network share name incorrect.
Computer name error Make sure computer name in directory	CIFS Computer name error
CIFS dialect negotiation fail Contact server administrator	CIFS dialect negotiation fail
CIFS fail to create file Make sure you have full control privilege	CIFS fail to create file.

Error Message	Meaning
CIFS send data error	CIFS send data error
CIFS fail to access file attribute Make sure you have full control privilege	CIFS fail to access file attribute
HTTP fail to connect Check IP & HTTP port	HTTP fail to connect
HTTP unauthorized Make sure your account has authorization	HTTP Unauthorized
HTTP forbidden This action is forbidden	HTTP Forbidden
MKCOL method not allowed Contact server administrator	HTTP MKCOL method not allowed
MKCOL method not implemented Contact server administrator	HTTP MKCOL method not implemented
HTTP PUT method not allowed Contact server administrator	HTTP PUT method not allowed
HTTP server internal error Contact server administrator	HTTP server internal error
PUT method not implemented Contact system administrator	HTTP PUT method not implemented
HTTP server unavailable Contact server administrator	HTTP server unavailable
HTTP No support That server does not support HTTP	HTTP server does not support HTTP version 1.1
Resource not found Contact server administrator	HTTP Resource not found

Error message on fax

Error Code	Error Message	Meaning
200	NO_STATUS = FAX_ERR_BASE,	
201	NO_DIALTONE_ERROR,	
202	NO_COMMON_MODULATION_ERROR	
203	NO_FAX_RESPONSE,	
204	NUMBER_BUSY,	
205	OPERATOR_CANCELLED,	
206	V8_ANSWER_ERROR,	
207	COMMAND_REPEAT_ERROR,	
208	NO_DIS_DTC_RECEIVED,	
209	NO_OR_LOST_FAX_CONNECTION,	
210	V34_CC_RETRAIN_TIMEOUT,	
211	CFR_RESEND_ERROR,	
212	COMMAND_REPEAT_ERROR1,	
213	REMOTE_CANNOT_RX_OR_POLL_ER ROR	
214	POLL_FAILED_NO_PAPER_IN_ADF,	
215	POLLING_DISABLED,	
216	CONFIDENTIAL_POLLING_FAILED,	
217	CONFIDENTIAL_TX_FAILED,	
218	CIG_DID_NOT_MATCH,	
219	CIG_NOT_RECEIVED,	
220	POLL_PASSWORD_DID_NOT_MATCH,	
221	PWDP_NOT_RECEIVED,	
222	ANSWER_NON_V34_MODE_ERROR,	
223	V34_NOT_SUPPORTED_IN_JM,	
224	PRI_ERROR_EOR,	
225	FAILED_TO_TRAIN_WHEN_SENDING,	
226	TOO_MANY_PPR_ERRORS,	
227	V34_PPR_COUNT_ERROR,	
228	T30_T5_TIME_OUT,	
229	PC_CTS_TIMEOUT_ERROR,	
230	TX_G3_PAGE_IMAGE_DATA_NOT_RE ADY_ERROR,	
231	CANNOT_RESEND_PAGE_ERROR,	
232	CFR_SENT_NO_RESPONSE_ERROR,	
233	DID NOT RECEIVE NEW DIS ERROR	
234	RX_MEMORY_FULL,	
235	TX_JOB_LOST,	
236	TX_JOB_DELETE,	
237	RTN_ERROR,	
238	EOR_Q_ERROR,	

Self Diagnostic Service Error Codes

Error Message	Cause	Description	Y / N	Solution
Service call 001:Error (C5900)	Machine Check Exception Hardware fault detected. (Board defective or Shortage of power supply volume)			Replace TBH PCB.
Power off/on 002 ~ 005 Error 006 / 007 Error	CPU Exception	Is the error issued again?	Yes	If RAM DIMM is installed, remove it, and turn the power off and on again. Replace the TBR PCB. Install the RAM DIMM again. Replace the RAM DIMM.
service 020:Error	CU ROM Hash Check Error	Does error display reappear?	Yes	Power OFF/ON. Replace TBR PCB.
Service call 025:Error	CU Font ROM Hash Check Error	A font ROM hash check error was detected.	Yes	Power OFF/ON. Replace TBR PCB.
Service call 030:Error	CU Optional RAM Check Error	Does error display reappear?	Yes	Power OFF/ON. Replace TBR PCB.
Service call 031:Error	CU Optional RAM Check Error	Is RAM DIMM set properly?	No Yes	Reset RAM DIMM. Replace RAM DIMM.
		Is error recovered by replacing RAM DIMM?	No	Replace TBR PCB.
Service call 036:Error (C5900)	RAM Spec Error Unsupported DIMM specification of the CU RAM	Is a genuine RAM DIMM in use?	No	Use genuine RAM DIMM.
		Is the RAM DIMM installed properly?	No Yes	Reset RAM DIMM. Replace RAM DIMM.
		Is the fault recovered when the RAM DIMM is replaced?	No	Replace TBR PCB
Service call 040:Error	CU EEPROM Error	Does error display reappear?	Yes	Power OFF/ON. Replace TBR PCB
Service call 041:Error	CU Flash Error Flash ROM Error on the CU board.	Does error display reappear?	Yes	Power OFF/ON. Replace TBR PCB
Service call 042~ 043:Error 045:Error	Flash File System Error	Access to the Flash ROM directly mounted on the CU PCB has failed.		Flash File System Error Access to the Flash ROM directly mounted on the CU PCB failed. Conduct forced initialization of the Flash (Notice that NIC-F/ W will also be erased. It needs to be written with the Maintenance Utility after the initialization.) Execute FLASH FORMAT of MAINTENANCE MENU of the System Maintenance Menu. When "FLASH FORMAT" is displayed, release the key and wait till "ONLINE" (approx. 2 min.). If the symptom does not change, replace the TBR PCB.

Service call 051:Error(C5900)	CU Fan Error Abnormal CPU cooling fan on CU board.	Is CU Fan connector set properly?	No	Connect properly.
		Is error recovered by replacing fan?	Yes No	Replace fan. Replace TBR PCB.
Service call 052:Error(C5900)	DMA Abort Error detected in Image processor.	Does error reoccur?	Yes	Power OFF/ON. Replace TBR PCB.
Power off/on 070:Error(C5900)	PSE firmware fault detected.	Does error reoccur?	Yes	Power OFF/ON. Replace TBR PCB.
Power off/on 072:Error xx	Engine I/F Error I/F error between PU-CU.	Is CU assembly set properly? Is error recovered by replacing SP1 /TBH board?	No Yes No	Set properly. Replace SPI PCB. Replace PU PCB (PRF)
Power off/on 073:Error	Video Error. A trouble was detected during image data development. (Illegal data received)	Is the CU Assembly installed properly?	No Yes	Redo the installation properly. Change the PC for another of higher grade, or execute print again after reducing the resolution. Replace the TBR PCB.
		Is the error issued again?	Yes	Replace the SP1 PCB. Reinstall or replace the optional RAM DIMM. Replace the interface cable. Redo the installation of the PC printer driver.
Power off/on 074:Error 075:Error	Video Error Fault detected when image data is extended.	Is CU assembly set properly?	No Yes	Set properly. Replace SP1/TBH PCB
Service call 081: ERROR	Parameter consistency Check error	EEPROM or FLASH has become incapable of reading or writing.		Replace the CU board if the problem remains after cycling the power.
Service call 104:Error	Engine EEPROM setting check is OK when power ON. Then detect read/ write error.	Does error reoccur?	Yes	Power OFF/ON. Replace PU PCB(PRF)
Service call 105:Error	An error detected by checking, at printer's powerom, EEPROM installation.	Does error reoccur?	Yes	Power OFF/ON. Replace PU PCB (PRF)
Service call 106:Error	Abnormal engine control logic.	Does error reoccur?	Yes	Power OFF/ON. Replace PU PCB (PRF)
Service call 111:Error	Detected illegal Duplex Unit.	Is the wrong Duplex Unit installed?	Yes	Replace with proper Duplex Unit.
Service call 112:Error	Detected illegal 2nd Tray.	Is an incorrect 2nd Tray installed?	Yes	Install correct 2nd Tray
Service call 120: ERROR	PU unit FAN motor error	Is the FAN in the PU unit working?	No Yes	Replace the FAN motor. Replace the PU board (PRF).
		Does the same error occur after replacement of the FAN motor?	Yes	Replace the PU board (PRF).

Service call 121:Error	High-voltage power supply I/F error.	Is cable between PU board and high-voltage power unit connected properly?	No Yes	Connect properly. Check improper connections for HV.
		Is there no improperly connections?	No	Replace high-voltage power supply.
Service call 122:Error	Low-voltage power supply fan error. Low-voltage power supply temperature error.	Is fan in low-voltage power supply unit operating?	No Yes	Check connections for connector of fan. Replace low-voltage power supply.
		Is fan connector connected properly?	No Yes	Replace fan motor. Replace low-voltage power supply.
Service call 123:Error	Abnormal environment humidity / Not connected humidity sensor.	Does error reoccur?	Yes	Power OFF/ON Replace the operator panel PCB (PRP)
Service call 124:Error	Abnormal environment temperature.	Does error reoccur?	Yes	Power OFF/ON. Replace the operator panel PCB(PRF)
Service call 126:Error	Condensation in the printer was detected.	Condensation is likely to occur when machine is moved from cold to warm environments. Allow printer to come to temperature for a few hours.	Yes	Turn on the printer again after it is allowed to stabilize in the environment.
		Does the error reoccur?	Yes	Replace the operator panel PCB (PRP)
Service call 127:Error	Error detected at the fuser unit cooling fan.	Is fan connector connected properly?	No Yes	Connect properly again. Replace fan motor
		Does error reoccur?	No	Replace PU PCB (PRF)
Service call 131 ~ 134 Error	LED head fault detected. 131 = Yellow 132 = Magenta 133 = Cyan 134 = K (Black)	Is LED head properly set?	No	Install the LED head unit properly.
		Is the LED head fuse blown out?	Yes	Check the LED head fuse. Change the fuse.
		Does error reoccur?	Yes	Replace the LED head unit.
Service call 140 ~ 142 Error	Error detected at ID position Up / Down 140= Y, 141= M, 142 = C	Is ID unit set properly?	No	Reset ID unit.
		Does error reoccur?	Yes	Replace ID Up/Down sensor.
Service call 150 ~ 153 Error	ID unit fuse cannot be disconnected. 150 = Y, 151 = M, 152 = C, 153 = K	Is ID unit setting proper?	No	Reset ID unit.
		Does error reoccur?	Yes	After checking connections of cable between PRT board and PU PCB, replace PRT PCB.
Service call 154:Error	Belt unit fuse cannot be disconnected.	Is belt unit setting proper?	No	Reset belt unit.
		Does error reoccur?	Yes	Check cable connections. replace PU PCB(PRF)
Service call 155:Error	Fuser unit fuse cannot be disconnected.	Is fuser unit set properly? Does error reoccur?	No Yes	After cleaning fuser connector, reset Check cable connections and replace PU PCB (PRF)

Service call 160 ~ 163 Error	Error detected by toner sensor. 160= Y, 161 = M, 162 = C, 163 = K	Is toner cartridge set?	No	Set toner cartridge.
		Is toner lock lever set?	No	Turn a lock lever of toner to lock
		Does error reoccur?	Yes	Replace toner sensor or assembly.
Service call 167:Error	Thermistor Slope Error	Is an error message indicated?	Yes	Turn on the power again.
		Is the error issued again?	Yes	Leave the printer as is for 30 minutes, and turn on the power again. Replace fuser unit.
Service call 168:Error	Compensation Thermistor Error	Is an error message indicated?	Yes	Turn on the power again.
		Is the error issued again?	Yes	Leave the printer as is for 30 minutes, and turn on the power again. (See note) Replace fuser unit.
Service call 169:Error	Upper Side Thermistor Error	Is an error message indicated?	Yes	Turn on the power again.
		Is the error issued again?	Yes	Leave the printer as is for 30 minutes, and turn on the power again. Replace fuser unit.
Service call 170:Error 171:Error	Short circuit in fuser thermistor or open circuit detected.	Does error reoccur?	Yes	Turn power ON again. Replace fuser unit. (see note)
Service call 172:Error 173:Error	Abnormal temperature detected by fuser thermistor (high temp or low temp.)	Does error reoccur?	Yes	Turn power ON again. Replace fuser unit.
Service call 174:Error	Short circuit in back up roller thermistor detected (at high temperature).	Does error reoccur?	Yes	Turn power ON again. Replace fuser unit.
Service call 175:Error	Open of back up roller thermistor detected (at low temperature).	Does error reoccur?	Yes	Turn power ON again. Replace fuser unit. (see note)
Service call 176:Error 177:Error	Abnormal (high) temperature of back up roller thermistor detected.	Does error reoccur?	Yes	Turn power ON again. Replace fuser unit.
Service call 181:Error 182:Error	Option unit I/F error. 181 = Duplex Unit 182 = Option Tray)	Does error reoccur?	Yes	Turn power ON again. After checking connection parts of connector, replace option unit.
Power off/on 190:Error	System Memory Overflow.	Does error reoccur?	Yes	Turn power ON again. Add option RAM DIMM.
Service call 200 ~ 202 Error	PU Firmware download Error.	Error occurred while writing over the PU firmware.		Turn the printer OFF/ON, and retry to download the PU firmware again.
Power off/on 209:Download Error	Media Table download Error.	Downloading Media Table to PU has failure.(Related to Custom Media Type)		Turn the printer OFF/ON, and retry to download the PU firmware, again.

Power off/on Error codes 203,204, 207, 208, 214, FOC, FFF F0D: Error(C5900) FFE: Error(C5900)	An error was detected of the CU program.	Reinstall the CU board. Is the error message displayed again?		After turn power OFF, check connections between CU board and PU board. Then turn power ON again.
Service call 220:Error	False setting of a record medium detected by a print statistics.	Take off the HDD or replaced?	Yes	Reset original HDD.
Service call 230:Error	RFID Reader not Installed	RFID read device error Is the error issued again?	Yes Yes	Check the connection of the RFID R/W board. Replace the RFID R/W board.
Service call 231:Error	RFID Reader I/F Error	An interface error was detected with the RFID reader device. 01: communication error between the RFID reader and the engine PCB. 02: the transceiver circuit error of the RFID reader. 03: communication error between the RFID reader and the Tag chip. 04: the RFID Tag detection error (more than 4 chips).		01: Same as Error 230 02: Replace RFID R/W board. 03: Check the antenna cable connection. 04: Check to see if the quantity of RFID Tags is correct.
Service call 250:Error	Secure File Erasing Error	An erasing error of an encrypted file was detected. Did the user agree to execute HDD ERASE?		Notify the user that Disk ERASE needs to be executed to erase the encrypted file, so that the HDD is restored to the original state as at the time of purchase. ADMIN MENU HDD ERASE
Service call 251:Error	Secure Disk Erasing Error	An error was detected during Disk ERASE. Can the error indication be reproduced?	Yes	Turn the power off and on again. Replace the HDD.
Power off/on 901:Error 902:Error	Short or open in belt thermistor detected.	Is belt thermistor cable setting proper Does error reoccur?	No Yes	Connect cable set properly again. Replace belt thermistor.
Power off/on 903:Error 904:Error	Abnormal temperature detected by belt thermistor (high temp or low temp.)	Is belt thermistor cable setting proper Does error reoccur?	No Yes	Connect cable set properly again. Replace belt thermistor and leave aside for 30 min. Then turn power ON again.
Service call 918:Error	Duplex FANO Alarm Detection	FAN error inside the Duplex. Is the error issued again	Yes Yes	Check if Duplex is properly installed. Check if FAN is properly connected. Replace the FAN.
Power off/on 923:Error	Black Image Drum Lock Error	The black image drum (K-ID) does not rotate properly. Is the error message issued again	Yes Yes	Check K-ID is properly installed. Replace the K-ID. Replace the K-ID motor.
Service call 928:Error	Fuser Motor Lock Error	The fuser does not rotate properly. Is the error message issued again	Yes Yes	Check fuser unit is properly installed. Replace the fuser unit. Replace the fuser motor.

Service call 980:Error	Error by media clinging to the fuser	Media has clung to the fuser.	Yes	Power OFF. Replace the fuser unit.
SDRAM ERROR	PU board SRAM error	Does error reoccur?	Yes	Turn on the printer again. Replace the PU board (PRF).
XXXXXXXXXXXXXXXXXXXX CRC CHECK NG	A PU download data CRC check error.	After PU data (PU firmware, custom media data and LED head adjustment data) downloading, a CRC check error was detected.		Turn on the printer again and re- download the data (during usual printer operation)
LOADER VERSION XX XX	PU board Flash ROM hash check error	Does error reoccur?	Yes	Turn on the printer again. Replace the PU board (PRF).
WDT ERROR	PU firmware went haywire.	Does error reoccur?	Yes	Turn on the printer again. Replace the PU board (PRF).
COMMUNICATION ERROR	An error in a PUCU interface.	Is the CU assembly installed properly?	No Yes	Reinstall the assembly properly. Replace the TBR board.

(Note)

SERVICE CALL **Error 168**, **Error 171** and **Error 175** are likely issued when the printer is cool at 0 degrees C or lower, therefore, if the printer is cool, turn on the power again after it has warmed up.

System Maintenance/Adjustments

User's Maintenance Menu

This is a maintenance menu category among the normal menu categories. (Different from the system maintenance menus) The items that can be set under this menu are indicated below. Shaded areas are default setting.

Category	Operator Panel Display		Function
	Item (Upper Display)	Value (Lower Display)	
Maintenance Menu	MENU RESET	EXECUTE	Initializes menu settings.
	SAVE MENU	EXECUTE	Stores current menu settings.
	RESTORE MENU	EXECUTE	Changes menu settings to stored ones. Displayed only when menu settings have been stored.
	POWER SAVE	ENABLE DISABLE	Sets Power Save mode enabled/disabled. Shift time to enable Power Save mode can be changed using "POWER SAVE SHIFT TIME" on "SYSTEM CONFIG.MENU"
	PAPER BLACK SET	0 +1 +2 -2 -1	Corrects print non-uniformity due to temperature variation. With faded images, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.
	PAPER COLOR SET	0 +1 +2 -2 -1	Corrects print non-uniformity due to temperature variation. With faded images, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.
	OHP BLACK SET	0 +1 +2 -2 -1	Used to correct dispersion of printing due to temperature difference. Change the value if a printed OHP sheet is blurred. If an output shows a scattered- or snowing-like phenomenon in a high-density print part, decrement the value. If an output is blurred, increment the value.
	OHP COLOR SET	0 +1 +2 -2 -1	Used to correct dispersion of printing due to temperature difference. Change the value if a printed OHP sheet is blurred. If an output shows a scattered or snowing-like phenomenon in a high-density print part, decrement the value. If an output is blurred, increment the value.

Indication of consumable part counters

This self-diagnosis is practiced to indicate the consumed states of consumable parts.

1. Activate the normal self-diagnostic mode, and press and hold down the [MENU+] key or [MENU-] key, until "CONSUMABLE STATUS" appears in the display section, and then, press the ENTER key. (The MENU+ key increments a test item, and the MENU- key decrements a test item.)
2. Pressing the [MENU+] key or [MENU-] key causes the consumed states of consumable parts to be displayed sequentially. (ONLINE and CANCEL keys inactive to pressing)
3. Press the [BACK] key to terminate the test. (Status of Item 1 restored)

Display Upper	Display Lower	Format	Unit	Function
K-ID UNIT	*****IMAGES	DEC	Images	The number of rotation after a new TONER ID of each color was attached. The number is converted into A4 3Page/ Job.
Y-ID UNIT	*****IMAGES	DEC	Images	
M-ID UNIT	*****IMAGES	DEC	Images	
C-ID UNIT	*****IMAGES	DEC	Images	
FUSER UNIT	*****PRINTS	DEC	Prints	The number of sheets after a new FUSER unit was attached.
TR BELT UNIT	*****IMAGES	DEC	Images	The number of sheets after a new BELT unit was attached
K-TONER (FULL)	*****%	DEC	%	The number of use of each color TONER.
Y-TONER (FULL)	*****%	DEC	%	
M-TONER (FULL)	*****%	DEC	%	
C-TONER (FULL)	*****%	DEC	%	
M-WASTE TNR CNT	*****TIMES	DEC	Times	The number of disposal TONER count. *Disposal TONER becomes full in more than 32times.
C-WASTE TNR CNT	*****TIMES	DEC	Times	
K-STC MODE CNT	*****TIMES	DEC	Times	The printing dot counts of each color TONER cartridge. (The count is NOT reset by replacing cartridge.)
Y-STC MODE CNT	*****TIMES	DEC	Times	
M-STC MODE CNT	*****TIMES	DEC	Times	
C-STC MODE CNT	*****TIMES	DEC	Times	
K REFILL CNT	*****TIMES	DEC	Times	The printing dot counts of each color TONER cartridge. (The count is reset by replacing cartridge.)
Y REFILL CNT	*****TIMES	DEC	Times	
M REFILL CNT	*****TIMES	DEC	Times	
C REFILL CNT	*****TIMES	DEC	Times	
K OVER RIDE CNT	*****TIMES	DEC	Times	The number of times that each color TONER cartridge life was extended.
Y OVER RIDE CNT	*****TIMES	DEC	Times	
M OVER RIDE CNT	*****TIMES	DEC	Times	
C OVER RIDE CNT	*****TIMES	DEC	Times	

Indication of printed page counters

This self-diagnosis is practiced to indicate the current number of printed pages of the printer.

1. Activate the normal self-diagnostic mode, and press and hold down the [MENU+] key or [MENU-] key, until "PRINTER STATUS" appears in the display section, and then, press the ENTER key. (The MENU+ key increments a test item, and the MENU- key decrements a test item.)
2. Pressing the [MENU+] key or [MENU-] key causes the current number of printed pages to be displayed sequentially. (ONLINE and CANCEL keys inactive to pressing)
3. Press the [BACK] key to terminate the test. (Status of Item 1 restored)

Display Upper	Display Lower	Format	Unit	Function
K-IMPRESSIONS	*****IMAGES	DEC	Images	The printing number of sheets of each color.
Y-IMPRESSIONS	*****IMAGES	DEC	Images	
M-IMPRESSIONS	*****IMAGES	DEC	Images	
C-IMPRESSIONS	*****IMAGES	DEC	Images	
TOTAL SHEET CNT	*****PRINTS	DEC	Prints	The indication of the total printing number of sheets

Service Maintenance Menu/Adjustments

Factory/Shipping switching

This self-diagnosis is practiced to switch the PU(PRF) PCB between the Factory mode and the Shipping mode.

1. Activate the self-diagnostic (Level 1) mode, and press and hold down the [MENU+] key or [MENU-] key, until the following message appears.

FACTORY MODE SET

2. Pressing the [ENTER] key causes the following message to appear. Press and hold down the [MENU+] key or [MENU-], until the intended item (See the table below) is displayed.

FACTORY MODE	
SHIPPING MODE	*

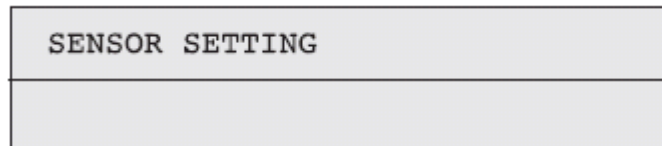
3. Pressing the [ENTER] key while the desired set item remains displayed selects the set value.
4. Pressing and holding down (3 sec) the [ENTER] key while the value you want to set remains displayed registers the currently displayed value on the EEPROM. Then, the status of Item 2 will be restored.
5. Repeat Items 2 to 4, as needed.
6. Press the [BACK] key to terminate the test. (The status of Item 1 is restored.)

Indication	Set Value	Function
FACTORY MODE	FACTORY MODE	For setting the Factory Work mode (Fuse-cut disabled mode).
	SHIPPING MODE	For canceling the Factory Work mode and enabling the fuse-cut function.
FUSE INTACT Note: ***** is either INTACT or BLOWN.	BELT UNIT *****	For checking the FUSE status of the transfer belt unit.
	FUSE UNIT *****	For checking the FUSE status of the fuser unit.
	K-ID UNIT *****	For checking the FUSE status of the K-ID unit.
	Y-ID UNIT *****	For checking the FUSE status of the Y-ID unit.
	M-ID UNIT *****	For checking the FUSE status of the M-ID unit.
	C-ID UNIT *****	For checking the FUSE status of the C-ID unit.

Setup of self-diagnostic function

This self-diagnosis is practiced to Enable/Disable the error detections of the different types of sensors. The error detections can be disabled or enabled temporarily for troubleshooting purposes. However, this function should be exercised with utmost care, since it is able to set some items that require specialized knowledge in the field of operation of the engine. After the function has been used, the set values must always be reset to the defaults.

1. Activate the self-diagnostic (Level 1) mode, and press and hold down the [MENU+] key or [MENU-] key, until the following message appears.



2. Pressing the [ENTER] key causes the following message to appear. Press and hold down the [MENU+] key or [MENU-], until the intended item (See the table below) is displayed.



3. Pressing the [ENTER] key allows to select the set value in the lower line of the display section. Pressing the [MENU+] key increments the set value. Pressing the [MENU-] key decrements the set value.
4. Pressing and holding down (3 sec) the [ENTER] key while the value you want to set remains displayed registers that value on the EEPROM. Then, the status of Item 2 will be restored.
5. Repeat Items 2 to 4, as needed.
5. Press the [BACK] key (except for the status of Item 4.) to terminate the setup. (Status of Item 1 restored)

*Shaded areas are default settings

Indication	Set Value	Operation of set value	Function
TONER SENSOR	ENABLE	Detects.	For enabling/disabling toner sensor operation.
	DISABLE	Does not detect.	
BELT UNIT CHECK	ENABLE	Checks	For enabling/disabling checking operation for mounted belt Unit
	DISABLE	Does not check.	
ID UNIT CHECK	ENABLE	Checks	For enabling/disabling checking operation for mounted ID Unit
	DISABLE	Does not check.	
UP/DOWN SENSOR	ENABLE	Detects.	For enabling/disabling ID UP/DOWN sensor operation
	DISABLE	Does not detect.	
REG ADJUST ERROR	ENABLE	Stops.	For enabling/disabling the stop of error issuance, based on color drift detection value
	DISABLE	Does not stop.	
DRUM OVER LIFE	STOP	Does not extend life.	For enabling/disabling extending the drum life.
	CONTINUANCE	Extends life.	

Self-diagnostic mode

The CX 2032 has two (2) SERVICE MODE LEVELS as listed below. LEVEL0 and LEVEL1. The LEVEL0 is used for monitoring purposes only and will not be detailed here. For more information on LEVEL0 consult the service manual.

Normal self-diagnostic mode (Level 1)

The menus of the normal self-diagnostic mode are indicated below.

Activation method for self-diagnostic mode (Level 1)

1. The system maintenance menu mode is activated when the power is turned on with the MENU+ and MENU- keys held down simultaneously
2. Press the MENU+ or MENU- key several times, until "ENGINE DIAG MODE" is displayed. Pressing the ENTER key causes "DIAGNOSTIC MODE" to appear.

DIAGNOSTIC MODE	
XX.XX.XX	FACTORY/SHIPPING

3. XX.XX.XX of "DIAGNOSTIC MODE XX.XX.XX" which is displayed in the LCD section is the version of the PU firmware. The set value of FACTORY WORKING MODE is indicated in the lower line to the right. Normally, S-MODE for "SHIPPING" is displayed.

4. Pressing the MENU+ or MENU- key takes you to each self-diagnostic step. (The menu items rotate as the MENU+ or MENU- key is pressed.)

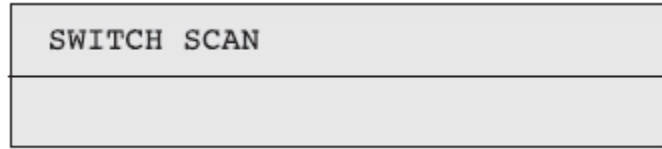
Deactivation of self-diagnostic mode

1. Turn the power off, and on again after ten seconds.

Switch scan test

This self-diagnosis is practiced to check the inlet sensors and switches.

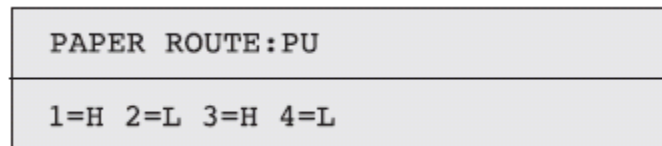
1. Activate the self-diagnostic mode (Level 1), press and hold down the MENU+ or MENU- key, until "SWITCH SCAN" appears in the upper line of the display section, and then, press the ENTER key. (The MENU+ key increments a test item, and the MENU- key decrements a test item.)



2. Press and hold down the MENU+ or MENU- key, until the item corresponding to the unit of Table 5-3 now to be tested appears in the lower line of the display section. (The MENU+ key increments a test item, and the MENU- key decrements a test item.)

3. Pressing the ENTER key initiates the test, and the name and current status of the corresponding unit are displayed.

Note) Pressing and holding down (2 sec) the [ENTER] key when a motor is decided causes the motor to keep running.



Conduct this operation on each unit (Figure 6-1). The indications are produced in the corresponding LCD display. (The indications vary from one sensor to another. See Table 6-3 for details).

4. Pressing the CANCEL key restores the status of Item 2 above.
5. Repeat Items 2 to 4, as needed.
6. To end the test, press the BACK key. (The status of Item 1 will be restored).

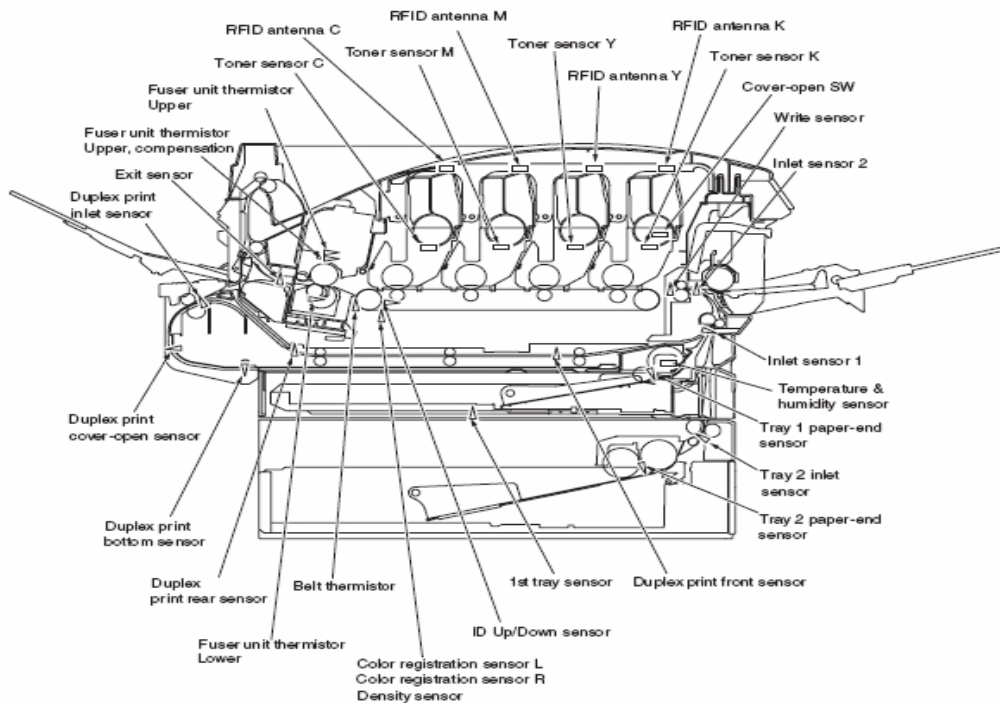


Figure 6-1 Switch Sensor Positions

Table 6-3 SWITCH SCAN Display Detail

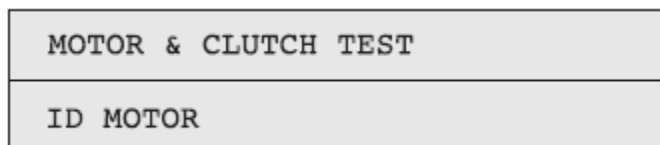
No functionality
 *1: Indication only, without functionality
 *2: L is indicated when a cover is open.
 *3: Status of 1st cassette is indicated.
 This function is effective only when a 2nd tray is installed.

NO	Upper line of display section	1		2		3		4	
		Detail	Display	Detail	Display	Detail	Display	Detail	Display
1	PAPER ROUTE : PU	Entrance Cassette Sns(IN1)	H:Paper out L:Paper present	Entrance-FF Sns(IN2)	H:Paper out L:Paper present	Entrance Belt Sns(WR)	H:Paper out L:Paper present	Exit Sns(OUT)	H:Paper out L:Paper present
2	TONER SENS	Toner-K Sns	H:Blocked L:Reflected	Toner-Y Sns	H:Blocked L:Reflected	Toner-M Sns	H:Blocked L:Reflected	Toner-C Sns	H:Blocked L:Reflected
3	CVO UP_LU_FU	Cover-Upper	H:Close L:Open						
4	REG L/R_OHP_WG	Alignment-Left-Sns	AD value: ***H	Alignment-Right-Sns	AD value: ***H				
5	HT THERMISTER	Upper-Center-Thermister	AD value: ***H	Lower-Center-Thermister	AD value: ***H			Ambient Temp -Thermister (Frame Temp)	AD value: ***H
6	HUM_TEMP_DEN	Hum Sns	AD value: ***H	Temperature-Sns	AD value: ***H	DensityK-Sns	AD value: ***H	DensityYMC-Sns	AD value: ***H
7	BELT_T	Belt-Thermister	AD value: ***H						
8	ID UP/DOWN							ID Up/Down Sns	H:Down L:Up
9	RFID COLOR L*2	TAG-K present/absent	UID: ***H	TAG-Y present/absent	UID: ***H	TAG-M present/absent	UID: ***H	TAG-C present/absent	UID: ***H
10	F-RL SL BL DT-DC*1								
11	T1 PE_PNE_CVO	1st-Paper-End Sns	H:Paper out L:Paper present						
12	T1 CASSETTE SIZE*1								
13	T2 PE_PNE_CVO_CA	2nd-Paper-End Sns	H:Paper out L:Paper present					1st-Cassette-Sns*3	H:Cassette present L:Cassette absent
14	T2 HOP_LF_FED					2nd-Feed Sns	H:Paper out L:Paper present		
15	T2 CASSETTE SIZE*1								
16	DUP IN_RA_FNT	Dup-In Sns	H:Paper out L:Paper present	Dup-Rear Sns	H:Paper out L:Paper present	Dup-Front Sns	H:Paper out L:Paper present		
17	DUP SK_CVO	Dup-Stack Sns(In2)	H:Paper out L:Paper present	Dup-Cover Open Sns	H:Close L:Open				

Motor clutch test

This self-diagnosis is practiced to test motors and clutches.

1. Activate the self-diagnostic mode (Level 1), press and hold down the MENU+ or MENU key, until "MOTOR & CLUTCH TEST" appears in the upper line of the display section, and then, press the ENTER key.(The MENU+ key increments a test item, and the MENU- key decrements a test item.)
2. Press and hold down the MENU+ or MENU- key, until the item corresponding to the unit of Table 6-4 now to be tested appears in the lower line of the display section.(The MENU+ key increments a test item, and the MENU- key decrements a test item.)



3. Pressing the ENTER key initiates the test, causing the unit name to start blinking, and the corresponding unit is driven for ten seconds (See Figure 6-2).

Note! After the unit has been driven for ten seconds, the status of Item 2.above is restored. The unit is driven again when the corresponding switch is pressed again. The clutch solenoid repeats ON/OFF operations in a

normal printing drive. (Clutches that cannot be driven individually due to their structural reason are driven along with their motors.) * "ID UP/DOWN" continues being driven, until the "CANCEL" key is depressed.

The motor keeps rotating if holding down the [ENTER] key for two seconds when determining the choice of the motor. (The motor stops when the [CANCEL] key is pressed.)

4. Pressing the CANCEL key stops the drive of the corresponding unit. (The indication of the corresponding unit will be maintained.)

5. Repeat Items 2 to 4, as needed.

6. To end the test, press the BACK key. (The status of Item 1 will be restored).

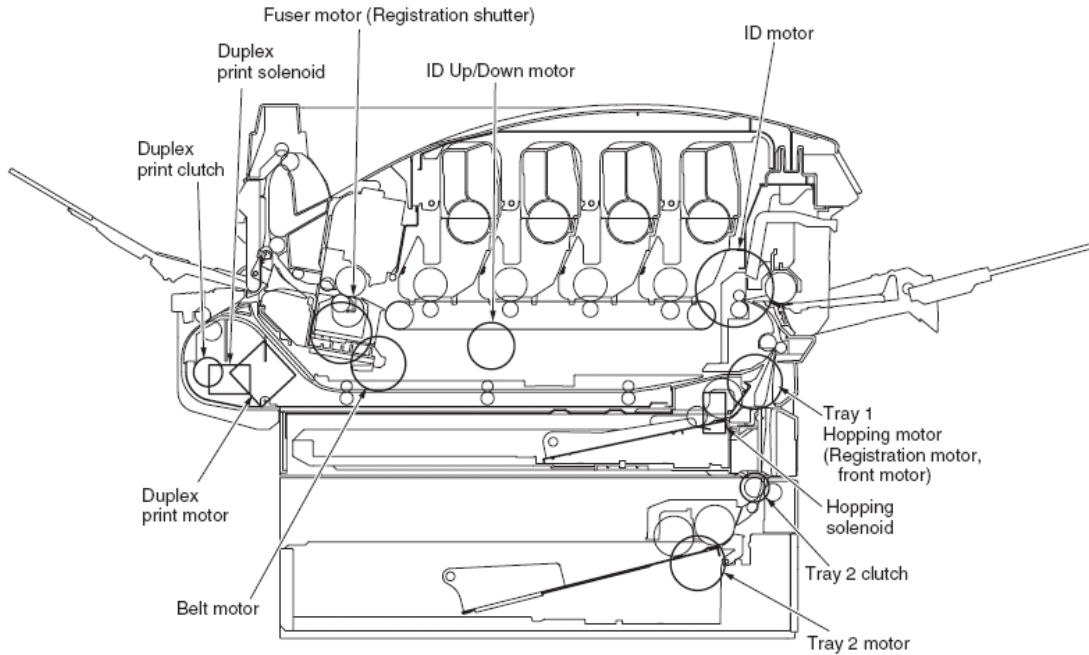


Figure 6-2

Unit Name	Description of Control for Unit Driving
ID motor	To be driven with all the IDs (Black/yellow/magenta/cyan) removed.
Belt motor	To be driven with all the IDs (Black/yellow/magenta/cyan) removed.
Fuser motor	-
Registration motor	(Tray 1 hopping motor only is driven.)
Tray 1 hopping motor	To be driven with Cassette 1 removed. (Hopping solenoid driven simultaneously)
Front motor	(Tray 1 hopping motor rotates in reverse.)
Color registration (Registration) shutter	(Fuser unit motor rotates in reverse.)
Duplex print solenoid (EXIT)	-
Duplex print motor	-
Duplex print clutch	-
Tray 2 motor	To be driven with Cassette 2 removed.
Tray 2 clutch	-
ID UP/DOWN	In closed state of TOP/FRONT cover
LV FAN TEST	-
FUSER FAN TEST	-

Table 6-4

Test print

This self-diagnosis is practiced to print test patterns built in PU. Other test patterns are stored in the controller. This print should not be used to check the print quality. To diagnose abnormal images, follow Section 7.

1. Activate the self-diagnostic mode (Level 1), press and hold down the MENU+ or MENU- key, until "TEST PRINT" appears in the upper line of the display section, and then, press the ENTER key. (The MENU+ key increments a test item, and the MENU- key decrements a test item.)
2. The lower line of the display section shows the set items that are applicable to the test print only. Press and hold down the MENU+ or MENU- key, until the corresponding item appears, and press the ENTER key. (The MENU+ key increments a test item, while the MENU- key decrements a test item.) (If the set values of the items are not necessary (Default settings), go on to Item 5.)
3. When the ENTER key is depressed after holding down the MENU+ or MENU- key in Item 2 above, a set item is displayed in the upper line of the display section, and a set value, in the lower line. Pressing the MENU+ key increments the set value, and pressing the MENU- key decrements it (the set value finally displayed will be applied). Pressing the BACK key defines the value and restores Item 2. Repeat Item 3, as needed.

TEST PATTERN
1

Indication	Set value	Function
PRINT EXECUTE	-	Pressing the ENTER key initiates print and pressing the CANCEL key ends the print (Page by page).
TEST PATTERN	0	0: Blank sheet print 1 - 7: See the following page (Pattern print). 8 - 15: Blank sheet print
CASSETTE	TRAY1	Select the paper feed source. If TRAY 2 is not mounted, indication of TRAY2 will not be produced.
	TRAY2	
	MFP	
PAGE	0000	Setup of the number of test-print pages
COLOR	ON	Select between Color print or Monochrome print. * If ON is specified, ON/OFF needs to be specified for each color.
	OFF	
DUPLEX (Indicated only when Duplex is mounted)	2 PAGES STACK	Two-sided print is conducted with two-page stack. OFF is selected for two-sided print. Two-sided print is conducted with one-page stack.
	OFF	
	1 PAGE STACK	
MONO SPEED	DEFAULT	The monochrome print speed is set. LOW:28ppm HIGH:32ppm DEFAULT:24ppm
	LOW	
	HIGH	
COLOR SPEED	DEFAULT	The color print speed is set. LOW:24ppm HIGH:26ppm DEFAULT:20ppm
	LOW	
	HIGH	

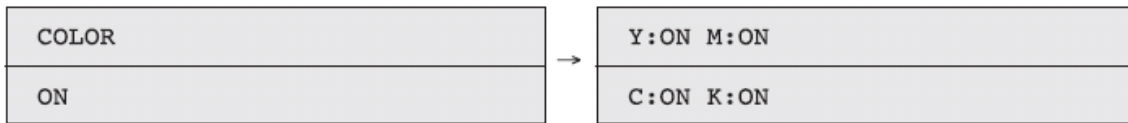
*Shaded areas are default settings

Notes!

PAGE setup - After shifting the digit of the set value with the MENU+ key or MENU- key, press the ONLINE key. The set value will be incremented. Pressing the CANCEL key decrements it.

COLOR setup - Pressing the ENTER key after selecting ON causes the data indicated below to appear on the panel.

Print setup for each color - Pressing the MENU+ key or MENU- key activates shifting. Pressing the ONLINE key or CANCEL key switches between ON and OFF. Pressing the BACK key restores the original panel indications.



4. When the ENTER key is depressed while "PRINT EXECUTE" remains displayed in the lower line of the display section in the operation of Item 2., the test print takes place with the set values specified in Items 2 and 3. Pressing the CANCEL key stops the test print. If any of the alarms indicated in the Detail column of the table below is detected when test print is started or during execution, it will be indicated on the panel, and the test print will be interrupted. (For details on the errors, see Subsection 6.3.2.14 Details of panel indications. In the case of a PU test print, the comments displayed will be different.)

Panel Display	Detail
PAPER END SELECTED TRAY	The tray is out of paper.
DUPLEX UNIT IS NOT INSTALLED	A duplex unit is not installed.
SELECTED TRAY IS NOT INSTALLED	The selected tray is not installed.
REMOVE PAPER OUT OF DUPLEX	An internal error of the duplex unit occurred.

Print Patterns (Should not be used for checking print quality.) Patterns 0 and 8 to 15 are Blank sheet print



Pattern 1



Pattern 2



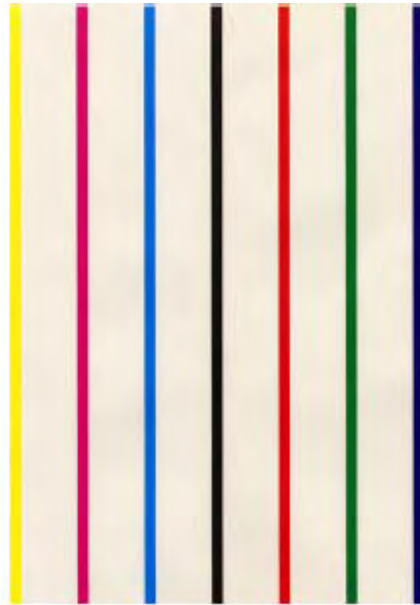
Pattern 3



Pattern 4



Pattern 5



Pattern 6



Pattern 7

Note! If the solid print (Pattern 7) available among the local print functions is conducted with 100% of each color, offset will take place. To prevent this offset, it will be necessary to make the print setup of each color as specified in 3 of Subsection 6.3.2.5 and to limit the colors to be printed simultaneously to two or less when conducting the solid print No. 7.

- When print is executed, the following message is displayed:

P=***
W=***

P: Number of test-print pages (Unit: sheets) **W:** Print wait time (Unit: seconds)

- Pressing the MENU+ key switches over the indication.

T=*** U=*** [###]
H=*** %L=*** [###]

U: *** = Measured value of upper heater temperature [Unit: °C] [###] = Target temperature for print execution [Unit: °C]
L: *** = Measured value of lower thermistor [Unit: °C] [###] = AD value of lower thermistor reading [Unit: HEX]
T: Measured value of environmental temperature [Unit: °C]
H: Measured value of environmental humidity [Unit: %]

- Pressing the MENU+ key switches over the indication.

KTR=*.* YTR=*.*
MTR=*.* CTR=*.*

YTR, MTR, CTR and **KTR** denote the transfer voltage set values of the respective colors (Unit: KV).

- Pressing the MENU+ key switches over the indication.

KR=*.* YR=*.*
MR=*.* CR=*.*

KR: BLACK transfer roller resistance value [Unit: uA] **YR:** YELLOW transfer roller resistance value [Unit: uA]
MR: MAGENTA transfer roller resistance value [Unit: uA] **CR:** CYAN transfer roller resistance value [Unit: uA]

- Pressing the MENU+ key switches over the indication.

ETMP=*** UTMP=***
REG=**** EXT=***

ETMP: Hopping motor constant-speed correction parameter (Environmental temperature)[Unit: DEC]
UTMP: Fuser motor constant-speed correction parameter (Target fuser temperature) [Unit:DEC]
REG: Hopping motor constant-speed timer value (I/O set value)[Unit: HEX]
EXT: Fuser motor constant-speed timer value (I/O set value)[Unit: HEX]

- Pressing the MENU+ key switches over the indication.

KID=**** YID=****
MID=**** CID=****

KID, YID, MID and **CID** denote the constant-speed timer values of the respective ID motors (I/O set values) [Unit: HEX].

- Pressing the MENU+ key switches over the indication.

BELT=****
FRM[***] (xxx)

BELT: Constant speed timer value of belt motor (I/O set value) [Unit: HEX]
FRM: [***] = AD value of frame thermistor reading [Unit: HEX](xxx) = Frame temperature [Unit: °C]

- Pressing the MENU+ key switches over the indication.

HT:k**y**m**c**
DB:k**y**m**c**

HT: Fuser temperature setup table ID No. [Unit: HEX]
DB: Development voltage setup table ID No. [Unit: HEX]

- Pressing the MENU+ key switches over the indication.

TR1:k**y**m**c**
TR2:k**y**m**c**

TR1: Transfer voltage parameter VTR1 table ID No. [Unit: HEX]
TR2: Transfer voltage parameter VTR2 table ID No. [Unit: HEX]

- Pressing the MENU+ key switches over the indication.

TROFF:**
BELT xxx (***)

TROFF: Transfer OFF voltage setup table ID No. [Unit: HEX]
BELT: *** = Belt temperature [Unit: °C] xxx = AD value of belt thermistor reading [Unit: HEX]

5. Repeat Items 2 to 4, as needed.

6. Press the CANCEL key to terminate the test. (Status of Item 1 restored)

Color registration adjustment test

This self-diagnosis is practiced to conduct testing on the color registration function of the printer and to locate the cause of color drift. Restore the normal operation of the printer by following the troubleshooting procedure if any error is issued during the color registration test.

1. Activate the self-diagnostic (Level 1) mode, and press and hold down the [MENU+] key or [MENU-] key, until the following message appears:

REG ADJUST TEST

2. Pressing the [ENTER] key causes the following message to appear. Press and hold down the [MENU+] key or [MENU-] key, until the intended item is displayed.

REG ADJUST TEST
REG ADJ EXECUTE

3. Pressing the [ENTER] key executes the test of the item currently displayed on the panel.

<<REG ADJ RESULT is executed>>

Color registration adjustment test is conducted. ([READY] light blinking)
When the test ends, the test result (OK or error name) appears in the upper line of the display section, and **** RESULT, in the lower line.

OK
REG ADJ RESULT

<< BLT REFLECT TEST is executed>>

OK
BLT REFLECT RSLT

4. Repeat Items 2 and 3, as needed.
5. Press the [BACK] key to terminate the test. (Status of Item 1 restored)

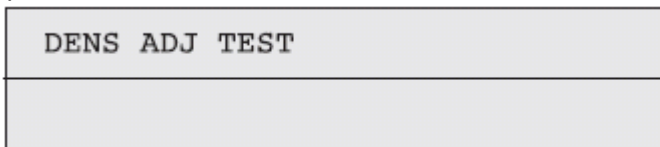
Color registration adjustment test items

Display	Function
REG ADJ EXECUTE	Execution of Color registration adjustment
REG ADJ RESULT	Viewing of the Color registration adjustment result
BLT REFLECT TEST	Execution of the judgment of good or bad Color registration adjustment belt reflectivity
BLT REFLECT RSLT	Viewing of the result of judgment of good or bad Color registration adjustment belt reflectivity

Print density adjustment test

This self-diagnosis is practiced to conduct testing on the Print density adjustment function of the printer and to view the execution result. This test is executed also to judge whether the Print density adjustment mechanism is normal or abnormal.

1. Activate the self-diagnostic (Level 1) mode, and press and hold down the [MENU+] key or [MENU-] key, until the following message appears:



2. Pressing the [ENTER] key causes the following message to appear. Press and hold down the [MENU+] key or [MENU-] key, until the intended item is displayed.

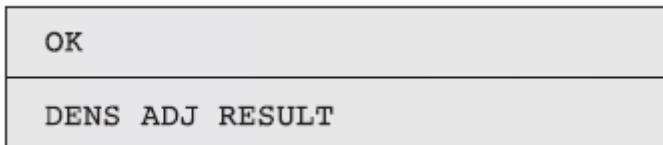


3. Pressing the [ENTER] key executes the test of the item currently displayed on the panel.

<< DENS ADJ EXECUTE is executed >>

A. A density correction test is conducted. ([READY] light blinking)

B. When the test ends, the test result (OK or error name) appears in the upper line of the display section, and **** RESULT, in the lower line.



4. Repeat Item 3, as needed.

5. Press the [BACK] key to terminate the test. (Status of Item 1 restored)

Density Correction Test Items

Display	Function
DENS ADJ EXECUTE	Execution of Print density adjustment
DENS ADJ PAR-SET	Indication is given, without functionality.
DENS ADJ RESULT	Viewing of Print density adjustment result
AUTO CALIBRATION	Automatic setting of Print density adjustment value

Fax User Settings

(For further information see CX2032 User's Guide page 38)

ITEM	DESCRIPTION OR CHOICE
Phone Book	Edit speed dial! Edit group dial! Delete speed dial! Delete group dial! Delete All! Append phone #: OFF/On
REPORTS: Activity Report Transmission Report Transmission Report Broadcast Report	Select to print activity report. Select to print transmission report. Yes / Error Only / No. Select to print broadcast report.
Cancel Fax Jobs	Select to cancel fax jobs stored in the MFP.s memory.
SET UP FAX: Station ID Fit to page Detect dial tone* Detect busy tone* Re-dial* Redial interval* Ring response Dial prefix Manual receive ECM mode Speaker volume	Id #: Enter MFP ID number. Station #: Enter MFP telephone number. Enable / Disable. Enable / Disable . Enable / Disable. 0 , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. 0 , 1min , 2min, 3min, 4min, 5min, 6min. 1 ring , 5secs, 10secs, 15secs, 20secs. If connecting via a PBX line, enter the access number to obtain an external line. Enable / Disable . Enable / Disable. 0 , 1, 2, 3.

Fax Reports / Test Pages

ITEM	DESCRIPTION OR CHOICE
Menu Map	Select to print menu map.
Printer Demo Page	Select to print a sample page.
MFP Usage report	Select to print usage information.
Supplies Status Report	Select to print information on the consumables remaining.

Fax Maintenance Menu (Service Mode)

To access the fax maintenance (Service Mode) menu depress the #2 key while powering on the machine. The following screen will appear:



This will allow Service Mode access in the regular user printer menu. To de-activate the service mode access cycle the power off / on.

Getting to the Service Mode

Select the "Menu" key Machine will display "Getting Printer Info." And then the following selections will appear:

User Menus

↓
Information
↓
Printer Menu
↓
Network Settings
↓
Mail Server
↓

Fax Settings → OK → Phone Book

↓ Reports
↓ Cancel Fax Jobs
↓ Setup Fax
↓ **Service Mode** → OK
↓ Report Print
↓ Management

(default settings are in bold)

Activity Report: Enable / Disable
Fax Header: Enable / Disable
Attenuator: 10db (select 0 thru 15db)
MF Attenuator: 8db (select 0 thru 15db)
Transmission Rate: 33.6kbs (select 28.8/14.4/9.6/4.8)
Monitor Control: Disable / Type 1 / Type 2
Pulse Dial Rate: 10pps / 20pps
Pulse Make Ratio: 40% / 33%
Tone Duration: 100ms / 75ms / 85ms
Calling Timer: 60
Tone Send Test: 2100hz / 1100hz / 1850hz / 1650hz
Pulse Send Test: N/A
Modem Signal Test: v.34(33.6)
v.34(28.8)/v.17(14.4)/v.17(12.0)
v.17(9.6)/v.17(7.2)/v.29(9.6)/v.29(7.2)
v.27(4.8)/v.27(2.4)/v.21(0.3)/v.21(0.3)
Tone / Pulse: Tone

Troubleshooting

Basic Troubleshooting Procedure

The following tables provide detailed troubleshooting information.

Table 8.7.1	The LCD does not display.
Table 8.7.2	Printer does not react.
Table 8.7.3	Optical path dirty or hardware problem.
Table 8.7.4	Printer does not print.
Table 8.7.5	Image not clear.
Table 8.7.6	Noise generated.
Table 8.7.7	LCD does not show message after command.
Table 8.7.8	CX2032MFP is not connected to the network
Table 8.7.9	CX2032MFP cannot send email

8.7.2.1 LCD does not display

Table 8.7.1

Cause	Relevant Unit	Check Method	Maintenance Method
Unplugged from outlet	None	Visual check	Insert the AC plug into the outlet
DC power unplugged from unit	None	Visual check	Insert the DC power adapter cable into the unit
AC voltage failure	None	AC outlet voltage check	None
Power adapter output voltage failure	Power unit	Output voltage (+24v) check	Replace the power unit
PCB failure	Main control PCB	Tester check (+24V, GND)	Remove the cause or replace the PCB
LCD module main board connection failure	LCD module main board	Visual check	Plug the connector and secure it firmly

8.7.2.2 Printer does not react

Table 8.7.2

Cause	Relevant Unit	Check Method	Maintenance Method
Printer cable failure	Printer cable	Visual check	Secure printer cable firmly or replace the printer cable
Printer link failure	Main PCB	Visual check	Replace the PCB
	Printer paper jam	Visual check	Remove paper
	Printer paper empty	Visual check	Insert paper
	Printer problem	Visual check	See printer manual
	Printer busy	Visual check	Wait till printer ready

8.7.2.3 Scanning is not performed

Table 8.7.3

Cause	Relevant Unit	Check Method	Maintenance Method
Scanner cable failure	Scanner cable	Visual check	Attach the scanner cable
Scanner link failure	Main PCB	Visual check	Replace the PCB
	Scan Module		Replace the Scan Module

8.7.2.4 Printer does not print

Table 8.7.4

Cause	Relevant Unit	Check Method	Maintenance Method
Printer select wrong	Printer	Visual check	Make sure the printer information on the LCD display is correct.
Paper size incorrect	Paper tray	Visual check	Replace paper tray (The paper size being selected is inconsistent between the printer & the CX2032MFP).
Printer problem		Visual check	Check printer

8.7.2.5 Image unclear

Table 8.7.5

Cause	Relevant Unit	Check Method	Maintenance Method
Lamp too dark	Lamp	Visual check	Replace the lamp
Dirt on flatbed glass	Flatbed glass	Visual check	Clean the flatbed glass with isopropyl alcohol
Printer toner low	Printer toner	Visual check	Check printer toner or replace the toner
Printer memory not enough	Printer	Visual check	Add printer memory

8.7.2.6 Noise generated

Table 8.7.6

Cause	Relevant Unit	Check Method	Maintenance Method
Motor unit failure	Motor unit	Replace the motor unit	Replace the motor
Main control PCB failure	Main control PCB	Replace the main control PCB	Replace the main control PCB
Scanning module failure	Scanning module	Check scanning module shakiness	Replace the scanning module
Dirt on rail	None	Visual check	Clean the rail with oil

8.7.2.7 LCD does not show message after command

Table 8.7.7

Cause	Maintenance Method
LCD module cable failure	Attach the LCD module cable and secure it firmly
LCD problem	Replace the LCD module
Push button failure	Replace the LCD module

8.7.2.8 CX2032MFP is not connected to the network

Table 8.7.8

Cause	Maintenance Method
RJ-45 connector is not plugged in	Plug the connector in
Network cable is damaged	Replace a good one
IP address is invalid	Ask MIS for a valid address
Subnet Mask is invalid	Ask MIS for a valid value
Gateway IP is invalid	Ask MIS for a valid address

8.7.2.9 CX2032MFP cannot send email

Table 8.7.9

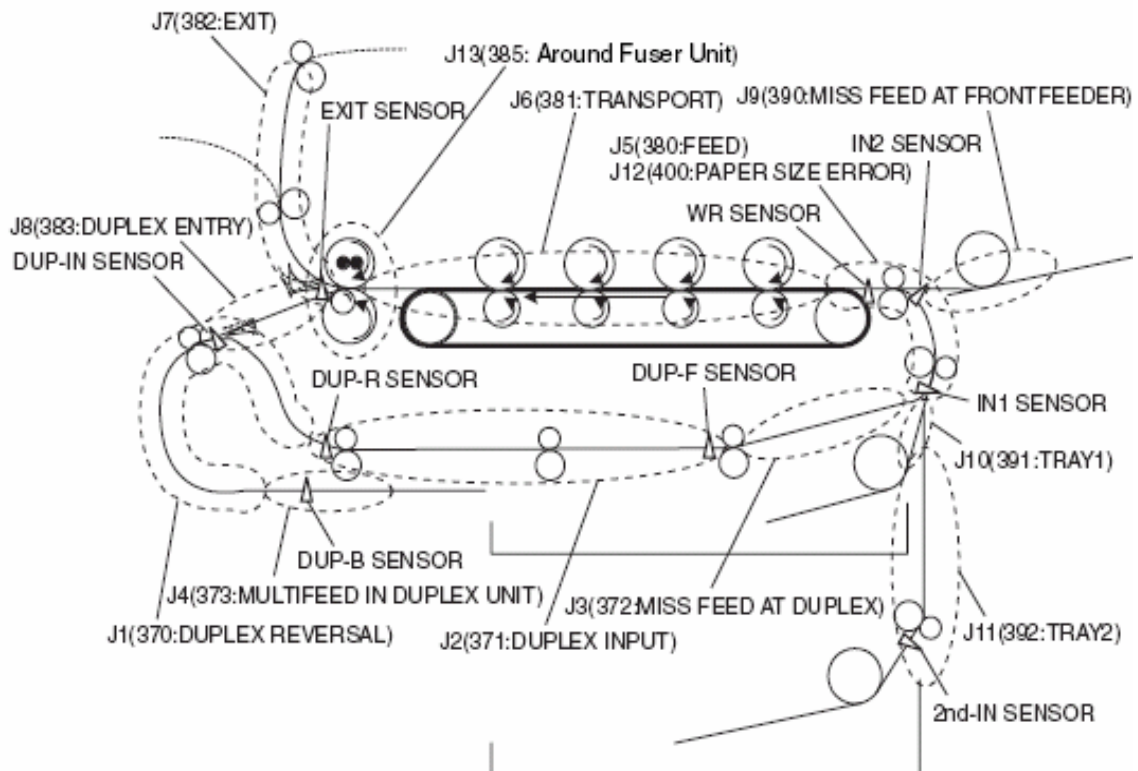
Cause	Maintenance Method
SMTP server IP is wrong	Ask MIS for a correct SMTP server address
"From" address is wrong	Check "From" email account
"To" address is wrong	Check "To" email address
Other causes	Please refer to the following error code table

Paper Feed Troubleshooting

Error number and jam location at paper jam

Error No.	Name	Reference	Corresponding Sensor	Jam Release Method
370	Duplex reversal	J1	DUP-IN, DUP-R	Jam release method ③
371	Duplex input	J2	DUP-F, DUP-R	Jam release method ③
372	Feed error at Duplex	J3	IN1	Jam release method ①
373	Multi-feed in Duplex Unit	J4	DUP-B	Jam release method ③
380	Feed	J5	IN2, WR	Jam release method ①
381	Transport	J6	IN1, IN2, WR, EXIT	Jam release method ②
382	Exit	J7	EXIT	Jam release method ②
383	Duplex entry	J8	EXIT, DUP-IN, DUP-R	Jam release method ②
385	Around Fuser Unit	J13	Fuser thermistor	Jam release method ②
390	Feed error at front feeder	J9	IN2, WR	Jam release method ①
391	Tray1	J10	IN1	Jam release method ①, ④
392	Tray2	J11	2nd-IN	Jam release method ④
400	Paper size error	J12	IN1	Jam release method ①

Diagram of jam location



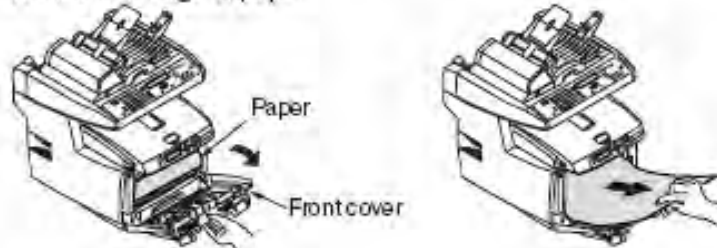
JAM RELEASE METHOD

Removing the jammed paper

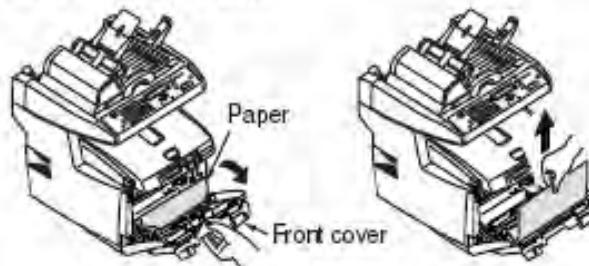
Front cover section (Codes: 372, 380, 390, 391, 400)

Open the front cover, and if the leading end or trailing end of the jammed paper is visible, pull out the paper slowly. If code 400 is issued, the paper may be unloaded automatically. If that is the case, opening and closing of the cover will clear the error.

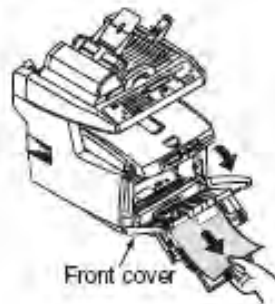
If you see the rear edge of paper



If you see the top edge of paper



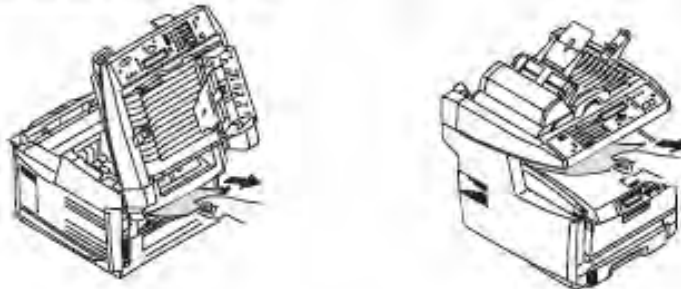
If you do not see the top edge of paper



Paper Exit Part (Code: 382)



Pull out the jammed paper from the exit slowly.

Note! Even when paper is jammed in the delivery section, pull out the paper to the inside of the printer, if it is visible under the top cover. Forcing the paper out toward the rear could damage the fuser unit.



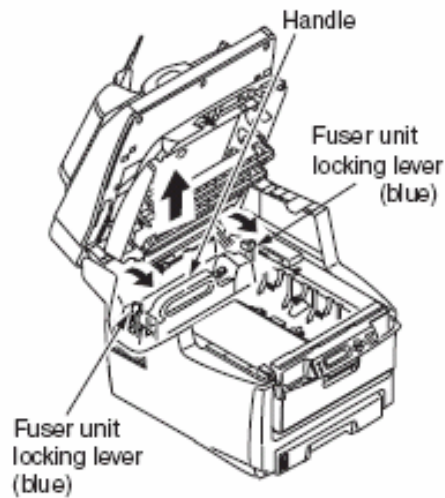
JAM RELEASE METHOD

FUSER unit section (Codes: 381, 382, 383,385)

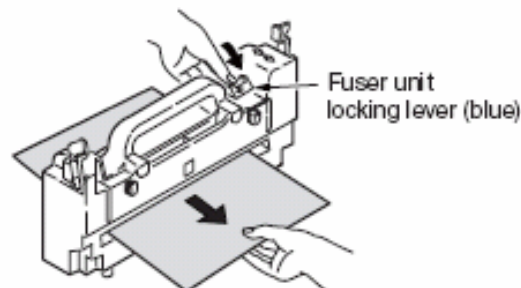
 Caution	Possible to get burned.	
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The fuser unit can be very hot. Be careful not to touch it. If the unit remains hot, do not hasten to work, but wait, until after the unit has cooled down a little, and then remove the paper.

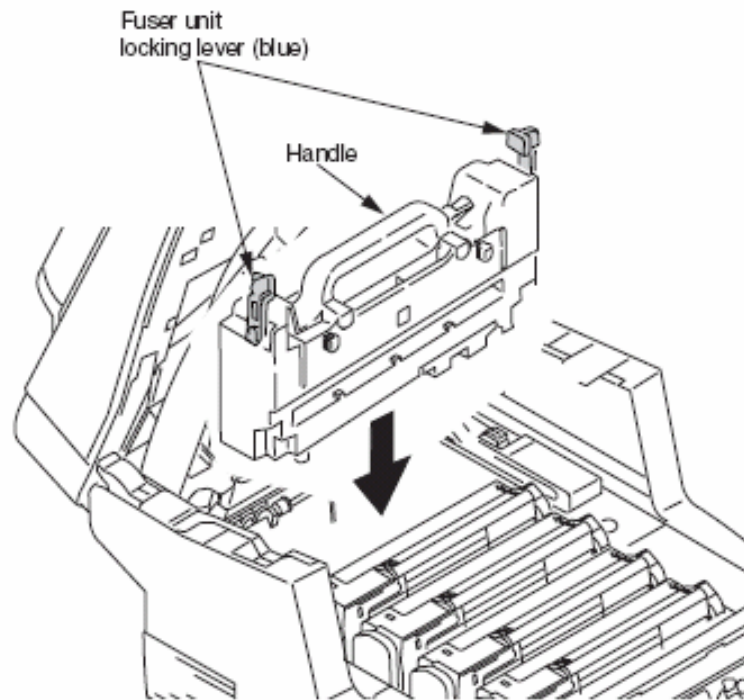
- (1) Raise the lock levers (2, blue) of the fuser unit in the direction of the arrows.
- (2) Take out the fuser unit holding it by the handle, and place it on a flat table.



- (3) While pushing the lever (Blue) of the fuser unit in the direction of the arrow, pull out the jammed paper always in the direction of the arrow (forward).



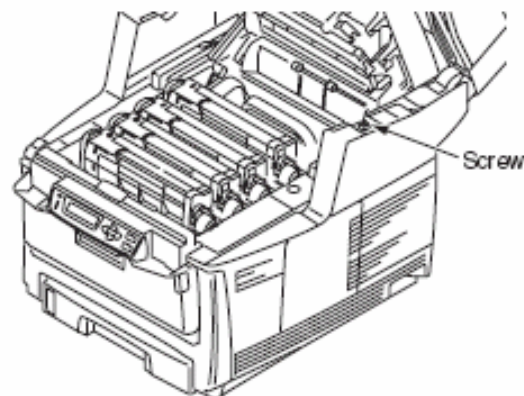
- (4) Hold the fuser unit again by the handle and put it gently back in the printer.
- (5) Push the lock levers (2, blue) of the fuser unit toward the rear, and fasten the unit



Note! After a jammed paper has been removed from the fuser unit section, unfixed toner may still remain inside the fuser unit. Therefore, execute the Menu Map print (Subsection 3.6), or print blank paper several times.

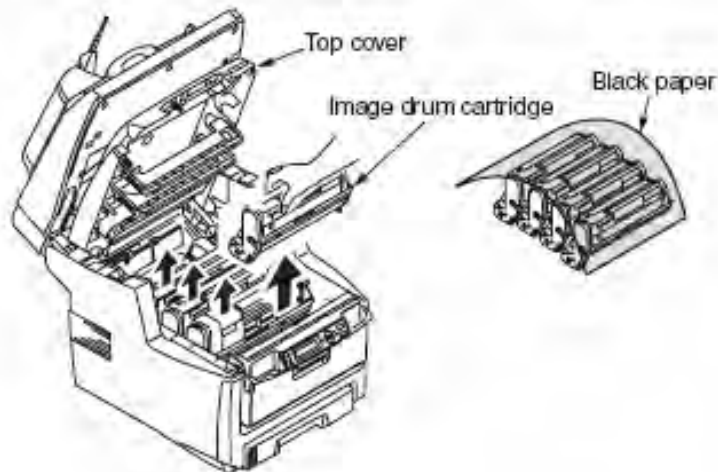
If the paper jam error is not cleared even after the jammed paper has been removed, remove the other jammed paper by the procedure described below.

- (1) Discharge static electricity by touching the screw by hand.



- (2) Take out the image drum cartridges (4), and place them on a flat table.
- (3) Cover the image drum cartridges thus taken out with a black sheet of paper.

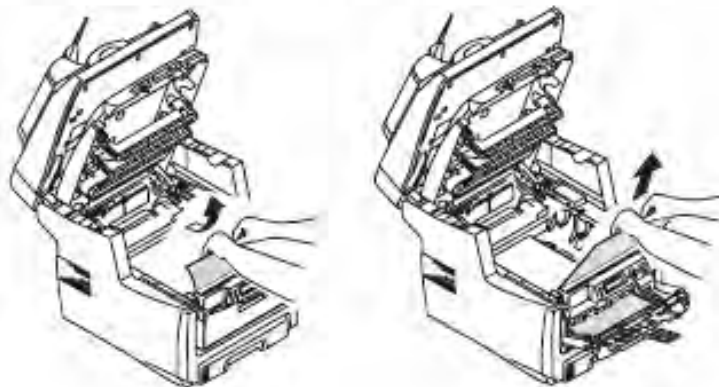
- Note!**
- The image drums (green tubular parts) are extremely vulnerable. Use good caution in handling them.
 - Do not expose the image drum cartridges to direct sun or intense light (over approximately 1500 luxes). Even under the room lighting, do not leave them exposed for five minutes or longer.



- (4) Pull out the jammed paper slowly.

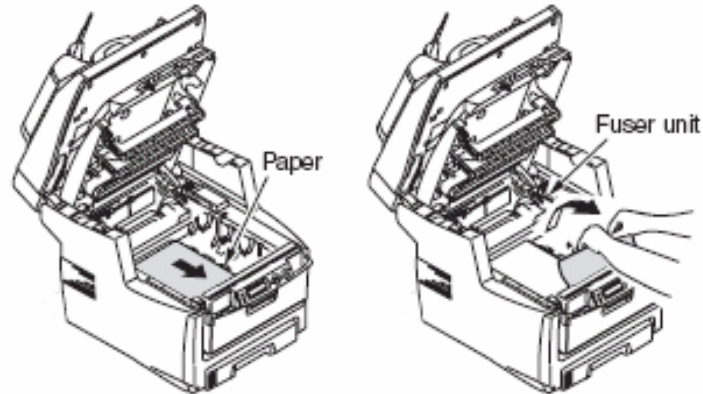
When the leading end of the paper is visible

Pull out the paper slowly to the inside of the printer.



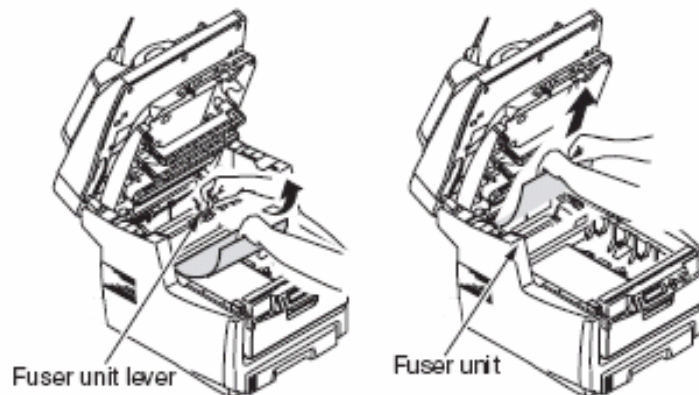
When neither the leading end nor the trailing end is visible

First slide the jammed paper into the direction of the arrow, and then, pull it out slowly.



When the trailing end of the paper is visible

While pushing the lever of the fuser unit into the direction of the arrow, pull out the jammed paper slowly.

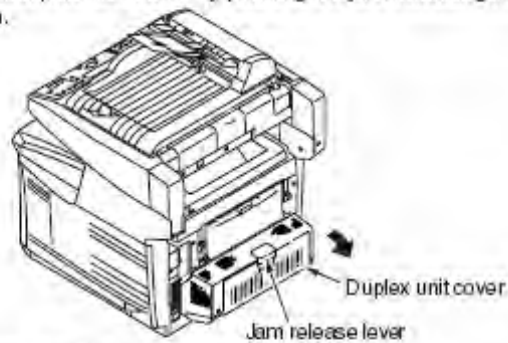


- (5) Put the image drum cartridges back in place.

JAM RELEASE METHOD

Two-sided print unit section (Optional)(Codes: 370, 371, 373)

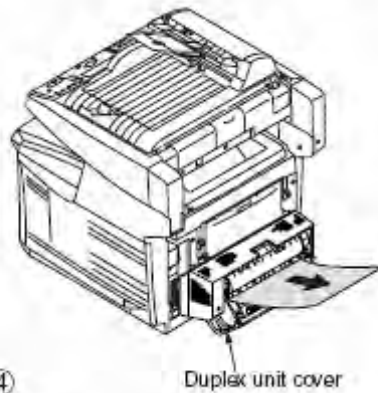
- (1) Open the two-sided print unit cover by pushing the jam releasing lever of the two-sided print unit section.



- (2) Take out the jammed paper.

If the paper is not visible, close the two-sided print unit cover briefly, and the paper will be unloaded automatically.

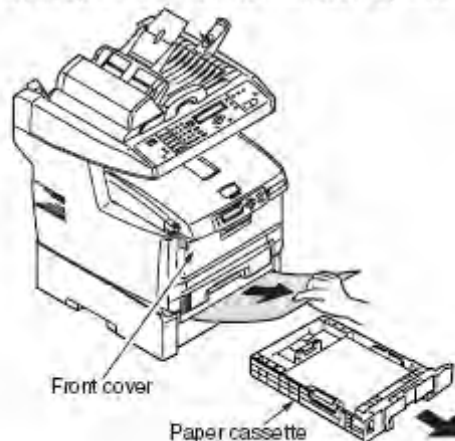
Note! If the two-sided print unit needs to be drawn out, turn off the power of the printer.



JAM RELEASE METHOD ④

Second tray unit section (Optional)(Codes: 391, 392)

- (1) Draw out the paper cassette of the second tray unit section, and remove the jammed paper.
- (2) After removing the paper, open and close the front cover by holding the handle under the operator panel.



Paper Feed Jam(Error 391:1st Tray)

Paper feed jam occurs right after turning on the power (1st Tray)

Confirmation Items	Confirmation Tasks	Action at NG
(3-1-1) Check of state of running route		
Paper running route in front unit	Open the front cover, and check to see if there is paper jammed on the running route.	Remove the jammed paper
(3-1-2) Check of state of mechanical parts		
Check the sensor levers of inlet sensors 1 and 2.	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the sensor lever with a normal one.
(3-1-3) Check of electrical parts		
Check the state of sensor signal detection.	Use the SWITCH SCAN function of the Maintenance Menu to check to see if the sensor signal is detected normally.	Replace the PU PCB (PRF PCB), front sensor PCB (RSF PCB) or the connection cord.
Check the output levels of inlet sensors 1 and 2	Check the following signals through the FSNS connector of the PU PCB (PRF PCB). Pin 4: Inlet sensor 1 Pin 3: Inlet sensor 2 Confirm that the above signal levels vary as the sensor levers are actuated.	Replace the front sensor PCB (RSF PCB).
Check the power supply of the front sensor PCB (RSF PCB).	Check the 5-V power through the CN connector of the front sensor PCB (RSF PCB). Pin 5: 5V power Pin 1: 0VL	Replace the connection cord.

Paper feed jam occurs right after paper feeding starts (1st Tray)

Confirmation Items	Confirmation Tasks	Action at NG
(3-2-1) Check of state of running route		
Paper running route in front unit	Check to see if there is paper jammed on the running route.	Remove the jammed paper.
(3-2-2) Check of state of mechanical parts		
Check the sensor levers of inlet sensors 1 and 2.	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the sensor lever with a normal one.
(3-2-3) Check of operating state of motors		
Feed motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the feed motor operates normally.	Replace the PU PCB (PRF PCB) or feed motor.
Feed motor driver	Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the connector side: Several Mohms between pin 1 and FG Several Mohms between pin 2 and FG Several Mohms between pin 3 and FG Several Mohms between pin 4 and FG	Replace the PU PCB (PRF PCB).

Confirmation Items	Confirmation Tasks	Action at NG
(3-2-4) Check of connections		
Feed motor drive cord	Check the connected state of the cord. Check for incomplete connection or skew insertion, and check the cord visually to see if it has any assembling problem.	Redo the connection properly. Replace the cord with a normal one.
Feed motor drive cord	Check to make sure that the cord is not caught under any assembled part of the printer. Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the cord side: Short-circuiting between pin 1 and FG Short-circuiting between pin 2 and FG Short-circuiting between pin 3 and FG Short-circuiting between pin 4 and FG	Replace the cord, and correct the assembling to make it normal.
Feed motor	Confirm 3.5Ω of resistance is seen between 5pin-6pin, and 7pin-8pin each at the cord side after pulling out HOPKID connector of the PU board (PRF PCB).	Replace the feed motor.
(3-2-5) Check of operating state of solenoid		
Feed solenoid	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the feed solenoid operates normally. Make this checking with the right side plate detached, so that the solenoid is visible.	Replace the PU PCB (PRF PCB) or feed solenoid.
Feed solenoid	Check to see if there is anything that interferes with the moving part of the solenoid (cord, etc.).	Correct the assembling of the printer to make it normal.
(3-2-6) Check of connections		
Feed solenoid cord	Check the connected state of the cord. Check for any incomplete connection or skew insertion, and check the cord visually if it has any assembling problem.	Correct the connection properly. Replace the cord with a normal one.
Feed solenoid cord	Check to make sure that the cord is not caught under any assembled part of the printer. Unplug the HSOL connector of the PU PCB (PRF PCB), and confirm the following on the cord side: Short-circuiting between pin 1 and FG Unplug the HSOL connector, and check to see if there is a resistance of approximately 89Ω between pin 1 and pin 2.	Replace the solenoid Assy, and redo the reassembling properly.

Paper Feed Jam (Error 390:Multi-purpose Tray)
 Paper feed jam occurs right after turning on the power (Multi-purpose Tray)

Confirmation Items	Confirmation Tasks	Action at NG
(4-1-1) Check of state of running route		
Paper running route in front unit	Check to see if there is paper jammed on the running route.	Remove the jammed paper.
(4-1-2) Check of state of mechanical parts		
Check the sensor levers of inlet sensor 2 and WR sensor.	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the sensor lever with a normal one.
(4-1-3) Check of electrical parts		
Check the state of sensor signal detection.	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signal is detected normally.	Replace the PU PCB (PRF PCB), front sensor PCB (RSF PCB) or the connection cord.
Check the output levels of inlet sensor 2 and WR sensor.	Check the following signals through the FSNS connector of the PU PCB (PRF PCB). Pin 2: WR sensor Pin 3: Inlet sensor 2 Confirm that the above signal levels vary as the sensor levers are actuated.	Replace the front sensor PCB (RSF PCB).
Check the power supply of the front sensor PCB (RSF PCB).	Check the 5-V power through the CN connector of the front sensor PCB (RSF PCB). Pin 5: 5-V power Pin 1: 0V	Replace the connection cord.

Paper feed jam occurs right after paper feeding starts (Multi-purpose Tray)

Confirmation Items	Confirmation Tasks	Action at NG
(4-2-1) Check of state of running route		
Paper running route in multi-purpose tray	Check to see if there is paper jammed on the running route.	Remove the jammed paper.
Sheet receive (reed) of multi-purpose tray	Check to see if the sheet receive is always located in the upper position.	Modify the tray, so that the sheet receive will be raised to the prescribed position.
(4-2-2) Confirm condition of mechanical parts		
Check sensor levers at the entrance sensor 2 and WR sensor lever	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the sensor lever with a normal one.
Planetary gears for paper feed control	Conduct the Motor and Clutch Test of the self-diagnostic mode, and actuate the feed motor (FRONT MOTOR) to make sure that both of the planetary gears rotate in their lower positions. (The planetary gear box is the right-hand white molded section, which is accessible by opening the front cover.)	Replace the planetary gear box.
Front cover	Check to see if the right and left locks of the front cover are properly locked.	Replace the front unit.
(4-2-3) Check of the operating state of motors		
Feed motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the feed motor operates normally.	Exchange a PU board (PRF PCB) or paper feed motor.
Feed motor driver	Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the connector side: Several Mohms between pin 1 and FG Several Mohms between pin 2 and FG Several Mohms between pin 3 and FG Several Mohms between pin 4 and FG	Exchange a PU board (PRF PCB)
(4-2-4) Check of connections		
Feed motor drive cord	Check a connection status of the cord. HOPKID connector of the PU board (PRF PCB). Check half connection, incomplete plug-in or installation status of the cord by eyes.	Correct the connection properly. Replace the cord with a normal one.
Cord to drive a paper feed motor	Check to make sure that the cord is not caught under any assembled part of the printer. Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the cord side: Short-circuiting between pin 1 and FG Short-circuiting between pin 2 and FG Short-circuiting between pin 3 and FG Short-circuiting between pin 4 and FG	Return the installation to a right status by exchanging a cord.
Feed motor	Confirm 3.5Ω of resistance is seen between 5pin-6pin, and 7pin-8pin each at the cord side after pulling out HOPKID connector of the PU board (PRF PCB).	Replace the feed motor

Paper Path Jam(Error 381)

Paper path jam occurs right after turning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(5-1-1) Check of state of running route		
Paper running route in front unit	Check to see if there is paper jammed on the running route.	Remove the jammed paper.
(5-1-2) Check of state of mechanical parts		
Check sensor levers of WR sensor	Confirm that there is no abnormality in the shape of the sensor lever and in the operation.	Replace the sensor lever with a normal one.
(5-1-3) Check of electrical parts		
Check the state of sensor signal detection.	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signal is detected normally.	Replace the PU PCB (PRF PCB), front sensor PCB (RSF PCB) or connection cord.
Check the output level of the WR sensor.	Check the following signal through the FSNS connector of the PU PCB (PRF PCB). Pin 2: WR sensor Confirm that the above signal level varies as the sensor lever is actuated.	Replace the front sensor PCB (RSF PCB).
Check the power supply of the front sensor PCB (RSF PCB).	Check 5V power with CN connector of a front sensor board (RSF PCB). 5pin:5V Power 1pin:0VL	Replace the connection cord.

Paper path jam occurs right after feeding paper

Confirmation Items	Confirmation Tasks	Action at NG
(5-2-1) Check of state of running route		
Paper running route on the belt	Remove the ID unit, and check to see if there is paper jammed on the running route.	Remove the jammed paper.
(5-2-2) Check of state of mechanical parts		
Check the sensor lever of the WR sensor	Check to see if the sensor lever demonstrates any abnormal shape or motion.	Replace the sensor lever with a normal one.
(5-2-3) Check of operating state of motors		
Feed motor, belt motor, ID motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the feed motor, belt motor and ID motor operate normally. Make this checking in the presence and absence of a load.	Replace the PU PCB (PRF PCB), if the feed motor, belt motor, ID-up motor or ID motor is faulty. Replace the feed motor, belt motor or ID motor. Replace the ID unit or belt unit. To use a new consumable on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
Feed motor driver, ID up-motor driver, and belt motor driver	Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the connector side: Several Mohms between pin 1 and FG Several Mohms between pin 2 and FG Several Mohms between pin 3 and FG Several Mohms between pin 4 and FG Unplug the BELTIDUP connector of the PU PCB (PRF PCB), and confirm the following on the connector side: Several Mohms between pin 1 and FG Several Mohms between pin 2 and FG Several Mohms between pin 3 and FG Several Mohms between pin 4 and FG Several Mohms between pin 5 and FG Several Mohms between pin 6 and FG Several Mohms between pin 7 and FG Several Mohms between pin 8 and FG	Replace the PU PCB (PRF PCB), if the feed motor, belt motor, ID up-motor or ID motor is faulty.

Confirmation Items	Confirmation Tasks	Action at NG
(5-2-4) Check of connections		
Feed motor drive cord, ID motor drive cord, belt motor, ID-up motor drive cord, fuser drive cord	Check the connected states of the cords. Check for any incomplete connection or skew insertion of the HOP connector, DCID connector, DCHEAT connector, BELTIDUP connector and RELAY connector of the PU PCB (PRF PCB). Check for any incomplete connection or skew insertion, and examine the cords visually to see if they have any assembling problem.	Correct the connection properly. Replace the cord with a normal one.
Feed motor drive cord, ID motor drive cord, belt motor, ID-up motor drive cord	Check to make sure that none of the cords is caught under any assembled part of the printer. Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the cord side: Short-circuiting between pin 1 and FG Short-circuiting between pin 2 and FG Short-circuiting between pin 3 and FG Short-circuiting between pin 4 and FG Unplug the BELTIDUP connector of the PU PCB (PRF PCB), and confirm the following on the cord side: Short-circuiting between pin 1 and FG Short-circuiting between pin 2 and FG Short-circuiting between pin 3 and FG Short-circuiting between pin 4 and FG Short-circuiting between pin 5 and FG Short-circuiting between pin 6 and FG Short-circuiting between pin 7 and FG Short-circuiting between pin 8 and FG	Replace the cord, and correct the assembling to make it normal.
Feed motor, belt motor, ID up-motor	Unplug the connectors of the respective PCBs, and confirm that there are the following resistances between the pins of the cord side: HOP connector of PU PCB (PRF PCB) Between pin 1 and pin 2: Approx. 3.5 Ω Between pin 3 and pin 4: Approx. 3.5 Ω BELTIDUP connector of PU PCB (PRF PCB) Between pin 1 and pin 2: Approx. 6 Ω Between pin 3 and pin 4: Approx. 6 Ω Between pin 5 and pin 6: Approx. 3.5 Ω Between pin 7 and pin 8: Approx. 3.5 Ω	Replace the feed motor, ID motor, or belt motor.

Paper path jam occurs in a path route

Confirmation Items	Confirmation Tasks	Action at NG
(5-3-1) Check of operating state of motors		
Feed motor, belt motor, ID motor, ID up/down-motor	<p>Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the feed motor, belt motor and ID motor operate normally.</p> <p>Make this checking in the presence and absence of a load.</p>	<p>Replace the PU PCB (PRF PCB), or replace the feed motor, belt motor, ID motor, or ID up-motor, or replace the ID unit or belt unit.</p> <p>To use a new ID unit or belt unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.</p>
Feed motor driver, belt motor driver, ID up-motor driver	<p>Unplug the HOP connector of the PU PCB (PRF PCB), and confirm the following on the connector side:</p> <ul style="list-style-type: none"> Several MΩ between pin 1 and FG Several MΩ between pin 2 and FG Several MΩ between pin 3 and FG Several MΩ between pin 4 and FG <p>Unplug the BELTIDUP connector of the PU PCB (PRF PCB), and confirm the following on the connector side:</p> <ul style="list-style-type: none"> Several MΩ between pin 1 and FG Several MΩ between pin 2 and FG Several MΩ between pin 3 and FG Several MΩ between pin 4 and FG Several MΩ between pin 5 and FG Several MΩ between pin 6 and FG Several MΩ between pin 7 and FG Several MΩ between pin 8 and FG 	<p>Replace the PU PCB (PRF PCB), if the feed motor, belt motor or D motor is faulty, or replace the motor driver PCB if the belt motor is faulty.</p>

Paper path jam occurs right after reaching the fuser unit

Confirmation Items	Confirmation Tasks	Action at NG
(5-4-1) Check of operating state of motors		
Fuser motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the fuser motor operates normally. Make this checking in the presence and absence of a load.	Replace the PU PCB (PRF PCB). Replace the fuser motor. Replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(5-4-2) Temperature control of rotating roller		
Heat roller detection temperature	Check the detection temperature of the heat rollers in the self-diagnostic mode. Check to see if an abnormally low or high temperature is detected.	Replace the fuser unit, or replace the junction PCB (PRY PCB) or PU PCB (PRF PCB). To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(5-4-3) Check of installed state of fuser unit		
Fuser unit	Check to see if the fuser unit is properly installed (whether it is pushed in to the lowest position).	Install the unit properly in the printer.

Paper Exit Jam(Error 382)

Paper exit jam occurs right after tuning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(6-1-1) Check of state of running route		
Paper running route in delivery section	Check to see if there is paper jammed on the running route.	Remove the jammed paper.
(6-1-2) Check of state of mechanical parts		
Check the sensor lever of the delivery sensor	Check to see if the sensor lever demonstrates any abnormal shape or motion.	Replace the sensor lever with a normal one.
(6-1-3) Check of electrical parts		
Check the state of sensor signal detection.	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signal is detected normally.	Replace the PU PCB (PRF PCB), EXIT sensor or connection cord.
Check the output level of the EXIT sensor.	Check the following signal through the RELAY connector of the PU PCB (PRF PCB). Pin 9: EXIT sensor Confirm that the signal level varies as the sensor lever is actuated.	Replace the EXIT sensor.
Check the power of the junction PCB (PRY PCB).	Check the 5-V power through the EXIT connector of the junction PCB (PRY PCB). Pin 1: 5-V power Pin 3: 0 VL	Replace the connection cord.
(6-1-4) Check of connections		
Signal cord for motor driver PCB, EXIT sensor cord	Check to see if the FFC is properly plugged in the RELAY connector of the PU PCB (PRF PCB) and the PUIF connector of the junction PCB. Check to see if the cord is properly connected in the junction PCB (PRY PCB) and EXIT sensor.	Correct the connection properly.
Signal cord for motor driver PCB, EXIT sensor cord	Check to see if the cords are caught under any other part, or have any peel-off of the covering or any assembling problem.	Replace the connection cord, or correct the assembling property.

Paper exit jam occurs right after feeding paper

Confirmation Items	Confirmation Tasks	Action at NG
(6-2-1) Check of state of running route		
Face-up stacker cover	Check to see if the cover is completely open or closed.	Eliminate imperfect opening or closing of the cover.
Duplex pull-in gate	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the Duplex pull-in gate operates normally. Make sure that it is duly on the exit side.	Replace the duplex pull-in gate or replace the duplex solenoid.
Rear panel	Check to see if the rear panel is installed properly, and if it is not obstructing the paper running route.	Redo the installation of the rear panel.
Running route in delivery section	Check visually for any load that obstructs running of paper along the route of the delivery section. Check to see if the delivery rollers are stiff in rotating.	Modify the load portion.
(6-2-2) Check of state of mechanical parts		
Sensor lever of exit sensor	Check to see if the sensor lever demonstrates any abnormal shape or motion.	Replace the sensor lever with a normal one.
(6-2-3) Check of operating state of motor		
Fuser motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the fuser motor operates normally. Make this checking in the presence and absence of a load.	Replace the PU PCB (PRF PCB), fuser motor, or fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(6-2-4) Check of connections		
Fuser motor drive cord	Check the connected state of the cord. Check visually for any incomplete connection or skew insertion of the DCHEAT connector of the PU PCB (PRF PCB) or any assembling problem of the cord.	Correct the connection properly. Replace the cord with a normal one.
Fuser motor		Replace the fuser motor.

(6-3) Paper exit jam occurs in a path route

Confirmation Items	Confirmation Tasks	Action at NG
(6-3-1) Check of operating state of motor		
Fuser motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the fuser motor operates normally. Make this checking in the presence and absence of a load.	Replace the PU PCB (PRF PCB), fuser motor, or fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Duplex Print Jam(Error 370,371,372,373,383)

Duplex print jam occurs right after turning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(7-1-1) Check of state of running route		
Paper running route in duplex unit	Check to see if there is paper jammed on the running route. Open the front cover and see if there is paper jammed in the middle of feeding through the Duplex. Open the rear cover and see if there is paper jammed in the reversal path. Draw out the Duplex and see if there is paper jammed at the insertion inlet to the Duplex. Open the running path cover of the Duplex and see if there is paper jammed inside.	Remove the jammed paper.
(7-1-2) Check of state of mechanical parts		
Check the sensor levers of the sensors of Duplex.	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the sensor lever with a normal one.
(7-1-3) Check of electrical parts		
Check the state of sensor signal detection.	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signals are detected normally. Check the state of signal detection in two cases: With a sheet of paper placed inside the duplex unit and with the paper removed.	Replace the Duplex PCB (V7Y PCB), sensors or connection cord.

(7-2) Duplex print jam occurs in the Duplex entry

Confirmation Items	Confirmation Tasks	Action at NG
(7-2-1) Check of operating state of solenoid		
Duplex solenoid	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check the operating state of the Duplex solenoid.	Replace the V7Y PCB or solenoid.
Separator DUP (Delivery/ DUP-intake switching gate located immediately after fuser unit)	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check visually the motion of the gate (EXIT SOLENOID). See if its motion is stiff, or its amount of opening/closing is abnormal.	Replace the separator DUP.
On/off timing of duplex solenoid	Conduct test print with the cover open, and see if the separator DUP opens at the right timing.	Replace the WR sensor lever or solenoid.
(7-2-2) Check of operating state of sensor lever		
Dup-IN sensor lever	Open the rear cover, touch the Dup-IN sensor lever by hand, and see if its motion is stiff.	Replace the Dup-IN sensor lever.
Dup-IN sensor	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signals are detected normally.	Replace the duplex PCB (V7Y PCB), sensors or connection cord.
(7-2-3) Check of state of running route		
Reversal transport path	Check to see if there are paper chips, burrs or any other foreign matters in the reversal transport path that obstruct the running of paper.	Remove the foreign matters.

Confirmation Items	Confirmation Tasks	Action at NG
(7-2-4) Check of operating state of motor		
Duplex motor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check the operation of the duplex motor. Make this checking by the rotation of the rollers, which are visible as the rear cover is opened.	Replace the V7Y PCB or the motor.
Duplex intake/reversal roller and its pinch roller	Check to see if the intake/reversal roller on the duplex unit side comes into contact with the pinch roller on the cover side when the rear cover of the Duplex is closed (Is the pinch roller also rotating when the duplex roller is turning?)	Replace the rear cover.

(7-3) Duplex print jam occurs in reverse of the paper

Confirmation Items	Confirmation Tasks	Action at NG
(7-3-1) Check of operating state of sensor lever		
Dup-IN sensor lever	Open the rear cover and touch the Dup-IN sensor lever by hand. Check to see if its motion is stiff.	Replace the Dup-IN sensor lever.
Dup-In sensor	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signals are detected normally.	Replace the duplex PCB (V7Y PCB), sensor or connection cord.
(7-3-2) Check of operating state of motor		
Duplex motor	Check visually to see if the paper has started reversal motion from the slit of the rear cover. If the reversal motion has not been started, check to see if the planetary gear in the duplex unit is stiff.	Replace the planetary gear.

(7-4) Duplex print jam occurs in the Duplex input

Confirmation Items	Confirmation Tasks	Action at NG
(7-4-1) Check of operating state of sensor levers		
Dup-R and Dup-F sensor levers	Remove the Duplex, and check the motions of the sensor levers.	Replace the sensor levers.
(7-4-2) Check of sensors		
Check the state of sensor signal defection.	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if the sensor signals are detected normally. Except for the Dup-In sensor, check the state of signal detection in two cases: With a sheet of paper placed inside the duplex unit and with the paper removed.	Replace the duplex PCB (V7Y PCB), corresponding sensor or connection cord.

(7-5) Paper is not fed to a Regist roller from Duplex section

Confirmation Items	Confirmation Tasks	Action at NG
(7-5-1) Check the operational condition of the clutch		
Duplex clutch	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check the operation of the duplex clutch.	Replace the V7Y PCB or the clutch.

Paper Size Error (Error 400)

Paper jam occurs when the end of paper is near IN1 sensor.

Confirmation Items	Confirmation Tasks	Action at NG
(8-1-1) Check of state of paper feed		
Multiple feed of paper	Open the front cover, and check to see if multiple sheets are fed through.	If the error recurs even after the jammed paper was removed, replace the reed of the tray in use.
Paper size	Check to see if the paper size specified for printing matches the size of the paper loaded in the tray.	Change the specified paper size or the paper size in the tray.
Inlet sensor 1	Check to see if the sensor lever demonstrates any abnormal shape or motion.	Replace the sensor lever with a normal one.

Service Error Code/Hardware Troubleshooting

ID Unit Up-Down Error(Service Call 140-143)

An error occurs in the operation of ID Unit Up

Confirmation Items	Confirmation Tasks	Action at NG
(9-1-1) Check for load in the ascent		
Load in installing/removing of ID unit	Check to see if any abnormal load is felt in installing or removing the ID unit.	Replace the ID unit or right and left side plates. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
Greasing of right and left up-down link levers	Check to see if the slant parts of the link levers are properly greased.	Apply grease.
Assembled state of right and left up/down link levers	Check to see if any part around the link levers is obstructing their motion.	Reassemble them correctly.
(9-1-2) Up/down mechanism		
Assembled state around link levers	Check to see if the link levers are assembled in such a manner that they link to the planetary gears.	Reassemble them correctly.
Right and left link levers	Check to see if the link levers are placed in the positions where the gears are engaged properly (check to see if the link levers are placed with several gear teeth displaced.)	Reassemble them correctly.
(9-1-3) Check of sensors		
Up/down sensor lever (integrated to the left link lever)	Check to see if the sensor levers demonstrate any abnormal shape or motion.	Replace the left link lever.
Up/down sensor	Conduct the Motor and Clutch Test of the self-diagnostic mode, and check to see if the sensor signals are detected normally. Block the sensor with a piece of paper, and then, unblock it to see if the SCAN state varies.	Replace the high-voltage PCB.

An error occurs in the operation of ID Unit Down

Confirmation Items	Confirmation Tasks	Action at NG
(9-2-1) Check of load in the descent		
Load in installing/removing of ID unit	Check to see if any abnormal load is felt in installing or removing the ID unit.	Replace the ID unit or modify the right and left side plates.
Greasing of right and left up-down link levers	Check to see if the slant parts of the link levers are properly greased.	Apply grease.
Assembled state of right and left up/down link levers	Check to see if any part around the link levers is obstructing their motion.	Reassemble them correctly.
(9-2-2) Installed state of ID unit		
At least the cyan ID is installed.	Check to see if there is no cyan ID installed when the N-color mode is set.	Install a dummy cyan ID or regular cyan ID.

Fuser Unit Error(Error 170-177)

An error occurs right after turning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(10-1-1) Malfunction of thermistors		
Upper thermistor, lower thermistor, frame thermistor	Check to see if the thermistors are short-circuited or open. Check the resistance value through the connector pins below the fuser unit. (See Subsection 9.1 Check of resistance values (Fuser unit.)	Replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
Installed state of fuser unit	Check to see if the fuser unit is securely pushed in to such a position that the connector at its lower part is plugged in.	Redo the installation of the fuser unit.

An error occurs in 1 min. from turning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(10-2-1) Temperature rise of fuser unit		
Thermostat, halogen lamp	Ensure that the heater control is properly exerted, and touch the fuser unit to confirm that it is hot. If it remains cold, confirm that the resistance between pin 1 and pin 6 of the connectors (2) measures from several Ω to several tens of Ω .	Replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(10-2-2) Temperature rise of fuser unit		
Installed state of upper thermistor	Check to see if the upper thermistor is installed away from its prescribed position, causing the temperature to be measured low. Detach the heater cover, and check visually for warpage of the sensor, etc.	Replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
Installed state of lower thermistor	Check to see if the lower thermistor is located away, whereas it should be in contact with the unit, causing a lower temperature than the prescribed one to be detected.	Replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(10-2-3) AC input for halogen lamp		
AC voltage of low-voltage power supply	Check to see if the AC voltage for the heater is supplied normally. Between pins 1 and 2 and between pins 3 and 4 of the CN connector of the power supply.	Replace the low-voltage power supply.
Heater-on signal delivered from PU to low-voltage power supply	Check to see if the heater-on signal turns active at the warming-up timing. "L" active while it is ON. Pin 11 and pin 12 of the POWER connector of the PU PCB (PRF PCB)	Replace the PU PCB (PRF PCB).

Motor Fan Error(Error 120,127,051)

Low voltage power unit fan or CU fan does not rotate right after turning on the power

Confirmation Items	Confirmation Tasks	Action at NG
(11-1-1) Connections and laying of cords		
Connections and laying of cords of low-voltage power supply fan, fuser fan and CU fan	Check to see if the connectors are properly connected. Check to see if the surplus portion of a cord is touching the blades of any fan.	Redo the insertion of the connector. Modify the cord laying route. Replace the fan.
Check of normal CU fan/ CU PCB	Check to see if the CU fan/CU PCB are normal.	Replace the CU fan/ CU PCB.

ID cooling fan does not rotate in printing

Confirmation Items	Confirmation Tasks	Action at NG
(11-2-1) Connection and laying of cord		
Connection and laying of Duplex fan cord	Check to see if the connector is properly connected. Check to see if the surplus portion of the cord is touching the blades of the fan.	Redo the insertion of the connector. Correct the cord laying route. Replace the fan.
24V fuse F501 of duplex PCB (V7Y PCB)	Check to see if the fuse F501 is blown out or not.	Replace the duplex PCB (V7Y PCB).
24V supply of duplex PCB (V7Y PCB)	Check to see if the fuse FU3 of the PU PCB (PRF PCB) is blown out or not.	Replace the PU PCB (PRF PCB).

DUPLEX fan does not rotate in DUPLEX printing

Confirmation Items	Confirmation Tasks	Action at NG
(11-3-1) 24V power supply		
Fuses F2 and F4 of PU PCB (PRF PCB)	Check to see if the F2 and F4 are open or not.	Replace the PU PCB (PRF PCB).
24V power supplied to PU PCB (PRF PCB)	Check the power through the POWER connector of the PU PCB (PRF PCB). Pins 4, 5, 6: 24V Pin 8: 0VL Pins 1, 2, 3: 0VP	Replace the low-voltage power supply.

Print Speed is Slow (Low Performance)

Print speed decreases up to 2ppm

Confirmation Items	Confirmation Tasks	Action at NG
(12-1-1) Environmental temperature		
Environmental temperature of the location where the printer is installed	Check to see if the printer is located in such a small room that the environmental temperature gets unusually high, or the cooling effect of the fans cannot be obtained.	Review the installation environment (especially, check to see if the intake port or delivery port of the fan is blocked).

Print speed decreases

Confirmation Items	Confirmation Tasks	Action at NG
(12-2-1) Setting of Media Weight		
Media Weight specified for printing	Check to see if a wrong Media Weight is specified.	Correct the Media Weight.

Option unit is not recognized

Duplex unit is not recognized

Confirmation Items	Confirmation Tasks	Action at NG
(13-1-1) Duplex PCB		
Duplex unit	Check to see if the duplex unit in use conforms to the C6100/C5900/C5800/C5800L/C5700/C5600/C5500 specification (A unit conforming to the C3200/C5540/C5510/C5450/C5250/C3100/ML3100/C5200/ML5200/C5100/ML5100/C5300/ML5300 specification cannot be connected).	Replace the Duplex unit.
(13-1-2) Check of connections		
Connections from PU PCB (PRF PCB) to duplex PCB (V7Y PCB).	Check to make sure that the cord is properly connected from the DU connector of the PU PCB (PRF PCB) to the duplex PCB.	Correct the connections.
Square connector connecting the duplex unit to the printer	Check to see if there is any foreign matter trapped in the connecting part of the square connector	Remove the foreign matter.
Square connector connecting the duplex unit to the printer	Check to see if the pins of the square connector are broken.	Replace the connector.
(13-1-3) Check of control signal		
Signal delivered from PU PCB (PRF PCB) to duplex (V7Y PCB)	Check the signal delivered through the OPTLPN connector of the PU PCB (PRF PCB). Pin 6: TXD (PU → DUP) Pin 4: RXD (DUP → PU)	Replace the PU PCB (PRF PCB).

(13-2) 2nd Tray unit is not recognized

Confirmation Items	Confirmation Tasks	Action at NG
(13-2-1) 2nd tray PCB		
2nd tray unit	Check to see if the 2nd tray unit in use conforms to the C5900dn specification (A unit conforming to the C5800n specification cannot be connected).	Replace the 2nd tray unit.
(13-2-2) Check of connections		
Connections from PU PCB (PRF PCB) to 2nd tray PCB (V7Y PCB)	Check to make sure that the cord is properly connected from the 2nd connector of the PU PCB (PRF PCB) to the 2nd tray PCB.	Correct the connections.
Correct the connections.	Check to see if there is any foreign matter trapped in the connecting part of the square connector.	Remove the foreign matter.
Square connector connecting the 2nd tray unit to the printer	Check to see if the pins of the square connector are broken.	Replace the connector.
(13-2-3) Check of control signal		
Signal delivered from PU PCB (PRF PCB) to 2nd tray PCB (V7Y PCB)	Check the signal delivered through the 2nd connector of the PU PCB (PRF PCB). Pin 5: TXD (PU → 2nd) Pin 3: RXD (2nd → PU)	Replace the PU PCB (PRF PCB).

LED head is not recognized(Error 131,132,133,134)

Service Call 131-134(LED HEAD Missing)

Confirmation Items	Confirmation Tasks	Action at NG
(14-1-1) Check of connections		
Connected state between CU PCB connector and head connector	Check visually the connected state of the FFC.	Redo the connection properly.
Head FFC	Unplug the FFC of the head, and check for any wire breakage or peel-off of the covering along the cord.	Replace the head FFC or CU PCB.

Toner cartridge is not recognized(Error 540,541, 542,543)

Errors caused by consumables

Confirmation Items	Confirmation Tasks	Action at NG
(15-1-1) Installed state of consumables		
ID units and toner cartridges	Are the ID units installed in the right positions? Check to see if the lock levers of the toner cartridges are locked.	Redo the installation properly.

(15-2) Errors caused by toner sensor

Confirmation Items	Confirmation Tasks	Action at NG
(15-2-1) State of toner sensor		
Toner sensor	Is the toner sensor lens stained with toner?	Wipe off the stain
Toner sensor	Use the SWITCH SCAN function of the diagnostic mode to check to see if the sensor is normal. Hold a white paper in front of the sensor, and see if the SCAN state varies.	Replace the toner sensor PCB (PRZ PCB), PU PCB (PRF PCB) or the FFC between PRZ and PRF.

Note! How to check a toner sensor operation with SWITCH SCAN in the self-diagnosis mode.

- (1) Confirmation of the operation in the device
 - 1) Change to a display that a changing situation of the toner sensor is confirmed from the operation panel in the self-diagnosis mode.
Refer to Section 5.4.2.3 Switch Scan Test as for how to display the operation panel.
 - 2) When taking out an ID unit and toner cartridge (TC) from the device, there is a window on the observers' right from the device, in a position across to the side of the TC.
In that window, a toner sensor is located.
 - 3) Hold up a piece of white paper against a sensor in a place within 3mm from a sensor window.
 - 4) The operation panel displays "L" if a piece of paper has light reflection and it displays "H" if not.
 - 5) By holding up a piece of paper, if the operation panel changes "H" to "L" or "L" to "H", the device operates normally.

Response in NG:

 - Clean a toner of the sensor surface and clear paper dust
 - Confirm a connection state of FFC cable between the toner sensor board (PRF) and PU main board (PRZ).
 - Check an operation again and exchange PU main board (PRZ) or a toner sensor board (PRF) if there is no change.
- (2) Confirmation of the operation in Toner Cartridge (TC)
 - 1) Install a TC and ID unit in a position where normal operation of the device has confirmed in Confirmation (1) and check operation in the operation panel.
 - 2) The display of the operation panel changes "H" to "L" or "L" to "H" in conjunction with an action of TC white light reflector when operation of TC is normal.

Response in NG:

 - Confirm an operation state of each ID motor by MOTOR&CLUTCH TEST in the self-diagnosis mode.
 - Clean the surface of the white light reflector at the side of TC. (Dirty from a toner or paper dust)
 - Exchange a TC of a different color and ID unit by the set.
Exchange a TC or ID unit if the set of the different color is OK.

Errors caused by machine defects

Confirmation Items	Confirmation Tasks	Action at NG
(15-3-1) Loading on ID unit		
ID Unit	Is a heavy load imposed on the ID unit, for example, because the waste toner belt was ruptured?	Replace the ID unit. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(15-3-2) Operating state of motors		
ID motor	Use the SWITCH SCAN function of the self-diagnostic mode to check to see if each ID motor operates normally. Make this checking in the presence and absence of a load.	Replace the PU PCB (PRF PCB) or the ID motor.

Fuse Cutout Error (Error 150-155)

Fuse cutout errors

Confirmation Items	Confirmation Tasks	Action at NG
(16-1-1) Check of connections		
FFC interconnecting the PU PCB (PRF) and the toner sensor PCB (PRZ PCB)	Check for any incomplete insertion or skew insertion of the SSNS connector of the PU PCB (PRF) and the SSNS connector of the toner sensor PCB (PRZ PCB). Also check to see if the FFC has any wire breakage of peel-off of the covering.	Redo the connection of the FFC properly. Or, replace the FFC.
(16-1-2) Fuse-cut circuit		
PU PCB (PRF PCB)	After checking the connections, turn on the power again, and see if the error is issued again.	Replace the PU PCB (PRF PCB).

Dew Condensation Errors (Error 123)

Dew Condensation

Confirmation Items	Confirmation Tasks	Action at NG
(17-1-1) Check of connections		
Connection between PU PCB (PRF PCB) and high-voltage PCB	Check to see if the 13-pin FFC is properly plugged into the HVOLT connector of the PU PCB (PRF PCB). Also check to see if the 9-pin FFC is properly plugged into the CN connector of the high-voltage PCB. Search for an imperfect connection or skew insertion.	Correct the insertion of the cord properly.
FFC interconnecting the PU PCB (PRF PCB) and the high-voltage PCB	Check for a wire breakage with a circuit tester. Check visually for peel-off of the covering.	Replace the PRF of the High Voltage PCB.
(17-1-2) Environmental condition		
Heavy variation of environmental condition	Check to see if the environmental condition has changed from a low-temperature condition to a high temperature condition in a short time. (For example, the printer was moved from storage in a cold region to an office environment.)	Switch on the printer again after acclimatizing it to the new environmental temperature for one hour or so. Before turning on the power, touch the sheet metal of the controller panel on the back and internal sheet metals in order to see how the casing of the printer is warming up. Turn on the power again when much difference from the room temperature is no longer perceived.

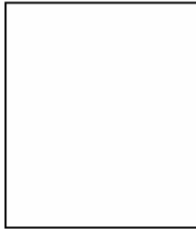
Image Quality Troubleshooting



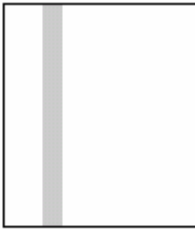
A Light or faded image on whole page



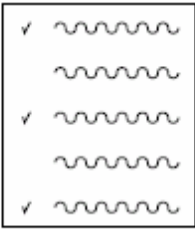
B Dirty Background



C Blank



D Vertical black belt or line



E Defective image of regular interval



F Vertical white belt or line

Figure 8.2

Color is totally pale (Fig.8.2 A)

Color is pale

Confirmation Items	Confirmation Tasks	Action at NG
(1-1-1) Toner		
Remaining quantity of toner	Check to see if "ORDER TONER" or "REPLACE TONER" appears on the operator panel.	Replace the toner cartridge with a new one.
Tape at the opening of toner cartridge	Check to see if the tape placed at the opening of the toner cartridge has been removed or not.	Close the lever of the toner cartridge, and peel off the tape from the opening.
(1-1-2) LED head		
LED head lens	Check to see if the lens surface of the LED head is stained with toner or paper chips.	Clean the lens with a soft cloth.
Installed state of LED head	Check to see if the LED head is properly installed in the LED head holder. Also check to see if the right and left tension springs are properly installed.	Correct the installation properly.
(1-1-3) Print media		
Type of medium	Check to see if the medium loaded in the printer is not something particularly thick.	Use the prescribed paper.
(1-1-4) High-voltage terminal		
ID unit terminal	Ensure visually that the high-voltage terminal of the ID unit is duly in contact with the contact ASSY (see Figure 8-3).	Replace the ID unit or modify the high-voltage terminal. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(1-1-5) Installed state of ID unit		
Lowest position of ID unit (Deficient transfer)	Draw out and insert the ID unit by hand repeatedly, and check to see if it is normally lowered to its lowest position free from any abnormal load. Not acceptable (NG) if the leading edge of a sheet of paper inserted in between the drum and the belt can readily be passed through.	Check the U-grooves of the side plates for any trouble. If the trouble is irreparable, replace the printer.

Background is dirty (Fig.8.2 B)

Background is dirty (partly)

Confirmation Items	Confirmation Tasks	Action at NG
(2-1-1) ID unit		
Drum exposed to light	Check to see if the ID unit has been left in an environment where its surface was exposed to light for a long time.	Replace the ID unit. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
Leak of toner	Check to see if toner is leaking from the ID unit or toner cartridge.	Replace the ID unit or toner cartridge. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(2-1-2) Fuser unit		
Offset toner of fuser unit	Check to see if the fuser unit has offset toner from the previous print job sticking.	Repeat idle printing by using waste medium, until the offset toner is exhausted to the print medium. Or, replace the fuser unit. To use a new fuser unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Background is dirty (totally)

Confirmation Items	Confirmation Tasks	Action at NG
(2-2-1) Printmedium		
Type of medium	Check to see if an especially thin medium is used for printing.	Use the prescribed paper.
(2-2-2) High-voltage terminal		
ID unit terminal	Ensure visually that the high-voltage terminal of the ID unit is properly in contact with the contact ASSY (see Figure 8-3).	Replace the ID unit or modify the high-voltage terminal. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Blank Print (Fig.8.2 C)

Blank on the whole page

Confirmation Items	Confirmation Tasks	Action at NG
(3-1-1) State of toner		
Remaining quantity of toner	Check to see if a sufficient quantity of toner remains in the toner cartridge.	Replace the toner cartridge.
(3-1-2) State of exposure		
LED head	Check to see if the LED head faces the drum properly in the prescribed position when the cover is closed. Also check to see if there is something on the light-emitting surface of the LED head that obstructs the light emission.	Correct the installed position of the LED head.
Connected state of LED head	Check to see if the LED head is properly connected.	Replace the LED head.
Drum shaft	Check to see if the drum shaft is so mounted that it properly touches the right and left side plates.	Replace the ID unit. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(3-1-3) High-voltage terminal		
ID unit terminal	Ensure visually that the high-voltage terminal of the ID unit is properly in contact with the contact ASSY (see Figure 8-3).	Replace the ID unit or high-voltage PCB. Or, modify high-voltage terminal. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Vertical lines are printed

Thin vertical lines (with color) (See Fig.8.2 D)

Confirmation Items	Confirmation Tasks	Action at NG
(4-1-1) State of ID unit		
Filming of ID unit	Check to see if the print was conducted in the absence of toner.	Replace the toner cartridge with a new one. If still the error is issued, replace the ID unit. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Thin vertical lines (without color) (See Fig.8.2 F)

Confirmation Items	Confirmation Tasks	Action at NG
(4-2-1) State of LED head		
LED head	Check to see if the LED head has any foreign matter sticking to the light-emitting surface of the SELFOC lens.	Remove the foreign matter.
(4-2-2) Running state of paper		
Path route	Check to see if there is a burr in the paper running path before fuser that scratches unfixed toner.	Remove the burr.

Cyclic Print Trouble (Refer to Fig.8.2 E)

Vertical cyclic print trouble

Confirmation Items	Confirmation Tasks	Action at NG
(5-1-1) Periodicity		
Image drum	Check to see if the periodicity is 94.25 mm or not.	Replace the ID unit.
Development roller	Check to see if the periodicity is 39.68 mm or not.	Replace the ID unit.
Toner supply roller	Check to see if the periodicity is 58.36 mm or not.	Replace the ID unit.
Charging roller	Check to see if the periodicity is 37.7 mm or not.	Replace the ID unit.
Roller on the fuser unit	Check to see if the periodicity is 86.39 mm or not.	Replace the fuser unit.
Transfer roller (Black)	Check to see if the periodicity is 50.27 mm or not.	Replace the belt unit.
Transfer roller (Color)	Check to see if the periodicity is 43.98 mm or not.	Replace the belt unit.
		To use a new consumable part on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.

Color registration is wide.

"IN ADJUSTING COLOR REGISTRATION" is shown only a short time

Confirmation Items	Confirmation Tasks	Action at NG
(6-1-1) Color registration result		
Color registration time (Approx. 50 sec if normal)	Execute REG ADJUST TEST in the self-diagnostic mode, and check the result. Any error issued is not displayed if the ONLINE indication is on.	Replace the sensor that originated NG. Clean the sensor. Replace the shutter. Replace the PU PCB (PRF PCB).
(6-1-2) Toner		
Remaining quantity of toner	Check to see if "ORDER TONER" or "REPLACE TONER" is displayed on the operator panel.	Replace the toner cartridge with a new one.
(6-1-3) Color registration sensor		
Dirty sensor	Check to see if the sensor has toner or paper chips sticking.	Wipe off the dirt.
(6-1-4) Color registration sensor shutter		
Defects of the shutter operation	Check the shutter operation in the self-diagnostic mode.	Replace the shutter or modify the mechanism.

Although REG ADJUST TEST of the engine maintenance function is OK, Color drift is seen

Confirmation Items	Confirmation Tasks	Action at NG
(6-2-1) Paper feed system		
State of paper feed system of running route	Check to see if there is anything on the paper feed route that hinders the paper from running.	Remove the obstacle.

Solid Black Print

Solid black on a full page

Confirmation Items	Confirmation Tasks	Action at NG
(7-1-1) High-voltage contact state		
CH terminal	Check visually from above to see if the terminal extending from the printer is properly in contact with the high-voltage terminal on the left side of the ID unit.	Replace the terminal of the printer side.
CH terminal	Check to see if the high-voltage terminal remains in normal contact on the high-voltage PCB. Remove the high-voltage PCB by opening the left cover, and check to see if the terminal is abnormally installed.	Redo the installation of the terminal properly.
ID unit terminal	Ensure visually that the high-voltage terminal of the ID unit is properly in contact with the contact ASSY (see Figure 7-3)	Replace the ID unit, high-voltage PCB, or modify the high-voltage terminal. To use a new ID unit on a trial basis, use FUSE KEEP MODE of the System Maintenance Menu.
(7-1-2) State of high-voltage output		
CH output	If a high-voltage probe is available among the maintenance tools, open the left cover, and check the CH output with the high-voltage probe through the solder side of the high-voltage PCB while the machine is printing. (The high-voltage probe is not an ordinary maintenance tool.)	Replace the high-voltage PCB.

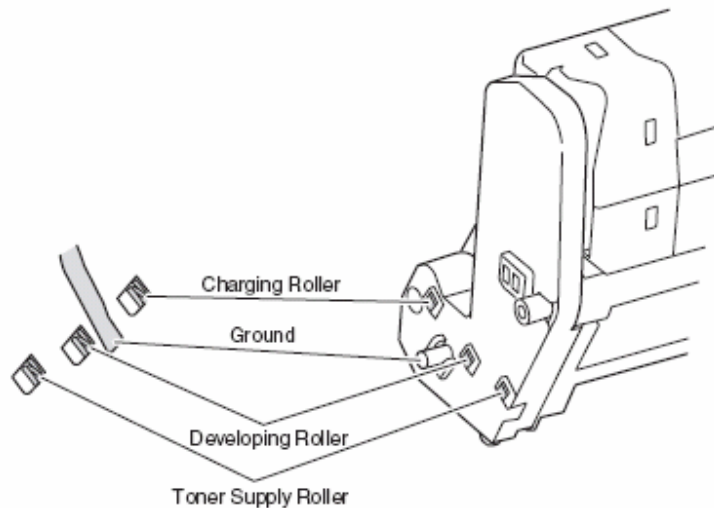


Figure 8.3

Network Troubleshooting

Network Troubleshooting

Cannot print from Utility.

Confirmation Items	Confirmation Tasks	Action at NG
(1) Check of LINK light		
Check of LINK light	Check to see if the LINK light (green) is on. Check to see if the HUB and the printer are properly linked. (Check to see if the network cable is properly connected.)	Redo the connection of the network cable.
	Check to see if a straight cable is in use.	Replace the cable with a straight cable.
	Insert a Network cable to a different HUB port.	Replace the HUB.
(2) Check of network information		
Check to see if network information can be printed correctly.	Press the Push-SW of the NIC card to print the network information.	Rewrite NIC-F/W with the utility.
(3) Check of contents of network information		
Check the IP address, SUB-net mask and gateway address.	Check an IP address, Subnet mask, Gateway address printed on Network information.	Set an IP address, Subnet mask, and Gateway address correctly.
(4) Check to see if communication can be held through the network.		
Check to see if a Ping command can be sent from the PC to the printer.	Check the IP address, SUB-net mask and gateway address which are printed in the network information.	Set an IP address, Subnet mask, Gateway address correctly.
(5) Check of Utility		
Check the settings of the OKILPR Utility.	Check the set items of the OKILPR Utility.	Set the set items of the OKILPR Utility correctly.
(6) Check through standard OS port		
Check the standard LRP port conforming to the WINDOWS standard (NT, 2000, XP).	Set the standard LPR port conforming to the WINDOWS standard (NT, 2000, XP), and see if print can be executed.	Set the standard LPR port conforming to the WINDOWS standard (NT, 2000, XP) correctly.

Actions after forced initialization of HDD/Flash

This subsection explains the actions to be taken after a troubled HDD or Flash has been subjected to forced initialization.

1) Action after forced initialization of HDD

If the HDD is forcibly initialized, the following data is deleted. There is no way to recover it.

- Unprinted data inside the HDD
- Log data of JobAccount (If JobAccount is active at the time)

2) If the Flash is forcibly initialized, the following data is deleted, making it impossible to use the network.

- NIC-F/W
- Web Page data
- Demonstration page data for OEM (If the printer is for OEM)

The above NIC-F/W, Mac address and Web Page data need to be written to a flash by means of the Maintenance Utility.

Note! Do not execute this initialization in normal condition.

Basic Fax Troubleshooting

For more detailed information of machine Fax settings refer to “Setting the Fax Facility” in the **CX2032 MFP user’s guide pages 58 to 65**.

The MFP will not dial a telephone number

Check the power cable and wall outlet. Make sure that the telephone line (not external telephone or handset) is connected to the LINE socket on the back of the machine. If an external telephone is installed, lift the handset and check for a dial tone. If there is no dial tone, there may be a problem with the telephone line. If there is a dial tone, the MFP may be using the wrong dialing method (pulse or tone) for the region. If alternating tones are heard instead of dialing pulses and the region uses pulse dialing, change the call parameters (See pages 58 in the CX2032 MFP user’s guide).

The display shows a communications error

This indicates any of a number of problems:

- > The MFP may be incompatible with the remote machine, or the remote machine may not be able to perform the function requested of it such as polling or confidential faxing.
- > The remote machine may also be out of paper or experiencing a paper jam.
- > Bad telephone line conditions can also cause communication errors. Try sending the fax again and check to make sure that the correct telephone number is being dialed.
- > If a prefix number must be dialed to get an outside line, or if the call is to an international destination, a pause may need to be entered (use the Pause key) after the dial prefix or international dialing code to tell the machine to wait for a dial tone. If there are frequent problems communicating with a particular remote machine, try programming the telephone number into a speed dial key, and then change the parameters for that key (See “Advanced set up” on page 59 in the CX2032 MFP user’s guide).
- > Finally, either the local or remote machine may require servicing. Try sending a fax to another location to check the local MFP.

Faxing is possible but the image of the document printed by the remote machine is very poor.

If the faxed document has small type, complex illustrations, photos, or is very light or very dark, try changing the fax quality and density settings (See “Advanced operation” on page 88 in the CX2032 MFP user’s guide). Copy the document on the machine to determine how it will transmit. The problem may be caused by telephone line interference. Try sending the document again later.

Fax sent but received message was completely blank

Make sure that the document is loaded correctly before faxing; with text face UP in the ADF or face DOWN on the glass.

Image of received fax is very poor

Try making a copy of a document on the local machine to make sure it is working properly. If there is still a problem, contact the person sending the fax and ask them to change their fax quality and density settings. Ask the person to make a copy of the document on their machine to ensure that it is working properly. Then ask them to send the fax again.

Dialing was tried with a Speed Dial number but nothing happened

Make sure that the Speed Dial number being used is programmed correctly.

Local MFP will not answer the telephone or receive faxes

First check to see that the power cord is connected properly. Also check the reception mode setting of the machine. This MFP will not receive faxes automatically if the manual receive mode is enabled (See "Manual receive" on page 64 in the CX2032 MFP user's guide).

Documents received are light or have vertical streaks on them, and MFP is not out of toner

Gently wipe the lens surface of the MFP's LED array, and then check to see if the machine is working properly.

(See "Cleaning the LED head" on page 126 in the CX2032 MFP user's guide).

If the MFP still does not work properly, remove the image drum, tap the toner cartridge, and slowly swing it 20 to 30 degrees vertically several times. Be careful not to let the toner leak from the cartridge. If this does not work, the image drum unit may need to be replaced.

MFP is set for delayed transmission but it did not

Check the display to make sure that the MFP is set to the correct time and date

(See "Initial set up" on page 58 in the CX2032 MFP user's guide).

MFP will not poll a remote machine

Call the person at the remote machine and make sure that they have loaded documents and that their machine is set to polling transmission mode.

MFP is connected to a PBX but it is not possible to dial out

Be certain that the dial prefix is entered before the telephone number for each number dialed or programmed into the MFP.

(See "Connecting to a PBX" on page 62 in the CX2032 MFP user's guide).

MFP always answers before it's possible to use the external telephone

If an external telephone is connected, change the MFP's ring response setting.

(See "Advanced set up" on page 59 in the CX2032 MFP user's guide).

Faxes received sometimes look distorted

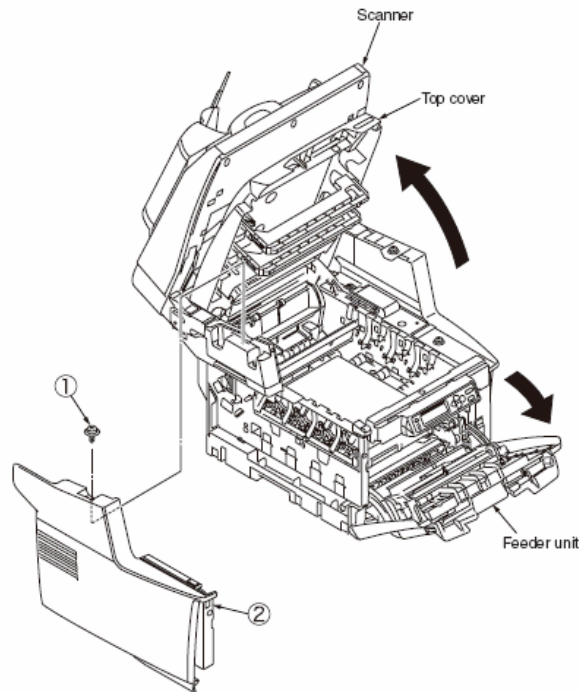
If the document received is wider or longer than the paper loaded in the paper tray, the machine automatically reduces the width or length of the document so that it will fit on the paper. This type of problem could also be communication related.

Part Replacement Procedures

This section details the replacement methods for parts and assemblies illustrated in the disassembly system diagram below.

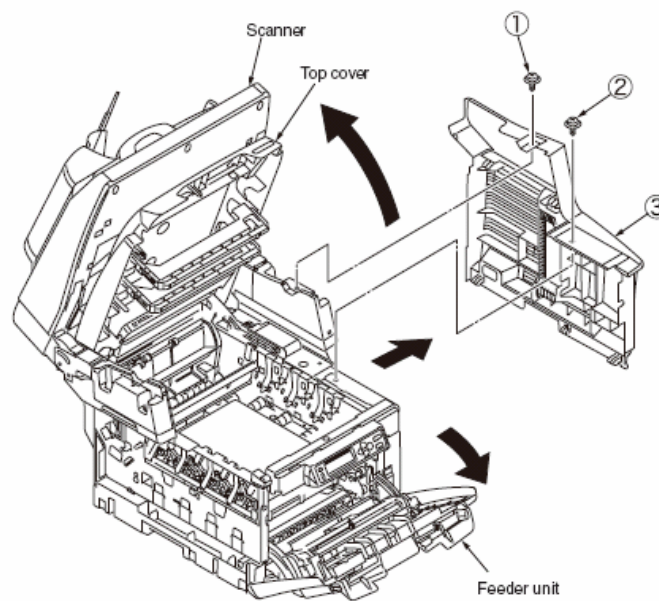
Left side cover

- (1) Open the scanner. (2) Open the top cover. (3) Open the feeder unit. (4) Remove screw (silver) **1**, and detach left side cover **2**.



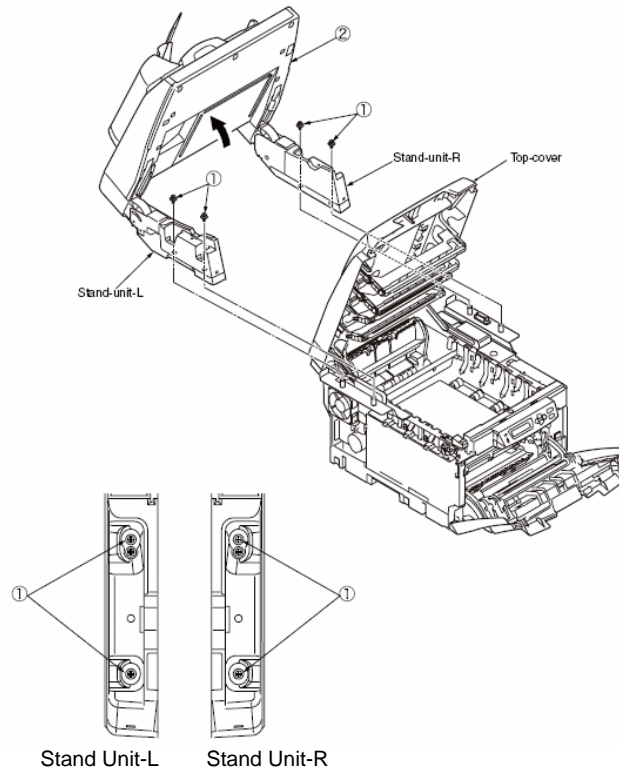
Right side cover

- (1) Open the scanner. (2) Open the top cover. (3) Open the feeder unit. (4) Remove screw **1**, **2**, and detach right side cover **3**.



Detaching the scanner from the printer

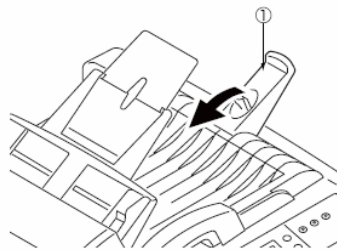
(1) Detach left side cover and right side cover. (2) Remove the four screws #1, and detach the scanner #2.



Note! • Be careful when you detach the scanner. The stand-unit-R/L will rotate under the restoring force of the spring when the scanner is detached from the printer.

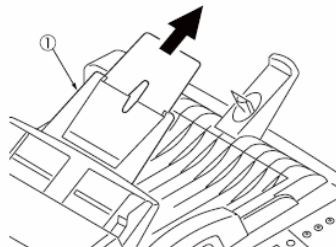
Scanner - ADF Unit - ASS'Y STOPPER

(1) Slide the ASS'Y STOPPER in the arrow direction and remove it.



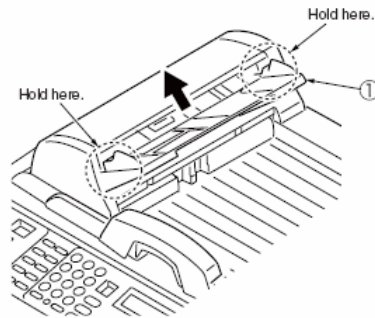
Scanner - ADF Unit - ASS'Y PAPER SUPPORT

(1) Pull the ASS'Y PAPER SUPPORT in the arrow direction and remove it.



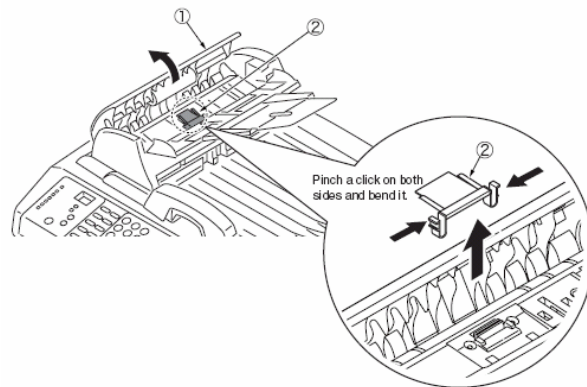
Scanner - ADF Unit - ASS'Y PAPER TRAY

- (1) Hold the both sides of the ASS'Y PAPER TRAY tightly. While keeping the both sides on a level, lift up the ASS'Y PAPER TRAY in the arrow direction and remove it.



Scanner - ADF Unit - ASS'Y PAD

- (1) Raise the center of the ADF front cover in the arrow direction and open the ADF front cover. (2) Pinch the clicks on both sides of the ASS'Y PAD with your fingers. While bending the clicks, pull up the pad.



Scanner - ADF Unit - Assembly Hinge Light/Heavy

- (1) **Figure # 1** Remove the screw **1** and remove cover-ADF-wire **2** and detach the ADF-Cable
- (2) **Figure # 2** Open the ADF unit **2**. While pulling up the ADF unit, release the lock of the Hinge Light by inserting a slotted screwdriver into the notch as shown in the figure. Pull up the ADF unit further and release the Hinge Heavy in the same way, pull up the ADF unit and remove it.
- (3) **Figure # 3** Remove the six screws **5** and remove the Hinge Light **3** and the Hinge Heavy **4** .

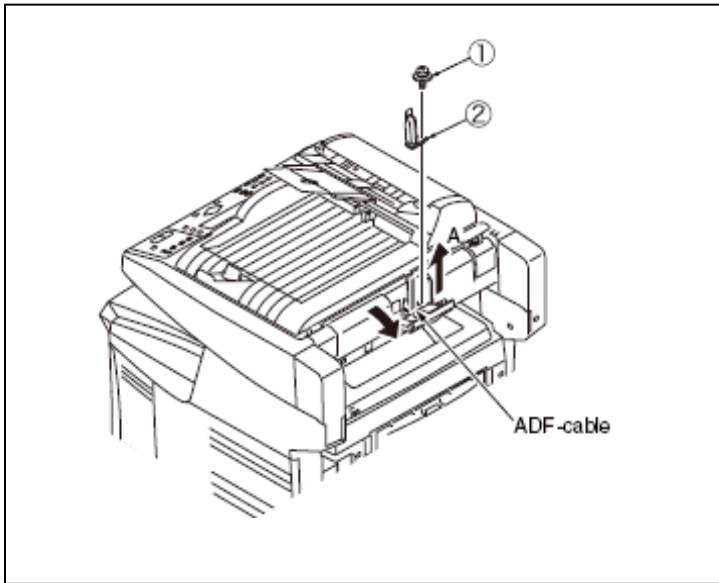


Figure # 1

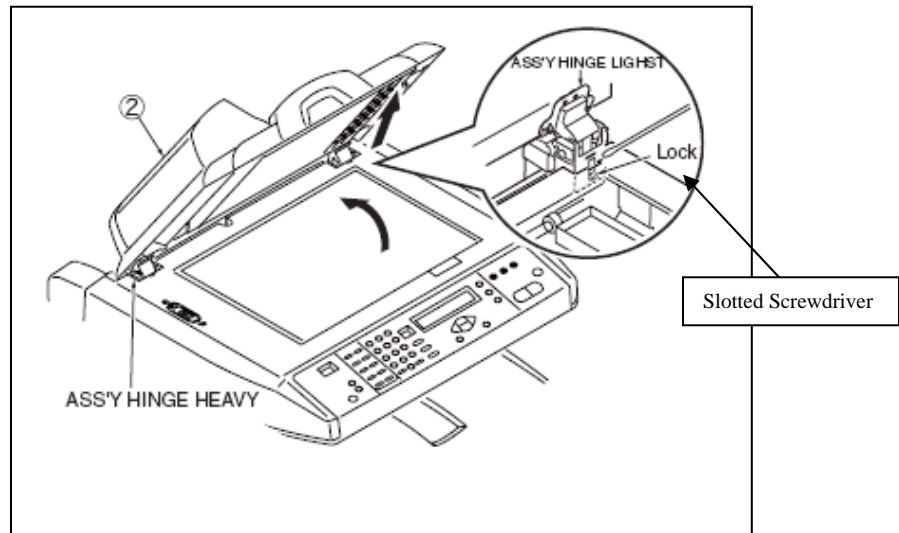


Figure # 2

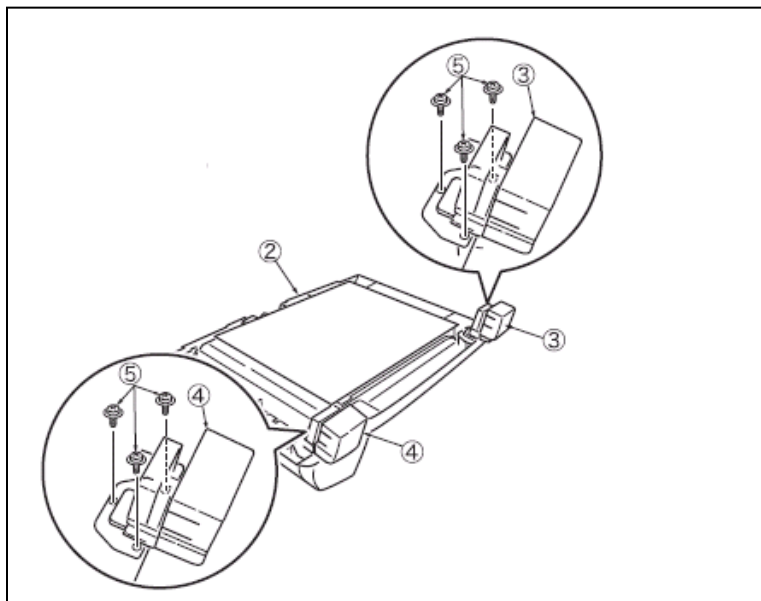


Figure # 3

Scanner - Flatbed unit - ASS'Y CONTROL PANEL

(1) Remove the three screws **1** (**Figure 1**). (2) Pull the front of the ASS'Y CONTROL PANEL **2** in the direction of arrow A and then slide the ASS'Y in the direction of arrow B to remove it. (**Figure 2**). (3) Disconnect the cable. (**Figure 3**)

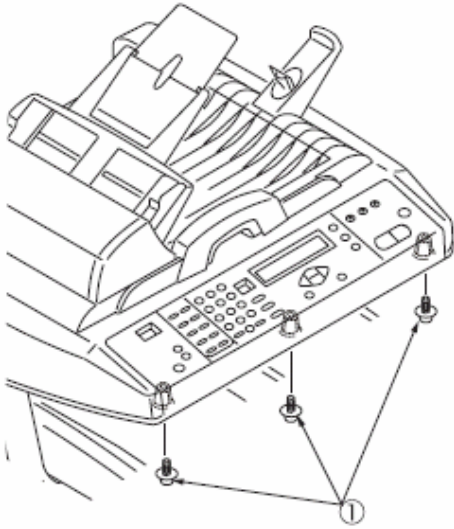


Figure 1

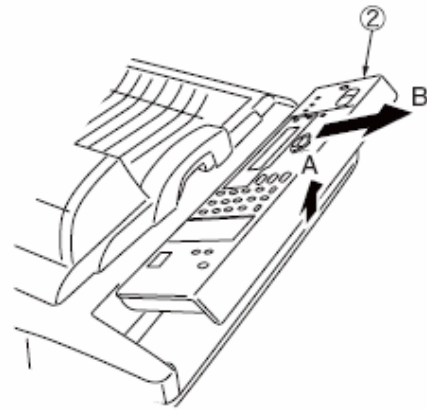


Figure 2

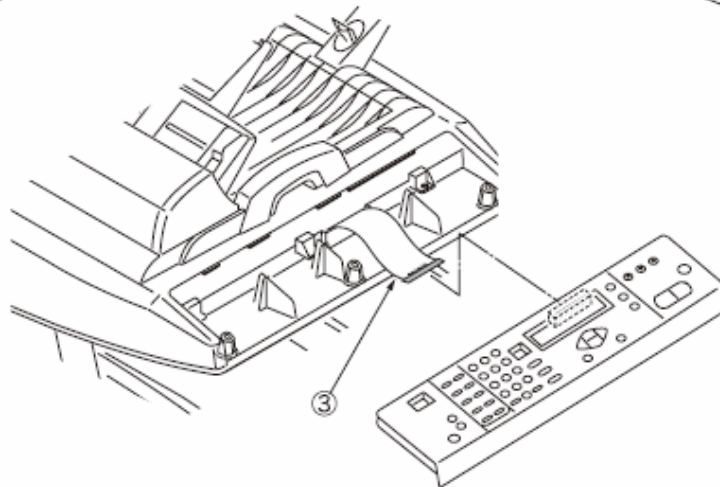
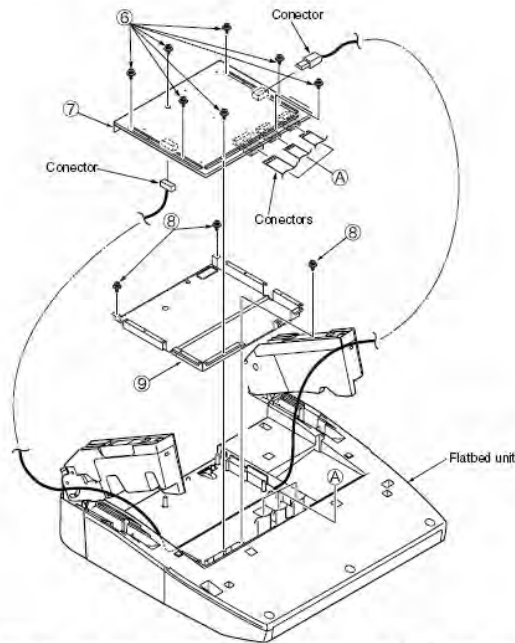


Figure 3

Scanner - Flatbed unit – Scanner Main PCB ASS'Y / Stand Ass'y Left - Right

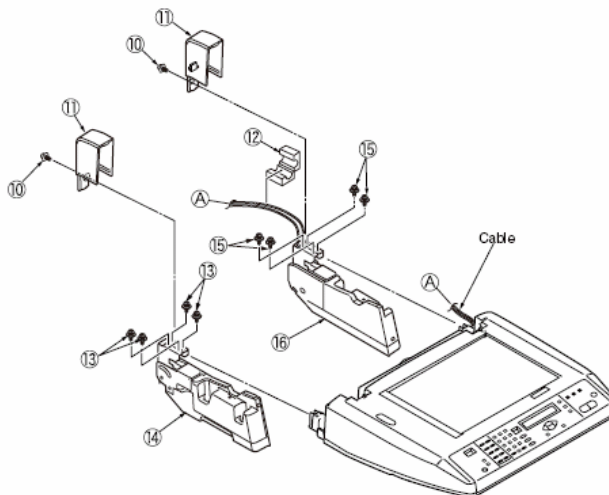
(1) Follow the “Detaching the scanner from the printer” procedure on page 85 (2) Follow the “Scanner - ADF Unit - ASS'Y HINGE LIGHT/HEAVY” procedure on page 86 to remove the ADF. (3) Turn over the flatbed unit. (4) Remove the seven screws **6** and open the ASS'Y MAIN BOARD **7**. Disconnect all the connectors and remove the ASS'Y MAIN BOARD. (See 4.4 Precautions for Main Board Replacement). (5) Remove the three screws **8** and remove the cover-PCBA **9**.



Note! • Be careful when you detach the scanner. The stand-unit-R/L will rotate under the restoring force of the spring when the scanner is detached from the printer.

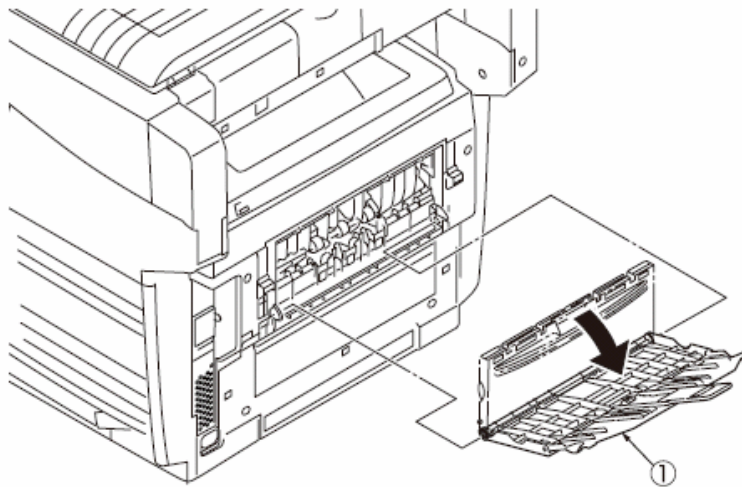
Scanner - Flatbed unit –Stand Assembly Left and Right

(1) Remove the two screws **10** and detach Hinge-Cover-Upper-L/R **11**. (2) Remove the core **12**. (3) Remove the four screws **13** and remove the ASS'Y STAND-L **14**. (4) Remove the four screws **15** and remove the ASS'Y STAND-R **16** with cable.



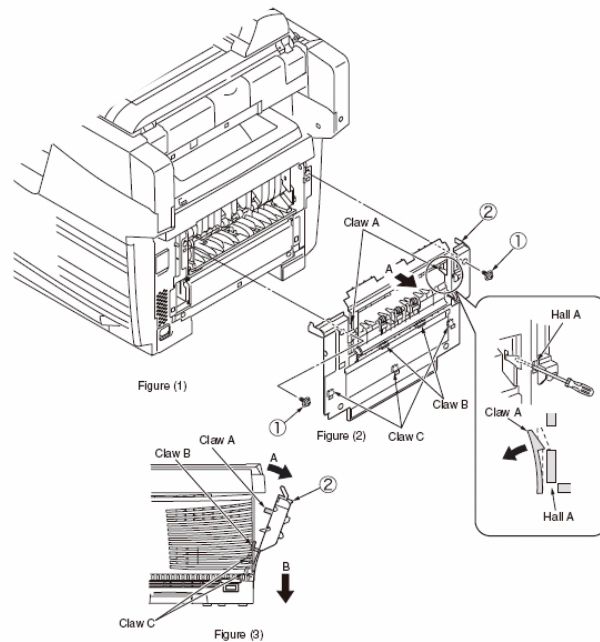
Printer - Face-Up Tray

- (1) Open face-up tray **1** into the direction of the arrow, free the engagement on either side of it while deflecting the tray, and remove the tray.



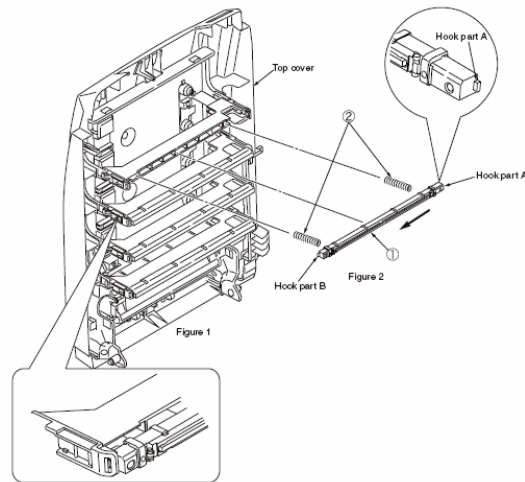
Printer - Rear cover

- (1) Open the face-up tray.
- (2) Remove two screws (silver) **1**.
- (3) Insert the flat-tipped screwdriver into hole A, as illustrated in Figure (2), and release two claws A.
- (4) Now, release two claws B, and pull the upper part of rear cover **2** in the direction of arrow A.
- (5) Push the lower part of rear cover **2** in the direction of arrow B, as shown in Figure (3), and detach rear cover by freeing three claws C.



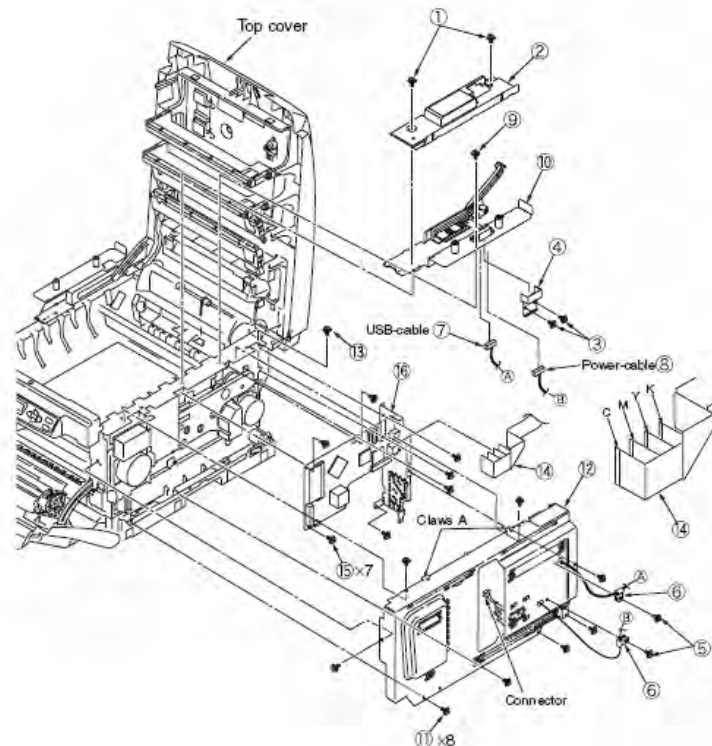
Printer - LED Assembly / LED Assembly springs

- (1) Open the top cover. (2) After disconnecting the cable, first free hook part A by applying force in the direction of the arrow, as illustrated in Figure (2), and then, free hook part B, to finally remove LED Assembly. (In this operation, two springs will come out together with LED Assembly.)



Printer - Control PCB

- (1) Detach the scanner. (See page 85).
- (2) Remove the two screws **1**, and detach cover-stay(R) **2**.
- (3) Remove the two screws **3**, and detach plate shield drawer **4**.
- (4) Remove the two screws **5**, and detach cable-clamp **6**. (2 places).
- (5) Disconnect USB-cable **7**, and power-cable **8**, then remove the screw **9**.
- (6) Detach stay-Assy-R **10**.
- (7) Remove eight screws (silver) **11**, and detach plate shield assembly **12** by releasing connector claws A.
- (8) Remove screw **13**, and disconnect head cable **14**.
- (9) Remove seven screws (silver) **15**, disconnect all the cables **16**, and disassemble control PCB (TBR-1 PCB).



Printer - Print engine controller PCB

- (1) Remove the plate shield Assy. (see “Printer - Control PCB” items 1 thru 7 on page 91). (2) Remove all the connectors and two screws (silver) **1**, and disassemble the print engine controller PCB **2**.

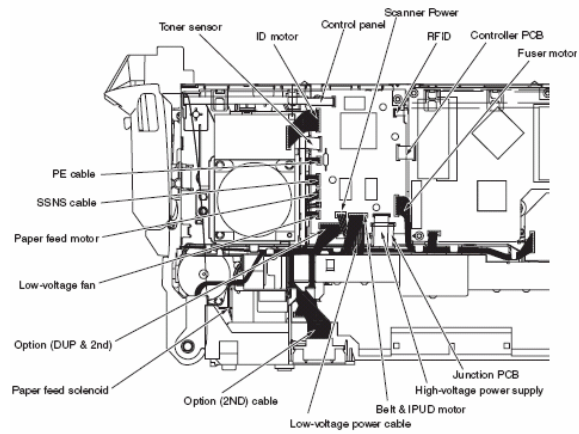
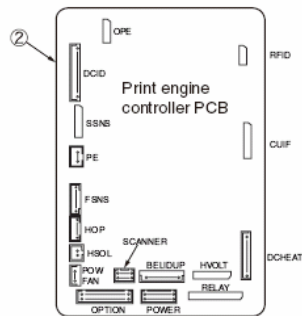
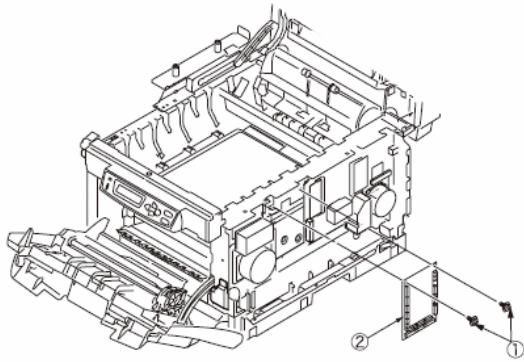
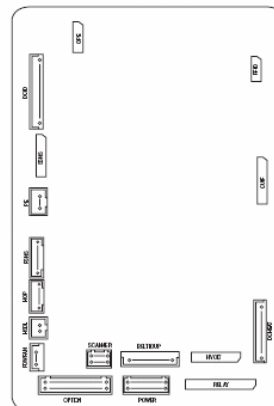


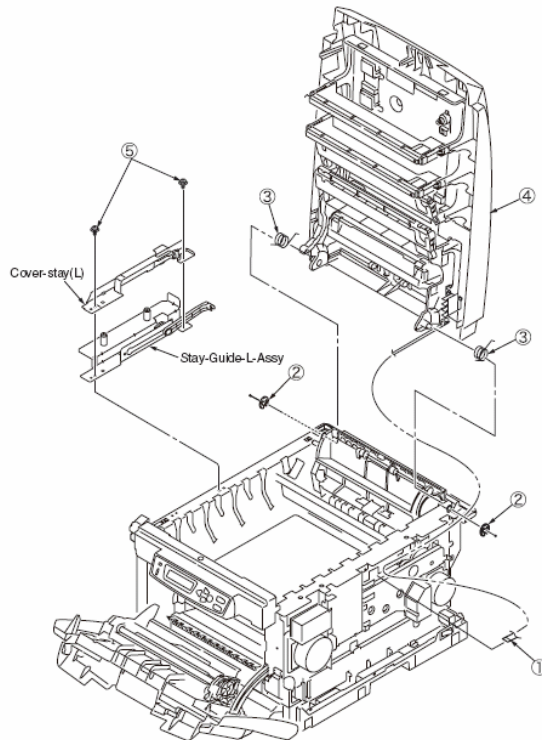
Figure 4-2-7-1 Cable route diagram of print engine controller PCB



Connection diagram of print engine controller PCB

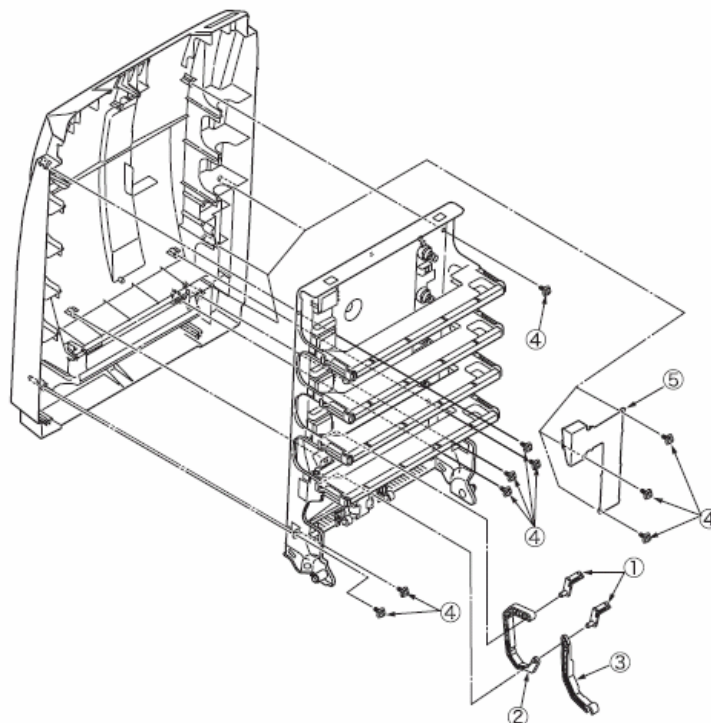
Printer - Top cover assembly

- (1) Detach the scanner. (See page 85)
- (2) Detach the rear cover. (See page 90)
- (3) Remove the plate shield assembly, and then, the control PCB. (See page 91)
- (4) Remove the two screws 5 and detach cover-stay (L), stay-guide-L-Ass'y.
- (5) After unplugging the connector, disconnect hooked RFID cable 1.
- (6) Remove two E-shaped retaining rings 2 and two spring torsions 3, and detach top cover Assembly 4.



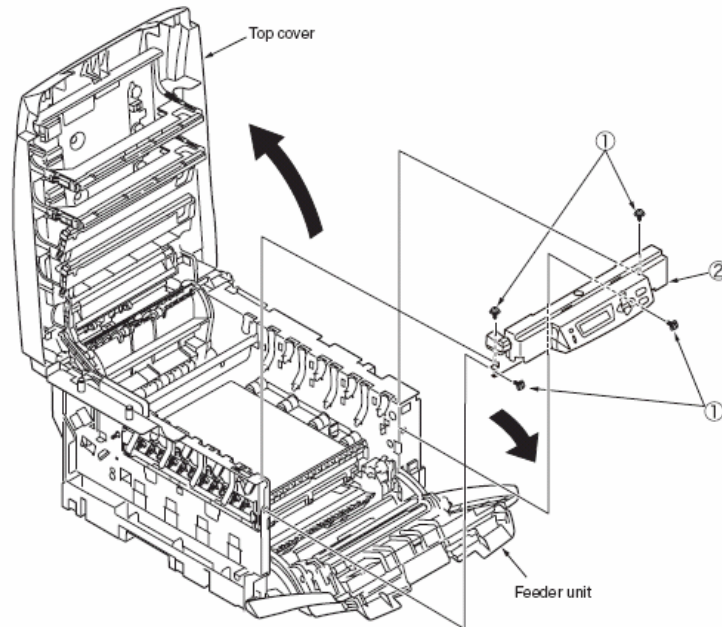
Printer - Top cover

- (1) Detach the top cover assembly. (See above.)
- (2) Detach the Holder-post 1.
- (3) Detach the Link-A 3 and Link-B 2.
- (4) Remove ten screws (black) 4, and detach cable cover 5 and top cover 6.



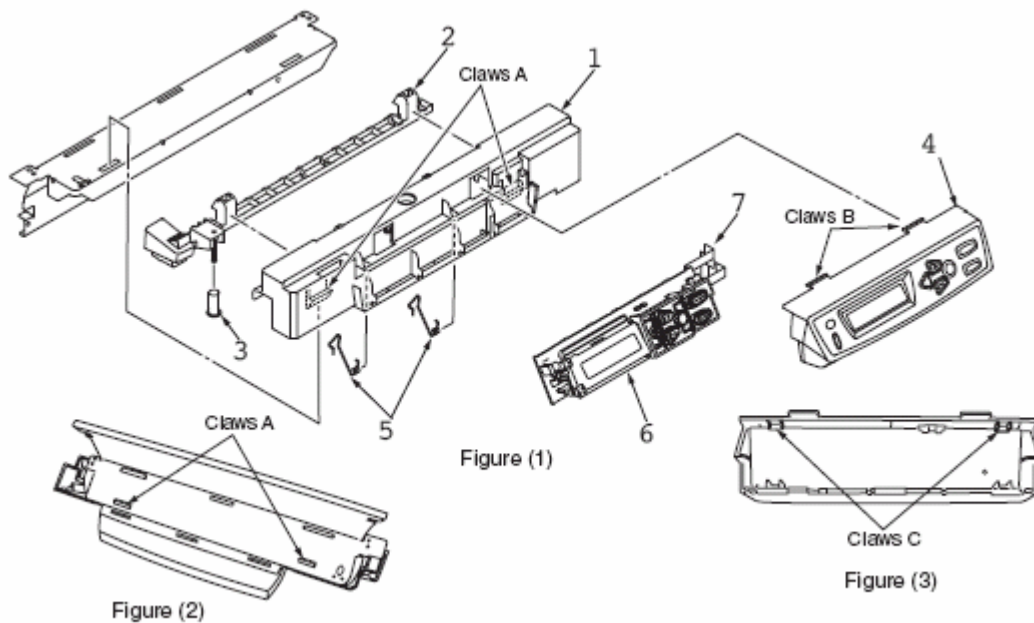
Printer - Controller Panel Assembly

- 1) Open the top cover. (2) Open the feeder unit. (3) Detach the right side cover.(See page 84) (4) Remove the plate shield assembly. [See page 91] (5) After unplugging the connector of the control panel assembly, free the hook. (6) Remove four screws (silver) **1**, and detach control panel Assembly **2**.



Printer - Board PRP/ Top Cover Handle

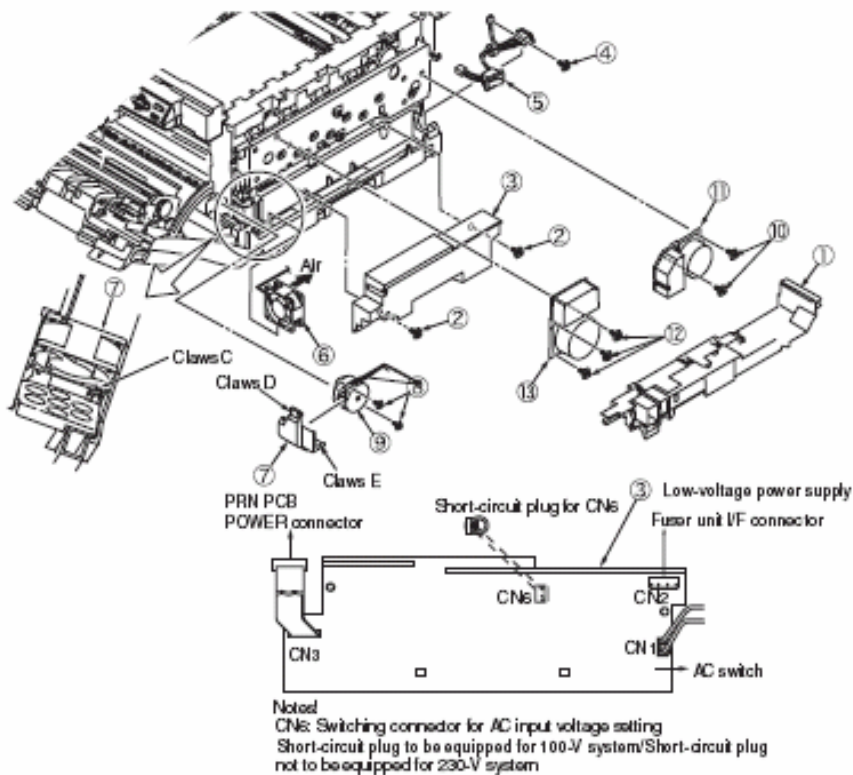
- (1) Detach the control panel assembly. (See above.) (2) Release two claws A, as illustrated in Figure (2), and remove frame OP **1**, lever lock **2** and spring compression **3**. (3) Release two claws B by forcing in the flat-tipped screwdriver and remove the cover assembly OP **4** and spring torsion **5**. (4) Release two claws C of the cover assembly OP **4**, as shown in Figure (3), and remove Board PRP **6** and cable **7**.



Printer - Low-Voltage Power Supply / Low-Voltage Fan / Hopping Motor / Fuser Motor

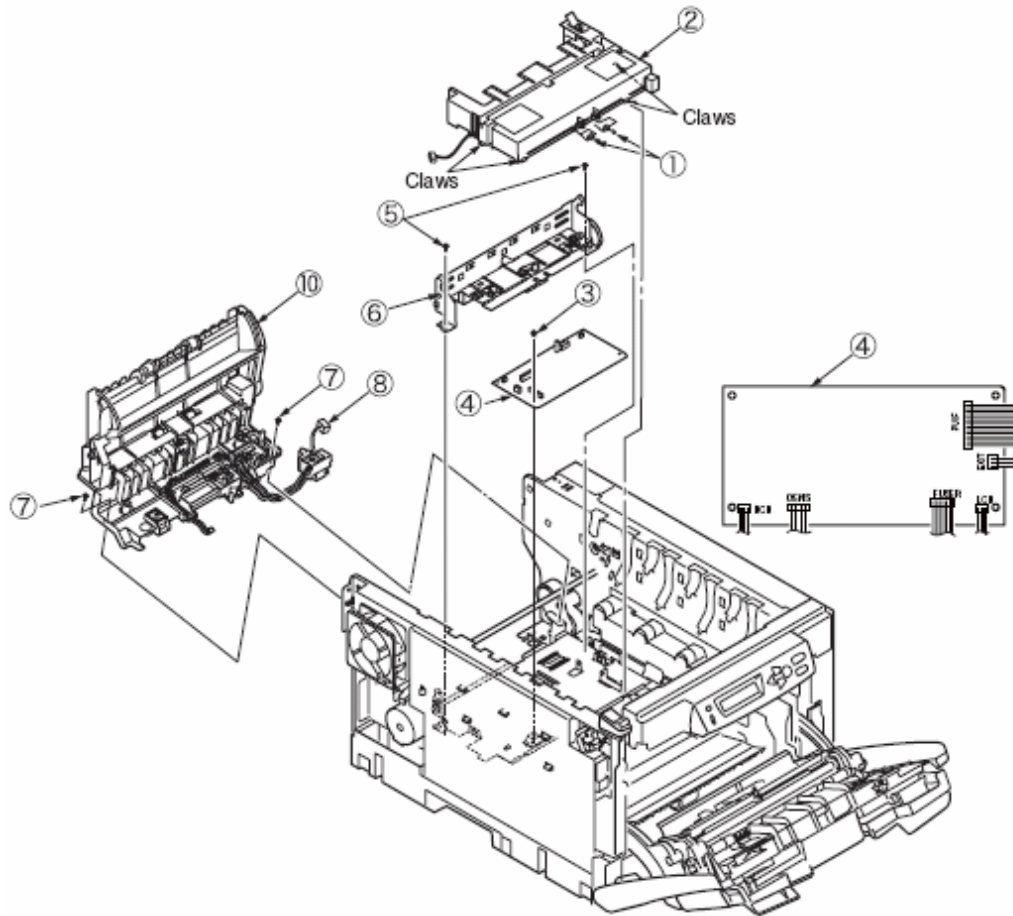
(1) Remove the cassette assembly. (2) Disassemble the print engine controller PCB. (See page 92)
 (3) Disassemble the control PCB. (See page 91) (4) Disconnect all the cables from the Guide Cable Power Low.
 (5) Unplug the fuser I/F connector from the low-voltage power supply, and remove Guide Cable Power Low **1** by releasing the two claws. (6) Remove two screws (silver) **2** and four connectors (CN1, CN2, CN3), and disassemble low-voltage power supply **3**. At the same time, remove screw **4** to disassemble AC inlet Assembly **5**.
 (7) Release claw C, and remove low-voltage fan **6**. (8) Detach motor cover **7** by releasing two claws D and claw E. (9) Remove two screws (black) **8**, unplug the connector, and disassemble hopping motor **9**. (10) Remove two screws (silver) **10**, unplug the connector, and disassemble Fuser Motor **11**. (11) Remove three screws (silver) **12**, unplug the connector, and disassemble ID motor **13**.

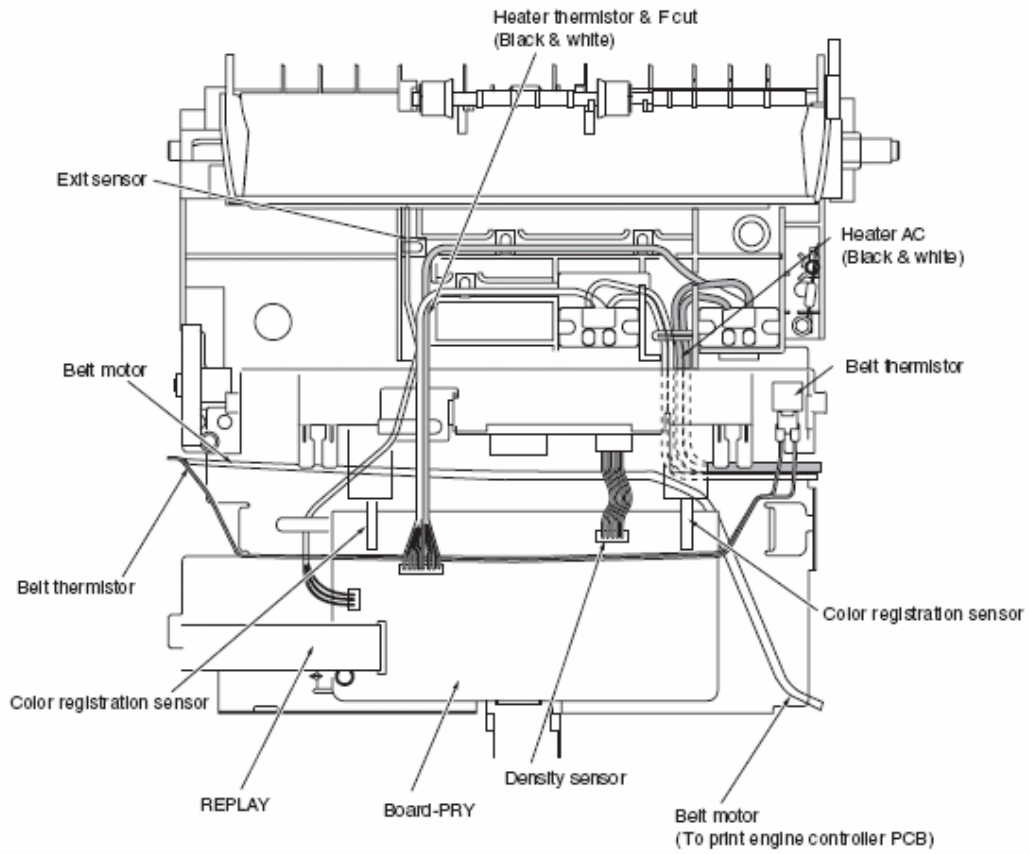
Note! • When reassembling low-voltage fan **6**, confirm the direction. When reassembling low-voltage power supply **3**, check the setting of the AC input voltage. 120-V system: Install a short-circuit plug to connector CN6. 230-V system: Do not install a short-circuit plug to connector CN6. **Replace low-voltage power supply 3 and AC inlet assembly 5 together in a pair. (Parts approved in a pair under Safety Standard) (they were in a pair qualified to applicable safety standards).**



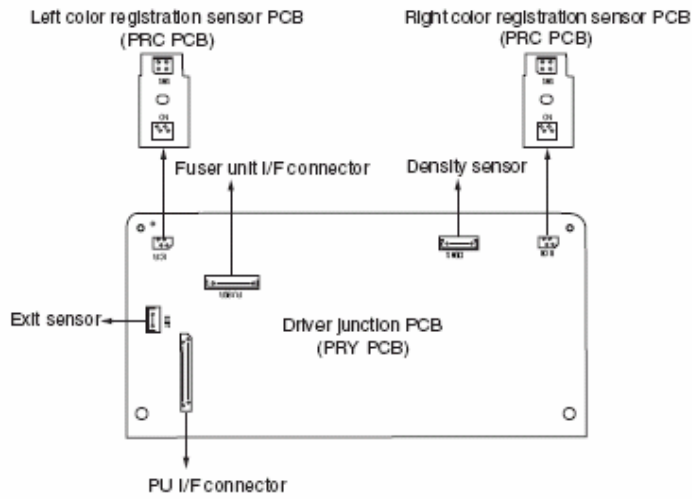
Printer - Guide Eject Assembly / Color Register Assembly / Board-PRY

- (1) Detach the left side cover page 84, right side cover page 84, rear cover page 90, and top cover assembly page 93. (2) Remove the print engine controller PCB, control PCB, and low-voltage power supply page 95. (3) Unplug the connector of the belt thermistor, remove two spring torsions 1, and disassemble cover driver 2 by freeing the four claws with the flat-tipped screwdriver (Tool No. 3). (4) Remove screws (silver) 3, and unplug the six connectors to disassemble Board-PRY 4. (5) Remove two screws (silver) 5, and disassemble color register Assembly 6. (6) Remove three screws (silver) 7, and free cable 8 of the fuser I/F connector from the clamp. Then, release the claw of guide cable 9 by sliding it, and remove guide eject Assembly 10.





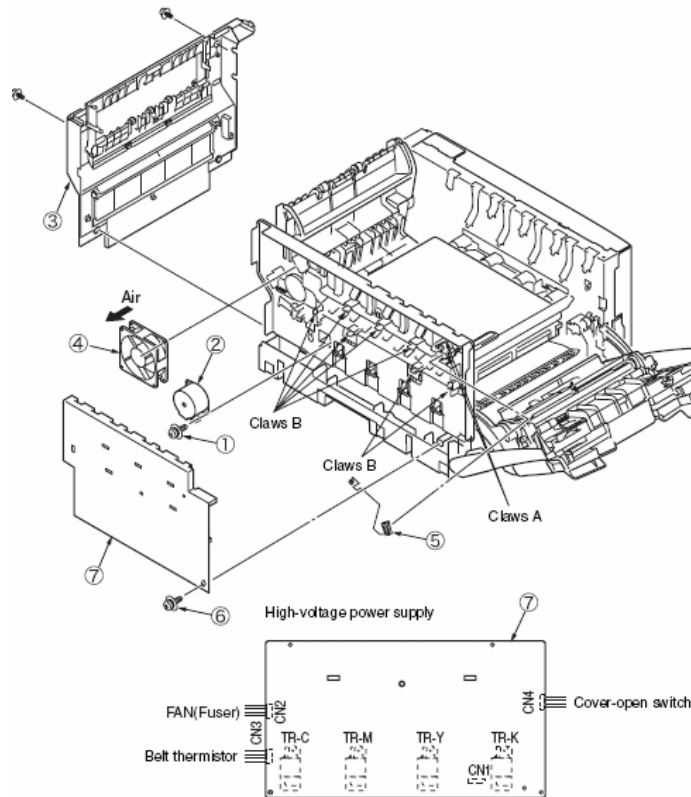
Board-PRY Cable Route Diagram



Board-PRY Connection Diagram

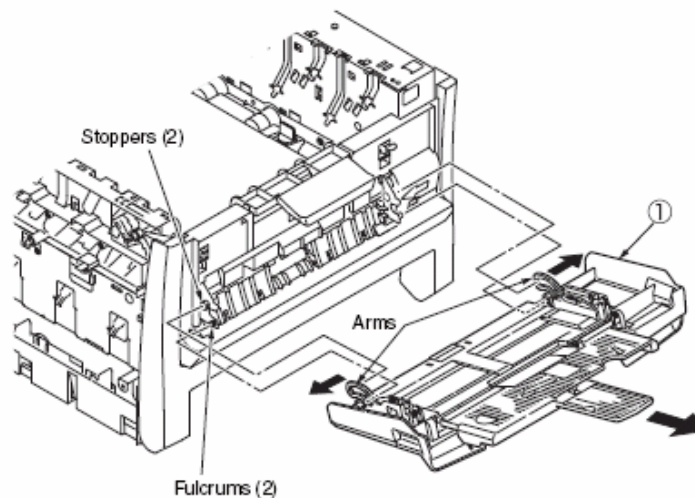
Printer - Fan (Fuser)/ Belt Motor / High-Voltage Power Supply Board / Cover-Open Switch

- (1) Detach the left side cover. (See page 84). (2) Remove screw (silver) **1**, unplug the connector, and disassemble belt motor **2**. (3) Detach rear cover **3**. (See page 90). (4) Unplug the connector, and remove Fan (Fuser) **4** by turning it clockwise. (5) Free the connector and two claws **11**, and remove cover-open switch **5**. (6) Remove screws (silver) **6** and seven claws **12**, unplug the two connectors, and disassemble high-voltage power supply **7**.



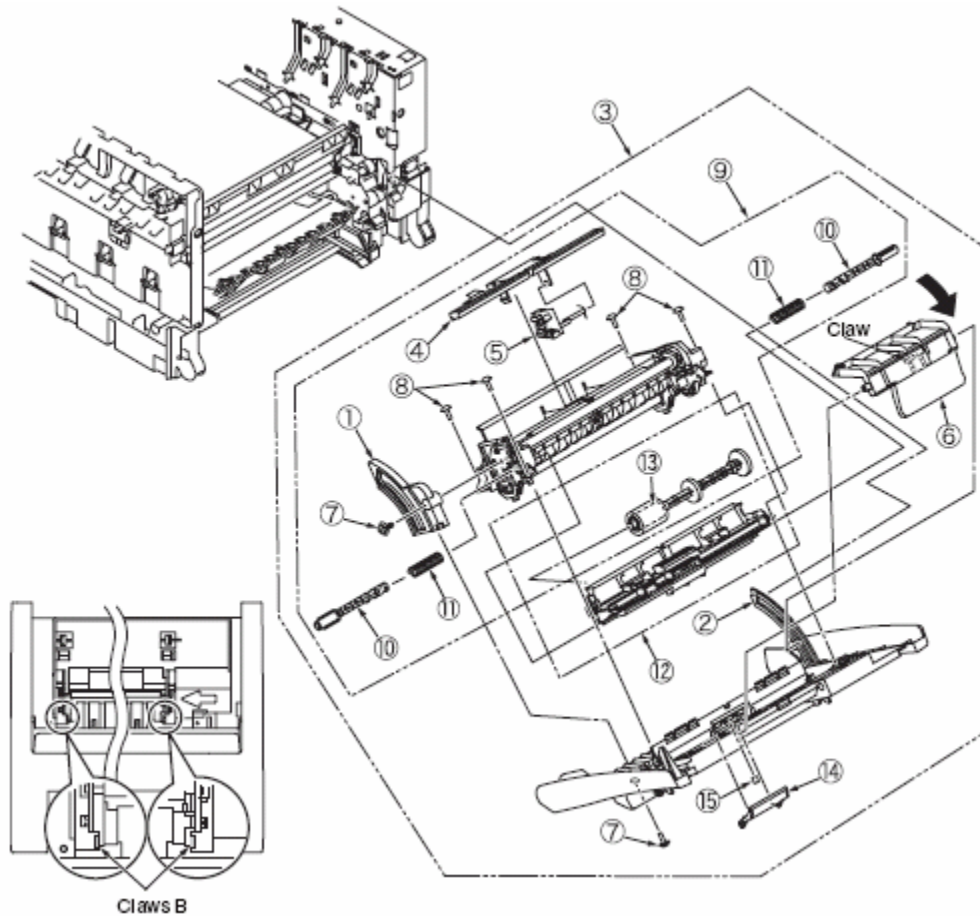
Printer - MPT Assembly

- (1) Open MPT Assembly **1**. (2) Release the two stoppers by opening the two arms of MPT Assembly **1** toward the outside, pull the assembly in the direction of the arrow to free the two fulcrums, and detach MPT Assembly **1**.



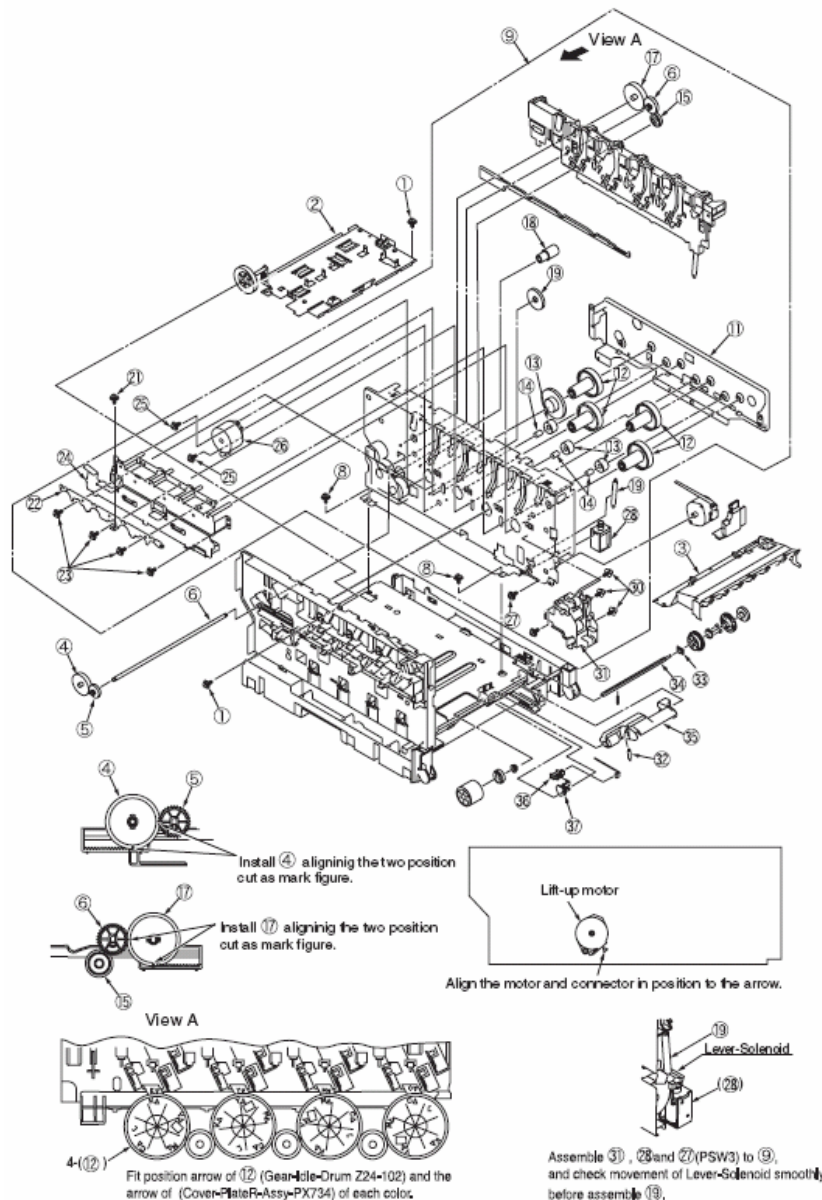
Feeder Unit / Board-RSF/ MPT Hopping Roller / Frame Assembly Separator / Cover Front

- (1) Open the top cover.
- (2) Remove the plate shield, and unplug the connector. (See page 91).
- (3) Free the claws of Stay L 1 and Stay R 2, and remove feeder unit 3 by sliding it to the right.
- (4) Detach the motor cover. (See page 95)
- (5) Disassemble cover sensor 4 by freeing the claw.
- (6) Unplug the connector, and disassemble Board-RSF 5.
- (7) Remove MPT Assy. (See page 98)
- (8) Detach lever 6 by turning it until its claw is freed.
- (9) Remove two screws (black) 7, and detach stay L 1.
- (10) Remove four screws (black) 8, free two claws 12 on the front side, and disassemble feed Assembly 9.
- (11) Detach two lock shafts 10 and two springs 11, and disassemble guide Assembly 12 by freeing the four claws.
- (12) Remove hopping roller shaft 13.
- (13) Free the two fulcrums, and remove frame assembly separator 14 and spring 15.



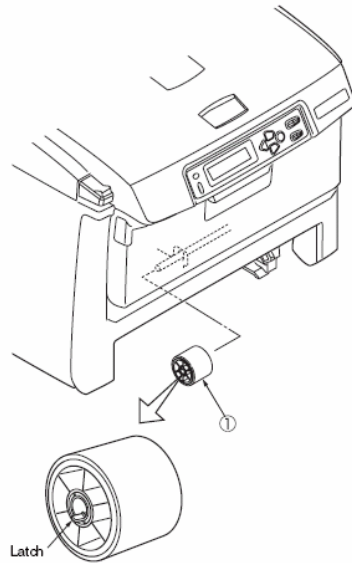
Board-PRZ Lift-Up Motor/Solenoid/Paper-End Sensor

- (1) Detach the left side cover page 84, right side cover page 84, rear cover page 90, top cover unit page 93, and feeder unit page 85. (2) Disassemble the print engine controller PCB page 92 and control PCB page 91. (3) Remove the guide cable Power Low, low-voltage power supply, and low-voltage fan page 95. (4) Remove the cover driver, Board-PRY, color register Assembly, and eject assembly page 96. (5) Remove two screws (silver) 1 and plate driver 2. (6) Release the latch, and disassemble cover hopping 3 after unplugging the connector of the 2nd tray. (7) Detach the Fan (Fuser) page 98. (8) Remove gear 4 by releasing the two latches, and remove gear 5 by releasing the latch. Then, remove shaft 7 by releasing the latch of gear 6. (9) Remove two screws (silver) 8, and disassemble side plate R Assembly 9. (10) Remove ten screws (silver) 10 and plate outer 11, and detach four gears idle ID 12, gear 13, three color 14, gear 6, 15, 16, 17, 18 and spring 19 of the solenoid. (11) Release the two latches, and remove guide Assembly side R 20 by sliding it upward. (12) Remove screw (silver) 21, remove plate lockout ID 22 and four screws 23, and detach plate inner 24. (13) Remove two screws (silver) 10, unplug the connector, and disassemble lift-up motor. (14) Remove screw (silver) 27, and detach solenoid 28. (15) Remove the screw (silver) and three screws (black) 30, and detach gear Assembly HP 31. (16) Remove spring 32, free the claw, and remove bushing 33, hopping roller shaft 34 and frame hopping 35. (17) Disassemble paper-end sensor 36 and paper-end lever 37.



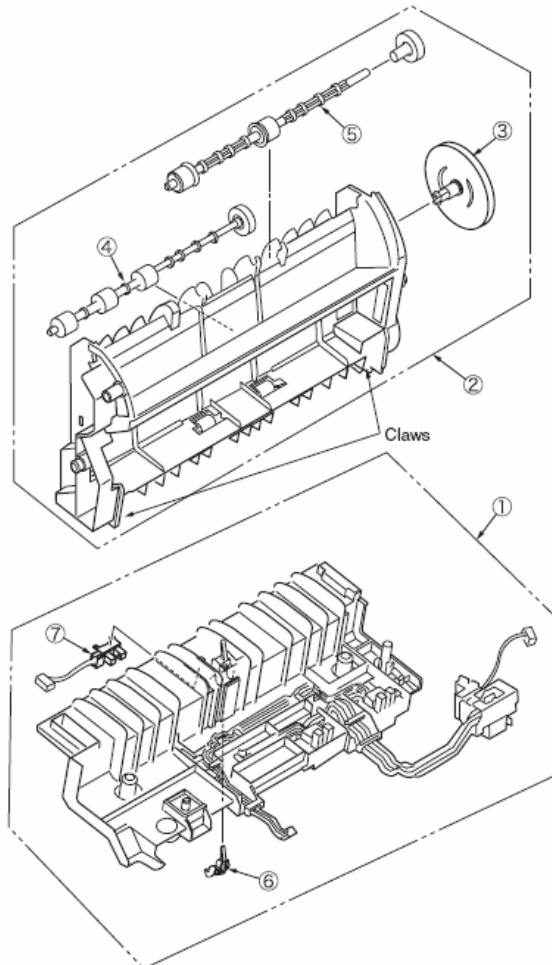
Feed Roller

- (1) Remove the cassette. (2) Release the latch, and remove feed roller.



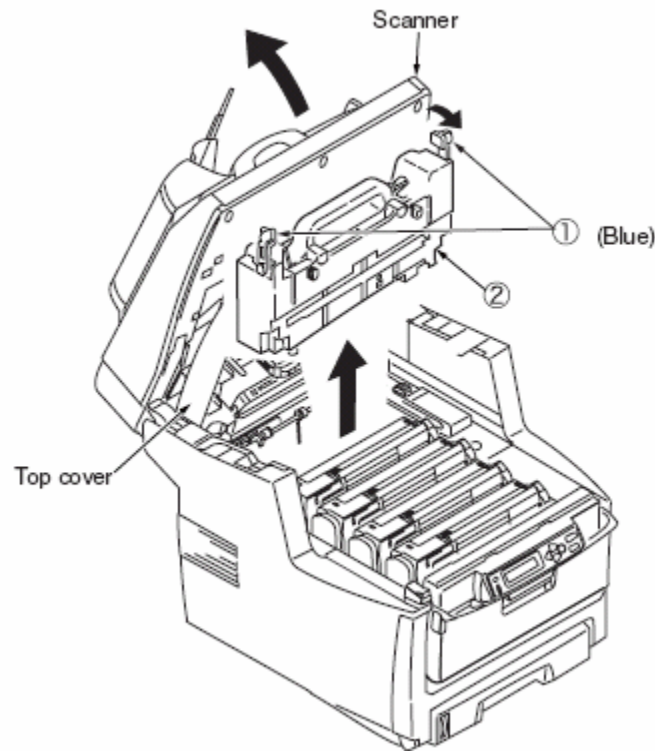
Shaft Eject Assembly (FU) / Shaft Eject Assembly(FD) / Eject Sensor

- (1) Remove the eject Assembly. (See page **XXX**) (2) Free the two claws, and divide the Assembly between guide into lower **1** and guide eject upper **2**. (3) Remove gear idle eject **3**, and disassemble shaft Assembly eject (FU) **4** Gear-Eject, and shaft Assembly eject (FD) **5**. (4) Remove lever eject sensor **6** and eject sensor **7**.



Fuser Unit

- (1) Open the scanner. (2) Open the top cover. (3) Lift up the lock levers **1** (2, blue) of the fuser unit in the direction of the arrow, and remove fuser unit **2**.



Belt Unit

- (1) Open the scanner. (2) Open the top cover. (3) Remove ID unit **1**. (4) Turn the lock levers (2, blue) of belt unit **2** in the direction of the arrow, and hold belt unit **2** by the levers (Blue) to remove it.

