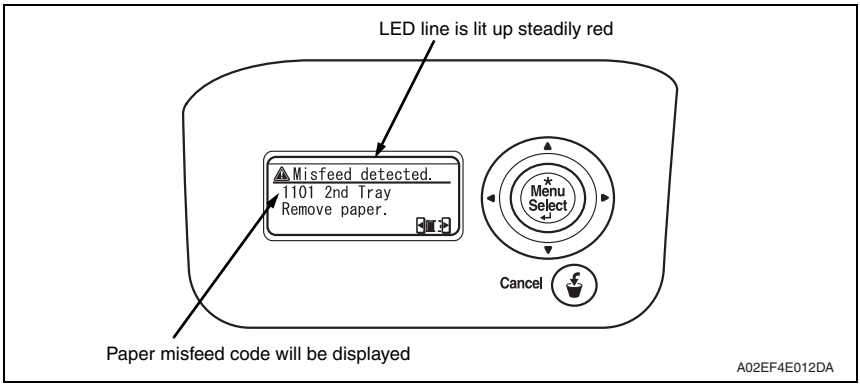
Troubleshooting

13. Jam display

13.1 Misfeed display

- When a paper misfeed occurs, the LED line lights up red steadily and the misfeed message is displayed on the control panel of the machine.



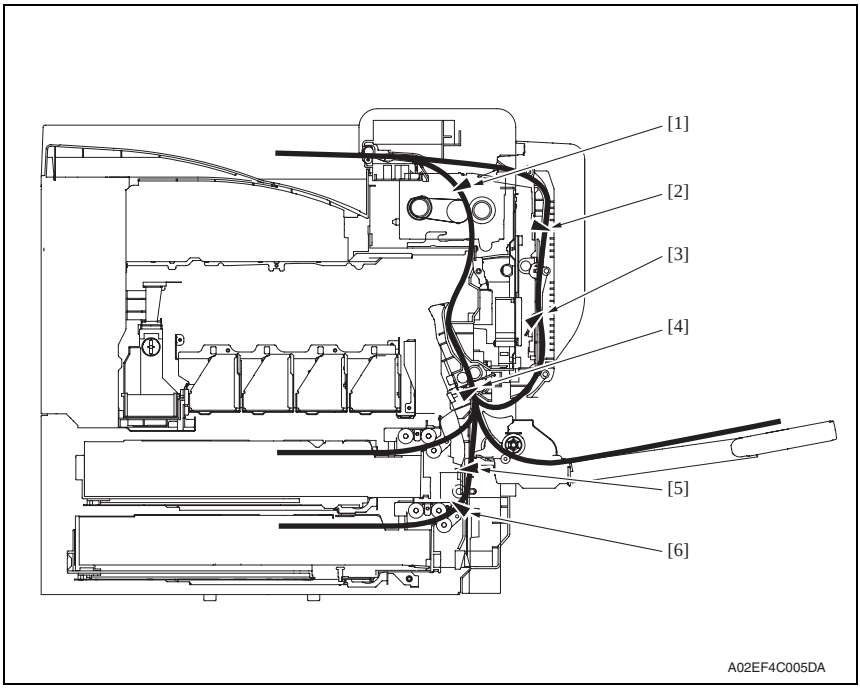
Code *1	Jam type	Misfeed processing location	Action
1101	Misfeed at tray 2 feed section	Right door	P.277
1201	Misfeed at tray 3 feed section	Vertical transport door	P.278
1301	See P.21 of the PC-106/205 service manual.		
2001			
1401			
2001			
1501	See P.27 of the PC-406 service manual.		
2001			
1001	Misfeed at tray 1 feed section	Right door	P.279
9201	Misfeed at duplex pre-registration section	Right door, duplex door	P.280
2001	Misfeed at vertical transport section	Right door, vertical transport door	P.281
3001	2nd image transfer section	Right door	P.282
3201	Misfeed at exit section	Right door	P.283
9301	Misfeed at duplex transport section	Duplex door	P.284
⚠1 9901	Controller jam	—	P.285
7216	See P.67 of the FS-519/PK-515/OT-602 service manual. See P.59 of the FS-609/PK-501 service manual.		
⚠1 7218			
7221			
7281			
7243	See P.67 of the FS-519/PK-515/OT-602 service manual.		
7221	See P.33 of the SD-505 service manual.		
⚠1 7225	See P.33 of the SD-505 service manual. See P.59 of the FS-609/PK-501 service manual.		
7284	See P.33 of the SD-505 service manual.		
7285			
7290	See P.7 of the MT-502 service manual.		

*1: JAM code is described in the paper jam history of the machine management list.
[Service Mode] → [List Output] → [Management List]

13.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfed, and close the door.

13.2 Sensor layout



[1]	Paper exit sensor	PS25	[4]	Sensor in front of tim. roller	PS23
[2]	Duplex paper passage sensor/1	PS33	[5]	Paper feed tray 3 vertical transport sensor	PS16
[3]	Duplex paper passage sensor/2	PS34	[6]	Paper feed tray 3 paper feed sensor	PS14

13.3 Solution

13.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the edge guide and trailing edge stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

13.3.2 Solution when paper curl occurs

Step	Check items/actions		
1	Turn over the stacked paper in the paper tray.	OK	—
		NG	Go to step 2.
2	Does paper curl occur just after a warm-up has been completed or the sleep mode has been turned OFF?	YES	Go to step 3.
	Does paper curl occur under normal conditions (under conditions other than those mentioned above)?	YES	Go to step 5.
3	*1.* Call the Service Mode to the screen. *2.* Select [System Settings] → [Change WarmupTime]. *3.* Change the setting to [Mode 3]. See P.217	OK	—
		NG	Go to step 4.
4	*1.* Call the Service Mode to the screen. *2.* Select [System Settings] → [Change WarmupTime]. *3.* Change the setting to [Mode 4]. See P.217	—	—
5	*1.* Call the Service Mode to the screen. *2.* Select [MachineAdjustment] → [FusingTemperature] → [Heated Side]. *3.* Select a paper type. *4.* Change the temperature to [-10 °C]. See P.225	OK	—
		NG	Go to step 6
6	*1.* Call the Service Mode to the screen. *2.* Select [MachineAdjustment] → [FusingTemperature] → [Heated Side]. *3.* Select a paper type. *4.* Change the temperature of to [-20 °C]. See P.225	—	—

13.3.3 Misfeed at tray 2 feed section

A. Detection timing

Type	Description
Detection of misfeed at tray 2 feed section	• The leading edge of the paper does not turn ON the sensor in front of tim. roller (PS23) even after the lapse of a given period of time after the tray 2 starts to feed paper.
Detection of paper left in tray 2 feed section	• The paper feed tray 2 chain feed sensor (PS1) is turned ON when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
Tray 2 feed section loop registration reversing jam	• For paper fed from the tray 2, due to a delay in paper arrival, loop forming in front of the timing roller is not complete before the rise timing of the transport motor (M1).
Tray 2 feed section TOD permit waiting jam	• For paper fed from the tray 2, TOD permit continues to be disabled for a predetermined period of time after the timing of TOD output.

B. Action

Relevant parts	
Transport motor (M1) Paper feed tray 2 paper feed clutch (CL1) Paper feed tray 2 chain feed sensor (PS1) Sensor in front of tim. roller (PS23)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS1 I/O check	PRCB CN12PRCB-8 (ON)	D-8 to 9
3	PS23 I/O check	PRCB CN1PRCB-3 (ON)	D-18
4	CL1 operation check	PRCB CN12PRCB-11 (ON)	D-9
5	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
6	Change PRCB	—	—

13.3.4 Misfeed at tray 3 feed section

A. Detection timing

Type	Description
Detection of misfeed at tray 3 feed section	• The leading edge of the paper does not unblock the paper feed tray 3 vertical transport sensor (PS16) even after the lapse of a given period of time after the tray 3 starts to feed paper.
Detection of paper left in tray 3	• The paper feed tray 3 vertical transport sensor (PS16) is unblocked when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset. • The paper feed tray 3 paper feed sensor (PS14) is unblocked when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
Tray 3 feed section TOD permit waiting jam	• For paper fed from the tray 3, TOD permit continues to be disabled for a predetermined period of time after the timing of TOD output.

B. Action

Relevant parts	
Transport motor (M1) Paper feed tray 3 paper feed clutch (CL2) Paper feed tray 3 vertical transport clutch (CL3) Paper feed tray 3 paper feed sensor (PS14) Paper feed tray 3 vertical transport sensor (PS16)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS14 I/O check	PRCB CN9PRCB-8 (ON)	D-10
3	PS16 I/O check	PRCB CN9PRCB-11 (ON)	D-10
4	CL2 operation check	PRCB CN9PRCB-19 (ON)	D-11
5	CL3 operation check	PRCB CN9PRCB-17 (ON)	D-10 to 11
6	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
7	Change PRCB	—	—

13.3.5 Misfeed at tray 1 feed section

A. Detection timing

Type	Description
Detection of misfeed at tray 1 feed section	• The leading edge of the paper does not turn ON the sensor in front of tim. roller (PS23) even after the lapse of a given period of time after the tray 1 starts to feed paper.
Tray 1 feed section loop registration reversing jam	• For paper fed from the tray 1, loop forming has not been complete before a sheet enters the timing roller because the rise timing of load to perform registration is earlier than the rise timing of load to form a loop.
Tray 1 feed section TOD permit waiting jam	• For paper fed from the tray 1, TOD permit continues to be disabled for a predetermined period of time after the timing of TOD output.

B. Action

Relevant parts	
Transport motor (M1) Paper feed tray 1 paper feed clutch (CL4) Sensor in front of tim. roller (PS23)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS23 I/O check	PRCB CN1PRCB-3 (ON)	D-18
3	CL4 operation check	PRCB CN6PRCB-2 (ON)	D-1
4	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
5	Change PRCB	—	—

13.3.6 Misfeed at duplex pre-registration section

A. Detection timing

Type	Description
Detection of misfeed at duplex pre-registration section	• The leading edge of the paper does not turn ON the sensor in front of tim. roller (PS23) even after the lapse of a given period of time after a duplex paper feed sequence has been started.
Duplex pre-registration section loop registration reversing jam detection	• For the second-side feed of paper in the duplex mode, loop forming has not been complete before the second side of a sheet enters the timing roller because the rise timing of load to perform registration is earlier than the rise timing of load to form a loop.
Duplex pre-registration section TOD permit waiting jam	• For the second-side feed of paper in the duplex mode, TOD permit continues to be disabled for a predetermined period of time after the timing of TOD output.

B. Action

Relevant parts	
Transport motor (M1) Duplex transport motor (M7) Sensor in front of tim. roller (PS23)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS23 I/O check	PRCB CN1PRCB-3 (ON)	D-18
3	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
4	M7 operation check	PRCB CN4PRCB-1 to 4	D-3
5	Change PRCB	—	—

13.3.7 Misfeed at tray 3 vertical transport section

A. Detection timing

Type	Description
Detection of misfeed at vertical transport section	• The leading edge of the paper does not turn ON the sensor in front of tim. roller (PS23) even after the lapse of a given period of time after the paper has blocked the paper feed tray 3 vertical transport sensor (PS16). • The paper feed tray 3 vertical transport sensor (PS16) is not unblocked even after the lapse of a given period of time after the paper has blocked the PS16.
Vertical transport section loop registration reversing jam	• For paper fed from the tray 3, loop forming has not been complete before a sheet enters the timing roller because the rise timing of load to perform registration is earlier than the rise timing of load to form a loop.

B. Action

Relevant parts	
Transport motor (M1) Paper feed tray 3 vertical transport clutch (CL3) Paper feed tray 3 vertical transport sensor (PS16) Sensor in front of tim. roller (PS23)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS16 I/O check	PRCB CN9PRCB-11 (ON)	D-10
3	PS23 I/O check	PRCB CN1PRCB-3 (ON)	D-18
4	CL3 operation check	PRCB CN9PRCB-17 (ON)	D-10 to 11
5	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
6	Change PRCB	—	—

13.3.8 Misfeed at 2nd image transfer section

A. Detection timing

Type	Description
Detection of misfeed at 2nd image transfer section	• A sheet of paper does not turn OFF the sensor in front of tim. roller (PS23) after a predetermined period of time has elapsed since the sheet has turned ON the PS23. • A sheet of paper does not turned ON the paper exit sensor (PS25) after a predetermined period of time has elapsed since the sheet has turned ON the sensor in front of tim. roller (PS23).
Detection of paper left in 2nd image transfer section	• The sensor in front of tim. roller (PS23) is turned ON when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
2nd image transfer section loop registration reversing jam	• For paper fed from the tray, loop forming has not been complete before a sheet enters the timing roller because the rise timing of load to perform registration is earlier than the rise timing of load to form a loop.

B. Action

Relevant parts	
Transport motor (M1) Fusing motor (M5) Tim. roller clutch (CL6) Sensor in front of tim. roller (PS23) Paper exit sensor (PS25)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS23 I/O check	PRCB CN1PRCB-3 (ON)	D-18
3	PS25 I/O check	—	—
4	CL6 operation check	PRCB CN1PRCB-5 (ON)	D-17
5	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
6	M5 operation check	PRCB CN34PRCB-2 (REM) PRCB CN34PRCB-5 (LOCK)	D-21
7	Change PRCB	—	—

13.3.9 Misfeed at exit section

A. Detection timing

Type	Description
Detection of misfeed at exit section	• The paper exit sensor (PS25) is not turned OFF even after the lapse of a given period of time after the paper has turned ON the PS25. • The paper exit sensor (PS25) is not turned ON even after the lapse of a given period of time after the switchback sequence is started. • The duplex paper passage sensor/1 (PS33) is not turned ON even after the lapse of a given period of time after the switchback sequence is started.
Detection of paper left in exit section	• The paper exit sensor (PS25) is turned ON when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant parts	
Transport motor (M1) Fusing motor (M5) Switchback motor (M6) Duplex transport motor (M7) Paper exit sensor (PS25) Duplex paper passage sensor/1 (PS33)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS25 I/O check	—	—
3	PS33 I/O check	PRCB CN4PRCB-7 (ON)	D-4
4	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
5	M5 operation check	PRCB CN34PRCB-2 (REM) PRCB CN34PRCB-5 (LOCK)	D-21
6	M6 operation check	PRCB CN40PRCB-10 to 13	D-18
7	M7 operation check	PRCB CN4PRCB-1 to 4	D-3
8	Change PRCB	—	—

13.3.10 Misfeed at duplex transport section

A. Detection timing

Type	Description
Detection of misfeed at duplex transport section	• A sheet of paper does not unblock the duplex paper passage sensor/2 (PS34) after a predetermined period of time has elapsed since the sheet blocks the duplex paper passage sensor/1 (PS33). • A sheet of paper does not unblock the duplex paper passage sensor/1 (PS33) after a predetermined period of time has elapsed since the sheet blocks PS33. • A sheet of paper does not block the duplex paper passage sensor/2 (PS34) after a predetermined period of time has elapsed since the sheet unblocks PS34.
Detection of paper left in duplex transport section	• The duplex paper passage sensor/1 (PS33) is blocked, or the duplex paper passage sensor/2 (PS34) is unblocked when the power switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant parts	
Switchback motor (M6) Duplex transport motor (M7) Duplex paper passage sensor/1 (PS33) Duplex paper passage sensor/2 (PS34)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	PS33 I/O check	PRCB CN4PRCB-7 (ON)	D-4
3	PS34 I/O check	PRCB CN4PRCB-10 (ON)	D-4
4	M6 operation check	PRCB CN40PRCB-10 to 13	D-18
5	M7 operation check	PRCB CN4PRCB-1 to 4	D-3
6	Change PRCB	—	—

13.3.11 Controller jam

A. Detection timing

Type	Description
Controller jam	• A control erratic operation as it relates to the duplex unit occurs.
	• A stop command (a command to effect a forced stop) is received.
	• A media error (wrong type or size of paper) occurs during a 2-sided print cycle.

B. Action

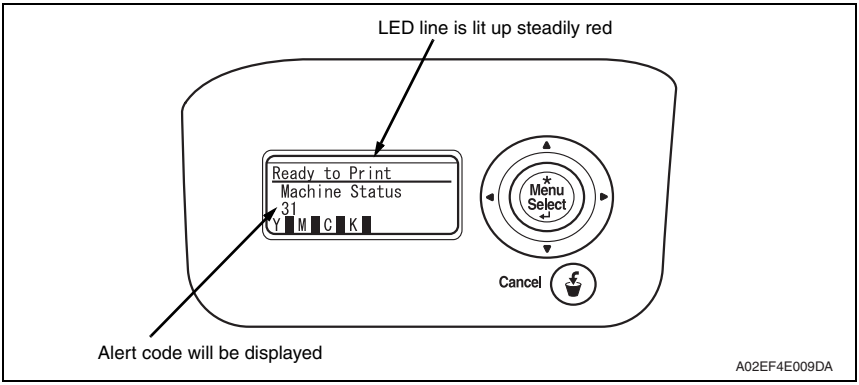
Relevant parts	
MFP board (MFPB)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Initial check items	—	—
2	Check for the paper left in the machine.	—	—
3	Check to see if the size or type of the paper specified on the control panel or printer driver coincides with that of the paper actually loaded.	—	—
4	One possible cause is a control erratic operation. So, turn OFF and ON the power switch and run the print cycle again.	—	—
5	Upgrade the firmware.	—	—
6	Change PRCB	—	—
7	Change MFPB	—	—

14. Malfunction code

14.1 Alert code

- The machine's CPU performs a self-diagnostics function that, on detecting a malfunction, displays the corresponding warning code on the control panel.



14.1.1 Alert code list

- If a stabilization-related fault occurs, the numeral portion of the corresponding warning code appears.

Code	Item	Description
P-5	IDC sensor (front) failure	• When adjusting the IDC sensor, output voltage detected for all sample patterns are specified value or more. • When adjustment is complete, sensor's output voltage with selected light intensity is specified value or under. • During image stabilization (gamma correction control), detected output value for IDC sensor did not go below threshold (half the value of what is detected by IDC sensor on the belt surface) for three consecutive times (position of the pattern end is not detected). • During image stabilization (gamma correction control), sensor's output value of each color for hyper 0 gradation after the primary approximation is half the detection level on the belt surface or under
P-28	IDC sensor (rear) failure	
P-6	Cyan imaging unit failure	• All density readings taken from the density pattern produced on the transfer belt are 1.0 g/m^2 (IDC sensor photo receiver output) or less during max. density adjustment (Vg/Vdc adjustment).
P-7	Magenta imaging unit failure	
P-8	Yellow imaging unit failure	
P-9	Black imaging unit failure	
P-21	Color regist test pattern failure	• The number of points detected in the main scan direction is more or less than the specified value during main scan direction registration correction. • The number of points detected in the sub scan direction is more or less than the specified value during sub scan direction registration correction.

Code	Item	Description
P-22	Color regist adjust failure	• The color shift amount is greater than the specified range during main scan direction registration correction. • The color shift amount is greater than the specified range during sub scan direction registration correction. • On the color shift test pattern, the maximum and minimum deviations detected in the main and sub scan directions go over the predetermined value.
P-27	Secondary transfer ATVC failure	• An abnormal average value is detected during an adjustment of the second image transfer ATVC value.
P-30	Color PC drive sensor malfunction	• The output from the color PC drive main and sub sensors remains unchanged for a continuous period of 1,000 ms while the color PC motor is turning stably and the lock signal is active (LOW-0).
P-31	Black PC drive sensor malfunction	• The output from the black PC drive main and sub sensors remains unchanged for a continuous period of 1,000 ms while the transport motor is turning stably and the lock signal is active (LOW-0).

14.2 Solution

14.2.1 P-5: IDC sensor (front) failure

14.2.2 P-28 IDC sensor (rear) failure

Relevant parts	
IDC registration sensor/MK (IDCS/MK) IDC registration sensor/YC (IDCS/YC)	Printer control board (PRCB) High voltage unit (HV) Transfer belt unit

Step	Action
1	Wipe clean the surface of the transfer belt with a soft cloth, if it is dirty.
2	Change the image transfer belt unit if the transfer belt is damaged.
3	Reinstall or reconnect IDCS/MK or IDCS/YC, sensor shutter or connector, if it is installed or connected improperly.
4	Clean IDCS/MK or IDCS/YC if it is dirty.
5	Check the HV connector for proper connection and correct as necessary.
6	Open/close the front door, run an image stabilization sequence, and output the adjustments list, and check the IDC value of the level history1. IDC1: IDCS/MK, IDC2: IDCS/CY If the value is 1.0 V or less, change IDCS/MK or IDCS/CY.
7	Change PRCB.

14.2.3 P-6: Cyan imaging unit failure

14.2.4 P-7: Magenta imaging unit failure

14.2.5 P-8: Yellow imaging unit failure

14.2.6 P-9: Black imaging unit failure

Relevant parts	
Imaging unit /C Imaging unit /M Imaging unit /Y Imaging unit /K	Transfer belt unit High voltage unit (HV) Printer control board (PRCB)

Step	Action
1	Select [ProcessAdjustment] → [Dmax Density] and, if the setting value is negative, readjust.
2	Check the drive transmission portion of the Imaging Unit and correct as necessary.
3	Clean the IDC registration sensor/MK (IDCS/MK) or IDC registration sensor/CY (IDCS/CY) window if dirty.
4	Clean the contact of the imaging unit connector if dirty.
5	Check the HV connector for proper connection and correct as necessary.
6	Change imaging unit.
7	Change the transfer belt unit.
8	Change PRCB.

14.2.7 P-21: Color regist test pattern failure

Relevant parts	
Transfer belt unit PH unit	Printer control board (PRCB)

Step	Action
1	Wipe clean the surface of the transfer belt with a soft cloth, if it is dirty.
2	Change the image transfer belt unit if the transfer belt is damaged.
3	Change the PH unit.
4	Change PRCB.

14.2.8 P-22: Color regist adjust failure

Relevant parts	
IDC registration sensor /MK (IDCS/MK) IDC registration sensor/CY (IDCS/CY)	Printer control board (PRCB)

Step	Action
1	Slide out the imaging unit and reinstall it in position.
2	Reinstall or reconnect IDCS/MK or IDCS/CY if it is installed or connected improperly.
3	Check the vertical transport guide for installed position and correct as necessary.
4	Change PRCB.

14.2.9 P-27: Secondary transfer ATVC failure

Relevant parts	
High voltage unit (HV) Printer control board (PRCB)	Image transfer entrance guide 2nd image transfer assy Transfer belt unit

Step	Action
1	Check roller opposed to the 2nd image transfer roller is grounded. Clean the joint or correct if necessary.
2	Check the image transfer entrance guide for proper installation and correct if necessary.
3	Check that the spring does not come off during the pressure operation of the 2nd transfer roller and correct if necessary.
4	Check the contact at the joint of the 2nd image transfer assy and HV. Clean the joint or correct if necessary.
5	Change the transfer belt unit.
6	Change HV.
7	Change PRCB.

14.2.10 P-30: Color PC drive sensor malfunction

Relevant electrical parts	
Color PC drive main sensor (PS27) Color PC drive sub sensor (PS28)	Main drive unit Printer control board (PRCB)

Step	Action
1	Check the PS27 or PS28 for installed position and proper connector connection.
2	Wipe the PS27 or PS28 clean of dirt if any.
3	If P-30 occurs again, change the main drive unit.
4	Change PRCB.

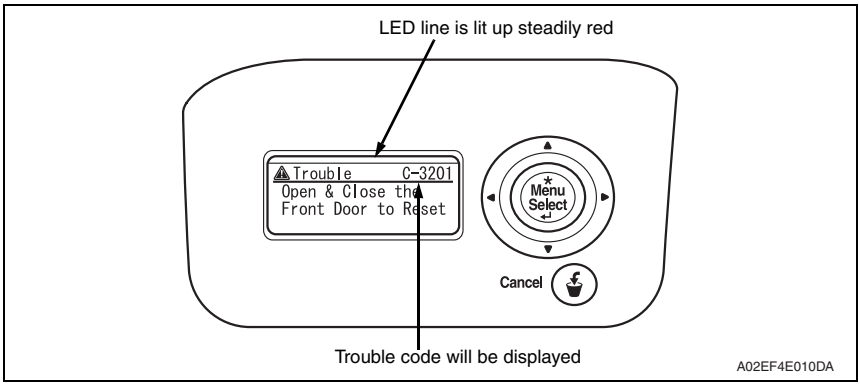
14.2.11 P-31: Black PC drive sensor malfunction

Relevant parts	
Black PC drive main sensor (PS29) Black PC drive sub sensor (PS30)	Main drive unit Printer control board (PRCB)

Step	Action
1	Check the PS29 or PS30 for installed position and proper connector connection.
2	Wipe the PS29 or PS30 clean of dirt if any.
3	If P-31 persists, change the main drive unit.
4	Change PRCB.

14.3 Trouble code

- The machine's CPU performs a self-diagnostics function that, on detecting a malfunction, displays the corresponding malfunction code on the control panel.



14.3.1 Trouble code list

* For the details of the malfunction codes of the options, see the Service Manual for the corresponding option.

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C0001	LCT connection failed	See P.32 of the PC-406 service manual.	—	C
C0202	Tray 2 feeder up/down abnormality	• The paper feed tray 2 upper limit sensor is not blocked even after the lapse of a given period of time after the lifting motion has been started.	Tray 2	B
C0204	Tray 3 feeder up/down abnormality	• The paper feed tray 3 upper limit sensor is not blocked even after the lapse of a given period of time after the lifting motion has been started.	Tray 3	B
C0206	Tray 4 feeder up/down abnormality	See P.26 of the PC-106/205 service manual.	Tray 4	B
C0208	Tray 5 feeder up/down abnormality		Tray 5	B
C0209	LCT elevator motor malfunction	See P.32 of the PC-406 service manual.	LCT	B
C0210	LCT ascent motion failure		LCT	B

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C0211	Tray 1 feeder up/down abnormality	• The paper feed tray 1 lift-up position sensor is not unblocked even when the transport motor has turned for a given number of pulses after the sequence to move the paper lifting plate from the standby position to the feed position was started. • The paper feed tray 1 lift-up position sensor is not blocked even when the transport motor has turned for a given number of pulses after the sequence to move the paper lifting plate from the feed position to the standby position was started.	Tray 1	B
C0212	LCT ejection failure	See P.32 of the PC-406 service manual.	LCT	B
C0213	LCT shift gate malfunction		LCT	B
C0214	LCT shifting failure		LCT	B
C0215	LCT shift motor malfunction		LCT	B
C0301	Suction fan motor's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C1004	FNS communication error	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	C
⚠1 C1180	Transport system drive malfunctions	See P.65 of the FS-609/PK-501 service manual.	—	B
⚠1 C1181	Paddle motor malfunctions		—	B
C1182	Unsupported option trouble			
⚠1 C1183	Finishing option elevator drive malfunction	See P.73 of the FS-519/PK-515/OT-602 service manual. See P.65 of the FS-609/PK-501 service manual.	—	B
C1190	Finishing option aligning bar moving mechanism malfunction 1	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
C1191	Finishing option aligning bar moving mechanism malfunction 2		—	B
⚠1 C1192	Front aligning plate motor malfunctions	See P.65 of the FS-609/PK-501 service manual.	—	B
⚠1 C1193	Rear aligning plate motor malfunctions		—	B
C11A0	Paper holding drive failure	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
C11A1	Finishing option exit roller pressure/retraction failure		—	B
C11A2	Saddle exit roller pressure/retraction failure	See P.38 of the SD-505 service manual.	—	B
C11A3	Shutter drive failure	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B

	Code	Item	Detection timing	Trouble isolation compliant unit	Rank
⚠1	C11A4	Saddle exit motor failure Booklet exit motor malfunctions	See P.38 of the SD-505 service manual. See P.65 of the FS-609/PK-501 service manual.	—	B
	C11A5	Saddle in & out guide motor failure	See P.38 of the SD-505 service manual.	—	B
	C11A6	Saddle layable guide drive failure		—	B
	C11B0	Finishing option stapler unit CD drive failure	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
⚠1	C11B1	Stapler unit slide motor malfunctions	See P.65 of the FS-609/PK-501 service manual.	—	B
	C11B2	Finishing option stapling mechanism malfunction 1	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
⚠1	C11B4	Stapler/folding motor malfunctions	See P.65 of the FS-609/PK-501 service manual.	—	B
	C11B5	Side staple 1 drive failure	See P.38 of the SD-505 service manual.	—	B
	C11B6	Side staple 2 drive failure		—	B
	C11C0	Punch motor malfunction	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
⚠1	C11C1	Punch control board malfunctions	See P.65 of the FS-609/PK-501 service manual.	—	C
⚠1	C11C2	Punch side registration motor malfunctions		—	C
⚠1	C11C3	Punch motor malfunctions		—	C
⚠1	C11C5	Punch sensor malfunctions		—	C
	C11D0	Crease motor drive failure	See P.38 of the SD-505 service manual.	—	B
	C11E0	Unsupported option trouble			
	C1301	Finishing option cooling fan motor failure	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	B
⚠1	C1401	Backup RAM failure	See P.65 of the FS-609/PK-501 service manual.	—	C
	C2151	Secondary transfer roller pressure welding alienation	• During a retraction operation of the 2nd image transfer roller, the 2nd image transfer welding alienation sensor cannot detect the 2nd image transfer roller at its retracted position within a predetermined period of time after the 2nd image transfer retraction motor starts rotating. • During a pressure operation of the 2nd image transfer roller, the 2nd image transfer welding alienation sensor cannot detect the 2nd image transfer roller at its pressed position within a predetermined period of time after the 2nd image transfer retraction motor starts rotating.	—	B

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C2152	Transfer belt pressure welding alienation	• During a retraction operation of the transfer belt, the transfer belt retraction sensor cannot detect the transfer belt at its retracted position within a predetermined period of time after the transfer belt retraction clutch is turned ON. • During a pressure operation of the transfer belt, the transfer belt retraction sensor cannot detect the transfer belt at its pressed position within a predetermined period of time after the transfer belt clutch is turned ON.	—	B
C2164	PC charge malfunction	• When electrostatic charge output is ON, electrostatic charge leak detection system continues to detect leaks for a predetermined period of time.	—	B
C2253	Color PC motor's failure to turn	• The motor lock signal remains HIGH for a predetermined continuous period of time while the motor is turning.	—	B
C2254	Color PC motor's turning at abnormal timing	• The motor lock signal remains LOW for a predetermined continuous period of time while the motor remains stationary.	—	B
C225D	Color dev. unit engagement/disengagement failure	• The gears remain disengaged after the lapse of a predetermined period of time after the engagement operation is started by the color dev. unit engaged motor. • The gears remain engaged after the lapse of a predetermined period of time after the disengagement operation is started by the color dev. unit engaged motor.	—	B
C2351	K toner suction fan motor's failure to turn	• The motor lock signal remains HIGH for a predetermined continuous period of time while the motor is turning.	—	B
C2451	Release new transfer belt unit	• A new installation is not detected when a new transfer cleaner unit (image transfer belt unit) is installed.	—	B
C2551	Abnormally low toner density detected cyan TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 4 % or less for a given number of times consecutively.	—	B
C2552	Abnormally high toner density detected cyan TCR sensor	• TC ratio in the developing machine, which is determined by Toner replenishing amount control mechanism, is 11 % or more for a given number of times consecutively.	—	B
C2553	Abnormally low toner density detected magenta TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 4 % or less for a given number of times consecutively.	—	B

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C2554	Abnormally high toner density detected magenta TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 11 % or more for a given number of times consecutively. • When the connector of the TCR sensor is disconnected.	—	B
C2555	Abnormally low toner density detected yellow TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 4 % or less for a given number of times consecutively. • When the connector of the TCR sensor is disconnected.	—	B
C2556	Abnormally high toner density detected yellow TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 11 % or more for a given number of times consecutively. • When the connector of the TCR sensor is disconnected.	—	B
C2557	Abnormally low toner density detected black TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 4 % or less for a given number of times consecutively.	—	B
C2558	Abnormally high toner density detected black TCR sensor	• TC ratio in the developing machine, which is determined by toner replenishing amount control mechanism, is 11 % or more for a given number of times consecutively. • When the connector of the TCR sensor is disconnected.	—	B
C2559	Cyan TCR sensor adjustment failure	• TCR sensor automatic adjustment does not function properly, failing to adjust to an appropriate value.	—	B
C255A	Magenta TCR sensor adjustment failure		—	B
C255B	Yellow TCR sensor adjustment failure		—	B
C255C	Black TCR sensor adjustment failure		—	B
C2650	Main backup media access error	• The re-written data, which has been read out, checked and founded as error, is read out again and found as error. • The error was found when reading out the counter value. • The machine detects that the service EEPROM board is not loaded in position.	—	C

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C2651	EEPROM access error (IU C)	• An error was found when reading or writing data. • The error was found when reading out the counter value.	—	C
C2652	EEPROM access error (IU M)		—	C
C2653	EEPROM access error (IU Y)		—	C
C2654	EEPROM access error (IU K)		—	C
C2A01	EEPROM access error (TC C)	• An error was found when reading or writing data. • The error was found when reading out the counter value.	—	C
C2A02	EEPROM access error (TC M)		—	C
C2A03	EEPROM access error (TC Y)		—	C
C2A04	EEPROM access error (TC K)		—	C
C3101	Fusing roller separation failure	• With the fusing roller being retracted, the pulse of the fusing roller retraction sensor does not change even after the specified period of time has passed after the fusing retraction motor started rotating. • With the fusing roller being pressed, the pulse of the roller retraction sensor does not change even after the specified period of time has passed after the fusing retraction motor started rotating. • During a pressure operation of the fusing roller, the fusing roller is not at the pressed position even after the roller retraction sensor counts the specified number of pulses after the fusing retraction motor starts rotating.	—	B
C3201	Fusing motor failure to turn	• The motor lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C3202	Fusing motor turning at abnormal timing	• The motor lock signal remains LOW for a predetermined continuous period of time while the motor remains stationary.	—	B
C3301	Fusing cooling fan motor/ 1 failure to turn	• The fan motor lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C3302	Fusing cooling fan motor/ 2,3 failure to turn	• The fan motor lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C3421	Fusing heaters trouble (heating side)	• The temperature detected by the heating roller thermistor/C does not reach a predetermined level after the lapse of a predetermined period of time after the heating roller fusing heater lamp lights up. • The difference between the maximum and minimum temperatures detected by the heating roller thermistor/C within a predetermined period of time after the start of a warm-up cycle is below or above a predetermined value. • The temperature detected after a pressure level correction remains under a predetermined level even after the lapse of a predetermined period of time after the start of the temperature detection. • During a warm-up, a zero cross signal cannot be detected after the lapse of a predetermined period of time after the fusing heater is turned ON or OFF.	—	A
C3423	Fusing heaters trouble (pressurizing side)	• After warm-up operation starts, the fusing pressure roller thermistor does not detect a temperature as high as a predetermined one though a predetermined period of time has elapsed. • The temperature of the pressure roller remains lower than a predetermined level even after the lapse of a predetermined period of time after a temperature correction.	—	A
C3461	Release new fusing unit	• A new installation is not detected when a new fusing Unit is installed.	—	B
C3721	Fusing abnormally high temperature detection (heating side)	• The heating roller thermistor continues to detect a temperature higher than a predetermined one for a predetermined period of time. • Hard protection signal L is detected continuously over a predetermined period of time.	—	A
C3723	Fusing abnormally high temperature detection (pressurizing side)	• The temperature of the pressure roller continues to be higher than a predetermined level for a predetermined period of time after a temperature correction.	—	A
C3821	Fusing abnormally low temperature detection (heating side)	• The heating roller thermistor continues to detect a temperature lower than a predetermined one for a predetermined period of time. • In the states other than a warm-up operation, a zero cross signal cannot be detected after the lapse of a predetermined period of time after the fusing heater is turned ON or OFF. • The power supply frequency cannot be detected.	—	A

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
C3823	Fusing abnormally low temperature detection (pressurizing side)	• The temperature of the pressure roller continues to be lower than a predetermined level for a predetermined period of time after a temperature correction.	—	A
C4151	Polygon motor rotation trouble (C)	• The polygon motor fails to turn stably even after the lapse of a given period of time after activating the polygon motor. • Motor lock signal detects HIGH for a given period time consecutively during the polygon motor is rotating.	—	B
C4152	Polygon motor rotation trouble (M)		—	B
C4153	Polygon motor rotation trouble (Y)		—	B
C4154	Polygon motor rotation trouble (K)		—	B
C4551	Laser malfunction (C)	• SOS signal is not detected even after the lapse of a given period of time after staring the laser output. • SOS signal is not detected for a given period of time during printing or image stabilization adjustment.	—	B
C4552	Laser malfunction (M)		—	B
C4553	Laser malfunction (Y)		—	B
C4554	Laser malfunction (K)		—	B
C5102	Transport motor's failure to turn	• The motor lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C5103	Transport motor's turning at abnormal timing	• The motor lock signal remains LOW for a predetermined continuous period of time while the motor remains stationary.	—	B
C5351	Power supply cooling fan motor/1's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C5353	Cooling fan motor/2's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C5354	Exhaust fan motor's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C5357	Cooling fan motor/1's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
C5371	MFP board cooling fan motor's failure to turn	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.	—	B
CA051	Standard controller configuration failure	• The controller of the printer control board (PRCB) is faulty.	—	C
CA052	Controller hardware error	• A controller hardware error is detected in the network I/F.	—	C
CA053	Controller start failure	• A controller start failure is detected in the controller interface.	—	C
CC151	ROM contents error upon startup (MSC)	• A fault is detected in a sequence of ROM contents check of the MSC (PRCB) during starting	—	C

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
CC153	ROM contents error upon startup (PRT)	• A fault is detected in a sequence of ROM contents check of the mechanical control board (MFPB) during starting.	—	C
CC155	Finisher ROM error	See P.73 of the FS-519/PK-515/OT-602 service manual.	—	C
CC163	ROM contents error (PRT)	• The wrong model of firmware is detected in the engine during the initial connection to the engine is being checked.	—	C
CC164	ROM contents error (MSC)	• The wrong model of firmware is detected in the MFP board when the power switch is turned ON.	—	C
CD002	JOB RAM save error	• The error in save of JOB data to the memory/ hard disk and its read error are detected.	—	C
CD004	Hard disk access error	• Unable to communicate between the hard disk and printer control board (PRCB).	—	C
CD005	Hard disk error 1	• Hard disk is faulty.	—	C
CD006	Hard disk error 2		—	C
CD007	Hard disk error 3		—	C
CD008	Hard disk error 4		—	C
CD009	Hard disk error 5		—	C
CD00A	Hard disk error 6		—	C
CD00B	Hard disk error 7		—	C
CD00C	Hard disk error 8		—	C
CD00D	Hard disk error 9		—	C
CD00E	Hard disk error A		—	C
CD00F	Hard disk data transfer error	• Data transfer from the hard disk is faulty.	—	C
CD010	Hard disk unformat	• Unformatted hard disk is connected.	—	C
CD011	Hard disk out of specifications mounted	• A hard disk that falls outside the specifications is connected.	—	C
CD020	Hard disk verify error	• The data abnormality is detected by the HDD verify check.	—	C
CD030	Hard disk management information reading error	• The machine fails to read administrative information data saved in the hard disk.	—	C
CD201	File memory mounting error	• The file memory is not mounted. • The file has any abnormality.	—	C
CD202	Memory capacity discrepancy	• File memory capacity on the Printer control board (PRCB) is not enough. • File memory capacity necessary for duplex printing is not enough during Duplex unit mounting.	—	C
CD203	Memory capacity discrepancy 2	• File memory capacity on the Printer control board (PRCB) is not enough.	—	C
CD211	PCI-SDRAM DMA operation failure	• Hardware related to the transfer of memory image of the Printer control board (PRCB) fails to respond.	—	C

Code	Item	Detection timing	Trouble isolation compliant unit	Rank
CD212	Compression/extraction timeout detection	• Hardware related to the BTC compression function of the Printer control board (PRCB) fails to respond.	—	C
CD241	Encryption board setting error	• Initialization error of the encrypted ASIC is detected during the machine is starting.	—	C
CD242	Encryption board mounting error	• The faulty of the installation of encrypted ASIC is detected during the machine is starting.	—	C
CD261	USB host board failure	• When a failure is detected in USB host board included in the local interface kit. • Non-standard USB device is connected.	—	C
CD3##	NVRAM data error	• Abnormality is detected by the abnormal check of each NVRAM data.	—	—
CD370	NVRAM data multiple errors	• Multiple errors (Over 5) are detected by the abnormal check of each NVRAM data.	—	—
CD401	NACK command incorrect	• When abnormality is found in the communication of controller.	—	C
CD402	ACK command incorrect		—	C
CD403	Checksum error		—	C
CD404	Receiving packet incorrect		—	C
CD405	Receiving packet analysis error		—	C
CD406	ACK receiving timeout		—	C
CD407	Retransmission timeout		—	C
CDC##	Trouble related to security	• Contact the responsible people of KMBT before taking some countermeasures.	—	—
CE001	Abnormal message queue	• Printer control board (PRCB) is faulty.	—	C
CE002	Message and method parameter failure		—	C
CE003	Task error		—	C
CE004	Event error		—	C
CE005	Memory access error		—	C
CE006	Header access error		—	C
CE007	DIMM initialize error		—	C
CEEE1	MSC undefined malfunction occurring	• An undefined malfunction occurs in the MSC of the printer control board (PRCB).	—	C
CEEE2	Scanner section undefined malfunction	• An undefined malfunction occurs in the scanner section.	—	C
CEEE3	Engine section undefined malfunction	• An undefined malfunction occurs in the engine section (MFPB, etc.).	—	C

- The machine displays an abort code (CF###) on the control panel as it becomes unable to process tasks properly through its software control.
- When the system program is aborted, check the electrical component, unit, option, and connection relating to the specific type of the abort condition.

Code	Item		Relevant electrical components, units, and options	Rank
CF001	CT_singleList table abnormal	An exceptional instance occurred due to the unexpected Parameter in the System F/W.	• MFP board (MFPB)	C
CF002	CT_doubleList table abnormal			C
CF003	CT_doubleList table abnormal			C
CF004	CT_queue full abnormal			C
CF011	Array link abnormal			C
CF012	FAT link abnormal			C
CF013	File size abnormal			C
CF021	setDelayMessage Table OverFlow			C
CF022	procSetBootParamTcpipAddress() injustice			C
CF023	MsgQue OverFlow			C
CF031	getJobPageToIPE() page number injustice			C
CF032	getJobHDDPageToIPE() page number injustice			C
CF033	setDivTbl() limitation over			C
CF034	HDDQUEUE Over Flow			C
CF041	getAPPPtrFromAPPID() abnormal			C
CF042	getAPPIndexFromAPPID() abnormal			C
CF051	CC_InputPageEntry:operator[] page injustice			C
CF061	IdeCommand_Set() status abnormal			C
CF062	IdeCommand_Set() parameter abnormal			C
CF091	PCI ASIC1 ERROR	ASIC1 error		C
CF092	PCI ASIC2 ERROR	ASIC2 error		C
CF093	PCI ASIC4 ERROR	ASIC3 error		C
CF101	SCAN TIME OUT	Image transfer malfunctions		C
CF111	Compress TIME OUT	Compression malfunctions		C
CF112	Compress table OverFlow			C
CF113	Compress table check			C
CF121	Expand TIME OUT			C
CF122	Expand table OverFlow			C
CF123	Expand expandLine abnormal			C

Code	Item		Relevant electrical components, units, and options	Rank
CF131	Print TIME OUT	Image transfer malfunctions	• MFP board (MFPB)	C
CF201	startIRReadAnd Compress()Sequence	An exceptional instance occurred due to the unexpected parameter in the system F/W.		C
CF202	startWorkSave()Sequence abnormal			C
CF203	convAPItoIJCParameter()page abnormal			C
CF204	calcCompresserUse()CmpExpID Abnormal			C
CF211	setParameterBandColorPlane() Table OverFlow			C
CF212	convAPItoIJCParameter()page abnormal			C
CF213	calcExpandUse() CmpExpID abnormal			C
CF221	startPrintOutput outputsize zero			C
CF222	Next request comes during processing of startPrintOutput ()			C
CF223	Next request comes during processing of startWorkLoadOutput ()			C
CF614	“Output sequence” queue			C
CF624	Panel LCD date queue			C
CF704	Common data “Delete-waiting HDD accumulated job ID” queue			C
CF724	Engine/Command queue		• MFP board (MFPB)/ Engine	C
CF734	Panel/Command queue		• MFP board (MFPB)/ Control Panel	C
CF744	File memory transfer start-waiting command queue		• MFP board (MFPB)	C
CF754	File memory compression requesting command queue			C
CF764	Panel instruction delete job queue			C
CF774	Warning delete job queue			C
CF784	Application instruction delete job queue			C
CF794	Output page information for duplex back side queue			C
CF7A4	Paper feed completion output pate information queue			C
CF7B4	Exposure compaction output page information queue			C

Code	Item		Relevant electrical components, units, and options	Rank
CF7C4	Pre-discharge completion output page information queue	An exceptional instance occurred due to the unexpected parameter in the system F/W.	• MFP board (MFPB)	C
CF7D4	Touch panel coordinate data queue			C
CF7E4	Direct key data queue			C
CF802	SIO sending port...ENG		• MFP board (MFPB)/ Engine	C
CF810	SIO sending port		• MFP board (MFPB)	C
CF8ED	SIO sending port...EPNet			C
CF902	SIO receiving port...ENG		• MFP board (MFPB)/ Engine	C
CF910	SIO receiving port		• MFP board (MFPB)	C
CF9ED	SIO receiving port...EPNet			C
CFA01	getOneImgTransInfoFromTh() No applied thread	An exceptional instance occurred due to the unexpected parameter in the system F/W.		C
CFA02	chkEnableAllocExec() default error			C
CFA03	setTransBandAndRepeatNum() error			C
CFA04	Application ID error			C
CFA05	Thread selection image processing mode error			C
CFA06	getOneImgIndexNumFromTh() No applied thread			C
CFA07	setBufBandFromOut() No applied thread			C
CFA08	chkStartOutput() No applied thread			C
CFA09	rptReleaseMemResultACS() No applied thread			C
CFA10	rptEndBandTrans() No applied thread			C
CFA11	cancelTransExec() No applied thread			C
CFA12	CC_ImgTransInfo:allocTransIndex			C
CFA13	CC_MultiThreadProfile:rptBuf2MemClrEnd			C
CFA14	Thread software error		• Whole electrical components, units, and options	C
CFB00	ASIC117 first sheet DMA00		• MFP board (MFPB)	C
CFB01	ASIC117 first sheet DMA01			C
CFB02	ASIC117 first sheet DMA02			C
CFB03	ASIC117 first sheet DMA03			C
CFB04	ASIC117 first sheet DMA04			C

Code	Item	Relevant electrical components, units, and options	Rank
CFB05	ASIC117 first sheet DMA05	• MFP board (MFPB)	C
CFB06	ASIC117 first sheet DMA06		C
CFB07	ASIC117 first sheet DMA07		C
CFB08	ASIC117 first sheet DMA08		C
CFB09	ASIC117 first sheet DMA09		C
CFB0A	ASIC117 first sheet DMA10		C
CFB10	ASIC117 first sheet DMA16		C
CFB11	ASIC117 first sheet DMA17		C
CFB12	ASIC117 first sheet DMA18		C
CFB13	ASIC117 first sheet DMA19		C
CFB14	ASIC117 first sheet DMA20		C
CFB15	ASIC117 first sheet DMA21		C
CFB16	ASIC117 first sheet DMA22		C
CFB17	ASIC117 first sheet DMA23		C
CFB18	ASIC117 first sheet DMA24		C
CFB19	ASIC117 first sheet DMA25		C
CFB1A	ASIC117 first sheet DMA26		C
CFB1B	ASIC117 first sheet DMA27		C
CFB1C	ASIC117 first sheet DMA28		C
CFB1D	ASIC117 first sheet DMA29		C
CFB1E	ASIC117 first sheet DMA30		C
CFB20	Unsupported option trouble		
CFB21			
CFB22			
CFB23			
CFB24			
CFB25			
CFB26			
CFB27			
CFB28			
CFB29			
CFB2A			
CFB30			
CFB31			
CFB32			
CFB33			
CFB34			
CFB35			
CFB36			
CFB37			
CFB38			

Code	Item	Relevant electrical components, units, and options	Rank
CFB39	Unsupported option trouble		
CFB3A			
CFB3B			
CFB3C			
CFB3D			
CFB3E			
CFB40			
CFB41			
CFB42			
CFB60	ASIC117 first sheet interruption	• MFP board (MFPB)	C
CFB61	Unsupported option trouble		
CFB62			
CFB70	ASIC117 first sheet common register setting	• MFP board (MFPB)	C
CFB71	Unsupported option trouble		
CFB72			
CFB80	ASIC117 first sheet PCIBridgeDMA	• MFP board (MFPB)	C
CFB81	Unsupported option trouble		
CFB82			
CFB90	ASIC117 first sheet BTC compander/expander	• MFP board (MFPB)	C
CFB91	Unsupported option trouble		
CFB92			
CFC00	ASIC117 first sheet DMA00 error interruption	• MFP board (MFPB)	C
CFC01	ASIC117 first sheet DMA01 error interruption		C
CFC02	ASIC117 first sheet DMA02 error interruption		C
CFC03	ASIC117 first sheet DMA03 error interruption		C
CFC04	ASIC117 first sheet DMA04 error interruption		C
CFC05	ASIC117 first sheet DMA05 error interruption		C
CFC06	ASIC117 first sheet DMA06 error interruption		C
CFC07	ASIC117 first sheet DMA07 error interruption		C
CFC08	ASIC117 first sheet DMA08 error interruption		C
CFC09	ASIC117 first sheet DMA09 error interruption		C
CFC0A	ASIC117 first sheet DMA10 error interruption		C
CFC10	ASIC117 first sheet DMA16 error interruption		C
CFC11	ASIC117 first sheet DMA17 error interruption		C
CFC12	ASIC117 first sheet DMA18 error interruption		C
CFC13	ASIC117 first sheet DMA19 error interruption		C
CFC14	ASIC117 first sheet DMA20 error interruption		C
CFC15	ASIC117 first sheet DMA21 error interruption		C
CFC16	ASIC117 first sheet DMA22 error interruption		C
CFC17	ASIC117 first sheet DMA23 error interruption		C
CFC18	ASIC117 first sheet DMA24 error interruption		C

Code	Item	Relevant electrical components, units, and options	Rank
CFC19	ASIC117 first sheet DMA25 error interruption	• MFP board (MFPB)	C
CFC1A	ASIC117 first sheet DMA26 error interruption		C
CFC1B	ASIC117 first sheet DMA27 error interruption		C
CFC1C	ASIC117 first sheet DMA28 error interruption		C
CFC1D	ASIC117 first sheet DMA29 error interruption		C
CFC1E	ASIC117 first sheet DMA30 error interruption		C
CFC20	ASIC117 first sheet SDC sleep illegal access error		C
CFC21	ASIC117 first sheet watchdog timer error interruption		C
CFC22	ASIC117 first sheet underrun at image output interface 1		C
CFC23	ASIC117 first sheet overflow at image input interface		C
CFC24	ASIC117 first sheet underrun at image output interface 1		C
CFC25	ASIC117 first sheet PCI master detects target abort		C
CFC26	ASIC117 first sheet master abort by PCI master		C
CFC27	ASIC117 first sheet PCI master detects illegal setting		C
CFC28	ASIC117 first sheet PCI master detects retry error		C
CFC29	ASIC117 first sheet PCI master detects split completion byte count malfunction		C
CFC2A	ASIC117 first sheet PCI master detects split completion error message		C
CFC2B	ASIC117 first sheet unknown marker detected at JBIG core		C
CFC2C	ASIC117 SC count overflow detected at JBIG core		C
CFC2D	ASIC117 first sheet master read data parity error		C
CFC2E	ASIC117 first sheet master write data parity error		C
CFC2F	ASIC117 first sheet system error		C
CFC30	ASIC117 first sheet sleep read data parity error		C
CFC31	ASIC117 first sheet sleep write data parity error		C
CFC32	ASIC117 first sheet address parity error		C
CFC50	Unsupported option trouble		
CFC51			
CFC52			
CFC53			
CFC54			
CFC55			
CFC56			
CFC57			
CFC58			
CFC59			
CFC5A			
CFC60			

Code	Item	Relevant electrical components, units, and options	Rank
CFC61	Unsupported option trouble		
CFC62			
CFC63			
CFC64			
CFC65			
CFC66			
CFC67			
CFC68			
CFC69			
CFC6A			
CFC6B			
CFC6C			
CFC6D			
CFC6E			
CFC70			
CFC71			
CFC72			
CFC73			
CFC74	ASIC117 first sheet underrun at LCD output interface	• MFP board (MFPB)	C
CFC75	Unsupported option trouble		
CFC76			
CFC77			
CFC78			
CFC79	ASIC117 first sheet PCI master detects split completion byte count malfunctio	• MFP board (MFPB)	C
CFC7A	ASIC117 first sheet PCI master detects split completion error message		C
CFC7B	Unsupported option trouble		
CFC7C			
CFC7D			
CFC7E			
CFC7F			
CFC80			
CFC81			
CFC82			
CFCA0			
CFCA1			
CFCA2			
CFCA3			
CFCA4			
CFCA5			

Code	Item	Relevant electrical components, units, and options	Rank
CFCA6	Unsupported option trouble		
CFCA7			
CFCA8			
CFCA9			
CFCAA			
CFCAB			
CFCAC			
CFCAD			
CFCAE			
CFCAF			
CFCB0			
CFCB1			
CFCB2			
CFCB3			
CFCB4			
CFCB5			
CFCB6			
CFCB7			
CFCB8			
CFCB9			
CFCBA			
CFCBB			
CFCD0	CPS2300Great watchdog timer error	• MFP board (MFPB)	C
CFCD1	CPS2300Great local bus error		C
CFCD2	CPS2300Great sleep read data parity error		C
CFCD3	CPS2300Great sleep write data parity error		C
CFCD4	CPS2300Great address parity error		C
CFCF0	PIC3400Great watchdog timer error		C
CFCF1	PIC3400Great sleep read data parity error		C
CFCF2	PIC3400Great sleep write data parity error		C
CFCF3	PIC3400Great address parity error		C
CFD00	ASIC117 first sheet DMA00 time out		C
CFD01	ASIC117 first sheet DMA01 time out		C
CFD02	ASIC117 first sheet DMA02 time out		C
CFD03	ASIC117 first sheet DMA03 time out		C
CFD04	ASIC117 first sheet DMA04 time out		C
CFD05	ASIC117 first sheet DMA05 time out		C
CFD06	ASIC117 first sheet DMA06 time out		C
CFD07	ASIC117 first sheet DMA07 time out		C
CFD08	ASIC117 first sheet DMA08 time out		C
CFD09	ASIC117 first sheet DMA09 time out		C

Code	Item	Relevant electrical components, units, and options	Rank
CFD0A	ASIC117 first sheet DMA10 time out	• MFP board (MFPB)	C
CFD10	ASIC117 first sheet DMA16 time out		C
CFD11	ASIC117 first sheet DMA17 time out		C
CFD12	ASIC117 first sheet DMA18 time out		C
CFD13	ASIC117 first sheet DMA19 time out		C
CFD14	ASIC117 first sheet DMA20 time out		C
CFD15	ASIC117 first sheet DMA21 time out		C
CFD16	ASIC117 first sheet DMA22 time out		C
CFD17	ASIC117 first sheet DMA23 time out		C
CFD18	ASIC117 first sheet DMA24 time out		C
CFD19	ASIC117 first sheet DMA25 time out		C
CFD1A	ASIC117 first sheet DMA26 time out		C
CFD1B	ASIC117 first sheet DMA27 time out		C
CFD1C	ASIC117 first sheet DMA28 time out		C
CFD1D	ASIC117 first sheet DMA29 time out		C
CFD1E	ASIC117 first sheet DMA30 time out		C
CFD50	Unsupported option trouble		
CFD51			
CFD52			
CFD53			
CFD54			
CFD55			
CFD56			
CFD57			
CFD58			
CFD59			
CFD5A			
CFD60			
CFD61			
CFD62			
CFD63			
CFD64			
CFD65			
CFD66			
CFD67			
CFD68			
CFD69			
CFD6A			
CFD6B			
CFD6C			
CFD6D			

Code	Item	Relevant electrical components, units, and options	Rank
CFD6E	Unsupported option trouble		
CFDA0			
CFDA1			
CFDA2			
CFE00	ASIC117 first sheet DMA00 time out	• MFP board (MFPB)	C
CFE01	ASIC117 first sheet DMA01 time out		C
CFE02	ASIC117 first sheet DMA02 time out		C
CFE03	ASIC117 first sheet DMA03 time out		C
CFE04	ASIC117 first sheet DMA04 time out		C
CFE05	ASIC117 first sheet DMA05 time out		C
CFE06	ASIC117 first sheet DMA06 time out		C
CFE07	ASIC117 first sheet DMA07 time out		C
CFE08	ASIC117 first sheet DMA08 time out		C
CFE09	ASIC117 first sheet DMA09 time out		C
CFE0A	ASIC117 first sheet DMA10 time out		C
CFE10	ASIC117 first sheet DMA16 time out		C
CFE11	ASIC117 first sheet DMA17 time out		C
CFE12	ASIC117 first sheet DMA18 time out		C
CFE13	ASIC117 first sheet DMA19 time out		C
CFE14	ASIC117 first sheet DMA20 time out		C
CFE15	ASIC117 first sheet DMA21 time out		C
CFE16	ASIC117 first sheet DMA22 time out		C
CFE17	ASIC117 first sheet DMA23 time out		C
CFE18	ASIC117 first sheet DMA24 time out		C
CFE19	ASIC117 first sheet DMA25 time out		C
CFE1A	ASIC117 first sheet DMA26 time out		C
CFE1B	ASIC117 first sheet DMA27 time out		C
CFE1C	ASIC117 first sheet DMA28 time out		C
CFE1D	ASIC117 first sheet DMA29 time out		C
CFE1E	ASIC117 first sheet DMA30 time out		C
CFE50	Unsupported option trouble		
CFE51			
CFE52			
CFE53			
CFE54			
CFE55			
CFE56			
CFE57			
CFE58			
CFE59			
CFE5A			

Code	Item	Relevant electrical components, units, and options	Rank
CFE60	Unsupported option trouble		
CFE61			
CFE62			
CFE63			
CFE64			
CFE65			
CFE66			
CFE67			
CFE68			
CFE69			
CFE6A			
CFE6B			
CFE6C			
CFE6D			
CFE6E			
CFEA0			
CFEA1			
CFEA2			
CFF00	ASIC117 first sheet DMA00 time out	• MFP board (MFPB)	C
CFF01	ASIC117 first sheet DMA01 time out		C
CFF02	ASIC117 first sheet DMA02 time out		C
CFF03	ASIC117 first sheet DMA03 time out		C
CFF04	ASIC117 first sheet DMA04 time out		C
CFF05	ASIC117 first sheet DMA05 time out		C
CFF06	ASIC117 first sheet DMA06 time out		C
CFF07	ASIC117 first sheet DMA07 time out		C
CFF08	ASIC117 first sheet DMA08 time out		C
CFF09	ASIC117 first sheet DMA09 time out		C
CFF0A	ASIC117 first sheet DMA10 time out		C
CFF10	ASIC117 first sheet DMA16 time out		C
CFF11	ASIC117 first sheet DMA17 time out		C
CFF12	ASIC117 first sheet DMA18 time out		C
CFF13	ASIC117 first sheet DMA19 time out		C
CFF14	ASIC117 first sheet DMA20 time out		C
CFF15	ASIC117 first sheet DMA21 time out		C
CFF16	ASIC117 first sheet DMA22 time out		C
CFF17	ASIC117 first sheet DMA23 time out		C
CFF18	ASIC117 first sheet DMA24 time out		C
CFF19	ASIC117 first sheet DMA25 time out		C
CFF1A	ASIC117 first sheet DMA26 time out		C
CFF1B	ASIC117 first sheet DMA27 time out		C

Code	Item	Relevant electrical components, units, and options	Rank
CFF1C	ASIC117 first sheet DMA28 time out	• MFP board (MFPB)	C
CFF1D	ASIC117 first sheet DMA29 time out		C
CFF1E	ASIC117 first sheet DMA30 time out		C
CFF50	Unsupported option trouble		
CFF51			
CFF52			
CFF53			
CFF54			
CFF55			
CFF56			
CFF57			
CFF58			
CFF59			
CFF5A			
CFF60			
CFF61			
CFF62			
CFF63			
CFF64			
CFF65			
CFF66			
CFF67			
CFF68			
CFF69			
CFF6A			
CFF6B			
CFF6C			
CFF6D			
CFF6E			
CFFA0			
CFFA1			
CFFA2			

14.4 How to reset

- Different malfunction resetting procedures apply depending on the rank of the trouble code.

* List of malfunction resetting procedures

Trouble code rank	Resetting procedures
Rank A	• Trouble reset For details of Trouble Reset, see Adjustment/ Setting. See P.267
Rank B	• Opening/closing the front door
Rank C	• Turning power switch OFF/ON

14.5 Solution

14.5.1 C0202: Tray 2 feeder up/down abnormality

Relevant parts	
Paper feed tray 2 lift-up motor (M8) Paper feed tray 2 upper limit sensor (PS8)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M8 connector for proper connection and correct as necessary.	—	—
2	Check the connector of M8 for proper drive coupling and correct as necessary.	—	—
3	PS8 I/O check	PRCB CN12PRCB-3 (ON)	D-8
4	M8 operation check	PRCB CN11PRCB-4 (REM)	D-13
5	Change M8	—	—
6	Change PRCB	—	—

14.5.2 C0204: Tray 3 feeder up/down abnormality

Relevant parts	
Paper feed tray 3 lift-up motor (M9) Paper feed tray 3 upper limit sensor (PS15)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M9 connector for proper connection and correct as necessary.	—	—
2	Check the connector of M9 for proper drive coupling and correct as necessary.	—	—
3	PS15 I/O check	PRCB CN9PRCB-3 (ON)	D-9
4	M9 operation check	PRCB CN7PRCB-9 (REM)	D-11
5	Change M9	—	—
6	Change PRCB	—	—

14.5.3 C0211: Tray 1 feeder up/down abnormality

Relevant parts	
Transport motor (M1) Paper feed tray 1 pick-up solenoid (SL1) Paper feed tray 1 lift-up position sensor (PS17)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M1 connector for proper connection and correct as necessary.	—	—
2	Check the connector of M1 for proper drive coupling and correct as necessary.	—	—
3	PS17 I/O check	PRCB CN6PRCB-7 (ON)	D-2
4	SL1 operation check	PRCB CN6PRCB-4 (ON)	D-1
5	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
6	Change SL1	—	—
7	Change M1	—	—
8	Change PRCB	—	—

14.5.4 C0301: Suction fan motor's failure to turn

Relevant parts	
Suction fan motor (FM8)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM8 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM8 operation check	PRCB CN3PRCB-2 (ON) PRCB CN3PRCB-3 (LOCK)	D-4 to 5
4	Change the right door assy	—	—
5	Change PRCB	—	—

14.5.5 C2151: Secondary transfer roller pressure welding alienation

Relevant parts	
2nd image transfer retraction motor (M11) 2nd image transfer welding alienation sensor (PS36)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M11 connector for proper connection and correct as necessary.	—	—
2	Check the connector of M11 for proper drive coupling and correct as necessary.	—	—
3	PS36 I/O check	PRCB CN3PRCB-9 (ON)	D-5
4	Change the right door assy	—	—
5	Change PRCB	—	—

14.5.6 C2152: Transfer belt pressure welding alienation

Relevant parts	
Fusing motor (M5) Transfer belt retraction clutch (CL7) Transfer belt retraction sensor (PS31)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M5 connector for proper connection and correct as necessary.	—	—
2	PS31 I/O check	PRCB CN36PRCB-15 (ON)	D-26 to 27
3	CL7 operation check	PRCB CN39PRCB-10 (ON)	D-23
4	M5 operation check	PRCB CN34PRCB-2 (REM) PRCB CN34PRCB-5 (LOCK)	D-21
5	Change CL7	—	—
6	Change M5	—	—
7	Change PRCB	—	—

14.5.7 C2164: PC charge malfunction

Relevant parts	
Imaging unit	High voltage unit (HV) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the imaging unit for proper connection and correct as necessary.	—	—
2	Check the HV connector for proper connection and correct as necessary.	—	—
3	Check the PRCB connector for proper connection and correct as necessary.	—	—
4	Change IU	—	—
5	Change HV	—	—
6	Change PRCB	—	—

14.5.8 C2253: Color PC motor's failure to turn

14.5.9 C2254: Color PC motor's turning at abnormal timing

Relevant parts	
Color PC motor (M2)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M2 connector for proper connection and correct as necessary.	—	—
2	Check the M2 connector for proper drive coupling and correct as necessary.	—	—
3	Check the PRCB connector for proper connection and correct as necessary.	—	—
4	M2 operation check	PRCB CN35PRCB-4 (REM) PRCB CN35PRCB-7 (LOCK)	D-22
5	Change M2	—	—
6	Change PRCB	—	—

14.5.10 C225D: Color dev. unit engagement/disengagement failure

Relevant parts	
Color dev. unit engaged motor (M10) Color dev. unit engaged position sensor (PS26)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M10 connector for proper connection and correct as necessary.	—	—
2	Check the M10 connector for proper drive coupling and correct as necessary.	—	—
3	Check the PRCB connector for proper connection and correct as necessary.	—	—
4	PS26 I/O check	PRCB CN39PRCB-18 (ON)	D-24
5	M10 operation check	PRCB CN39PRCB-12 (REM)	D-24
6	Change M10	—	—
7	Change PRCB	—	—

14.5.11 C2351: K toner suction fan motor's failure to turn

Relevant parts	
Toner suction fan motor (FM3)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM3 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM3 operation check	PRCB CN30PRCB-7 (ON) PRCB CN30PRCB-9 (LOCK)	K-7 to 8
4	Change FM3	—	—
5	Change PRCB	—	—

14.5.12 C2451: Release new transfer belt unit

Relevant parts	
Transfer belt unit	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall unit	—	—
2	Check there is a short circuit in the fuse of the transfer belt unit.	—	—
3	Check the PRCB connector for proper connection and correct as necessary.	—	—
4	Change PRCB	—	—

14.5.13 C2551: Abnormally low toner density detected cyan TCR sensor

14.5.14 C2553: Abnormally low toner density detected magenta TCR sensor

14.5.15 C2555: Abnormally low toner density detected yellow TCR sensor

Relevant parts	
Imaging unit /C Imaging unit /M Imaging unit /Y Toner cartridge /C Toner cartridge /M Toner cartridge /Y	Toner supply motor/CK (M3) Toner supply motor/YM (M4) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall imaging unit	—	—
2	Reinstall toner cartridge	—	—
3	M3, M4 operation check (At this time, IU must be non-installation.)	PRCB CN39PRCB-1 to 4 (M3) PRCB CN39PRCB-5 to 8 (M4)	D-23
4	Change imaging unit	—	—
5	Change PRCB	—	—

14.5.16 C2552: Abnormally high toner density detected cyan TCR sensor

14.5.17 C2554: Abnormally high toner density detected magenta TCR sensor

14.5.18 C2556: Abnormally high toner density detected yellow TCR sensor

Relevant parts	
Imaging unit /C Imaging unit /M Imaging unit /Y Toner cartridge /C Toner cartridge /M Toner cartridge /Y	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall imaging unit	—	—
2	Reinstall toner cartridge	—	—
3	Change imaging unit	—	—
4	Change PRCB	—	—

14.5.19 C2557: Abnormally low toner density detected black TCR sensor

Relevant parts	
Imaging unit /K Toner cartridge /K	Toner supply motor/CK (M3) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	M3 operation check (At this time, IU must be non-installation.)	PRCB CN39PRCB-1 to 4	D-23
2	Reinstall imaging unit	—	—
3	Reinstall toner cartridge	—	—
4	Change imaging unit /K	—	—
5	Change PRCB	—	—

14.5.20 C2558: Abnormally high toner density detected black TCR sensor

Relevant parts	
Imaging unit /K Toner cartridge /K	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall imaging unit	—	—
2	Reinstall toner cartridge	—	—
3	Change imaging unit /K	—	—
4	Change PRCB	—	—

14.5.21 C2559: Cyan TCR sensor adjustment failure

14.5.22 C255A: Magenta TCR sensor adjustment failure

14.5.23 C255B: Yellow TCR sensor adjustment failure

Relevant parts	
Imaging unit /C Imaging unit /M Imaging unit /Y	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall imaging unit	—	—
2	Change imaging unit	—	—
3	Change PRCB	—	—

14.5.24 C255C: Black TCR sensor adjustment failure

Relevant parts	
Imaging unit /K	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Reinstall imaging unit /K	—	—
2	Change imaging unit /K	—	—
3	Change PRCB	—	—

14.5.25 C2650: Main backup media access error

Relevant parts	
Service EEPROM board (SV ERB)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the connector (CN23PRCB) on PRCB, the connector (CN1SV ERB) on SV ERB, and the harness between the boards for proper connection and correct as necessary.	—	—
2	Change PRCB *1.* Turn OFF the power switch and replace the current PRCB with a new one. (When using a PRCB of another machine in service, be sure to use a PRCB installed in the same model.) See P.99 *2.* Update the PRCB firmware. *3.* After completing the firmware update, turn OFF and ON the power switch and check to see that warm-up is started. Make sure that malfunction codes other than C2650 or improper IU/TC placement is not detected. *4.* When the trouble cannot be solved, reinstall the removed PRCB to the original board. **NOTE** • **When taking the above steps, check whether PRCB is defective or not without replacing the SV ERB.**	—	—
3	Change SV ERB *1.* Replace the current SV ERB with a new one. See P.106 *2.* Turn ON the power switch and check to see that warm-up is started. (One minute is spent to prepare the new SV ERB for use. During the period, the control panel backlight stays off.) Make sure that malfunction codes other than C2650 or improper IU/TC placement is not detected. *3.* Make the specified readjustments. See P.106	—	—
4	If the above actions do not solve the problem, contact KMBT.	—	—

14.5.26 C2651: EEPROM access error (IU C)

14.5.27 C2652: EEPROM access error (IU M)

14.5.28 C2653: EEPROM access error (IU Y)

14.5.29 C2654: EEPROM access error (IU K)

Relevant parts	
Imaging unit /C Imaging unit /M Imaging unit /Y Imaging unit /K	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Clean the connection between the imaging unit and the machine if dirty	—	—
2	Reinstall imaging unit	—	—
3	Check the harness for proper connection and correct as necessary.	—	—
4	Change imaging unit	—	—
5	Change PRCB	—	—

14.5.30 C2A01: EEPROM access error (TC C)

14.5.31 C2A02: EEPROM access error (TC M)

14.5.32 C2A03: EEPROM access error (TC Y)

14.5.33 C2A04: EEPROM access error (TC K)

Relevant parts	
Toner cartridge /C Toner cartridge /M Toner cartridge /Y Toner cartridge /K	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Clean the connection between the toner cartridge and the machine if dirty.	—	—
2	Reinstall toner cartridge	—	—
3	Check the harness for proper connection and correct as necessary.	—	—
4	Change toner cartridge	—	—
5	Check that CN29 harness on PRCB has a ferrite core. If not, attach the ferrite core to the harness.	—	—
6	Change PRCB	—	—

14.5.34 C3101: Fusing roller separation failure

Relevant parts	
Fusing retraction motor (M12) Fusing roller retraction sensor (PS38)	Printer control board (PRCB) Fusing unit

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M12 connector for proper connection and correct as necessary.	—	—
2	PS38 I/O check	PRCB CN28PRCB-8 (ON)	D-25
3	M12 operation check	PRCB CN28PRCB-4 to 5	D-25
4	Change M12	—	—
5	Change fusing unit	—	—
6	Change PRCB	—	—

14.5.35 C3201: Fusing motor failure to turn

14.5.36 C3202: Fusing motor turning at abnormal timing

Relevant parts	
Fusing motor (M5)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M5 connector for proper connection and correct as necessary.	—	—
2	Check the loading status of the fusing unit drive, and correct the error as necessary.	—	—
3	Check the fusing unit, PRCB for proper connection and correct or change as necessary.	—	—
4	M5 operation check	PRCB CN34PRCB-2 (REM) PRCB CN34PRCB-5 (LOCK)	D-21
5	Change M5	—	—
6	Change PRCB	—	—

14.5.37 C3301: Fusing cooling fan motor/ 1 failure to turn

Relevant parts	
Fusing cooling fan motor/1 (FM9)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM9 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM9 operation check	PRCB CN40PRCB-2 (ON) PRCB CN40PRCB-3 (LOCK)	D-19
4	Change FM9	—	—
5	Change PRCB	—	—

14.5.38 C3302: Fusing cooling fan motor/ 2,3 failure to turn

Relevant parts	
Fusing cooling fan motor/2 (FM10) Fusing cooling fan motor/3 (FM11)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM10 or FM11 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM10/FM11 operation check	PRCB CN40PRCB-5 (ON) PRCB CN40PRCB-6 (LOCK)	D-19
		PRCB CN40PRCB-8 (ON) PRCB CN40PRCB-9 (LOCK)	D-18
4	Change FM10/FM11	—	—
5	Change PRCB	—	—

14.5.39 C3421: Fusing heaters trouble (heating side)

14.5.40 C3423: Fusing heaters trouble (pressurizing side)

Relevant parts	
Fusing unit	DC power supply (DCPU) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the fusing unit for correct installation (whether it is secured in position).	—	—
2	Check the open/close operation of the upper right door.	—	—
3	Check the fusing unit, PRCB and DCPU for proper connection and correct or change as necessary.	—	—
4	Change fusing unit	—	—
5	Change PRCB	—	—
6	Change DCPU	—	—

14.5.41 C3461: Release new fusing unit

Relevant parts	
Fusing unit	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the fusing unit for correct installation (whether it is secured in position).	—	—
2	Check the fusing unit, PRCB for proper connection and correct or change as necessary.	—	—
3	Reinstall fusing unit	—	—
4	Change fusing unit	—	—
5	Change PRCB	—	—

14.5.42 C3721: Fusing abnormally high temperature detection (heating side)

14.5.43 C3723: Fusing abnormally high temperature detection (pressurizing side)

Relevant parts	
Fusing unit	DC power supply (DCPU) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the fusing unit for correct installation (whether it is secured in position).	—	—
2	Check the open/close operation of the upper right door.	—	—
3	Check the fusing unit, PRCB and DCPU for proper connection and correct or change as necessary.	—	—
4	Change fusing unit	—	—
5	Change PRCB	—	—
6	Change DCPU	—	—

14.5.44 C3821: Fusing abnormally low temperature detection (heating side)

14.5.45 C3823: Fusing abnormally low temperature detection (pressurizing side)

Relevant parts	
Fusing unit	DC power supply (DCPU) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the fusing unit for correct installation (whether it is secured in position).	—	—
2	Check the open/close operation of the upper right door.	—	—
3	Check the fusing unit, PRCB and DCPU for proper connection and correct or change as necessary.	—	—
4	Change fusing unit	—	—
5	Change PRCB	—	—
6	Change DCPU	—	—

14.5.46 C4151: Polygon motor rotation trouble (C)

14.5.47 C4152: Polygon motor rotation trouble (M)

14.5.48 C4153: Polygon motor rotation trouble (Y)

14.5.49 C4154: Polygon motor rotation trouble (K)

Relevant parts	
PH unit	PH relay board (PHREYB) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the connector for proper connection and correct as necessary.	—	—
2	Change PH unit	—	—
3	Change PHREYB	—	—
4	Change PRCB	—	—

14.5.50 C4551: Laser malfunction (C)

14.5.51 C4552: Laser malfunction (M)

14.5.52 C4553: Laser malfunction (Y)

14.5.53 C4554: Laser malfunction (K)

Relevant parts	
PH unit	PH relay board (PHREYB) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the connector for proper connection and correct as necessary.	—	—
2	Change PH unit	—	—
3	Change PHREYB	—	—
4	Change PRCB	—	—

14.5.54 C5102: Transport motor's failure to turn

14.5.55 C5103: Transport motor's turning at abnormal timing

Relevant parts	
Transport motor (M1)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the M1 connector for proper connection and correct as necessary.	—	—
2	Check M1 for proper drive coupling and correct as necessary.	—	—
3	Check the PRCB connector for proper connection and correct as necessary.	—	—
4	M1 operation check	PRCB CN34PRCB-10 (REM) PRCB CN34PRCB-13 (LOCK)	D-22
5	Change M1	—	—
6	Change PRCB	—	—

14.5.56 C5351: Power supply cooling fan motor's failure to turn

Relevant parts	
Power supply cooling fan motor (FM5)	DC power supply (DCPU) Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM5 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM5 operation check	PRCB CN30PRCB-11 (ON) PRCB CN30PRCB-12 (LOCK)	K-8
4	Change FM5	—	—
5	Change DCPU	—	—
6	Change PRCB	—	—

14.5.57 C5353: Cooling fan motor/2's failure to turn

Relevant parts	
Cooling fan motor/2 (FM2)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM2 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM2 operation check	PRCB CN28PRCB-2 (ON) PRCB CN28PRCB-3 (LOCK)	D-24
4	Change FM2	—	—
5	Change PRCB	—	—

14.5.58 C5354: Exhaust fan motor's failure to turn

Relevant parts	
Exhaust fan motor (FM4)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM4 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM4 operation check	PRCB CN3PRCB-14 (ON) PRCB CN3PRCB-16 (LOCK)	D-6
4	Change FM4	—	—
5	Change PRCB	—	—

14.5.59 C5357: Cooling fan motor/1's failure to turn

Relevant parts	
Cooling fan motor/1 (FM1)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM1 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM1 operation check	PRCB CN30PRCB-4 (ON) PRCB CN30PRCB-6 (LOCK)	K-7
4	Change FM1	—	—
5	Change PRCB	—	—

14.5.60 C5371: MFP board cooling fan motor's failure to turn

Relevant parts	
MFP board cooling fan motor (FM6)	MFP board (MFPB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the FM6 connector for proper connection and correct as necessary.	—	—
2	Check the fan for possible overload and correct as necessary.	—	—
3	FM6 operation check	PRCB CN44PRCB-1 (REM) PRCB CN44PRCB-3 (LOCK)	K-9
4	Change FM6	—	—
5	Change MFPB	—	—

14.5.61 CA051: Standard controller configuration failure

14.5.62 CA052: Controller hardware error

14.5.63 CA053: Controller start failure

Relevant parts	
MFP board (MFPB)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check to see if the following setting has been correctly made: [Service Mode] → [System Settings] → [Image Controller]. If changing the setting, turn OFF the power switch and turn it ON again after 10 seconds or more.	—	—
2	Check the connectors of the MFP board (MFPB) for proper connection and correct as necessary.	—	—
3	Change MFPB	—	—

14.5.64 CC151: ROM contents error upon startup (MSC)

14.5.65 CC153: ROM contents error upon startup (PRT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the ROM version.	—	—
2	Rewrite the firmware.	—	—
3	Replace the appropriate board.	—	—

14.5.66 CC163: ROM contents error (PRT)

Relevant parts	
Service EEPROM board (SV ERB)	Printer control board (PRCB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Rewrite the firmware.	—	—
2	Change PRCB *1.* Turn OFF the power switch and replace the current PRCB with a new one. (When using a PRCB of another machine in service, be sure to use a PRCB installed in the same model.) See P.99 *2.* Update the PRCB firmware. *3.* After completing the firmware update, turn OFF and ON the power switch and check to see that warm-up is started. *4.* When the trouble cannot be solved, reinstall the removed PRCB to the original board. **NOTE** • **When taking the above steps, check whether PRCB is defective or not without replacing the SV ERB.**	—	—
3	Change SV ERB *1.* Replace the current SV ERB with a new one. See P.106 *2.* Turn ON the power switch and check to see that warm-up is started. (One minute is spent to prepare the new SV ERB for use. During the period, the control panel backlight stays off.) *3.* Make the specified readjustments. See P.106	—	—
4	If the above actions do not solve the problem, contact KMBT.	—	—

14.5.67 CC164: ROM contents error (MSC)

Relevant parts	
Printer control board (PRCB)	MFP board (MFPB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the ROM version.	—	—
2	Rewrite the firmware.	—	—
3	Replace the corresponding board.	—	—
4	When not reviving even if the above-mentioned procedure is done, contact the responsible people of KMBT.	—	—

14.5.68 CD002: JOB RAM save error

Relevant parts	
MFP board (MFPB)	Hard disk

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the hard disk connector for proper connection and correct as necessary.	—	—
2	Format hard disk.	—	—
3	Change hard disk.	—	—
4	Change MFPB	—	—

14.5.69 CD004: Hard disk access error

14.5.70 CD005: Hard disk error 1

14.5.71 CD006: Hard disk error 2

14.5.72 CD007: Hard disk error 3

14.5.73 CD008: Hard disk error 4

14.5.74 CD009: Hard disk error 5

14.5.75 CD00A: Hard disk error 6

14.5.76 CD00B: Hard disk error 7

14.5.77 CD00C: Hard disk error 8

14.5.78 CD00D: Hard disk error 9

14.5.79 CD00E: Hard disk error A

14.5.80 CD00F: Hard disk data transfer error

14.5.81 CD020: Hard disk verify error

Relevant parts	
MFP board (MFPB)	Hard disk

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the hard disk connector for proper connection and correct as necessary.	—	—
2	Reinstall the hard disk.	—	—
3	Change hard disk.	—	—
4	Change MFPB	—	—

14.5.82 CD010: Hard disk unformat

Relevant parts	
MFP board (MFPB)	Hard disk

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Select [Service Mode] → [Machine Status] → [HDD Format], and conduct the HDD format function.	—	—
2	Change hard disk.	—	—
3	Change MFPB	—	—

14.5.83 CD011: Hard disk out of specifications mounted

Relevant parts	
Hard disk	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the hard disk specifications.	—	—
2	Change the hard disk.	—	—

14.5.84 CD201: File memory mounting error

14.5.85 CD202: Memory capacity discrepancy

14.5.86 CD203: Memory capacity discrepancy 2

Relevant parts	
MFP board (MFPB)	Memory

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check to see if the memory on MFPB is installed correctly.	—	—
2	Change the memory on MFPB.	—	—
3	Change MFPB	—	—

14.5.87 CD211: PCI-SDRAM DMA operation failure

14.5.88 CD212: Compression/extraction timeout detection

Relevant parts	
MFP board (MFPB)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Change MFPB	—	—

14.5.89 CD241: Encryption board setting error

14.5.90 CD242: Encryption board mounting error

Relevant parts	
Encryption board (SC-503)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the encryption board connector for proper connection and correct as necessary.	—	—
2	Change encryption board.	—	—

14.5.91 CD261: USB host board failure

Relevant parts	
MFP board (MFPB)	USB host board (EK-603)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check that the USB device in use is compliant with the standard.	—	—
2	Check the operation with another USB device.	—	—
3	Check the USB host board connector for proper connection and correct as necessary.	—	—
4	Change USB host board.	—	—
5	Change MFPB	—	—

14.5.92 CD3##: NVRAM data error

- When the data stored due to the NVRAM trouble is lost, backup data can be used for restoration.
- Trouble code [C-D370] will be displayed when multiple errors (over 5) of NVRAM data are detected, which can be restored with one restoration command.
- Data backup will be automatically performed every hour. Backup can also be performed manually with the following setting.
  [Service Mode] → [Security Settings] → [Data Backup]
  See P.245

A. Recovery procedure from NVRAM data error

1. On the trouble code screen, highlight “Recover Data” and press the Menu/Select key.
2. Select [Yes] and press the Menu/Select key.
3. The screen will be shifted to the data restoration screen to perform data restoration.

NOTE

- **When the restoration is performed in a short time, data restoration screen may not be displayed.**

4. Check the message which indicates that the data restoration was successfully conducted. Turn OFF the power switch and turn it ON again more than 10 seconds after.

NOTE

- **In case it failed to restore data, return to the trouble code screen.**

14.5.93 CD401: NACK command incorrect

14.5.94 CD402: ACK command incorrect

14.5.95 CD403: Checksum error

14.5.96 CD404: Receiving packet incorrect

14.5.97 CD405: Receiving packet analysis error

14.5.98 CD406: ACK receiving timeout

14.5.99 CD407: Retransmission timeout

Relevant parts	
MFP board (MFPB)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check whether there is an strong electromagnetic noise source near the main body.	—	—
2	Check the connectors on MFPB for proper connection and correct as necessary.	—	—
3	Change MFPB	—	—

14.5.100 CE001: Abnormal message queue

14.5.101 CE003: Task error

14.5.102 CE004: Event error

14.5.103 CE005: Memory access error

14.5.104 CE006: Header access error

14.5.105 CE007: DIMM initialize error

Relevant parts	
MFP board (MFPB)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the connectors on MFPB for proper connection and correct as necessary.	—	—
2	Change MFPB	—	—

14.5.106 CE002: Message and method parameter failure

Relevant parts	
MFP board (MFPB)	Hard disk

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Turn OFF the power switch and turn it ON again, and conduct the following setting. [Service Mode] → [System Settings] → [Initialize] → [Data Clear]. See P.210	—	—
2	Format hard disk.	—	—
3	Change hard disk.	—	—
4	Change MFPB	—	—

14.5.107 CEEE1: MSC undefined malfunction occurring

Relevant parts	
MFP board (MFPB)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the connectors on MFPB for proper connection and correct as necessary.	—	—
2	Change MFPB	—	—

14.5.108 CEEE3: Engine section undefined malfunction

Relevant parts	
Printer control board (PRCB)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical component)
1	Check the PRCB connector for proper connection and correct as necessary.	—	—
2	Change PRCB	—	—

15. Power supply trouble

15.1 Machine is not energized at all (DCPU operation check)

Relevant parts	
Main power switch (S1) Front door switch/1 (S3) Front door switch/2 (S4) Printer control board (PRCB)	DC power supply (DCPU)

Step	Check item	WIRING DIAGRAM (Location)	Result	Action
1	Is a power voltage supplied across CN1DCPU-1 and 2 on DCPU?	S-4	NO	Check the WIRING from the wall outlet to S1 to CN1DCPU.
2	Are the fuses on DCPU conducting?	—	NO	Change DCPU.
3	Is DC24 V being output from CN7DCPU-5 on DCPU?	Q-6	NO	Change DCPU.
4	Is DC5 V being input to CN5DCPU-1 on DCPU?	Q-5	NO	Change DCPU.
5	Is DC5 V being input to CN31PRCB-3 on the printer control board? (LED on PRCB does not blink.)	H-4	NO	Change DCPU.
			YES	Change PRCB.

15.2 Control panel indicators do not light.

Relevant parts	
Operation Board (OB)	JMP board (JMPB) DC power supply (DCPU)

Step	Check item	WIRING DIAGRAM (Location)	Result	Action
1	Is OB (PJ30MFPB) securely set on the MFPB?	T to U-12	NO	Reconnect.
2	After the power switch is turned ON, the blue and orange status indicator lights continue to be on while the control panel is not being displayed. Is JMPB (PJ17MFPB) securely set on the MFPB?	T to U-9	NO	Reconnect.
3	Is a power voltage being applied across CN1DCPU-1 and 2 on DCPU?	S-4	NO	Check the WIRING from the wall outlet to S1 to CN1DCPU.
4	Is the fuse on DCPU conducting?	—	NO	Change DCPU.

15.3 Fusing heaters do not operate

Relevant parts	
Main power switch (S1) Right door switch (S5) Fusing unit	DC power supply (DCPU)

Step	Check item	WIRING DIAGRAM (Location)	Result	Action
1	Is the power source voltage applied across CN7DCPU-5 on DCPU? During this time, the right door should be closed.	Q-6	NO	Check wiring from power outlet to S1 to CN7DCPU to S5.
2	Is the power source voltage applied across CN27-1?	D-19	YES	Fusing unit
			NO	Change DCPU.

15.4 Power is not supplied to option

15.4.1 PC-106/205/406

Step	Check item	WIRING DIAGRAM (Location)	Result	Action
1	Is DC24 V being applied to hookup connector CN47-13?	J-16	NO	Malfunction in paper feed cabinet
2	Is DC24 V being output from CN14PRCB-2 on PRCB?	H-16	NO	Check wiring from PRCB to CN47 to paper feed cabinet.
3	Is the fuse on DCPU conducting?	—	YES	Change DCPU.
			NO	Malfunction in paper feed cabinet

⚠1 15.4.2 FS-519/FS-609

Step	Check item	WIRING DIAGRAM (Location)	Result	Action
1	Are DC24 V being applied to CN51-1?	J-18	NO	Malfunction in FS-519/FS-609.
2	Are DC24 V being applied to CN4DCPU-1 on DCPU?	Q-3	NO	Check wiring from DCPU to FS-519/FS-609.
3	Is the fuse on DCPU conducting?	—	YES	Change DCPU.
			NO	Malfunction in FS-519/FS-609.

16. Image quality problem

16.1 How to read element date

- Using the numeric values on the list produced through [Service Mode] → [List Output] → [Adjustment List] or [Management List], isolate the cause of the image problem.

16.1.1 Table No.

- Check the table No. by the machine management list.

Vdc-C Vdc-M Vdc-Y Vdc-K	• Shows the developing bias value of each color of toner when an image is produced. • Standard values: around 100 to 800 V • A correction is made to make the image lighter when the numeric value is greater. • A correction is made to make the image darker when the numeric value is smaller. • Relevant Components: Imaging unit, high voltage unit (HV)
Vg-C Vg-M Vg-Y Vg-K	• Shows the grid voltage value of each color of toner when an image is produced. • Standard values: around 300 to 1100 V • A correction is made to make the image lighter when the numeric value is greater. • A correction is made to make the image darker when the numeric value is smaller. • Relevant Components: Imaging unit, high voltage unit (HV)

16.1.2 Level history1

- Check the level history1 by the adjustments list.

TCR-C TCR-M TCR-Y TCR-K	• Shows the T/C ratio reading taken last (in 0.01 % increments). • Standard value: 6 to 8 % • Relevant components: TCR sensor • “Reading taken last” means: Latest value When the Start key is pressed, the output value is displayed while a test print is being produced.
IDC1 IDC2	• Shows the IDC bare surface output reading taken last (in 0.01 V increments). • It should normally be around 4.3 V. • The output range is 0 V to 5 V. • “Reading taken last” means: Present value • Relevant components: IDC sensor, transfer belt unit
Temp-Heat Temp-Press	• Shows the temperature of the each part of the fusing unit (in 1 °C increments). • Relevant components: Fusing unit

16.1.3 Level history2

- Check the level history2 by the adjustments list.

IDC Sensor Adjust 1 IDC Sensor Adjust 2	• Shows the IDC intensity adjustment value. • It should normally be around 40 and can range from 0 to 255. • The value becomes greater as the transfer belt unit has been used more. • Relevant components: IDC sensor, transfer belt unit
ATVC -C ATVC -M ATVC -Y ATVC -K ATVC -2nd	• Shows the latest ATVC level (which varies according to the paper type). • 5 μA to 40 μA (ATVC-C/-M/-Y/-K) • 300 V to 4800 V (ATVC-2nd) • Relevant components: Transfer belt unit, High voltage unit (HV), 2nd transfer assy

16.2 How to identify problematic part

- This chapter is divided into two parts: “Initial check items” and “Troubleshooting procedure by a particular image quality problem.”
- When an image quality problem occurs, first go through the “Initial check items” and, if the cause is yet to be identified, go to “Troubleshooting procedure by a particular image quality problem.”

16.2.1 Initial check items

A. Initial check items 1

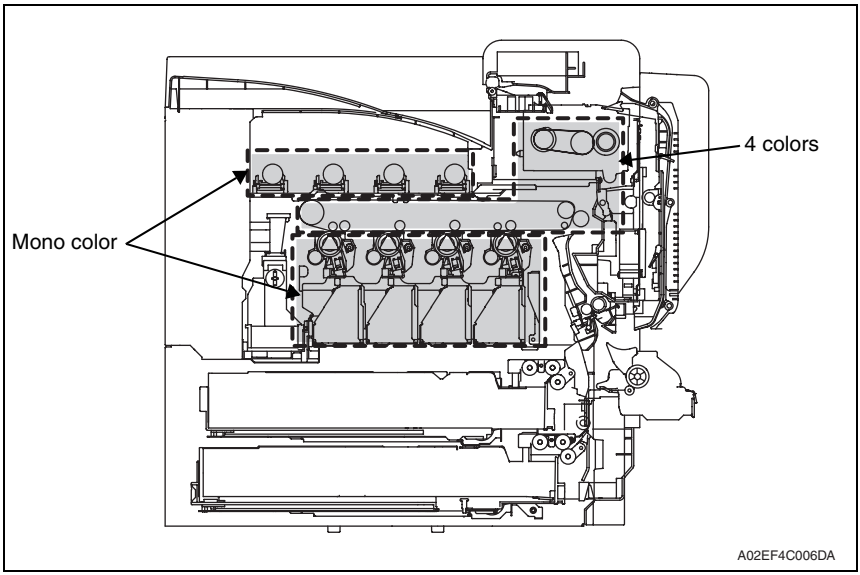
- The trouble will be distinguished whether it is on the printer, or on the controller.

* How to distinguish

Action	Result	Next step
When transmitting the print job to magicolor 8650, the “RIP” is displayed on the control panel on the machine.	NO	See P.373 (Trouble on the controller)
When selecting “GDI Demo Page” from “Print Reports” which is available from “User Settings”, image trouble occurs.	NO	• Check the connector connected to MFP board. • Replace the MFP board.
	YES	Initial check items 2

B. Initial check items 2

- If the printer is responsible for the image problem, let the machine produce a test print and determine whether the image problem occurs in a specific single color or four colors



- Evaluation procedure

Image problem	Action	Result	Cause	Next step
Lines, bands	From [User Settings], select [Print Reports] → [GDI Demo Page], and produce a test print. Is image problem evident in each of all four colors?	YES	Printer, 4 colors	P.360
		NO	Printer, single color	P.346

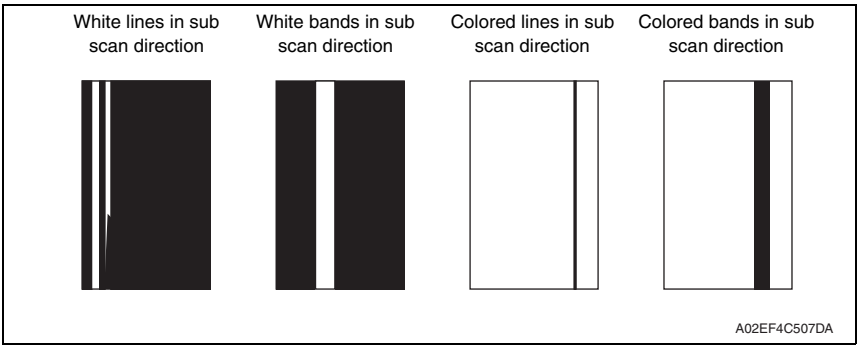
16.3 Solution

NOTE

- **Typical faulty image samples shown in the following are all printed with A4S setting.**

16.3.1 Printer monocolor: white lines in sub scan direction, white bands in sub scan direction, colored lines colored bands in sub scan direction

A. Typical faulty images

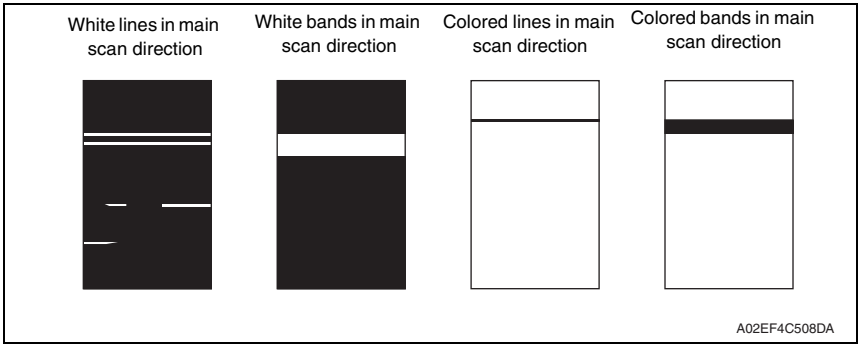


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image check	A white line or black line in sub scan direction is sharp.	YES	Clean the electrostatic charger wire.
2	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
3		Dirty on the outside.	YES	Clean.
4		Contact terminals make good connection between each IU and machine.	NO	Clean contact terminals.
5		Developing bias contact terminal makes good connection.	NO	Clean contact terminal and check terminal position.
6	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
7		The problem has been eliminated through the checks of steps up to 6.	NO	Change imaging unit. → Change transfer belt unit. → Change PH unit.

16.3.2 Printer monocolor: white lines in main scan direction, white bands in main scan direction, colored lines in main scan direction, colored bands in main scan direction

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image check	A white line or black line in main scan direction is sharp.	NO	Clean the electrostatic charger wire.
2	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
3		Dirty on the outside.	YES	Clean.
4		Contact terminals make good connection between each IU and machine.	NO	Clean contact terminals.
5		Developing bias contact terminal makes good connection.	NO	Clean contact terminal and check terminal position.
6	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
7		The problem has been eliminated through the checks of steps up to 6.	NO	Change imaging unit. → Change transfer belt unit. → Change PH unit.

16.3.3 Printer monocolor: uneven density in sub scan direction

A. Typical faulty images

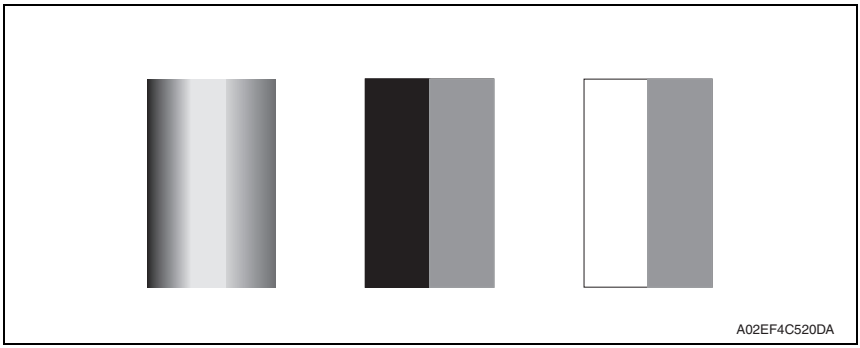
A02EF4C521DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	High image density original	Uneven density in sub scan direction occurs at a pitch of 40 mm to 50 mm when a multi-print cycle is run using an original with high image density (50% or more).	YES	Feed 10 to 20 blank sheets of paper with no originals placed, as the IU fails to keep up with a high demand for toner.
2	Machine MachineAdjustment → LD Adjust → LD Light balance	The problem has been eliminated through the LD light balance.	NO	Go to next step.
3	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
4		Dirty on the outside.	YES	Clean.
5	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
6	Image transfer belt unit	Is abnormality found in the cam gear?	YES	Change transfer belt unit.
7		The problem has been eliminated through the checks of steps up to 6.	NO	Change IU. → Change PH unit. → Change printer control board. → Change High voltage unit.

16.3.4 Printer monocolor: uneven density in main scan direction

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	MachineAdjustment → LD Adjust → LD Light balance	The problem has been eliminated through the LD light balance.	NO	Go to next step.
2	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
3		Dirty on the outside.	YES	Clean.
4	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
5	Transfer roller	Check that the spring does not come off during the pressure operation of the transfer roller.	NO	Correct. Change transfer roller unit.
6	Transfer belt unit	Transfer belt unit makes positive contact with plates on rails.	NO	Check and correct contacts.
7		Is abnormality found in the cam gear?	YES	Change transfer belt unit.
8		The problem has been eliminated through the checks of steps up to 7.	NO	Change imaging unit. → Change PH unit. → Change high voltage unit.

16.3.5 Printer monocolor: low image density

A. Typical faulty images

A02EF4C516DA

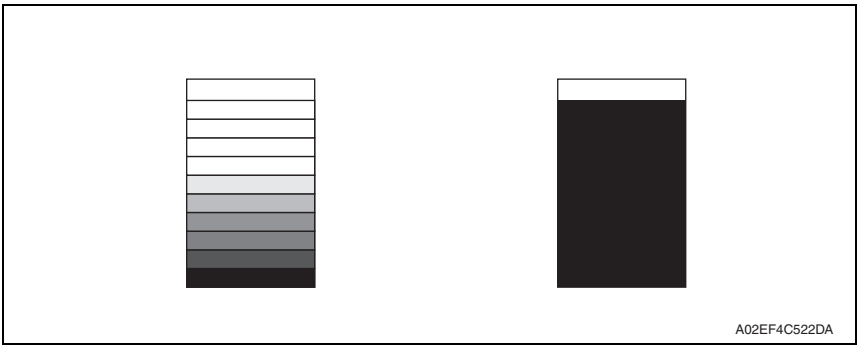
B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Warning display	The warning code is displayed on the panel.	YES	Take action according to the warning code shown on the state confirm screen.
2	[Table No.] on the list produced through [Service Mode] → [List Output] → [Management List]	Check data for Vg and Vdc. Color Vdc: around 400 V Vg : around 500 V Black Vdc: around 400 V Vg : around 500 V	—	Go to next step.
3	[Level History1] on the list produced through [Service Mode] → [List Output] → [Adjustment List]	Check TCR data. (specified rang: 6 to 8 %)	NO	Go to next step.
4		IDC output value is around 4.3 V.	NO	Clean IDC sensor and execute the image stabilization. Check image transfer belt for damage and correct as necessary.
5	Level history data check results	Low TCR and low Vg and Vdc	YES	Go to step 10.
6		Low TCR and high Vg and Vdc	YES	Go to step 14.
7		TCR falling within specified range and low Vg and Vdc	YES	Go to step 10.
8		TCR falling within specified range and high Vg and Vdc	YES	Go to step 14.
9		The situations other than the above-mentioned.	YES	Go to step 10.
10	Imaging unit	Dirty on the outside.	YES	Clean.
11	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
12	Transfer belt unit	Transfer belt unit makes positive contact with plates on rails.	NO	Check and correct contacts.
13		Is abnormality found in the cam gear?	YES	Change transfer belt unit.

Step	Section	Check item	Result	Action
14	Hopper unit	Connectors are loose.	YES	Reconnect.
15		Gear is cracked.	YES	Change gear.
16	Service Mode → ProcessAdjustment → TCR Level Setting	Toner is properly supplied when TCR toner supply is run.	NO	Go to next step.
17	Service Mode → ProcessAdjustment → Dmax Density	The problem has been eliminated through the adjust of Dmax Density.	NO	Go to next step.
18	Service Mode → ProcessAdjustment → Stabilization → Initialize + Stabi.	After the Initialize + Stabi. sequence has been completed, run gradation adjust.	NO	Go to next step.
19		The problem has been eliminated through the checks of steps up to 18.	NO	Change imaging unit. → Change printer control board. →Change PH unit. →Change high voltage unit.

16.3.6 Printer monocolor: gradation reproduction failure

A. Typical faulty images

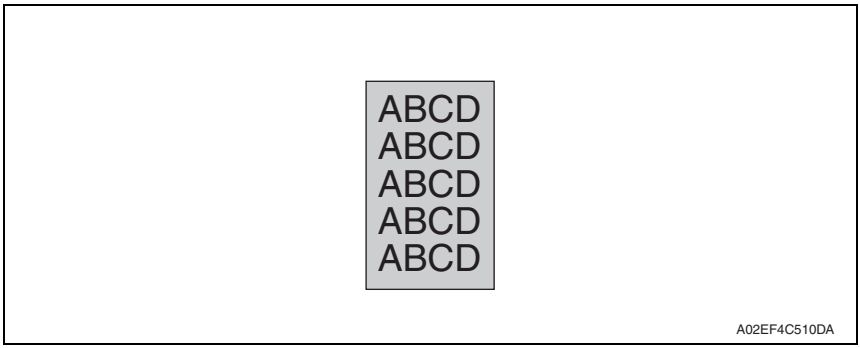


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Warning display	The warning code is displayed on the panel.	YES	Take action according to the warning code shown on the state confirm screen.
2	Photo/density	Original type and screen pattern are selected properly.	NO	Change screen pattern.
3	Imaging unit	Dirty on the outside.	YES	Clean.
4	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
5	[Level History1] on the list produced through [Service Mode] → [List Output] → [Adjustment List]	IDC output value is around 4.3 V.	NO	Clean IDC sensor and execute the stabilization. Check transfer belt for damage and correct as necessary.
6	Service Mode → ProcessAdjustment → Dmax Density	The problem has been eliminated through the adjust of Dmax Density.	NO	Go to next step.
7	Service Mode → ProcessAdjustment → Stabilizarion → Initialize + Stabi.	After the Initialize + Stabi. sequence has been completed, run gradation adjust;	NO	Go to next step.
8		The problem has been eliminated through the checks of steps up to 7.	NO	Change imaging unit. → Change printer control board. → Change PH unit. → Change high voltage unit.

16.3.7 Printer monocolor: foggy background

A. Typical faulty images



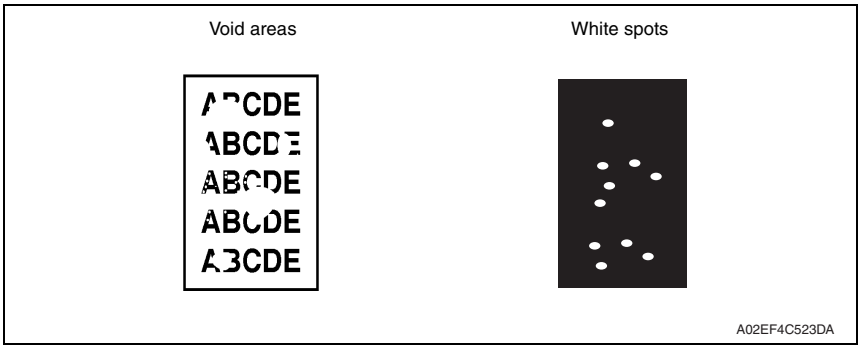
B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Warning display	The warning code is displayed on the panel.	YES	Take action according to the warning code shown on the state confirm screen.
2	[Table No.] on the list produced through [Service Mode] → [List Output] → [Management List]	Check data for Vg and Vdc. Color Vdc: around 400 V Vg : around 500 V Black Vdc: around 400 V Vg : around 500 V	NO	Go to next step.
3	[Level History1] on the list produced through [Service Mode] → [List Output] → [Adjustment List]	Check TCR data. (specified rang: 6 to 8 %)	NO	Go to next step.
4		IDC output value is around 4.3 V.	NO	Clean IDC sensor and execute the stabilization. Check transfer belt for damage and correct as necessary.
5	Level history data check results	Low TCR and low Vg and Vdc	YES	Go to step 10.
6		Low TCR and high Vg and Vdc	YES	Go to step 12.
7		TCR falling within specified range and low Vg and Vdc	YES	Go to step 10.
8		TCR falling within specified range and high Vg and Vdc	YES	Go to step 12.
9		The situations other than the above-mentioned.	YES	Go to step 10.
10	Imaging unit	Dirty on the outside.	YES	Clean.
11	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
12	Service Mode → ProcessAdjustment → Background Margin	The problem is eliminated after background margin has been adjusted.	NO	Go to next step.

Step	Section	Check item	Result	Action
13	Service Mode → Process Adjustment → Dmax Density	The problem has been eliminated through the adjust of Dmax Density.	NO	Go to next step.
14	Service Mode → ProcessAdjustment → Stabilization → Initialize + Stabi.	After the Initialize + Stabi. sequence has been completed, run gradation adjust.	NO	Go to next step.
15	Printer control board (PRCB) PH relay board (PHREYB)	Check the connection of connectors, harness, and flat cables between PRCB and PHREYB, and correct if necessary.	NO	Change printer control board. Change PH relay board.
16		The problem has been eliminated through the checks of steps up to 15.	NO	Change imaging unit. → Change PH unit. → Change high voltage unit.

16.3.8 Printer monocolor: void areas, white spots

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image Check	There are void areas at the front side or high density section.	YES	See P.350
2		There is void area at the rear side section.	YES	Perform [TransferOutputAdj] of [ProcessAdjustment] under Service Mode.
3	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
4		Dirty on the outside.	YES	Clean.
5	Toner cartridge	Foreign matter or caked toner in the toner cartridge.	YES	Remove foreign matter.
6	Installation environment	Is the atmospheric pressure at the installation site low?	YES	Make the following adjustment: [Service Mode] → [ProcessAdjustment] → [Bias Choice].

16.3.9 Printer monocolor: colored spots

A. Typical faulty images

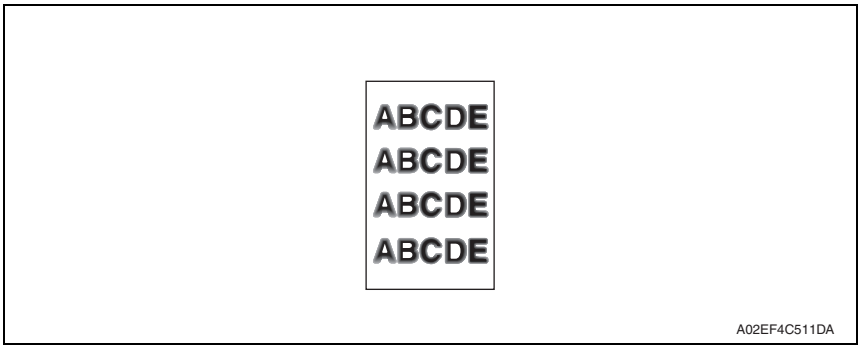
A02EF4C524DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Imaging unit	Developing bias contact terminal makes good connection.	NO	Clean contact terminal and check terminal position.
2		The surface of the PC drum is scratched.	YES	Change imaging unit.
3		Dirty on the outside.	YES	Clean.

16.3.10 Printer monocolor: blurred image

A. Typical faulty images

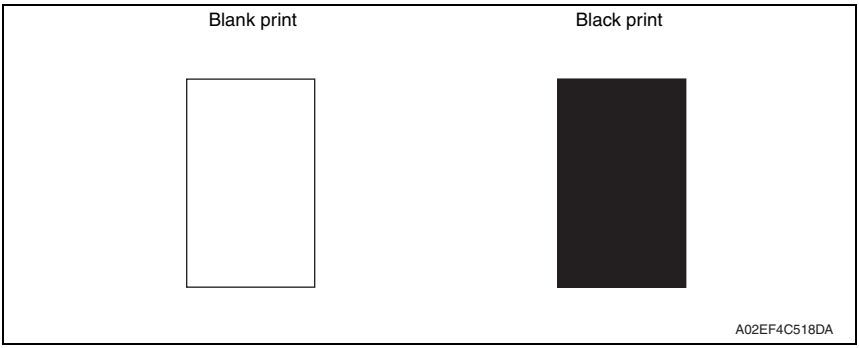


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	PH unit	The surface of the PH window is dirty.	YES	Clean with cleaning jig.
2	Imaging unit	Dirty on the outside.	YES	Clean.
3		The problem has been eliminated through the checks of steps up to 2.	NO	Change imaging unit. → Change PH unit.

16.3.11 Printer monocolor: blank print, black print

A. Typical faulty images

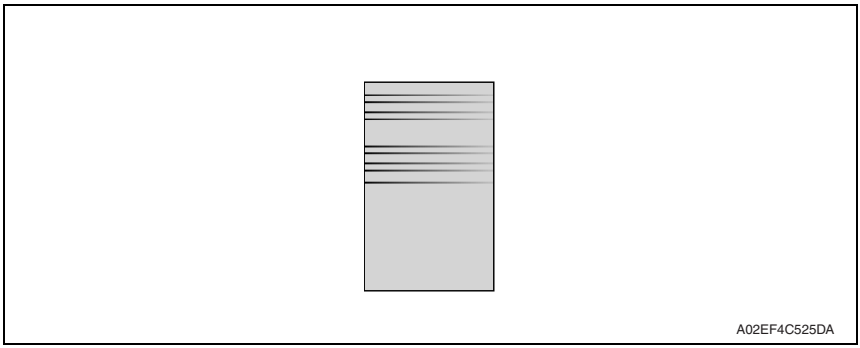


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image check	A blank print occurs.	YES	Check PH unit connector for proper connection.
2	Imaging unit	Coupling of IU drive mechanism is installed properly.	NO	Check and correct drive transmitting coupling. Change IU.
3		The PC drum charge corona voltage contact or PC drum ground contact of the imaging unit is connected properly.	NO	Check, clean, or correct the contact.
4	High voltage unit	Connector is connected properly.	NO	Reconnect.
5		The problem has been eliminated through the check of step 4.	NO	Change high voltage unit. → Change printer control board. → Change PH unit.

16.3.12 Printer monocolor: uneven image

A. Typical faulty images

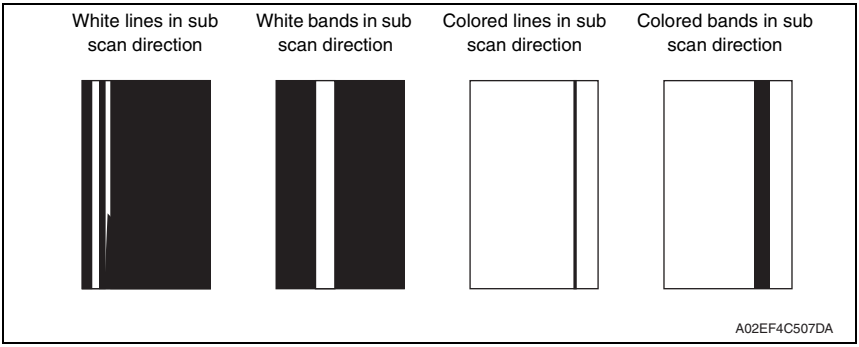


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Toner cartridge	The toner cartridge of every color is surely installed.	NO	Re-install it.
2	PH unit	The PH unit is surely installed.	NO	Re-install it.
3	Toner cartridge	There is any stain or breakage on the drive section of the toner cartridge.	YES	Clean/replace the toner cartridge.
4	Imaging unit	There is any stain, damage or abrasion on the PC drum.	YES	Replace the imaging unit.
5	Transfer roller	There is any stain, damage, deformation or abrasion on the transfer roller.	YES	Replace the transfer roller.
6	Fusing unit	There is any stain, damage, deformation or abrasion on the roller and drive section of the fusing unit.	YES	Replace the fusing unit.
7		The problem has been eliminated through the check of step 6.	NO	Replace the transfer belt unit.

16.3.13 Printer 4-color: white lines in sub scan direction, white bands in sub scan direction, colored lines in sub scan direction, and colored bands in sub scan direction

A. Typical faulty images

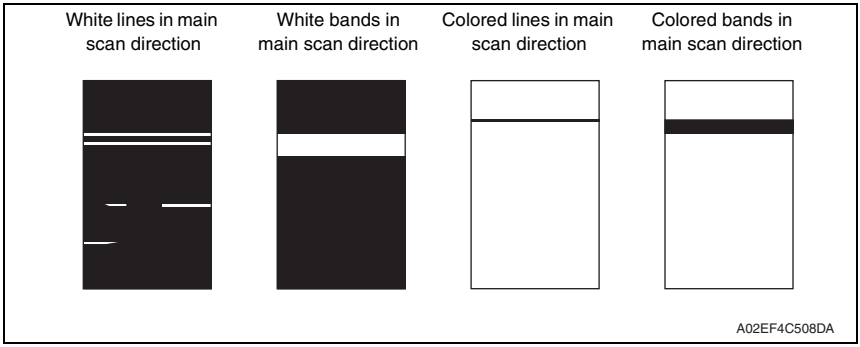


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image check	A white line or colored line in sub scan direction.	YES	Clean the comb electrode by moving the comb electrode cleaning lever.
2	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
3		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
4		Cleaning blade is not effective in removing toner completely.	YES	Clean cleaning blade. Change transfer belt unit.
5	Transfer roller unit	Transfer roller is dirty or scratched.	YES	Change transfer roller unit.
6	Paper path	There is foreign matter on paper path.	YES	Remove foreign matter.
7		Image transfer paper separator fingers are damaged or dirty.	YES	Clean or change.
8	Fusing unit	Fusing entrance guide plate is dirty or damaged.	YES	Clean. Change fusing unit.
9		Fusing paper separator fingers are dirty.	YES	Clean.
10		The problem has been eliminated through the checks of steps up to 9.	NO	Change printer control board

16.3.14 Printer 4-color: white lines in main scan direction, white bands in main scan direction, colored lines in main scan direction, and colored bands in main scan direction

A. Typical faulty images

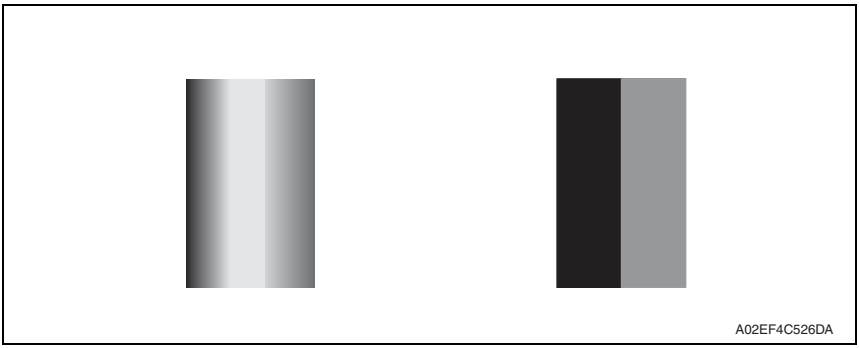


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
2		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
3	Transfer roller unit	Transfer roller is dirty or scratched.	YES	Change transfer roller unit.
4	Paper path	There is foreign matter on paper path.	YES	Remove foreign matter.
5		Image transfer paper separator fingers are damaged or dirty.	YES	Clean or change.
6	Fusing unit	Fusing entrance guide plate is dirty or damaged.	YES	Clean. Change fusing unit.
7		Fusing paper separator fingers are dirty.	YES	Clean.
8	Neutralizing brush	The resistance values between the neutralizing brush and the ground terminal is not ∞.	NO	Check the contact modify. Change neutralizing brush.
9		The problem has been eliminated through the checks of steps up to 8.	NO	Change printer control board

16.3.15 Printer 4-color: uneven density in sub scan direction

A. Typical faulty images

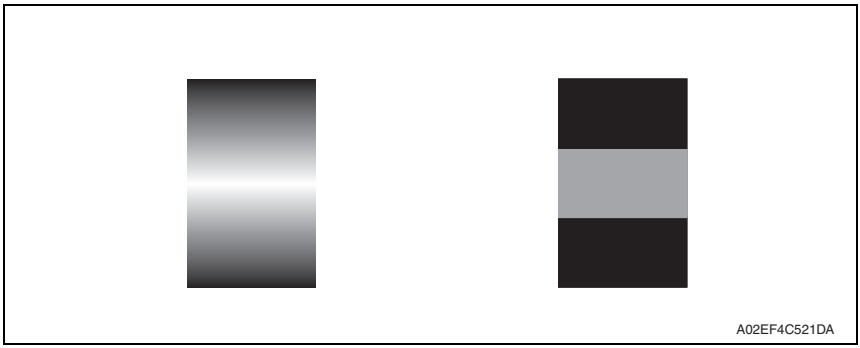


B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
2		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
3		Terminal is dirty.	YES	Clean.
4	Transfer roller unit	Image transfer roller is installed properly.	NO	Reinstall.
5		Image transfer roller is dirty or scratched.	YES	Change transfer roller unit.
6		The problem has been eliminated through the checks of steps up to 5.	NO	Change transfer belt unit.

16.3.16 Printer 4-color: uneven density in main scan direction

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
2		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
3		Terminal is dirty.	YES	Clean.
4	Transfer roller unit	Image transfer roller is installed properly.	NO	Reinstall.
5		Image transfer roller is dirty or scratched.	YES	Change transfer roller unit.
6		The problem has been eliminated through the checks of steps up to 5.	NO	Change transfer belt unit. → Change high voltage unit.

16.3.17 Printer 4-color: low image density

A. Typical faulty images

A02EF4C516DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Paper	Paper is damp.	YES	Change paper to one just unwrapped from its package.
2	Transfer belt unit	Terminal is dirty.	YES	Clean.
3	Transfer roller unit	Transfer roller is installed properly.	NO	Reinstall.
4		Transfer roller is dirty or scratched.	NO	Change transfer roller unit.
5	IDC sensor	Sensor is dirty.	YES	Clean IDC sensor and execute the stabilization.
6	Service Mode → ProcessAdjustment → Dmax Density	The problem has been eliminated through the adjust of Dmax Density.	NO	Go to next step.
7	Service Mode → ProcessAdjustment → Stabilization → Initialize + Stabi.	After the Initialize + Stabi. sequence has been completed, run gradation adjust.	NO	Go to next step.
8		The problem has been eliminated through the checks of steps up to 7.	NO	Change image transfer belt unit. → Change printer control board. → Change high voltage unit.

16.3.18 Printer 4-color: poor color reproduction

A. Typical faulty images

A02EF4C527DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Paper	Paper is damp.	YES	Change paper to one just unwrapped from its package.
2	Transfer belt unit	Terminal is dirty.	YES	Clean.
3	Transfer roller unit	Transfer roller is installed properly.	NO	Reinstall.
4		Transfer roller is dirty or scratched.	NO	Change transfer roller unit.
5	IDC sensor	Sensor is dirty.	YES	Clean IDC sensor and execute the stabilization.
6	Service Mode → ProcessAdjustment → Dmax Density	The problem has been eliminated through the adjust of Dmax Density.	NO	Go to next step.
7	Service Mode → ProcessAdjustment → Stabilization → Initialize + Stabi.	After the Initialize + Stabi. sequence has been completed, run gradation adjust.	NO	Go to next step.
8		The problem has been eliminated through the checks of steps up to 7.	NO	Change image transfer belt unit. → Change printer control board → Change high voltage unit.

16.3.19 Printer 4-color: incorrect color image registration

A. Typical faulty images

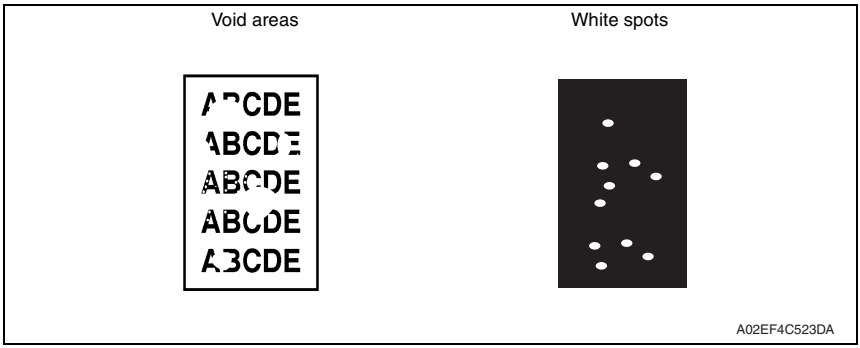
A02EF4C512DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Warning display	The warning code is displayed on the panel.	YES	Take action according to the warning code shown on the state confirm screen.
2	Machine condition	Vibration is given to the machine after power switch has been turned ON.	YES	Turn off the power switch and turn it on again more than 10 seconds after.
3	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
4		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
5		Drive coupling to the machine is dirty.	YES	Clean.
6	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
7	Transfer roller unit	Transfer roller is installed properly.	NO	Reinstall.
8		Transfer roller is dirty or scratched.	YES	Change transfer roller unit.
9	Service Mode → MachineAdjustment → Fusing Speed	Brush effect or blurred image occurs.	YES	Readjust fusing transport speed.
10	Service Mode → MachineAdjustment → Color Reg.	Check the specific color in which color shift occurs.	YES	Perform “Color Reg.” If color shift is not corrected even with a correction of ± 1 dot, go to next step.
11		The problem has been eliminated through the checks of steps up to 10.	NO	Change transfer belt unit. → Change printer control board

16.3.20 Printer 4-color: void areas, white spots

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Image check	There are void areas at the front side or high density section.	YES	P.365
2		There are void areas in the trailing edge.	YES	Perform [TransferOutputAdjust] of [ProcessAdjustment] under Service Mode.
3	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
4		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
5	Transfer roller unit	Transfer roller is dirty or scratched.	YES	Change 2nd image transfer roller unit.
6		Charge neutralizing cloth is not separated and ground terminal is connected properly.	NO	Correct or change.
7	Paper path	There is foreign matter on paper path.	YES	Remove foreign matter.
8		Pre-image transfer guide plate is damaged or dirty.	YES	Clean or change.
9		The problem has been eliminated through the checks of steps up to 8.	NO	Change transfer belt unit.

16.3.21 Printer 4-color: colored spots

A. Typical faulty images

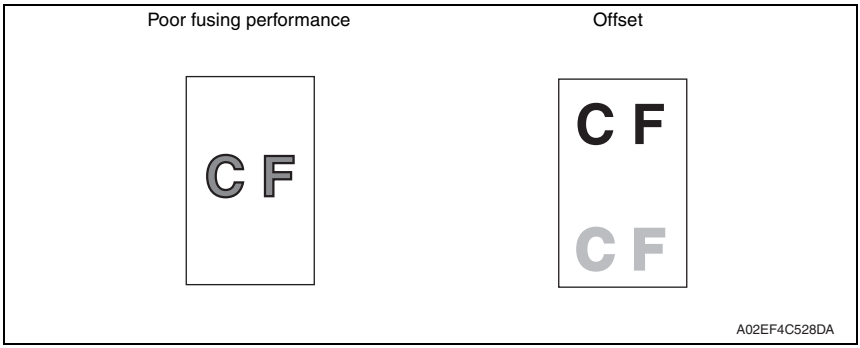
A02EF4C509DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Imaging unit	The surface of the PC drum is scratched.	YES	Change imaging unit.
2	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the image transfer belt.	YES	Clean.
3		Transfer belt is dirty or scratched.	YES	Clean dirty belt with a soft cloth. Change transfer belt unit if belt is damaged.
4	Transfer roller unit	Transfer roller is dirty or scratched.	YES	Change transfer roller unit.
5	Paper path	There is foreign matter on paper path.	YES	Remove foreign matter.
6	Fusing unit	Fusing belt is dirty or scratched.	YES	Change fusing unit.
7		The problem has been eliminated through the checks of steps up to 6.	NO	Change transfer belt unit.

16.3.22 Printer 4-color: poor fusing performance, offset

A. Typical faulty images



B. Troubleshooting procedure

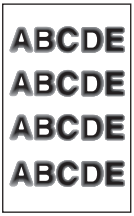
Step	Section	Check item	Result	Action
1	Paper	Paper type does not match.	YES	Change the setting.
2	Service Mode → MachineAdjustment → FusingTemperature	Changing fusing temperature eliminates the problem of poor fusing performance and offset.	YES	Readjust fusing temperature.
3		The problem has been eliminated through the checks of steps up to 2.	NO	Change fusing unit.

16.3.23 Printer 4-color: brush effect, blurred image

A. Typical faulty images

Brush effect

Blurred image



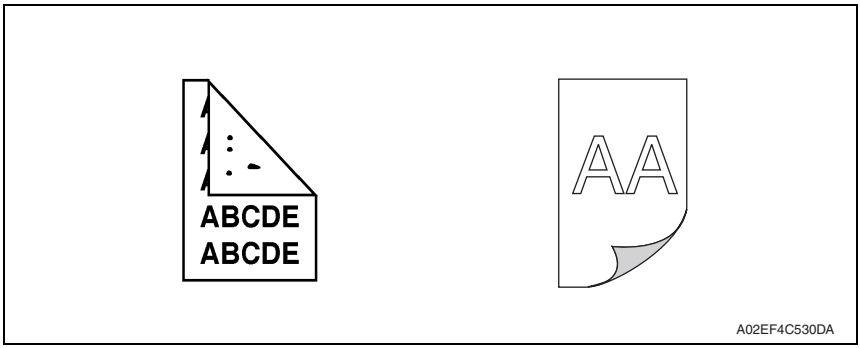
A02EF4C529DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Paper	Paper is damp.	YES	Change paper to one just unwrapped from its package.
2		Paper type does not match.	YES	Change the setting.
3	Fusing unit	Fusing unit is installed properly.	NO	Reinstall.
4		Fusing entrance guide plate is dirty.	YES	Clean.
5		Fusing belt is dirty or scratched.	YES	Change fusing unit.
6	Service Mode → MachineAdjust-met → Fusing Speed	Changing fusing speed eliminates the problem of brush effect and blurred image.	YES	Readjust fusing transport speed.

16.3.24 Printer 4-color: back marking

A. Typical faulty images



B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	2nd image transfer roller unit	Image transfer roller is scratched or dirty.	YES	Change transfer roller unit.
2	Paper path	There is foreign matter on paper path.	YES	Remove foreign matter.
3	Fusing unit	Fusing entrance guide plate is scratched or dirty.	YES	Clean or change.
4		Lower fusing roller is scratched or dirty.	YES	Change fusing unit.
5	Transfer belt unit	Fingerprints, oil, or other foreign matter is evident on the transfer belt.	YES	Clean.
6		The problem has been eliminated through the checks of steps up to 5.	NO	Change transfer belt unit. → Change high voltage unit.

16.3.25 Printer 4-color: uneven image

A. Typical faulty images

A02EF4C525DA

B. Troubleshooting procedure

Step	Section	Check item	Result	Action
1	Toner cartridge	The toner cartridge of every color is surely installed.	NO	Re-install it.
2	PH unit	The PH unit is surely installed.	NO	Re-install it.
3	Toner cartridge	There is any stain or breakage on the drive section of the toner cartridge.	YES	Clean/replace the toner cartridge.
4	Imaging unit	There is any stain, damage or abrasion on the PC drum.	YES	Replace the imaging unit.
5	Transfer roller unit	There is any stain, damage, deformation or abrasion on the transfer roller.	YES	Replace the transfer roller unit.
6	Fusing unit	There is any stain, damage, deformation or abrasion on the roller and drive section of the fusing unit.	YES	Replace the fusing unit.
7		The problem has been eliminated through the check of step 6.	NO	Replace the transfer belt unit.

17. Controller trouble

17.1 Unable to print over the network

17.1.1 The “RIP” is displayed on the machine control panel.

Step	Check	Result	Action
1	An error on machine side (Paper running out, toner running out, etc.)	Yes	Correct the error.
2	Waiting its turn	Yes	Check the machine control panel for jobs in print queue. Priority may be changed as necessary
3	The job is locked.	Yes	Enter the password to unlock the job.
4	The correct division ID has not been entered.	Yes	Enter the correct division ID in the printer driver and try re-transmitting the job again.(account code)

17.1.2 The “RIP” is not displayed on the machine control panel.

Step	Check	Result	Action
1	The response of ping sent from the PC to the machine.	No	Go to item 5.
2	The print destination port setting is wrong.	Yes	Set the correct port.
3	PC operates erratically temporarily.	Yes	Restart the PC
4	Printer driver incorrectry installed.	No	Uninstall the printer driver through the proper steps and then reinstall it properly.
5	The power on the machine turns OFF/ON and operates normally.	Yes	No process is necessary. Only a temporally malfunction.
6	Network cable is disconnected or a relay device is faulty.	No	Reconnect the cable and restart or change the faulty relay device.
7	IP address and/or subnet mask incorrectly set.	No	Set the correct IP address and subnet mask.