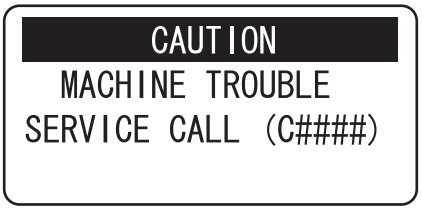
14. MALFUNCTION CODE

14.1 Trouble code

- The copier's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code and maintenance call mark on the control panel.



14.1.1 Trouble code list

Code	Item	Description
C0211	Bypass tray lift-up failure	• When a print cycle is completed, a jam is fixed, or the power switch is turned ON, if the bypass lift sensor (PS4) does not change from the unblocked to blocked condition after the lapse of a given period of time after the bypass pick-up solenoid (SD1) is turned ON, the machine retries the depressing motion. This trouble code is displayed if the PS4 is not blocked after the retry. • While the bypass lift sensor (PS4) is blocked, if the PS4 is not unblocked after the lapse of a given period of time after the bypass pick-up solenoid (SD1) is turned ON, the machine retries the lifting motion. This trouble code is displayed if the PS4 is not unblocked after the retry.
C2351	Suction fan motor malfunction	• The fan lock signal remains HIGH for a predetermined continuous period of time while the motor remains stationary.
C2557	Abnormally low T/C ratio	• The T/C ratios detected by the TCR sensor board (TCRSB) are below the threshold for the detection of abnormally low T/C ratio for three successive times. However, if a toner empty condition is detected, this abnormality is not detected.
C2558	Abnormally high T/C ratio	• The T/C ratios detected by the TCR sensor board (TCRSB) are above the threshold for the detection of abnormally high T/C ratio for three successive times. • The connector between TCRSB to PRCC is disconnected.
C255C	TCR sensor adjustment failure	• When [SERVICE MODE]→[FUNCTION]→[TCR AUTO ADJUST] is performed, the difference between the TCR sensor output voltage determined by TCR AUTO ADJUST and the standard voltage is greater than the given value.
C2702	Abnormal image transfer voltage	• The image transfer voltage remains more than 100 V continuously for a given period of time while the drum remains stationary.

Code	Item	Description
C3451	Warming-up failure	• The surface temperature of the fusing roller does not reach a given level even after the lapse of a given period of time during a warm-up cycle.
C3751	Fusing failure (abnormally high fusing temperature 1)	• The temperature detected by the thermistor/1 (TH1) remains higher than a given temperature for a given period of time.
C3752	Fusing failure (abnormally high fusing temperature 2)	• The temperature detected by the thermistor/2 (TH2) remains higher than a given temperature for a given period of time.
C3851	Fusing failure (abnormally low fusing temperature)	• The temperature detected by the thermistor/1 (TH1) remains lower than a given temperature for a given period of time.
C4001	Faulty HSYNC	• The SOS sensor does not detect a rising edge of SOS within a given period of time after the polygon motor has started turning and a laser output has been started. • The SOS sensor detects no rising edges of SOS while VIA (image area control) is ON.
C4101	Polygon motor malfunction	• A HIGH polygon motor lock signal is not detected within a given period of time that begins 0.5 sec. after the polygon motor has started turning. • A LOW polygon motor lock signal is not detected for a continuous given period of time while the rotation of the polygon motor remains stabilized.
C5102	Main motor malfunction	• The main motor (M1) lock signal remains HIGH for a continuous 1-sec. period at any time 1 sec. after the main motor has started turning.
C6101	Scanner home detection failure	• When the power switch is turned ON or a scan operation is completed, detecting the home position fails.
C9401	Scanner lamp error	• When the power switch is turned ON or a scan operation is completed, the light quantity is checked and the shading compensation is performed. At this time, trouble is detected.
CC102	Controller - engine connection failure	• The engine control system can not communicate with the controller.
CC151	Flash ROM error	• The copier determines that there is an error if writing to the flash ROM fails during upgrading of the firmware. • When the power switch is turned ON, the error indicator lights up steadily and a corresponding message appears on the display. • If this error message appears, no operations can then be performed. It is not possible to upgrade the firmware from a PC connected through USB connection, either.
CC153	Engine flash ROM error	• Data of flash ROM of the engine control system is determined to be faulty.
CC163	Engine connection failure	• The controller can not communicate with the engine control system
CD301	EEPROM error	• Contact the responsible people of KMBT before taking some countermeasures.

14.2 Trouble resetting procedure

Code	Item	Procedure
C0211	Bypass tray lift-up failure	• Turn OFF and ON the power switch.
C2351	Suction fan motor malfunction	
C2557	Abnormally low T/C ratio	
C2558	Abnormally high T/C ratio	
C255C	TCR sensor adjustment failure	
C2702	Abnormal image transfer voltage	
C3451	Warming-up failure	• Turn ON the power switch with the Back/ Stop/Reset key held down.
C3751	Fusing failure (abnormally high fusing temperature 1)	
C3752	Fusing failure (abnormally high fusing temperature 2)	
C3851	Fusing failure (abnormally low fusing temperature)	
C4001	Faulty HSYNC	• Turn OFF and ON the power switch.
C4101	Polygon motor malfunction	
C5102	Main motor malfunction	
C6101	Scanner home detection failure	
C9401	Scanner lamp error	
CC102	Controller - engine connection failure	
CC151	Flash ROM error	
CC153	Engine flash ROM error	
CC163	Engine connection failure	
CD301	EEPROM error	

14.3 Solution

14.3.1 C0211: Bypass tray lift-up failure

Relevant electrical components	
Bypass lift sensor (PS4) Bypass pick-up solenoid (SD1)	Main motor (M1) Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the connector between M1-PRCB CN6 for proper connection and correct as necessary.	-	-
2	Check M1 for correct drive coupling and correct as necessary.	-	-
3	Check the connector between PS4-relay CN6-PRCB CN8 for proper connection and correct as necessary.	-	-
4	Check the connector between SD1-relay CN4-relay CN6-PRCB CN8 for proper connection and correct as necessary.	-	-
5	PS4 I/O check, sensor check.	PRCB CN8-8 (ON)	E-11
6	M1 operation check.	PRCB CN6-7 (LOCK)	D-9
7	SD1 operation check.	PRCB CN8-12 (REM)	F-11
8	Change PRCB.	-	-

14.3.2 C2351: Suction fan motor malfunction

Relevant electrical components	
Suction fan motor (FM5)	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the connector between FM5-relay CN13-PRCB CN14 for proper connection and correct as necessary.	-	-
2	Check the fan for possible overload and correct as necessary.	-	-
3	FM5 operation check.	PRCB CN14-2(REM)	F-3
4	Change PRCB.	-	-

14.3.3 C2557: Abnormally low T/C ratio

14.3.4 C2558: Abnormally high T/C ratio

14.3.5 C255C: TCR sensor adjustment failure

Relevant electrical components	
TCR sensor board (TCRSB)	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check to see if developer is available.	-	-
2	Check the connector between TCRSB-relay CN14-PRCB CN10 for proper connection and correct as necessary.	-	-
3	Change TCRSB.	-	-
4	Execute “TCR AUTO ADJUST.”	-	-
5	Change PRCB.	-	-

14.3.6 C2702: Abnormal image transfer voltage

Relevant electrical components	
Transfer roller unit High voltage unit (HV1)	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the transfer roller unit for installation.	-	-
2	Change HV1.	-	-
3	Change PRCB.	-	-

14.3.7 C3451: Warming-up failure

14.3.8 C3751: Fusing failure (Abnormally high fusing temperature 1)

14.3.9 C3752: Fusing failure (Abnormally high fusing temperature 2)

14.3.10 C3851: Fusing failure (Abnormally low fusing temperature)

Relevant electrical components	
Fusing unit	Right door switch (SW2) DC power supply (DCPU) Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the fusing unit for correct installation.	-	-
2	Check the open/close operation of the right door.	-	-
3	Check the fusing unit, DCPU and PRCB for proper connection and correct or change as necessary.	-	-
4	Change fusing unit.	-	-
5	Change PRCB.	-	-
6	Change DCPU.	-	-

14.3.11 C4001: Faulty HSYNC

14.3.12 C4101: Polygon motor malfunction

Relevant electrical components	
PH unit	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn OFF and ON the power switch.	-	-
2	Check the connector between PH unit-PRCB CN1, CN2 for proper connection and correct as necessary.	-	-
3	Change PH unit.	-	-
4	Change PRCB.		-

14.3.13 C5102: Main motor malfunction

Relevant electrical components	
Main motor (M1)	Printer control board (PRCB) DC power supply (DCPU)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the connector between M1-PRCB CN6 for proper connection and correct as necessary.	-	-
2	Check M1 for correct drive coupling and correct as necessary.	-	-
3	M1 operation check.	PRCB CN6-7 (LOCK)	D-9
4	Change PRCB.	-	-
5	Change DCPU.	-	-

14.3.14 C6101: Scanner home detection failure

Relevant electrical components	
Scanner motor (M4) CIS module (CIS)	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn OFF and ON the power switch.	–	–
2	Check the connector between M4-PRCB P101 for proper connection and correct as necessary.	–	–
3	Check M4 for correct drive coupling and correct as necessary.	–	–
4	Check the connector between CIS-PRCB P102 for proper connection and correct as necessary.	–	–
5	M4 operation check	PRCB P101-1 to 4	F-11
6	Change M4.	–	–
7	Change CIS	–	–
8	Change MFPB.	–	–

14.3.15 C9401: Scanner lamp error

Relevant electrical components	
CIS module (CIS)	Printer control board (PRCB)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn OFF and ON the power switch.	–	–
2	Check the connector between CIS-PRCB P102 for proper connection and correct as necessary.	–	–
3	Change CIS	–	–
4	Change MFPB.	–	–

14.3.16 CC102: Controller-engine connection failure

Relevant electrical components	
Printer control board (PRCB)	

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn OFF and ON the power switch.	-	-
2	Change PRCB.	-	-

14.3.17 CC151: Flash ROM error

14.3.18 CC153: Engine flash ROM error

Relevant electrical components	
Printer control board (PRCB)	

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the PRCB connectors for proper connection and correct as necessary.	-	-
2	Identify the specific firmware that is responsible for the error.	-	-
3	Perform upgrading of the firmware.	-	-
4	Unplug EEPROM (R22) from PRCB and then plug it back in.	-	-
5	Change PRCB.	-	-

14.3.19 CC163: Engine connection failure

Relevant electrical components	
Printer control board (PRCB)	

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn OFF and ON the power switch.	-	-
2	Check the PRCB connectors for proper connection and correct as necessary.	-	-
3	Change PRCB.	-	-