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iColor

PRINTING SOLUTIONS

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iColor 550

Error Message listing

5. TROUBLESHOOTING

5.1 ERROR MESSAGES

5.1.1 OVERVIEW

The error messages will be displayed on the LCD of the operation panel if the machine has a problem. These can be recovered by a customer.

5.1.2 ERROR MESSAGES LIST

000	Cover Open
	The front or top cover is open.
	1. Close the front or top cover. 2. Replace the interlock switches or actuator mechanism.

010	AIO Set Error (Black)
011	AIO Set Error (Magenta)
012	AIO Set Error (Cyan)
013	AIO Set Error (Yellow)
	▪ Black AIO not set ▪ Defective connection of the ID chip terminal on the black AIO
	1. Install the AIO (black, magenta, cyan or yellow). 2. Reinstall or replace the AIO (black, magenta, cyan or yellow).

015	ITB (Image Transfer Belt) Unit Set Error
	▪ ITB unit not set ▪ The machine does not detect any signal from the TM sensors while the ITB contact motor is initializing.
	Install the ITB unit.

Error Messages

016	Fusing Unit Set Error
	▪ Fusing unit not set ▪ Disconnected or defective harness of the fusing unit
	1. Install the fusing unit. 2. Check or replace the harness of the fusing unit 3. Replace the fusing unit.

070	Printing Error 1: No Paper
	▪ No paper in the tray
	Put paper in the tray.

071	Printing Error 2: Paper Size Error
	▪ Paper size mismatch between selected paper size and detected paper size
	Load correct size paper in the tray or select correct paper size.

072	Duplex Error: Job Data Delay
	▪ Job data for the 2nd side is not sent to the machine for specified time while paper is fed in the duplex path.
	Send print job data again.

087	Life End: Yellow AIO
	▪ Consumed toner exceeds in the toner end limit. ▪ Collected toner exceeds in the waste toner limit.
	Replace the yellow AIO

088	Waste Toner Bottle: Near Full
089	Waste Toner Bottle: Full
	▪ Waste toner bottle near-full or full
	Replace the waste toner bottle.

090	ITB (Image Transfer Belt) Unit Near End
091	ITB Unit End
	▪ ITB unit near end or end
	Replace the ITB unit.

092	Fusing Unit: Near End
	▪ Fusing unit near ned
	Replace the fusing unit.

999	Color Registration (MUSIC) Error
	▪ Color registration (MUSIC) failure
	This error is not displayed even if this error occurs. It is just logged. This error is automatically recovered after the color registration (MUSIC) has been done successfully.

Troubleshooting

5.2 SC CONDITIONS

5.2.1 SUMMARY

This machine issues an SC (Service Call) code if an error occurs on the machine. The error code can be seen on the LCD of the operation panel.

Make sure that you understand the following points;

1. All SCs are logged.

2. At first, always turn the main switch off and on if an SC code is issued.

3. First, disconnect then reconnect the connectors before you replace the PCBs, if the problem concerns electrical circuit boards.

4. First, check the mechanical load before you replace motors or sensors, if the problem concerns a motor lock.

5. Fusing related SCs: To prevent damage to the machine, the main machine cannot be operated until the fusing related SC has been reset by a service representative.

    ▪ How to reset; Execute SP5-810-001 to clear SC541, SC542, SC543, SC545 or SC548.

There are 4 levels of service call conditions.

Level	Definition	Reset Procedure
A	To prevent damage to the machine, the main machine cannot be operated until a service representative has reset the SC.	Do SP 5810, and then turn the main power switch off and on.
B	SCs that disable only the features that use the defective item. Although these SCs are not shown to the user under normal conditions, they are displayed on the operation panel only when the defective feature is selected.	Turn the operation switch or main switch off and on.
C	The SC history is updated. The machine can be operated as usual.	The SC will not be displayed. Only the SC history is updated.
D	Turning the main switch off then on resets SCs displayed on the operation panel. These are redisplayed if the error occurs again.	Turn the operation switch off and on.

5.2.2 ENGINE SC

SC 2xx (Laser Optics Error)

202	Polygon motor error 1: ON timeout
D	The polygon mirror motor does not reach the targeted operating speed within 5 sec. after turning on or changing speed
203	Polygon motor error 2: OFF timeout
D	The polygon mirror motor does not leave the READY status within 3 sec. after the polygon motor switched off.
204	Polygon motor error 3: XSCRDY signal error
D	The SCRDY_N signal remains HIGH for 350 ms while the LD unit is firing.
	- Polygon motor/driver board harness loose or disconnected - Polygon motor/driver board defective - Laser optics unit defective - IPU (EGB) defective - Replace the interface harness of the laser optics unit. - Replace the laser optics unit. - Replace the EGB (Engine Board).

220	Laser Synchronizing Detection Error: [K]/[Y]
D	The laser synchronizing detection signal for LDB [K]/[Y] is not output after the LDB unit has turned on while the polygon motor is rotating normally.
222	Laser Synchronizing Detection Error: [M]/[C]
D	The laser synchronizing detection signal for LDB [M]/[C] is not output after the LDB unit has turned on while the polygon motor is rotating normally.

Troubleshooting

	- Disconnected cable from the laser synchronizing detection unit or defective connection - Defective laser synchronizing detector - Defective LDB - Defective EGB - Check the connectors. - Replace the laser optics unit. - Replace the EGB.

240 D	LD error
	The IPU (EGB) detects a problem at the LD unit.
	- Worn-out LD - Disconnected or broken harness of the LD. - Replace the laser optics unit.

SC 3xx (Charge Error)

300 D	High voltage power output error
	The measured voltage is not correct when the EGB measures each charge output (charge, development, image transfer belt unit, and transfer unit).
	- Disconnected or defective high voltage harness - Defective high voltage power supply - Defective EGB - Check or replace the harnesses. - Replace the high voltage power supply board - Replace the EGB. - Replace the AIOs.

396 D	Black drum motor error
	The LOCK signal error is detected when the EGB monitors the black drum motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)

	▪ Disconnected or defective motor harness.
	▪ Motor slips due to excessive load
	1. Check the harness from the black drum motor. Replace it if necessary.
397 D	Color drum motor error
	The LOCK signal error is detected when the EGB monitors the color drum motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)
	▪ Disconnected or defective motor harness.
	▪ Motor slips due to excessive load
	1. Check the harness from the color drum motor. Replace it if necessary.

SC 4xx (Image Transfer and Transfer Error)

445 D	ITB (Image Transfer Belt) Unit: Home Position Error
	The ITB contact sensor does not detect the home position of the ITB for 5 seconds after the ITB unit initialization has been done.
	ITB (Image Transfer Belt) Unit: Contact Position Error
	The ITB contact sensor does not detect the contact position of the ITB for 5 seconds after the ITB unit has moved to the contact position.
	ITB (Image Transfer Belt) Unit: No-contact Position Error
	The ITB contact sensor does not detect the home position of the ITB for 5 seconds after the ITB unit has moved to no-contact position.
	▪ Defective ITB contact motor
	▪ Defective ITB contact sensor
	▪ Defective ITB unit
	1. Replace the ITB contact motor.
	2. Replace the ITB contact sensor.
	3. Replace the ITB unit.

Troubleshooting

480 D	Agitator Motor Error
	The agitator motor error is detected twice for 10 msec during the initialization at power-on or after the cover is closed.

	▪ Disconnected or defective harness
	▪ Defective agitator motor
	  1. Check or replace the harness.
	  2. Replace the agitator motor.

SC 5xx (Motor and Fusing Error)

500 D	Transport/Fusing Motor Error
	The LOCK signal error is detected when the EGB monitors the transport/fusing motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)
	▪ Disconnected or defective motor harness. ▪ Motor slips due to excessive load 1. Check the harness from the transport/fusing motor. Replace it if necessary.

530 D	LSU Fan Motor Error
	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.

	▪ Disconnected or defective motor harness.
	▪ Defective LSU fan motor
	  1. Check or replace the motor harness.
	  2. Replace the LSU fan motor.

531 D	Fusing Fan Motor Error
	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.

	▪ Disconnected or defective motor harness.
	▪ Defective LSU fan motor
	1. Check or replace the motor harness.
	2. Replace the fusing fan motor.

532	Air Intake Fan Motor Error
D	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.

	▪ Disconnected or defective motor harness.
	▪ Defective air intake fan motor
	   1. Check or replace the motor harness.
	   2. Replace the air intake fan motor.

533	PSU Fan Motor Error
D	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.

	▪ Disconnected or defective motor harness.
	▪ Defective PSU fan motor
	   1. Check or replace the motor harness.
	   2. Replace the PSU fan motor.

541	Thermistor Error
A	The thermistor output is less than 0°C for 6 seconds.

	▪ Disconnected thermistor
	▪ Defective harness connection
	   1. Check the harness connection of the thermistor.
	   2. Replace the fusing unit.
	⭐Important
	   ▪ Execute "SC Reset; Fusing SC" with SP5-810-001 to recover the machine after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and cannot be operated.

Troubleshooting

542	Print Ready Temperature Error
A	- The heating roller temperature increase during a set time is not correct. - The fusing temperature does not reach the print ready temperature within a set time after the fusing lamp has turned on.
	- Defective thermistor - Incorrect power supply input at the main power socket - Defective fusing lamp 1. Check the voltage of the wall outlet. 2. Replace the fusing unit 3. Replace the fusing lamp. ⭐Important - Execute "SC Reset; Fusing SC" with SP5-810-001 to recover the machine after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and cannot be operated.

543	High Temperature Detection Error
A	This SC is issued if one of following conditions occurs: - The thermistor (center) detects 245°C or thermistor (end) detects 230°C. - The thermistor (center) detects a 14°C increment or more for five seconds at 220°C or more or the thermistor (end) detects a 9°C increment or more for five seconds at 160°C (Warming Up), 170 °C (Standby), or 180°C (Print) or more.
	- Defective I/O control (EGB) - Defective EGB 1. Replace the EGB ⭐Important - Execute "SC Reset; Fusing SC" with SP5-810-001 to recover the machine after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and cannot be operated.

545	Heating Lamp Full-Power Error
A	
	The fusing lamp is fully-powered for a certain time while the fusing unit stays in the stand-by mode and is not rotating.

	▪ Deformed thermistor
	▪ Thermistor not in the correct position
	▪ Defective fusing lamp
	  1. Replace the fusing unit.
	  2. Replace the fusing lamp.
	⭐Important
	
	  ▪ Execute "SC Reset; Fusing SC" with SP5-810-001 to recover the machine after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and cannot be operated.

547	Zero Cross Error
D	
	The zero cross signal is not detected for three seconds even though the fusing lamp relay is on after turning on the main power or closing the front door.
	▪ Defective fusing lamp relay 1. Turn the main power switch off and on.

548	Low Temperature Error
A	
	The center thermistor detects 90°C or less for 4 seconds.

	▪ Defective fusing lamp
	▪ Defective thermistor
	  1. Replace the fusing unit.
	  2. Replace the fusing lamp.
	⭐Important
	
	  ▪ Execute "SC Reset; Fusing SC" with SP5-810-001 to recover the machine after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and cannot be operated.

Troubleshooting

SC Conditions

557	Zero Cross Frequency Error
D	The detection error occurs ten times consecutively in ten zero cross signal detections. This error is defined when the detected zero cross signal is 17 or less/27 or more for 0.2 seconds.

	▪ Defective fusing lamp relay
	▪ Unstable input power source
	   1. Check the power supply source.
	   2. Replace the fusing unit.

559	Consecutive Fusing Jam
D	The paper jam counter for the fusing unit reaches 3. The paper jam counter is cleared if the paper is fed correctly. This SC is activated only when this function is enabled with "Fuser SC Detect" in the SP Mode 2 tab.

	▪ Defective fusing unit
	▪ Defective fusing control
	   1. Clear this SC to send a command after a jam removal.
	   2. Turn off this function after a jam removal.

SC 6xx (Communication and Other Error)

660	Serial Number Error
D	The serial number stored in the memory (EGB) is not correct.
	▪ NVRAM defective ▪ EGB replaced without original NVRAM 1. Check the serial number. 2. If the stored serial number is incorrect, contact your supervisor.

669	NVRAM Error
D	An unexpected value exists in the initialization flag of the NVRAM
	- NVRAM not initialized - Defective NVRAM 1. Initialize the NVRAM. 2. Replace the NVRAM. 3. Replace the EGB.

690	GAVD Communication Error
D	The ID of the GAVD is not identified during initialization.
	The chip ID of the GAVD cannot be detected by the machine at power-on.
	Defective EGB 1. Replace the EGB.

Troubleshooting

5.2.3 CONTROLLER SC

SC641-00 , -01, -02, -03, -04

Error Name

Engine to Controller Communication Error (No Response)

Type

D

Symptoms

The controller sent a data frame by RAPI protocol, but there was no response after trying 3 times, once every 100ms.

Possible Causes

- The controller board or software is defective.
- The engine board or software is defective.
- The controller board and the engine board are not connected properly.

Troubleshooting Procedures

- iColor 550: Check that the screw shown in the picture is fixed.

m0aga0082

- Check the connection between the controller board and engine board.
- Turn the main power OFF then ON.

SC670-01, -02

Error Name

SC670-01: Engine Start Up Error

SC670-02: Engine Down at Start Up (No SC Reboot)

Type

D

Symptoms

- SC670-01
  - A /ENGRDY signal was not asserted at power ON or recovery from Energy Save.
  - There is no response from the EC/PC/SC command within 70 secs after the main power was turned ON.

▪ Writing onto the Rapi driver failed (the other party could not be found through PCI).

▪ SC670-02

After a /ENGRDY signal is asserted, there is an unexpected engine down.

Possible Causes

▪ SC670-01

The engine board failed to start up.

▪ SC670-02

The engine board was reset at an unexpected time.

Troubleshooting Procedures

1. **Check if new firmware is available for the engine and controller boards. (SC670-02 only)**

   ▪ If there is new firmware, update the boards.

   ▪ If there is no new firmware, proceed to the next step.

2. **Reconnect the engine board and the controller board.**

   If the SC does not recur, no further action is necessary. If the SC recurs, proceed to the next step.

3. **Replace the boards in the following order.**

   ▪ Engine board

   ▪ Controller board, or the board between the controller and the engine

   ▪ PSU

SC816-00 to -96, -99

Error Name

SC816-00: Energy Save I/O Subsystem Failure Detection

SC816-01: Energy Save I/O Subsystem Error

SC816-02, -07, -10, -11, -12: Energy Save I/O Subsystem Error: sysarch (LPUX_GET_PORT_INFO) Error

SC816-03: Energy Save I/O Subsystem Error: STR Transition Failure

SC816-04: Energy Save I/O Subsystem Error: Kernel Communication Driver Interruption

SC816-05, -06: Energy Save I/O Subsystem Error: Preparation for STR Transition Failed

SC816-08: Energy Save I/O Subsystem Error: sysarch (LPUX_ENGINE_TIMERCTRL) Error

SC816-09: Energy Save I/O Subsystem Error: sysarch (LPUX_RETURN_FACTOR_STR) Error

SC816-13, -15 to -18, -20: Energy Save I/O Subsystem Error: Open () Error

SC816-14: Energy Save I/O Subsystem Error: Memory Address Error

SC816-19: Energy Save I/O Subsystem Error: Double Open () Error

SC816-22: Energy Save I/O Subsystem Error: Parameter Error

SC816-23, -24, -35: Energy Save I/O Subsystem Error: Read () Error

SC816-25: Energy Save I/O Subsystem Error: Write () Error

SC816-26, -27, -28: Energy Save I/O Subsystem Error: Write () Communication Retry Error

SC816-29, -30: Energy Save I/O Subsystem Error: Read () Communication Retry Error

SC816-36 to -99: Energy Save I/O Subsystem Error: Subsystem Error

Type

D

Symptoms

The Energy Save I/O Subsystem has detected an error.

Possible Causes

- The Energy Save I/O Subsystem itself is malfunctioning.
- The Energy Save I/O Subsystem detects a controller board error (no response).
- An error was detected during preparation for transition to STR.

Troubleshooting Procedures

Generally, these are fatal errors.

Turn the main power OFF then ON. If the problem is not solved, there is a problem with the hardware. Replace the controller board.

SC817-00

Error Name

Monitor Error: File Detection/Digital Signature Error

Type

D

Symptoms

- The bootloader failed to read the diagnostic module, kernel, or root file system.
- The digital signature of the bootloader SD card with a diagnostic module, kernel, or root file system cannot be checked.

Possible Causes

- The diagnostic module, kernel, or root file system in the SD card does not exist or is corrupted.
- The diagnostic module, kernel, or root file system in the SD card was tampered with.

Troubleshooting Procedures

- Update the ROM of the controller system.
- Use a bootloader SD card that has a valid digital signature.

SC819-00 [0x5032]

Error Name

Kernel Halt: HAIC-P2 Error

Type

D

Symptoms

An error has occurred in the HAIC-P2 (the compression/decompression module in the ASIC).

Possible Causes

- If EFI controller is installed:

    When HAIC-P2 compression/decompression data is sent from the EFI controller to the GW controller, a decoding error (P2ERR) occurred due to a flaw in the data.

    In such a case, check with EFI.

    The types of P2ERR errors are as follows:

    - T-ERR (Terminal Error): This error
    - H-ERR (Code Error): Unlikely to occur because an IP is sent.
    - L-ERR (Incorrect Line Length): The contents that were verified during the combined debug with EFI.

- If EFI controller is not installed:

    - The code data in the HDD is corrupted for some reason (for example, the HDD is defective).
    - The code data in the NVRAM is corrupted for some reason (for example, the memory is defective).
    - The ASIC is defective.
    - Due to a fault in the software, data other than the code data is decompressed.

    If the problem cannot be solved by replacing the hardware, check with IMH.

Troubleshooting Procedures

- Turn the main power OFF then ON.
- Replace the HDD.
- Replace the NVRAM.
- Replace the controller board.
- Re-install or update the software.

Troubleshooting

SC819-00 [0x6261], [0x696e], [0x766d], Others

Error Name

SC819-00 [0x6261]: Kernel Halt: HDD Error

SC819-00 [0x696e]: Kernel Halt: gwinit Processing End

SC819-00 [0x766d]: Kernel Halt: VM Full

SC819-00 (Character string displayed): Kernel Halt: Others

Type

D

Symptoms

- [0x6261]

   There is no error reply from the HDD. Even though initialization was successful, the file

   system data received is corrupted.

- [0x696e], [0x766d]

   Unknown

- (Character string displayed)

   There is a discrepancy in the OS.

Possible Causes

- [0x6261]

   A sudden cut in the power supply when writing data to the HDD.

- [0x696e]

   If the SCS process ends for some reason, the gwinit process will also end (this is in

   accordance with gwinit specifications). As a result, the kernel will also come to a halt (this

   is in accordance with kernel specifications).

- [0x766d]

   Too much RAM is used during system processing.

- (Character string displayed)
   - There is a bug in the software.
   - There is insufficient memory.
   - The hardware (RAM, FLASH memory, CPU) is malfunctioning.

Troubleshooting Procedures

- [0x6261]

   Replace or remove the HDD.

- [0x696e], [0x766d]

   Nil

- (Character string displayed)
   - When there is a software bug, identify the conditions causing the bug, and contact

      the software engineer.
   - When there is insufficient memory, replace with an expanded memory.

SC840-00

Error Name

EEPROM Access Error

Type

D

Symptoms

- A reading error occurred during I/O processing, and after three subsequent retries reading still failed.
- A writing error occurred during I/O processing.

Possible Causes

The EEPROM is defective.

Troubleshooting Procedures

Nil

SC841-00

Error Name

EEPROM Read Data Error

Type

D

Symptoms

Mirrored data of the EEPROM is different from the original data in EEPROM.

Possible Causes

Data in the EEPROM is overwritten for some reason.

Troubleshooting Procedures

Nil

SC842-00 to -02

Error Name

SC842-00: Nand-Flash Verification Error

SC842-01: Nand-Flash Block Threshold Over Error

SC842-02: Nand-Flash Block Deletion Over Error

Type

C

Symptoms

- SC842-00

  During remote ROM update or ROM update, the SCS detected a write error (verify error) regarding the data written to the Nand-Flash.

- SC842-01

  At startup or recovery from Energy Save, the Nand-Flash status is read and the number

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of unusable blocks exceeded the threshold.

- ▪ SC842-02

  At startup or recovery from Energy Save, the Nand-Flash status is read and the number of deleted blocks exceeded the threshold.

Possible Causes

- ▪ SC842-00

  Nand-Flash is damaged.

- ▪ SC842-01

  The number of unusable blocks have exceeded the threshold.

- ▪ SC842-02

  The number of deleted blocks have exceeded the threshold.

Troubleshooting Procedures

Turn the main power OFF then ON.

Replace the controller board.

SC845-01 to -05

Error Name

Hardware Error during Firmware Auto Update

Type

D

Symptoms

Cannot complete firmware update while retrying three times.

Possible Causes

Hardware-related error occurs in a board.

The branch number of this SC represents where the error occurs.

-01: BiCU

-02: Controller Board

-03 or -04: Operation panel board

-05: FCU

Troubleshooting Procedures

Replace the board that causes the SC.

SC853-00

Error Name

Bluetooth Device Connection Error

Type

D

Symptoms

Bluetooth (USB) option is connected when the main power is ON.

Possible Causes

Bluetooth (USB) option cannot be connected while the main power is ON.

Troubleshooting Procedures

Turn ON the main power after the option is connected to the USB port.

SC854-00

Error Name

Bluetooth Device Disconnection

Type

B

Symptoms

The Bluetooth hardware (USB type) was removed after startup.

Possible Causes

The Bluetooth hardware (USB type) was removed after startup.

Troubleshooting Procedures

Connect the Bluetooth hardware (USB type) before turning ON the main power.

SC855-01

Error Name

Wireless LAN board error (driver attachment failure)

Type

B

Symptoms

Wireless LAN board error (wireless LAN card: 802.11 is covered)

Possible Causes

- Defective wireless LAN board
- Loose connection

Troubleshooting Procedures

- Turn the main power off/on.
- Replace the wireless LAN board

Troubleshooting

SC855-02

Error Name

Wireless LAN board error (driver initialization failure)

Type

B

Symptoms

Wireless LAN board error (wireless LAN card: 802.11 is covered)

Possible Causes

- Defective wireless LAN board
- Loose connection

Troubleshooting Procedures

- Turn the main power off/on.
- Replace the wireless LAN board

SC858-00, -01, -02, -30, -31

Error Name

SC858-00: Data Encryption Conversion Error (Key Acquisition Error)

SC858-01: Data Encryption Conversion Error (HDD Key Setting Error)

SC858-02: Data Encryption Conversion Error (NVRAM Read/Write Error)

SC858-30: Data Encryption Conversion Error (NVRAM Before Conversion Error)

SC858-31: Data Encryption Conversion Error (Other Errors)

Type

A

Symptoms

A serious error occurred after data conversion when updating the encryption key.

Possible Causes

- SC858-00, -01
  - Data such as the USB Flash is corrupted.
  - A communication error is caused by electrostatic noise.
  - The controller board is defective.
- SC858-02

  The NVRAM is defective.
- SC858-30

  There is a software error (for example, the parameters used for conversion are invalid).
- SC858-31

  The controller board is defective.

Troubleshooting Procedures

- SC858-00, -31

  Replace the controller board.

- SC858-01, -30

  Turn the main power OFF then ON.

  If the error persists, replace the controller board.

- SC858-02

  - Replace the NVRAM.

  - Replace the controller board.

SC859-00, -01, 02, -10

Error Name

SC859-00: Data Encryption Conversion HDD Conversion Error

SC889-01: Data Encryption Conversion HDD Conversion Error (HDD Check Error)

SC859-02: Data Encryption Conversion HDD Conversion Error (Power Failure During Conversion)

SC859-10: Data Encryption Conversion HDD Conversion Error (Data Read/Write Command Error)

Type

B

Symptoms

- SC859-00, -01

  When updating the data encryption key, HDD data was not converted correctly. During conversion, only the error screen is displayed and there is no SC. The SC is displayed after the machine is turned OFF and ON.

- SC859-02

  When updating the data encryption key, NVRAM/HDD conversion was incomplete. During conversion, only the error screen is displayed and there is no SC. The SC is displayed after the machine is turned OFF and ON.

- SC859-10

  When updating the data encryption key, an abnormal DMAC return value (such as DMAC time-out or serial communication error) was detected for two or more times. During data conversion, only the error screen is displayed and there is no SC. The SC is displayed after the machine is turned OFF and ON.

Possible Causes

- SC859-00, -01

  - HDD conversion was specified for data encryption key update, but the HDD was removed.

  - Power was cut during data encryption key update.

Troubleshooting

- - There was a HDD error or electrostatic noise during data encryption key update.
  - SC859-02

    Power was cut during data encryption key update.
  - SC859-10

    There was a HDD error or electrostatic noise during data encryption key update.

Troubleshooting Procedures

- SC859-00, -01, -10
  - Check the HDD connection.
  - Format the HDD.
  - If the HDD is defective, replace it.
- SC859-02

  After restart, a screen instructing the user to format the HDD is displayed.

SC860-00

Error Name

HDD Startup Error At Main Power On (HDD Error)

Type

B

Symptoms

- The HDD is connected but the driver detected the following errors:
  - SS_NO.T_READY:/* (-2)HDD does not become READY*/
  - SS_BAD_LABEL:/* (-4)Wrong partition type*/
  - SS_READ_ERROR:/* (-5)Error occurred while reading or checking the label*/
  - SS_WRITE_ERROR:/* (-6) Error occurred while writing or checking the label*/
  - SS_FS_ERROR:/* (-7) Failed to repair the file system*/
  - SS_MOUNT_ERROR:/* (-8) Failed to mount the file system*/
  - SS_COMMAND_ERROR:/* (-9) Drive not responding to command*/
  - SS_KERNEL_ERROR:/* (-10) Internal kernel error*/
  - SS_SIZE_ERROR:/* (-11) Drive size too small*/
  - SS_NO_PARTITION:/* (-12) The specified partition does not exist*/
  - SS_NO_FILE:/* (-13) Device file does not exist*/
- The driver attempted to acquire the HDD status but there was no response.

Possible Causes

- The HDD is not formatted.
- The label data is damaged.
- The HDD is defective.

Troubleshooting Procedures

Format the HDD (done through SP mode).

SC862-00

Error Name

Bad Sector: MAX (HDD Rrror)

Type

B

Symptoms

There are 101 bad sectors in HDD

Possible Causes

SC863 is issued during reading HDD because of a bad sector. Then SC 862 is issued when the bad sector count reaches 101.

Troubleshooting Procedures

Format the HDD (SP4-911-002).

(The HDD should be replaced)

SC863-00

Error Name

HDD Data Read Error

Type

B

Symptoms

Data in HDD cannot be read correctly.

Possible Causes

There is a bad sector in the HDD.

Troubleshooting Procedures

1. **Turn the main power OFF then ON.**
2. **Format the HDD through SP mode.**
3. **Replace the HDD if:**
   - this SC occurs more than 10 times.
   - this SC occurs in a short time interval.
   - it takes 30 seconds to finish the start-up.

Troubleshooting

SC863-01, -02 to -23

Error Name

HDD Data Read Error

Type

D

Symptoms

HDD data cannot be read.

Possible Causes

- SC863-01

    A bad sector was generated during operation. (An error occurred in an area that does not belong to a partition, such as the disk label area.)

- SC863-02 to -23

    A bad sector was generated during operation. (An error occurred in partitions from "a" (SC863-02) to "v" (SC863-23).

Troubleshooting Procedures

Replace the HDD when:

- this SC occurred ten times or more, and
- the error recurs at short intervals.
- the SC repeatedly occurs in the same situation (for example, at power ON).
- startup takes a long time when the main power is turned ON.

    It takes a long time for the operation panel to become ready after power ON because it takes time to access the HDD. Normally, HDD access after power ON takes about 5 secs. If the machine is not waiting for the engine to be ready and it still takes 20 to 30 seconds or more, there may be a problem with the HDD. Check if HDD-related SCs such as SC860 and SC863 are also occurring frequently. Print the SC log data to check them.

SC864-01, -02 to -23

Error Name

HDD Data CRC Error

Type

D

Symptoms

During HDD operation, the HDD did not respond to a CRC error query.

Possible Causes

- SC864-01

  A bad sector was generated during operation. (An error occurred in an area that does not belong to a partition, such as the disk label area.)

- SC864-02 to -23

  A bad sector was generated during operation. (An error occurred in partitions from "a" (SC863-02) to "v" (SC863-23).

Troubleshooting Procedures

- Format the HDD.
- Replace the HDD.

SC865-00, -01, -02 to -23, -50 to -73

Error Name

SC865-00, -01, -02 to -23: HDD Access Error

SC865-50 to -73: HDD Access Timeout Error

Type

D

Symptoms

- SC865-00, -01, -02 to -23

  During HDD operation, the HDD returned an error.

- SC865-50 to -73

  There was no response from the HDD (time-out). The area where the error occurred is unknown.

Possible Causes

- SC865-00

  The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error).

- SC865-01

  The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error). (An error occurred in an area that does not belong to a partition, such as the disk label area.)

SC Conditions

- SC865-02 to -23

  The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error). (An error occurred in partitions from "a" (SC863-02) to "v" (SC863-23).

- SC865-50 to -73

  The HDD did not respond to the read/ write command from the machine (DMA transfer).

Troubleshooting Procedures

- SC865-00, -01, -02 to -23

  Replace the HDD.

- SC865-50 to -73

  Check if the HDD power cord and communication cable are properly connected.

  If the problem is not solved after reconnecting the cord or cable, replace the HDD.

SC866-00

Error Name

SD Card Authentication Error

Type

B

Symptoms

An error has occurred with the license used for the electronic authentication of an application in the SD card.

Possible Causes

The program data in the SD card is invalid.

Troubleshooting Procedures

Store a valid program in the SD card.

SC867-00 to -02

Error Name

SD Card Removed Error

Type

D

Symptoms

The application SD card was removed.

Possible Causes

The application SD card was removed from the slot (mount point: /mnt/sd*).

SC867-00: /mnt/sd0

SC867-01: /mnt/sd1

SC867-02: /mnt/sd2

Troubleshooting Procedures

Turn the main power OFF then ON.

SC868-00, -02

Error Name

SD Card Access Error

Type

D

Symptoms

During operation, the SD controller returned an error. (An error occurred at mount point: /mnt/sd0).

⬇ Note

- The slot number is displayed in the sub code. The detailed code is on the SMC Print, and provides details about the error.
- -2, or no code number refers to device access error.

Possible Causes

- The SD card is defective.
- The SD controller is defective.

Troubleshooting Procedures

- In the case of an application SD Card:
    1. Turn the main power OFF. Check that the SD card is properly inserted.
    2. Turn the main power ON.
    3. If a SC is detected, replace the SD card.
    4. If the SC recurs, replace the controller board.
- In the case of a user SD Card:

    If it is a file system error, reformat the SD card (using the specified SD formatter).

    If it is a device access error, perform the following procedure.
    1. Turn the main power OFF. Check that the SD card is properly inserted.
    2. Turn the main power ON.
    3. If the SC recurs, replace with another user SD card.
    4. If the SC recurs, replace the controller board.

    ⬇ Note

    - Do not format the SD card that comes with the machine, or an optional SD card. Only format the SD card used for tasks such as updating.

Troubleshooting

SC872-00

Error Name

HDD Mail Reception Error

Type

B

Symptoms

A HDD error was detected when the main power is turned ON.

Possible Causes

- The HDD is defective.
- The main power was turned OFF when the machine was accessing the HDD.

Troubleshooting Procedures

- Format the HDD (SP5-832-007).
- Replace the HDD.

When the above steps are taken, the following information will be initialized.

- Partly received partial mail messages
- POP3 messages that are received and already read. (All messages on the mail server are handled as new messages.)

SC873-00

Error Name

HDD Mail Reception Error

Type

B

Symptoms

A HDD error was detected when the main power is turned ON.

Possible Causes

- The HDD is defective.
- The main power was turned OFF when the machine was accessing the HDD.

Troubleshooting Procedures

- Format the HDD (SP5-832-007).
- Replace the HDD.

When the above steps are taken, the following information will be initialized.

- Mail text
- Default sender name and password(SMB/FTP/NCP)
- Administrator mail address
- Scan to email history

SC874-xx

Error Name

SC874-05: Delete All Error (Delete Data Area): Read Error

SC874-06: Delete All Error (Delete Data Area): Write Error

SC874-09: Delete All Error (Delete Data Area): No response from HDD

SC874-10: Delete All Error (Delete Data Area): Error in Kernel

SC874-12: Delete All Error (Delete Data Area): No Designated Partition

SC874-13: Delete All Error (Delete Data Area): No Device File

SC874-14: Delete All Error (Delete Data Area): Start Option Error

SC874-15: Delete All Error (Delete Data Area): No Designated Sector Number

SC874-16: Delete All Error (Delete Data Area): hdderase Execution Failure

SC874-41: Delete All Error (Delete Data Area): Other Fatal Errors

SC874-42: Delete All Error (Delete Data Area): End by Cancellation

SC874-61 to SC874-65: Delete All Error (Delete Data Area): Library Error

SC874-66: Delete All Error (Delete Data Area): Unavailable

SC874-67: Delete All Error (Delete Data Area): Erasing Not Finished

SC874-68: Delete All Error (Delete Data Area): HDD Format Failure (Normal Operation)

SC874-69: Delete All Error (Delete Data Area): HDD Format Failure (Abnormal Operation)

SC874-70: Delete All Error (Delete Data Area): Unauthorized Library

SC874-99: Delete All Error (Delete Data Area): Other Errors

Type

D

Symptoms

- An error occurred when deleting data in the HDD or NVRAM.
- Erasing All Memory (deleting all data in the HDD/NVRAM) was executed but the Erase All Memory option was not installed.

Possible Causes

- An error occurred in the program for deleting the HDD.
- An error occurred when deleting data on the NVRAM.
- The Erase All Memory option was not installed.

Troubleshooting Procedures

- Turn the main power OFF then ON, and then execute Erase All Memory again from the user tools. (However, if there is a defective sector or other problem with the HDD, the error will recur.)
- Reinstall the Erase All Memory option.

Troubleshooting

SC875-01, -02

Error Name

SC875-01: Delete All Error (Delete HDD): hddchack –i Error

SC875-02: Delete All Error (Delete HDD): Failed to Delete Data

Type

D

Symptoms

An error was detected before the deletion of HDD data starts (Failed to erase data/ failed to logically format HDD).

Possible Causes

- HDD logical formatting failed.
- The modules failed to erase the data.

Troubleshooting Procedures

Turn the main power OFF then ON.

SC878-00, -01, -02, -03, -20

Error Name

SC878-00: TPM Authentication Error

SC878-01: USB Flash Error

SC878-02: TPM Error

SC878-03: TCSD Error

SC878-20: Random Number Generator Error

Type

D

Symptoms

- SC878-00

  At startup, the system's hash in the TPM and the USB's hash do not match. As a result, authentication by TPM failed.

- SC878-01

  There is an error in the file system of the USB flash memory.

- SC878-02

  There is an error in the TPM or TPM driver.

- SC878-03

  An error occurred in the TPM software stack.

- SC878-20

  An error occurred when doing self-check against seed for random number generated.

Possible Causes

- SC878-00

  - The system module was not updated via the correct update route.

  - The USB flash memory is malfunctioning.

- SC878-01

  The file system of the USB flash memory is corrupted.

- SC878-02, -20

  The TPM is defective.

- SC878-03

  - The TPM software stack cannot start.

  - A file required by the TPM software stack is missing.

Troubleshooting Procedures

Turn the main power Off then ON. If the SC recurs, replace the controller board.

SC899-00

Error Name

Software Performance Error (Signal Reception End)

Type

D

Symptoms

Unknown

Possible Causes

This error occurs when a GW program behaves abnormally.

Troubleshooting Procedures

- In the case of a hardware fault, replace the hardware.

- In the case of a software fault, turn the main power OFF then ON. Then update the firmware.

SC900-00

Error Name

Electronic Counter Error

Type

D

Symptoms

The electronic total counter value is not the specified value.

This error is detected when the counter moves forward.

Possible Causes

- The NVRAM connection is not correct.

- The NVRAM is defective.

- The NVRAM data is corrupted.
- The data was written in the wrong area due to external factors.
- When PRT received signals at SRM, the requested count is not completed.

Troubleshooting Procedures

Replace the NVRAM.

SC990-00

Error Name

Software Performance Error

Type

D

Symptoms, Possible Causes

Unknown

Troubleshooting Procedures

Nil

SC991-00

Error Name

Software Error (Operation Can Continue)

Type

C

Symptoms

The software performed in an unexpected way. By taking recovery measures, further operation is possible.

Possible Causes

- The parameter is invalid.
- There is insufficient work memory.
- This SC is caused by errors that are not normally detected from the hardware.

Troubleshooting Procedures

Nil

SC992-00

Error Name

Undefined SC

Type

D

Symptoms

An undefined SC has occurred.

Possible Causes

There is a bug in the software.

Troubleshooting Procedures

Turn the main power OFF then ON.

SC997-00

Error Name

Application Function Selection Error

Type

D

Symptoms

The application did not function normally after pressing the application key on the operation panel.

Possible Causes

There is a bug in the software.

Troubleshooting Procedures

- Check if the options required by the application (RAM, DIMM, boards) are installed properly.
- Check whether downloaded applications are correctly configured.

SC998-00

Error Name

Application Start Error

Type

D

Symptoms

- After power ON, no application program was registered to the system within the specified period of time. (No application started or ended normally.).
- Even though the application started up, it cannot be rendered due to an unknown fault.

Possible Causes

- There is a bug in the software.
- The options required by the application (RAM, DIMM, board) are not installed.
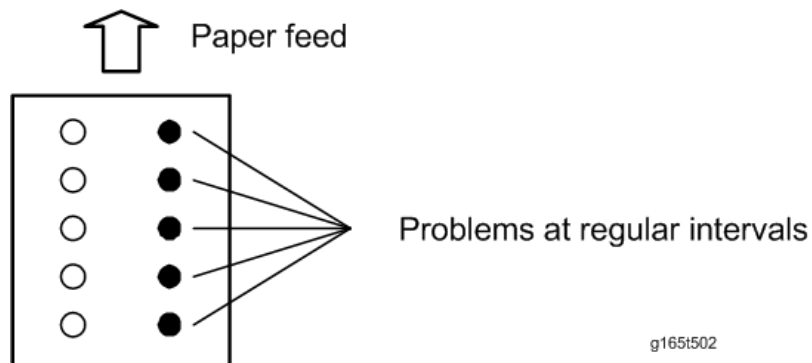
Troubleshooting

Troubleshooting Procedures

- Turn the main power OFF then ON.
- Check the RAM, DIMM, and boards.
- Check the application configurations.
- Replace the controller board.

5.3 IMAGE PROBLEMS

5.3.1 OVERVIEW

Image problems may appear at regular intervals that depend on circumstances of certain components. The following diagram shows the possible symptoms (black or white dots at regular intervals).
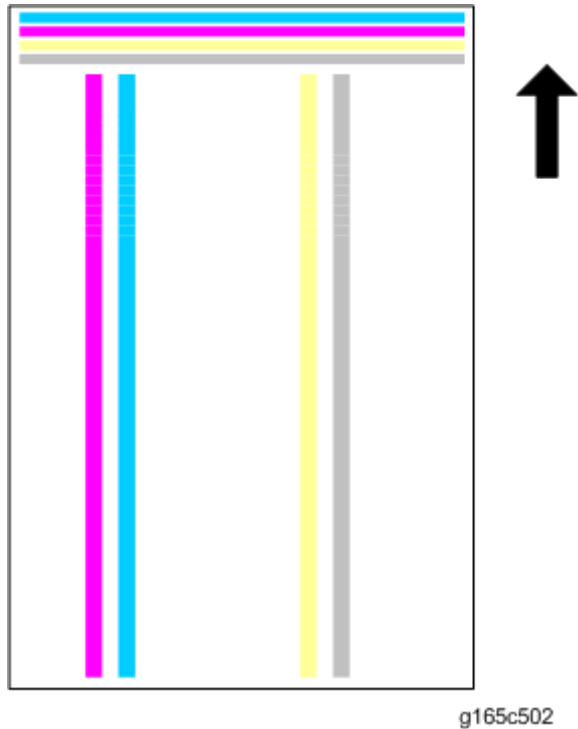

- Abnormal image at 24-mm intervals: Image transfer belt unit
- Colored spots at 38-mm intervals: AIO cartridge (Development roller)
- Abnormal image at 60-mm intervals: Transfer roller
- Colored spots at 75-mm intervals: AIO cartridge (OPC drum)
- Abnormal image at 110-mm intervals: Fusing unit (Pressure roller)
- Abnormal image at 141.3-mm intervals: Fusing unit (Fusing belt)

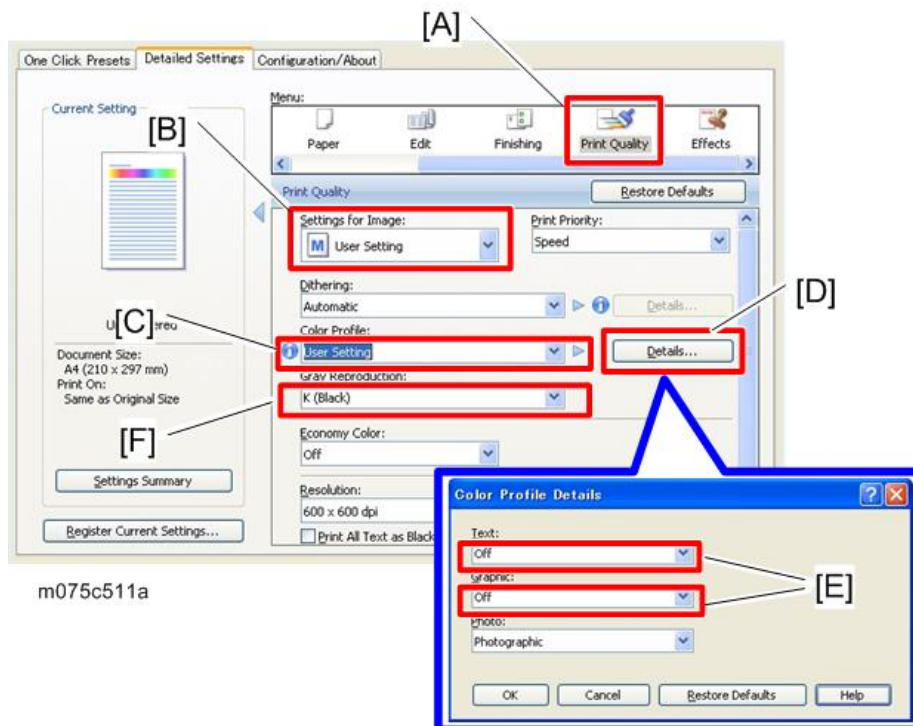## 5.3.2 CHECKING A SAMPLE PRINTOUT

Print out a mono-color pattern (all K, C, M, or Y), which will clarify if the cause is a problem with one of the AIO cartridges, Image transfer belt, image transfer roller, or the fusing unit. A sample page is provided with the printer driver's CD. You can print the sample page from the printer driver's CD. Before printing, you have to adjust the printer driver settings to make the problem become obvious. For details about adjusting the settings, refer to "Printer Driver Setting for Printing a Sample" described below.

- Occurs with 1-3 colors: AIO cartridge(s) failure
- Occurs with all four colors: Image transfer belt, transfer roller or fusing unit failure

Image Problems

g165c502

Printer Driver Setting for Printing a Sample

1. Click "Properties" on the printer driver.
2. Click "Printing Preferences" in the property screen.
3. Click "Detailed Settings" tab in the printing preferences screen.

m075c511a

4. Click "Print Quality" [A] in the Menu.
5. Select "User Setting" from the pull-down menu in the "Settings for Image" [B].

6. Select "User Setting" from the pull-down menu in the "Color Profile" [C].

7. Press "Details..." [D], and then select "Off" from the pull-down menus [E] in the "Text:" and "Graphic".

8. Select "K (Black)" from the pull-down menu in the "Gray Reproduction" [F].

Troubleshooting