HYOSUNG TNS

Error Code Manual

MONIMAX5700R

V01.00.00 (2020. 7. 14)

Revision History

Error Code Manual - MX5700R

No.	Version	Date	Description of Change	Chapter
1	V01.00.00	2020/07/14	New Publication	All

2020. 7. 14. 1st Release

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HYOSUNG TNS INC.

Anti Skimming

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186E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
186F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
286400	Failed check CRC of USB bulk data	Check line of USB communication
286E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
286F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
386400	Failed check CRC of USB bulk data	Check line of USB communication
386E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
386F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
3A96100	Set to Unsupported Antiskim mode	Check value of antiskim mode
3A96500	Range over of Antiskim frequency setting	Check range of frequency value for antiskim
3A96600	Range over of Antiskim pulse count setting	Check range of pulse count value for antiskim
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3E96100	Range over of Coil high temperature base	Check range of coil high temperature base value
3G96100	Range over of Proximity setting	Check range of proximity setting value
3I23200	Error of Coil High Temperature in Initialize	Check temperature of coil(ex. sensor unpluged) Run Initialize. If error is repeated, need to change device.
3I24200	Error of Coil Low current in Initialize	Check status of coil(ex. Unpluged or open circuit) Run Initialize. If error is repeated, need to change device.
3I24300	Error of Coil High current in Initialize	Check status of coil(ex. short circuit) Run Initialize. If error is repeated, need to change device.
3I26C00	Error of Antiskim control in Initialize	Check config of antiskim. Recover normal setting. Run Initialize. If error is repeated, need to change device.
3I31100	Warning of Proximity detect in Initialize	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
3I31200	Error of Proximity detect in Initialize	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
3P23200	Error of Coil High Temperature.	Check temperature of coil(ex. sensor unpluged) Run Initialize. If error is repeated, need to change device.
3P24200	Error of Coil Low current	Check status of coil(ex. Unpluged or open circuit) Run Initialize. If error is repeated, need to change device.
3P24300	Error of Coil High current	Check status of coil(ex. short circuit) Run Initialize. If error is repeated, need to change device.

Problem Code	Problem Description	Troubleshooting
3P26C00	Error of Antiskim control	Check config of antiskim. Recover normal setting. Run Initialize. If error is repeated, need to change device.
3P31100	Warning of Proximity detect	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
3P31200	Error of Proximity detect	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
3U96200	Failed check CRC of BIN file data for download	Check BIN file for download
3U96300	Wrong sequence of BIN file data index	Check line of USB communication
3U96A00	Size over of BIN file for download	Check BIN file for download
3U96B00	Error of BIN file header	Check BIN file for download
3X86400	Failed check CRC of USB bulk data (CMD MI x)	Check line of USB communication
3X86E00	Undefined SubCMD (CMD MI x)	Check CMD Mi. do not use undefined CMD
3X86F00	Undefined CMD (CMD MI x)	Check CMD Mi. do not use undefined CMD
486400	Failed check CRC of USB bulk data	Check line of USB communication
486E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
486F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
586400	Failed check CRC of USB bulk data	Check line of USB communication
586E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
586F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
686400	Failed check CRC of USB bulk data	Check line of USB communication
686E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
686F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
786400	Failed check CRC of USB bulk data	Check line of USB communication
786E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
786F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
886400	Failed check CRC of USB bulk data	Check line of USB communication
886E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
886F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
986400	Failed check CRC of USB bulk data	Check line of USB communication
986E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
986F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
A86400	Failed check CRC of USB bulk data	Check line of USB communication
A86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
A86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
A96100	Set to Unsupported Antiskim mode	Check value of antiskim mode
A96500	Range over of Antiskim frequency setting	Check range of frequency value for antiskim
A96600	Range over of Antiskim pulse count setting	Check range of pulse count value for antiskim
A96700	Range over of Antiskim idle time setting	Check range of idle time value for antiskim
A96800	Range over of Antiskim duty table count setting	Check range of duty table count value for antiskim
A96900	Range over of Antiskim duty table value setting	Check range of duty table value for antiskim
B86400	Failed check CRC of USB bulk data	Check line of USB communication
B86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
B86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
C86400	Failed check CRC of USB bulk data	Check line of USB communication
C86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD

Problem Code	Problem Description	Troubleshooting
C86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
D86400	Failed check CRC of USB bulk data	Check line of USB communication
D86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
D86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
E86400	Failed check CRC of USB bulk data	Check line of USB communication
E86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
E86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
E96100	Range over of Coil high temperature base	Check range of coil high temperature base value
F86400	Failed check CRC of USB bulk data	Check line of USB communication
F86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
F86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
G86400	Failed check CRC of USB bulk data	Check line of USB communication
G86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
G86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
G96100	Range over of Proximity setting	Check range of proximity setting value
H86400	Failed check CRC of USB bulk data	Check line of USB communication
H86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
H86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
I23200	Error of Coil High Temperature in Initialize	Check temperature of coil(ex. sensor unpluged) Run Initialize. If error is repeated, need to change device.
I24200	Error of Coil Low current in Initialize	Check status of coil(ex. Unpluged or open circuit) Run Initialize. If error is repeated, need to change device.
I24300	Error of Coil High current in Initialize	Check status of coil(ex. short circuit) Run Initialize. If error is repeated, need to change device.
I26C00	Error of Antiskim control in Initialize	Check config of antiskim. Recover normal setting. Run Initialize. If error is repeated, need to change device.
I31100	Warning of Proximity detect in Initialize	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
I31200	Error of Proximity detect in Initialize	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
I31300	Failure of connect to proximity sensor.	Check connector or cable of proximity sensor. Replace the proximity sensor.
I86400	Failed check CRC of USB bulk data	Check line of USB communication
I86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
I86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
J86400	Failed check CRC of USB bulk data	Check line of USB communication
J86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
J86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
K86400	Failed check CRC of USB bulk data	Check line of USB communication
K86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
K86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
L86400	Failed check CRC of USB bulk data	Check line of USB communication
L86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
L86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
M86400	Failed check CRC of USB bulk data	Check line of USB communication
M86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD

Problem Code	Problem Description	Troubleshooting
M86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
N86400	Failed check CRC of USB bulk data	Check line of USB communication
N86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
N86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
O86400	Failed check CRC of USB bulk data	Check line of USB communication
O86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
O86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
P23200	Error of Coil High Temperature.	Check temperature of coil(ex. sensor unpluged) Run Initialize. If error is repeated, need to change device.
P24200	Error of Coil Low current	Check status of coil(ex. Unpluged or open circuit) Run Initialize. If error is repeated, need to change device.
P24300	Error of Coil High current	Check status of coil(ex. short circuit) Run Initialize. If error is repeated, need to change device.
P26C00	Error of Antiskim control	Check config of antiskim. Recover normal setting. Run Initialize. If error is repeated, need to change device.
P31100	Warning of Proximity detect	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
P31200	Error of Proximity detect	Check dust or unknown things around of proximity sensor. Run Initialize. If error is repeated, need to change device.
P31300	Failure of connect to proximity sensor.	Check connector or cable of proximity sensor. Replace the proximity sensor.
P86400	Failed check CRC of USB bulk data	Check line of USB communication
P86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
P86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
Q86400	Failed check CRC of USB bulk data	Check line of USB communication
Q86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
Q86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
R86400	Failed check CRC of USB bulk data	Check line of USB communication
R86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
R86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
S86400	Failed check CRC of USB bulk data	Check line of USB communication
S86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
S86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
T86400	Failed check CRC of USB bulk data	Check line of USB communication
T86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
T86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
U86400	Failed check CRC of USB bulk data	Check line of USB communication
U86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
U86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
U96200	Failed check CRC of BIN file data for download	Check BIN file for download
U96300	Wrong sequence of BIN file data index	Check line of USB communication
U96A00	Size over of BIN file for download	Check BIN file for download
U96B00	Error of BIN file header	Check BIN file for download
V86400	Failed check CRC of USB bulk data	Check line of USB communication
V86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD

Problem Code	Problem Description	Troubleshooting
V86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
W86400	Failed check CRC of USB bulk data	Check line of USB communication
W86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
W86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
X86400	Failed check CRC of USB bulk data (CMD MI x)	Check line of USB communication
X86E00	Undefined SubCMD (CMD MI x)	Check CMD Mi. do not use undefined CMD
X86F00	Undefined CMD (CMD MI x)	Check CMD Mi. do not use undefined CMD
Y86400	Failed check CRC of USB bulk data	Check line of USB communication
Y86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
Y86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD
Z86400	Failed check CRC of USB bulk data	Check line of USB communication
Z86E00	Undefined SubCMD	Check CMD Mi. do not use undefined CMD
Z86F00	Undefined CMD	Check CMD Mi. do not use undefined CMD

Barcode

Problem Code	Problem Description	Troubleshooting
9708014	Failed to open communication port	Check the serial port, cable, or reset the unit to recover. It it is not recovered, replace main board or the unit.
9708030	Failed to create Registry	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708031	Failed to read Registry	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708032	Failed to write Registry	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708034	Failed to delete Registry	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708042	Failed to run sensor polling thread.	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708043	Failed to stop sensor polling thread.	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708101	Failed to make enable barcode Device	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708102	Failed to make disable barcode Device	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708103	Failed to read data from barcode device	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708104	communication error between SP and firmware during idle status.	1 .SP Close and Open(Take the Log for failure) 2. Restart the system
9708105	encountered unexpected timeout from firmware.	1 .SP Close and Open(Take the Log for failure) 2. Restart the system

Camera

Problem Code	Problem Description	Troubleshooting
9702010	Failed to connect device	Check whether the USB port is connected or not.
9702012	Failed to capture Image	Check whether the USB port is connected or not.
9702014	communication error	1.Do Reset at operator function. 2.Check the communication cable 3.Reboot ATM
9702020	Failed to create file(CamData is NULL)	Check whether the parameter when function is called from Application
9702040	Failed to create Thread	Check whether the USB port is connected or not.
9702041	Failed to capture Image(can't find camera device)	Check whether the USB port is connected or not.
9702042	Failed to capture Image(invalid file path)	Check whether the parameter when function is called from Application
9702043	Failed to capture Image(can't find ATMInside)	Check whether the parameter when function is called from Application
9702044	Failed to capture Image(receive black or white frame)	Check whether the USB port is connected or not.
9702045	Failed to capture Image(abnormal frame)	Check whether the USB port is connected or not.
9702046	Failed to capture Image(invalid input parameter)	Check whether the parameter when function is called from Application
9702047	Failed to capture Image(communication dll error)	Check whether the parameter when function is called from Application
9702048	Failed to capture Image(exception occur)	Check whether the parameter when function is called from Application

Card Reader

Problem Code	Problem Description	Troubleshooting
3000000	To shows that received command was undefined	Confirm the firmware version
3000100	To show command parameter error	Confirm the firmware version
3000200	The reception of the command that impossible to implementation	Issue the Reset command.
3000300	To show that the command to the hardware that does not exist was received	Restart the Service Provider
3000400	To show that error data was included in command	Confirm the firmware version
3000500	To show that a command, which requires the card movement, was executed before IC contacts were released from the card	Issue the Reset command.
3000600	To show that ICRW has not obtained the key exchange key. [V04.01.58]	Issue the Reset command.
3001000	To show that the card was not carried to the specific location after specified number of trial for specified time during execution of command of carrying card in various ways	Issue the Reset command.
3001100	To show that status signal for "shutter open" is not received while shutter is open.	Check device and shutter.
3001200	To show that the Sensor is damaged or more that one card is inside ICRW.	Clear sensor and check the sensor.
3001300	To show that the card longer than 92mm is inserted into ICRW	Remove card and reset device
3001400	To show that the card shorter than 78mm is inserted into ICRW	Remove card and reset device
3001500	To show that data in F-ROM is damaged	Restart system and change device to new one.
3001600	To show that the card staying inside ICRW was moved up to the point where status request information change. To show that card was inserted into the ICRW through rear side by external force	Issue the Reset command.
3001700	To show that the card was not carried to the specific location after specified number of Trial for pecified time during execution of RETRIEVE command.	Issue the Reset command.
3001800	To show that shutter open/close detection sensor(SW2) and card width check sensor(SW1) are not operating correctly.	Remove card and reset device
3001900	To show that a card was not inserted from the rear, even if 10 seconds had passed after the execution of BACK ENTRY command	Remove card and reset device
3002000	To show that track has parity error	Remove card and reset device
3002100	To show that read error has happened in Multiple magnetic read command.	Remove card and reset device
3002200	To show that write error is detected through write/verify procedure.	Remove card and reset device
3002300	To show that only SS,ES,LRC are contained in the track. (no retry)	Please confirm which is problem card or cardreader

Problem Code	Problem Description	Troubleshooting
3002400	To show that the card has no magnetic track(no retry)	Please confirm which is problem card or cardreader
3002500	To show that quality error (Jitter,Preamble,Postamble) has happended in write verify.	Please confirm which is problem card or cardreader
3002600	To show that the track has no SS.	Please confirm which is problem card or cardreader
3002700	To show that the track has no ES	Please confirm which is problem card or cardreader
3002800	To show that the track has no LRC error	Please confirm which is problem card or cardreader
3002900	To show that the discordance of write data has happened in write verify.	Please confirm which is problem card or cardreader
3003000	To show that power down(or power cut in short instant) is detected(or being detected).	Issue the Reset command.
3003100	To show that DSR signal was turned to OFF (communication is cut)	Check the device cable and connection.
3004000	To show that the card was pulled out form ICRW through entrance date when CAPTURE command is being executed.	Issue the Reset command.
3004100	Failure at IC Contact solenoid or sensor ICD.	Confirm the solenoid sensor
3004300	Card could not be set to IC contack position/Failure at sensor PDI.	Issue the Reset command.
3004500	ICRW lost sight of the card when ICRW completed to carrry the card to the rear position during the card acceptance, and ICRW ejected the card to entrance gate.	Confirm the sensor
3004600	To show that the ejected card has not been withdrawn during execution of Monitoring for removal command.	Remove card and reset device
3005000	Retract counter overflow.	Remove card and reset device
3005100	To show that Motor error has happened, through start/stop check in Initialize command.	Confirm the sensor
3005300	To show that read error in Digital Decode Read Command.	Remove card and reset device
3005400	Unable to perform ACT operation	1. Open the cover of the device. 2. ACT motor makes loosely. 3. Close the cover and execute reset. 4. If ACT motor does not turn around, change the device.
3005500	Jamed card is locked	Unlock ACT and then take jamed card
3006000	To show that there found abnormal condition on the power-line.	Remove card and reset device
3006100	The receiving error for ATR.	Check to cardreader is running well with IC Chipcard.
3006200	To show that the specified protocol does not agree with that of ICC/SAM ICRW still connected.	Check to cardreader is running well with IC Chipcard.
3006300	In case T=1 cards, after ATR receiving, IFS exchange is failed. ICRW detects time out.	Check to cardreader is running well with IC Chipcard.
3006400	In case T=1 cards, after ATR receiving, IFS exchange is failed. ICRW detects protocol error.	Check to cardreader is running well with IC Chipcard.

Problem Code	Problem Description	Troubleshooting
3006500	HOST tried to communicate with IC card without card activation.	Check to cardreader is running well with IC Chipcard.
3006600	ICRW tried to activate with ICC/SAM, but the card returned ATR, which is not supported.	Check to cardreader is running well with IC Chipcard.
3006900	ICRW tried to activate with ICC/SAM, but the card returned ATR, Which does not match EMV.	Check to cardreader is running well with IC Chipcard.
3007000	Failure at F-ROM operation.	Reset device and restart system.
3007100	Firmware of User program code area is wrong.	Reset device and restart system.
3009000	The cover of the unit is opened. (ICT3S5 model only)	Close the unit cover.
3009500	AntiSkimming device is broken down or disconnected.	Turn off the power and check that the antiskimming device was connected normally. if the error is arising from mechanism failure, it is cleared by the repair fo the parts.
3009600	Skimming is detected.	Cleared by executing Initialize command after the skimming has been removed
3009900	Abnormal current was found on the internal module.	Turn off te power and check that the internal module was damaged. if the error is arising from electrical failure, it is cleared by the repaire of te parts
300B000	Received the other command before executing Initialize command.	Reset device and restart system.
30R1000	Retain Card Jam	1. Check device outlet, reset Device
3CL1100	Shutter Close Fail	1. Check shutter
3E01000	Eject Card Jam	1. Check device inlet, reset Device
3ER1000	Eject and Retain Card Jam	1. Check device in/outlet, reset Device
3OP1100	Shutter Open Fail	1. Check shutter
3TDtc00	-	Remove metal or foreign object from bezel
3TINTER	-	Check Dll File
3TTDt00	-	Restart ATM After Checking bezel
3TVDt00	-	Restart ATM after Checking bezel
9723010	Fail to connect device.	Check the device cable and connection.
9723016	Fail to receive data.	Check the device cable and connection.
9723017	Send timeout occured.	Check the device cable and connection.
9723018	Card is jam in enterance	Remove card inside cardreader and issue the reset command

Cash Dispenser Unit (CDU10)

Abbreviations

No.	Abbreviation	Full Name	Description	No.	Abbreviation	Full Name	Description
1	MB	Main Body	Located on the top of the machine, outputs banknotes and temporarily stacks banknotes.	4	CST	Cassette	Stores banknotes to be dispensed.
2	RJ/RT BOX	Reject / Retract Box	Stores rejected/retracted banknotes.	5	SF	Separator & Feeder	Separates banknotes one by one from the cassette and returns them to MB.
3	THR	Throat	Returns banknotes from the MB to the paper dispensing part.	6	FF	Feed & Frame	A frame where a cassette, SF, and PCBA are mounted.

Module Layout
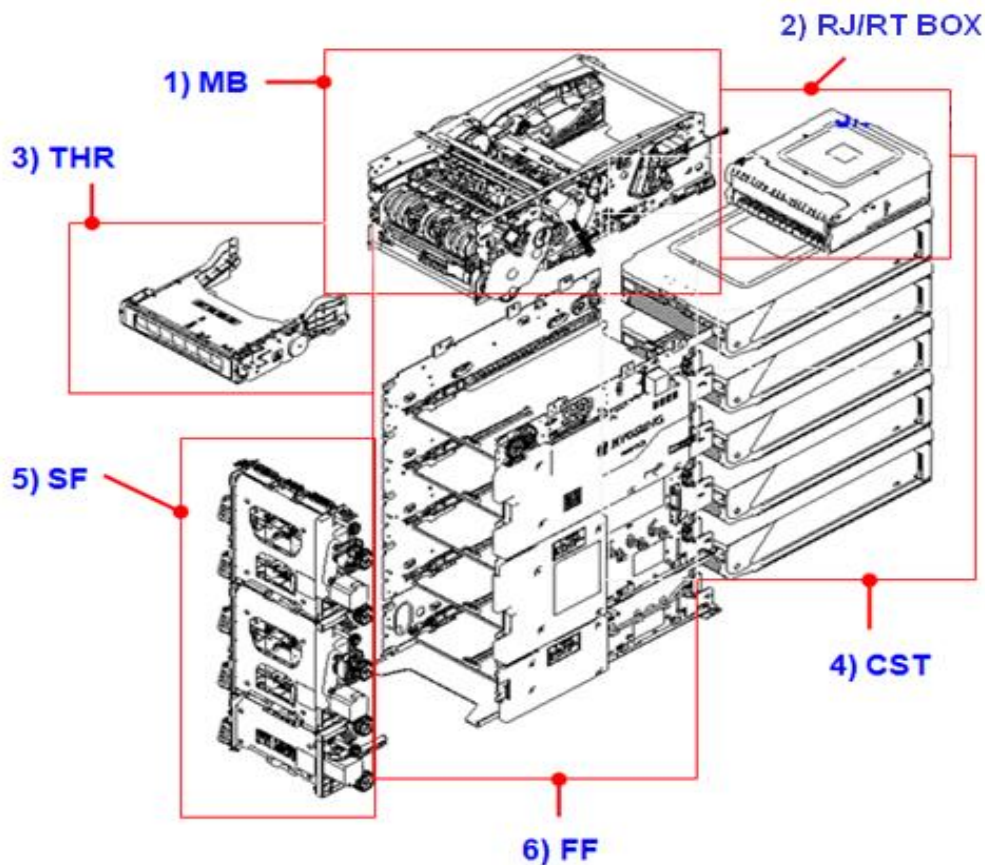
Diagram of Electromagnetic Parts
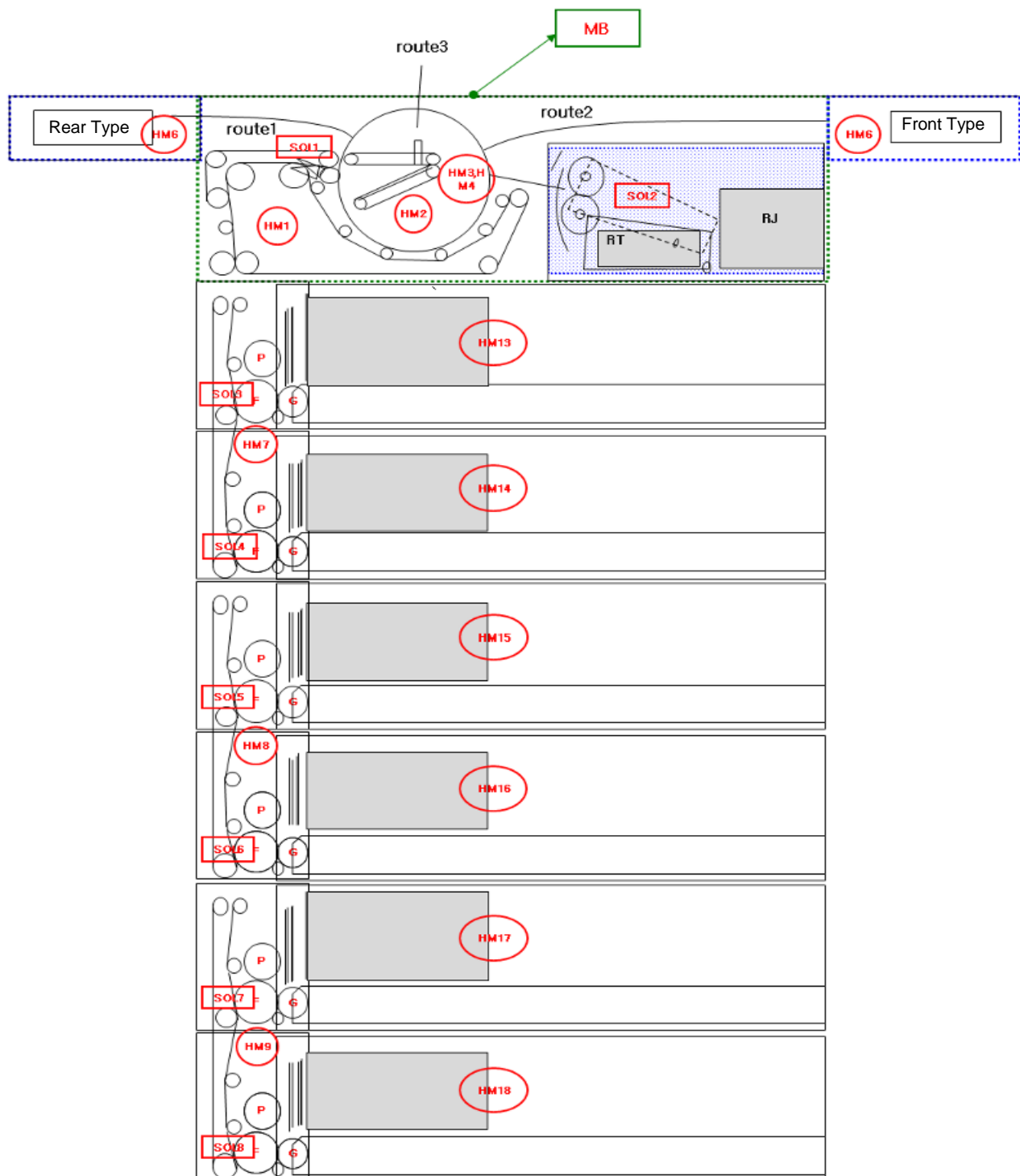
Diagram of Sensors
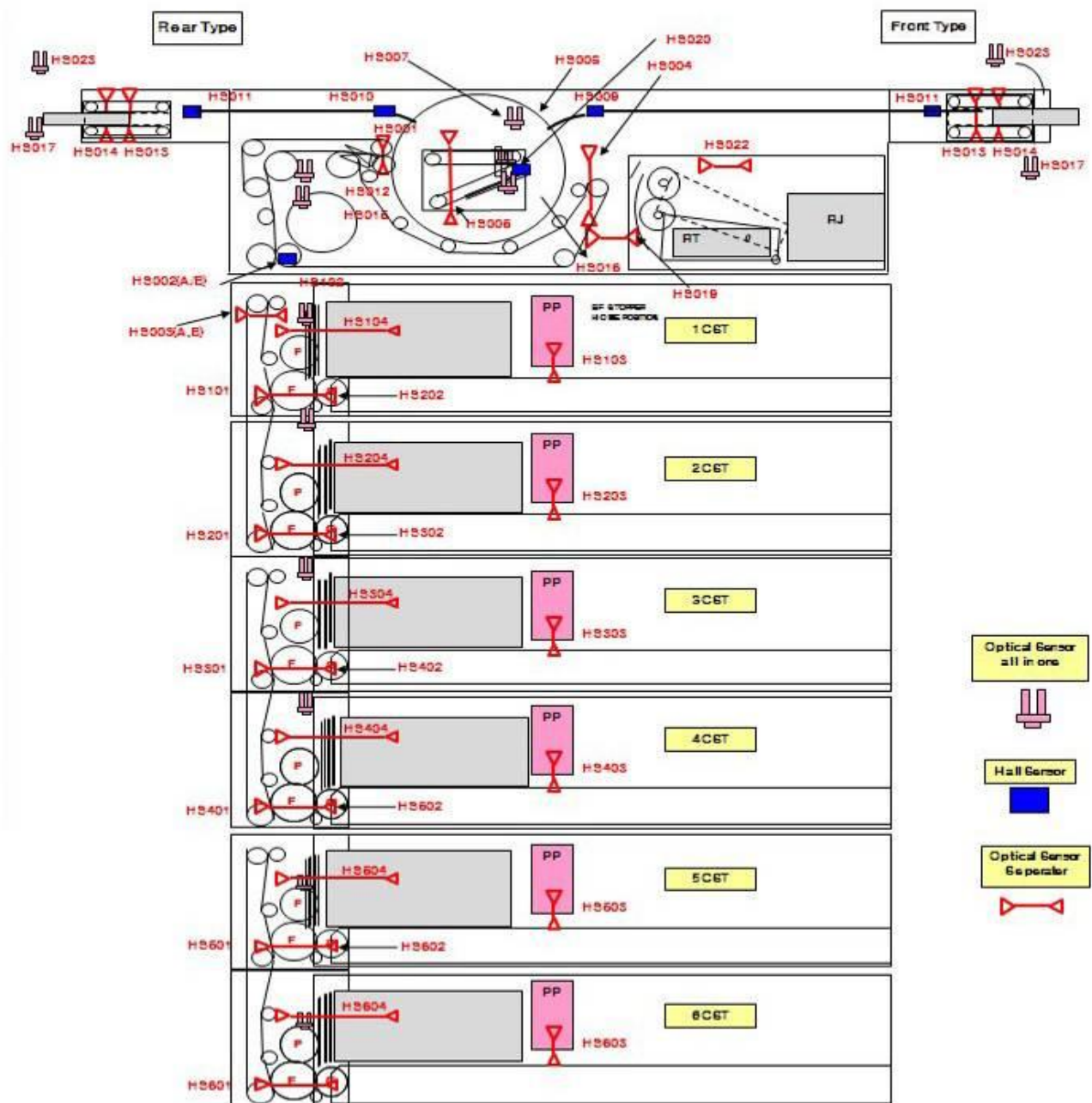
Error Code List

Problem Code	Problem Description	Troubleshooting
4001000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4001100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the main board or the cassettee if the same symtom recurs.
4001200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette if the same symptom recurs.
4001400	NoteDB has CRC error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and retry Download. 3. Replace the CDU main board if the same symptom recurs.
4001500	Note DB Write error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4001600	Note DB Encryption failed.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4001700	Download file(EP) is not correct.	1. Download proper EP Binary file.
4002300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it does not, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4002400	Encryption of communication message failed.	1. Check the communication cable and perform the initialization. 2. Update SP, VDM, TM, and EP.
4002500	Unspecified CMD.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of SP and EP, and update if necessary.
4002600	Unspecified SubCMD.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of SP and EP, and update if necessary.

Problem Code	Problem Description	Troubleshooting
4002700	Unspecified FuncCMD.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of SP and EP, and update if necessary.
4002800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee ID board if the same symtom recurs.
4002900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee if the same symtom recurs.
400E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
400E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
400E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
400E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
400EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
400EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
400EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
400ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4011100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #1 if the same symtom recurs.
4011200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #1 if the same symptom recurs.
401E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
401E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
401E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
401E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4021100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #2 if the same symtom recurs.
4021200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #2 if the same symptom recurs.
402E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
402E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
402E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
402E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4031100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #3 if the same symtom recurs.
4031200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #3 if the same symptom recurs.
403E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
403E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
403E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
403E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4041100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #4 if the same symtom recurs.
4041200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #4 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
404E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
404E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
404E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4051100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #5 if the same symtom recurs.

Problem Code	Problem Description	Troubleshooting
4051200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #5 if the same symptom recurs.
405E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
405E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
405E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
4061100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #6 if the same symtom recurs.
4061200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #6 if the same symptom recurs.
406E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
406E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
406E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
407E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
407E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
407E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
407EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
407EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
407ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
408EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
40C1400	NoteDB has CRC error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and retry Download. 3. Replace the CDU main board if the same symptom recurs.
40C1700	Download file(EP) is not correct.	1. Download proper EP Binary file.
40C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it does not, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
40C2400	Encryption of communication message failed.	1. Check the communication cable and perform the initialization. 2. Update SP, VDM, TM, and EP.
40C2D00	The communication message of master station is sent as plain text (security breach).	1. Check the communication cable and perform the initialization. 2. Update SP, VDM, TM, and EP.
40CBC00	Controller authentication failure. [Unauthorized Dispense]	Only one registered controller to the CDU can perform the Dispense. To re register, The existing registration must be cleared. Please refer to the separate specification for the Clearing.
40CBD00	Communication Protocol(RN) Error	Illegal Dispense (If not, Reset System)
40CBE00	Not encrytped command.	Reset system., if the error has not been recovered automatically.

Problem Code	Problem Description	Troubleshooting
40H1000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
40H2900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee if the same symtom recurs.
4102A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4103A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4104400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4104500	HS005 JAM. (not occurred after V01.00.10)	1. Remove the jam within the carriage. 2. Remove contamination from the HS005 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4104600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4104700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4104A00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Remove contamination from the HS001 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4105400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4105900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4105A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4105B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4105C00	Double Detecting Sensor Unplug Error.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4105D00	Outside the Double Detecting Sensor minimum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4105E00	Outside the Double Detecting Sensor maximum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Remove contamination from the double detecting sensor (HS002). 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4106E00	HS005, the residual confirmation sensor in the stacker, does not detect dark (continued light) When try "Initialize".	※ When the Device checking, notes may or may not exist in the carriage (Must be checked and confirm whether it is normal) 1. Check for short or foreign objects on the board or connect 2. Check the cable short, etc.
4107400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4107600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4107700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4108000	No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4108500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4108700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4108800	Retract/reject operation time out during initialization : No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4108C00	Notes spilt four or more time during initialization.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong assembly. 3. Check the Pickup Solenoid (SOL 3 to 8) for normal operation 4. Replace pick-up control parts (SF12, SF34 and SF5) if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4109000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4109100	NO RJRT box.	1. Check that the Reject/Retract box is in place. 2. Check the HS019 Sensor for normal operation and any losse or wrong assembly. 3. Check HS019 cable connection. 4. Replace the main body if the same symptom recurs.
4109300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
410A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette. 2. Check the HSx02 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM13~HM18) for normal operation. 4. Replace Cassette if the same symptom recurs. 5. Replace the SF Module if the measure under 4 fails.
410AC00	HSx01 JAM.	1. Open SF and remove the jam from the pick-up control part. 2. Remove the cassette and check the shutter section. 3. Check the HSx01 Sensor cable. 4. Replace SF12, SF34 and SF5 modules if the same symptom recurs.
410B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
410B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
410B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
410B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
410DB00	Unit home position error.	1. Do not operate CDU where it s position is outside of the system. 2. If inevitable, pull the home position switch and change sensor values before operating
410E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
410E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
410E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
410E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
410EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
410EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
410EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
410ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4112200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
411A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #1. 2. Check the HS102 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM13) for normal operation. 4. Replace Cassette #1 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.
411AC00	HSx01 JAM.	1. Open SF12 and remove the jam from the pick-up control part. 2. Remove Cassette #1 and check the shutter section. 3. Check the HS101 Sensor cable. 4. Replace SF12 if the same symptom recurs.
411AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL3) for correct assembly. 2. Check the solenoid (SOL3) cable connection. 3. Replace SF12 if the same symptom recurs.
411E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
411E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
411E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
411E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4122200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
412A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #2. 2. Check the HS202 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM14) for normal operation. 4. Replace Cassette #2 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.
412AC00	HSx01 JAM.	1. Open SF12 and remove the jam from the pick-up control part. 2. Remove Cassette #2 and check the shutter section. 3. Check the HS201 Sensor cable. 4. Replace SF12 if the same symptom recurs.
412AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL4) for correct assembly. 2. Check the solenoid (SOL4) cable connection. 3. Replace SF12 if the same symptom recurs.
412E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
412E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
412E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
412E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4132200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
413A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #3. 2. Check the HS302 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM15) for normal operation. 4. Replace Cassette #3 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
413AC00	HSx01 JAM.	1. Open SF34 and remove the jam from the pick-up control part. 2. Remove Cassette #3 and check the shutter section. 3. Check the HS301 Sensor cable. 4. Replace SF34 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
413AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL5) for correct assembly. 2. Check the solenoid (SOL5) cable connection. 3. Replace SF34 if the same symptom recurs.
413E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
413E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
413E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
4142200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
414A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #4. 2. Check the HS402 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM16) for normal operation. 4. Replace Cassette #4 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
414AC00	HSx01 JAM.	1. Open SF34 and remove the jam from the pick-up control part. 2. Remove Cassette #4 and check the shutter section. 3. Check the HS401 Sensor cable. 4. Replace SF34 if the same symptom recurs.
414AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL6) for correct assembly. 2. Check the solenoid (SOL6) cable connection. 3. Replace SF34 if the same symptom recurs.
414E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
414E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
414E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
414E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4152200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
415A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #5. 2. Check the HS502 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM17) for normal operation. 4. Replace Cassette #5 if the same symptom recurs. 5. Replace the SF5 if the measure under 4 fails.
415AC00	HSx01 JAM.	1. Open SF5 and remove the jam from the pick-up control part. 2. Remove Cassette #5 and check the shutter section. 3. Check the HS501 Sensor cable. 4. Replace SF5 if the same symptom recurs.
415AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL7) for correct assembly. 2. Check the solenoid (SOL7) cable connection. 3. Replace SF5 if the same symptom recurs.
415E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
415E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
415E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
415E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4162200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
416A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #6. 2. Check the HS602 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM18) for normal operation. 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
416AC00	HSx01 JAM.	1. Open SF56 and remove the jam from the pick-up control part. 2. Remove Cassette #6 and check the shutter section. 3. Check the HS601 Sensor cable. 4. Replace SF56 if the same symptom recurs.
416AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL8) for correct assembly. 2. Check the solenoid (SOL8) cable connection. 3. Replace SF56 if the same symptom recurs.
416E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
416E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
416E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4172200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4175400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4175500	Constant speed error at the main motor. (not completing operation within 20 seconds from initial and 110 seconds from dispense)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4175600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4175800	Reject Gate Solenoid Echo Error.	1. Check the Reject Gate for any lose or incorrect assembly. 2. Check the solenoid (SOL1) cable connection. 3. Replace the main body if the same symptom recurs.
4175900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4175A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4175B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4175C00	Double Detecting Sensor Unplug Error.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4175D00	Outside the Double Detecting Sensor minimum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4175E00	Outside the Double Detecting Sensor maximum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Remove contamination from the double detecting sensor (HS002). 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4178C00	Notes spilt four or more time during initialization.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong assembly. 3. Check the Pickup Solenoid (SOL 3 to 8) for normal operation 4. Replace pick-up control parts (SF12, SF34 and SF5) if the same symptom recurs.
4179300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
417DC00	Note remains in moving path.	1. Check and Clear the moving path. 2. DIP#2 On and Off, if there is no note.

Problem Code	Problem Description	Troubleshooting
417E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
417E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
417E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
417EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
417EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
417EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
417ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4182200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4182A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4184400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4184600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4184700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4185400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4185600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4186000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4186100	Rotor failed to move to Front Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4186200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4186300	Rotor failed to move to Center Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4186400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4186500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4186900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4187100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4187300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4187400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4187500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.
4187600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4187700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4187A00	Not a note of the size that can be handled by the BF stopper.	1. Check the note class setting. 2. Conduct calibration again for the note class.
4188500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4188700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4188800	Retract/reject operation time out during initialization : No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4189000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4189300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
418B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
418B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
418B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
418B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
418EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
4192200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4192A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4199200	Solenoid 2 Echo Error.	1. Check the solenoid (SOL2) cable connection. 2. Check the solenoid (SOL2) for any loose or wrong assembly. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the same symptom recurs.
41C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
41C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
41C7700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4201000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4201300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4202A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4202C00	Main EEPROM is full.	1. Turn the power off and on and try the command again. 2. Set CDU information again. 3. Replace the CDU main board if the same symptom recurs.
4202F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4203100	Error in designating the total number of notes to be dispensed. (outside 1 to 100)	1. Check the total number of notes to be dispensed (1 to 100). 2. Check the final version of AP, SP and EP, and update if necessary..
4203200	Calibration command received for multiple cassettes.	1. Check whether only a single cassette has been ordered to dispense. 2. Check the final version of VDM, SP and EP, and update if necessary..
4203400	Dispense command received where the nuber of notes requested for individual cassettes does not match the total.	1. Check the combined number of notes to be dispensed. 2. Check the final version of AP, SP and EP, and update if necessary..
4203600	Errors from the previous command execution not cleared.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of AP, SP and EP, and update if necessary..
4203700	Error in designating the number of notes for calibration. (outside 6 to 20)	1. Check the number of notes to be dispensed (6-20). 2. Check the final version of AP, SP and EP, and update if necessary..
4203A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4204400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4204500	HS005 JAM. (not occurred after V01.00.10)	1. Remove the jam within the carriage. 2. Remove contamination from the HS005 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4204600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4204700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4204800	Failure to remove JAM from cassette outlet(HSx01)	1. Remove the JAM from the cassette exit. 2. Remove contamination from the HSx01 sensor. 3. Replace the SF module if the same symptom recurs.
4205100	Invalid note detected at HS001.	1. Check the Double detecting sensor guide for correct locking. 2. Check and Clear the moving path. 3. Check the Reject Gate for any lose or incorrect assembly.
4205200	The number of notes dispensed from the cassette and declared abnormal does not match the number of notes that passed the reject sensor. (Notes mismatch)	1. Check the Reject Gate for any lose or incorrect assembly. 2. Check that the guide for the double detecting sensor is locked. 3. Remove contamination from the HS004 sensor.
4205300	The number of notes dispensed from the cassette and declared normal does not match the number of notes that passed the stack sensor. (Notes mismatch)	"1. Check the number of stacked notes for confirmation.2. Check whether the double detect sensor guide is locked firm and tight.3. Check whether the stack wheel wears out.4. Remove if any contamination on the HS001 sensor.5 Check whether the assembly of reject gate is correct."
4205400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4205900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4205A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4205B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4205C00	Double Detecting Sensor Unplug Error.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4205D00	Outside the Double Detecting Sensor minimum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4205E00	Outside the Double Detecting Sensor maximum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Remove contamination from the double detecting sensor (HS002). 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4205F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4206500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4206A00	The carriage is not in an appropriate position to execute "Dispense".	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Check whether damaged at Carriage and Rotor.

Problem Code	Problem Description	Troubleshooting
4206E00	HS005, the residual confirmation sensor in the stacker, does not detect dark (continued light) When doing "Dispense".	※ When the Device checking, notes may or may not exist in the carriage (Must be checked and confirm whether it is normal) 1. Check for short or foreign objects on the board or connect 2. Check the cable short, etc.
4207300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4207500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.
4207600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4207700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4208000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4208100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4208300	Carriage Grab operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4208500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4208700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4208A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4209000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4209100	NO RJRT box.	1. Check that the Reject/Retract box is in place. 2. Check the HS019 Sensor for normal operation and any losse or wrong assembly. 3. Check HS019 cable connection. 4. Replace the main body if the same symptom recurs.
4209300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
420A000	Miss Feed.	1. Check notes in the Cassettes. 2. Check the HSx01 and HSx02 sensors for any contamination and any losse or wrong assembly. 3. Check the motors (Pickup and Push Plate) for normal operation. 4. Check the solenoids (being at SF) for normal operation. 5. Replace the Cassette if the same symptom recurs. 6. Replace the SF module if the measure under 5 fails.
420A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette. 2. Check the HSx02 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM13~HM18) for normal operation. 4. Replace Cassette if the same symptom recurs. 5. Replace the SF Module if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
420A200	[Dispense] Cassette #x is empty.	1. Confirm whether there are notes in cassettes. 2. Replace the cassette with a new one 　If error occured with being notes it_s inside. 3. Replace the SF module even if the new cassette doesn_t fix the error.
420A600	Dispense command for other cassettes than set.	1. Check the CDU information. (Set the number of cassettes.) 2. Set CDU information again. 3. Turn the power off and on and try the command again. 4. Check the command from SP. 5. Replace the CDU main board if the same symptom recurs.
420AC00	HSx01 JAM.	"1. Open SF and remove if any jam from the separation control module.2. Remove the cassette and check whether the cassette shutter is correct.3. Check whether the HSx01 sensor cable connection is firm and tight.4. Replace SF12, SF34 or SF5 module respectably according to jam position if the same error continues."
420B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
420B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
420B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
420B300	Shutter closing immediately after open success. (caused by motor step-out)	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
420B400	Shutter lock status check failure (Security Issue)	Vandalism or Fraud is cause. If necessary, Repair or Replace the Throat module.
420B600	Shutter failure due to Vandalism. (Security Issue)	Vandalism or Fraud is cause. If necessary, Repair or Replace the Throat module.
420C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette.
420C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette.
420C400	Continuous rejection by invalid note intervals.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module if the measure under 3 fails.
420C500	Continuous rejection by skewed notes	1. Check whether the notes in the cassette are set properly. 2. Clean if any residue or contamination on HS003A/B sensors. 3. Replace cassette with new one if the same error continues. 4. Replace the SF module even if the new cassette does not fix the error.
420C600	Continuous rejection by half notes.	1. Remove Cassette and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module even if the new cassette does not fix the error.
420C700	Continuous rejection by perforated notes.	1. Remove Cassette and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
420C800	Continuous rejection by unknown reason.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module if the measure under 3 fails.
420C900	Continuous rejection by invalid thickness notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.
420CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace SF module if the same symptom recurs.
420CB00	Continuous rejection by thin notes	1. Check whether the quality of rejected notes is poor. 2. Clean the double detect sensor and execute sensor calibration. 3. Replace the main body if the same error continues.
420CC00	Total rejection count is 20 or more.	1. Remove the cassette and check note setting. 2. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 3. Check the separation motors (HM7 to 9) for any abnormal action. (i.e. noise) 4. Replace the Cassette if the same symptom recurs. 5. Replace the SF section if the measure under 4 fails.
420D000	The number of notes does not match after dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Replace the main board.
420D100	Notes spilt three times or more at standby after dispensing.	1. Remove the cassette and check note setting. 2. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 3. Check the separation motor (HM7 to 9) for any abnormal action. (i.e. noise) 4. Replace the Cassette if the same symptom recurs. 5. Replace the SF section if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
420D200	Ten or more times of error in dispensing retrial.	"1. Confirm whether the notes in the cassette are properly stacked and in good condition.2. Check whether the SF note separation solenoids (SOL 3 to 8) are working during initialization through supervisor function in VDM.3. Check whether the separation motors (HM7 to 9) are working without noise during initialization through supervisor function in VDM.4. Replace the cassette with new one if the same error continues.5. Replace the SF module even if the new cassette doesn't fix the error."
420D300	Notes spilt three times or more at standby before dispensing.	1. Remove the cassette and check note setting. 2. Check the operation of the SF note separation solenoids. (SOL3 to 8) 3. Check the separation motor(HM7 to 9) for any abnormal action. (i.e. noise) 4. Replace the Cassette if the same symptom recurs. 5. Replace the SF section if the measure under 4 fails.
420D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove the cassette and check note setting. 3. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 4. Check the separation motors (HM7 to 9) for any abnormal action. (i.e. noise) 5. Replace the Cassette if the same symptom recurs. 6. Replace the SF section if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
420D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
420D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
420D700	Fewer notes are stacked than the total requested.	1. Check sensors HS001, HS003 and HS004. 2. Remove the cassette and check note setting. 3. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 4. Check the separation motors (HM7 to 9) for any abnormal action. (i.e. noise) 5. Replace the Cassette if the same symptom recurs. 6. Replace the SF section if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.

Problem Code	Problem Description	Troubleshooting
420D800	More notes are stacked than the total requested.	1. Check sensors HS001, HS003 and HS004. 2. Remove the cassette and check note setting. 3. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 4. Check the separation motors (HM7 to 9) for any abnormal action. (i.e. noise) 5. Replace the Cassette if the same symptom recurs. 6. Replace the SF section if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
420D900	Large gap between HS003A and HS003B.	1. Check the note condition. 2. If they are OK, clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420DA00	Values for HS002A and HS002B are outside the available range.	1. Check the double detecting sensor guide for correct locking. 2. Clean the double detecting sensor section and conduct calibration.
420DB00	Unit home position error.	1. Do not operate CDU where it s position is outside of the system. 2. If inevitable, pull the home position switch and change sensor values before operating
420E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420E300	HS301 JAM - JAM Task.	"1. Open SF34 module and remove if any jam from the separation control module.2. Check whether the HS301 sensor cable connection is firm and tight.3. Clean the sensor section and execute sensor auto-dimming that is automatically performed during initialization."
420E400	HS201 JAM - JAM Task.	"1. Open SF12 and remove if any jam in the separation control module.2. Check the HS201 sensor cable connection whether it is firm and tight.3. Clean the sensor section and execute sensor auto-dimming that is automatically performed during initialization."

Problem Code	Problem Description	Troubleshooting
420E500	HS101 JAM - JAM Task.	"1. Open SF12 module and remove if any jam from the separation control module.2. Check whether the HS101 sensor cable connection is firm and tight.3. Clean the sensor section and execute sensor auto-dimming that is automatically performed during initialization."
420E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
420E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
420E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
420EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
420EB00	HS004 JAM.	"1. Remove if any jam from the reject box entrance.2. Check whether the HS004 sensor cable connection is firm and tight.3. Clean the sensor part."
420EC00	HS001 Light JAM.	"1. Open the double detect sensor guide and the reject gate, and remove if any jam in them.2. Check whether the reject gate is lifted to reject position or the HS001 sensor is protruded. If so, adjust them to normal position.3. Check whether the tension of the belt is tight enough to revolve the pulley.4. Remove if any jam or residue in the bill transport."
420ED00	HS004 Light JAM.	"1. Open the double detect sensor guide and the reject gate, and remove if any jam in them.2. Remove if any jam in the bill path into RJ/RT box.3. Check whether the reject gate is lifted to reject position or the HS001 sensor is protruded. If so, adjust them to normal position.4. Check whether the tension of the belt is tight enough to revolve the pulley.5. Remove if any jam or residue in the bill transport."
4211000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4211300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4212200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4213000	Dispense command received for a missing cassette.	1. Remove Cassette #1 and put it back. 2. Check Cassette #1 connection cable. 3. Replace Cassette #1 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4213300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #1. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4213A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4214800	Failure to remove JAM from cassette outlet(HS101)	1. Remove the JAM from the cassette #1 exit. 2. Remove contamination from the HS101 sensor. 3. Replace the SF12 module if the same symptom recurs.
4215F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4218000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4218100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4218A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4219300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
421A000	Miss Feed.	"1. Confirm whether there are notes in the cassette 1.2. Clean any residue or contamination on HS101 and HS102 sensors and check whether the assembly condition of them is firm and tight.3. Check whether the motors (HM07, HM13) are working during initialization through supervisor function in VDM.4. Replace cassette 1 with new one if the same error continues.5. Replace the SF12 module even if the new cassette doesn't fix the error."
421A100	HSx02 had not been light state, during cassette-push-plate operation.	"1. Check whether notes in cassette 1 is set properly.2. Clean if any contamination on HS102 and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM13) is working during initialization through supervisor function in VDM.4. Replace the cassette 1 if the same error continues.5. Replace the SF12 module even if the new cassette doesn't fix the error."
421A200	Cassette empty.	"1. Confirm whether there are notes in the cassette 1.2. Clean any residue or contamination on HS104 sensor and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM13) is working during initialization through supervisor function in VDM.4. Replace cassette 1 with new one if the same error continues.5. Replace the SF12 module even if the new cassette doesn't fix the error."
421A900	Dispense requested for a cassette that needs note calibration.	1. Conduct note class setting via calibration or note class DB.
421AC00	HSx01 JAM.	1. Open SF12 and remove the jam from the pick-up control part. 2. Remove Cassette #1 and check the shutter section. 3. Check the HS101 Sensor cable. 4. Replace SF12 if the same symptom recurs.
421AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL3) for correct assembly. 2. Check the solenoid (SOL3) cable connection. 3. Replace SF12 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
421C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #1 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #1.
421C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #1 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #1.
421C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #1 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL3). 3. Replace Cassette #1 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
421C500	Continuous rejection by skewed notes.	"1. Check whether the notes in the cassette 1 are set properly.2. Clean if any residue or contamination on HS003A/B sensors.3. Replace cassette 1 with new one if the same error continues.4. Replace the SF12 module even if the new cassette doesn't fix the error."
421C600	Continuous rejection by half notes.	1. Remove Cassette #1 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #1 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
421C700	Continuous rejection by perforated notes.	1. Remove Cassette #1 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
421C800	Continuous rejection by unknown reason.	1. Remove Cassette #1 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL3). 3. Replace Cassette #1 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
421C900	Continuous rejection by invalid thickness notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.
421CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #1 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL3). 3. Replace SF12 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
421CB00	Continuous rejection by thin notes.	"1. Check whether the quality of rejected notes is poor.2. Clean the double detect sensor and execute sensor calibration..3. Replace the main body if the same error continues."
421CC00	Total rejection count is 20 or more.	"1. Check whether notes in cassette 1 are set properly.2. Check whether SF12 note separation solenoid (SOL3) is working.3. Check whether the separation motor (HM7) is working properly, i.e. noise.4. Replace Cassette 1 if the same error continues.5. Replace the SF12 even if the new cassette doesn't fix the error."
421CD00	Cassette displaced during dispensing.	1. Remove Cassette #1 and put it back. 2. Check the cassette#1 for correct locking.
421D200	Ten or more times of error in dispensing retrial.	"1. Confirm whether the notes in the cassette 1 are properly stacked and in good condition.2. Check whether the SF note separation solenoid (SOL 3)is working during initialization through supervisor function in VDM.3. Check whether the separation motor (HM7) is working without noise during initialization through supervisor function in VDM.4. Replace the cassette 1 with new one if the same error continues.5. Replace the SF module even if the new cassette doesn't fix the error."
421D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#1 and check note setting. 3. Check the operation of SF12 note separation solenoid. (SOL3) 4. Check the separation motor (HM7) for any abnormal action. (i.e. noise) 5. Replace Cassette #1 if the same symptom recurs. 6. Replace the SF12 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
421D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
421D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
421E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
421E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
421E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
421E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
421EC00	HS001 Timeout JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
4221000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4221300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4222200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4223000	Dispense command received for a missing cassette.	1. Remove Cassette #2 and put it back. 2. Check Cassette #2 connection cable. 3. Replace Cassette #2 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4223300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #2. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4223A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4224800	Failure to remove JAM from cassette outlet(HS201)	1. Remove the JAM from the cassette #2 exit. 2. Remove contamination from the HS201 sensor. 3. Replace the SF12 module if the same symptom recurs.
4225F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4228000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4228100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4228A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4229300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
422A000	Miss Feed.	"1. Confirm whether there are notes in the cassette 2.2. Clean any residue or contamination on HS201 and HS202 sensors and check whether the assembly condition of them is firm and tight.3. Check whether the motors (HM07, HM14) are working during initialization through supervisor function in VDM.4. Check whether the solenoid (SOL4) is working during initialization through supervisor function in VDM. 5. Replace cassette 2 with new one if the same error continues.6. Replace the SF12 module even if the new cassette doesn't fix the error."
422A100	HSx02 had not been light state, during cassette-push-plate operation.	"1. Check whether notes in cassette 2 is set properly.2. Clean if any contamination on HS202 and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM14) is working during initialization through supervisor function in VDM.4. Replace the cassette 2 if the same error continues.5. Replace the SF12 module even if the new cassette doesn't fix the error."
422A200	Cassette empty.	"1. Confirm whether there are notes in the cassette 2.2. Clean any residue or contamination on HS204 sensor and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM14) is working during initialization through supervisor function in VDM.4. Replace cassette 2 with new one if the same error continues.5. Replace the SF12 module even if the new cassette doesn't fix the error."
422A900	Dispense requested for a cassette that needs note calibration.	1. Conduct note class setting via calibration or note class DB.
422AC00	HSx01 JAM.	1. Open SF12 and remove the jam from the pick-up control part. 2. Remove Cassette #2 and check the shutter section. 3. Check the HS201 Sensor cable. 4. Replace SF12 if the same symptom recurs.
422AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL4) for correct assembly. 2. Check the solenoid (SOL4) cable connection. 3. Replace SF12 if the same symptom recurs.
422C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #2 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #2.
422C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #2 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #2.

Problem Code	Problem Description	Troubleshooting
422C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #2 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL4). 3. Replace Cassette #2 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
422C500	Continuous rejection by skewed notes.	"1. Check whether the notes in the cassette 2 are set properly.2. Clean if any residue or contamination on HS003A/B sensors.3. Replace cassette 2 with new one if the same error continues.4. Replace the SF12 module even if the new cassette doesn't fix the error."
422C600	Continuous rejection by half notes.	1. Remove Cassette #2 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #2 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
422C700	Continuous rejection by perforated notes.	1. Remove Cassette #2 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
422C800	Continuous rejection by unknown reason.	1. Remove Cassette #2 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL4). 3. Replace Cassette #2 if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
422C900	Continuous rejection by invalid thickness notes.	"1. Check whether the quality of rejected notes is poor.2. Clean the double detect sensor and execute sensor calibration..3. Replace the main body if the same error continues."
422CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #2 and check note setting. 2. Check the operation of SF12 note separation solenoid (SOL4). 3. Replace SF12 if the same symptom recurs.
422CB00	Continuous rejection by thin notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
422CC00	Total rejection count is 20 or more.	1. Remove Cassette #2 and check note setting. 2. Check the operation of SF12 note separation solenoid. (SOL4) 3. Check the separation motor (HM7) for any abnormal action. (i.e. noise) 4. Replace Cassette #2 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.
422CD00	Cassette displaced during dispensing.	1. Remove Cassette #2 and put it back. 2. Check the cassette#2 for correct locking.
422D200	Ten or more times of error in dispensing retrial.	1. Remove Cassette #2 and check note setting. 2. Check the operation of SF12 note separation solenoid. (SOL4) 3. Check the separation motor (HM7) for any abnormal action. (i.e. noise) 4. Replace Cassette #2 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.
422D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#2 and check note setting. 3. Check the operation of SF12 note separation solenoid. (SOL4) 4. Check the separation motor (HM7) for any abnormal action. (i.e. noise) 5. Replace Cassette #2 if the same symptom recurs. 6. Replace the SF12 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
422D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
422D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
422E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
422E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
422E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
422E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
422EC00	HS001 Timeout JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
4231000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4231300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4232200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4233000	Dispense command received for a missing cassette.	1. Remove Cassette #3 and put it back. 2. Check Cassette #3 connection cable. 3. Replace Cassette #3 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4233300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #3. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4233A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4234800	Failure to remove JAM from cassette outlet(HS301)	1. Remove the JAM from the cassette #3 exit. 2. Remove contamination from the HS301 sensor. 3. Replace the SF34 module if the same symptom recurs.
4235F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4238000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4238100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4238A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4239300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
423A000	Miss Feed.	"1. Confirm whether there are notes in the cassette 3.2. Clean any residue or contamination on HS301 and HS302 sensors and check whether the assembly condition of them is firm and tight.3. Check whether the motors (HM08, HM15) are working during initialization through supervisor function in VDM.4. Check whether the solenoid (SOL5) is working during initialization through supervisor function in VDM. 5. Replace cassette 3 with new one if the same error continues.6. Replace the SF34 module even if the new cassette doesn't fix the error."
423A100	HSx02 had not been light state, during cassette-push-plate operation.	"1. Check whether notes in cassette 3 is set properly.2. Clean if any contamination on HS302 and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM15) is working during initialization through supervisor function in VDM.4. Replace the cassette 3 if the same error continues.5. Replace the SF34 module even if the new cassette doesn't fix the error."
423A200	Cassette empty.	"1. Confirm whether there are notes in the cassette 3.2. Clean any residue or contamination of HS304 sensor and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM15) is working through supervisor function in VDM.4. Replace cassette 3 with new one if the same error continues.5. Replace the SF34 module even if the new cassette doesn't fix the error."
423A900	Dispense requested for a cassette that needs note calibration.	1. Conduct note class setting via calibration or note class DB.
423AC00	HSx01 JAM.	1. Open SF34 and remove the jam from the pick-up control part. 2. Remove Cassette #3 and check the shutter section. 3. Check the HS301 Sensor cable. 4. Replace SF34 if the same symptom recurs.
423AD00	SF Solenoid Echo Error.	"1. Check whether the SF solenoid (SOL5) assembly is correct.2. Check whether the solenoid (SOL5) cable connection is firm and tight.3. Replace SF34 if the same error continues."
423C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #3 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #3.
423C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #3 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #3.

Problem Code	Problem Description	Troubleshooting
423C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #3 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL5). 3. Replace Cassette #3 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
423C500	Continuous rejection by skewed notes.	"1. Check whether the notes in the cassette 3 are set properly.2. Clean if any residue or contamination on HS003A/B sensors.3. Replace cassette 3 with new one if the same error continues.4. Replace the SF34 module even if the new cassette doesn't fix the error."
423C600	Continuous rejection by half notes.	1. Remove Cassette #3 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #3 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
423C700	Continuous rejection by perforated notes.	1. Remove Cassette #3 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
423C800	Continuous rejection by unknown reason.	1. Remove Cassette #3 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL5). 3. Replace Cassette #3 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
423C900	Continuous rejection by invalid thickness notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.
423CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #3 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL5). 3. Replace SF34 if the same symptom recurs.
423CB00	Continuous rejection by thin notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
423CC00	Total rejection count is 20 or more.	1. Remove Cassette #3 and check note setting. 2. Check the operation of SF34 note separation solenoid. (SOL5) 3. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 4. Replace Cassette #3 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
423CD00	Cassette displaced during dispensing.	1. Remove Cassette #3 and put it back. 2. Check the cassette#3 for correct locking.
423D200	Ten or more times of error in dispensing retrial.	1. Remove Cassette #3 and check note setting. 2. Check the operation of SF34 note separation solenoid. (SOL5) 3. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 4. Replace Cassette #3 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
423D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#3 and check note setting. 3. Check the operation of SF34 note separation solenoid. (SOL5) 4. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 5. Replace Cassette #3 if the same symptom recurs. 6. Replace the SF34 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
423D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
423D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
423E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
423E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
423E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
423E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
423EC00	HS001 Timeout JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
4241000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4241300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4242200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4243000	Dispense command received for a missing cassette.	1. Remove Cassette #4 and put it back. 2. Check Cassette #4 connection cable. 3. Replace Cassette #4 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4243300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #4. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4243A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4244800	Failure to remove JAM from cassette outlet(HS401)	1. Remove the JAM from the cassette #4 exit. 2. Remove contamination from the HS401 sensor. 3. Replace the SF34 module if the same symptom recurs.
4245F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4248000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4248100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4248A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4249300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
424A000	Miss Feed.	"1. Confirm whether there are notes in the cassette 4.2. Clean any residue or contamination on HS401 and HS402 sensors and check whether the assembly condition of them is firm and tight.3. Check whether the motors (HM08, HM16) are working during initialization through supervisor function in VDM.4. Check whether the solenoid (SOL6) is working during initialization through supervisor function in VDM. 5. Replace cassette 4 with new one if the same error continues.6. Replace the SF34 module even if the new cassette doesn't fix the error."
424A100	HSx02 had not been light state, during cassette-push-plate operation.	"1. Check whether notes in cassette 4 is set properly.2. Clean if any contamination on HS402 and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM16) is working during initialization through supervisor function in VDM.4. Replace the cassette 4 if the same error continues.5. Replace the SF34 module even if the new cassette doesn't fix the error."
424A200	Cassette empty.	"1. Confirm whether there are notes in the cassette 4.2. Clean any residue or contamination on HS404 sensor and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM16) is working during initialization through supervisor function in VDM.4. Replace cassette 4 with new one if the same error continues.5. Replace the SF34 module even if the new cassette doesn't fix the error."
424A900	Dispense requested for a cassette that needs note calibration.	1. Conduct note class setting via calibration or note class DB.
424AC00	HSx01 JAM.	1. Open SF34 and remove the jam from the pick-up control part. 2. Remove Cassette #4 and check the shutter section. 3. Check the HS401 Sensor cable. 4. Replace SF34 if the same symptom recurs.
424AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL6) for correct assembly. 2. Check the solenoid (SOL6) cable connection. 3. Replace SF34 if the same symptom recurs.
424C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #4 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #4.
424C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #4 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #4.

Problem Code	Problem Description	Troubleshooting
424C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #4 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL6). 3. Replace Cassette #4 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
424C500	Continuous rejection by skewed notes.	"1. Check whether the notes in the cassette 4 are set properly.2. Clean if any residue or contamination on HS003A/B sensors.3. Replace cassette 4 with new one if the same error continues.4. Replace the SF34 module even if the new cassette doesn't fix the error."
424C600	Continuous rejection by half notes.	1. Remove Cassette #4 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #4 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
424C700	Continuous rejection by perforated notes.	1. Remove Cassette #4 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
424C800	Continuous rejection by unknown reason.	1. Remove Cassette #4 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL6). 3. Replace Cassette #4 if the same symptom recurs. 4. Replace the SF34 module if the measure under 3 fails.
424C900	Continuous rejection by invalid thickness notes.	"1. Check whether the quality of rejected notes is poor.2. Clean the double detect sensor and execute sensor calibration..3. Replace the main body if the same error continues."
424CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #4 and check note setting. 2. Check the operation of SF34 note separation solenoid (SOL6). 3. Replace SF34 if the same symptom recurs.
424CB00	Continuous rejection by thin notes.	"1. Check whether the quality of rejected notes is poor.2. Clean the double detect sensor and execute sensor calibration..3. Replace the main body if the same error continues."

Problem Code	Problem Description	Troubleshooting
424CC00	Total rejection count is 20 or more.	1. Remove Cassette #4 and check note setting. 2. Check the operation of SF34 note separation solenoid. (SOL6) 3. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 4. Replace Cassette #4 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
424CD00	Cassette displaced during dispensing.	1. Remove Cassette #4 and put it back. 2. Check the cassette#4 for correct locking.
424D200	Ten or more times of error in dispensing retrial.	1. Remove Cassette #4 and check note setting. 2. Check the operation of SF34 note separation solenoid. (SOL6) 3. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 4. Replace Cassette #4 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
424D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#4 and check note setting. 3. Check the operation of SF34 note separation solenoid. (SOL6) 4. Check the separation motor (HM8) for any abnormal action. (i.e. noise) 5. Replace Cassette #4 if the same symptom recurs. 6. Replace the SF34 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
424D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
424D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
424E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
424E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
424E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
424E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
424EC00	HS001 Timeout JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
4251000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4251300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4252200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4253000	Dispense command received for a missing cassette.	1. Remove Cassette #5 and put it back. 2. Check Cassette #5 connection cable. 3. Replace Cassette #5 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4253300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #5. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4253A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4254800	Failure to remove JAM from cassette outlet(HS501)	1. Remove the JAM from the cassette #5 exit. 2. Remove contamination from the HS501 sensor. 3. Replace the SF5 module if the same symptom recurs.
4255F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4258000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4258100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4258A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4259300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
425A000	Miss Feed.	"1. Confirm whether there are notes in the cassette 5.2. Clean any residue or contamination on HS501 and HS502 sensors and check whether the assembly condition of them is firm and tight.3. Check whether the motors (HM09, HM17) are working during initialization through supervisor function in VDM.4. Check whether the solenoid (SOL7) is working during initialization through supervisor function in VDM. 5. Replace cassette 5 with new one if the same error continues.6. Replace the SF5 module even if the new cassette doesn't fix the error."
425A100	HSx02 had not been light state, during cassette-push-plate operation.	"1. Check whether notes in cassette 5 is set properly.2. Clean if any contamination on HS502 and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM17) is working during initialization through supervisor function in VDM.4. Replace the cassette 5 if the same error continues.5. Replace the SF5 module even if the new cassette doesn't fix the error."
425A200	Cassette empty.	"1. Confirm whether there are notes in the cassette 5.2. Clean any residue or contamination on HS504 sensor and check whether the assembly condition of it is firm and tight.3. Check whether the motor (HM17) is working during initialization through supervisor function in VDM.4. Replace cassette 5 with new one if the same error continues.5. Replace the SF5 module even if the new cassette doesn't fix the error."
425A900	Dispense requested for a cassette that needs note calibration.	1. Execute note calibration or set note denomination through denomination database.
425AC00	HSx01 JAM.	1. Open SF5 and remove the jam from the pick-up control part. 2. Remove Cassette #5 and check the shutter section. 3. Check the HS501 Sensor cable. 4. Replace SF5 if the same symptom recurs.
425AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL7) for correct assembly. 2. Check the solenoid (SOL7) cable connection. 3. Replace SF5 if the same symptom recurs.
425C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #5 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #5.
425C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #5 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #5.

Problem Code	Problem Description	Troubleshooting
425C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #5 and check note setting. 2. Check the operation of SF5 note separation solenoid (SOL7). 3. Replace Cassette #5 if the same symptom recurs. 4. Replace the SF5 module if the measure under 3 fails.
425C500	Continuous rejection by skewed notes.	"1. Check whether the notes in the cassette 5 are set properly.2. Clean if any residue or contamination on HS003A/B sensors.3. Replace cassette 5 with new one if the same error continues.4. Replace the SF5 module even if the new cassette doesn't fix the error."
425C600	Continuous rejection by half notes.	1. Remove Cassette #5 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #5 if the same symptom recurs. 4. Replace the SF5 module if the measure under 3 fails.
425C700	Continuous rejection by perforated notes.	1. Remove Cassette #5 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
425C800	Continuous rejection by unknown reason.	1. Remove Cassette #5 and check note setting. 2. Check the operation of SF5 note separation solenoid (SOL7). 3. Replace Cassette #5 if the same symptom recurs. 4. Replace the SF5 module if the measure under 3 fails.
425C900	Continuous rejection by invalid thickness notes.	"1. Check whether the quality of rejected notes is poor.2. Clean the double detect sensor and execute sensor calibration..3. Replace the main body if the same error continues."
425CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #5 and check note setting. 2. Check the operation of SF5 note separation solenoid (SOL7). 3. Replace SF5 if the same symptom recurs.
425CB00	Continuous rejection by thin notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
425CC00	Total rejection count is 20 or more.	1. Remove Cassette #5 and check note setting. 2. Check the operation of SF5 note separation solenoid. (SOL7) 3. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 4. Replace Cassette #5 if the same symptom recurs. 5. Replace the SF5 if the measure under 4 fails.
425CD00	Cassette displaced during dispensing.	1. Remove Cassette #5 and put it back. 2. Check the cassette#5 for correct locking.
425D200	Ten or more times of error in dispensing retrial.	1. Remove Cassette #5 and check note setting. 2. Check the operation of SF5 note separation solenoid. (SOL7) 3. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 4. Replace Cassette #5 if the same symptom recurs. 5. Replace the SF5 if the measure under 4 fails.
425D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#5 and check note setting. 3. Check the operation of SF5 note separation solenoid. (SOL7) 4. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 5. Replace Cassette #5 if the same symptom recurs. 6. Replace the SF5 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
425D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
425D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
425E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
425E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
425E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
425E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
425EC00	HS001 Timeout JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
4261000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4261300	Dipswitch setting error (#4)	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4262200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4263000	Dispense command received for a missing cassette.	1. Remove Cassette #6 and put it back. 2. Check Cassette #6 connection cable. 3. Replace Cassette #6 if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
4263300	Error in designating the number of notes to be dispensed from the cassette. (outside 1 to 100)	1. Check the number of notes to be dispensed from Cassette #6. (100 max.) 2. Check the final version of VDM, SP and EP, and update if necessary..
4263A00	The transparent Note is not supported at this type CDU.	1. Apply the correct type of CDU. 2. If correct, check the HS040 sensor.
4264800	Failure to remove JAM from cassette outlet(HS601)	1. Remove the JAM from the cassette #6 exit. 2. Remove contamination from the HS601 sensor. 3. Replace the SF6 module if the same symptom recurs.
4265F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4268000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4268100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4268A00	Notes spilit five or more time during Dispensing.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4269300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
426A000	Miss Feed.	1. Check notes at Cassette #6. 2. Check the HS601 and HS602 sensors for any contamination and any losse or wrong assembly. 3. Check the motors (HM09 and HM18) for normal operation. 4. Check the solenoid (SOL8) for normal operation. 5. Replace Cassette #6 if the same symptom recurs. 6. Replace the SF56 if the measure under 5 fails.
426A100	HSx02 had not been light state, during cassette-push-plate operation.	1. Check notes at Cassette #6. 2. Check the HS602 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM18) for normal operation. 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.
426A200	Cassette empty.	1. Check notes at Cassette #6. 2. Check the HS604 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM18) for normal operation. 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.
426A900	Dispense requested for a cassette that needs note calibration.	1. Conduct note class setting via calibration or note class DB.
426AC00	HSx01 JAM.	1. Open SF56 and remove the jam from the pick-up control part. 2. Remove Cassette #6 and check the shutter section. 3. Check the HS601 Sensor cable. 4. Replace SF56 if the same symptom recurs.
426AD00	SF Solenoid Echo Error.	1. Check the SF solenoid (SOL8) for correct assembly. 2. Check the solenoid (SOL8) cable connection. 3. Replace SF56 if the same symptom recurs.
426C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #6 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #6.
426C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette #6 if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette #6.

Problem Code	Problem Description	Troubleshooting
426C400	Continuous rejection by invalid note intervals.	1. Remove Cassette #6 and check note setting. 2. Check the operation of SF56 note separation solenoid (SOL8). 3. Replace Cassette #6 if the same symptom recurs. 4. Replace the SF56 module if the measure under 3 fails.
426C500	Continuous rejection by skewed notes.	1. Remove Cassette #6 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #6 if the same symptom recurs. 4. Replace the SF56 module if the measure under 3 fails.
426C600	Continuous rejection by half notes.	1. Remove Cassette #6 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette #6 if the same symptom recurs. 4. Replace the SF56 module if the measure under 3 fails.
426C700	Continuous rejection by perforated notes.	1. Remove Cassette #6 and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
426C800	Continuous rejection by unknown reason.	1. Remove Cassette #6 and check note setting. 2. Check the operation of SF56 note separation solenoid (SOL8). 3. Replace Cassette #6 if the same symptom recurs. 4. Replace the SF56 module if the measure under 3 fails.
426C900	Continuous rejection by invalid thickness notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.
426CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette #6 and check note setting. 2. Check the operation of SF56 note separation solenoid (SOL8). 3. Replace SF56 if the same symptom recurs.
426CB00	Continuous rejection by thin notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
426CC00	Total rejection count is 20 or more.	1. Remove Cassette #6 and check note setting. 2. Check the operation of SF56 note separation solenoid. (SOL8) 3. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.
426CD00	Cassette displaced during dispensing.	1. Remove Cassette #6 and put it back. 2. Check the cassette#6 for correct locking.
426D200	Ten or more times of error in dispensing retrial.	1. Remove Cassette #6 and check note setting. 2. Check the operation of SF56 note separation solenoid. (SOL8) 3. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.
426D400	More stacked than requesteded for the dispensing.	1. Check sensors HS001, HS003 and HS004. 2. Remove cassette#6 and check note setting. 3. Check the operation of SF56 note separation solenoid. (SOL8) 4. Check the separation motor (HM9) for any abnormal action. (i.e. noise) 5. Replace Cassette #6 if the same symptom recurs. 6. Replace the SF56 if the measure under 5 fails. 7. Replace the main borad if the measure under 6 fails.
426D500	Note Size No Set Error.	1. Conduct note class setting via calibration or note class DB.
426D600	Note Size Min/Max Error.	1. Check the note size : Acceptable range 60 to 80 2. Conduct note class setting via calibration or note class DB if the notes are ok
426E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
426E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
426E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
426E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
4272200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4274900	HS003 JAM.	1. Remove the jam from the SF12 moving path. 2. Remove contamination from the HS003 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the SF12 module if the measure under 3 fails.
4274A00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Remove contamination from the HS001 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4275100	Invalid note detected at HS001.	1. Check the Double detecting sensor guide for correct locking. 2. Check and Clear the moving path. 3. Check the Reject Gate for any lose or incorrect assembly.
4275200	The number of notes dispensed from the cassette and declared abnormal does not match the number of notes that passed the reject sensor. (Notes mismatch)	1. Check the Reject Gate for any lose or incorrect assembly. 2. Check that the guide for the double detecting sensor is locked. 3. Check whether the stack wheel wear. 4. Remove contamination from the HS004 sensor.
4275300	The number of notes dispensed from the cassette and declared normal does not match the number of notes that passed the stack sensor. (Notes mismatch)	1. Check the stacked notes. 2. Check that the guide for the double detecting sensor is locked. 3. Check whether the stack wheel wear. 4. Remove contamination from the HS001 sensor. 5. Check the Reject Gate for any lose or incorrect assembly.
4275400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4275500	Constant speed error at the main motor. (not completing operation within 20 seconds from initial and 110 seconds from dispense)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4275600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4275700	Synchro buffer exceeded for the Reject Gate. (The maximum number of notes that can receive synchro buffer for gate control is 3.)	1. Check the Reject Gate for any lose or incorrect assembly. 2. Check the solenoid (SOL1) cable connection. 3. Replace the main body if the same symptom recurs.
4275800	Reject Gate Solenoid Echo Error.	1. Check the Reject Gate for any lose or incorrect assembly. 2. Check the solenoid (SOL1) cable connection. 3. Replace the main body if the same symptom recurs.
4275900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4275A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4275B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4275C00	Double Detecting Sensor Unplug Error.	1. Check the double detecting sensor (HS002) cable assembly. 2. Replace the CDU main board if the same symptom recurs. 3. Replace the main body if the measure under 2 fails.
4275D00	Outside the Double Detecting Sensor minimum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Remove contamination from the double detecting sensor (HS002). 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4275E00	Outside the Double Detecting Sensor maximum value.	1. Check the double detecting sensor (HS002) cable assembly. 2. Remove contamination from the double detecting sensor (HS002). 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4275F00	Double Detecting Sensor data read error	1. Check the assembly status of double detecting sensor(HS002). 2. Replace the Hall Sensor or Magnetic Assy. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the problem is not resolved.
4279300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
427C200	Continuous rejection by long length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette.
427C300	Continuous rejection by short length notes.	1. Check the rejected notes. 2. Check that note class setting is correct at Cassette if the notes are ok. 3. Conduct note class setting via calibration or note class DB for Cassette.
427C400	Continuous rejection by invalid note intervals.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module if the measure under 3 fails.
427C500	Continuous rejection by skewed notes	1. Check whether the notes in the cassette are set properly. 2. Clean if any residue or contamination on HS003A/B sensors. 3. Replace cassette with new one if the same error continues. 4. Replace the SF module even if the new cassette does not fix the error.
427C600	Continuous rejection by half notes.	1. Remove Cassette and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module even if the new cassette does not fix the error.

Problem Code	Problem Description	Troubleshooting
427C700	Continuous rejection by perforated notes.	1. Remove Cassette and check note setting. 2. Check HS003A/B sensor for any contamination and clean it if necessary. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
427C800	Continuous rejection by unknown reason.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace Cassette if the same symptom recurs. 4. Replace the SF module if the measure under 3 fails.
427C900	Continuous rejection by invalid thickness notes.	1. Check the rejected notes. 2. Clean the double detecting sensor section and conduct sensor calibration if nothing wrong with the notes. 3. Replace the main body if the same symptom recurs.
427CA00	Continuous rejection by the notes from invalid cassette that has not been designated.	1. Remove Cassette and check note setting. 2. Check the operation of note separation solenoid (SOL3~SOL8). 3. Replace SF module if the same symptom recurs.
427CB00	Continuous rejection by thin notes	1. Check whether the quality of rejected notes is poor. 2. Clean the double detect sensor and execute sensor calibration. 3. Replace the main body if the same error continues.
427CC00	Total rejection count is 20 or more.	1. Remove the cassette and check note setting. 2. Check the operation of the SF note separation solenoids. (SOL 3 to 8) 3. Check the separation motors (HM7 to 9) for any abnormal action. (i.e. noise) 4. Replace the Cassette if the same symptom recurs. 5. Replace the SF section if the measure under 4 fails.
427D900	Large gap between HS003A and HS003B.	1. Check the note condition. 2. If they are OK, clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427DA00	Values for HS002A and HS002B are outside the available range.	1. Check the double detecting sensor guide for correct locking. 2. Clean the double detecting sensor section and conduct calibration.
427DC00	Note remains in moving path.	1. Check and Clear the moving path. 2. DIP#2 On and Off, if there is no note.

Problem Code	Problem Description	Troubleshooting
427E000	HS601 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E100	HS501 JAM - JAM Task.	1. Open SF56 and remove the jam from the pick-up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E200	HS401 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E300	HS301 JAM - JAM Task.	1. Open SF34 and remove the jam from the pick-up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E400	HS201 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E500	HS101 JAM - JAM Task.	1. Open SF12 and remove the jam from the pick-up control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E600	HS003A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E700	HS003B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto-dimming. (Automatically run during initialization)
427E800	HS002A JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
427E900	HS002B JAM - JAM Task.	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
427EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
427EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
427EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
427ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4282200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4282A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4284400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4284600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4284700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4285400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4285600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4286000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4286100	Rotor failed to move to Front Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4286200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4286300	Rotor failed to move to Center Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4286400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4286500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4286900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4287100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4287300	Error in the operation of the carriage driving motor. (timeout)	"1. Clean if any contamination of HS009,HS010,HS011 and HS020 and check whether the assembly condition of them is firm and tight.2. Check whether the cable connections of HS009,HS010,HS011 and HS020 are firm and tight.3. Check whether the carriage motor (HM03) is working during initialization through supervisor function in VDM.4. Replace the main body if the same error continues."
4287400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4287500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.
4287600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4287700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4287A00	Not a note of the size that can be handled by the BF stopper.	1. Check the note class setting. 2. Conduct calibration again for the note class.
4288000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4288100	Cassette operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4288300	Carriage Grab operating time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4288500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4288700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4289000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4289300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
428A000	Miss Feed.	1. Check notes in the Cassettes. 2. Check the HSx01 and HSx02 sensors for any contamination and any losse or wrong assembly. 3. Check the motors (Pickup and Push Plate) for normal operation. 4. Check the solenoids (being at SF) for normal operation. 5. Replace the Cassette if the same symptom recurs. 6. Replace the SF module if the measure under 5 fails.
428A200	[Dispense] Cassette #x is empty.	1. Confirm whether there are notes in cassettes. 2. Replace the cassette with a new one If error occured with being notes it_s inside. 3. Replace the SF module even if the new cassette doesn_t fix the error.
428B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
428B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
428B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
428B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
428B500	Shutter open is detected during Delivery operation. (Security Issue)	Vandalism or Fraud is cause. If necessary, Repair or Replace the Throat module.
428E000	HS601 JAM	1. Open SF56 and remove the jam from the pick up control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E100	HS501 JAM	1. Open SF56 and remove the jam from the pick up control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E200	HS401 JAM	1. Open SF34 and remove the jam from the pick up control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E300	HS301 JAM	1. Open SF34 and remove the jam from the pick up control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E400	HS201 JAM	1. Open SF12 and remove the jam from the pick up control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
428E500	HS101 JAM	1. Open SF12 and remove the jam from the pickup control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E600	HS003A JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428E700	HS003B JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct auto dimming. (Automatically run during initialization)
428EA00	HS001 JAM	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
428EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
428EC00	HS001 Light JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
428ED00	HS004 Light JAM	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4292200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4292A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4294B00	HS004 jam prior to dispense.	"1. Remove if any jam from the entrance of reject box.2. Clean if any contamination on HS004 sensor.3. Replace the CDU main board if the same error continues.4. Replace the main body even if the new main board doesn't fix the error."

Problem Code	Problem Description	Troubleshooting
4299200	Solenoid 2 Echo Error.	1. Check the solenoid (SOL2) cable connection. 2. Check the solenoid (SOL2) for any loose or wrong assembly. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the same symptom recurs.
42C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
42C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
42C7700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
42CBC00	Controller authentication failure. [Unauthorized Dispense]	Only one registered controller to the CDU can perform the Dispense. To re register, The existing registration must be cleared. Please refer to the separate specification for the Clearing.
42CBD00	Communication Protocol Error	Illegal Dispense (If not, Reset System)
42H2F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4302A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4304600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4304700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4307600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4307700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4308000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
430B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the thread module if the same symptom recurs.
430B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the thread module if the same symptom recurs.
430B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the thread module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
430B300	Shutter closing immediately after open success. (caused by motor step-out)	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
4382200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4382A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4384600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4384700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4386000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4386100	Rotor failed to move to Front Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4386200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4386400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4386500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4386900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4387100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4387300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4387400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4387500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.
4387600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4387700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4388000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
438B000	Shutter Close Error	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
438B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
438B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
438B300	Shutter closing immediately after open success. (caused by motor step-out)	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
4392A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
43C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
43C2300	USB CRC error.	1. Check that it operates normally after power off and on. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
43C7700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4402A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4402F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4404600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4404700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4407600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4407700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4407900	The CRG has failed to move to Present.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4408000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
440B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
440B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
440B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
440B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
440B600	Shutter failure due to Vandalism. (Security Issue)	Vandalism or Fraud is cause. If necessary, Repair or Replace the Throat module.
4482200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4482A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4484600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4484700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4486000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4486100	Rotor failed to move to Front Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4486200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4486300	Rotor failed to move to Center Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4486400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4486500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4486900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4487100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4487300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4487400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4487500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.
4487600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4487700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4487900	The CRG has failed to move to Present.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4488000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
448B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
448B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
448B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
448B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
448B500	Shutter open is detected during Delivery operation. (Security Issue)	Vandalism or Fraud is cause. If necessary, Repair or Replace the Throat module.
4492A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
44C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
44C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
44H2F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4502A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4507600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4507800	Not a location for feed out.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Replace the main body if the same symptom recurs.
450B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
450B100	Shutter Open Error.	"1. Clean any residue or contamination on HS017 and HS023 sensors and check whether the assembly condition of them is firm and tight.2. Check whether the cable connections of HS017 and HS023 are firm and tight.3. Check whether the motor (HM06) is working during initialization through supervisor function in VDM.4. Check whether the gap between the shutter and the bezel is less than 0.5mm.5. Replace the throat module if the same error continues."

Problem Code	Problem Description	Troubleshooting
450B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
450B300	Shutter closing immediately after open success. (caused by motor step-out)	"1. Clean if any contamination on the HS017 and HS023 sensors and check for any contamination and whether the assembly condition of them is firm and tight.2. Check whether HS017 and HS023 sensor cables connections firm and tight.3. Check whether the motor (HM06) is working during initialization through supervisor function in VDM.4. Replace the throat module if the same error continues."
4582200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4582A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4587600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013 for any contamination or loose or wrong assembly. 3. Check the HS013 cable for any loose or wrong assembly.
4587800	Not a location for feed out.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Replace the main body if the same symptom recurs.
4588000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
458B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
458B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
458B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
458B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
4592A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
45C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
45C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4602A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4604400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4604600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4604700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4605400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4605900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4605A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4605B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4607500	Notes missing from inside the carriage.	1. Check that dispensed notes have been picked up by the customer. 2. Check HS005 for any loose or wrong assembly. 3. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4607600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4607700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4608000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4608100	No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4608500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4608700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4608B00	Notes spilit five or more time during Retract.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4609000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4609100	NO RJRT box.	1. Check that the Reject/Retract box is in place. 2. Check the HS019 Sensor for normal operation and any losse or wrong assembly. 3. Check HS019 cable connection. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4609300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
460B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
460B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
460B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
460B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
460E000	HS601 JAM	1. Open SF6 and remove the jam from the pickup control part. 2. Check the HS601 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E100	HS501 JAM	1. Open SF56 and remove the jam from the pickup control part. 2. Check the HS501 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)

Problem Code	Problem Description	Troubleshooting
460E200	HS401 JAM	1. Open SF34 and remove the jam from the pickup control part. 2. Check the HS401 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E300	HS301 JAM	1. Open SF34 and remove the jam from the pickup control part. 2. Check the HS301 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E400	HS201 JAM	1. Open SF12 and remove the jam from the pickup control part. 2. Check the HS201 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E500	HS101 JAM	1. Open SF12 and remove the jam from the pickup control part. 2. Check the HS101 Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E600	HS003A JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003A Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E700	HS003B JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS003B Sensor cable. 3. Clean the sensor section and conduct Auto Dimming. (Automatically run during initialization)
460E800	HS002A JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002A Sensor cable. 3. Clean the sensor part.
460E900	HS002B JAM	1. Open the double detecting sensor guide and remove the jam. 2. Check the HS002B Sensor cable. 3. Clean the sensor part.
460EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.
460EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
460EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.

Problem Code	Problem Description	Troubleshooting
460ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
461A000	Separation failure in cassette #1	1. Confirm whether there are notes in the cassette 1. 2. Clean any residue or contamination on HS101 and HS102 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM07, HM13) are working during initialization through supervisor function in VDM. 4. Replace cassette 1 with new one if the same error continues. 5. Replace the SF12 module even if the new cassette does not fix the error.
462A000	Separation failure in cassette #2	1. Confirm whether there are notes in the cassette 2. 2. Clean any residue or contamination on HS201 and HS202 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM07, HM14) are working during initialization through supervisor function in VDM. 4. Replace cassette 2 with new one if the same error continues. 5. Replace the SF12 module even if the new cassette does not fix the error.
463A000	Separation failure in cassette #3	1. Confirm whether there are notes in the cassette 3. 2. Clean any residue or contamination on HS301 and HS302 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM08, HM15) are working during initialization through supervisor function in VDM. 4. Replace cassette 3 with new one if the same error continues. 5. Replace the SF34 module even if the new cassette does not fix the error.

Problem Code	Problem Description	Troubleshooting
464A000	Separation failure in cassette #4	1. Confirm whether there are notes in the cassette 4. 2. Clean any residue or contamination on HS401 and HS402 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM08, HM16) are working during initialization through supervisor function in VDM. 4. Replace cassette 4 with new one if the same error continues. 5. Replace the SF34 module even if the new cassette does not fix the error.
465A000	Separation failure in cassette #5	1. Confirm whether there are notes in the cassette 5. 2. Clean any residue or contamination on HS501 and HS502 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM09, HM17) are working during initialization through supervisor function in VDM. 4. Replace cassette 5 with new one if the same error continues. 5. Replace the SF5 module even if the new cassette does not fix the error.
466A000	Separation failure in cassette #6	1. Confirm whether there are notes in the cassette 6. 2. Clean any residue or contamination on HS601 and HS602 sensors and check whether the assembly condition of them is firm and tight. 3. Check whether the motors (HM09, HM18) are working during initialization through supervisor function in VDM. 4. Replace cassette 6 with new one if the same error continues. 5. Replace the SF6 module even if the new cassette does not fix the error.
4672200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4675400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4675600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4675900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4675A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4675B00	Reject Gate Act Off failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4678B00	Notes spilit five or more time during Retract.	1. Remove the whole cassette and put it back to ensure normal operation. 2. Check the HSx01 sensor for any contamination and any losse or wrong aaembly. 3. Check the Pickup Solenoid(SOL 3 to 8) for normal operation. 4. Replace pick-up control parts(SF12, SF34 and SF5) if the same symptom recurs.
4679300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
467EA00	HS001 JAM.	1. Remove the jam from the Reject Gate. 2. Check the HS001 Sensor cable. 3. Clean the sensor part.

Problem Code	Problem Description	Troubleshooting
467EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
467EC00	HS001 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 3. Check the tension of the moving path. 4. Clean the moving path.
467ED00	HS004 Light JAM.	1. Open the double detecting sensor guide and reject guide section and remove the jam. 2. Remove the jam from the reject and retract path. 3. Check the reject gate and HS001 for anything protruding from them and make adjustment if necessary. 4. Check the tension of the moving path. 5. Clean the moving path.
4682200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4682A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4684400	HS004 JAM during Initialize or Retract	1. Remove the jam from the entrance of the reject box. 2. Remove contamination from the HS004 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the main body if the measure under 3 fails.
4684600	JAM at sensor HS013	1. Remove the JAM from the throat. 2. Remove contamination from the HS013 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.
4684700	JAM at sensor HS014	1. Remove the JAM from the throat. 2. Remove contamination from the HS014 sensor. 3. Replace the CDU main board if the same symptom recurs. 4. Replace the throat module if the measure under 3 fails.

Problem Code	Problem Description	Troubleshooting
4685400	Constant speed error at the main motor. (not arriving within 3 seconds from the start)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4685600	Constant speed error from the main motor. (deviating from the constant speed during operation)	1. Open SF12/SF34 and remove the jam from the moving path. 2. Remove the jam from the entrance of the reject box. 3. Remove all cassettes and remove any residual notes from the feed modules. 4. Check the connection of the main motor (HM001) cable. 5. Check the HS015 Sensor cable. 6. Replace the main body if the same symptom recurs.
4686000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4686100	Rotor failed to move to Front Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4686200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4686300	Rotor failed to move to Center Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4686400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4686500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4686900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4687100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4687300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4687400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4687500	Notes missing from inside the carriage.	1. Check that dispensed notes have been picked up by the customer. 2. Check HS005 for any loose or wrong assembly. 3. Replace the main body if the same symptom recurs.
4687600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4687700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4688000	Time out at starting - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4688500	Carriage Home Position time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4688700	Carriage BF Stopper Move time out - No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4689000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4689300	SOL002 Gate Act-Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
468B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
468B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
468B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
468B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
468EB00	HS004 JAM.	1. Remove the jam from the entrance of the reject box. 2. Check the HS004 Sensor cable. 3. Clean the sensor part.
4692200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4692A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
46C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
46C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
46C7700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4802B00	Automatic illumination failed.	1. Check the sensor for any contamination (residual notes/foreign materials) and clean it if necessary. 2. Check the sensor cable connection. 3. Replace the sensor if the measures under 1 and 2 above fail. 4. Replace the CDU main board if the same symptom recurs.
48C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
48C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4902A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4907600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4907700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.

Problem Code	Problem Description	Troubleshooting
490B000	Shutter Close Error.	"1. Clean if any contamination on the HS017 and HS023 sensors and check for any contamination and whether the assembly condition of them is firm and tight.2. Check whether HS017 and HS023 sensor cables connections firm and tight.3. Check whether the motor (HM06) is working during initialization through supervisor function in VDM.4. Check whether the gap between the shutter and the bezel is less than 0.5mm.5. Replace the throat module if the same error continues."
490B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the thread module if the same symptom recurs.
490B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the thread module if the same symptom recurs.
490B300	Shutter closing immediately after open success. (caused by motor step-out)	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the thread module if the same symptom recurs.
4982A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
4987600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4987700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.

Problem Code	Problem Description	Troubleshooting
498B000	Shutter Close Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
498B100	Shutter Open Error.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Check the gap between the shutter and the bezel. (0.5mm or more) 5. Replace the throad module if the same symptom recurs.
498B200	The two shutter sensors have darkened at the same time.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Replace the throad module if the same symptom recurs.
498B300	Shutter closing immediately after open success.	1. Check the HS017 and HS023 Sensor for any contamination and any losse or wrong assembly. 2. Check HS017 and HS023 sensor cables for correct assembly. 3. Check the motor (HM06) for normal operation. 4. Replace the throad module if the same symptom recurs.
4992200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4992A00	Incorrect CDU 10 setting.	1. Check CDU information and set again. 2. Turn the power off and on and try the command again. 3. Replace the CDU main board if the same symptom recurs.
49C2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
49C2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4A02100	Invalid CDU10 setting data received.	1. Check the setting information and set again. 2. Try again after power off and on.
4A02800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4A02900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4AC2100	Invalid CDU10 setting data received.	1. Check the setting information and set again. 2. Turn the power off and on and try again.
4AC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4AC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4B01200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette if the same symptom recurs.
4B02800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee ID board if the same symtom recurs.
4B02900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee if the same symtom recurs.
4B02F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4B0A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette. 2. Check the HSx02 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM13~HM18) for normal operation. 4. Replace Cassette if the same symptom recurs. 5. Replace the SF Module if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4B0A300	Invalid cassette ID.	1. Remove the Cassette and put it back. 2. Check the cassette setting. 3. Replace the Cassette if the same symptom recurs.
4B0A400	The cassette serial number does not match.	1. Remove the Cassette and put it back. 2. Check the cassette setting. 3. Replace the Cassette if the same symptom recurs.
4B0A500	The cassette ID does not match.	"1. Remove the cassette and insert it back to system.2. Check whether the cassette ID setting is correct, such as denomination and serial number by using TM.3. Replace the cassette if the same error continues."
4B0A700	Setting request made to an invalid cassette	1. Check the cassette for correct mounting. 2. Check the cassette connection. 3. Mount it again and try cassette setting again. 4. Replace the Cassette if the same symptom recurs.
4B0A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove the cassette and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace the Cassette if the same symptom recurs.
4B0AA00	Cassette Index is invalid.	1. Set it to a valid index again. 2. Replace the cassette if setting is impossible.
4B11200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #1 if the same symptom recurs.
4B12200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B12800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #1 if the same symptom recurs.
4B12900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #1 if the same symptom recurs.
4B1A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #1. 2. Check the HS102 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM13) for normal operation. 4. Replace Cassette #1 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4B1A300	Invalid cassette ID.	1. Remove Cassette #1 and put it back. 2. Check the cassette#1 setting. 3. Replace Cassette #1 if the same symptom recurs.
4B1A400	The cassette serial number does not match.	1. Remove Cassette #1 and put it back. 2. Check the cassette#1 setting. 3. Replace Cassette #1 if the same symptom recurs.
4B1A500	The cassette ID does not match.	1. Remove Cassette #1 and put it back. 2. Check the cassette#1 setting. 3. Replace Cassette #1 if the same symptom recurs.
4B1A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #1 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #1 if the same symptom recurs.
4B1AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4B21200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #2 if the same symptom recurs.
4B22200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B22800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #2 if the same symptom recurs.
4B22900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #2 if the same symptom recurs.
4B2A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #2. 2. Check the HS202 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM14) for normal operation. 4. Replace Cassette #2 if the same symptom recurs. 5. Replace the SF12 if the measure under 4 fails.
4B2A300	Invalid cassette ID.	1. Remove Cassette #2 and put it back. 2. Check the cassette#2 setting. 3. Replace Cassette #2 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4B2A400	The cassette serial number does not match.	1. Remove Cassette #2 and put it back. 2. Check the cassette#2 setting. 3. Replace Cassette #2 if the same symptom recurs.
4B2A500	The cassette ID does not match.	1. Remove Cassette #2 and put it back. 2. Check the cassette#2 setting. 3. Replace Cassette #2 if the same symptom recurs.
4B2A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #2 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #2 if the same symptom recurs.
4B2AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4B31200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #3 if the same symptom recurs.
4B32200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B32800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #3 if the same symptom recurs.
4B32900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #3 if the same symptom recurs.
4B3A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #3. 2. Check the HS302 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM15) for normal operation. 4. Replace Cassette #3 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
4B3A300	Invalid cassette ID.	1. Remove Cassette #3 and put it back. 2. Check the cassette#3 setting. 3. Replace Cassette #3 if the same symptom recurs.
4B3A400	The cassette serial number does not match.	1. Remove Cassette #3 and put it back. 2. Check the cassette#3 setting. 3. Replace Cassette #3 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4B3A500	The cassette ID does not match.	1. Remove Cassette #3 and put it back. 2. Check the cassette#3 setting. 3. Replace Cassette #3 if the same symptom recurs.
4B3A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #3 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #3 if the same symptom recurs.
4B3AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4B41200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #4 if the same symptom recurs.
4B42200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B42800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #4 if the same symptom recurs.
4B42900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #4 if the same symptom recurs.
4B4A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #4. 2. Check the HS402 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM16) for normal operation. 4. Replace Cassette #4 if the same symptom recurs. 5. Replace the SF34 if the measure under 4 fails.
4B4A300	Invalid cassette ID.	1. Remove Cassette #4 and put it back. 2. Check the cassette#4 setting. 3. Replace Cassette #4 if the same symptom recurs.
4B4A400	The cassette serial number does not match.	1. Remove Cassette #4 and put it back. 2. Check the cassette#4 setting. 3. Replace Cassette #4 if the same symptom recurs.
4B4A500	The cassette ID does not match.	1. Remove Cassette #4 and put it back. 2. Check the cassette#4 setting. 3. Replace Cassette #4 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4B4A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #4 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #4 if the same symptom recurs.
4B4AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4B51200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #5 if the same symptom recurs.
4B52200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B52800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #5 if the same symptom recurs.
4B52900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #5 if the same symptom recurs.
4B5A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #5. 2. Check the HS502 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM17) for normal operation. 4. Replace Cassette #5 if the same symptom recurs. 5. Replace the SF5 if the measure under 4 fails.
4B5A300	Invalid cassette ID.	1. Remove Cassette #5 and put it back. 2. Check the cassette#5 setting. 3. Replace Cassette #5 if the same symptom recurs.
4B5A400	The cassette serial number does not match.	1. Remove Cassette #5 and put it back. 2. Check the cassette#5 setting. 3. Replace Cassette #5 if the same symptom recurs.
4B5A500	The cassette ID does not match.	1. Remove Cassette #5 and put it back. 2. Check the cassette#5 setting. 3. Replace Cassette #5 if the same symptom recurs.
4B5A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #5 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #5 if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4B5AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4B61200	Invalid cassette serial number.	1. Remove the Cassette and put it back. 2. Check the cassette serial number. 3. Replace the Cassette #6 if the same symptom recurs.
4B62200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4B62800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #6 if the same symptom recurs.
4B62900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #6 if the same symptom recurs.
4B6A100	HSx02 had not been light state, during cassette push plate operation.	1. Check notes at Cassette #6. 2. Check the HS602 Sensor for any contamination and any losse or wrong assembly. 3. Check the motor (HM18) for normal operation. 4. Replace Cassette #6 if the same symptom recurs. 5. Replace the SF56 if the measure under 4 fails.
4B6A300	Invalid cassette ID.	1. Remove Cassette #6 and put it back. 2. Check the cassette#6 setting. 3. Replace Cassette #6 if the same symptom recurs.
4B6A400	The cassette serial number does not match.	1. Remove Cassette #6 and put it back. 2. Check the cassette#6 setting. 3. Replace Cassette #6 if the same symptom recurs.
4B6A500	The cassette ID does not match.	1. Remove Cassette #6 and put it back. 2. Check the cassette#6 setting. 3. Replace Cassette #6 if the same symptom recurs.
4B6A800	Cassette Ready Pickup not completed within 12 seconds.	1. Remove Cassette #6 and check the inside of it. 2. Check that notes are set correctly. 3. Check the PP part for any damage and that it is correctly aligned. 4. Replace Cassette #6 if the same symptom recurs.
4B6AA00	Cassette Index is invalid.	1. Set it to a valid index. 2. Replace the cassette if setting is impossible.
4BC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4BC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4C02800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4C02900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Replace Cassette #6 if the same symptom recurs.
4CC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4CC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4D01000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4D01400	NoteDB has CRC error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and retry Download. 3. Replace the CDU main board if the same symptom recurs.
4D01500	Note DB Write error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4D01600	Note DB Encryption failed.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4D02800	Reading EEPROM failed.	1. Turn the power off and on and try the command again. 2. Remove the cassette and put it back 3. Relace the main board or the cassettee if the same symtom recurs.

Problem Code	Problem Description	Troubleshooting
4D02900	Writing EEPROM failed.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4D02E00	Deletion of selected DB failed.	1. Turn the power off and on and try the command again. 2. Set note information again. 3. Replace the CDU main board if the same symptom recurs.
4D0A300	Invalid cassette ID.	1. Remove the Cassette and put it back. 2. Check the cassette setting. 3. Replace the Cassette if the same symptom recurs.
4DC1400	NoteDB has CRC error.	1. Turn the power off and on and check the DB file. 2. If the file is proper, replace the USB cable and retry Download. 3. Replace the CDU main board if the same symptom recurs.
4DC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4DC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4L01000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4LC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4LC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4MC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4MC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4T01000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4T01100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the main board or the cassettee if the same symtom recurs.
4T02700	Unspecified FuncCMD.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of SP and EP, and update if necessary.
4T02F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4T05900	JAM at Reject Gate	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor(HS012). 5. Replace the main body if the same symptom recurs.
4T05A00	Reject Gate Act On failed.	1. Remove the jam from the Reject Gate. 2. Check the reject gate for any lose or incorrect assembly. 3. Check the solenoid (SOL1) cable connection. 4. Check the Reject Gate Sensor (HS012). 5. Replace the main body if the same symptom recurs.
4T06000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T06500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4T06900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T07300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4T09000	SOL002 did not "ON" operate. (Sensor is not able to confirm.)	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 5. Replace the main body if the same symptom recurs.
4T09300	SOL002 Gate Act Off Error.	1. Remove the jam from the Reject/Retract box. 2. Check that the Reject/Retract box is full. 3. Check the solenoid (SOL2) for normal operation. 4. Check the HS022 Sensor for any contamination and any losse or wrong assembly. 4. Replace the main body if the same symptom recurs.
4T11100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #1 if the same symtom recurs.
4T21100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #2 if the same symtom recurs.
4T31100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #3 if the same symtom recurs.
4T41100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #4 if the same symtom recurs.

Problem Code	Problem Description	Troubleshooting
4T51100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #5 if the same symtom recurs.
4T61100	Clearing(Format) EEPROM failed.	1. Turn the power off and on and try the command again. 2. Relace the cassettee #6 if the same symtom recurs.
4T86000	Rotor failed to return home position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T86100	Rotor failed to move to Front Delivery position	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T86200	Rotor failed to move to Rear Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T86300	Rotor failed to move to Center Delivery position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T86400	Rotor failed to move to Retract position.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.

Problem Code	Problem Description	Troubleshooting
4T86500	The carriage is not in an appropriate position to execute the command.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensors (HS007,HS008) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T86900	Rotor movement error. (Timeout)	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T87100	No carriage within the rotor.	1. Remove jam from the rotor. 2. Remove any contamination from the home position sensor (HS020) and check for any loose assembly. 3. Check the rotor motor (HM002) cable. 4. Replace the CDU main board if the same symptom recurs. 5. Replace the main body if the measure under 4 fails.
4T87300	Error in the operation of the carriage driving motor. (timeout)	1. Check HS009,HS010,HS011 and HS020 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS009,HS010,HS011 and HS020. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4T87400	BF stopper failure.	1. Check HS016 for any contamination and any losse or wrong assembly. 2. Check the cable connection at HS016. 3. Check the BF Stopper Motor(HM05) for normal operation. 4. Replace the main body if the same symptom recurs.
4T87500	Notes missing from inside the carriage.	1. Check HS005 for any loose or wrong assembly. 2. Check HS013 and HS 014 for any loose or wrong assembly. 3. Check HS011 for any loose or wrong assembly. 4. Replace the main body if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4T87600	Carriage Feed Time out.	1. Check the HM04 motor for normal operation. 2. Check HS013(& HS014) for any contamination or loose or wrong assembly. 3. Check the HS013(& HS014) cable for any loose or wrong assembly.
4T87700	Unexpected note(s) remain(s) in the Carriage.	1. Clean if any residue or contamination on sensor HS005 and check whether the assembly condition of the sensor is firm and tight. 2. Check align state of the Carriage. 3. Replace the main body if the same error continues.
4T87800	Not a location for feed out.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Replace the main body if the same symptom recurs.
4T87900	The CRG has failed to move to Present.	1. Check HS011 for any contamination and any losse or wrong assembly. 2. Check the HS011 cable for any loose or wrong assembly. 3. Check the carriage motor (HM03) for normal operation. 4. Replace the main body if the same symptom recurs.
4T87A00	Not a note of the size that can be handled by the BF stopper.	1. Check the note class setting. 2. Conduct calibration again for the note class.
4T88000	Time out at starting _ No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4T88300	Carriage Grab operating time out _ No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4T88500	Carriage Home Position time out _ No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4T88700	Carriage BF Stopper Move time out _ No response as to whether the action was successful or not.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4TC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4TC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.

Problem Code	Problem Description	Troubleshooting
4TH2F00	Error of DIP Switch setting	1. Check the DIP switch setting. 2. Check the final version of SP and EP, and update if necessary. 3. Replace the CDU main board if the same symptom recurs.
4U01700	Download file(EP) is not correct.	1. Download proper EP Binary file.
4U0BF00	Illegal attempt to EP Rollback.	Illegal attempt (If not, Reset System)
4UC1700	Download file(EP) is not correct.	1. Download proper EP Binary file.
4UC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4UC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4V01000	NAND Flash R/W Error.	1. Turn the power off and on and try the command again. 2. Replace the CDU main board if the same symptom recurs.
4VC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4VC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
4WC2200	An abnormal code executed during program running.	1. Turn the power off and on and check that it operates normally. 2. Replace the CDU main board if the same symptom recurs.
4WC2300	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it doesn't, replace the USB cable and check again. 3. Replace the CDU main board if the same symptom recurs.
9411200	-	1. Do RESET at Operator Function. 2. Reboot ATM
9411300	Cash Dispenser USB succeed in open, but device no response.	1. Do RESET at Operator Function. 2. Reboot ATM 3. Check the USB Cable
9413300	Abnormal communication (device is offline, communication cable is disconnected)	1. Do Reset at operator function. 2. Check the communication cable 3. Reboot ATM
9413400	[Delivery] Communicatino error of firmware (old error code : 4DN01)	"1. Execute the reset function in operation mode.2. Reboot the system."

Problem Code	Problem Description	Troubleshooting
9413401	Bulk Resend Fail	1. Check USB Cable. 2. Disonnect&Connect the USB cable. 3. System reboot
9413402	AuthFail response from EP(Firmware)	1. Disconnec t & Connect USB Cable. 2. SP Close and Open 3. System Reboot
9413403	Crypto mode Command Fail	1. Disconnect&Connect USB cable. 2. SP Close and Open 3. System reboot
9413404	Decrypt Fail	1. SP Close and Open 2. System reboot
9425600	Failed to create file	1. Reboot ATM 2. Reinstall software 3. Replace hard disk drive
9426100	Failed to copy file	1. Reboot ATM 2. Reinstall software 3. Replace hard disk drive
9429900	Failed to download firmware.	1. Check the firmware file
9441700	Failed to create sensor poll thread	1. Reboot ATM 2. Reinstall software 3. Replace hard disk drive
9441800	Failed to create status update thread	1. Reboot ATM 2. Reinstall software 3. Replace hard disk drive
9441900	Failed to create cash taken check thread.	1. Reboot ATM 2. Reinstall software 3. Replace hard disk drive
94A6100	Dispenser state is not dispensable.	1. Check the Reject/Retract Bin Full or missing. 2. Check the replenished amount and replenish.
94A6200	CDU Home Position Error	1. Check CDU home position 2. Check home position sensor cable and pollution 3.Change the sensor of home position 4. Change CDU10 board if error continues.
94A63	Abnormal shutter open detected.	1. Do Reset at Operator Function
94B6100	Error to dispense 0 sheets to be required	1. Check received command 2. Check communication cable 3. Check Cash unit Information
94B6200	The remained note is detected when the notes start to be dispensed	1. Check the remained notes in Stacker 2. Check a dust in stacker. 3. Check the sensor Cable.
94B6300	No bills in stacker when Present executed.	1. Check a dust in stacker 2. Check the sensor cable.
94B6500	Invalid parameter set in Calibrate command. - Calibration request to RJ/RT Cassette.	1. Check the input parameter.
94B6600	Invalid parameter set in Calibrate/Test cashunit command. - Unsupported retract area set.	1. Check the device capability. 2. Check the input parameter.
94B6700	Calibrate/TestCash is not executable because Reject bin is Full or missing.	1. Check the Reject/Retract Bin Full or missing

Problem Code	Problem Description	Troubleshooting
94B7100	Invalid parameter(retract area) was set in retract command	1. Device capability check. 2. Check the input parameter.
94B8100	Invalid parameter(retract area, out poistion) was set in reset command	1. Device capability check. 2. Check the input parameter.
94B8600	Shutter already opened when shutter open executed.	1. Check for sensor pollution - HS017, HS023 2. Clean sensor and replace if necessary.
94B8700	Shutter already closed when shutter close executed.	1. Check for sensor pollution - HS017, HS023 2. Clean sensor and replace if necessary.
94B9100	Reject/Retract Cashunit type setting is invalid.	1. Check the input parameter.
94B9200	Cashunit type setting is invalid. (except Reject/Retract Cashunit)	1. Check the input parameter.
94C6100	Safe door is open, when dispense start.	1. Check the safe door open.
94C6200	Count mismatch between request count and dispensed count.	1. Check for sensor pollution - HSx01, HS001 2. Clean sensor and replace if necessary. 3. Reboot ATM 4. Check the USB Cable
94C6500	Calibration was set at not dispensable cassette.	1. Check the input parameter.
94C6600	[Delivery] No more bill is available in cash cassette(s) for test cash dispense.	"1. Confirm whether there are notes in the cassette.2. Check whether count setting of the cassette is correct.3. Set the cassette information again with correct setting."
94C6700	No more dispensable cassette exist after Test Cash Unit.	1. Check notes in cassette. 2. Check count setting in cassette 3. Replenish and reconfigure cashunitinfo.
94C6800	Items not detectd by carriage&transport sensors (HS005, HS013, HS014) after dispense success	1. Check HS005, HS013, HS014 sensors 2. Do sensor calibration in VDM menu 3. Replace sensor parts if the problem is not resolved
94C6900	Items not detectd by carriage&transport sensors (HS005, HS013, HS014) after dispense success, and no items retracted in internal initialize.	1. Check HS005, HS013, HS014 sensors 2. Do sensor calibration in VDM menu 3. Replace sensor parts if the problem is not resolved
94C7100	There were no items to reject.	1. Check for sensor pollution - HSx01, HS003, HS004 - HS005,HS013, HS014. 2. Clean sensor and replace if necessary.
94C7200	There were no items to retract	1. Check for sensor pollution - HS005,HS013, HS014. 2. Clean sensor and replace if necessary.
94C7300	Items were taken during retract operation	-
94C7400	Time out due to jam (HS013 or HS014) during retract operation	1. Remove the remaining notes and foreign objects at the position of the HS013, HS014 sensor 2. If error occurs after checking HS013, HS014 disconnection and operation, replace a sensor.

Problem Code	Problem Description	Troubleshooting
94C7800	Items not detectd by carriage&transport sensors (HS005, HS013, HS014) after delivery fail	1. Check HS005, HS013, HS014 sensors 2. Do sensor calibration in VDM menu 3. Replace sensor parts if the problem is not resolved
94C7900	Items not detectd by carriage&transport sensors (HS005, HS013, HS014) after delivery fail, and no items retracted in internal initialize.	1. Check HS005, HS013, HS014 sensors 2. Do sensor calibration in VDM menu 3. Replace sensor parts if the problem is not resolved
9719400	Invalid Cash Unit ID	1. Reconfigure cash dispenser setup data
9719800	The cassette having the same ID or invalid ID is installed	1. Reconfigure cassette ID in VDM
971A000	Invalid denomination	1. Reconfigure denomination at supervisor mode
971A100	Invalid currency	1. Reconfigure currency at supervisor mode
971A200	CASSETTE OFF POSITION. Not dispensable	1. Reconfigure denomination 2. Reconfigure currency
971A300	In case the number of bills dispensed exceeds the maximum dispensing bill	1. Check cash dispenser driver (CDM SP) version 2. Reconfigure the maximum dispensable count
971A400	In case the number of coins dispensed exceeds the maximum dispensing coin	1. Check coin dispenser driver version 2. Reconfigure the maximum dispensable count
971A500	Invalid mix number	1. Reconfigure cash dispenser at supervisor mode
NNNNNN	receive undefined CMD in boot mode.	Recovery to normal mode by download the EPAP file.

Contactless Card Reader (RF Module)

Problem Code	Problem Description	Troubleshooting
9R11200	Fail to connect device or initialize device.	check communication cable.
9R13100	Fail to communicate	check communication cable
9R13101	RF Software occures error.	1. Check Communication cable 2. call your attendant
9R13102	RF Software occures error.	call your attendent.
9R13103	RF Software occures error.	call your attendent
9R13104	communication fail.	1. Check communication cable. 2. call your attendent
9R13106	RF Software occures error.	call your attendent
9r1310a	The card is invalid or not support media	Check the card protocol and use supported card
9r1310b	Vivotech RF : Command not Allowed.	1. Check communication cable. 2. Check command MI in Log. 3. Call your attendant
9r1310c	Vivotech RF : Sub Command not Allowed.	1. Check communication cable. 2. Check Sub command MI in Log. 3. Call your attendant
9RA0000	Perform a status code indicating that the EP download.	After complete EP Download, Code automatically clear .
9RB0000	Firmware Download Fail	1. Check for Serial Communication Cable 2. Check for Firmware Raw File corruption.
R020014	Error on transmitting and receiving the text	Check the USB cable
R020016	Error on balance increase process	Change the card
R020055	Text Error (Invalid Format)	1. Check the communication cable 2. Check the internal logic
R020056	Communication Error (Frame error)	Check the communication cable
R0200FF	RF Device Operation Error	Check the RF Device cable
r0203ED	Fail to Open device	check communication cable, dll
r0203F0	usb write error	check communication cable
r0203F1	usb read error	check communication cable
R050000	ERROR	-
R050200	UNSUPPORTED	-
R050300	FAILED	-
R050400	NAK	-
R050500	DATA MISSING	-
R050600	LRC ERROR	-
R050700	TLV ERROR	-
R050800	Requested parameter is out of scope	-
R050900	STX MISSING	-
R051000	ETX MISSING	-
R051100	UNKNOWN OPCODE	-
R051200	TOO MANY INSTRUCTIONS	-
R051300	Parameter is not supported	-
R051400	MEMORY ERROR	-
R051500	BUFFER OVERFLOW	-
R051700	COM TIMEOUT	-
R051800	CONFIG ERROR	-
R051900	INVALID DATA	-
R052000	INCOMPLETE DATA	-

Problem Code	Problem Description	Troubleshooting
R052100	UNKNOWN DATA	-
R052200	Collision detected - More than one PICC in the RF Field	-
R052300	Unable to write to the PCD Nonvolatile memory	-
R052400	Unable to read from the PCD Nonvolatile memory	-
R052500	RF failure (without PCD Error Recovery Sequence)	-
R052600	RF failure after PCD Error Recovery Sequence	-
R052700	PICC Data length overflow	-
R052800	Hercules Error Code	-
R052900	SAM/Contact general failure	-
R053000	SAM not present	-
R053100	SAM not active	-
R053200	SAM Protocol error (Only in PCD control)	-
R053300	Missing Parameter	-
R053400	Application Disabled	-
R053500	PCD Serial No. not suitable (For Password mechanism)	-
R053600	Index not found (for Indexed Objects).	-
R053700	Hash doesn't match for a public key	-
R053800	AID length error (index field)	-
R053900	Data field length error	-
R054000	Setup Error: The PCD failed during setup. When this failure happens - all commands will fail except Reset PCD.	-
R054100	Sub Scheme not Applicable	-
R054200	PKI Storage Error. If the PCD encounters storage error during power-up it will refuse all Poll EMV (Do an EMV Transaction) Template commands with this error code. In addition this error can occur on a temporary storage error.	-
R054300	Contactless Transaction Terminated	-
R054400	Poll EMV Timeout ended	-
R054500	EMV TRANSACTION CANCELLED	-
R054600	PCD is BUSY	-
R054700	Terminal Not Authorized	-
R054800	Secret Parameter Error	-
R054900	BOOT TARGET ID ERROR	-
R055000	BOOT PACKET LEN ERROR	-
R055100	BOOT FILE TOO BIG	-
R055200	BOOT STAMP ERROR	-
R055300	BOOL FILE TARGET ERROR	-
R055400	BOOT KEY VERSION ERROR	-
R055500	BOOT HASH ALGO ERROR	-
R055600	BOOT META NOT ORIGINAL	-
R055700	BOOT META MISS MANDATORY	-
R055800	BOOT META TLV ERROR	-
R055900	BOOT META LEN ERROR	-

Problem Code	Problem Description	Troubleshooting
R056000	BOOT META VERSION ERROR	-
R056100	PARAM MISSING	-
R056200	INSUFFICIENT CREDIT	-
R056300	BUFFER LENGTH	-
R062000	[TIT] Command undefined	-
R062001	[TIT] Parameter incorrect - BootMode	-
R062002	[TIT] Command cannot be executed	-
R062004	[TIT] Command data error	-
R062021	[TIT] Read error - Pre-amble error	-
R062022	[TIT] Read error - Post-amble error	-
R062023	[TIT] Read error - LRC error	-
R062024	[TIT] Read error - Parity error	-
R062025	[TIT] Read error - Blank error	-
R062027	[TIT] Card entry disabled	-
R062040	[TIT] Not Support Protocol	-
R062301	[TIT] 1st index down error	-
R062302	[TIT] 2nd index down error	-
R062303	[TIT] 3rd index down error	-
R062304	[TIT] 4th index down error	-
R062305	[TIT] 5th index down error	-
R062306	[TIT] 6th index down error	-
R062307	[TIT] 7th index down error	-
R062308	[TIT] 8th index down error	-
R063101	[TIT] API Not Supported	-
R063102	[TIT] Input File Error	-
R063103	[TIT] Cancel by User	-
R063104	[TIT] Port Not Supported	-
R063105	[TIT] API In Use	-
R063110	[TIT] Command Parameter Error	-
R063120	[TIT] Response Timeout	-
R063121	[TIT] Response Data Error	-
R063122	[TIT] Response Command Error	-
R063123	[TIT] Response BCC Error	-
R063124	[TIT] Response NAK Error	-
R063125	[TIT] Response DLE EOT Error	-
R063126	[TIT] Response Waiting	-
R063199	[TIT] Unknown Error	-

EPP (Encryption Pin-Pad)

Problem Code	Problem Description	Troubleshooting
1101	Firmware file length is wrong	Re-update with correct firmware
1102	Firmware size is wrong	Re-update with correct firmware
4J00	Not AES PIN key in PIN block en/decryption	En/decrypt data with AES key
4J01	Not TDES PIN key in PIN block en/decryption	En/decrypt data with TDES key
4Z01	Incorrect mode of use of working key	Inject correct TR31 working key value
9E11200	Cannot connect to device	Check the device cable and connection.
9E13100	Cannot receive data. timeout occurred	Check the device cable and connection.
9E13200	Cannot send data to device	Check the device cable and connection.
9E41A00	Cannot make thread	Restart ATM
9EA6100	Self test fail	Change device to new one
9EA6200	Cannot download firmware	confirm the firmware file
9EA6300	Firmware download failed.	Change device to new one
9EA6400	BCC error occurred	Restart ATM
9EA9100	PINPAD device is out of order	Check serial number of pinpad
9EA9200	PINPAD device is out of order	Check all buttons on keypad
9EA9300	PINPAD device do not support Secure Communication	Check PINPAD Firmware.
E12A500	Undefined Baudrate	Check baudrate parameter
E131100	Received message length error	Check SP message
E131200	Invalid parameter	Check SP message
E131400	Default sensitive password entry	Enter new sensitive passwords
E137400	Not in sensitive mode	Enter sensitive passwords
E141200	Invalid parameter	Check SP message
E147600	Invalid function key parameter	Check SP message
E147700	Invalid function key parameter	Check SP message
E15A400	RTC setting failure	Check SP message
E211200	Invalid parameter	Check SP message
E211400	Default sensitive password entry	Enter new sensitive passwords
E217400	Not in sensitive mode	Enter sensitive passwords
E217800	120 PIN entry excess within 1 hour	Wait until it reaches one hour
E21FB00	Undefined EPP state	Check EPP module
E21FF02	Factory State	NVRAM clear and EPP installation
E21FF03	Initialization State	EPP installation
E21FF04	Authorized Removal State	EPP installation
E21FF05	Unauthorized Removal State	EPP installation
E221200	Invalid parameter	Check SP message
E231200	Invalid parameter	Check SP message
E231300	Entry timeout	Entry retry
E237000	Sensitive password verification failure	Check sensitive passwords
E237100	Changed sensitive password verification failure	Check changed sensitive passwords
E23FD03	Not default ID and password	Ener default or NVRAM clear
E23FD04	1st and 2nd password are same	1st and 2nd passwords must be different
E23FD05	1st password is not verified	Enter correct 1st password
E23FD06	Password comparison failure	Check existing passwords
E23FD07	ID comparison failure	Check ID
E23FD08	ID is NULL value	Register non NULL ID

Problem Code	Problem Description	Troubleshooting
E23FD09	Password is NULL value	Register non NULL password
E23FD0A	Same ID exists	Register different ID
E23FD0D	ID count FULL	Delete unused ID or NVRAM clear
E23FD10	Not in removal sensitive mode	Enter removal sensitive id and password
E23FD13	Not default ID and password	Enter default or NVRAM clear
E23FF0F	ID not found	Check existing ID
E312300	Key not found	Load key to be needed
E322300	Key not found	Load key to be needed
E324G00	TMK not found	Load TMK to be needed
E331200	Invalid parameter	Check SP message
E332300	Key not found	Load key to be needed
E341200	Invalid parameter	Check SP message
E342300	Key not found	Load key to be needed
E352300	Key not found	Load key to be needed
E362300	Key not found	Load key to be needed
E371200	Invalid parameter	Check SP message
E372300	Key not found	Load key to be needed
E382300	Key not found	Load key to be needed
E391200	Invalid parameter	Check SP message
E392300	Key not found	Load key to be needed
E3A1200	Invalid parameter	Check SP message
E3A2300	Key not found	Load key to be needed
E3BA101	DUKPT Key not found	Inject DUKPT key
E3C2300	Key not found	Load key to be needed
E412300	Key not found	Load key to be needed
E412A00	Mismatch key usage	Check key usage
E413700	Multiple key usage	only one key usage is needed
E41A200	IBM3624(Local) PIN verification failure	Check PIN verification data
E41A300	No entered PIN	No entered PIN
EC11200	Key not found	Load key to be needed
EC12000	Key table is full	Delete unused key or NVRAM clear
EC12800	Key is not loaded state	Load key completely
EC12B00	Invalid keyname	Check keyname
EC12D00	Invalid key length	Check the key length. it should be 8 or 16.
EC12F00	Parent key is not KEK	Check parent key usage
EC13700	Multiple key usage	only one key usage is needed
EC13900	Weak Key	Check key value
EC13A00	Weak Key	Check key value
EC13F00	Non duplicated key	Check key usage
EC14D00	Weak Key	Check key value
EC14Y00	TR31 mode	Load TR31 working key or NVRAM clear
EC16200	Same with RSA keyname	Use different keyname from RSA Key
ED11100	Received message length error	Check SP message
ED11200	Invalid parameter	Check SP message
ED12300	Key not found	Load key to be needed
ED12800	Key is not loaded state	Load key completely
ED12A00	Mismatch key usage	Check key usage
ED12D00	Invalid key length	Check the key length. it should be 8 or 16.
ED13700	Multiple key usage	only one key usage is needed
ED1A000	Undefined AES mode	Check AES mode parameter
ED21100	Received message length error	Check SP message

Problem Code	Problem Description	Troubleshooting
ED21200	Invalid parameter	Check SP message
ED22300	Key not found	Load key to be needed
ED22800	Key is not loaded state	Load key completely
ED22A00	Mismatch key usage	Check key usage
ED22D00	Invalid key length	Check the key length. it should be 8 or 16.
ED23700	Multiple key usage	only one key usage is needed
ED2A000	Undefined AES mode	Check AES mode parameter
EF11100	Received message length error	Check SP message
EF11400	Default sensitive password entry	Enter new sensitive passwords
EF12A00	Mismatch key usage	Check key usage
EF15000	Undefined RSA key type	Check RSA key type
EF15800	Same with symmetric key name	Use different keyname from symmetric key
EF16300	Not RSA key format	Check RSA key
EF17400	Not in sensitive mode	Enter sensitive passwords
EF21100	Received message length error	Check SP message
EF21400	Default sensitive password entry	Enter new sensitive passwords
EF22A00	Mismatch key usage	Check key usage
EF25000	Undefined RSA key type	Check RSA key type
EF25800	Same with symmetric key name	Use different keyname from symmetric key
EF26300	Not RSA key format	Check RSA key
EF27400	Not in sensitive mode	Enter sensitive passwords
EF31100	Received message length error	Check SP message
EF31400	Default sensitive password entry	Enter new sensitive passwords
EF32A00	Mismatch key usage	Check key usage
EF35000	Undefined RSA key type	Check RSA key type
EF35800	Same with symmetric key name	Use different keyname from symmetric key
EF36300	Not RSA key format	Check RSA key
EF37400	Not in sensitive mode	Enter sensitive passwords
EF41100	Received message length error	Check SP message
EF41100	Received message length error	Check SP message
EF41100	Received message length error	Check SP message
EF41400	Default sensitive password entry	Enter new sensitive passwords
EF41400	Default sensitive password entry	Enter new sensitive passwords
EF41400	Default sensitive password entry	Enter new sensitive passwords
EF45100	Undefined RSA sign type	Check RSA sign type
EF45100	Undefined RSA sign type	Check RSA sign type
EF45100	Undefined RSA sign type	Check RSA sign type
EF47400	Not in sensitive mode	Enter sensitive passwords
EF47400	Not in sensitive mode	Enter sensitive passwords
EF47400	Not in sensitive mode	Enter sensitive passwords
EG11100	Received message length error	Check SP message
EG11100	Received message length error	Check SP message
EG19000	RSA encryption failure	Check RSA key and data
EG19100	RSA decryption failure	Check RSA key and data
EG29400	Encryption message length is not 256	Check encryption message length
EG31100	Received message length error	Check SP message
EG39200	Signature generation failure	Check RSA key and data
EG41100	Received message length error	Check SP message
EG49300	Signature verification failure	Check RSA key and data
EG49500	Signature verification failure	Check RSA key and data
EH11100	Received message length error	Check SP message

Problem Code	Problem Description	Troubleshooting
EH11200	Invalid parameter	Check SP message
EJ11200	Invalid parameter	Check SP message
EJ17400	Not in sensitive mode	Enter sensitive passwords
EJ21200	Invalid parameter	Check SP message
EJ27400	Not in sensitive mode	Enter sensitive passwords
EK01300	Entry timeout	Entry retry
EK11300	Entry timeout	Entry retry
EK21300	Entry timeout	Entry retry
EK31300	Entry timeout	Entry retry
EK37000	Sensitive password verification failure	Check sensitive passwords
EK41300	Entry timeout	Entry retry
EK47100	Changed sensitive password verification failure	Check changed sensitive passwords
EK51300	Entry timeout	Entry retry
EK5FD03	Not default ID and password	Ener default or NVRAM clear
EK5FD04	1st and 2nd password are same	1st and 2nd passwords must be different
EK5FD05	1st password is not verified	Enter correct 1st password
EK5FD06	Password comparison failure	Check existing passwords
EK5FD13	Not default ID and password	Enter default or NVRAM clear
EK5FF0F	ID not found	Check existing ID
EK61200	Invalid parameter	Check SP message
EK61300	Entry timeout	Entry retry
EK6FD06	Password comparison failure	Check existing passwords
EK6FD07	ID comparison failure	Check ID
EK6FD08	ID is NULL value	Register non NULL ID
EK6FD09	Password is NULL value	Register non NULL password
EK6FD0A	Same ID exists	Register different ID
EK6FD0D	ID count FULL	Delete unused ID or NVRAM clear
EK6FD10	Not in removal sensitive mode	Enter removal sensitive id and password
EK6FF0F	ID not found	Check existing ID
EL1FC00	Log not found	EPP installation when it is needed
EL1FD11	Cannot find start log	NVRAM clear
EM11100	Received message length error	Check SP message
EM11200	Invalid parameter	Check SP message
EM12300	Key not found	Load key to be needed
EM12A00	Mismatch key usage	Check key usage
EM12D00	Invalid key length	Check the key length. it should be 8 or 16.
EM13700	Multiple key usage	only one key usage is needed
EM21100	Received message length error	Check SP message
EM24900	MAC verification failure	Check MAC data
EN1Q007	Invalid received information	Check command message
EN22D00	Invalid key length	Check key length
EN2Q009	RSA key generation failure	Retry RSA key generation
EN32D00	Invalid key length	Check key length
EN3Q00D	RSA key pair verification failure	Check RSA key pair
EN42D00	Invalid key length	Check key length
EN4Q00E	Signature generation failure	Check input data and RSA key for signature
EN52D00	Invalid key length	Check key length
EN5Q006	Signature verification failure	Check input data and RSA key for signature
EN62D00	Invalid key length	Check key length
EN6N001	RSA decryption failure	Check input data and RSA key for decryption

Problem Code	Problem Description	Troubleshooting
EN72D00	Invalid key length	Check key length
EN7N001	RSA decryption failure	Check input data and RSA key for decryption
EN8Q007	Invalid received information	Check command message
EN9Q007	Invalid received information	Check command message
ENAN002	OAEP operation failure	Check input data for OAEP
ENAQ007	Invalid received information	Check command message
ENBQ007	Invalid received information	Check command message
Ep00400	Encryption fails	Check SP/EP Communication
Ep00500	EP Crypto Open fails	Check SP/EP Communication
Ep00600	Mac address comparison fails	Check Command Message
EP11200	Invalid parameter	Check SP message
EP12300	Key not found	Load key to be needed
EP12A00	Mismatch key usage	Check key usage
EP13700	Multiple key usage	only one key usage is needed
EP1A100	Maximum DUKPT PIN encryption count	Inject new DUKPT Key
EP1A101	DUKPT Key not found	Inject DUKPT Key
EP1A102	maximum DUKPT PIN encryption count	Inject new DUKPT key
EP1A300	No entered PIN	No entered PIN
EP1A400	Not 5 digits PIN Italy AP PIN format	Enter 5 digits PIN
EP1FB00	Undefined EPP state	Check EPP module
EP1FF02	Factory State	NVRAM clear and EPP installation
EP1FF03	Initialization State	EPP installation
EP1FF04	Authorized Removal State	EPP installation
EP1FF05	Unauthorized Removal State	EPP installation
EP1p001	Not auth success state	Authentication process needs between SP and EP
EP1p002	The stored Mac address of EPP is	Authentication process needs between SP and EP
EP1p003	Random number comparison fails	Authentication process needs between SP and EP
EP1p004	Encryption fails	Check command message
EP1p010	The stored serial number of EPP is	Authentication process needs between SP and EP
EP1p013	Decryption fails	Check command message
EP1p014	EPB Encryption fails	Check command message
EP1p016	When normal EPB, mac exists	Authentication process needs between SP and EP
EP1p017	When normal EPB, sn exists	Authentication process needs between SP and EP
EQ22D00	Invalid key length	Check key length
EQ2Q001	Invalid received length	Check command message
EQ2Q00F	Thumb print is not matched	Check RSA key and thumb print
EQ2Q010	Key type is not matched	Check Key Type
EQ2Q018	Host public key injection failure	Check Host public key information
EQ42D00	Invalid key length	Check key length
EQ4Q002	Invalid SnSCD	Check SnSCD
EQ4Q003	Invalid random	Check random number
EQ4Q004	Invalid IdKG	Check IdKG
EQ4Q006	Signature verification failure	Check input data and RSA key for signature
EQ4Q008	RSA key generation failure	Retry RSA key generation
EQ52D00	Invalid key length	Check key length
EQ5Q00E	Signature generation failure	Check input data and RSA key for signature
EQ5Q011	GIN H5 is not confirmed	GIN H5 must be confirmed
EQ5Q018	Host public key injection failure	Check Host public key information
EQ92D00	Invalid key length	Check key length
EQ9Q002	Invalid SnSCD	Check SnSCD
EQ9Q003	Invalid random	Check random number

Problem Code	Problem Description	Troubleshooting
EQ9Q004	Invalid IdKG	Check IdKG
EQ9Q006	Signature verification failure	Check input data and RSA key for signature
EQ9Q008	RSA key generation failure	Retry RSA key generation
EQA2D00	Invalid key length	Check key length
EQAQ00E	Signature generation failure	Check input data and RSA key for signature
EQAQ012	GRN H2 is not confirmed	GRN H2 must be confirmed
EQAQ018	Host public key injection failure	Check Host public key information
EQB2D00	Invalid key length	Check key length
EQBQ001	Invalid keyname	Check command message
EQBQ004	Invalid IdKG	Check IdKG
EQBQ006	Signature verification failure	Check input data and RSA key for signature
EQBQ010	Key type is not matched	Check Key Type
EQBQ018	Host public key injection failure	Check Host public key information
EQBQ020	Invalid KG version	Check KG version
EQE2D00	Invalid key length	Check key length
EQEN001	RSA decryption failure	Check input data and RSA key for decryption
EQEQ002	Invalid SnSCD	Check SnSCD
EQEQ003	Invalid random	Check random number
EQEQ004	Invalid IdKG	Check IdKG
EQEQ006	Signature verification failure	Check input data and RSA key for signature
EQEQ010	Key type is not matched	Check Key Type
EQEQ014	KTK injection failure	Check KTK information
EQEQ015	IdKD is not matched	Check IdKD
EQEQ016	Invalid encoded method	Check em type
EQEQ019	Invalid KTK information	Check KTK information
EQEQ021	Invalid KTK version	Check KTK version
EQEQ022	Invalid KTK serial	Check KTK serial
EQFQ007	Invalid received information	Check command message
EQGQ007	Invalid received information	Check command message
ER16400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER26400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER36400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER41100	Received message length error	Check SP message
ER42300	Key not found	Load key to be needed
ER42A00	Mismatch key usage	Check key usage
ER42B00	Invalid keyname	Check keyname
ER45000	Undefined RSA key type	Check RSA key type
ER45700	Signature verification failure	Check RSA key and data
ER45800	Same with symmetric key name	Use different keyname from symmetric key
ER46400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER46500	no unbinding	need unbinding
ER46600	Root and Host public keys are loaded	Unbinding procedure is needed or NVRAM clear
ER46700	Only Host public key is loaded	Unbinding procedure is needed or NVRAM clear
ER46800	Root and Host public key not found	Load Root or Host public key
ER46900	Modulus getting failure	Check RSA key
ER46A00	Root and Host public key name is same	Use different keyname for Root and Host public key
ER46B00	Not Host public key type	Check Host public key name and type
ER46C00	Not Root public key type	Check Root public key name and type
ER46D00	no host root key	need to load host root key with correct information
ER51200	Invalid parameter	Check SP message
ER55B00	Random number size is over 256	Maximum Random number size must be 256

Problem Code	Problem Description	Troubleshooting
ER56400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER81100	Received message length error	Check SP message
ER81200	Invalid parameter	Check SP message
ER82000	Key table is full	Delete unused key or NVRAM clear
ER82200	Not TMK usage	Check TMK usage
ER82B00	Invalid keyname	Check keyname
ER82D00	Invalid key length	Check the key length. it should be 8 or 16.
ER83900	Weak Key	Check key value
ER83A00	Weak Key	Check key value
ER84100	Same key value with another TMK	TMK key value must be different from another TMK
ER84D00	Weak Key	Check key value
ER85700	Signature verification failure	Check RSA key and data
ER85F00	RSA decryption failure	Check RSA key and data
ER86100	Random number comparison failure	Check random number
ER86200	Same with RSA keyname	Use different keyname from RSA Key
ER86400	RSA keys are not loaded all	Return to the factory and load RSA keys
ER86800	Root and Host public key not found	Load Root or Host public key
ER86900	Modulus getting failure	Check RSA key
ET11100	Received message length error	Check SP message
ET11200	Invalid parameter	Check SP message
ET11400	Default sensitive password entry	Enter new sensitive passwords
ET12000	Key table is full	Delete unused key or NVRAM clear
ET12200	Not TMK usage	Check TMK usage
ET12400	Plain text TMK load	Plain text key cannot be loaded
ET12500	No component key entered	Enter component key
ET12600	Component entry is not complete	Enter component key completely
ET12700	NULL key usage	Check key usage
ET12B00	Invalid keyname	Check keyname
ET13700	Multiple key usage	only one key usage is needed
ET13900	Weak Key	Check key value
ET13A00	Weak Key	Check key value
ET13B00	Component key count is less than 2	Minimum component key is 2
ET13C00	Not on entering component key	Enter component key
ET14100	Same key value with another TMK	TMK key value must be different from another TMK
ET14C00	Invalid component key digit	Check the compoent key digit. it should be 16 or 32.
ET14D00	Weak Key	Check key value
ET14F00	Not authenticated zeroization	Authenticated zeroization
ET14H00	The working key name is same with DUKPT key name.	Set the different keyname between working key and DUKPT key.
ET16200	Same with RSA keyname	Use different keyname from RSA Key
ET17400	Not in sensitive mode	Enter sensitive passwords
ET1A100	maximum PIN encryption count of DUKPT	Inject new DUKPT key
ET1A103	DUKPT Key Table Full	Delete an existing DUKPT key and inject DUKPT key
ET1A104	Not DUKPT key usage	Check key usage value
EU11100	Received message length error	Check SP message
EU21100	Received message length error	Check SP message
EU21200	Invalid parameter	Check SP message
EU28000	Not on updating firmware	Start firmware update at the first time
EU28300	Not Version code	Check firmware file

Problem Code	Problem Description	Troubleshooting
EU35700	Signature verification failure	Check RSA key and data
EU38000	Not on updating firmware	Start firmware update at the first time
EV2FB00	Undefined EPP state	Check EPP module
EW11200	Invalid parameter	Check SP message
EW1FD13	Not default ID and password	Enter default or NVRAM clear
EW21200	Invalid parameter	Check SP message
EW2FD0E	ID is NULL value	Register non NULL ID
EW2FD10	Not in removal sensitive mode	Enter removal sensitive id and password
EW3FA00	Undefined EPP state	Check EPP module
EW3FD01	Not two ID	Register at least 2 ID
EW3FD0E	ID is NULL value	Register non NULL ID
EW3FD10	Not in removal sensitive mode	Enter removal sensitive id and password
EW3FD12	The two removal switches of EPP are not pressed correctly.	Check if two removal switches of EPP are pressed correctly.
EW4FA00	Undefined EPP state	Check EPP module
EW4FD01	Not two ID	Register at least 2 ID
EW4FD0E	ID is NULL value	Register non NULL ID
EW4FD10	Not in removal sensitive mode	Enter removal sensitive id and password
EW5FF0F	ID not found	Check existing ID
EXX1000	Undefined main command	Check main command code
EXX1500	Glue attack is detected	Check EPP Key state
FFF1	120 PIN entry excess within 1 hour	Wait until it reaches one hour
FFF3	Fail to inject TR34 RKL Key	Reboot EPP
p018	Invalid return value	Replace EPP
S006	Fail to get TR34 RKL EPP cert	Inject EPP cert
S008	Fail to TR34 RKL bind	Check if host cert is valid
S009	Fail to TR34 RKL unbind	Check if host cert for unbinding is valid
S00A	Fail to load TR34 RKL master key	Check if master key block is valid

Receipt Printer

Problem Code	Problem Description	Troubleshooting
2010100	In case of detecting to be open lever of print head before printing receipt paper.	1.Close the lever of print head completely.
2010200	In case of detecting to be overheated in print head before printing receipt paper.	1.Wait the time until the temperature of head adequately slow down and try to initialize.
2010300	Paper jam occurs in return path before printing or cutting or discharging receipt paper.	1.Remove jammed paper between printer head and rollers.
2010400	It is detected that paper is empty before printing receipt printer.	1.Replenish receipt paper. 2.Check the status of sensor and its connctor.
2010500	It is detected that paper is not properly set before printing.	1.Check the status of setting paper. 2.Check the status of sensor and its connctor.
2010600	Command is received while doing self test.	1.After terminating self test and initialize receipt printer.
2010800	It is detected when paper is not properly cut while operating.	1.Check the Cutter module. 2.Check if printer head lever is properly close.
2010900	Black mark is not properly detected in receipt paper before printing.	1.Check the status of Black mark sensor. 2.Check if BlackMark Setting is correctly set. (If BlackMark unused, Dip Switch #2 ON or BlackMark Disable in VDM)).
2010A00	The size of image print data is abnormal while printing image.	1.Check the AP version and initialize.
2080100	In case of detecting to be open lever of print head after printing receipt paper.	1.Close the lever of print head completely.
2080200	In case of detecting to be overheated in print head after printing receipt paper.	1.Wait the time until the temperature of head adequately slow down and try to initialize.
2080300	Paper jam occurs in return path after printing or cutting or discharging receipt paper.	1.Remove jammed paper between printer head and rollers.
2080400	It is detected that paper is empty after printing receipt printer.	1.Replenish receipt paper. 2.Check the status of sensor and its connctor.
2080500	It is detected that paper is not properly set after printing.	1.Check the status of setting paper. 2.Check the status of sensor and its connctor.
2080600	Command is received while doing self test.	1.After terminating self test and initialize receipt printer. 2.Check the status of Near End sensor and its connctor.
2080800	It is detected that paper is not properly cut while operating.	1.Check the Cutter module. 2.Check if printer head lever is properly close.
2080900	Black mark is not properly detected in receipt paper after printing.	1.Check the status of Black mark sensor. 2.Check if Dip switch # 6 is correctly set. (Dip switch # 6 is set by On in case of not using Black mark).
2080A00	The size of image print data is abnormal while printing image.	1.Check the AP version and initialize.
2080B00	Margin setting error.	1. Check whether the default registry setting is changed. 2. Reset the PTR SP.
2080C00	Paper jammed at the exit of the slot.	1. Remove the jammed paper.
2080D00	Paper jam in path of dispense.	Remove the jammed paper.
2080E00	Error of Data Checksum	1. Update the firmware. or Replace device.

Problem Code	Problem Description	Troubleshooting
2080F00	Undefined Command or The firmware crashed.	1. Update the firmware. or Replace device.
2080I00	Use to same sequence number. Sequence number must be different to previous sequence number.	Need to check SP process.
2080K00	It means Image print is not finished. When SPR print image data with receive, If no more data received then SPR can not print all image data.	Cause is as follows. 1. Cable is low quality. 2. USB disconnect. 3. SP is not work continuously. Need to analyze tracelog for more infomation.

Shutter

Problem Code	Problem Description	Troubleshooting
5FF01	Failed to open shutter	1. Remove the foreign materials in shutter. 2. Retry to open shutter. 3. Replace the Shutter if the same symptom recurs.
5FF02	Failed to unlock solenoid.	1. Replace solenoid
5FF11	Failed to close shutter	1. Remove the foreign materials in shutter. 2. Retry to close shutter. 3. Replace the Shutter if the same symptom recurs.
5FF12	Failed to lock solenoid	1. Remove the foreign materials in shutter. 2. Retry to close shutter. 3. Replace the Shutter if the same symptom recurs.
5FF21	Setting Invalid Data	Check Data in registry with Spec. Data
5FF31	Range over the duty value for close step control	Check SP duty configration for close step control
5FF32	Range over the control time for close step control.(10~2000)	Check SP control time configration for close step control. (Range: 10~2000)
5FFFF	Unknown command.	1. Turn the power off and on check that it operates normally. 2. Replace the Shutter main board if the same symptom recurs.
CS0200	Shutter close fail	1. check the obstacle. 2. check status of sensor(MS1)
CS1200	Shutter close fail	1. check the obstacle. 2. check status of sensor(MS1)
CS1400	detected object inside of shutter (HS4 Dark)	Check inside of shutter
CS3200	abnormal sensor status (MS1 Dark, MS2 Light)	Check status of sensor
OS0100	Shutter open fail	1. check the obstacle. 2. check status of sensor(MS2)
OS1100	Shutter open fail	1. check the obstacle. 2. check status of sensor(MS2)
OS3100	abnormal sensor status. (MS1 Dark, MS2 Light)	Check status of sensor.
-SBE00	Duplicate sequence number	check SP version (check sequence number)
-SFF00	Undefined CMD	check SP version (check CMD MI)
USCE00	abnormal EP File for download	check EP File
USDE00	Incorrect checksum of transfered data	check line of communicatiaon(USB)
ZUS000	Failure to authorization.	Retry to authorization. (retry SP open)
ZUS100	Failure to authorization.	Retry to authorization. (retry SP open)
ZUS200	Failure to authorization.	Retry to authorization. (retry SP open)

UPNC

Problem Code	Problem Description	Troubleshooting
30000	Unspecified CMD.	1. Turn the power off and on and check that it operates normally. 2. Check the final version of SP and EP, and update if necessary.
31001	USB CRC error.	1. Turn the power off and on and check that it operates normally. 2. If it does not, replace the USB cable and check again. 3. Replace the PNC board if the same symptom recurs.
31002	Transferred file is crushed.	1. Download File Check
31005	Setting Serial-Information to ROM is fail. (ROM Writing error)	1. Turn the power off and on and try the command again. 2. Replace the PNC board if the same symptom reccurs.
31010	set OnTime of latch solenoid is range over (0 to 1000)	Check to SP registry value
31011	select wrong output port of latch solenoid	Check to SP registry value
9701010	Failed to open port (open connection failed)	Check whether the communication cable and SIU port are connected or not.
9701012	Failed to send data to device	Check whether the communication cable and SIU port are connected or not
9701016	Fail to receive data from the SIU device.	Check whether the communication cable and SIU port are connected or not
9701017	Timeout to communicate with the SIU device	Check whether the communication cable and SIU port are connected or not.
9701040	Failed to create thread	Restart the SIU Service Provider.
97010FF	Failed to download file	-
9701AFF	Failed to download tilt file	-
9701DN0	System offline	-