Error Codes

Error Code	Cause and Description	Measures
2 0 0 0 1	The Cash Dispenser Unit cassette is not installed. The Control Electronics checks if the Cash Dispenser Unit cassette is in the right position with the location sensor (LS6), and generates an error when the Cash Dispenser Unit is not in the correct position.	Install the cassette again. Check if LS6 (micro switch) is fully pressed while the cassette is loaded. Check if LS6 connector has been properly inserted and if cable is cut. Check logic related to LS6 of the Cash Dispenser Unit board.
2 0 0 0 2	Cash is not enough. This error occurs in the following cases: When the number of bills is "0" after the final payment transaction is made When the low level sensor (LS5) detects that the cassettes is at a low level in "Low currency check enable" mode	Fill cash and set the number of bills. * In "Low currency enable" mode: Check if LS5 hole on the side of the cassettes is matching with LS5 after installing the cassette. Check if the reflection plate of the LS5 sensor is polluted in the cassette. Check if LS5 sensor is polluted, cable is cut, or the connector is wrongly inserted. Check logic related to LS5 of the Cash Dispenser Unit board.
2 0 0 0 3	The reject box is full. This error occurs when the sum of rejected bills during the transaction and the rejected bills during the test is more than 50 after finally executing "Cassette Total".	Execute "Cassette Total" after moving cash from the reject box.
2 0 0 0 4	The security door is open. The sensor detects that the security door is open.	Close the security door. Check if the security door can be mechanically opened and closed by the door switch. Check if cable between the door switch and the Control Electronics is cut. Check if the connector is well connected to the Control Electronics. Check logic related to the door switch in the Control Electronics.
2 0 0 1 0	Receipt paper jam in the receipt printer. The jam detection sensor checks if there is paper before starting operation.	Remove paper jam and paper scraps. Check the lever operation position in the sensor. Check if the sensor is polluted. Check if cable is cut or the connector is wrongly inserted. Check logic related to the jam detection sensor of the Slip Printer board.

Error Code	Cause and Description	Measures
2 0 0 1 2	The feed lever of the recipt printer is open. It was detected that the feed lever was open before ther receipt printer started to operate.	Close the feed lever. Check if the micro switch of the feed lever normally functions. Check if cable of the micro switch is cut in the feed lever and the connector is wrontly inserted. Check logic related to the micro switch of the feed lever of the Slip Printer board.
2 0 0 1 3	Receipt paper is empty. It was detected that receipt paper was empty before the receipt printer started to operate (when both the paper empty sensor and the paper sentting sensor are lights).	Fill paper. Check the lever operation position in the sensor. Check if cable is cut or the connector is wrongly inserted. Check logic related to the paper empty and the paper setting sensors in the Slip Printer board.
2 0 0 1 4	The thermal head of the receipt printer is overheated (before the receipt printer starts to operate).	Check and replace the thermal printer head. Check logic related to the TPH of the PR board.
2 Y Y 1 5	Note has been detected on the return path before the Cash Dispenser Unit starts to operate. YY = Return Path Sensor ; 1A = LS1 , 1B = LS9	Remove the jammed note on the return path. Check if the sensor is polluted. Check if cable is cut or the connector is wrongly inserted. Check logic related to the sensor in the Cash Dispenser Unit board.
A X X X 1	The feed lever of the receipt printer is open. It was detected that the feed lever was open while the receipt printer was operating.	Remove receipts and close the feed lever. Check if the micro switch of the feed lever normally operates. Check if cable of the micro switch of the feed lever is cut or the connector is wrongly inserted. Check logic related to the micro switch of the feed lever in the Slip Printer board.
A X X X 2	The thermal head of the receipt printer is overheated (before the receipt printer starts to operate).	Check and replace the terminal printer head. Check logic related to TPH of the Slip Printer board.
A X X X 3	Receipt paper jam A jam error occurred while the receipt printer operates.	Remove paper jam and paper scraps. Check the lever operatio position in the sensor. Check if the sensor is polluted. Check if cable is cut or the connector is wrongly inserted. Check logic related to jam detection in the Slip Printer board.
A X X X 4	Receipt paper is empty. It was detected that paper was empty while the receipt printer was operating (when the paper empty sensor detected the light).	Fill paper. Check the lever operation position in the sensor. Check if cable is cut or the connector is wrongly inserted. Check logic related to the paper empty sensor in the Slip Printer board.

Error Code	Cause and Description	Measures
A X X X 5	Receipt paper setting error Jam and miss-feeding are detected during receipt paper is loaded. -> This error occurs when the setting sensor detects a dark part.	Remove paper jam and reload. Check the level oepration position in the jam sensor. Check if cable is cut or the connector is wrongly inserted (in the jam sensor). Check logic related to the jam sensor. Check if the return motor is operating. Check if cable is cut or a connector is wrongly inserted in the return motor, and check related logic.
A X X X 6	During the test in the offline mode of the Slip Printer	Turn on/ff the Slip Printer.
A X X X 7	Receipt Printer Lever Opened	Check sensor, cable connection and connector
A X X X 8	Receipt paper cutting error Receipt paper cutting failed.	Remove paper jam. Check if the cutter properly rotates and the swtich normally functions. Check if cable is cut or the connector is wrongly inserted. Check logic rlated to the cutter of the Slip Printer board.
A D N X X	Receipt printer connection failure	Check if communication cable between the Control Electronics and the Slip Printer is cut or the connector is wrongly inserted. Check communiation logic of the Control Electronics and the Slip Printer board. Check if the CPU of the Slip Printer board is normally running. Check if the power is normally supplied to the Slip Printer.

☞ From now on, error codes are Cash Dispenser Unit error codes (MB1520) when MB1000 Cash Dispenser Unit is applied.
Note) "X" means any number.

Error Code	Cause and Description	Measures
C 0 0 1 Y	Cash Dispenser Unit sensor cover 1 "Y" s a hexadecimal of the covered sensor. (from 1 to F) | 2^3	2^2	2^1	2^0
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CS4B	CS4A	-	CS2 | Ex) 'C0015' ; CS2, CS4A covered Occurs before or after initialization and dispensing notes.	Check if ther are notes. If so, remove them. Check if cable is cut or the connector is wrongly inserted. Check logic related to the sensor of the Cash Dispenser Unit board.

Error Code	Cause and Description	Measures
C 0 0 2 Y	Cash Dispenser Unit sensor covered 2 "Y" s a hexadecimal of the covered sensor. (from 1 to F) 	2^3	2^2	2^1	2^0
CS13	-	CS1B	CS1A	 Ex) 'C0023' ; CS1A, CS1B covered Occurs before or after initialization and dispensing notes.	Check if there are notes. If so, remove them. Check if cable is cut or the connector is wrongly inserted. Check logic related to the sensor of the Cash Dispenser Unit board.
C 0 0 3 0	Cash Dispenser Unit main motor failure Occurs during initialization. Occurs before notes are dispensed.	Check the main motor of the Cash Dispenser Unit. Check CS8 sensor. Check if cable is cut or the connector is wrongly inserted. Check logic relatd to the motor of the Cash Dispenser Unit board.
C 0 0 3 1	Gate solenoid echo error Occurs during initialization. Occurs before notes are dispensed.	Check if cable is cut or the connector is wrongly inserted in the gate solenoid. Check the gate solenoid. Check logic of the gate solenoid in the Cash Dispenser Unit board.
C 0 0 3 2	Outlet solenoid echo error Occurs during initialization. Occurs before notes are dispensed.	Check if cable is cut or the connector is wrongly inserted in the outlet solenoid. Check the outlet solenoid. Check logic of the outlet solenoid in the Cash Dispenser Unit board.
C 0 0 3 3	Cash Dispenser Unit data (country, cassette, shutter) setting error Occurs during initialization. (MB-2100,2200)	Check Cash Dispenser Unit information. Check battery back-up SRAM. Check the battery.
	Cash Dispenser Unit encoder error (MB-1000)	Encoder check Check logic related to the encoder in the Cash Dispenser Unit board.
C 0 0 3 4	Double detect module failure 1	Check if there are notes in the double detect module. Check CS5 sensor. Check the double detect slit. Check the double detect lever. Check logic related to double detect in the Cash Dispenser Unit board.
C 0 0 3 5	Double detect module failure 2	
C 0 0 3 6	CS13, CS2 covered befor initialization	Check if there are notes. If so, remove them. Check if cable is cut or the connector is wrongly inserted. Check logic of CS13 and CS2 sensors in the Cash Dispenser Unit board.

Error Code	Cause and Description	Measures
C 0 0 3 7	Double detection sensor (CS5) covered Occurs while notes are being dispensed.	Check CS5 – pollution, cable cutting, wrong insertion of connectors, etc. Check logic related to CS5 in the Cash Dispenser Unit board.
C 0 0 3 9	Gate operation detection sensor (CS3) Error Occurs during initialization. Occurs before notes are dispensed.	Check if CS3 is polluted. Check the position of the gate solenoid. Check if cable is cut or the connector is wrongly inserted. Check logic related to CS3 of the Cash Dispenser Unit board.
C 0 0 3 A	Request to display four or more notes.	Issue the command decrease the number of bills to four or less in the Control Electronics.
C 0 0 3 B	CS15A,15B sensor covered Occurs during initialization.	Check if there are notes. If so, remove them. Check CS15A and 15B sensors – pollution, cable cutting, wrong insertion of connectors, etc. Check logic related to CS15 of the Cash Dispenser Unit board.
C 0 0 4 0	The cassette was removed while notes were dispensed.	Check if the cassette has been normally installed. Check if CS7 (micro switch) can be completely pressed while the cassette is installed. Check if cable is cut or a connector is wrongly installed in CS7 connector. Check logic related to CS7 of the Cash Dispenser Unit board.
C 0 0 4 1	The machine tried to dispense notes five times or more.	Check the status of the note. Check if the note type on the index set by the Control Electronics matches with the actual note type.
C 0 0 4 2	Note jam Number of requested notes > Number of notes passing CS13 Occurs after notes are dispensed.	Check if there are notes in the return path. If so, remove them. Check CS13. Check logic related to CS13 of the Cash Dispenser Unit board.
C 0 0 4 3	Ten or more notes are rejected in one transaction. Occurs while notes are being dispensed.	Check status of the note. Check the two-sheet detection sensor. Check if the note type on the index set by the Control Electronics matches with the actual note type.
C 0 0 4 4	Five consecutive rejections in one transaction. Occurs while notes are being dispensed.	Check the status of the note. Check the two-sheet detection sensor. Check if the note type on the index set by the Control Electronics matches with the actual note type.
C 0 0 4 5	More note than requested were dispensed. Number of requested notes < Number of notes passing CS13 Occurs while notes are being dispensed.	Check the number of dispensed notes and the status of notes. Check CS13. Check logic related to CS13 of the Cash Dispenser Unit board.

Error Code	Cause and Description	Measures
C 0 0 4 7	1st Cassette Miss-feed No passing note is detected by CS1A and 1B sensors after the note is dispensed.	Check the note-setting status in the cassette. Check CS1A and 1B sensors.
C 0 0 4 9	Request to dispense 0 note. Command error in the Control Electronics control part	The Control Electronics revises and reissues the command.

C 0 0 4 A	Note jam
	CS1A,B ∼ CS4A,B Note Passting Time
	  >= 400ms
	CS4A,B∼CS13 Note Passting Time
	  >= 500ms
	Occurs while notes are being dispensed.
		Check if there are notes in the return path. If so, remove them.

C 0 0 4 B	Three or more consecutive rejection. Occurs while notes are being dispensed.	Check the status of the note. Check if the note type on the index set by the Control Electronics matches with the actual note type.
C 0 0 4 C	The number of dispensed notes does not match. Number of notes passing CS13 <> Number of notes passing CS1A,1B Occurs after notes are dispensed.	Check the number of dispensed notes. Check if the gate normally functions.
C 0 0 4 D	The cassette has not been installed before notes were dispensed. Occurs before notes are dispensed.	Check if the cassette has been normally installed. Check if CS7 (micro switch) is completely presed while the cassettes is installed. Check if cable is cut or a connector is wrongly installed in CS7. Check logic related to CS7 of the Cash Dispenser Unit board.
C 0 0 4 E	The number of dispensed notes does not match. Number of requested notes > Number of notes dispensed and reported to the Cash Dispenser Unit The Control Electronics checks after notes are dispensed.	Check the number of dispensed notes. Perform a unit test on the Cash Dispenser Unit.
C 0 0 4 F	The number of dispensed notes does not match. Number of requested notes < Number of notes dispensed and reported to the Cash Dispenser Unit The Control Electronics checks after notes are dispensed.	Check the number of dispensed notes. Perform a test on the Cash Dispenser Unit.
C 0 0 5 0	The power is cut while notes are being dispensed. The Control Electronics checks.	Check the number of dispensed notes. Check if there are notes in the return path. If so, remove them.
C 0 0 5 1	Request to dispense 150 or more notes. Control command error in the Control Electronics	The Control Electronics revises and reissues the command.

Error Code	Cause and Description	Measures
C 0 0 5 2	CS1A,1B sensor covered. Occurs after notes are dispensed.	Check if there are notes in the return path. If so, remove them. Check CS1A and 1B sensors. Check logic related to CS1A and 1B of the Cash Dispenser Unit board.
C 0 0 5 5	Outlet sensor (CS13) senses the length of the note. Occurs while notes are being dispensed.	Check the status of the note. Check CS13. Ceck the main motor speed. Check if the note type on the index set by the Control Electronics matches with the actual note type.
C 0 0 5 6	The gate position sensor (CS3) detects an incorrect position while the notes are being discahrged.	Check the gate solenoid. Check CS3. Check related logic of the Cash Dispenser Unit board.
C 0 0 5 B	2nd Cassette Mis-feed No passing note is detected by CS15A and 15B sensors after the note is dispensed.	Check the note-setting status in the cassette. Check CS15A and 15B sensors.
C 0 0 6 Y	Cash Dispenser Unit sensor half-light error 1 "Y" is a hexadecimal of the error sensor. (from 1 to F) <table><tr><td>2^3</td><td>2^2</td><td>2^1</td><td>2^0</td></tr><tr><td>CS4B</td><td>CS4A</td><td>-</td><td>CS2</td></tr></table>Ex) 'C0065' ; CS2, CS4A error	Check if related sensors are polluted. Check related logic of the Cash Dispenser Unit board.
C 0 0 7 Y	Cash Dispenser Unit sensor half-light error 2 "Y" is a hexadecimal of the error sensor. (from 1 to F) <table><tr><td>2^3</td><td>2^2</td><td>2^1</td><td>2^0</td></tr><tr><td>CS13</td><td>-</td><td>CS1B</td><td>CS1A</td></tr></table>Ex)'C0073'; CS1A, CS1B Error	Check if related sensors are polluted. Check related logic of the Cash Dispenser Unit board.
C 0 0 8 2	Shutter open error (CS10) Occurs while the shutter is being opened.	Check if the shutter normally operates and the status of CS10 when the shutter is open. Check CS10. Check logic related to CS10 of the Cash Dispenser Unit board.
C 0 0 8 3	Stacker note detection sensor (CS9) covered. Occurs before initiazliation and notes are dispensed.	Check if there are notes in the stacker. If so, remove them. Check CS9. Check logic related to CS9 of the Cash Dispenser Unit board.

Error Code	Cause and Description	Measures
C 0 0 8 4	Shutter close error (CS11) Occurs while the shutter is being closed.	Check if the shutter normally operates and status of CS22 when the shutter is closed. Check CS22. Check logic related to CS11 of the Cash Dispenser Unit board.
C 0 0 9 F	3rd Cassette Miss-feed No passing note is detected by CS31A and 31B sensors after the note is dispensed.	Check the note-setting status in the cassette. Check CS31A and 31B sensors.
C D N X X	Cash Dispenser Unit connection failure Control Electronics<->Cash Dispenser Unit communiation error	Check if the communication cable between the Control Electronics and the Cash Dispenser Unit is cut and the connector is wrongly inserted. Check logic related to communicationb between the Control Electronics and the Cash Dispenser Unit board. Check if the CPU of the Cash Dispenser Unit board is normally running. Check is power is supplied to the Cash Dispenser Unit.

Note) If an error occurs while the Cash Dispenser Unit is dispensing notes, the error report will be printed out on the receipt as shown below: (9bytes per cassette.   Therefore, if there are two cassettes, it will be 18bytes.   All values are hexadecimals.)

1	2	3	4	5	6	7	8	9	
Number of notes passing CS1A and 1B	Number of notes requested by the Control Electronics	Number of notes passing CS13	Number of skew reject cases Numberof rejected notes	Number of rejected notes due to the interval	Number of rejected notes due to the short length	Number of rejected notes due to long length	Number of rejected notes due to 2 (overlapping) bills	Number of total rejected notes	

☞ From now on, error codes are Cash Dispenser Unit error codes (MB1500) when the L-Cash Dispenser Unit is applied.
Note) "X" means any value.

Error Code	Cause and Description	Measures
C 0 0 0 0	A non-existing command is received from the AP.	Check the AP command or the contents of the test program command.
C 0 0 1 1	LS3 detects a dark part before initalization or dispensing.	Check if there is jam in the position of LS3 (on the reject box).
C 0 0 1 4	LS9 detects a dark part before initalization or dispensing.	Check if there is jam in the position of LS9 (the first sensor on the return path).
C 0 0 2 1	LS1 detects a dark part before initalization or dispensing.	Check if there is jam in the position of LS1 (between the separation part and the return path).
C 0 0 3 0	Failed in checking the main motor echo.	Initialize again, or check if there is any hardware error.
C 0 0 3 1	Failed in checking the solenoid echo.	Initialize, or check the status of the solenoid.
C 0 0 3 6	LS2 (outlet sensor) detects a dark part before initalization or dispensing.	Check if there is a note or a foreign substance at the outlet, and clear.
C 0 0 3 7	Two-note detection sensor error during dispensing	Check if the two-sheet deteciton sensor is well fixe. If not, replace it.
C 0 0 3 9	LS8 (gate operation sensor) erorr during initialization or dispensing	Check if the solenoid sensor is normal.

Error Code	Cause and Description	Measures
C 0 0 3 A	Request to dispense five or more test dispense CMDs	Check the number of notes requested by the test command. (Four or less)
C 0 0 3 B	Sensor error after initial recovery	Check if each sensor is normal.
C 0 0 4 0	Cassette removal during separate rejection	Check the contact status of LS6 (when the cassettes is at the right position).
C 0 0 4 1	Five or more retries	Check the status of the note, and restart the machine.
C 0 0 4 2	LS2 (outlet sensor) < Number of requested notes	Check the number of notes.
C 0 0 4 3	Too many rejections (10 or more notes)	Check the status of the note and the two-sheet detection sensor.
C 0 0 4 4	Rejects more than 5 bills continuously	Check the status of the note and each sensor.
C 0 0 4 5	LS2 (outlet sensor) > Number of requested notes	Check the number of notes.
C 0 0 4 6	An error occurred while checking the default of the Cash Dispenser Unit sensor.	Check if the sensor is normal. If not, replace the sensor.
C 0 0 4 7	MISFEED error	Check if the separation motor is normal.
C 0 0 4 9	Request to dispense 0 note	Check AP command or the contents of the test program command.
C 0 0 4 A	Cash note jam	Check if there is cash note jam in the return path and other places.
C 0 0 4 B	Consecutive rejection of notes three times	Check if the separation motor is normal.
C 0 0 4 D	Cassette removal before separate rejection	Install the cassette again.
C 0 0 5 1	Requst to dispense 51 or more notes	Check the number of requested notes (1 ~ 50).
C 0 0 5 4	P/G error	Check hardware.
C 0 0 5 7	EEPROM Write error	Check hardware.
C 0 0 7 1	Consecutive rejection of notes due to overlapping three times	Check if LS5 (remaining amount detection sensor) is normal. If not, replace the sensor.
"Dxxxx" errors are caused by network problem or receiving the denial message from host.		
D 0 0 0 1	Modem initializing error An error is received from the modem controller after Modem Initialize command is issued.	1. Check the modem controller and logic.

Error Code	Cause and Description	Measures
D 0 0 0 2	Reversal transaction failure Cancellation of the transaction due to an error having occurred while notes were dispensed was notified to the host; however, the host did not receive this notification. (in the US)	1. Check the Cash Dispenser Unit error and the numberof notes nornally dispensed. 2. Contact the host, and manually reverse. 3. Perform a unit test on the Cash Dispenser Unit to see if there is any error.
The following describes causes of errors when transaction is not completed in the host (in the US):		1. Check transaction records and hosts for each cause, and try to make the transaction again.
D 0 0 1 2 D 0 0 1 3 D 0 0 1 4 D 0 0 2 0 D 0 0 2 4 D 0 0 3 9 D 0 0 5 1 D 0 0 5 2 D 0 0 5 3 D 0 0 5 4 D 0 0 5 5 D 0 0 5 7 D 0 0 5 8 D 0 0 6 1 D 0 0 7 5 D 0 0 7 8 D 0 0 8 0 D 0 0 8 3 D 0 0 8 6 D 0 0 9 1 D 0 0 9 2	Invalid Transaction Invalid Amount Invalid Card Number Surcharge screen should have been displayed Exceeds Issuer Withdrawal Limit No Credit Account Insufficient Funds No Checking Account No Savings Account Expire Card Incorrect Pin Transaction not Permitted – Card Transaction not Permitted – Terminal Exceeds Withdrawal Limit PIN Tries Exceeded No Account Invalid Date Can not Verify PIN Can not Verify PIN Bank Unavailable System Unavailable	

Error Code	Cause and Description	Measures
The following describes causes of errors occurring while the host is receiving a message (in the US):		Check the host.
D 0 0 9 3 D 0 0 9 4 D 0 0 9 5 D 0 0 9 6 D 0 0 9 7 D 0 0 9 8 D 0 0 9 9 D 0 0 9 A D 0 0 9 B D 0 0 9 C D 0 0 9 D D 0 0 9 E D 0 0 9 F D 0 0 A 0 D 0 0 A 1 D 0 0 A 2 D 0 0 A 3 D 0 0 A 4	Transaction Serial No Miss-match Record Format Miss-match. Check if a proper AP for the host has been loaded. Routing Identification Miss-match. Check the routing Identification. Terminal Identification Miss-match. Check the temrianl Identification. Response Type Miss-match (Reversal) Response Type Miss-match (Day Close) Response Type Miss-match (Config) Response Type Miss-match (Withdrawal,Balance,Transfer) STXmissing ETXmissing FS missing (next to Response Code) FS missing (next to Retrieval Reference Number) FS missing (next to System Trace Audit Number) FS missing (next to Account Balance) FS missing (next to Available Balance) FS missing (next to Surcharge Amount) FS missing (next to Authorization Response Text) ETX position is not correct.	
D 0 0 A 5 D 0 0 A 6 D 0 0 A 7 D 0 0 A 8 D 0 0 A 9	FS missing (next to Total Cash Dispense Amount in the Day Close message) FS missing (nex to Total Non Cash Dispense Amount in the Day Close message) FS missing (next to Total Surcharge Amount in the Day Close message) FS missing (next to Surcharge Amount in the Config message) ETX missing (in the Config message)	
D 0 3 0 0	Modem is not responding Modem Initialze or Reset command No response from the modem controllerwithin a certain time after issuance. Initialize ; 1 second, Reset ; 10 seconds	1. Check the modem controller and logic.
D 1 1 0 0	ENQ was not received from the host.	1. Check the host.

Error Code	Cause and Description	Measures
D 1 2 0 0	Transmission error Failed to receive the whoel data within 5 seconds after requesting the modem to send the data.	1. Check the modem controller and logic.
D 1 3 0 0	NAK has been sent three times or more. Failed in receiving the data due to parity or LRC error.　Therefore, sent NAK to the host and requested to send the data again three times or more.	1. Check the host. 2. Line Noise check. 3. Check the modem controller and logic.
D 1 5 0 0	Modem dial connection time-out (while dialing the modem)	1. Check if the telephone line is well connected. 2. Check the telephone number of the host and if the host is alive. 3. Check modem-related parameter setting. 4. Check the modem controller and logic.
	Host not responding No response from the host for 60 seonds.	1. Check if the transaction card is valid. 2. Check the host.
D 1 7 0 X	No carrier No carrir during data transmission after the modem is connected.	1. Check the host. 2. Check if the transaction card is valid. 3. Check line noise. 4. Check the modem controller and logic.
D 1 8 0 0	No dial tone No dial tone while the modem is connected.	1. Check if the telephone line is well connected. 2. Check the status of the telephone line. 3. Check the modem controller and logic.
D 1 9 0 0	No Answer No silence in the line that does not support dial tone.	1. Check the status of the telephone line. 2. Check the modem controller and logic.
D 2 0 0 0	Dial busy	1. Check the host and the telephone number of the host. 2. Check the modem controller and logic.
D 2 1 0 0	Response time-out (30 seconds) for Modem Initialize command before the modem was connected.	1. Check the modem controller and logic.
D 2 2 0 0	EOT was not received from the host.	1. Check the host.

Error Code	Cause and Description	Measures
E 0 0 0 1 E 0 0 0 2 E 0 0 0 3 E 0 0 0 4	RMS port failure RMS response time-out RMS modem failure RMS no dial tone	1. Check RMS-related settings. 2. Check if the telephone line is connected and the status of the telephone line. 3. Check if the RMS host is alive. 4. Check the modem controller and logic.
F 0 0 0 1	The nuber of bills is not set.	1. Set the number of bills.
F 0 0 0 2	Surchage Owner is not set in Surcharge Enable mode.	1. Set the surcharge owner.
F 0 0 0 3	Surcharge Amount is not set in Surcharge Enable mode.	1. Set the surcharge amount.
F 0 0 0 4	Refresh timer is not set in Advertisement Enable mode.	1. Set the refresh timer.
F 0 0 0 5	Advertisement text is not set in Advertisement Enable mode.	1. Set advertisement text.
F 0 0 0 6	Dispense limite setting error Ex) Dispense Limit > Face value of the note type x 25	1. Check the dispense limit, and set the limit again.
F 0 0 0 7	Note type setting error Ex) For MB-2000, only 10$, 20$, 50$, and 100$ notes are valid.	1. Check the note type, and set it again.
F 0 0 0 8	Fast cash setting error Ex) Fast cash value > Dispense limit	1. Check the fast cash value, and set it again.
F 0 0 0 9	Master key index invalid 0 <= MKEY Index <= 15	1. Check the master key, and set it again.
F 0 0 0 A	Master key empty	1. Inject the master key.
F 0 0 0 B	Host phone number is not set.	1. Set the host phone number.
F 0 0 0 C	The error retry timer is not set.	1. Set the error retry timer.
F 0 0 0 D	RMS password is not set in RMS Enable mode.	1. Set the RMS password.
F 0 0 0 E	RMS phone number is not set in RMS Enable mode.	1. Set the RMS phone number.
F 0 0 0 F	The temrinal number is not set.	1. Set the terminal number.

Error Code	Cause and Description	Measures
F 0 0 1 0	Routing Identification is not set.	1. Set the routing Identification.
F 0 0 1 1	The master key serial number is not set.	1. Master key Serial Number set
F 0 0 1 2	Non-cash type text is not set. (MB-2100/2200 only)	1. Non-Cash Type set
F 0 0 1 4	NVRAM failure	1. Check the battery and the battery plug. 2. Replace the main board.
B 0 0 0 1	Expanded flash memory error (MB-2100/2200 only)	1. Replace the main board.
D 3 2 0 0	1. Dial connect time-out (60Sec) or dial connection error 2. Host response message time-out (60Sec)	1. Check the phone line or connector. 2. Contact the processor manfuacturer.