

## Warning: Codes Changed During Update

When the firmware is upgraded to SYS1534 or later, the settings for the following self-diagnosis codes are returned to default. Therefore, if you have changed the values in these codes, you must set them back.

Code	Subitem	Default value
08-8735	Sending setting of ScanToURL	0: Disabled
08-8736	Maximum size for ScanToURL attachment	5: 5MB
08-8662	Job interrupt (out of paper) Beep Sound	0: OFF
08-9963	Display of receiving job on JOB STATUS screen	0: Disabled
08-8754	Output of error sheet at reception of PDL data not supported	1: Enabled

## Special Warning this Version

Before installing version 2101, perform the following procedure to delete unnecessary logs in the HDD/SSD.  
[5][C]+ power ON -> [7] (7. HDD Utility) -> [START] -> [1] (1. Initialize) -> [START]

## 11.1 Firmware Updating with USB Device

To update firmware, store update programs and firmware data files in the USB device. There are three update programs, signature.sig, pubkey.key and plt\_integrity.cfg, and they are necessary for updating firmware except that of the System firmware. For the data file for each firmware, refer to the following tables.

### Notes:

When performing the update, use the latest program.

Firmware type and data file name for updating

### Equipment

Firmware	Stored	Data file name	Display
System firmware	System control PC board (SYS board)	<20ppm/25ppm: When only SSD is mounted.> T210SF0Wxxxx.tar <20ppm/25ppm: When HDD is mounted.> T210SF0Wxxxx.tar <LL20ppm/LL25ppm> T230SF0Wxxxx.tar * xxxx is version.	SYSTEM FIRMWARE (OS Data)
Engine firmware	Logic PC board (LGC board)	T210MWW.xxx * xxx is version.	ENGINE FIRMWARE
Scanner firmware	System control PC board (SYS board)	T210SLGWW.xxx * xxx is version.	SCANNER FIRMWARE
System software	SSD / HDD	<20ppm/25ppm: When only SSD is mounted.> T210HD0Wxxxx.tar <20ppm/25ppm: When HDD is mounted.> T569HD0Wxxxx.tar <LL20ppm/LL25ppm> T230HD0Wxxxx.tar * xxxx is version.	SYSTEM SOFTWARE (HD Data)

### Option

Firmware	Stored	Data file name	Display
RADF firmware	DLG board (MR-3024)	H546DFWW.0xxx * xxx is version.	RADF FIRMWARE
PFC firmware	PFC board (GH-1080)	T210FWW.xxx * xxx is version.	PFC FIRMWARE
Punch firmware (MJ-6008)	Punch control PC board (HP)	PUN6008T.xxx * xxx is version.	PUNCH FIRMWARE
Finisher firmware (MJ-1036)	Finisher control PC board	FIN1036T.xxx * xxx is version.	FINISHER FIRMWARE
Finisher firmware (MJ-1037)	Finisher control PC board	FIN1037T.xxx * xxx is version.	FINISHER FIRMWARE

Store the data file for updating in the model specific folder. This configuration is an example. The number of files differs depending on the installed option.

20ppm/25ppm, SSD only

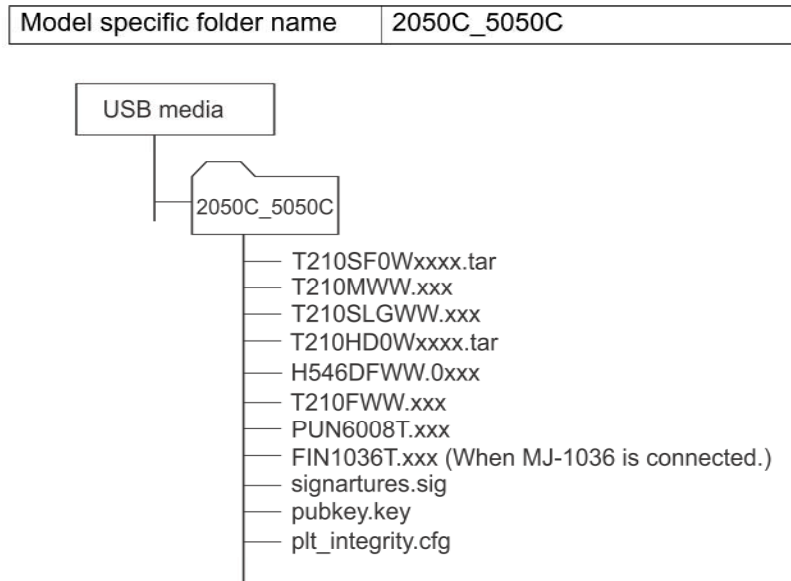


Fig.11-4

20ppm/25ppm, When HDD is mounted

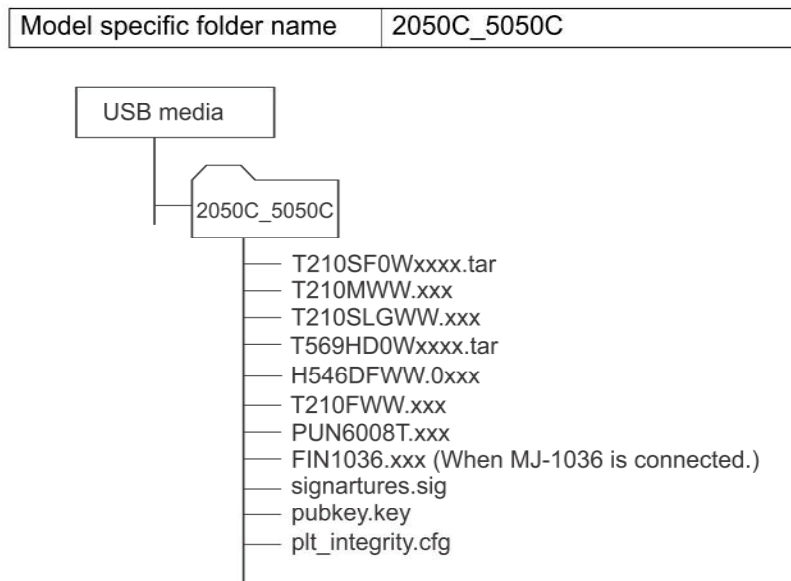
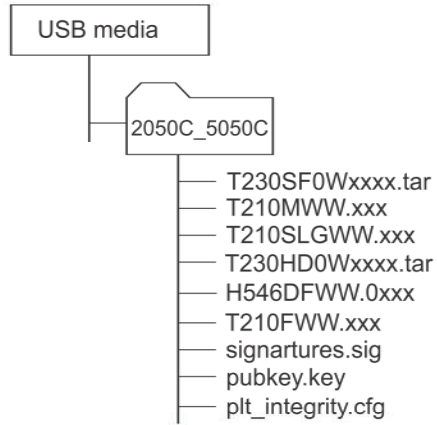


Fig.11-5

Model specific folder name	2050C_5050C
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**Fig.11-6**

**Notes:**

- Since the date and time set in the equipment are recorded in the firmware update log, make sure that they are correct before updating the firmware.
- Never change the model specific folder name, since it is used for identifying the data file when the data files used for updating multiple models are stored in the USB device.

**Important:**

- Only the USB devices which meet the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
  - A combination USB device with a flash memory (to be connected directly to the USB port) and its capacity is 1GB or more.
  - Operation of the USB device used for updating has been confirmed at the input check of this equipment (Test mode 03). (📖 P. 5-8 "5.3 Input check (Test mode 03)")
  - USB devices which comply with the following standards regulated by USB-IF (USB Implementers Forum)
    - Class number: 8 (=08h) (Mass-storage class)
    - Sub-class number: 6 (=06h) (SCSI transfer command set)
    - Protocol number: 80 (=50h) (Bulk-Only)
- \* Most common USB devices comply with the specification above and can be used for updating. However, the operation in all the Multi Functional Digital Color Systems and Multi Functional Digital Systems is not necessarily guaranteed since the most of these devices are developed based on use in a PC environment (Windows or Macintosh). Therefore, check thoroughly that the device is operational in the equipment for which the updating will be performed when purchasing it.
- The USB devices complying with USB2.0 can be used for updating.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk), since it is never guaranteed.
- It is possible to store the model specific update program and the data file for updating directly in the root directory when you store the updating data file for one specific model in the USB device. However, if the model specific folder for the same model as that of the data file stored in the root directory already exists, this will have priority.

## 11.1.1 System firmware / Engine firmware / Scanner firmware / System software / RADF firmware / PFC firmware / Punch firmware / Finisher firmware

### Important:

- The file system of USB device should be formatted in the FAT or FAT32 format. Be careful since the devices formatted in NTFS or other format will not be able to be operated. The file system can be confirmed on the device properties in applications such as Explorer of Windows.
- Never shut down the equipment during the update. Firmware data and the following option data (if installed) could be damaged and may not be able to be operated properly.
  - Data Overwrite Enabler (GP-1070)
  - Meta Scan Enabler (GS-1010)
  - External Interface Enabler (GS-1020)
  - IPSec Enabler (GP-1080)
  - Hardcopy Security kit (GP-1190A)

### [A] Update procedure

- (1) Connect the USB device to the PC and write the model specific folder in which the data file is stored.  
Store the data file for updating in the model specific folder.
- (2) Press the [ON/OFF] button to shut down the equipment.
- (3) Connect the USB device [1] to the USB port [2] on the right upper cover.

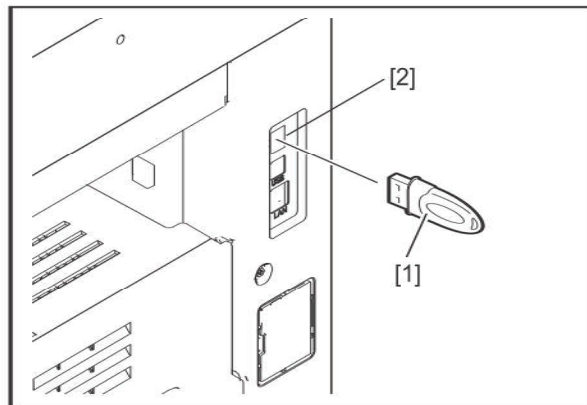


Fig.11-7

- (4) Press the [ON/OFF] button while simultaneously holding down the [4] and [9] buttons.  
Data in the USB device are checked and the checking status is displayed on the screen.
- (5) Enter the password, and then press the [OK] button.  
(If the password is not set for Service, press the [OK] button without entering anything.)

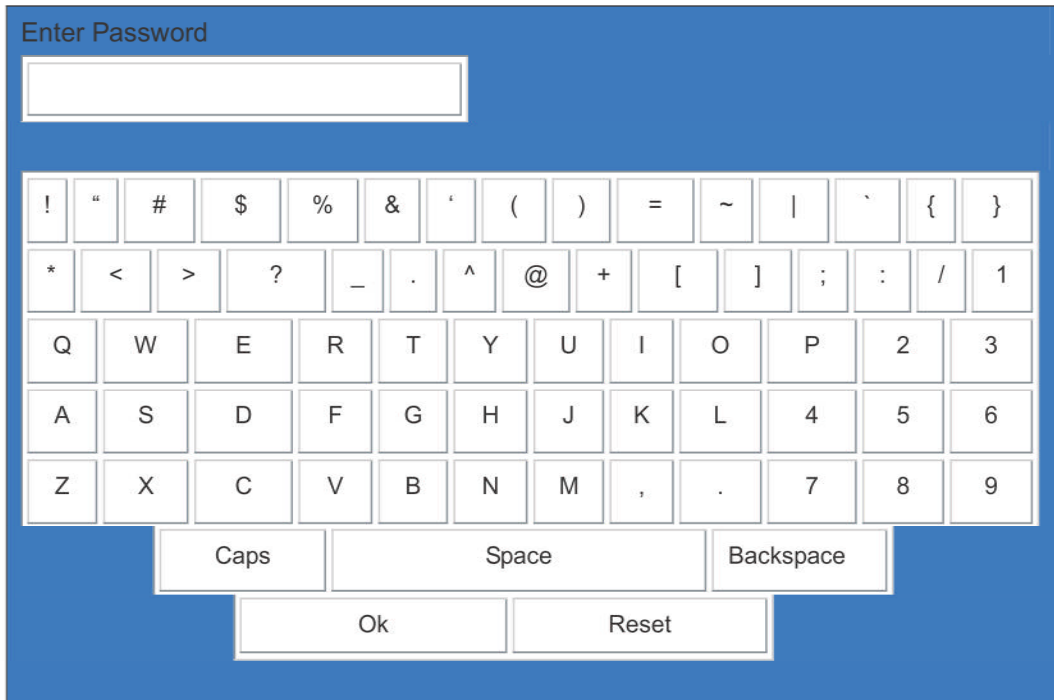


Fig.11-8

The screen for selecting items to be updated is displayed after approx. 3 minutes.  
On this screen, the current firmware version of this equipment and the firmware version of data to be updated are displayed.

Firmware Update Mode	System Firmware Version: x.x.x.x	
	Update Mode : USB Update	
Update Status	Updater Version	Installed Version
1. SYSTEM FIRMWARE(OS Data)	xxxxxxxxxxx	xxxxxxxxxxx
2. ENGINE FIRMWARE	xxxxxxx.xxx	xxxxxxx.xxx
3. SCANNER FIRMWARE	xxxxxxxxxxx	xxxxxxxxxxx
4. SYSTEM SOFTWARE(HD Data)	xxxxxxxxxxx	xxxxxxxxxxx
* FILE SYSTEM SOFTWARE	xxxxxxxxxxx	xxxxxxxxxxx
* APPLICATION SOFTWARE	xxxxxxxxxxx	xxxxxxxxxxx
5. RADF FIRMWARE	xxxxxxxxxxx	xxxxxxxxxxx
6. PFC FIRMWARE	xxxxxxx.xxx	xxxxxxx.xxx
7. PUNCH FIRMWARE		
8. SADDLE FIRMWARE		
9. FINISHER FIRMWARE		

Fig.11-9

**Notes:**

- The display of items on this screen varies depending on the types of data written on the USB device. Each item is displayed only when each data file is written on the USB device in the following conditions.

Item	Condition
1. SYSTEM FIRMWARE (OS Data)	<20ppm/25ppm: When only SSD is mounted.> T210SF0Wxxxx.tar is written. <20ppm/25ppm: When HDD is mounted.> T210SF0Wxxxx.tar is written. <LL20ppm/LL25ppm> T230SF0Wxxxx.tar is written. (xxxx is version.)
2. ENGINE FIRMWARE	T210MWW.xxx is written. (xxx is version.)
3. SCANNER FIRMWARE	T210SLGWW.xxx is written. (xxx is version.)
4. SYSTEM SOFTWARE (HD Data)	<20ppm/25ppm: When only SSD is mounted.> T210HD0Wxxxx.tar is written. <20ppm/25ppm: When HDD is mounted.> T569HD0Wxxxx.tar is written. <LL20ppm/LL25ppm> T230HD0Wxxxx.tar is written. (xxxx is version.)
5. RADF FIRMWARE	H546DFWW.0xxx is written. (When MR-3024 is connected) * xxx is version.
6. PFC FIRMWARE	T210FWW.xxx is written. (When GH-1080 is connected) * xxx is version.
7. PUNCH FIRMWARE	PUN6008T.xxx is written. (When MJ-6008 is connected.) * xxx is version.
8. SADDLE FIRMWARE	This item is unused.
9. FINISHER FIRMWARE	FIN1036T.xxx is written. (When MJ-1036 is connected.) FIN1037T.xxx is written. (When MJ-1037 is connected.) * xxx is version.

- If the USB device is not recognized properly, “USB device Not detected” message is displayed. In this case, disconnect the USB device and connect again within 3 minutes, or shut down the equipment and connect the device properly. Then repeat the procedure from (4).
- If any of the error messages below is displayed, confirm if the data file in the USB device is correct. Then repeat the procedure from (4).

Error number	Error message	Cause
01	Error Loadmodule	Module loading failed.
02	Machine Model Get Error	Model information was not downloaded.
03	Copy Data with valid signature in USB Storage	Checking of data file failed.
04	Other models ROMDATA TXXXXXXXXX * The version name comes at “xxxx.xxx.x”.	Master data of other model are stored.
05	Copy Signature File in USB Storage	Data files are not stored in the USB device.



Error number	Error message	Cause
06	Patch and Normal package in one folder of USB Storage	When both the system and patch update packages are in the USB device

- (6) Select the item with the digital keys.  
 “\*” is displayed next to the selected item. Display or delete the “\*” by pressing the number of the item.

Item	Remarks
1. SYSTEM FIRMWARE(OS Data)	Updating System firmware
2. ENGINE FIRMWARE	Updating Engine firmware
3. SCANNER FIRMWARE	Updating Scanner firmware
4. SYSTEM SOFTWARE (HD Data)	Updating System software
5. RADF FIRMWARE	Updating RADF firmware
6. PFC FIRMWARE	Updating PFC firmware
7. PUNCH FIRMWARE	Updating Punch firmware
8. SADDLE FIRMWARE	Updating Saddle firmware (Not used)
9. FINISHER FIRMWARE	Updating Finisher firmware

- (7) Press the [START] button.  
 Updating starts and the processing status is displayed on the LCD screen.

Status display during update	Status display when update is completed
SYSTEM FIRMWARE(OS Data) update in progress	SYSTEM FIRMWARE(OS Data) Completed
ENGINE FIRMWARE update in progress	ENGINE FIRMWARE Completed
SCANNER FIRMWARE update in progress	SCANNER FIRMWARE Completed
SYSTEM SOFTWARE (HD Data) update in progress	SYSTEM SOFTWARE (HD Data) Completed
RADF FIRMWARE update in progress	RADF FIRMWARE Completed
PFC FIRMWARE update in progress	PFC FIRMWARE Completed
PUNCH FIRMWARE update in progress	PUNCH FIRMWARE Completed
FINISHER FIRMWARE update in progress	FINISHER FIRMWARE Completed

- (8) “Update successfully completed Restart the MFP” is displayed at the bottom of the LCD screen after the updating is completed properly.

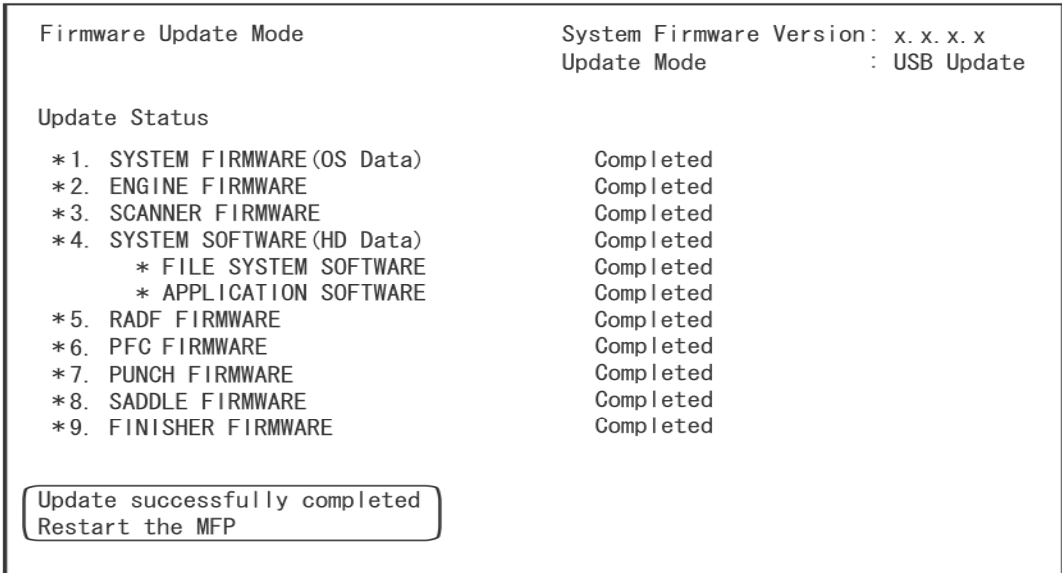


Fig.11-10

**Notes:**

- "Update Failed." is displayed at the bottom of the LCD screen when the updating is not completed properly. "Failed" appears next to the failed item on the status display. Even though an update fails, do not turn the power OFF until other updates are finished. If "Update Failed" appears at the bottom of the screen, turn OFF the power and then check the following items. After confirming and clearing the problems, restart updating from the beginning.
  - Does the USB device meet the conditions to be used for updating?
  - Is the data file written properly on the USB device?
  - Is the USB device installed properly?
  - Do the USB device and equipment operate properly?
- When an system firmware (OS Data) update error or system software (HD Data) update error occurs, "Update Failed" or "Failed" appears on the screen and the error number appears next to the message.  
For details of each error, refer to the following tables.

<b>System firmware update Error</b>	
<b>Error number</b>	<b>Error content</b>
O01	FROM writing failed
O02	FROM verification error
O03	File operation error
O04	SRAM flag set error
O05	Electronic key data backup error
O06	Device error

<b>System software update Error</b>	
<b>Error number</b>	<b>Error content</b>
H01	File creation error
H02	File decompression error (Out of free disk space on the HDD/SSD at file extraction)
H03	Partition mount error
H00	Other errors

- When an Engine firmware update error, Scanner firmware update error, RADF firmware update error, Punch firmware update error, Finisher firmware update error or PFC firmware update error occurs, "Update Failed" or "Failed" appears on the screen and the error number and error message appear next to the message. For details of each error, refer to the following tables.

<b>Engine firmware update Error</b>		
<b>Error number</b>	<b>Error message</b>	<b>Error content</b>
M01	Time out (When the download is requested)	Communication timeout (When the download is requested)
M02	Time out (When the download is written)	Communication timeout (When the download is written)
M03	Time out (When the download is finished)	Communication timeout (When the download is finished)
M04	Reception failed (When the download is requested)	Downloading request was denied. (When the download is requested)
M05	Deletion error (When the download is written)	Deletion error (When the download is written)
M06	Writing error (When the download is written)	Writing error (When the download is written)
M07	Checksum error (When the download is finished)	Checksum error (When the download is finished)
M08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
M09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
M10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
M00	Other error	Other error

<b>Scanner firmware update Error</b>		
<b>Error number</b>	<b>Error message</b>	<b>Error content</b>
S01	Time out (When the download is requested)	Communication timeout (When the download is requested)
S02	Time out (When the download is written)	Communication timeout (When the download is written)
S03	Time out (When the download is finished)	Communication timeout (When the download is finished)
S05	Deletion error (When the download is written)	Deletion error (When the download is written)
S06	Writing error (When the download is written)	Writing error (When the download is written)
S08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
S09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
S10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
S00	Other error	Other error

RADF firmware update Error		
Error number	Error message	Error content
R01	Time out (When the download is requested)	Communication timeout (When the download is requested)
R02	Time out (When the download is written)	Communication timeout (When the download is written)
R03	Time out (When the download is finished)	Communication timeout (When the download is finished)
R05	Deletion error (When the download is written)	Deletion error (When the download is written)
R06	Writing error (When the download is written)	Writing error (When the download is written)
R08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
R09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
R10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
R21	RADF Uninstallation	RADF not installed
R23	RADF Firmware model mismatch	RADF ROM for different model data connected
R00	Other error	Other error

PFC firmware update Error		
Error number	Error message	Error content
F01	Time out (When the download is requested)	Communication timeout (When the download is requested)
F02	Time out (When the download is written)	Communication timeout (When the download is written)
F03	Time out (When the download is finished)	Communication timeout (When the download is finished)
F04	Reception failed (When the download is requested)	Downloading request was denied. (When the download is requested)
F05	Deletion error (When the download is written)	Deletion error (When the download is written)
F06	Writing error (When the download is written)	Writing error (When the download is written)
F07	Checksum error (When the download is finished)	Checksum error (When the download is finished)
F08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
F09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
F10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
F00	Other error	Other error

Punch firmware update Error		
Error number	Error message	Error content
U01	Time out (When the download is requested)	Communication timeout (When the download is requested)

Punch firmware update Error		
Error number	Error message	Error content
U02	Time out (When the download is written)	Communication timeout (When the download is written)
U03	Time out (When the download is finished)	Communication timeout (When the download is finished)
U04	Reception failed (When the download is requested)	Downloading request was denied. (When the download is requested)
U05	Deletion error (When the download is written)	Deletion error (When the download is written)
U06	Writing error (When the download is written)	Writing error (When the download is written)
U07	Checksum error (When the download is finished)	Checksum error (When the download is finished)
U08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
U09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
U10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
U00	Other error	Other error

Finisher firmware update Error		
Error number	Error message	Error content
F01	Time out (When the download is requested)	Communication timeout (When the download is requested)
F02	Time out (When the download is written)	Communication timeout (When the download is written)
F03	Time out (When the download is finished)	Communication timeout (When the download is finished)
F04	Reception failed (When the download is requested)	Downloading request was denied. (When the download is requested)
F05	Deletion error (When the download is written)	Deletion error (When the download is written)
F06	Writing error (When the download is written)	Writing error (When the download is written)
F07	Checksum error (When the download is finished)	Checksum error (When the download is finished)
F08	Reception status code abnormality (When the download is requested)	Reception status code abnormality (When the download is requested)
F09	Reception status code abnormality (When the download is written)	Reception status code abnormality (When the download is written)
F10	Reception status code abnormality (When the download is finished)	Reception status code abnormality (When the download is finished)
F00	Other error	Other error

- (9) Press the [ON/OFF] button to shut down the equipment, and then remove the USB device.
- (10) Perform the initialization of the updating data.
- Press the [ON/OFF] button while simultaneously holding down the [0] and [8] buttons.
  - Key in "9030", and then press the [START] button.
  - Press the [INITIALIZE] button.

#### [B] Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data were overwritten properly.

### **[C] Adjustment**

Perform the adjustment of the equipment.

- Performing Image Quality Control (05-2742):  
📖 P. 6-4 "6.1.3 Performing Image Quality Control"
- Adjustment of Color Registration Control (05-4719):  
📖 P. 6-6 "6.1.4 Adjustment of Color Registration Control"
- Automatic gamma adjustment <PPC> (05-7869) (using [4][FAX] test pattern):  
📖 P. 6-28 "6.2.1 Automatic gamma adjustment"
- Automatic gamma adjustment < PRT > (05-8008) (using [70][FAX] test pattern):  
📖 P. 6-51 "6.3.1 Automatic gamma adjustment"

### [D] Display during the update

Update is performed in parallel as shown in the transition diagram below.

