

The diagnosis and recovery tool for bootup issue.

When a problem that MFP does not boot up occurs, try "Diagnosis / Recovery Tool" before replacing parts.

History

Date	Description
Apr-2023	The tool has new functions below. <ul style="list-style-type: none">– SSD defects that could not be detected before can now be detected.– Keep the counter information when replacing the CPU board on the machine with encryption enabled.
Sep-2025	<p>A function to initialize the storage lock password has been added as a recovery measure for the issue where the password setting screen appears under the following conditions:</p> <p>Case 1 : Downgrade to an older firmware version than Gxx-S7 using a USB memory stick on a machine with firmware version Gxx-S7 or later.</p> <p>Case 2 : Replace the CPU board on machines with FW Gxx-S7 or later.</p>

1. Overview of the tool

- Performs diagnostic analysis on defective CPU and storage (MicroSD) boards when issues such as the
- MFP failing to boot—indicated by a 25% or 50% progress bar or a black screen—are observed.
- Try to recovery in case of storage (MicroSD) failure
- To disable the encryption setting in CPU board when the storage board failure occurs on the machine with encryption enabled.

Supplement:

When the storage board is replaced on the machine with encryption is enabled, encryption setting in CPU board must be disabled. But it normally could not be disabled so CPU board must be replaced. With this tool, the setting can be disabled, and CPU board replacement is not necessary.

- To recover data in the storage board when it is diagnosed as Read-only status and needs to be replaced. (This function will not work on MicroSD.)
=> See "Data_Recovery_Procedure.xlsx" for procedure.
- Keep the counter information when replacing the CPU board on the machine with encryption enabled.
- Initialize the storage lock password

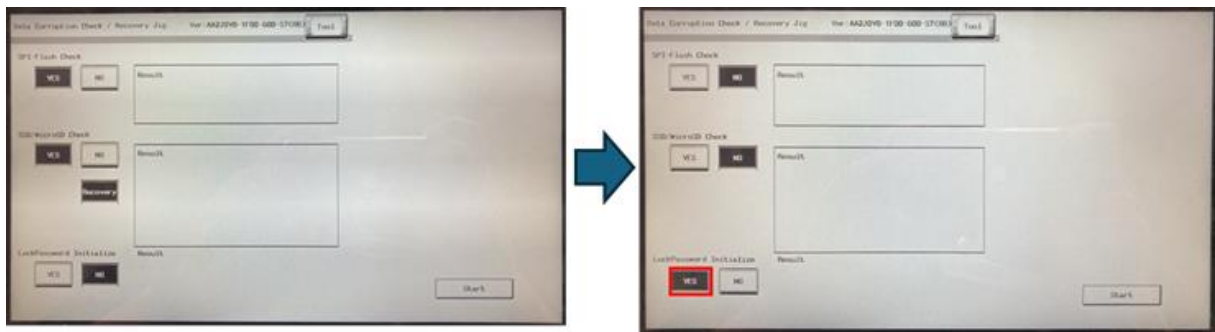
2. Model and Tool

Model	Data
C450i/C360i/C300i/C250i, C550i without Memory board C551i/C451i/C361i/C301i/C251i	AA2J0Y0-F232-GXX-44.exe
C650i/C550i C651i	AA7N0Y0-F232-GXX-29.exe
C750i C751i	ACKN0Y0-F232-GXX-28.exe
C4050i/C3350i C4051i/C3351i	A93E0Y0-F232-GXX-38.exe
C4000i/C3300i/C3320i C4001i/C3301i/C3321i	AAJT0Y0-F232-GXX-33.exe
450i/360i/300i, 650i without Memory Board, 550i without Memory Board 651i/551i/451i/361i/301i	AC770Y0-F232-GXX-45.exe
650i/550i	AC740Y0-F232-GXX-42.exe
750i 751i	ACV70Y0-F232-GXX-28.exe
950i/850i	ACVX0Y0-F232-GXX-04.exe
4750i/4050i 4751i/4051i	ACT90Y0-F232-GXX-23.exe
4700i 4701i	ACTA0Y0-F232-GXX-19.exe

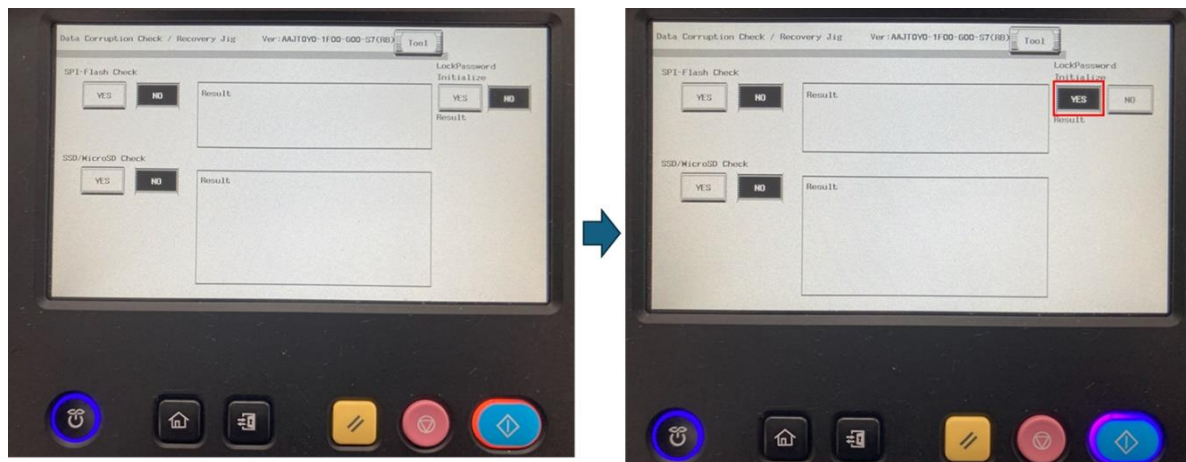
- When initializing the storage lock password

3. Procedure

1. Uncompress the tool file and copy the extracted tool data folder, [FW***], into the root directory of the USB memory
2. Turn OFF the main power switch.
3. Connect the USB memory containing the firmware into the USB port on the right side of the control panel.
4. Turn the main power switch ON while pressing the [Stop] key.
5. The tool screen is displayed in approx. 90 seconds and select "Yes" for lockPassword Initialize.
[For a 10-inch panel]



[For an 8-inch panel]



6. Press the [Start] button and wait for the results to be displayed.
7. When Result OK is displayed, turn OFF the main power, remove the USB memory, and the process is complete.



• When diagnosing a problem where the MFP does not boot up

3. Diagnosis procedure

8. Uncompress the tool file and copy the extracted tool data folder, [FW****], into the root directory of the USB memory
9. Turn OFF the main power switch.
10. Connect the USB memory containing the firmware into the USB port on the right side of the control panel.
11. Turn the main power switch ON while pressing the [Stop] key.
12. The tool screen is displayed in approx. 90 seconds and press the [Start] with default settings.

The screenshot shows a software window titled "Data Corruption Check / Recovery Jig". Inside the window, there are two main sections for data checks. The first section, "SPI-Flash check", has a "YES" button (which is highlighted in black), a "NO" button, and a "Result" text box. The second section, "SSD/MicroSD check", has a "YES" button (highlighted in black), a "NO" button, a "Recovery" button (highlighted in black), and a "Result" text box. At the bottom right of the window, there is a "Start" button.

[SPI-Flash check]: Conducts diagnosis for the data in SPI-Flash of CPU board.

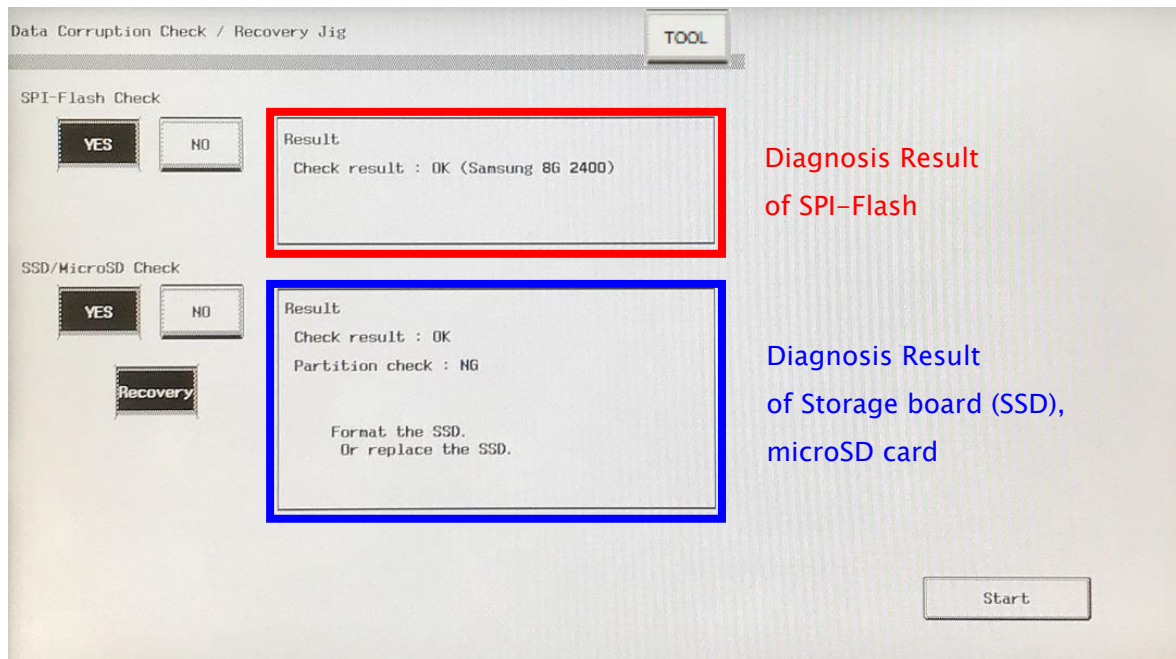
[SSD/MicroSD check]: Conducts diagnosis for the data and the partition in SSD/MicroSD

[Recovery]: Recovery the data in case of SSD/MicroSD data failure

- If MFP boots up without tool screen, this could be caused by USB memory or tool data failure. Replace usb memory to another one or re-write too data.
- If the tool does not boot up, this could be caused by CPU board failure. Replace CPU board to new one.

4. The diagnosis results

The diagnosis result is displayed as [OK], [NG], or [Error] with some messages in “Result”
Conduct troubleshooting according to the message.



<Diagnosis Result>

SPI-Flash Check

Result

Check result: OK (Manufacturer Info)

Message: <Blank>

-> No issues are detected in SPI-Flash.

Result

Check result: NG

Message: Replace the CPU board.

-> Replace CPU board because SPI-Flash may have some failure.

Result

Check result: NG

Message : Rewrite the jig, and if the problem persists, replace the USB memory.

-> This tool may not be working properly.
Replace USB flash memory and rewrite this tool if the problem persists.

Storage board (SSD), microSD card

The following diagnosis results are displayed for each item according to the diagnosis / recovery results.

Check Result: OK

Message: <Blank>

-> No issues are detected in Storage board (SSD)/microSD card.

Check Result: Error

Message : Rewrite the jig, and if the problem persists, replace the USB memory.

-> This tool may not be working properly.

Replace USB flash memory and rewrite this tool if the problem persists.

Check result: NG

Message : Replace [SSD/uSD], and if the problem persists, replace [CPU board].

-> Replace Storage board (SSD)/microSD card.

If the problem persists, replace CPU board.

Partition check: OK

Message: <Blank>

-> No issues are detected in the partition of Storage board (SSD)/microSD card.

Partition check: NG

Message: Format the SSD. Or replace the SSD.

-> Format or replace Storage board (SSD)/microSD card.

Partition check : Failed

Message : Replace [SSD/uSD], and if the problem persists, replace [CPU board].

-> Failed Partition check.

Replace Storage board (SSD)/microSD card.

If the problem persists, replace CPU board.

Recovery check: Complete

Message: <Blank>

-> Recovery Check : Complete

Reboot MFP and check the normal operation.

Recovery check: Failed

Message: Replace the SSD.

-> Recovery Check: Failed

Replace storage board (SSD) or microSD card.

*Storage board (SSD) is diagnosed as Read-only status.

The buttons A and B will be displayed to recover data stored in SSD.

Data Corruption Check / Recovery Jig

TOOL

SPI-Flash check

YES

NO

Result

SSD/MicroSD check

YES

NO

Result: NG

SSD is read only.

Please take action A or B.

A. Replace the SSD without data salvage.

Press [A] to clear the encryption key.

A

B

Start

See “Data_Recovery_Procedure.xlsx” for procedure to recover data.

*CPU board failure is detected on a machine with encryption enabled.

Replace the CPU board according to the following procedure.

1. The following screen is displayed when CPU board replacement is required on a machine with encryption enabled.

[illegible]

2. Press [Backup] button.

Data in SPI-Flash is backed up to USB stick.

It is finished when the following screen is displayed. Turn off the main SW.

Data Corruption Check / Recovery Jig

SPI-Flash check

YES

NO

Result

Check result : NG

Data Backup/Restore : DataBackup-Completed.

Next step is MainSW[Off] ->

replace [CPU board]->[On]->Restart JIG

SSD/MicroSD check

YES

NO

Recovery

Result

Check result : XXXXXXXXXXXX

Recovery result : XXXXXXXXXXXX

Partition check : XXXXXXXXXXXX

XX

XX

XX

Start

3. Replace the CPU board to new one.

4. Connect the USB memory containing the tool and backed up data into the USB port on the right side of the control panel and turn on the main SW while pressing [Stop] key to boot up the recovery tool.

5. Press [Restore] button.

Copy the backed-up data into new SSD.

Data Corruption Check / Recovery Jig

SPI-Flash check

Result

SPI-Flash backup data detection.
Press the [Restore] key to restore.

SSD/MicroSD check

Result

6. Turn OFF the main SW and remove the USB stick after [DataRestore-Completed.] screen is displayed.

Data Corruption Check / Recovery Jig

SPI-Flash check

Result

Data Backup/Restore : DataRestore-Completed.

SSD/MicroSD check

Result