Subject: "Internal Error: Recovery HDD" Error Message Displayed

Model	Serial Number
MKS-8010A	10010
MKS-8010A	10019-
MKS-8010A/T	10001-
MKS-9011A	10001-
MKS-9012A	10001-

1. Symptom

The following message "Internal Error: Recovery HDD" is displayed on the Menu Panel (MKS-8011) when starting up the system.

Example of the Symptom

Internal Error: Recovery HDD
The recovery data partition of hard disk is da maged, and all data is lost. The data needs to be recovered. Please execute Restore Data on Page 9999.
ОК
Fig. 1

2. Description

The message described above is displayed on the Menu Panel screen (MKS-8011) of MKS-8010A, MKS-9011A, and MKS-9012A

* This error message is NOT displayed on the menu panel of MKS-8010 (w/o A), MKS-9011 (w/o A), MKS-9012 (w/o A), or MKS-8010A (no target serial number of this technical memo).

The followings cause this symptom.

- 1) In case of replacing HDD by new one
- In case the recovery data (*1) in HDD is damaged Refer to the supplement 1 for detailed information of the recovery data.

Reset the recovery data by following this technical memo when the error message is displayed.

*1: Recovery data is a spare program in HDD. This spare program is used to start up system when the program stored in the nonvolatile memory to start up system normally is damaged. Therefore the system can be started and operated with the nonvolatile memory even without the recovery data, or even if it is damaged. But the warning message above is displayed whenever starting up system.

3. Tools and Repair Parts Required

- Empty Memory Stick to transfer data or Compact Flash (*2)

• The devices above are formatted with the target set, and have to be with over 64MB.

*2:

CCP-8000 series: With MKS-8025, use Compact Flash set. CCP-8000 series: With MKS-8025MS, use Memory Stick set. CCP-9000 series: With MKS-9011A and MKS-9012A, use Memory Stick set.

4. Countermeasure

Please download the recovery data on the specified site to the Memory Stick or Compact Flash. Unzip the RecoveryData.zip file and place the included files in the root directory of the Memory Stick or Compact Flash. The following files are included in the .Zip file:

RecoveryData/mks8010a-2.0.0-hdc4.tar.gz/ RecoveryData/mks8010a-2.0.0-hdc4_patches.tar.gz

(How to Install to the Set)

Touch the "OK" button on the screen of Fig.1 to cancel the error pop-up display. And press the "Page" button on the upper-left corner of the screen to input the page "9999". Then the screen shown in Fig.2 is displayed.



Attach the Memory Stick or Compact Flash saving the recovery data to the set, and press the "Restore Data on HDD" button on the right middle of the screen to display the following figure (Fig.3).

!	Restore Data on HDD
	This operation will copy recovery data from USB storage device to the HDD.
	Continue?
	Yes No
	Fig. 3

Click the "Yes" button to start installing the recovery data.

The following figure (Fig.4) is displayed when the installation is completed.

i	Restore Data
	Success!!
	ок
	Fig. 4

5. Confirmation

Confirm there is no warning display on the screen after turning off the power and then back on

Supplement 1. Recovery Data

The target sets of this technical memo have dual OS and application data in the hard disk. Therefore even if the memory saving program is damaged, the system can be started up. Recovery data is the OS or the application program saved in HDD to start up the system even if the memory is damaged.

1. How to Start up the System Normally The system is started up with OS or Application Program saved in the Flash Memory (IC2203) on MPU-302B board.



Fig.1: Normal Booting

2. How to Start up the System with the Recovery Data

When the system cannot be started up with the program saved in the Flash Memory on the board for some reason, start up the system with the recovery data saved in HDD of MPU board as shown in Fig. 2.

When the system is started up in this mode, the Flash Memory on the board is fixed automatically.



Fig.2: Booting with Recovery Data

3. How to Update the Recovery Data

When the program saved in hard disk is damaged, warning sign is displayed, but it does not affect the set booting operation. In this case, update the recovery data by Memory Stick or Compact Flash. This technical memo shows the update procedure.



Fig.3: Recovery Data Updating