Instructions

Tektronix

HFS 9000 Series
Stimulus Card Removal and Installation
063-0893-00

Warning
The servicing instructions are for use by qualified personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to the Safety Summary prior to performing service.

Please check for change information at the rear of this manual.

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**Instrument Serial Numbers**

Each instrument manufactured by Tektronix has a serial number on a panel insert or tag, or stamped on the chassis. The first letter in the serial number designates the country of manufacture. The last five digits of the serial number are assigned sequentially and are unique to each instrument. Those manufactured in the United States have six unique digits. The country of manufacture is identified as follows:

- **B010000**  Tektronix, Inc., Beaverton, Oregon, USA
- **E200000**  Tektronix United Kingdom, Ltd., London
- **J300000**  Sony/Tektronix, Japan
- **H700000**  Tektronix Holland, NV, Heerlen, The Netherlands

Instruments manufactured for Tektronix by external vendors outside the United States are assigned a two digit alpha code to identify the country of manufacture (e.g., JP for Japan, HK for Hong Kong, IL for Israel, etc.).

Tektronix, Inc., P.O. Box 500, Beaverton, OR 97077

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Tektronix warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of shipment. If any such product proves defective during this warranty period, Tektronix, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, Customer must notify Tektronix of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by Tektronix, with shipping charges prepaid. Tektronix shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Tektronix service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Tektronix shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than Tektronix representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; or c) to service a product that has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty of servicing the product.

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Removing Cards

To remove a card (CPU, Time Base, Pulse Generator, or Data Time Generator) from your HFS 9000, use the following procedure:

- **Step 1:** Switch off the HFS 9000 and disconnect any cables attached to the card you will remove.

- **Step 2:** If you are removing a card from an HFS 9009, remove the four torx (T-15) screws on the front panel. If you are removing a card from an HFS 9003, remove the two phillips-head screws on the front panel.

- **Step 3:** Carefully pull the front panel away from the mainframe and disconnect the ribbon cable from the CPU board.

- **Step 4:** Loosen the two screws that attach the card you wish to remove to the mainframe. Do not try to remove the screws from the card front panel; they are secured to the front panel with plastic retainers.

- **Step 5:** If you are removing a stimulus card or the time base card, remove the black cable from the card front panel.

![Clock Distribution Cable Location](image)

- **Step 6:** Insert a short, flat-bladed tool into the opening at either end of the card front panel. Carefully pry the board loose and slide the card out of the mainframe.
Installing Cards

To install a card (CPU, Time Base, Pulse Generator, or Data Time Generator) into your HFS 9000, use the following procedure:

☐ **Step 1:** If necessary, remove the front panel as described in *Removing Cards*, performing steps 1 through 3.

☐ **Step 2:** If necessary, remove a card to make room for the new card, performing steps 4 through 6 in *Removing Cards*.

☐ **Step 3:** Carefully slide the board into the empty slot in the mainframe and press firmly to seat the card in the connector on the backplane.

☐ **Step 4:** If you are installing a stimulus card or the time base card, insert the black cable into the card front panel. Make certain that the white dot on the black connector lines up with the black dot on the front panel of the card.

☐ **Step 5:** Tighten the two screws that secure the card to the mainframe.

☐ **Step 6:** Holding the front panel, insert the ribbon cable plug into the connector on the CPU board. Ensure that the red edge of the ribbon cable is positioned toward the Debug Port connector.

☐ **Step 7:** To install the front panel, lift the black cables that run between the cards so that they are above the aluminum shield that extends from the back of the front panel. As you put the front panel in place, ensure that none of the black cables are pinched between the shield on the front panel and the mainframe.

☐ **Step 8:** Reinstall the screws into the front panel.

☐ **Step 9:** Run the calibration procedure as described in the instrument service manual.