

# Varian Field Instruction Sheet

## Sensor Board Replacement for the XGS-600 Gauge Controller

### WARNING



**Disconnect power from the unit before performing any maintenance procedure that requires physically disconnecting any part of the system.**

It is possible to replace sensor boards in the field for repair or to change the unit's configuration to meet new application requirements. Because the slot spacing is different for slots 5 and 6, you must follow the instructions below when installing the sensor boards.

### Board Configuration Rules

- Slots are numbered from left to right as viewed from the front of the XGS-600.
- Option slots 1 through 4 are *Long, High Profile Slots* and can accommodate any board. HFIG boards are *Long, High Profile* boards and can only be installed in slots 1 through 4.
- Option slots 5 and 6 are *Short, Low Profile* slots and can accommodate only convection or IMG boards, with the following restrictions:
  - An IMG board may NOT be installed in slot 5 if any other board is installed in slot 4.
  - An IMG board may NOT be installed in slot 6 if any other board is installed in slot 5.

### WARNING



**Only trained service personnel should attempt this work. Disconnect the XGS-600 mains connection by unplugging the IEC power cord from the back of the unit before removing the unit's cover.**

### CAUTIONS



**Wear an ESD bracelet and observe all appropriate precautions to avoid damage to PCBs.**

**When these boards are assembled certain components are bent over intentionally. Do not straighten them.**

1. Turn off and unplug the line cord (AC mains).
1. Remove the cover by unscrewing the two Philips head screws.
2. If removing an HFIG board, unplug the yellow connector near the front panel. It may require some effort to unplug. Do not pull on the wires, pry the yellow plastic connector instead.
3. Lift the sensor board by the tab at the rear panel (Figure 1: End Guide and HFIG Connector). Once the board is disengaged from the board connector, pull the board out of the end guide.

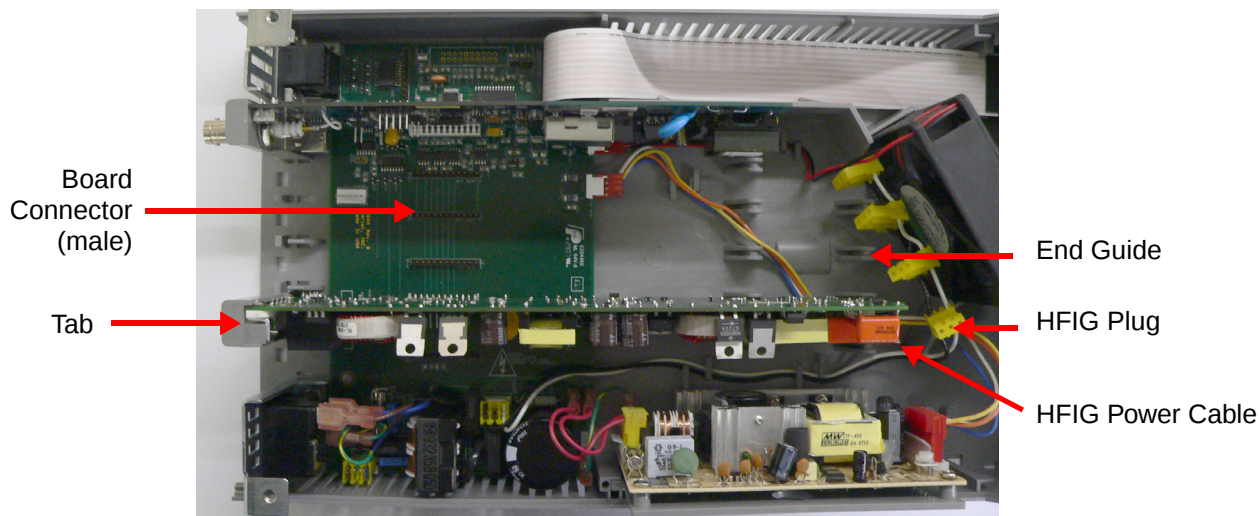
### WARNING



**To ensure safety and proper operation, no slot opening can be left unfilled. Install a filler plate by installing the two hooks into the case bottom and snapping in the foot. Contact Varian if additional fillers are needed.**

4. Install the replacement board:

- a. Place the end of the board into the end guide (Figure 1: End Guide and HFIG Connector).



**Figure 1: End Guide and HFIG Connector**

- b. Guide the board down as straight as possible onto the connector on the main board.
- c. Locate the rear panel portion of the board into its slot, press down the tab and exert gentle pressure until it clicks into place.

**CAUTION**



**Do not force the board down. If too much pressure is required the connector pins are not aligned.**

5. Insert the yellow HFIG plug into the connector (HFIG boards only). This connector is keyed.
6. Inspect the installation to ensure the board is seated properly and not touching any adjacent boards.
7. Replace the covers:
- a. Push the cover straight in under the lip at the XGS front bezel.
- b. Replace the two Philips head screws.
- c. The cover must be flat and fully seated. It may be necessary to adjust the boards and filler plates slightly for the cover to fully engage. The cover should drop on front of the filler plate.
8. Plug the unit back in and turn on the power switch.

**NOTE**



**Any board-specific settings must be reprogrammed. Most Sensor setup and set point user settings stay with the board. If the removed board and used elsewhere, most settings are saved. However, if a new board is installed, you must reprogram the settings.**