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## GIP POWER SUPPLY REPLACEMENT

### 1- REPLACEMENT PROCEDURE

#### 1-1 Tools and Instruments Required

| Item | Description                                 | Part Number    |
|------|---|----------------|
| 1.   | Gradient Interface Processor (GIP) Assembly | FRU# 2169941-2 |
| 2.   | GIP Power Supply Assembly                   | FRU# 2170363   |
| 3.   | Phillips-head Screwdriver                   |                |
| 4.   | Flat-blade Screwdriver                      |                |

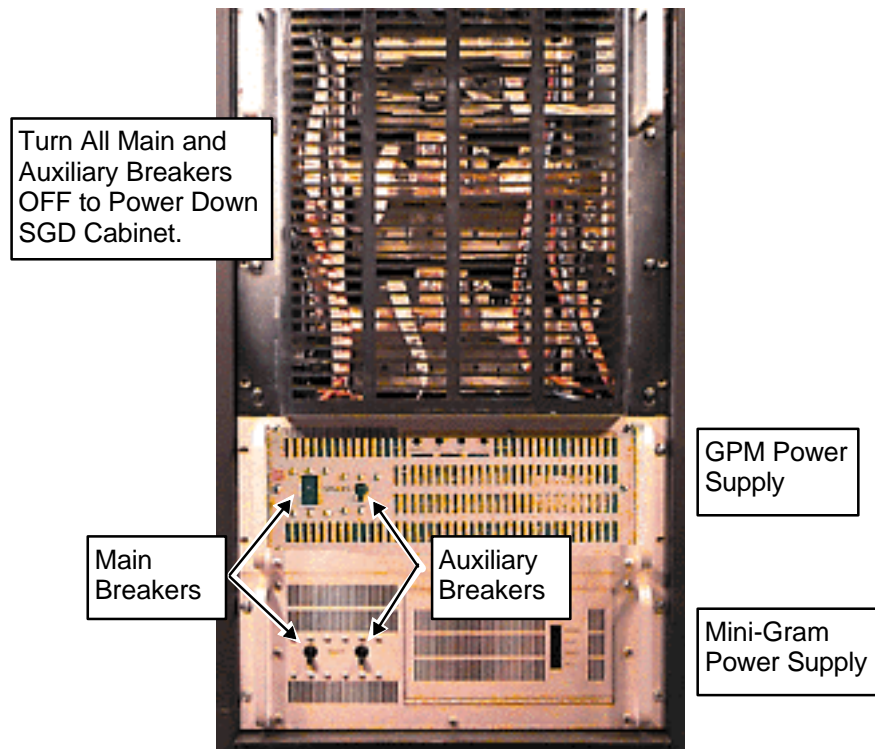
#### 1-2 Preliminary Set Up Procedure



**FATAL ELECTRIC SHOCK HAZARD!! TO PREVENT FATAL ELECTRIC SHOCK, DISCONNECT POWER FROM THE PDU BEFORE YOU PERFORM THE FOLLOWING PROCEDURES. PERFORM LOCKOUT / TAGOUT PROCEDURE PER GE OSHA LOCKOUT / TAGOUT REQUIREMENTS 29 CFR 1910.147. DO THIS BY SECURING THE PDU CIRCUIT BREAKER FOR THE SCALEABLE GRADIENT CABINET.**

## 1-2 Preliminary Setup Procedure (Continued)

1. Power down the SGD Cabinet by turning off the Main Breakers and Auxiliary Breakers on the Front Panel of **both** the Mini-GRAM Power Supply and the Gradient Power Module Power Supply. See Illustration 1-1.



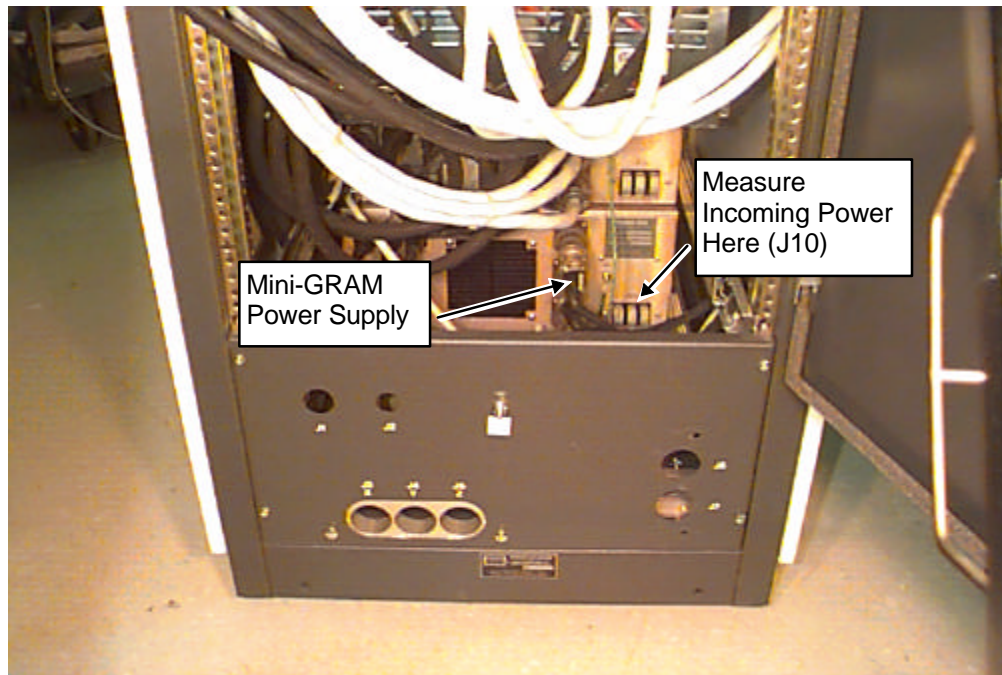
**SGD HI-SLEW CABINET—LOWER HALF (FRONT COVER REMOVED)**  
ILLUSTRATION 1-1

2. Turn off the SGD Cabinet Breaker at the Power Distribution Unit. Lock out the Breaker and tag it.
3. After power to the SGD Cabinet has had sufficient time to dissipate, take a Digital Multimeter and set it to its highest AC voltage range.
4. Verify that all energy has been dissipated by measuring incoming power to all components of the Scaleable Gradient Cabinet by following steps 5 and 6.

## 1-2 Preliminary Setup Procedure (continued)

5. Measure incoming power to the Mini-GRAM Power Supply as follows:

- Place the reference probe (black) on the SGD Cabinet Ground.
- Locate J10. This is the 208V, 3 Phase input to the Mini-GRAM Power Supply.
- Measure voltage at each of three 208 Volt input terminals. The meter should read 0 Volts AC at each of the three measuring points. See Illustration 1-2.

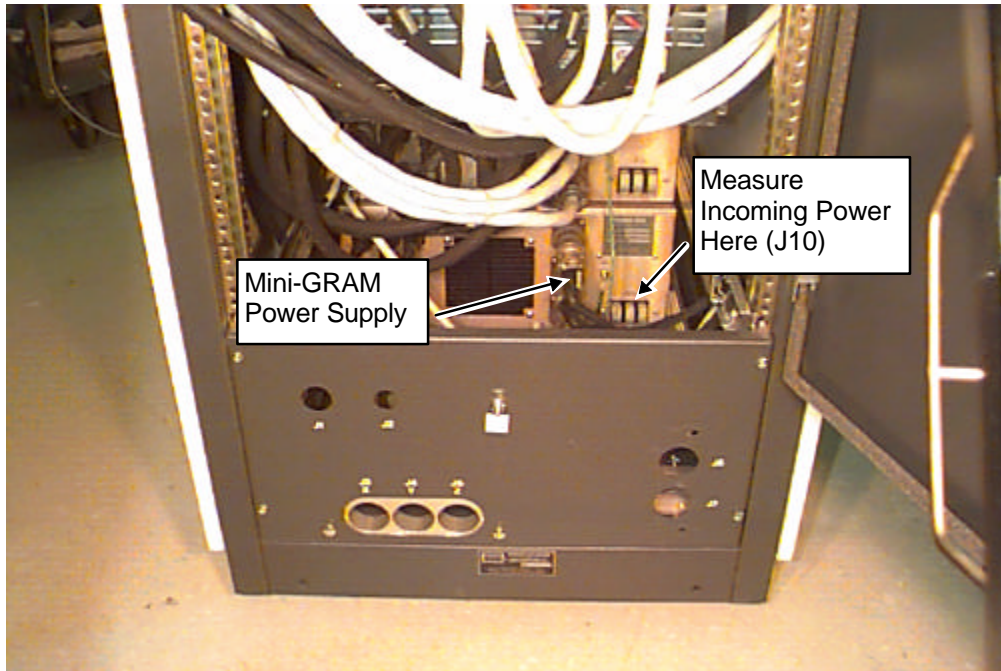


**SGD CABINET—REAR VIEW: INCOMING POWER MEASUREMENT LOCATIONS**  
ILLUSTRATION 1-2

## 1-2 Preliminary Setup Procedure (continued)

6. Measure voltage at the GPM Power Supply as follows:

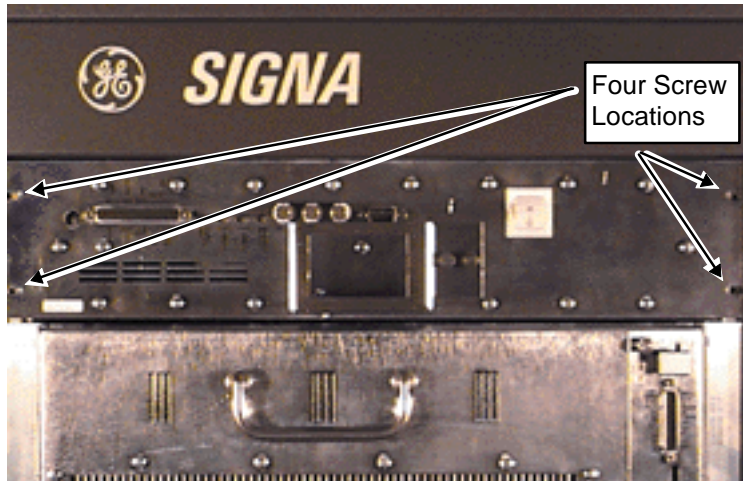
- Place the reference probe (black) on the SGD Cabinet Ground.
- Locate J-10. This is the 208V, 3 Phase input to the GPM Power Supply.
- Place the red probe on each of three 208 Volt input terminals: L1, L2, and L3. The meter should read 0 Volts AC at each of the three measuring points. See Illustration 1-3.



**SGD CABINET—REAR VIEW: INCOMING POWER MEASUREMENT LOCATIONS**  
ILLUSTRATION 1-3

### 1-3 GIP Power Supply Replacement Procedure Steps

1. Remove the Front Cover from the SGD Cabinet.
2. Disconnect all cables from the rear of the GIP module.
3. Remove four (4) Phillips-head screws from the outer corners of the GIP front panel. See Illustration 1-4.



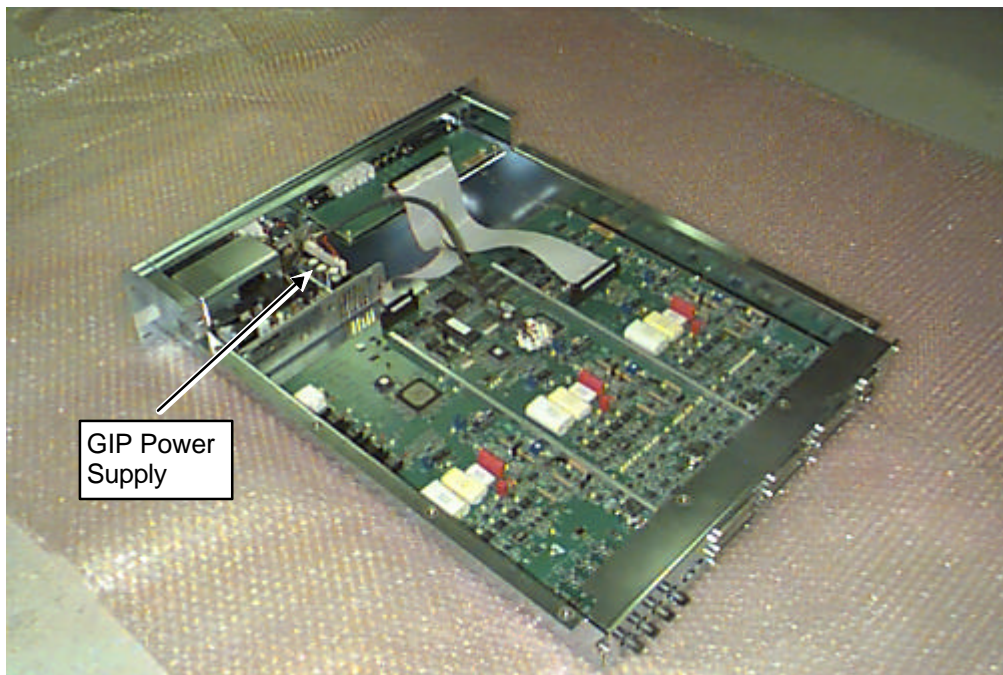
**SGD GIP ASSEMBLY SHOWING SCREW LOCATIONS**

ILLUSTRATION 1-4

4. Pull out the GIP Module just far enough to reach in behind the front panel. Reach in to disconnect the AC cord to the module. It will be on the right-hand side as you face the front of the GIP Module.
5. Remove the GIP Module completely from the cabinet.
6. Loosen the ten (10) captive screws on the GIP Module top cover, and remove the cover.

**1-3 GIP Power Supply Replacement Procedure (continued)**

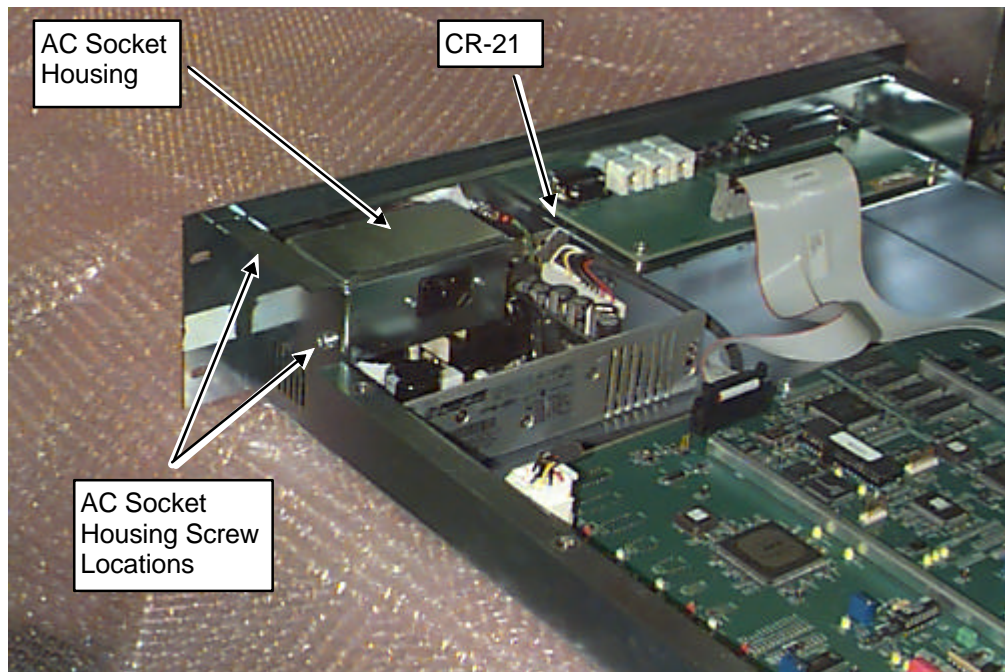
7. Locate the GIP Power Supply within the GIP Module. See Illustration 1-5.



**GIP MODULE (COVER REMOVED) SHOWING POWER SUPPLY LOCATION**  
ILLUSTRATION 1-5

### 1-3 GIP Power Supply Replacement Procedure (continued)

8. Remove the two small Phillips-head screws which secure the AC Power Socket Housing to the power supply enclosure. See Illustration 1-6.



**INSIDE OF GIP MODULE SHOWING POWER SUPPLY ATTACHMENT SCREWS**  
ILLUSTRATION 1-6

9. Use a small flat-blade screwdriver to loosen the plastic locking tabs on the three wire connector from TB-1. TB-1 is located in the corner of the power supply enclosure near to the right side as viewed from the front.
10. Remove the fourteen (14) pin connector from CR 21 on the power supply circuit board. See Illustration 1-6.
11. Carefully lift the GIP Module and set it in a position to remove the four flat Phillips-head screws and washers which secure the GIP Power Supply to the GIP enclosure. Take care to keep track of these washers as you remove the screws.
12. Remove the GIP Power Supply from the GIP enclosure.
13. Reverse the order of these steps to install a GIP Power Supply.

### 1-4 Functional Tests Required

No calibrations required; power up the system and set up for a scan to verify system comes up to Ready.

## REVISION HISTORY

| <b>REV</b> | <b>DATE</b>                 | <b>AUTHOR</b>        | <b>PRIMARY REASONS FOR CHANGE</b>  |
|------------|-----------------------------|----------------------|--|
| A          | Aug 11, 1997<br>Sep 6, 1997 | F. Fiore<br>F. Fiore | Initial draft of document completed<br>Enter original draft in MR template for Microsoft Word documents. |
| B          | Sep 23, 1997                | F. Fiore             | Add Lock out Tag Out   |
| 0          | Oct 3 1997                  | F. Fiore             | Initial Release for SGD production   |
|            |                             |                      |  |
|            |                             |                      |  |