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## 1- OVERVIEW

This procedure applies to Signa OpenSpeed 0.7T Power Cabinet (2224563) and the required steps to remove and replace the RFI Module.

Field replaceable units are listed in Table 1-1:

TABLE 1-1  
**FRU (1) PART LIST**

<b>Manufacturer's Part Number.Revision Number</b>	<b>GEMS Part Number</b>	<b>Item Description</b>
730000.##	2244580	0.7T RF Interface (RFI) Module

### 1-1 Required Tools

- Lock and Tag (for Lock Out Tag Out)
- Digital Multi-meter
- Philips Screwdriver
- Standard Screwdriver

## 2- LOCK OUT TAG OUT

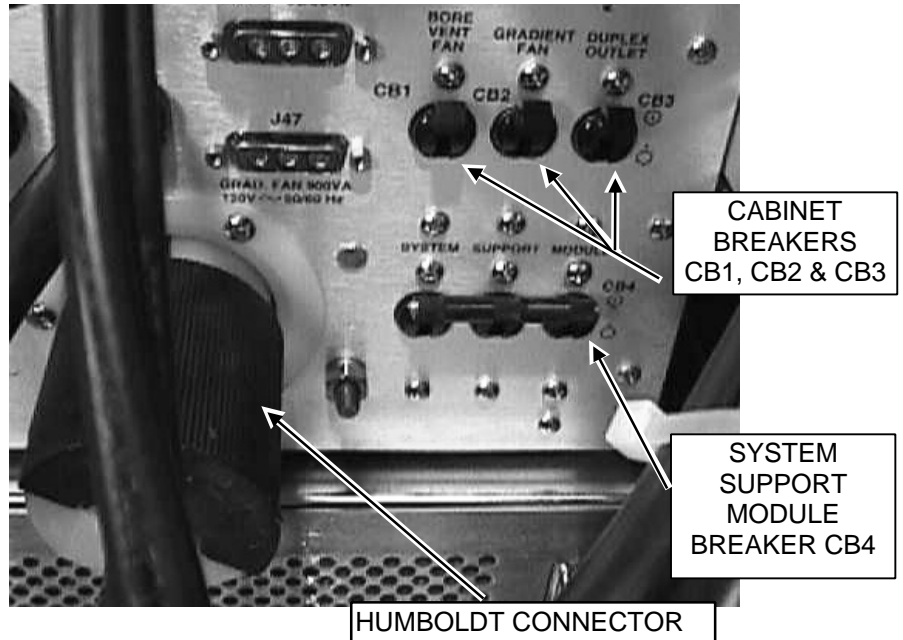


**FATAL ELECTRIC SHOCK HAZARD! TO PREVENT FATAL ELECTRIC SHOCK, DISCONNECT POWER AT THE PDU BEFORE YOU PERFORM THE REMOVAL/REPLACEMENT PROCEDURES. PERFORM LOCKOUT TAGOUT PROCEDURE. DO THIS BY SECURING THE PDU MAIN INPUT CIRCUIT BREAKER.**

1. Bring Signa software down.
2. Remove the front and rear covers from the 0.7T Power Cabinet.
3. Turn OFF the “OC/HOST” circuit breaker at the Power Distribution Unit (PDU).
4. Turn OFF the “SSM” circuit breaker at the Power Distribution Unit (PDU).
5. At the front (left) of the PDU place the “Main Input Circuit Breaker” switch to the OFF position.
6. Lock Out Tag Out the PDUs “MAIN INPUT CIRCUIT BREAKER” press the arrow (light gray inside portion) on the handle and insert the lock and tag).

## 2- LOCK OUT TAG OUT (continued)

7. At the rear of the 0.7T Power Cabinet turn OFF the CB1, CB2, CB3, and CB4 circuit breakers on the rear of the System Support Module (SSM). Remove the humboldt connector (P1) on rear of SSM. See Illustration 2-1.



REAR CABINET CIRCUIT BREAKER LOCATIONS  
ILLUSTRATION 2-1

8. Verify all LEDs are OFF (not illuminated) on front of SSM, and the RFI. Verify all LEDs are OFF (not illuminated) at the rear of the RF Amplifier Power Module.

### 3- REMOVAL/REPLACEMENT OF RFI MODULE FROM 0.7T POWER CABINET

#### 3-1 RFI Module Removal

**WARNING!**

**POSSIBLE PERSONAL INJURY! REMOVE POWER FROM THE PDU MAIN INPUT CIRCUIT BREAKER BEFORE REMOVING RF AMPLIFIER. VERIFY THAT LOCK OUT AND TAG OUT THE PDU MAIN INPUT CIRCUIT BREAKER IS PROPERLY PERFORMED. SERIOUS INJURY OR DEATH BY ELECTROCUTION MAY OTHERWISE OCCUR.**

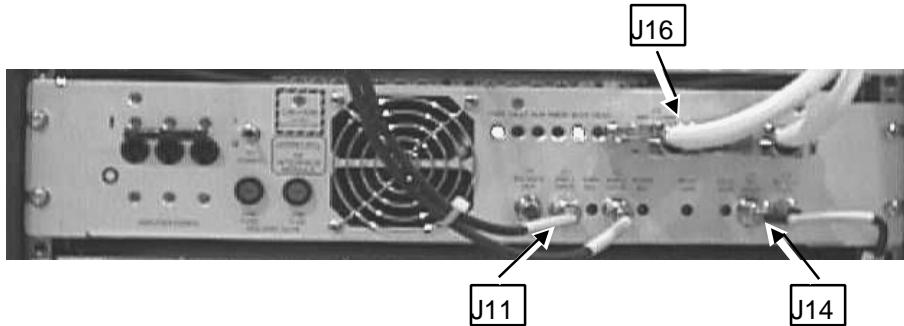
1. Perform Section 2- Lock Out Tag Out (Refer to CD-ROM *Dir. 2250758-3 [or -2], MR Signa OpenSpeed Service Methods, Renewal Parts and Service Tools, Safety, Section 6, OSHA LOCKOUT/TAGOUT REQUIREMENTS.*)
2. Verify that power is OFF by checking the fans and LEDs on the RFI, RF Amplifier, and SSM (System Support Module).
3. On the front of the RFI Module place the "RFI POWER" toggle switch to OFF. See Illustration 3-1.



**RFI POWER BREAKERS AND SWITCH LOCATIONS**  
ILLUSTRATION 3-1

**3-1 RFI Module Removal (continued)**

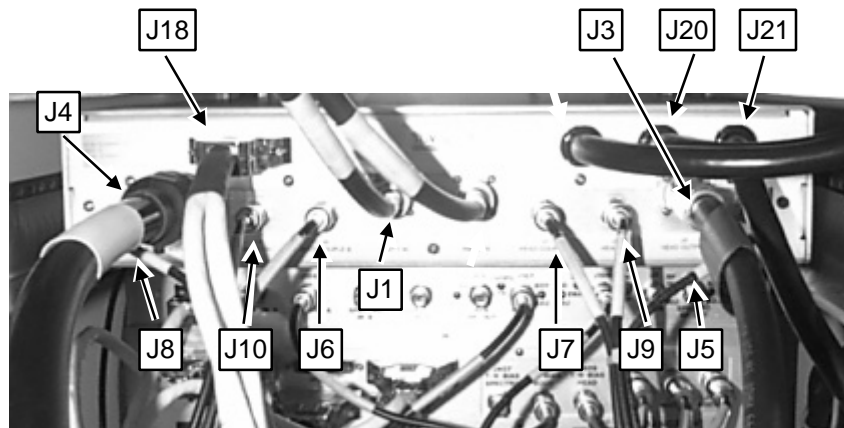
4. Remove the J11 (AMP 1 DRIVE), J16 (AMP 1 COMM), and J14 (RF INPUT) connections from front of the RFI Module. See Illustration 3-2.



**RFI MODULE FRONT CONNECTOR LOCATIONS**  
ILLUSTRATION 3-2

### 3-1 RFI Module Removal (continued)

5. Remove connections J8, J4, J10, J18, J6, J1, J7, J9, J3, J5, J20, and J21 from rear of RFI Module. See Illustration 3-3.
  - A. J8, Body Couple A
  - B. J4, Body Output
  - C. J18, General Comm
  - D. J10, Body TR
  - E. J6, Body Couple B
  - F. J1, Amp 1 In
  - G. J7, Head Couple A
  - H. J9, Head TR
  - I. J3, Head Output
  - J. J5, Head Couple B
  - K. J20: disconnect L1, L2, and Ground stud wires on RF Amplifier Module
  - L. J21: disconnect from SSM "Spectro Amp" connection



**RFI MODULE REAR CONNECTIONS**  
ILLUSTRATION 3-3

**3-1 RFI Module Removal (continued)**

6. Remove the four (4) screws securing the RFI Module to the cabinet. See Illustration 3-4.

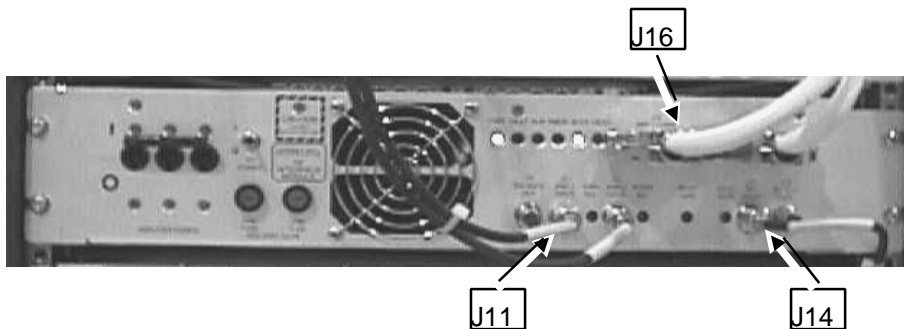


**LOCATION OF SCREWS TO REMOVE RFI MODULE**  
ILLUSTRATION 3-4

7. Pull RFI Module out of 0.7T Power Cabinet.

### 3-2 RFI Module Replacement

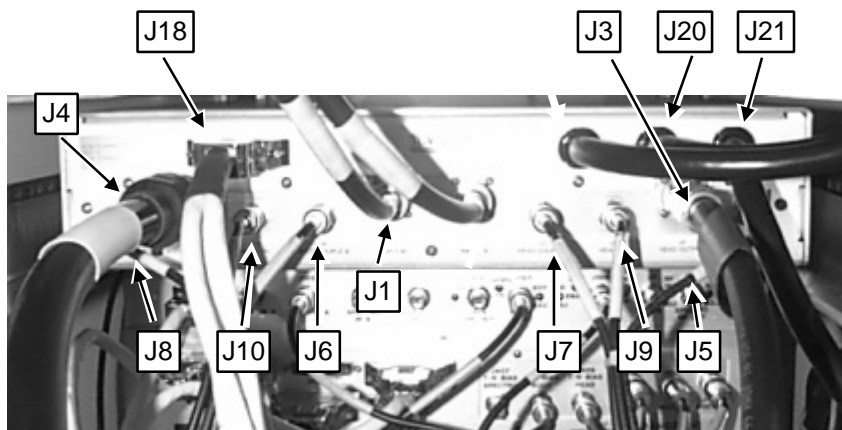
1. Visually verify the "MAIN INPUT CIRCUIT BREAKER" switch is in the OFF position at the front (left) of the PDU and has the proper Lock Out Tag Out before continuing.
2. Place new RFI Module on shelf in 0.7T Power Cabinet and slide module into cabinet.
3. Insert four (4) screws into front of RFI Module to secure to cabinet.
4. Reconnect cables J11 (AMP 1 DRIVE), J16 (AMP 1 COMM), and J14 (RF INPUT) to the front of RFI Module. See Illustration 3-5.



**RFI MODULE FRONT CONNECTOR LOCATIONS**  
ILLUSTRATION 3-5

### 3-2 RFI Module Replacement (continued)

5. Reconnect cables to J8, J4, J10, J18, J6, J1, J7, J9, J3, J5, J20, and J21 to rear of RFI Module. See Illustration 3-6.
  - A. J8, Body Couple A
  - B. J4, Body Output
  - C. J18, General Comm
  - D. J10, Body TR
  - E. J6, Body Couple B
  - F. J1, Amp1 In
  - G. J7, Head Couple A
  - H. J9, Head TR
  - I. J3, Head Output
  - J. J5, Head Couple B
  - K. J20: connect L1, L2, and Ground stud wires on RF Amplifier Module
  - L. J21: connect from SSM "Spectro Amp" connection



**RFI MODULE REAR CONNECTIONS**  
ILLUSTRATION 3-6

### 3-2 RFI Module Replacement (continued)

6. Remove lock and tag out from the PDU "MAIN INPUT CIRCUIT BREAKER" and restore power to the 0.7T Power Cabinet.
  - A. Re-connect the "SSM" humboldt (P1) connector.
  - B. Place the four (4) circuit breakers located at the rear of the "SSM" to the ON position.
  - C. Switch ON the "SSM" circuit breaker at the front of the PDU.
  - D. Switch ON the "OC/HOST" circuit breaker at the front of the PDU.
  - E. Verify the RF Amplifier switch is ON at the rear of the RF Amplifier.
  - F. Verify the RFI Module the "RFI POWER" toggle switch is ON at the front of the RFI.
  - G. Re-SIGNA as required.
7. After replacing the RFI Module, the RF Amplifier needs to be calibrated, refer to *GRFD Power RF Out Setup And Calibration* on the CD ROM, Direction 2250758-3 [or -2].
8. Replace rear cabinet cover and front 0.7T Power Cabinet door.

## REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
A	January 7, 2000	Resa Lambert	Preliminary release.
0	January 10, 2000	Resa Lambert	Initial release.