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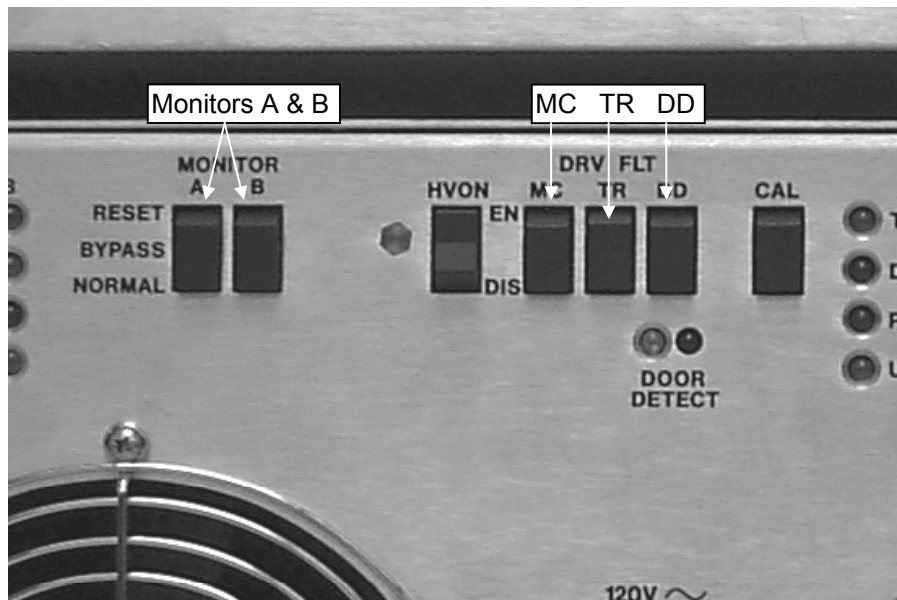
### 1- SST OVERVIEW

Small Sample Test (SST) may be run as a group of tests, or individually to check multiple subsystem functions. There are two primary modes of running SST to analyze system performance: body full power scan, and head full power scan.

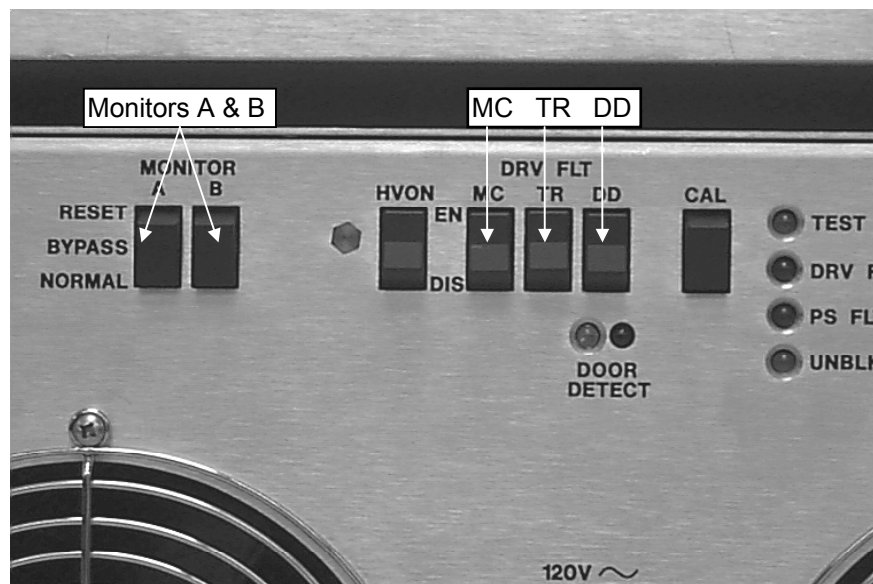
Additional bypass modes (which require the Universal SST kit) can be run to help isolate bad RF and gradient subsystem hardware, and to test multicoil hardware.

### 2- T/R DRIVER BOARD SERVICE MODE ACTIVATION

For RF/Pen II and RF/PDU cabinets, see Illustration 2-1 and Illustration 2-2.



RF/PEN II AND RF/PDU CABINETS- FRONT PANEL SWITCHES DISABLED  
ILLUSTRATION 2-1



RF/PEN II AND RF/PDU CABINETS- FRONT PANEL SWITCHES ENABLED  
ILLUSTRATION 2-2

### 3- SST MULTICOIL TEST MODE

This section describes the minimum SST tests that need to be run to test the additional preamplifiers, receiver modules in the TPS, Multicoil Select Switch, Multicoil Preamp Protect Assembly, and receive cabling for a system equipped with multicoil hardware. Prior to testing the hardware unique to multicoil systems, it is assumed that Head Full Power SST tests have been run in complete test mode to verify proper operation of the rest of the Signa system hardware.

Through use of a power divider, the receive signal from the Universal SST coil is divided eight ways (Signa currently uses only six receive channels) to drive all receive channels simultaneously. Therefore, only two multicoil SST scans are needed to evaluate all receive channels.

#### Note

The correlation between multicoil receive channels and TPS Receiver # is not the same for SST as compared to TLT and TR-Map procedures. Use Table 10 to correlate which multicoil receive channel goes with which TPS Receiver.

### 3-1 Kit Compatibility

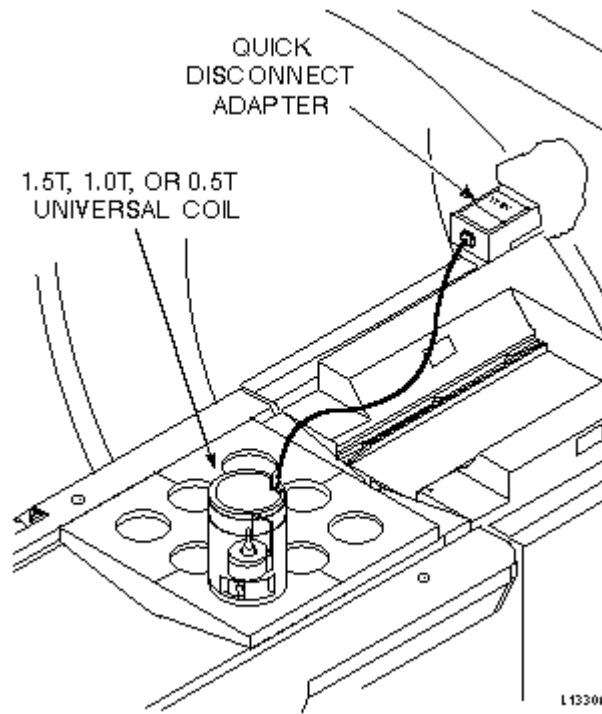
Multicoil Test mode requires a Universal Coil and can be performed with the Universal kits in Table 3-1.

TABLE 3-1  
FIELD STRENGTH AND SST KITS

Field Strength	Universal SST Kit
1.0T	46-320383G1, G2, G3, G4, or G5

### 3-2 Coil, Power Divider, and Base Plate Setup

1. Click on **[New Pt]**.
2. Setup the SST coil per the following steps:
  - a. Remove the head holder from the cradle.
  - b. Position base plate on patient table near head end of cradle.
  - c. Select the proper Universal Proton Coil for the system (1.0T).
  - d. Place the Universal SST Coil into base plate in corner as shown in Illustration 3-1 and turn lever to lock to the base plate. Unwrap entire length of cable from around coil. This arrangement will offset the sample vial 10 cm in the X, Y, and Z directions from isocenter.



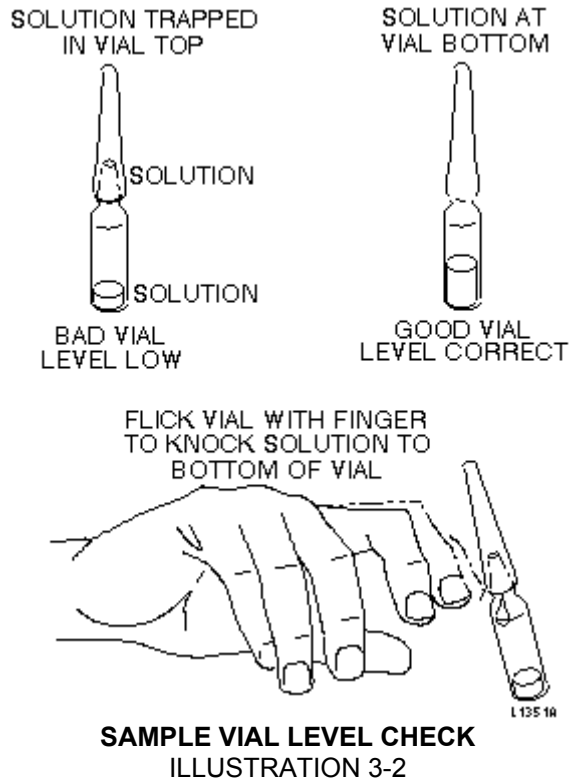
**UNIVERSAL SST COIL**  
ILLUSTRATION 3-1

5. Select the 0.014M NiCl<sub>2</sub> sample vial from SST kit; this is the recommended solution for all systems. SST results using NiCl<sub>2</sub> solution are not sensitive to temperature variations as CuSO<sub>4</sub> solution is.

**WARNING!**

**POISON HAZARD! SAMPLE CONTAINS NICKEL, A SUSPECT CARCINOGEN. DO NOT INGEST. DISPOSE OF AS A HAZARDOUS WASTE ACCORDING TO STATE AND FEDERAL REGULATIONS.**

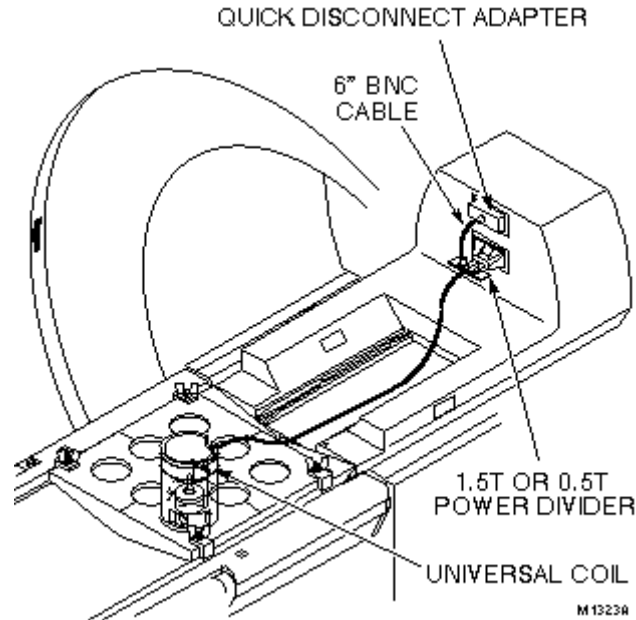
6. Inspect solution level in sample vial to ensure correct fluid level. If solution level is incorrect due to solution being trapped in vial top, correct by flicking vial with finger to knock solution to bottom of vial. See Illustration 3-2.



**Note**

If any solution remains trapped in the upper portion of the vial, the SNR test will probably fail. If vial is cracked or damaged and solution is leaking out, dispose of the vial immediately per local regulations.

7. Insert the sample vial into the Universal Proton Coil.
3. Select the proper SST Power Divider for the system (1.0T) and 6-inch BNC cable. See Illustration 3-3.



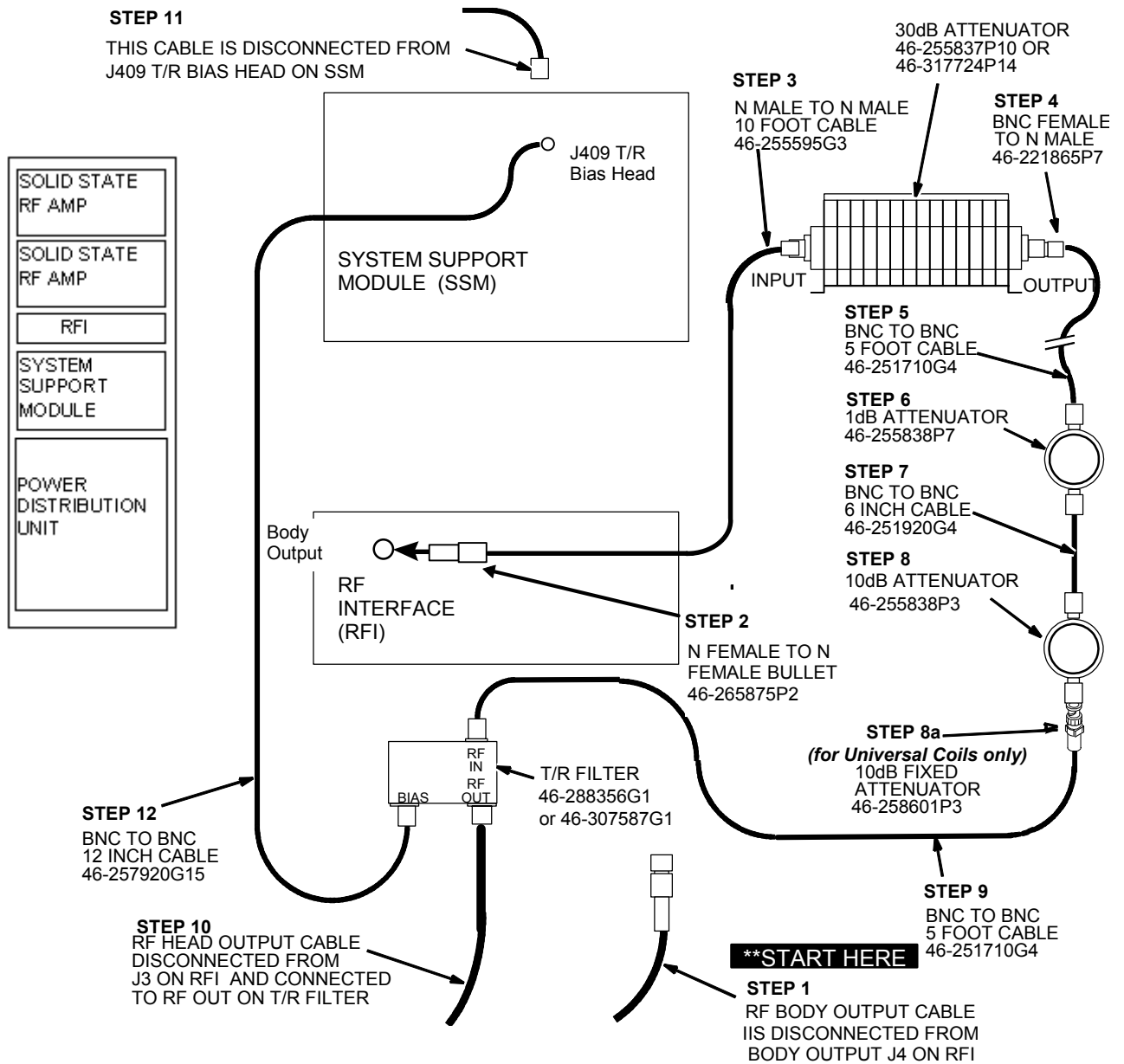
**POWER DIVIDER**  
ILLUSTRATION 3-3

4. Select the proper adapter from the kit: **For 1.0T**, use Service Tool Interface Adapter.
5. Insert power divider into multicoil port on head T/R switch. Connect cable from SST coil to J2 on power divider. See Illustration L1323A.
6. Insert head coil adapter into head T/R switch.
7. Connect 6-inch BNC between adapter and J3 on Power Divider.
8. Landmark at center of base plate (not on the coil).

**Note**

Software automatically turns on the bore vent for every scan. SST is done with the bore vent on to detect any noise problems it may be causing.

### 3-3 RF/PDU Cabinet Alterations





### 3-4 Scan Prescription

1. Set up scan protocol as follows:  
Id: **geservice**  
Name: **sst multi**  
Weight (lb): **111**

**Note**

Up to 32 characters can be typed in the Exam description field as comments. These are displayed on the Report Header Info screen.

2. Click on **[Patient Protocols]** and select **Service**. In the Protocol field, type **o.26.3** (o=Other, 3=series number) to load the protocol.

**Note**

On the Patient Position screen, up to 29 characters can be typed in the Series description field as comments. These are displayed on the Report Header Info screen.

3. Click on **Coil [...]**, then click on **Phased Array** for *Coil Type*, select **CTLTOP** to test channels: 2, 3, 4, & 5, then **[Accept]**.

Note: you must do a second scan using **CTLBOTTOM** to test remaining two untested channels.

**Note**

The purpose of the coil selections listed in Table 3-1 is to test all six multicoil hardware signal paths. The SST multicoil procedure tests all multicoil hardware except for the individual coils.

See Table 10 for Multicoil SST Hardware Tested Cross Reference.

TABLE 3-1  
MULTICOIL CROSS REFERENCE

Coil Selection Required	Coil Receive Channel Tested	TPS Receiver Tested
CTL Top	2	2
CTL Top	3	3
CTL Top	4	4
CTL Top	5	1
CTL Bottom	6	2
CTL Bottom	7	3

**Note:** Channels 1 and 8 are not currently used for any multicoil.

4. Click on **[Save Series]**.
5. Right click on **[Research Operations]** and select **Setup Params**. Preset the values listed:

R1 = 13  
R2 = 14  
TG = 70  
Number of Frames: 2 <Enter>

WINDOW ONE  
Frame: 1 <Enter>  
Frame: 0 <Enter>

WINDOW TWO  
Frame: 1 <Enter>  
Frame: 0 <Enter>  
[Done]

### 3-5 Prescan & Data Collection

#### Note

The 1dB step and 0.1dB step attenuators initially must be set to zero. For manual attenuators that do not have zero stops (to locate 0 dB position), zero marking on dial should be directly in line with BNC connector to provide 0dB attenuation.

1. Click on [**Manual Prescan**] and setup twin plot mode as listed:

PULL DOWN MENU  
[Windows]  
Select: **Two Windows**

WINDOW ONE  
Rec: 1  
Type: **Magnitude**  
Plot Gain: 2

WINDOW TWO  
Rec: 1  
Type: **P. Spect**  
Plot Gain: 1

#### Note

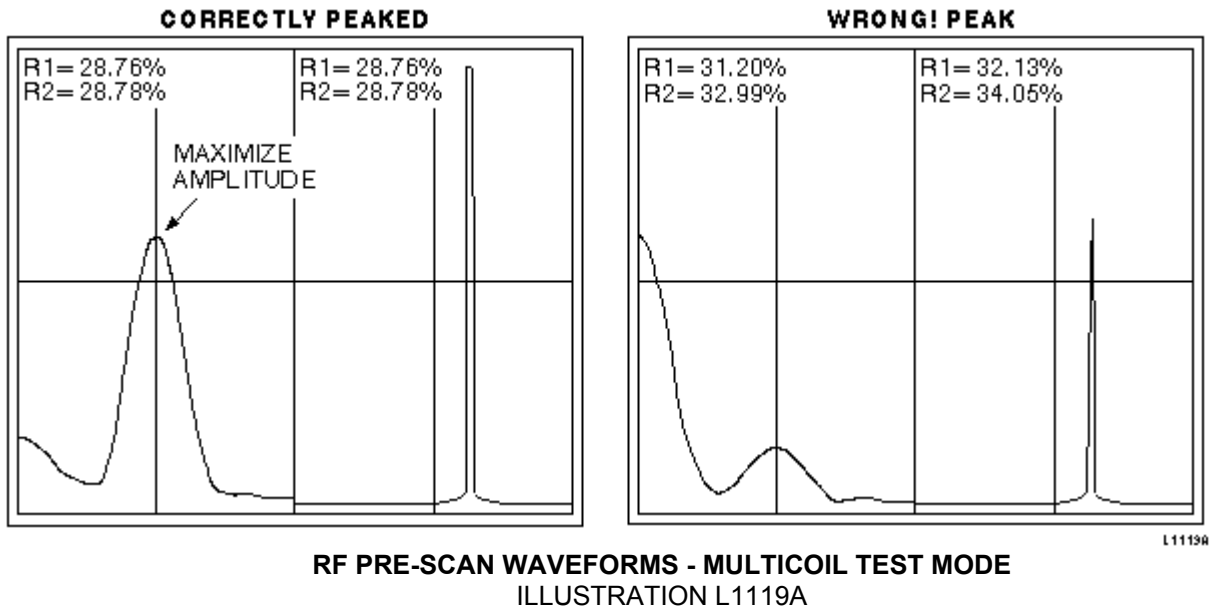
Set the T/R-DD Faults Disable Switch to On to disable fault reporting. If a T/R fault is detected, refer to section 2, T/R Driver Board Service Mode Activation.

2. Click on [**Center Freq Fine**], adjust the **DX Freq** value to position the P. Spect profile waveform (right display) on proper center frequency.

#### Note

If no prescan waveform is present, be sure that:

- 0.014M NiCl<sub>2</sub> solution and proper proton coil are selected for the field strength of the system.
  - Proper power divider is selected for the field strength of the system.
  - Sample vial solution level is correct, and vial is properly positioned in Universal Coil.
  - TG value is high enough to excite solution.
  - New values for left and right displays are entered correctly.
  - RCV Coil=1 specified on Users CVs page during scan prescription.
  - The proper adapter is being used:
3. Click on **[Transmit Gain]**. Adjust TG to obtain maximum flip. Peak using the maximum amplitude of the waveform on left display (magnitude). See Illustration L1119A. Test results accuracy depend on an accurate TG peaking. Take time and care to ensure accuracy in finding flip.



**Note**

If prescan waveform is not normal, verify that the proper Universal Proton Coil is selected for the field strength of the system, and verify that the 0.014M NiCl<sub>2</sub> solution vial is fully seated inside of Universal Coil.

4. Note the power spectrum R1% level before doing the next two steps. This value is compared to the power spectrum level in step 7.

**Note**

For 1.0T systems, if TG peaks below 100, substitute a 20-dB fixed attenuator (46-258601P2) for the 10-dB fixed attenuator already in the setup along with the rotary attenuators in the step below.

5. Adjust rotary attenuators (and if needed, add additional fixed attenuation as noted above) to correspond to TG value that peaked sample; follow example below.

Example:

TG=175 => 200-175=25; 25÷10=2.5

0-1 dB attenuator setting = .5 dB

0-10 dB attenuator setting = 2 dB

6. Set TG to **200**.
7. Prescan power spectrum % level should be the approximately same (+0.5%) after dialing in manual attenuation and setting TG=200. If not, verify proper peak with the manual attenuators by adjusting in 0.1 dB steps.
8. Set **Rec** for each receiver (1–4) to view power spectrum. The power spectrum for each receiver should be approximately the same, but will vary depending on preamp gain variations and receiver variations.
9. **[Done]**, then **[Scan]**.
10. After the scan completes, automatic data analysis begins in a desktop window called "Running Small Sample Test." The analysis provides messages that identify each test as its data are analyzed. When analysis completes, place cursor inside the window and press **<Enter>** to close the window.
11. To view SST data, refer to the Report Manager Tool.

#### 4- STABILITY TEST WITH GRADIENT CONTROL

The Stability Test consists of several modes as described in Table 4-1. Modes -1, and 1 through 4 run the stability test while driving individual, all, or no gradient amplifiers; during any of these five modes, the undriven gradient amplifiers are in Ready mode. There have been instances where a defective gradient amplifier caused a stability failure on another axis even when the defective amplifier was not driven. To troubleshoot these types of failures, the undriven gradient amplifiers must be placed in Standby mode during testing.

Modes -11, and 11 through 14 run the stability test while driving individual, all, or no gradient amplifiers; however, during any of these five modes the undriven gradient amplifiers are in Standby mode. The SST PSD controls the state of the gradient amplifiers during the scan for the gradient control modes.

Additional isolation modes are available (21, 22, 23, 31, 32, 33). These modes provide new combinations of amplifiers in Standby vs. Ready mode. See Table 4-1 for specifics.

TABLE 4-1  
SST STABILITY TEST MODES

TEST OPTION	MODE	DESCRIPTION	PSD Time (Min:Sec)
STABILITY	0	TEST OFF	--
	-1	NO GRADIENTS (X,Y, & Z GRADIENTS IN READY)	1:18
	-11	NO GRADIENTS (X, Y, & Z GRADIENTS IN STANDBY)	1:20
	1	NO GRADIENTS & X GRADIENT (Y & Z GRADIENTS IN READY)	2:36
	11	NO GRADIENTS & X GRADIENT (Y & Z GRADIENTS IN STANDBY)	2:44
	21	NO GRADIENTS & X GRADIENT (Y IN READY & Z IN STANDBY)	2:44
	31	NO GRADIENTS & X GRADIENT (Y IN STANDBY & Z IN READY)	2:44
	2	NO GRADIENTS & Y GRADIENT (X & Z GRADIENTS IN READY)	2:36
	12	NO GRADIENTS & Y GRADIENT (X & Z GRADIENTS IN STANDBY)	2:44
	22	NO GRADIENTS & Y GRADIENT (X IN STANDBY & Z IN READY)	2:44
	32	NO GRADIENTS & Y GRADIENT (X IN READY & Z IN STANDBY)	2:44
	3	NO GRADIENTS & Z GRADIENT (X & Y GRADIENTS IN READY)	2:36
	13	NO GRADIENTS & Z GRADIENT (X & Y GRADIENTS IN STANDBY)	2:44
	23	NO GRADIENTS & Z GRADIENT (X IN READY & Y IN STANDBY)	2:44
	33	GRADIENTS & Z GRADIENT (X IN STANDBY & Y IN READY)	2:44
	4	NO GRADIENTS & ALL GRADIENTS (UNDRIVEN GRADIENTS IN READY)	6:30
	14	NO GRADIENTS & ALL GRADIENTS (UNDRIVEN GRADIENTS IN STANDBY)	6:56
AUTO			
GRADAMP	0	OFF	--
CTRL	1	ON. IF THIS OPTION IS ON, SST RUNS AN ADDITIONAL PASS OF GRADIENT STABILITY TEST WITH UNDRIVEN GRADIENTS IN STANDBY	6:56



**Possible equipment damage. Some Signa systems have had transistor damage when running the stability tests. It is possible to decrease the power of the gradient waveforms (heater pulses) by manipulating CVs. Refer to Section 4-3 Modifying CVs for additional information.**

#### 4-1 Kit Compatibility

Stability Test With Gradient Control can be performed with any available SST kit.

#### 4-2 Test Setup

There is no special setup for the gradient control modes since the control is accomplished through software. These modes can be selected for specific gradient mode problem isolation techniques through **[User CVs]** setup with any SST configuration.

Stability results can then be compared to help identify specific gradient performance issues.

#### 4-3 Modifying CVs

Some Signa systems have experienced damage to the transistors when running the stability tests. It is possible to decrease the power of the gradient waveforms (heater pulses) by manipulating CVs. The CVs for reducing the amplitude of the heater pulses during Stability Tests are:

a\_gs\_ghx for the x axis  
a\_gs\_ghy for the y axis  
a\_gs\_ghz for the z axis

#### Procedure

1. Right click on **[Research Operations]** and select **Display CVs** from the Scan Operations list.
2. Highlight the **CV Name** field and type the desired **CV**, then **<Enter>**.

Multiply the default value of the CV by 0.5. This reduces the power of the gradient pulses by a little more than half, which should solve any problems you have been seeing with transistor failures and circuit breaker trips while maintaining a reasonable stress level to test the amplifiers.

3. Click on **[Modify]** and type the desired value, then **<Enter>**, then click on **[Accept]**.
4. Repeat steps 2 and 3 for any additional CVs to modify.
5. Click on **[Accept]**.

## 5- ERBTEC SOLID STATE DRIVE MODE

### Description

This procedure does not apply to 0.5T solid-state RF amplifiers. Use this section to isolate RF amplifier- related SST test failures (i.e., RF Linearity, Stability, and SNR test failures). The RF output to excite the universal coil is taken directly from the output of the solid-state amplifier board. This configuration bypasses the Intermediate Power Amplifier (IPA) tube, the Power Amplifier (PA) tube, and EFB circuitry. The solid-state amplifier is driven to its normal maximum output during this test; this equates to 160W for 1.5T in head mode, or 320W for 1.0T in body mode, or 50W for 0.5T systems.

### 5-1 Kit Compatibility

Solid State Driver (SS Out) Mode requires a Universal Proton Coil; this can be performed with the Universal kits in, see table 5-1.

TABLE 5-1  
SST KITS BY MAGNET STRENGTH

Field Strength	SST Kits
1.5T	46-320383G1, G2,, G3, G4 or G5
1.0T	46-320383G4
0.5T	46-320833G1, G2 or G3

The RF Power Measurement Kit, 46-317724G1 or G2, is also needed for this mode.

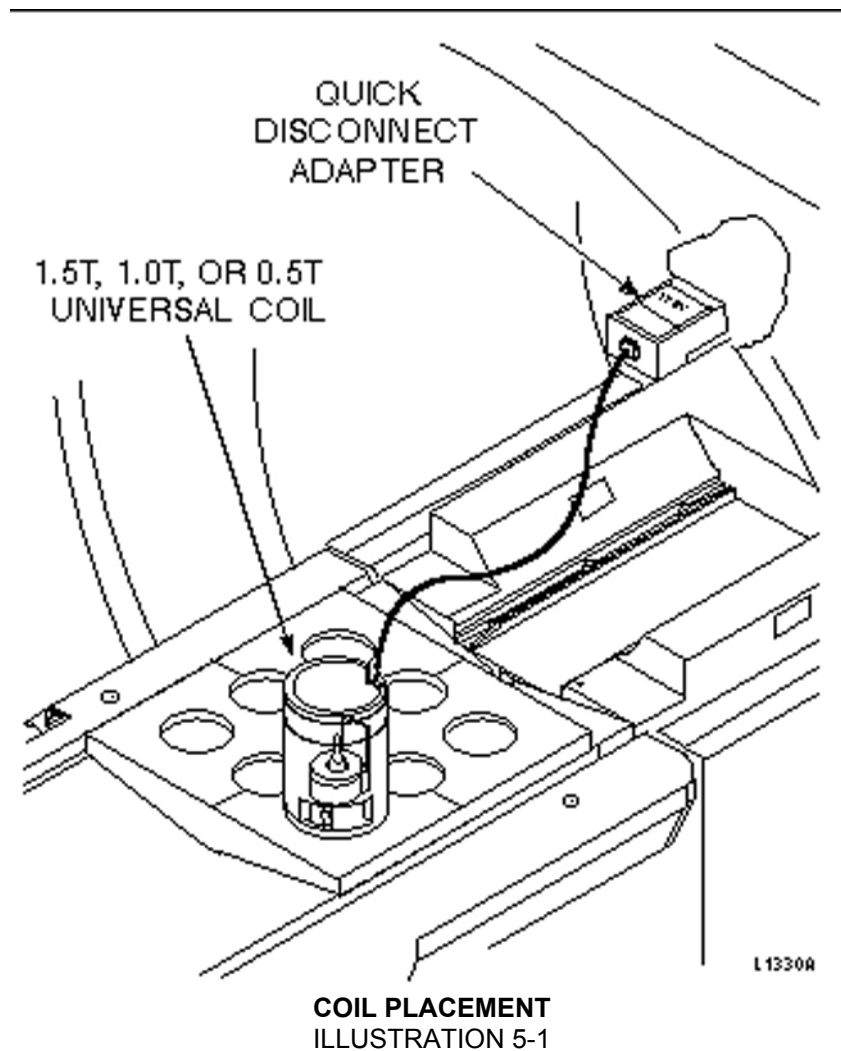
### 5-2 Coil, Power Divider, and Base Plate Setup

1. Select [**Scan Modes**], [**Service**], [**Accept**] at touch screen.
2. Select [**New Exam**].
3. Select a 0.014M NiCl<sub>2</sub> sample vial from the Universal Kit.

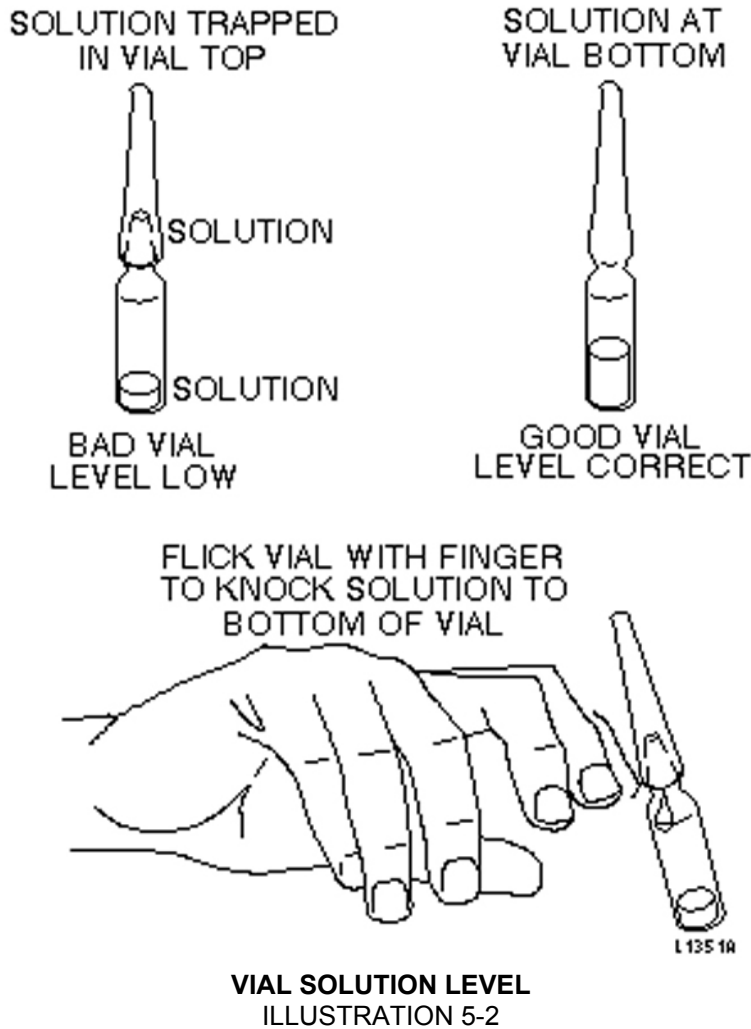


**POISON HAZARD! SAMPLE CONTAINS NICKEL, A SUSPECT CARCINOGEN. DO NOT INGEST. DISPOSE OF AS A HAZARDOUS WASTE ACCORDING TO STATE AND FEDERAL REGULATIONS.**

4. Select the proper Universal Proton Coil for the system (1.5T, 1.0T, or 0.5T).
5. Position base plate on patient table near head end of cradle.
6. Place the proper 1.5T, 1.0T, or 0.5T Universal Proton Coil into base plate in corner as shown in and turn lever to lock to base plate. Unwrap entire length of cable from around coil. This arrangement will offset the sample vial 10 cm in the x, y, and z directions from isocenter. See Illustration 5-1.



7. Insert head coil adapter into head T/R switch.
8. Inspect solution level in sample vial to ensure correct fluid level. If solution level is incorrect due to solution being trapped in vial top, correct by flicking vial with finger to knock solution to bottom of vial. See Illustration 5-2.



**Note**

If any solution remains trapped in the upper portion of the vial, the SNR test will probably fail. If vial is cracked or damaged, and solution is leaking out, dispose of the vial immediately per local regulations.



**POISON HAZARD! PHANTOM CONTAINS NICKEL, A SUSPECT CARCINOGEN. DO NOT INGEST. DISPOSE OF AS A HAZARDOUS WASTE ACCORDING TO STATE AND FEDERAL REGULATIONS.**

9. Insert the sample vial into the Universal Proton Coil.
10. Connect cable from coil to proper adapter: Use proper Service Tool Interface Adapter for field strength of system.
11. Landmark at center of base plate (not on the coil).

**Note**

Software automatically turns on the bore vent for every scan. SST is done with the bore vent on to detect any noise problems that it may be causing.

**5-3 Scan Prescription**

Continue at touch screen to set up scan protocol as follows.

1. Set up scan protocol as follows:

- Id:** geservice
- Name:** sst solid state
- Weight (lb):** 111

**Note**

Beginning with Release 5.4, up to 32 characters can be typed in the Exam description field as comments. (The comments are displayed on the Report "Header Info" screen.)

2. **[List/Sel Protocol]** select **2** (sst), **[View Protocol]**, select Series **4**.

**Note**

On the Patient Position screen, up to 29 characters can be typed in the Series description field as comments. (Comments are displayed on the Report "Header Info" screen.)

3. **[←]**, then **[Scan Ops]**.

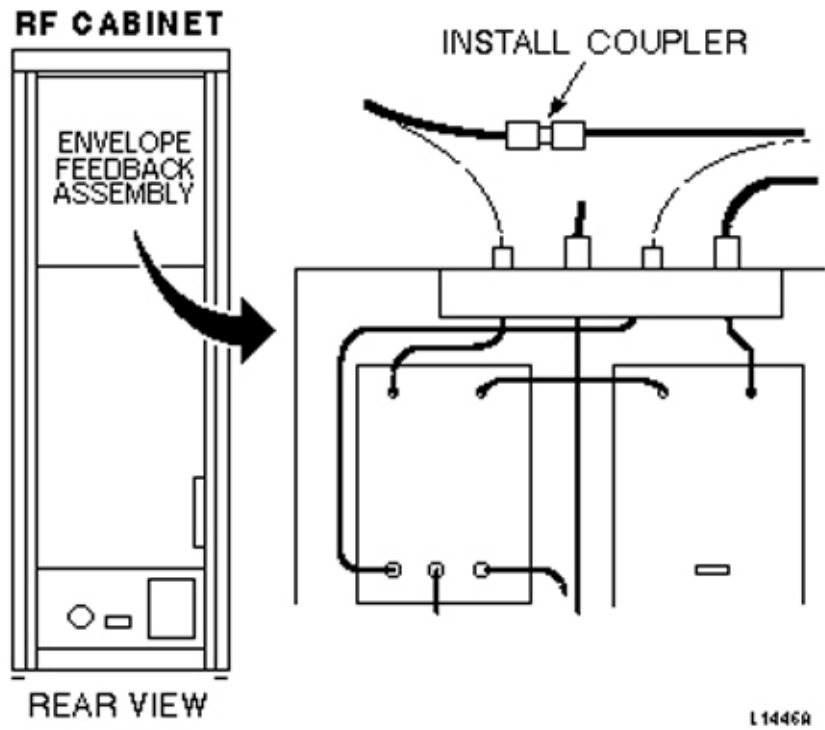
4. **[Setup Params]**, enter proper parameters for field strength of your system. See Table 5-2.

TABLE 5-2  
 SETUP PARAMS, SOLID STATE DRIVER MODE

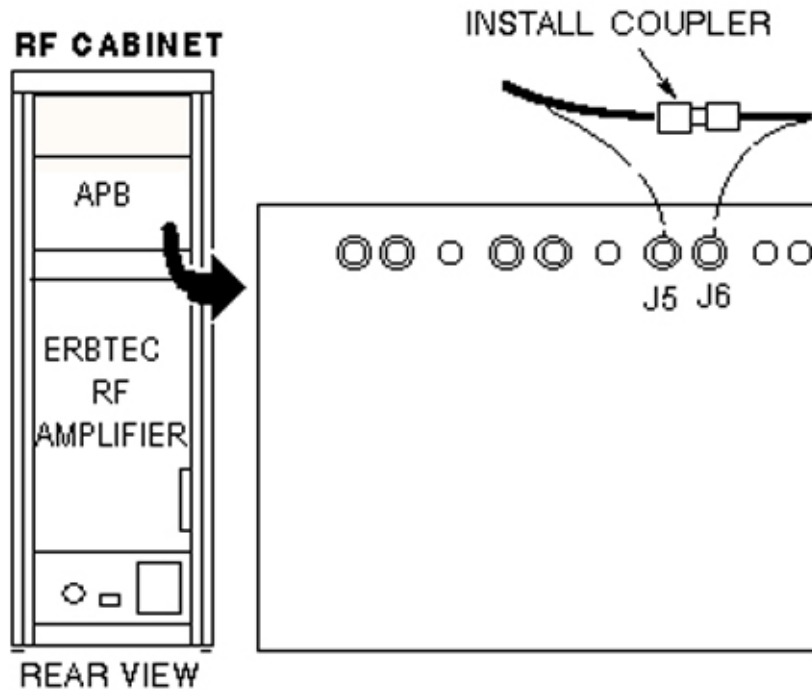
1.5T Systems	1.0T Systems	0.5T Systems
R1 = 6	R1 = 6	R1 = 6
R2 =14	R2 =14	R2 =14
TG =140	TG =150	TG =160
Plot: ON	Plot: ON	Plot: ON
Number Of Frames: 2	Number Of Frames: 2	Number Of Frames: 2
Frame: 1	Frame: 1	Frame: 1
Frame: 0	Frame: 0	Frame: 0
Plot Gain: 1	Plot Gain: 2	Plot Gain: 2
Plot Type: M	Plot Type: M	Plot Type: M
Frame: 1	Frame: 1	Frame: 1
Frame: 0	Frame: 0	Frame: 0
Plot Gain: 1	Plot Gain: 1	Plot Gain: 1
Plot Type: P	Plot Type: P	Plot Type: P
<b>[Backup]</b>	<b>[Backup]</b>	<b>[Backup]</b>

**5-4 RF Cabinet Alterations**

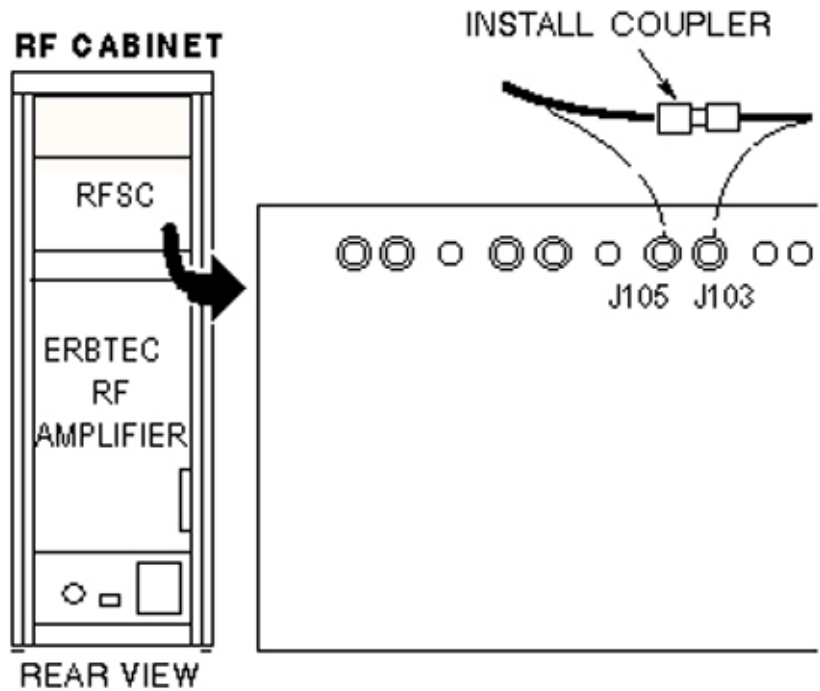
1. **For 1.5T systems only**, locate scope with >100 MHz frequency response. Calibrate scope with RF Measurement Calibrator from RF Power Measurement Kit. Use reference card "CAL" (46-317724P15) in the RF Power Measurement Kit for set up information.
2. **For 1.5T systems**, set up for Solid-state Output (Head Mode) using reference card (46-317724P20)  
**For 1.0T systems**, set up for Solid-state Output (Body Mode) using reference card (46-317724P34).  
**For 0.5T systems**, set up for Solid-state Output (Body Mode) using reference card (46-317724P27).
3. Bypass the EFB circuitry of the RF amplifier using a female-to-female BNC coupler from the Universal Kit. See Illustration 5-3 for RF amplifiers with EFB Assembly, or Illustration 5-4 for RF Amplifiers with Analog Processor Board, or Illustration 5-5 for RF amplifiers with RF System Controller. For RF/Pen II cabinet, see Illustration 5-6.



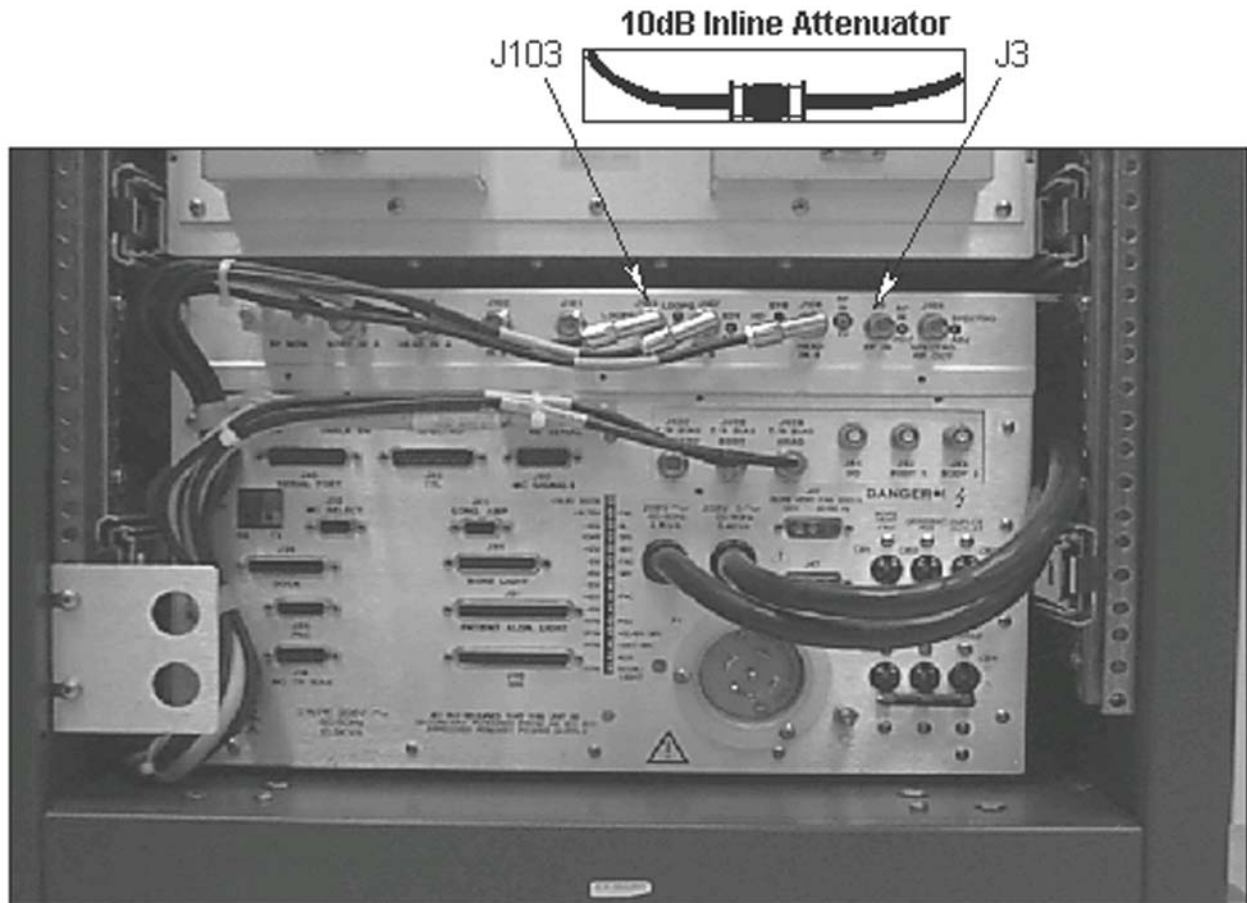
**BYPASS RF AMPLIFIERS WITH EFB ASSEMBLY**  
ILLUSTRATION 5-3



**BYPASS RF AMPLIFIERS WITH ANALOG PROCESSOR BOARD**  
ILLUSTRATION 5-4



RF AMPLIFIERS WITH ANALOG PROCESSOR BOARD  
ILLUSTRATION 5-5



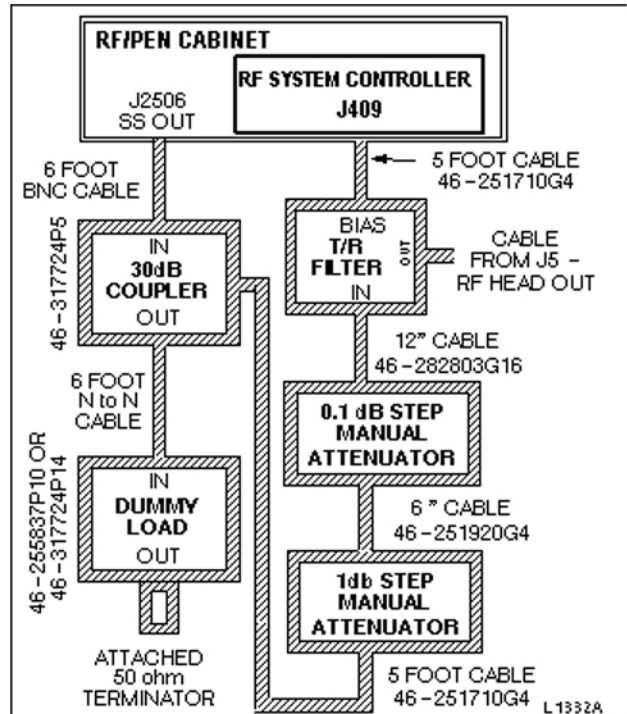
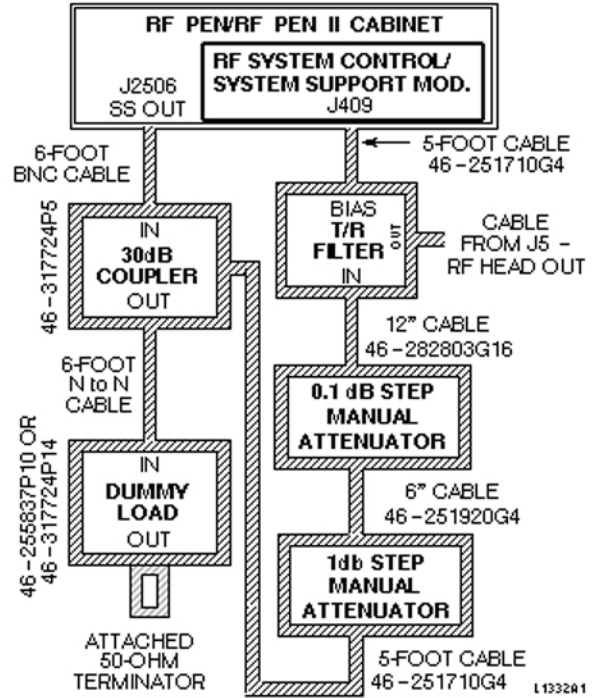
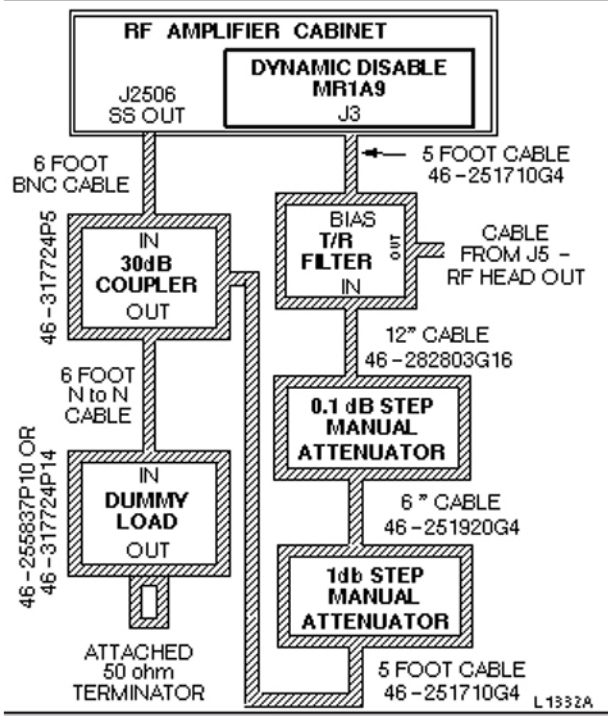
BYPASS FOR RF/PEN II CABINET  
ILLUSTRATION 5-6

4. Select **[Manual Prescan]** and adjust TG so the 180° p-p waveform on the scope spans the number of vertical divisions specified on the reference card. After adjusting TG to obtain the specified p-p waveform, the output of the Solid-state Amplifier Board will be 160W for 1.5T systems, 320W for 1.0T systems, or 50W for 0.5T systems.
5. Select **[Backup]**.
6. **See Illustration 5-7 and** reconfigure test cabling and hardware based upon your RF deck type.

Aside: Ensure that the 10-dB fixed attenuator (red one) is disconnected from the 30-dB coupler.

**Note**

The 1dB step and 0.1dB step attenuators initially must be set to zero. For manual attenuators that do not have zero stops (to locate 0 dB position), zero marking on dial should be directly in line with BNC connector to provide 0dB attenuation.



CABLE RECONFIGURATION  
ILLUSTRATION 5-7

## 5-5 Prescan and Data Collection

1. Select [Manual Prescan].

### Note

The occurrence of a T/R fault will be detected if the RF fault monitor has not been disabled. For Signa Advantage systems, the jumper on the T/R Driver Board must be in test (B) position to disable T/R fault reporting. For Signa Horizon systems, a switch on the front of the RF system controller module must also be in the disable position so that T/R faults are not reported. If a T/R fault is detected, refer to section 2, T/R Driver Board Service Mode Activation.

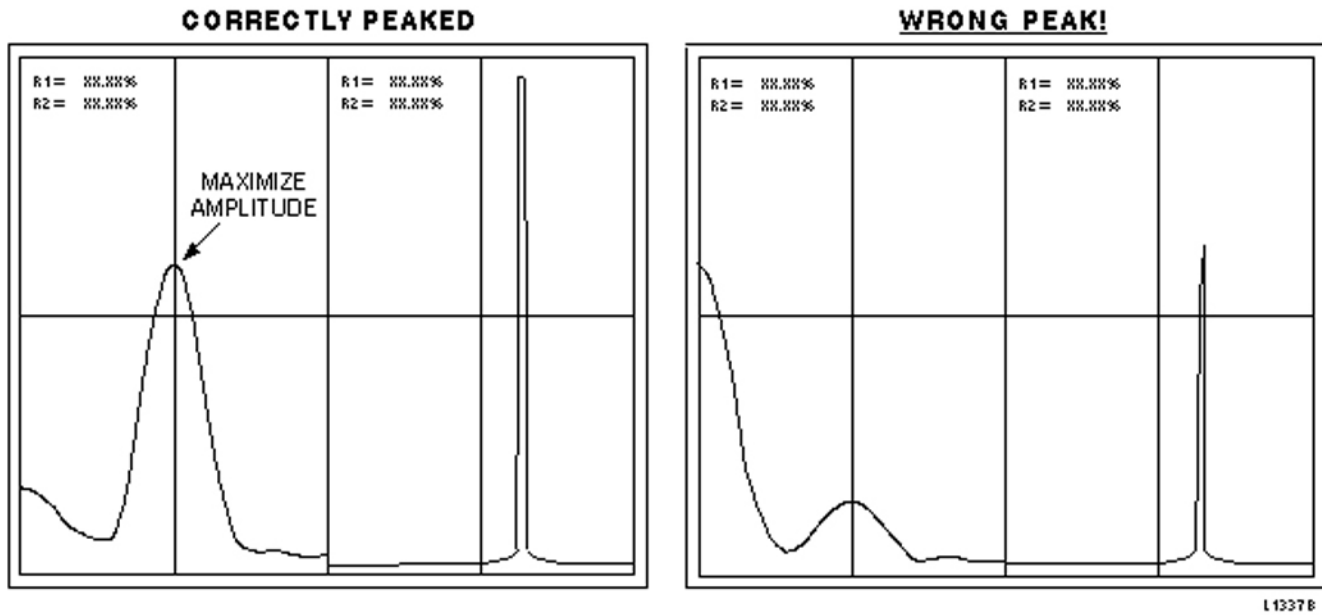
2. [CFA Fine], adjust DX to adjust waveform to proper center frequency on right display.

### Note

If no prescan waveform is present, check the following:

- Proper cable reconfiguration at RF cabinet.
- Proper Universal Proton Coil selected for the field strength of the system.
- Sample vial solution level correct and vial properly positioned in Universal Coil.
- TG value high enough to excite solution.
- New values for left and right displays entered correctly.
- Correct Receive Port (i.e., RCV Coil = 1) specified on User CVs page during Scan Prescription.
- The proper Service Tool Interface Adapter is being used for the field strength of the system.

3. [Flip Angle TR]. Adjust TG to obtain maximum flip. Peak using the maximum amplitude of the waveform on left display. See Illustration 5-8. Accuracy of test results are dependent upon an accurate TG peaking. Take time and care to ensure accuracy in finding maximum flip.



ADJUSTING TG TO OBTAIN MAXIMUM FLIP  
ILLUSTRATION 5-8

**Note**

If prescan waveform is not normal, verify that the proper Universal Proton Coil is selected for the field strength of the system, and verify that the 0.014M NiCl<sub>2</sub> solution vial is fully seated inside of Universal Coil.

- Note the power spectrum R1% level before doing the next two steps. This value is compared to the power spectrum level in step 7.
- Adjust rotary attenuators to correspond to TG value that peaked sample per equation:  
 $TG(\text{step 4}) - TG(\text{sample peak}) = \text{Attenuation setting}$ ; follow example below:

Example:

$TG(\text{step 4}) = 165$ ;  $TG(\text{sample peak}) = 150$

$165 - 150 = 15$  (where 165 is the TG that obtained the specified p-p waveform in step 4 of section 5-4 RF Cabinet Alterations)

$$15 \div 10 = 1.5$$

0-1 dB attenuator setting = .5 dB

0-10 dB attenuator setting = 1 dB

- Set TG to value that obtained the specified p-p waveform in step 4 of section 5-4 RF Cabinet Alterations
- Prescan power spectrum % level should be the approximately same ( $\pm 0.5\%$ ) after dialing in manual attenuation and setting TG as specified in step 6. If not, verify proper peak with the manual attenuators by adjusting in 0.1 dB steps.
- Select **[Done]**, **[Scan]**.

9. After the scan completes, automatic data analysis begins in a window on the touch screen titled "Running Small Sample Test." The analysis provides messages that identify each test as its data are analyzed.
10. When analysis completes, verify that no errors messages were reported. Touch inside the window, and then press **<Enter>** to close the window.
11. Use Report Manager to view the results of the scan.

**6- SST RESULTS**

Small Sample Test results can be reported with both graphics and text using the Report Manager tool program located in the MR Service Tools group on the SGI host computer. Refer to the Report Manager Tool procedure to view the SST test results.

See Illustration 6-1 for example file name; refer to Table 6-1 for data file naming convention.



\* EXAMPLE FILE CREATED: JULY  
 6, 1991 AT 7:40:03 L1121A  
**DATA FILE NAMING CONVENTION**

**SST EXAMPLE FILE NAME**  
 ILLUSTRATION 6-1

TABLE 6-2  
**DATA FILE NAMING CONVENTION**

YEAR	MONTH	DAY		HOUR		MINUTES, SECONDS
0 = 1990	1 = JAN.	1 = 01	H = 17	0 = 00:00	D = 13:00	0 to 59
1 = 1991	2 = FEB.	2 = 02	I = 18	1 = 01:00	E = 14:00	
2 = 1992	3 = MAR.	3 = 03	J = 19	2 = 02:00	F = 15:00	
3 = 1993	4 = APR.	4 = 04	K = 20	3 = 03:00	G = 16:00	
4 = 1994	5 = MAY	5 = 05	L = 21	4 = 04:00	H = 17:00	
5 = 1995	6 = JUN.	6 = 06	M = 22	5 = 05:00	I = 18:00	
6 = 1996	7 = JUL.	7 = 07	N = 23	6 = 06:00	J = 19:00	
7 = 1997	8 = AUG.	8 = 08	O = 24	7 = 07:00	K = 20:00	
8 = 1998	9 = SEP.	9 = 09	P = 25	8 = 08:00	L = 21:00	
9 = 1999	A = OCT.	A = 10	Q = 26	9 = 09:00	M = 22:00	
A = 2000	B = NOV.	B = 11	R = 27	A = 10:00	N = 23:00	
B = 2001	C = DEC.	C = 12	S = 28	B = 11:00	O = 24:00	
:		D = 13	T = 29	C = 12:00		
Z = 2026		E = 14	U = 30			
		F = 15	V = 31			
		G = 16				

## 7- SYSTEM RESTORATION

1. Depending on tests run, restore connections at back of the RF cabinet:
  - EFB bypass BNC coupling
  - RFSC J409
  - Head Port J2803
  - Solid-state Output J2506
  - J2 HEAD/BODY OUT cabling
2. Restore the T/R-DD Faults Disable switch, on the RF System Controller, to the Off position.
3. Depending on tests run, remove all SST coil hardware (coil, power divider, test cables, etc.) from the bore.

Perform at least one head scan to verify proper system operation.

## REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
0	09/28/95	B. Schmidt	Initial Release
1	07/31/96	JNJ	Update to Lightning format
2	08/05/97	B. Schmidt	Added RF/Pen II
3	10/16/97	K. L-P	Updated to word format. Updated for 8.2 Report Manager
4	5/14/98	FFF	Update for SRFD RF/PDU
5	Oct 15, 1998	M. Keber	Removed obsolete Release 8.1 information; style guide cleanup. <b>Needs 1.5T and RF/Pen information put back in!!</b>
6	Nov 8, 2003	Hawthorne	Restored RF/Pen information into section 5.