

TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
1-Required Tool	2
2-Flowchart	2
3-Scan Parameter Setting.....	3
4-Phantom Setting.....	5
5-Setup Oscilloscope.....	7
6-Auto Prescan.....	8
7-Manual Prescan.....	9
8-Data Measurement and Analysis	10

Rev 0

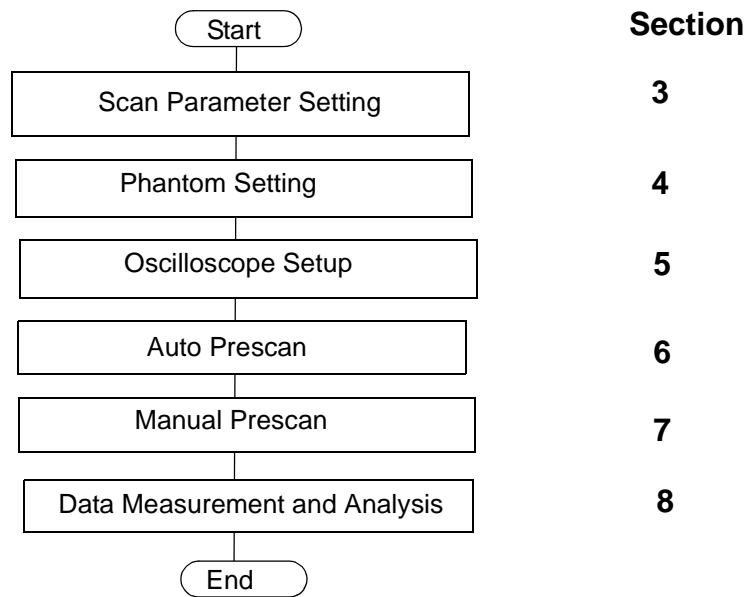
1. Required Tool

TABLE 1-1
REQUIRED TOOL

Items	Qty	Check
Oscilloscope with 20MHz bandwidth limit function	1	
Cable Z9807PT	2	
50 ohms terminator Z9807QA (Manufacturing part no. PD003) *1	2	
Body Sphere Phantom with Loader Shell	1	

Note: *1 Needed only if oscilloscope does not have 50 ohm DC range function

2. Flowchart



FLOWCHART OF POWER CHECK
ILLUSTRATION 2-1

Rev 0

3. Scan Parameter Setting

1. Click **[New Pt]**.
2. Input the following data in "patient information".
 - Patient Data: geservice
 - Weight: 50(Kg)

PATIENT INFORMATION

Accession Number

Patient ID

Patient Name

Birth Date Age Sex

Weight (Lb) (Kg)

Rad Refer

Req Number Status

Description

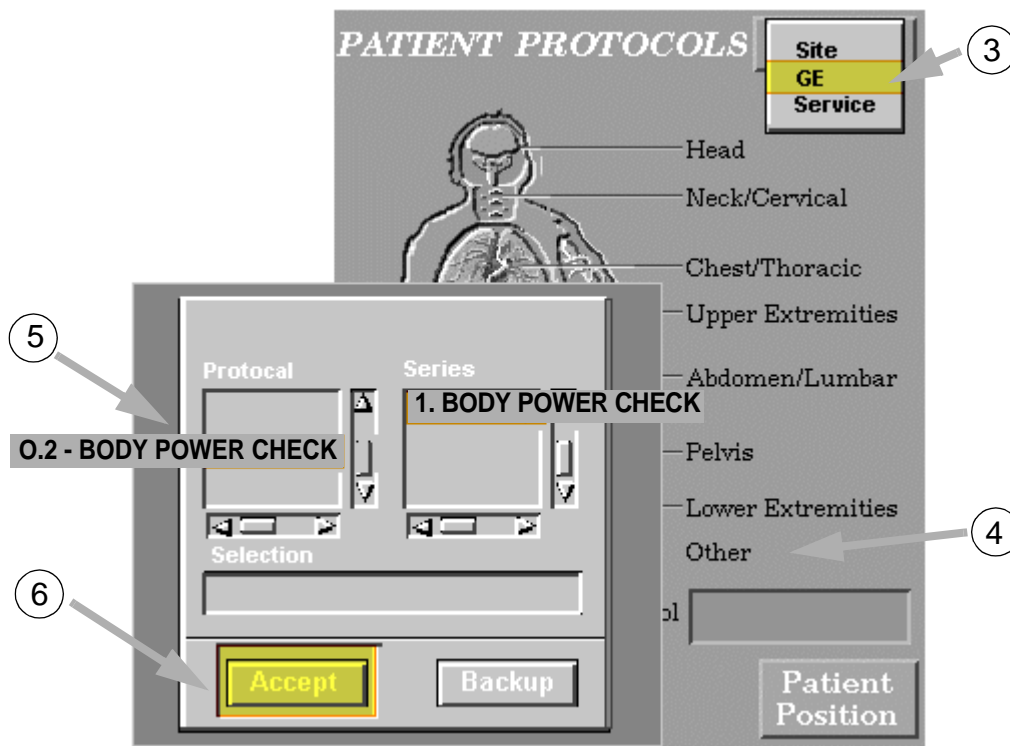
History

PATIENT INFORMATION
ILLUSTRATION 1

Rev 0

3. Scan Parameter Setting(continued)

- 3. Choose **GE**.
- 4. Click **Other**. Protocol window comes Up.
- 5. Select [**O.2 - BODY POWER CHECK**] from protocol.
Select [**1. BODY POWER CHECK**] from series.
- 6. Select [**Accept**].)



PATIENT INFORMATION
ILLUSTRATION 2

- 7. Select Save Series.

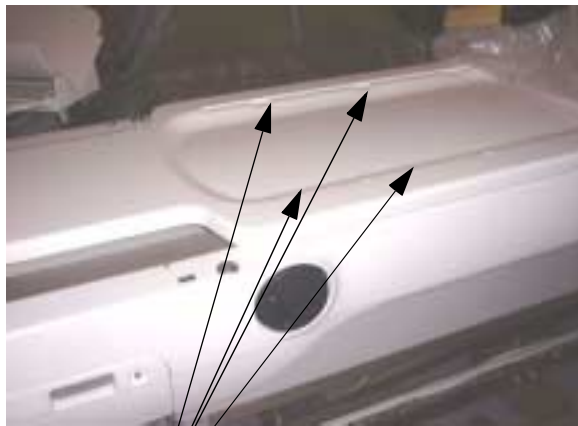


SAVE SERIES
ILLUSTRATION 3

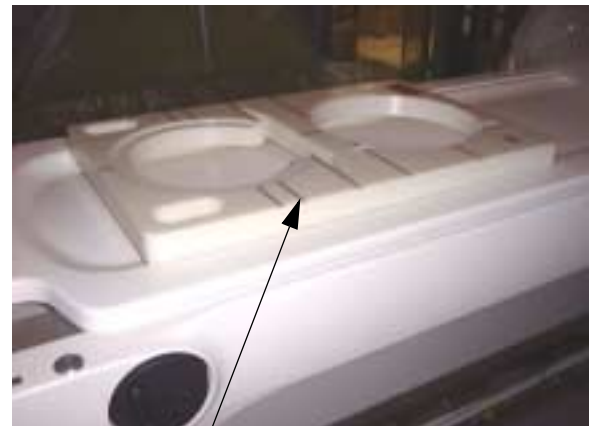
Rev 0

4. Phantom Setting

1. Set the nesting plate on the cradle by aligning the dents of cradle and projection of nesting plate as shown below.



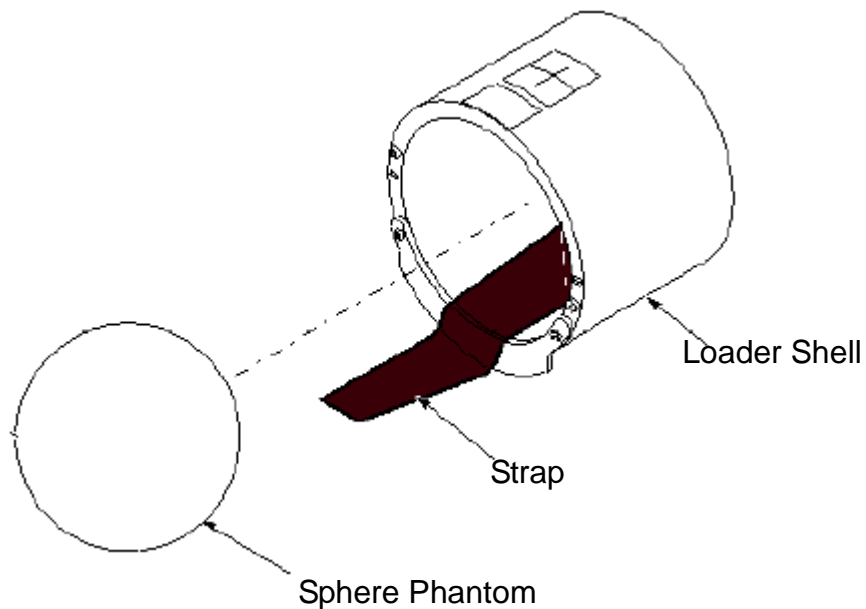
Nesting Plate Alignment Dents



Nesting Plate

NESTING PLATE
ILLUSTRATION 4-1

2. Insert Body Sphere in Loader Shell as shown below. Fasten strap to top of Loader Shell to secure Body Sphere Phantom inside loader.



INSERT SPHERE PHANTOM IN LOADER SHELL
ILLUSTRATION 4-2

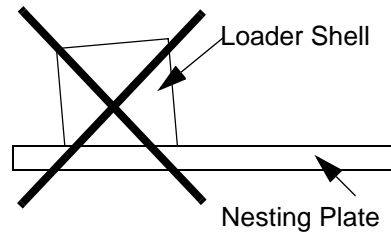
Rev 0

4. Phantom Setting (continued)

3. Set the Loader Shell on nesting plate as shown below. Make sure that the Loader Shell is horizontal (not tilted).

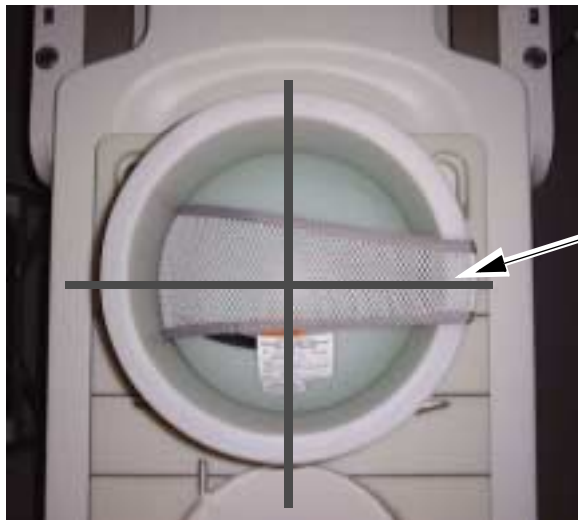


Make sure Loader Shell is not tilted



PLACE LOADER ON NESTING PLATE
ILLUSTRATION 4-1

4. Move the cradle so that the alignment light hit the center of the Sphere Phantom.



Align at center of phantom

ALIGN
ILLUSTRATION 4-2

5. Press [LANDMARK] and then press [MOVE TO SCAN].

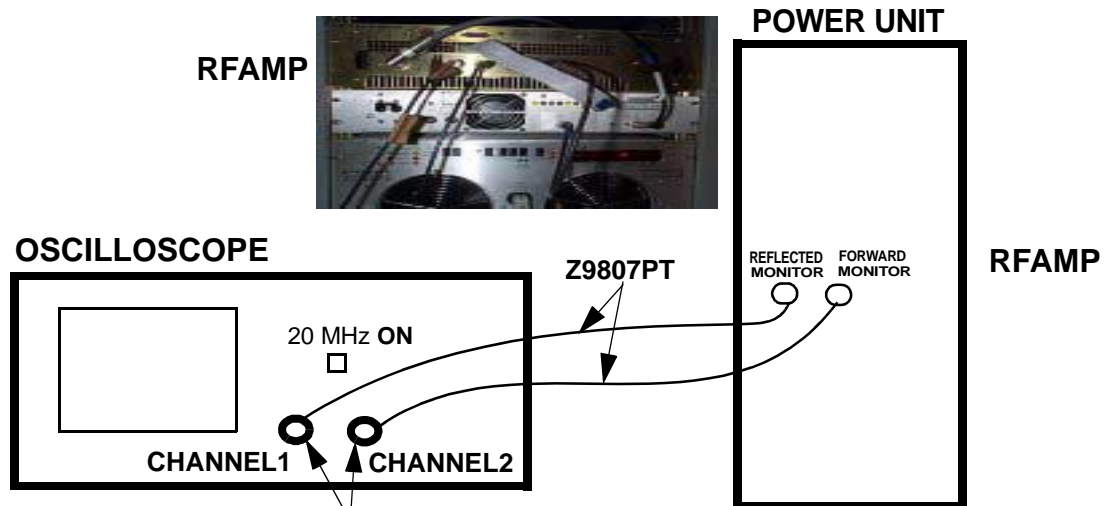
Rev 0

5. Setup Oscilloscope

1. Setup oscilloscope according to the following illustration.
2. Set the range to 50 ohms DC.

Note : If your oscilloscope does not have 50 ohms DC range function, use 50 ohm terminator Z9807QA.

3. Turn 20 MHz bandwidth limit function "ON"



Set the range to 50 ohms DC.

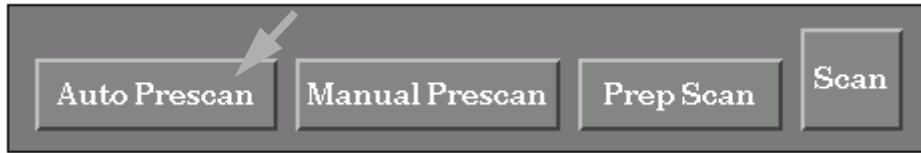
If your oscilloscope does not have 50 ohms DC range function, insert 50 ohm terminator Z9807QA here.

OSCILLOSCOPE SETUP
ILLUSTRATION 5-1

Rev 0

6. Auto Prescan

1. Select [**Auto Prescan**].



**AUTO PRESCAN
ILLUSTRATION 4**

2. Verify that scanning has been started.

3. Record TG value

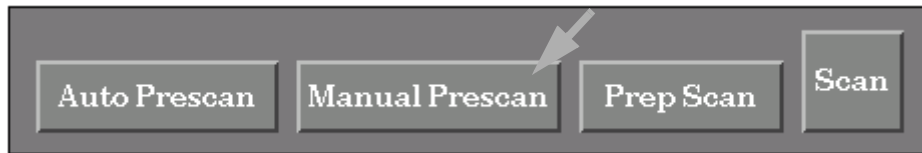
**TABLE 6-1
AUTO PRESCAN TG VALUE)**

	Value	Sample Value
TG		153

Rev 0

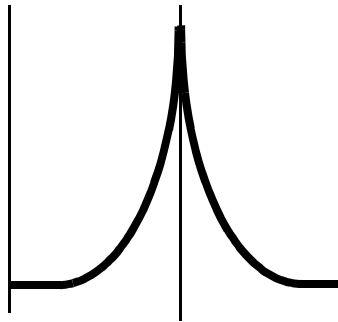
7. Manual Prescan

1. Select [Manual Prescan].



MANUAL PRESCAN
ILLUSTRATION 5

2. Click on "ScanT/R".
3. Verify that there exists some kind of projection.



EXAMPLE OF PROJECTION
ILLUSTRATION 7-1

Rev 0

8. Data Measurement and Analysis

1. Measure V(forward) (voltage of Forward p-p) and V(reflection) (voltage of Reflection p-p) from the oscilloscope. For accuracy, record $V_{p(+)-0}$ first, and record $V_{0-p(-)}$ next, and calculate the sum.

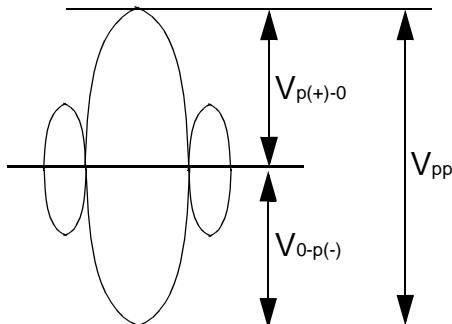


ILLUSTRATION 8-1
 $V_{P(+)-0}$ AND $V_{0-P(-)}$

TABLE 8-1
FORWARD AND REFLECTION P-P VOLTAGE)

	Value ($V_{P(+)-0}$)	Value ($V_{0-P(-)}$)	$V_{pp} (= V_{p(+)-0} + V_{0-p(-)})$	V_{pp} (Reference Value)
V(forward)	V	V	V	9.7 V
V(reflection)	V	V	V	0.3 V

2. Calculate the sum of the voltages according to the following formula and record the value.

$$V(\text{sum}) = V(\text{forward}) + V(\text{reflection})$$

TABLE 8-2
SUM VOLTAGE)

	Value
$V(\text{sum}) = V(\text{forward}) + V(\text{reflection})$	V
Specification	$V(\text{sum}) \leq 11.04 \text{ V}$
Reference Value	10.0 V

Note:

If calculated sum voltage exceeds the specification, there may be problems in transceiver side of RF chain. Refer to Trouble Shooting (RF Chain).

Rev 0

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 8, 2001	M. Ikeda	Initial Release