1A. Test Equipment

Model 610 Sweep Generator
Model 6247D RF Plug In
D11 Single Beam Storage
Model 1038H13 Horiz/Memory/Log Display
Model 1038V12 Log Amp/Memory/Channel A
Model 1038V12 Log Amp/Memory/Channel B
Model 60N50 VSWR Bridge 10MHz to 2GHz

1B. Test Equipment

Wiltron Network Analyzer Model 560
8620C Sweep Osc.
86222A RF Plug-In
SWR Auto Tester 560-97N50-1

2A. Test Equipment Hook Up 1st Test

610D Amp-RF Dip
Sweep Mode Auto
Sweep Time .1 - .01 Var Knob ≃ 11 "0"clock
Freq Selector F1 to F2
Horiz out to Detector input to 1038H13
Leveling - int
F1 (Red) ≃ 829MHz
F2 (Orange) ≃ 2GHz
Var Freq Marker (yellow) same as F1
ΔF Freq Blue on 2

6247D Freq Range 10MHz - 18.5GHz
RF Power ≃ Z oclock
RF output thru 10dB load to VSWR bridge

1038H13
A in
B off
Horiz ext
Calibration off
Detector input from Horiz output

1038V12
Channel A
Offset dBm/db 000
Chan A Disp Access Mem In
dB/Div 1dB
Ref Level CL
Ref Center Screen
Detector to power detector 10 -1575

1038V12
Channel B off during this test

2B. Test Equipment Hook up

560 Channel A on 1dB/Div
Memory A off Sub on
Offset to 000
Channel B Off
Memory B Off
Input B On
Ref dB Lite On
Smoothing Off
Display mode refresh in

8620C Full sweep off Band 2-6.2GHz
ΔF On X1
CW marker on Inter 2GHz
CW vernier off x1
Mode Auto
Trigger - Line
Time .01 knob CCW

86222H RF On
Pwr Lev ≃ 9
Int
RF out to 10dB load to SWR Auto Tester

SWR Auto Tester
RF input to RF output 86222A thru 10dB load
Device under test (DUT) open for now
Detected SWR output goes to B input 560

RF Detector
5MA end open for now
other end goes to Wiltron port A

3A. Setting up a Standard

Put barrel from detector to VSWR bridge

Channel A On
Channel B Off
Access A Memory
Ref Lin CL
Ref Adjust center line
dB/Div .5dB
push memorize
push (-)memory
push 1dB/div
Ref line to +4

3B. Insert barrel between detector and VSWR bridge
Offset 0dB center of screen with zero db set
Memory off
.5dB/div
Store trace push
Subtract push
1dB/div
Offset to top of screen - 04.0
Remove barrel

4. Continuity Test

Use ohm meter and special U shaped cable and check continuity between ports 1 & 2. See Fig. 1 then with meter lead in port 1, touch case to see if it is shorted, it shouldn't be.

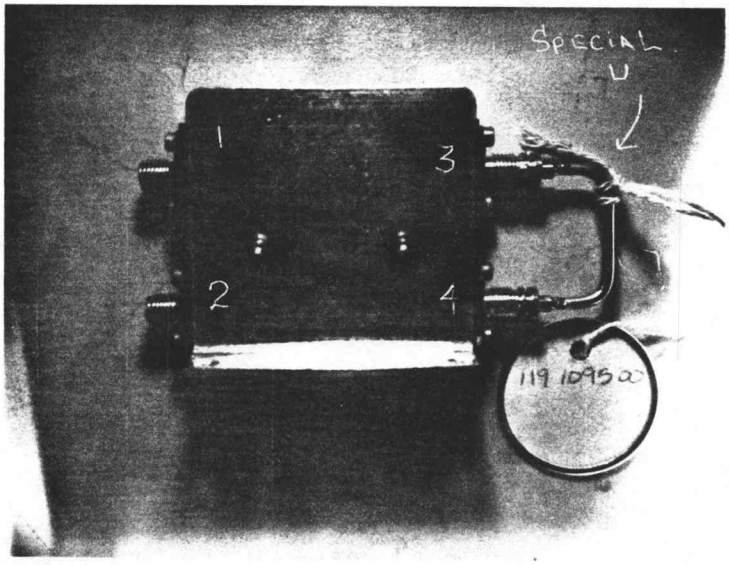

Fig. 1

4A. Testing On System 610D

Insert quick disconnect on ports 2 & 4 with 50Ω terminators
Insert detector into port 1
Insert port 3 into the VSWR bridge
The screen should look like Figure 2

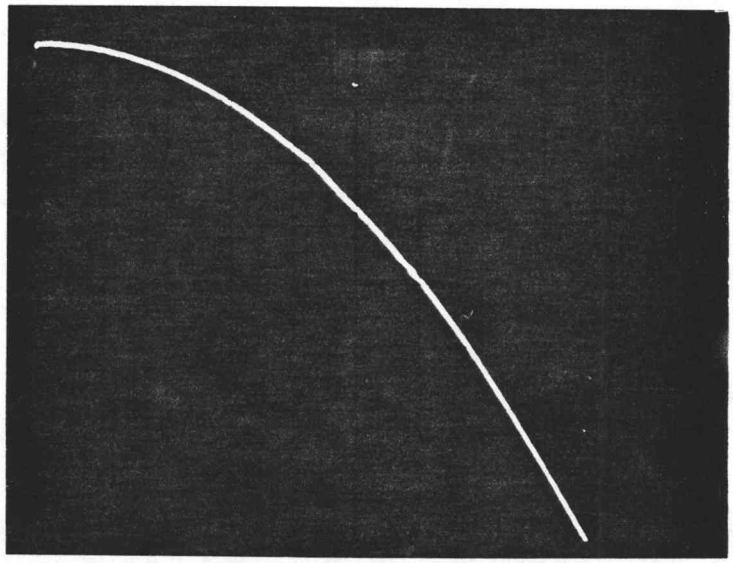

Fig. 2

This is a 10% check selected at random-if it looks like this ship it.

4B. Testing on System 510

Insert quick disconnection ports 2 & 4 with 50Ω terminators
Insert detector into port 1
Insert port 3 into the VSWR bridge the screen
Should look like Fig. 3

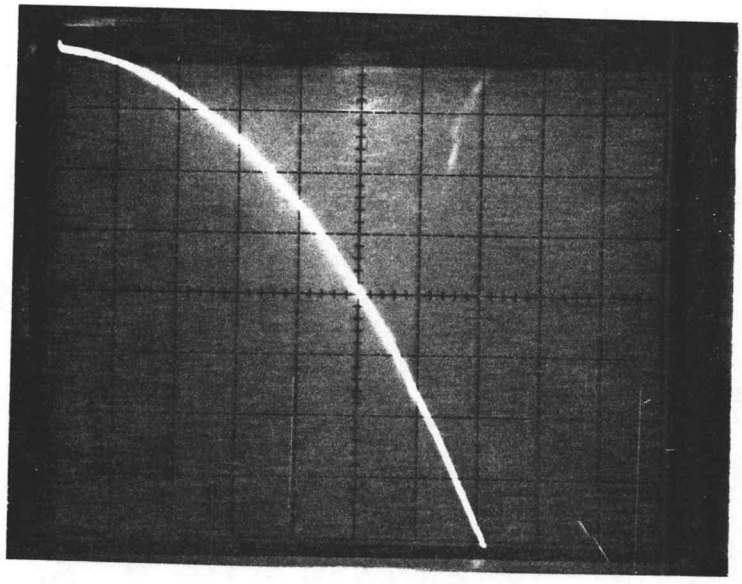

Fig. 3

5 Specs 2 - 12dB from 829MHz to 2072MHz.