

4920M A-D Assembly Test Procedure

Equipment Required.

1. 4920M test rig
2. DMM (1061)
3. Calibrator (4700)

Abbreviations Used.

BUT Board Under Test

Procedure.

1.0. Initial Checks.

- 1.1. Check pcb for solder shorts, misplaced components etc and ensure that all relevant ECO's have been incorporated. Move TL601 to the left hand position.

2.0. Self Test.

- 2.1. Fit the board under test (BUT) into the test rig. Switch on rig. Observe OPER TEST and ensure satisfactory completion. In this case continue at step 2.3.
- 2.2. If Oper Test fails investigate problem using pathways and error messages to isolate the problem. Note it may be useful to run DIAGNOSTIC TEST to see how far out of spec the problem is. Repeat 2.1 until a pass is obtained.
- 2.3. Connect the DMM and scope to the following test points wrt TL203 and check that the readings are as shown. Ensure that there are no oscillations.

Voltage	Test Point	Reading	Noise
+11V	TL704	+10V to +11V	<5mV p-p
-19V	TL705	-18V to -19V	<5mV p-p
+5V	TL702	+4.75V to +5.25V	<10mV p-p

3.0. Linearity.

3.1. Remove U401 from BUT. Connect the calibrator Hi to U401 Pin 8, Lo to R519 rear, and select 10V DC range, Remote Guard, output ON. On test rig select 7½ digit resolution and Pathway PV01 =>>. Apply the following voltages and note the display readings:-

Input	Display Reading	Noise
+1V	a	< 5 digits
+5V	b	< 5 digits
+9V	c	< 5 digits
-9V	Check same as c ±10,000 digits	< 5 digits

Check that $\frac{c+a}{2} = b \pm 10 \text{ digits}$

4.0. Refit U401 to BUT. Cut TL201, TL202, TL203.

All Tests Complete.

4920M A-D Assembly Test Procedure

Ser No:-

Operator:-

- 1. Power Up Self Test ()
- 2. Power Supply Checks ()
- 3. Linearity Check ()
- 4. Refit U401. Cut TL201,202,203 ()