

**912 ENVELOPE FOLLOWER**

**A. FOLLOWER SECTION**

1. Set P1 to mid-rotation.
2. Apply a 250Hz sine wave at -15db to the SIGNAL INPUT (J1).
3. Set P4 for 4.5 volts dc at the CONTROL OUTPUT (J2).
4. Adjust P3 to even the "TOPS" of the peaks of the sine wave, with response ON, as observed on oscilloscope connected at CONTROL OUTPUT (symmetry). Repeat steps 3 and 4 to maintain proper dc output. If necessary, change R21 from 15K to

6.5K for a 4.5V indication.

5. Check input/output levels as shown below with a 250Hz sine wave.

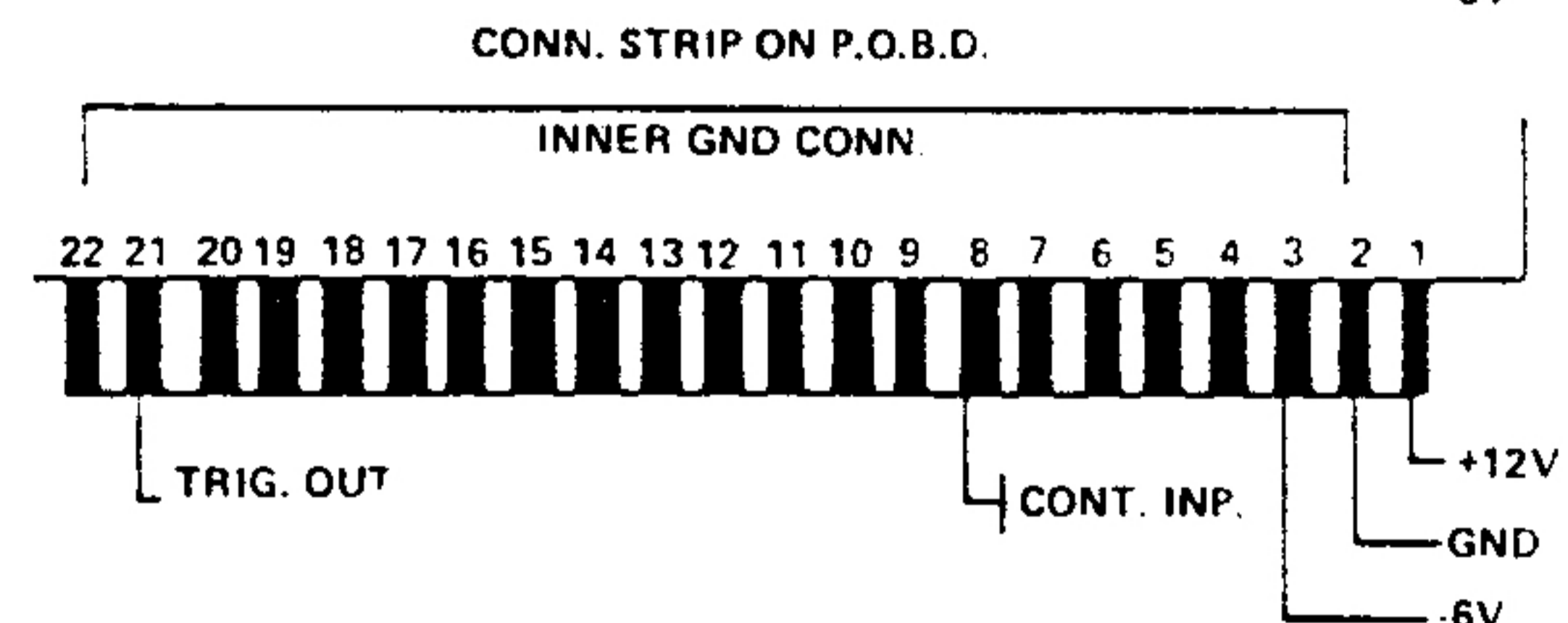
INPUT (db)	OUTPUT (volts)
+3	6.0
-3	5.5
-9	5.0
-15	4.5
-21	4.0
-27	3.5
-33	3.0
-39	2.4
-45	1.8
-51	1.1
-57	0

±0.1V (for 4.5V to 6.0V range)  
±0.2V (for 1.1V to 4.0V range)

**B. TRIGGER SECTION**

1. Apply a -42db signal to SIGNAL INPUT (J1).
2. Connect dc voltmeter across TRIGGER OUTPUT (J4). As THRESHOLD control (R13) is rotated counterclockwise, trigger output of approximately 50MV will occur at mid-range of rotation.

**NOTE**  
Utilize a 912 Envelope Follower to trigger a 921, 902 and 911 setup to determine proper operation of trigger threshold.



**NOTES: UNLESS OTHERWISE NOTED:**

1. ALL RESISTORS IN OHMS
2. ALL CAPACITORS IN  $\mu$ f
3. ALL NPN TRANSISTORS = 2N3392
4. ALL PNP TRANSISTORS = 2N4058
5. ALL DC VOLTAGES  $\pm$  20% MEASURED WITH 250Hz -15db SIGNAL AT SIGNAL INPUT
6. VOLTAGES READ WITH THRESHOLD CONTROL GOING FROM FULL CW TO FULL CCW
7. BASE LAYOUT FOR TRANSISTORS USED:

**ADJUSTMENT LOCATION DIAGRAM**

993-041776

FIGURE 19 ENVELOPE FOLLOWER MODEL 912