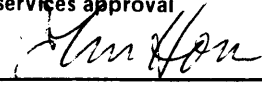
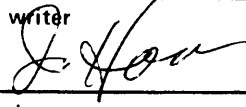
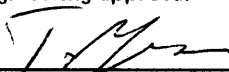
 <b>SERVICE BULLETIN</b>	model number ALL UNITS	bulletin number  00017
	for serial numbers ALL UNITS	
	subject TROUBLESHOOTING BURNED OUT COMPONENTS OF THE DRIVER BOARDS	
	technical services approval 	writer 
engineering approval 	date 4/17/80	

**TRUBLESHOOTING BURNED OUT COMPONENTS OF THE DRIVER BOARDS**

**SYMPTOM:**

Resistor R33 is burned out on the end-driver board and resistor R17 on the center-driver board is okay. (See figure 1 to locate R33 on the end driver which is labelled on the board and see figure 2 to locate the labelled resistor R17 on the center-driver board.)

**POSSIBLE CAUSE:**

1. Loose connector on the center-driver board.

**SOLUTION:**

Turn power off and wait one minute. Remove the center-driver board, and examine connectors J2, J3 and J4 (see figure 2 to locate). If any of them is loose, replace the center-driver board and the defective end-driver board and retest using the short-test indicator lamp. (See page #139 of the Installation, Alignment and Field Service Manual for instructions relating to the use of the short-test indicator. If no connectors are loose, go to possible cause #2.)

**POSSIBLE CAUSE:**

2. The black and red cable (cable #5) connecting the end-driver board to the center-driver board is defective.

**SOLUTION:**

Turn off the power and wait one minute. Replace the end driver and the red and black cable connecting the end driver to the center driver with the one in the repair kit. Retest the system using the short-test indicator. (See page #139 for short-test indicator instructions.)

**POSSIBLE CAUSE:**

3. The end driver has a defective connector labelled J2. (see figure 1 to locate the connector.)

**SOLUTION:**

Turn off the power and wait one minute. Replace the defective end-driver board and retest using the short-test indicator.



(See page #139 of the Installation, Alignment and Field Service Manual for short-test indicator instructions.)

**SYMPTOM:**

Resistor R33 on an end-driver board is burned out and resistor R17 on the center-driver board is burned out. (See figure 1 and 2 to locate the resistors.)

**POSSIBLE CAUSE:**

1. A loose connector on the center-driver board.

**SOLUTION:**

Turn off the power and wait one minute. Remove the center-driver board and examine connectors J2, J3 and J4 on it (See figure for locations). If any are loose, replace the effected end-driver boards and center-driver boards and retest by using the high-voltage test lamp. If no connectors are loose, go to possible cause number 2 below.

**POSSIBLE CAUSE:**

2. The connector where the red and black cable (#4) plugs in on the power supply is loose.

**SOLUTION:**

Turn power off and wait one minute. Examine the connector on the power supply where the red and black cable plugs in for looseness. If loose, replace the power supply, the center-driver board and the end-driver board(s) which have the burned out resistors. Retest the system using the high-voltage test lamp. If not loose, go to possible cause #3 below.

**POSSIBLE CAUSE:**

3. A defective red and black cable (cable #4) connecting the center-driver board to the power supply.

**SOLUTION:**

Turn power off and wait one minute. Replace the center driver and the end-driver board(s) which have the burned-out resistors, and replace the red and black cable (#4) which connects the center driver to the power supply. Retest using the short-test indicator.

TROUBLESHOOTING BURNED OUT COMPONENTS OF THE DRIVER BOARDS

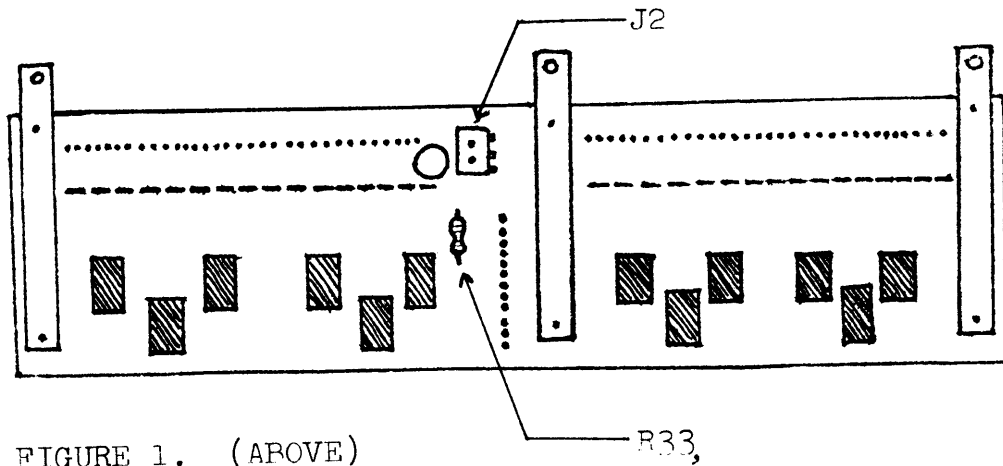


FIGURE 1. (ABOVE)

END DRIVER BOARD

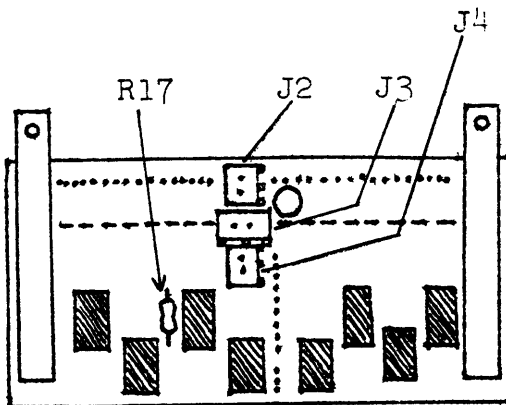


FIGURE 2. (ABOVE)

CENTER DRIVER BOARD