

TROUBLESHOOTING DOCUMENTATION

PROBLEM: Intermittent "OUT OF MEDIA" on switch panel display

SOLUTION: Replace R27 with a 20 K Ω resistor, (was a 10 K Ω). Desolder 10 K Ω resistor and solder 20 K Ω resistor into the same location of plotter controller board. Perform adjustment procedure below.

Course Adjustment

Tools: Small tweaker and ohmmeter

Procedure: The VR2 potentiometer needs adjusting to a setting of 20 K Ω -28 K Ω , (+/- 5 K Ω). Place the red lead of the ohmmeter to the pin 14 of U7 and the black lead to ground. Adjust VR2 until the ohmmeter reads ~ 23 K Ω . Use a small tweaker to adjust the VR2 potentiometer to the left in _ turn increments. Perform a reset. If the switch panel display still reads "OUT OF MEDIA" after two turns, return the VR2 potentiometer back to its initial position. Adjust potentiometer by turning to the right in increments of a _ of a turn until the problem is resolved.

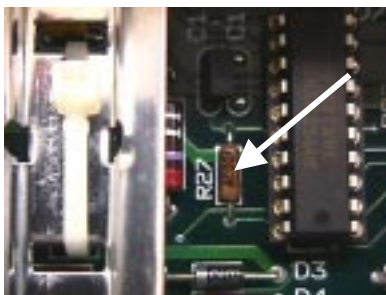
Note: Course adjustment is done to obtain on line status only, use the fine adjustment procedure to obtain 50/50 Duty Cycle.

Fine Adjustment

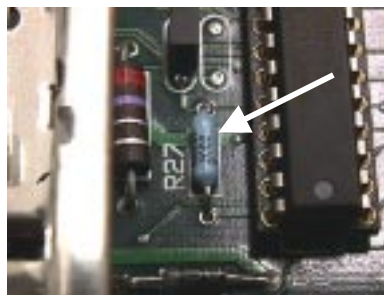
Tools: Small tweaker and Oscilloscope

Settings: Time/Div. = 50 ms Volt/Div. = 2 V

Procedure: Place the probe of the oscilloscope onto the leg of the resistor at the R27 location. Connect the ground return of the oscilloscope to ground. Start the accuracy test and check the frequency lengths of the square wave. (50/50 Duty Cycle) If the frequency lengths are not equal, adjustment is necessary. Use tweaker to turn VR2 potentiometer as required (either clockwise or counter-clockwise) to obtain 50/50 Duty Cycle.



R 27 w/10 K Ω resistor

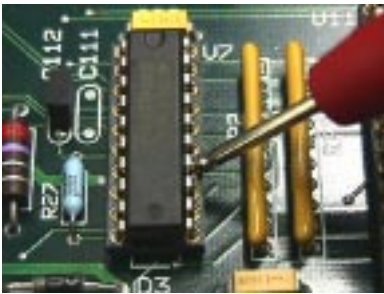


R 27 w/20 K Ω resistor

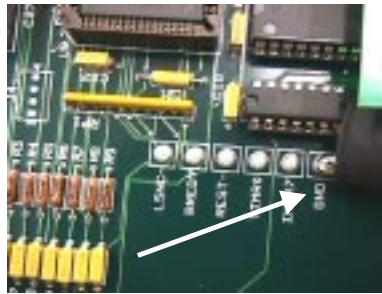


VR2

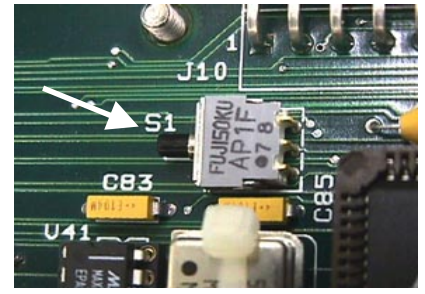
MORE ILLUSTRATIONS ON THE FOLLOWING PAGE



PIN 14 on U7

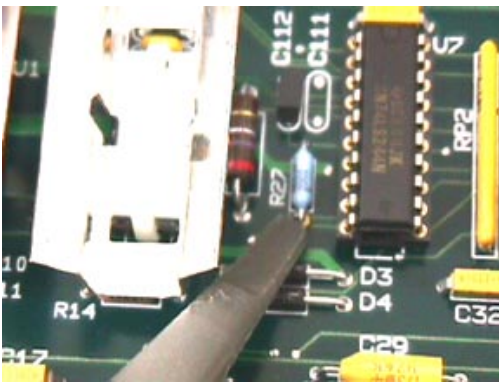


Ground

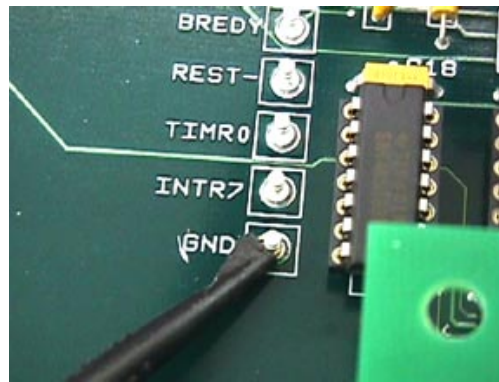


Reset Button

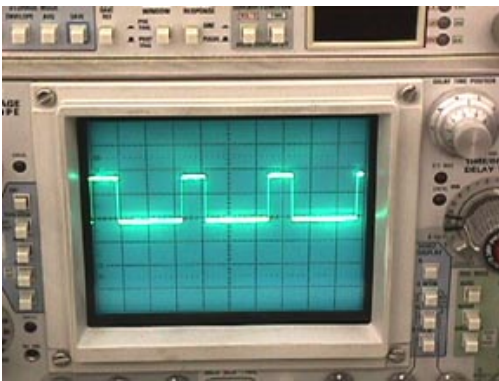
Illustrations for FINE adjustment



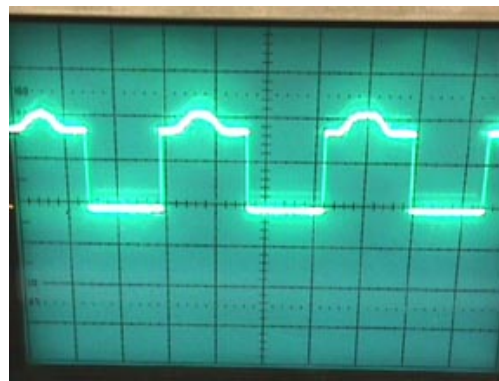
Probe



Ground



VR2 needs adjustment



VR2 after proper adjustment