



CDP-101 Power supply service

Overview

This service covers measuring the PSU's output voltages, measuring any ripple voltage, and evaluating and testing capacitors.

Measure the PSU's voltages

1. Remove the top panel and locate the PSU at the back left of the player.
2. Locate test points 8 to 15 and measure each voltage relative to chassis GND as per the following:

TP8 +12V

TP9 -12V

TP10 -16V

TP11 +16V

TP12 -12V

TP13 +12V

TP14 -5V

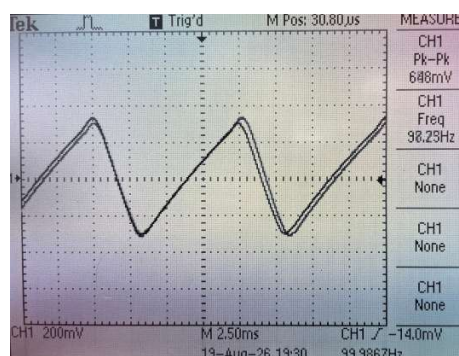
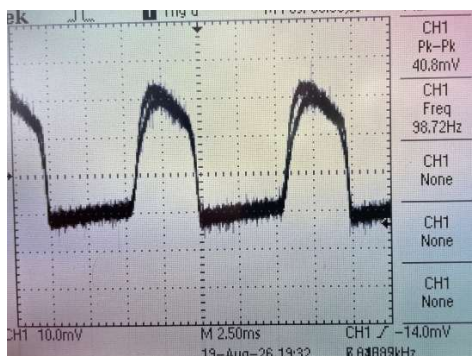
TP15 +5V

3. Enter each reading in the service checklist

Measure ripple voltages.

1. Measure the ripple voltage using an oscilloscope and record the peak to peak voltage in the service checklist
2. Take a screenshot of the +16V un regulated supply ripple waveform and add to the service checklist
3. Take a screenshot of the +12V regulated supply ripple waveform and add to the checklist.

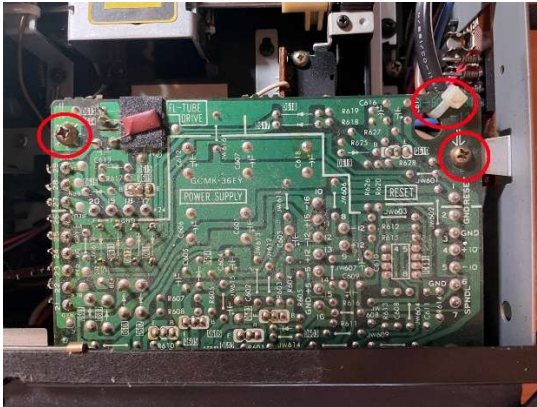
NOTE: With the player idling, the unregulated 16V supplies should measure about 650mV PP and the other regulated supplies (5V&12V) should measure about 40mV PP. The Waveforms should look like the following:



Evaluating electrolytic capacitor condition

NOTE: Before starting unplug the player from the mains supply and ensure enough time has passed to drain any charge the capacitors may have.

1. Remove the two screws holding the PSU PCB in place and the cable tie (circled)



2. From the rear of the player remove the two screws holding the heatsink in (circled)



3. Pull out the PSU as much as possible.
4. Examine the capacitors for any signs of bulging or leaking. Replace any if necessary.
5. Refit the PSU and replace the cable tie.