

Symptoms:

- 1) TV powers on but shuts down within a few seconds and Power On LED blinks a sequence of 4 RED flashes.
- 2) TV powers on but only the top or bottom half of the screen appears lit.



Figure 1

- 3) TV may power on and display a picture for only a few seconds and then shutdown. Usually the picture displayed will be something like figure 1.

NOTE: After the TV goes to the protect mode you will not be able to power it up again for at least three (3) minutes thus it may appear to be completely dead. This is due to a charge existing on the power supply board which prevents the TV from coming on. In order to verify whether a picture is momentarily displayed you will need to wait at least two (2) minutes and when you plug in the power cord you will hear a relay click. You may then power on the TV and observe whether the panel displays a picture prior to shutdown.

Models

26S2000/26S2010

32S2000/32S2010/32S2400/32S20L1

40S2000/40V2500/40S2010/40S2400/40S20L1

46S2000/46S2010/46V2500/46V25L1

Part Numbers

178950711

178950411

178950032

A1251295B

Testing results:**MODEL: KDL32520001 32520101 32524001 32520L 1**

The vast majority of 32-inch inverter board failures can be easily diagnosed by checking the fuses. To do this remove the rear cover of the set and then swing the main power supply out of the way by removing the 4 screws circled below (see figure 2).

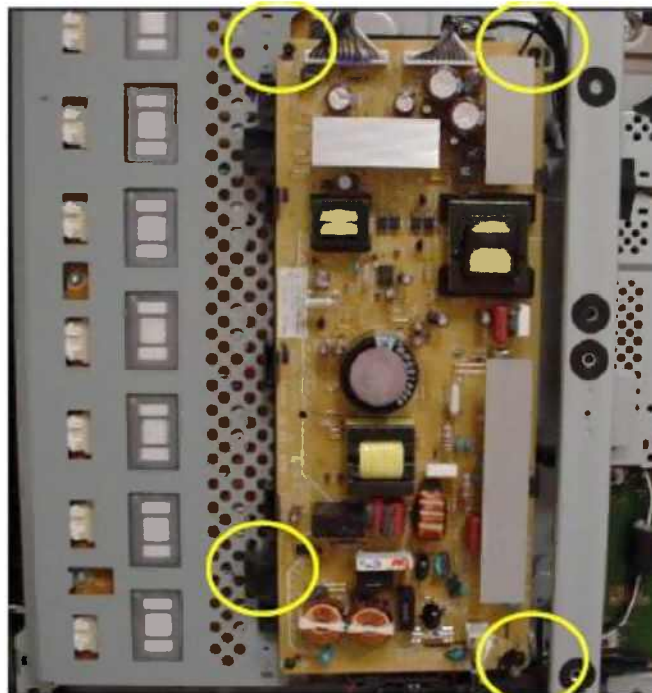


Figure 2

With the power supply out of the way you can remove the screws from the inverter board shield (see figure 3).

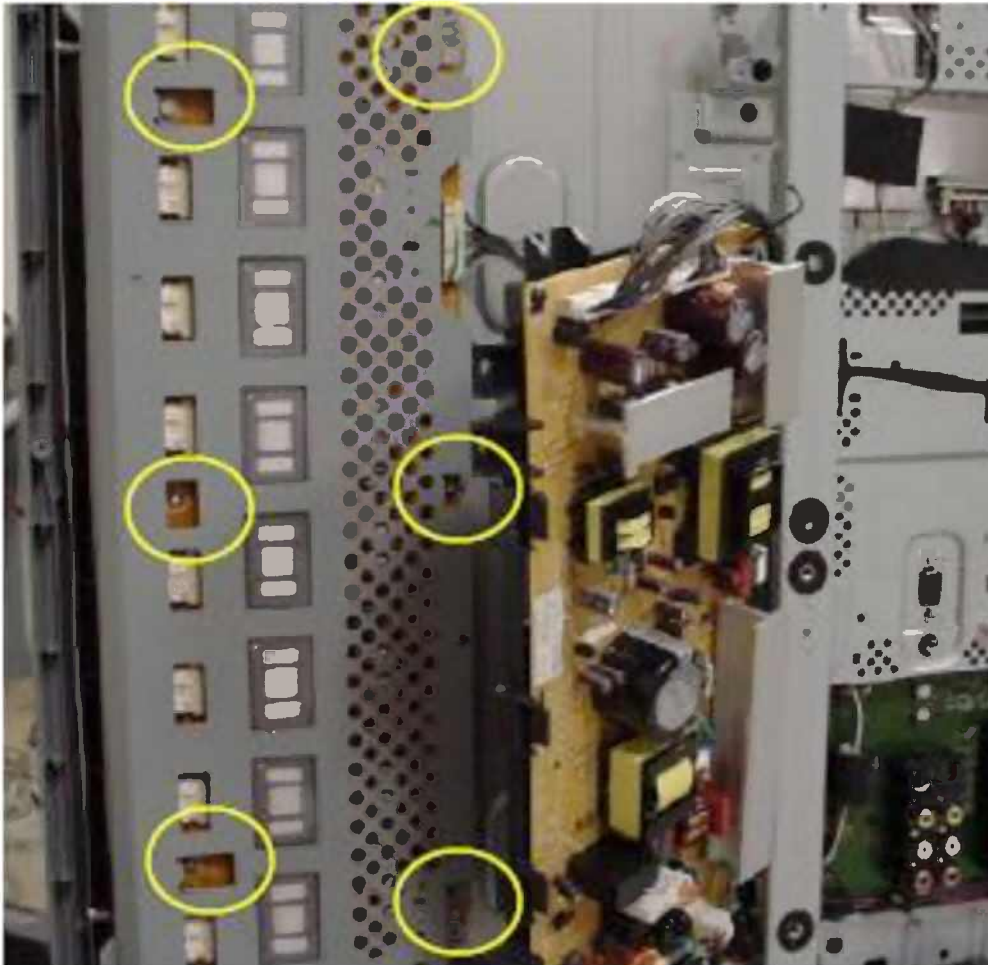


Figure 3

You can now check the three (3) fuses shown below (figure 4). If anyone of the fuses is opened the inverter board is bad. Please change the board. Component level repair is not allowed on this board since many of the parts have very specific requirements for safety.

CAUTION: When TV is on **HIGH VOLTAGE** is present on the secondary of the transformers and leads to the backlights so do not attempt to measure these voltages.

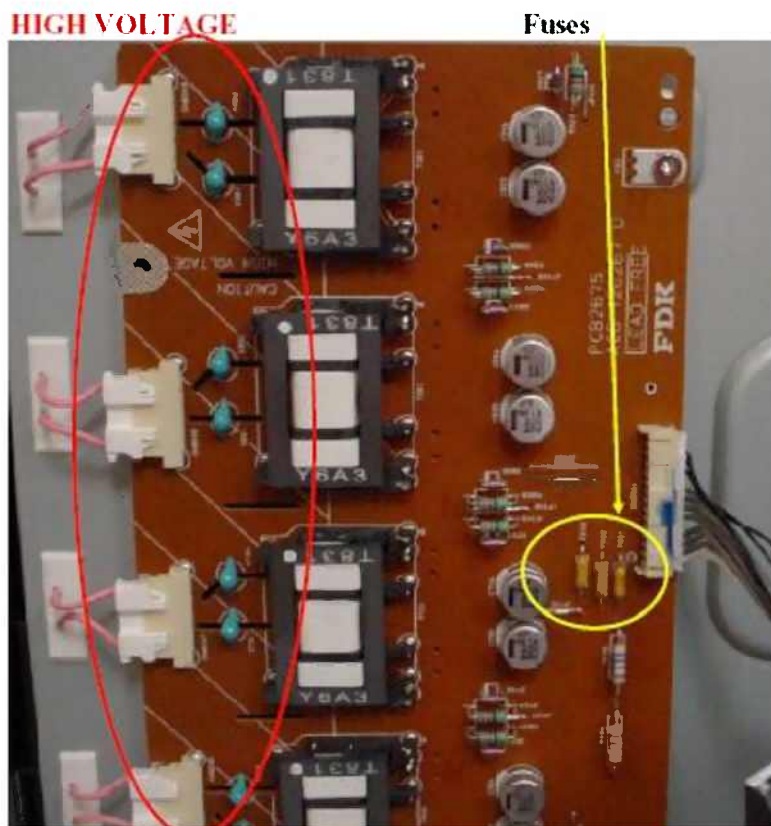


Fig 4

MODEL: KDL40520001 40520101 40V25001 40524001 40520L 1

Many of 40-inch inverter board failures can be easily diagnosed by checking the fuses. To do this remove the rear cover of the set. The inverter board is located under the shield to the left of the power supply. Remove the shield to access the fuses (see figure 5).

HIGH VOLTAGE

Fuses

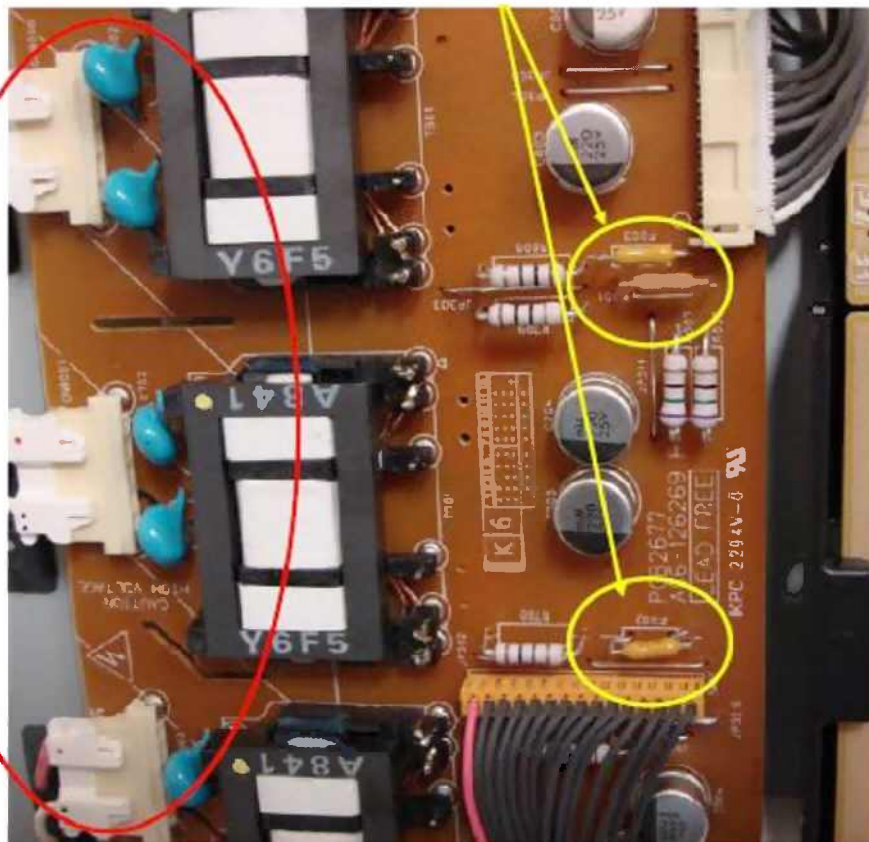


Figure 5

If anyone of the fuses is opened the inverter board is bad. Please change the board. Component level repair is not allowed on this board since many of the parts have very specific requirements for safety. CAUTION: When TV is on HIGH VOLTAGE is present on the secondary of the transformers and leads to the backlights.

Troubleshooting process:

Plug in unit and monitor the 18V line from the power supply to the inverter as the set is powered on. If 18v is present power supply is likely fine. Then verify if picture is displayed even if just for a moment. Pay special attention whether half the screen is dark or a single horizontal bar is dark (see examples below). Please note that it may take up to 3 minutes before the TV will allow itself to be turned on once it goes to protect so once it shuts down you will need to wait before trying to test it again. Even unplugging the set will not shorten this time for the set to reset.



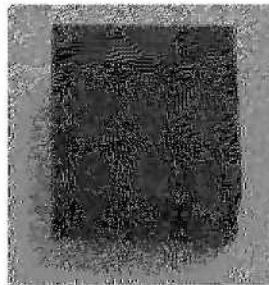
Half screen dark (Inverter Board failure) NOTE: 32" may stay on while the 40" normally displays for 1 second then shuts down.



One (1) lamp out

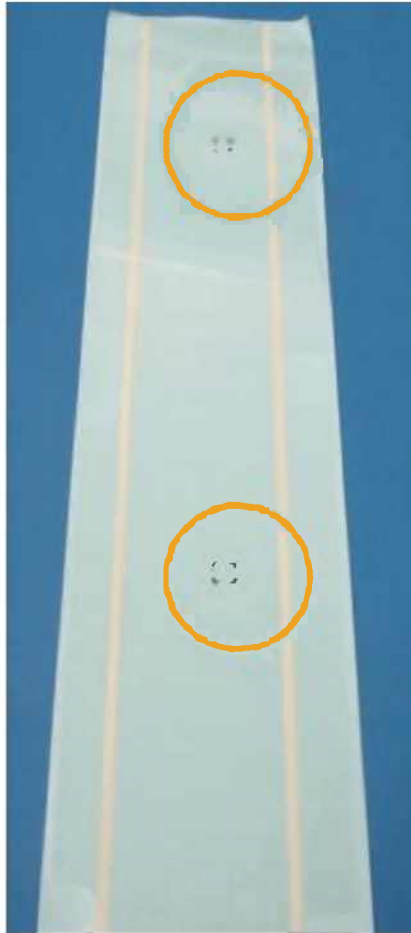
NOTE: Both the 32 and 40 inch models normally shut down for this condition. Remove power from set and verify that the connectors from the inverter board to the backlights are seated correctly. Try inverter board first however if that does not fix this condition you will need a panel assembly.

NOTE: When changing the inverter board on the **40** inch models please make sure to include the 2 **spacers** (part # **2-897-655-01**) as shown below.



You may also need to change the insulator sheet part number **2-896-954-01**

NOTE: There are perforated markings on the insulator sheet which show the location for the spacers. Below the perforated areas have been outlined in black so that they may be seen in the picture.



NOTE: For the 46" models there are two sets of inverter boards, one for the left side and the other for the right side of the panel. When you order the part number at the top of this document you will receive a kit that contains both sets. There are pictures below which illustrate this.



