

Optical assembly cleaning procedure

Purpose:

The following is a procedure for cleaning the optical assembly. The instructions below start at the point where it is assumed that the optical assembly has been removed from the TV set. THIS PROCEDURE MUST BE PERFORMED IN A CLEAN ENVIRONMENT.

Symptom:

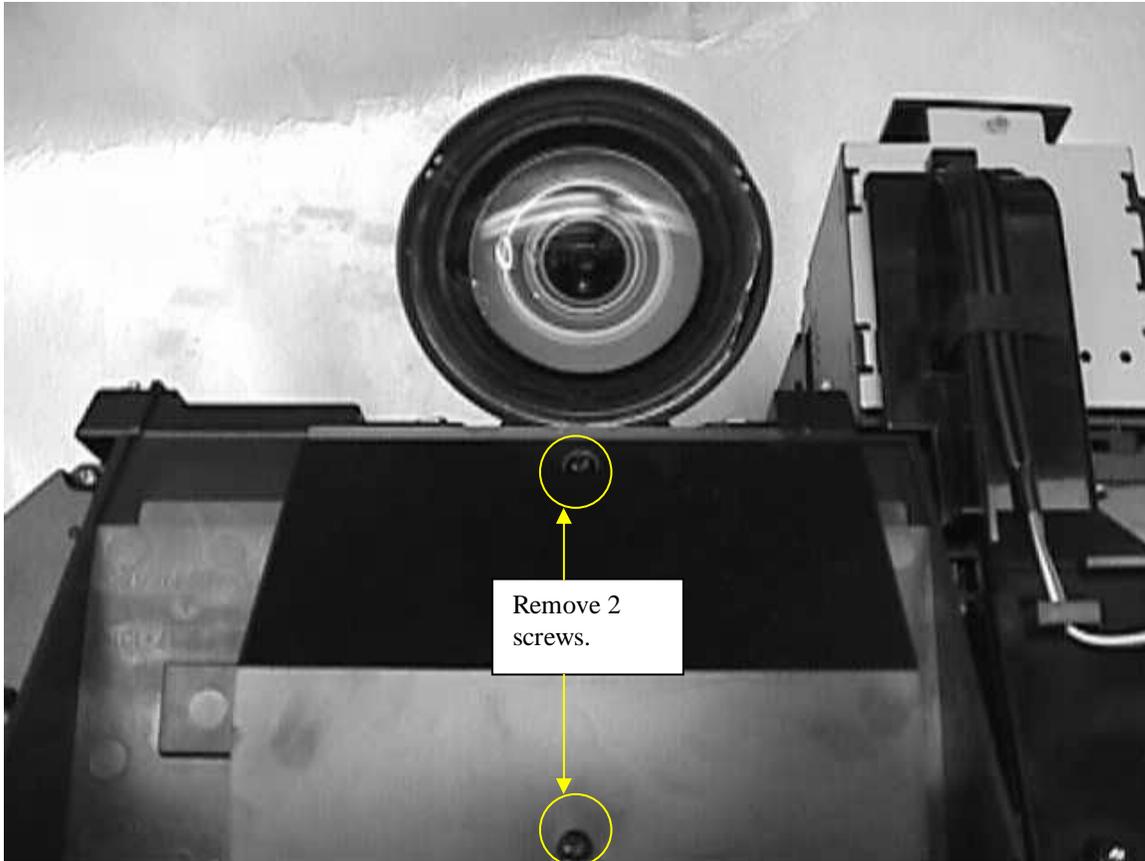
Dust spots will normal show up as diffused circles about the size of a quarter or silver dollar. Something the will appear as white however if viewed up close you will normally be able to see one of the primary colors of Red, Green, or Blue within the spot or around the edges of the spot.

Test Condition:

A standard method for determining whether dust is in the optical assembly is to use a signal generator and display an all white and all black display and a red, green, and blue raster. While each pattern is on the screen look carefully to determine which LCD panel has the offending particle. When all black or all white is displayed look carefully at the edges of the spot for reddish, greenish, or bluish color.

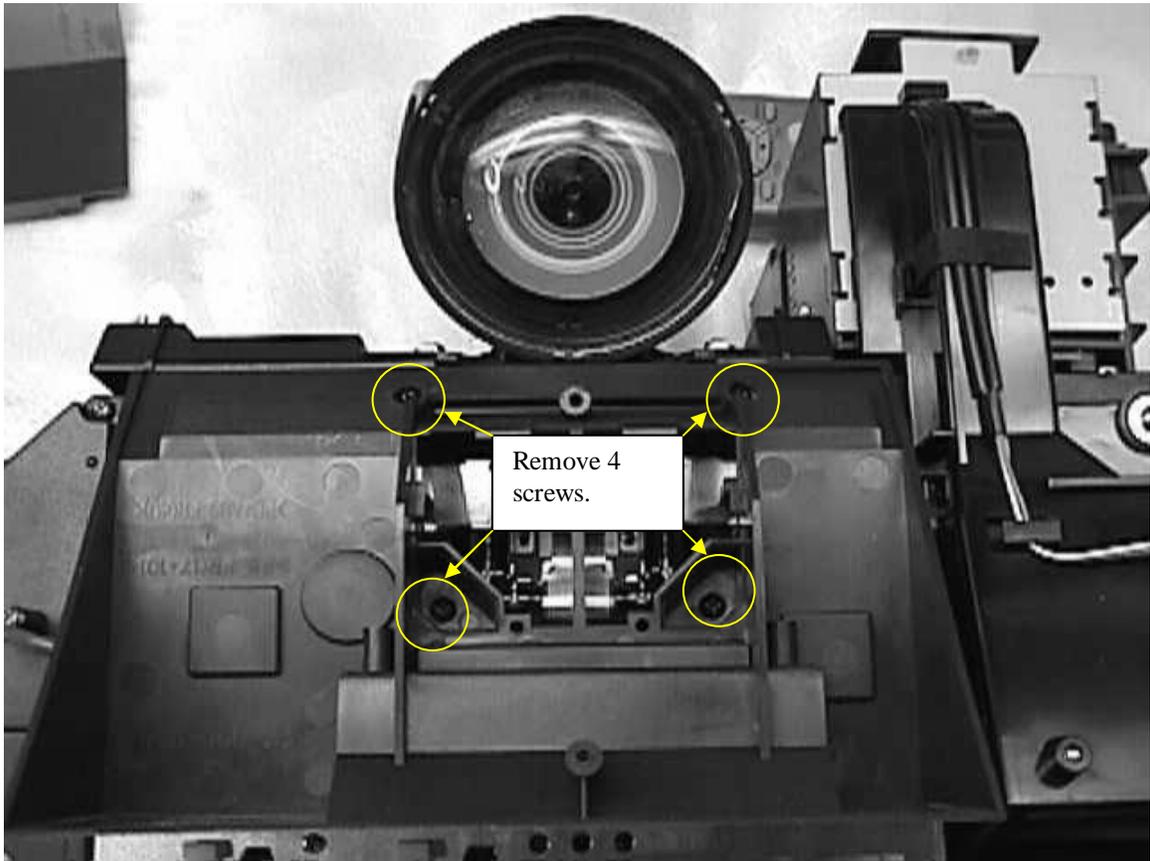
Step 1:

With the optical assembly removed from the set remove the 2 screws from the top plastic shield as shown below. If you have not removed the optical assembly and need assistance please see chapter 2 of the service manual.



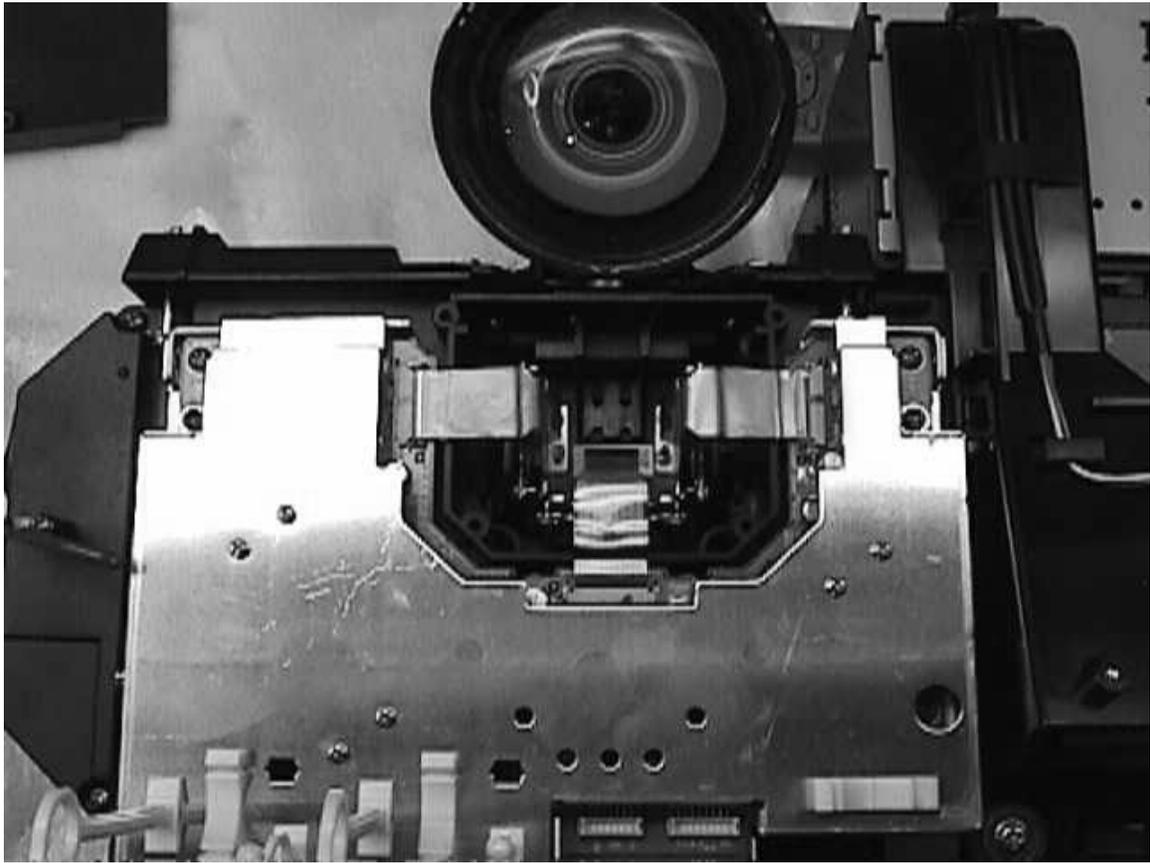
Step 2:

Remove the 4 screws from the plastic shield, which is below the shield that was removed in step 1. See picture below.



Step 3:

The unit will now look as shown below.

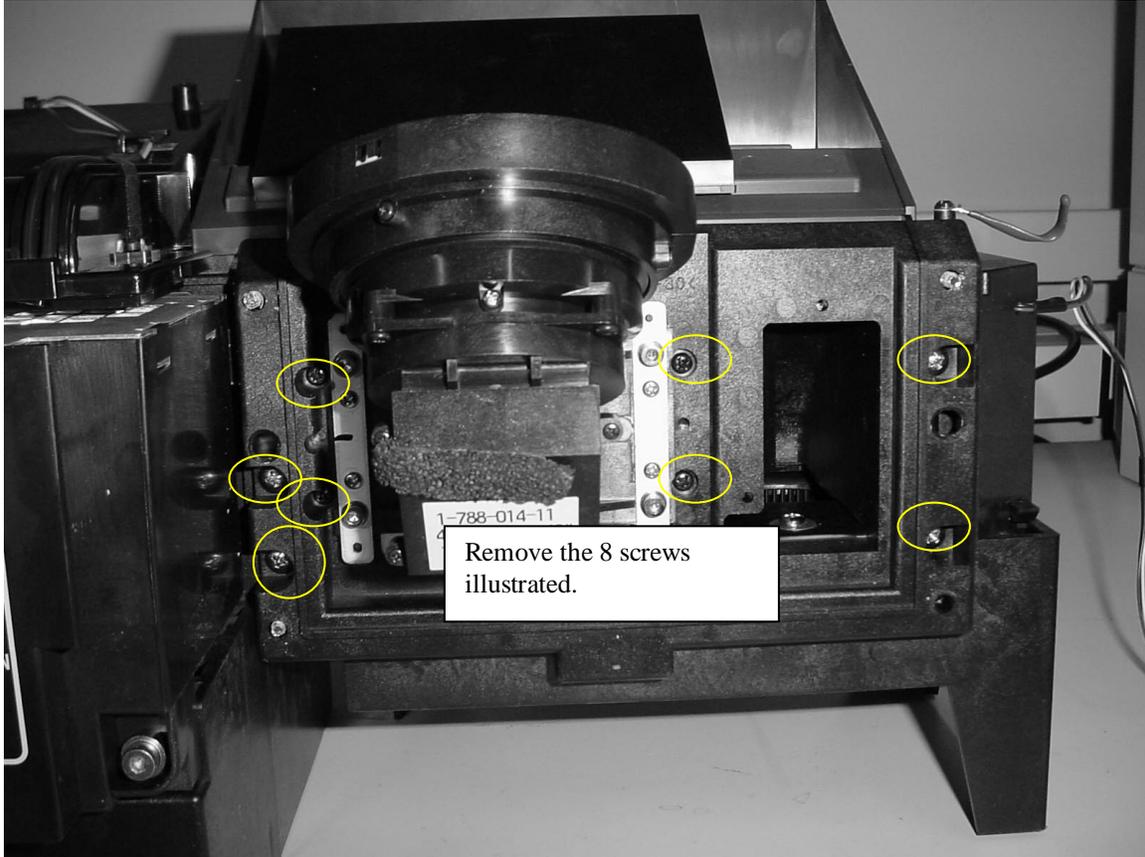


Now carefully lift the brown tabs that hold the ribbon cables in place. With the brown tabs in the up position remove the ribbon cables by slowly pulling them straight out. See picture below before attempting.



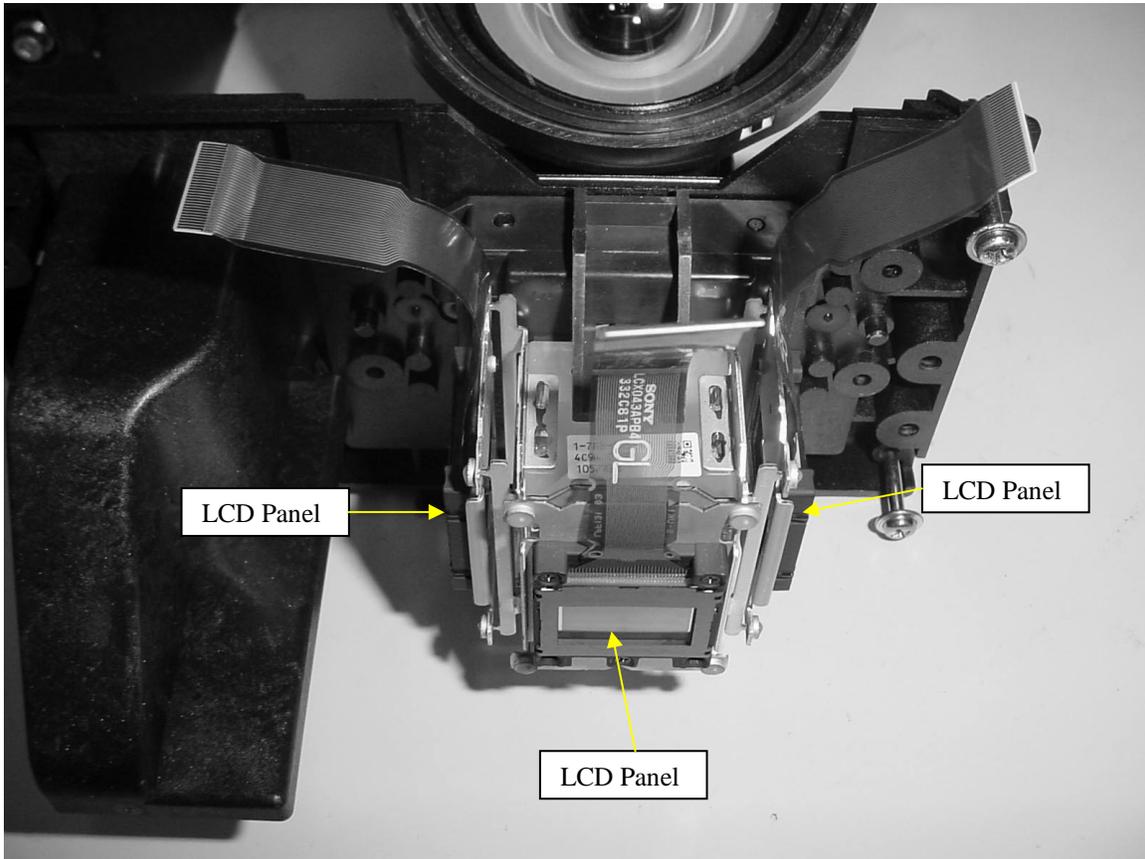
Step 4:

Once the 3 ribbon cables have been removed we will now remove the prism and lens assembly. Remove the 8 screws indicated in the below picture.



Step 6:

With the assembly removed you can now CAREFULLY clean off the LCD panels. This can be done by using filtered air and a soft brush if necessary to remove dust. Do not touch the LCD panels with your fingers as this will leave a mark. Make sure to clean both sides of the panels as well as the opening in which the prism block was removed from. NOTE: DO NOT take this module any farther apart. DO NOT adjust the screws holding the panels in place or the screws/ hex nuts near the lens as the alignment will be disturbed.



Step 7:

Carefully reassemble the optical assembly and reinstall it into the TV. Make sure that the LVDS cables are connected to their proper plugs as shown below.

