Created 10/01/09

This procedure covers the field replacement of the 1054 CCD Board for the USL DSTR-20 Digital SoundTrack Reader using the DSTR-CCD Kit.

### The parts in the DSTR-CCD Kit include;

- 1 ea.1054 CCD Board.
- 2 ea. M3 x 6mm Phillips Pan Head Screws.
- 4 ea. M3 x 12mm Allen Cap Screws.
- 4 ea. .25" dia. x .290" long Aluminum Spacers.
- 1 ea. disposable Static Strap.

#### Other items needed;

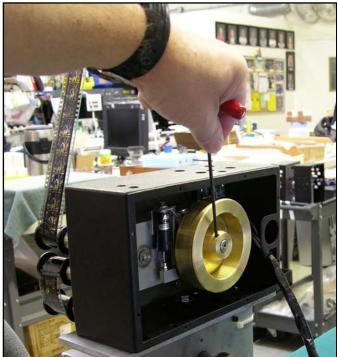
- Test Film.
- Laptop with DRAS (Dolby Reader Alignment Software).



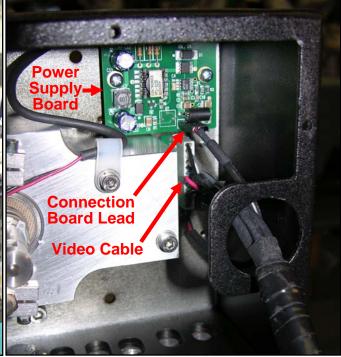
**CAUTION:** Use the Static Strap whenever handling or working near the 1054 CCD Board.

**Step 1:** Remove the 4 CCD Board Cover screws with their lock washers, and remove the Cover.



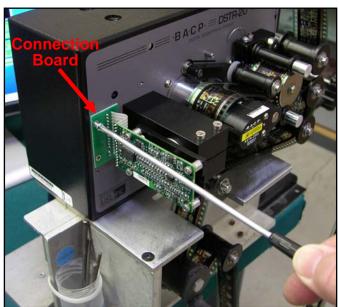


**Step 2:** Loosen the Flywheel Set Screw and remove the Flywheel.

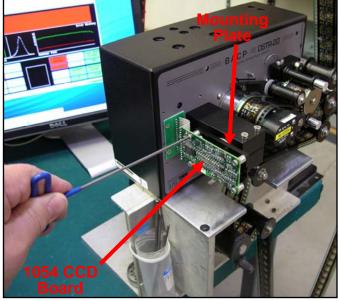


**Step 3:** Disconnect the Video Cable from the Connection Board.

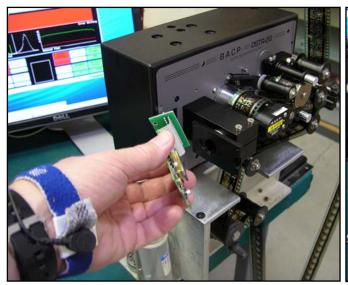
Disconnect the Connection Board Lead from the Power Supply Board.



**Step 4:** Remove the Connection Board screws.



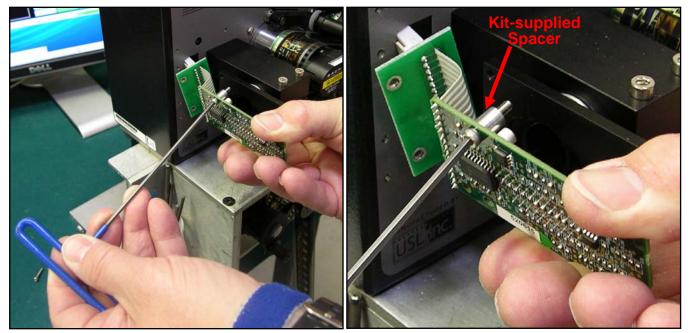
**Step 5:** Remove the four screws and spacers holding the 1054 CCD Board to the Mounting Plate.



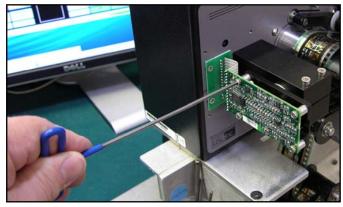
**Step 6:** Remove 1054 CCD Board. Be careful when pulling the Connection Board Lead out of the Chassis opening. **Step 7:** Install the replacement 1054 CCD Board. Feed the Video Cable out of, and the Connection Board Lead into the opening in the Chassis. Plug



**Step 7:** Install the replacement 1054 CCD Board. Feed the Video Cable out of, and the Connection Board Lead into the opening in the Chassis. Plug the Video Cable onto the Connection Board. Carefully feed the Cable and Lead back into the opening in the Chassis while positioning the 1054 CCD Board.

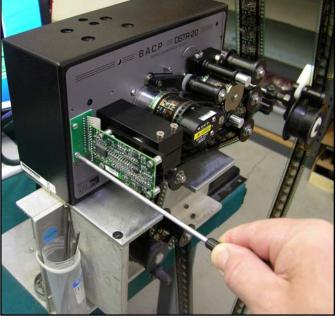


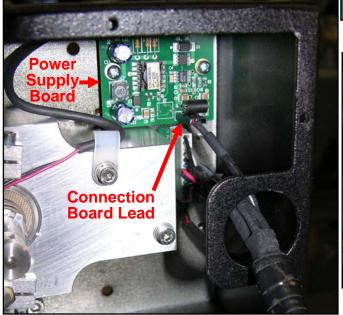
**Step 8:** One at a time, insert the Screws along with the kit-supplied Spacers into each corner hole of the 1054 CCD Board. (Note: Be sure to replace the existing spacers with the kit-supplied spacers. The kit-supplied Spacers are the proper length to ensure that the CCD contacts the aluminum Mounting Plate. This is necessary for the CCD to remain cool.)



**Step 9:** Run the Screws into the Mounting Plate, but leave them loose.

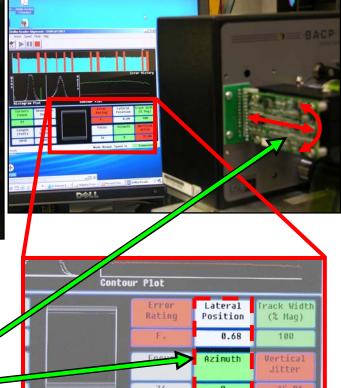
Step 10: Replace the Connection Board screws.





**Step 11:** Connect the Connection Board Lead to the Power Supply board.

**Step 12:** Replace the Flywheel, then install and start the Test Film and DRAS (Dolby Reader Alignment Software). Adjust the position of the 1054 CCD Board to obtain the proper "Lateral Position" and "Azimuth" (as specified on the "Test Film") on the DRAS. Tighten the screws holding the 1054 CCD Board.



Mode: Normal, Speed: 1x

Connected

**Step 13:** Remove the Test Film and replace the CCD Board Cover.