

## Teac Reel to Reel Pinch Roller Problems

This guide will step you through repairing one of the most common problems in the vintage Teac reel to reel decks. This is such a common problem that you should do this procedure to all of the vintage Teac units if you have them apart for any reason.

### Cleaning supplies and tools needed:

Rubber Cleaner/Restorer (available at Vintage Electronics). It can be used on anything except plastics. Be especially careful around plastic case parts as it will leave a mark if it comes in contact with the surfaces.

### Cotton Swabs

Screwdrivers A medium size Philips head screwdriver

Phono-lube This is a brand name of fine grease I use. Any fine grease will work just as well.

**Problem:** When the unit is put in play mode the pinch roller either does not come up at all or is very stiff and doesn't come up tightly against the capstan. This can also cause the tape speed to be too fast at the beginning of the tapes and slow down near the end. You should be able to lift the roller up and down freely. If not, then continue with the procedure below.

**Fix:** Unplug the unit. First, take the pinch roller off of the unit. On most units it will just pull off with the shaft included. On some models you will have to unscrew the silver cover cap. Next unscrew the silver collar around the capstan shaft and remove it and the rubber or foam washer that is around the capstan shaft. Now, lay the unit down on it's face on top of a thick towel or blanket so as not to damage the tape reel spindles. Take the back cover off. On some units this is a metal black cover that wraps around onto the top of the unit and on others it is just a wood cover on the back only. Once you get this off, you will be able to see inside of the unit. Looking down you will see the main drive motor near the center of the unit and the metal flywheel just below it and to your left. We will need to take the flywheel out to get to the pinch roller linkage. Sitting on top of the flywheel there is a metal bracket about 1" wide by 5" long with a screw in each end. Take those screws out. On some units there will be two more screws holding the wiring harness in place. Take those out also. Now you will be able to lift the bracket up and out of the way. Grasp the flywheel and pull it straight up and out of the unit. Lay it aside. Around the base of the bearing for the flywheel you will see an "H" shaped piece of metal with two screws in it. Remove these and the small bracket. Now if you look at the left shaft that the flywheel bracket was screwed into, you will see a sleeve over the shaft. This sleeve goes through to the front of the unit and the pinch roller is mounted to it. You need lift this sleeve off. First you will need to remove one of the screws in the black micro switch to the left and pivot the switch out of the way. Next you will have to take out the

three screws holding the solenoid just above the switch and slide it back a little. Now you can lift the sleeve off. Most often the sleeve will be somewhat frozen in place. This is the source of the whole problem. If the sleeve will not lift up there are several methods of getting it loose. I use a small butane torch to heat up the shaft. If using this method be very careful not to burn any of the wiring harness. You can also take a large soldering iron and heat the shaft or use a little WD-40 and let it soak for a couple of hours. Once you get the sleeve off, clean the shaft and the inside of the sleeve thoroughly with cotton swabs soaked in Rubber Cleaner. Then apply a thin layer of grease on the shaft and slide the sleeve back down in place. Verify that the lever now moves freely.

This is also a great time to replace the main drive belt. Now you just need to reverse the procedure and reassemble the unit.