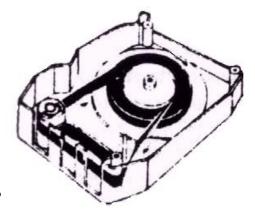
## **Troubleshooting Cartridge Problems**

## by **Abigail Lavine**

Although 8-track has always been a somewhat, shall we say *challenging* format, certain aspects of it become more difficult with the passage of time. Many of the frequently-encountered malfunctions of 8-track tapes and <u>players</u> are caused by time and repeated use. For example, the dreaded 8-track tar, a horrible mess which fills your player with goo, is caused by decaying rubber pinch rollers. The solution? Check pinch rollers carefully before you casually stick unfamiliar tapes into your player. If your thumbnail leaves an indentation which doesn't spring back in a black rubber pinch roller, the roller is probably no good. Some trackers avoid rubber rollers altogether, favoring the plastic rollers which were more common in the later years of 8-track. It is entirely possible to replace bad rollers with good ones, it's just a matter of figuring out how to open the cartridge (more on this later) and having spare parts on hand.



Most serious trackers have a number of extra cartridges around to use for parts.

This discussion of "bad" rubber versus "good" plastic rollers brings up an interesting point. Plastic pinch rollers can cause quite different but equally troubling problems. One of the very most common difficulties which 8-trackers encounter is crosstalk, or sound bleeding between programs. The tracks are so thin and are so close together that the slightest incorrect contact between tape and playing head causes this. The underlying problem is often a misaligned playback head (more on that later) or, worse yet, a misaligned recording head on the machine which created the tape (nothing much can be done about that). There is no question, however, that tape slipping sideways on a plastic pinch roller can greatly exacerbate the problem. A plastic pinch roller simply cannot grip tape and keep it on its path the way a rubber roller can. When a tape has been played repeatedly, the lubricant from the underside of the tape rubs off on the roller, making it even more slippery.

Another extremely common problem is that of "accordianed" tape. This is often caused by another pinch roller problem--the roller's failure to turn properly, which in turn causes the tape to back up against it as the capstan spins. It has been suggested in the pages of 8-Track Mind that accordianed tape can be carefully ironed straight with a not-very-hot iron, when the tape is protected on both sides by cloth or paper. In order to loosen up the roller so that it moves more freely, the "Realistic 8-Track Cartridge Repair Manual" suggests that you should open the cartridge and remove the roller, lightly sand the roller shaft with fine sandpaper, and then put it back on the shaft.

There are two different types of pressure pads which are commonly found in 8-track cartridges:

- Type 1 pads consist of a bent sheet metal strip with little felt squares glued to its ends (this is the type pictured in this diagram).
- Type 2 pads are a strip of foam rubber, typically covered by a piece of cellophane across the top.

Each of these types of pads is associated with a particular type of breakdown, although the result is frequently the same. Pressure pad breakdown causes improper tape contact with the playback head which leads to erratic sound fadeout. With Type 1 pads, commonly the felt squares become unglued and lost over time. The solution is simple--cut more little squares of felt and glue them in. Type 2 pads are prone to becoming gummy and losing their "springy" quality. When this occurs, a simple fix is to just cut a little strip of sponge rubber to size and jam it in on top of the decayed pad. This can usually be done without even opening the cartridge. A more elegant solution which has been suggested in the Usenet newsgroup alt.collecting.8-track-tapes is buying foam weather-stripping and cutting it to size. The stuff has an adhesive backing, so it stays in place well. If you really want to get fancy, you can put a piece of cellophane tape over the top of the foam, where the magnetic tape makes contact. This gives it a smooth surface to glide over.

Eight-track tapes are prone to breaking at the splice. This is usually what has happened when your tape runs through a

1 of 2 02/04/2013 10:06 AM

program and then suddenly stops without changing to the next program. You can replace the metal foil sensing strip yourself--that is, you can if you can find new foil. Until recently, it was still available from Radio Shack. It may be possible to improvise your own foil strips, I will start experimenting as soon as my supply runs out. The one thing which is usually unavoidable, though, is opening the cartridge in order to find both ends of the tape. There are so many different types of cartridge locking systems that it is difficult to give much general advice on how to open 8-track cartridges. As a general tip, **look around under the label**. If you are very lucky, there will be some type of attachment that you can recognize. If not, anything goes--you may need to pry, drill, or saw the cartridge in order to get it open.

Troubleshooting <u>Player Problems</u> Back to <u>[CONTENTS]</u>

2 of 2 02/04/2013 10:06 AM