

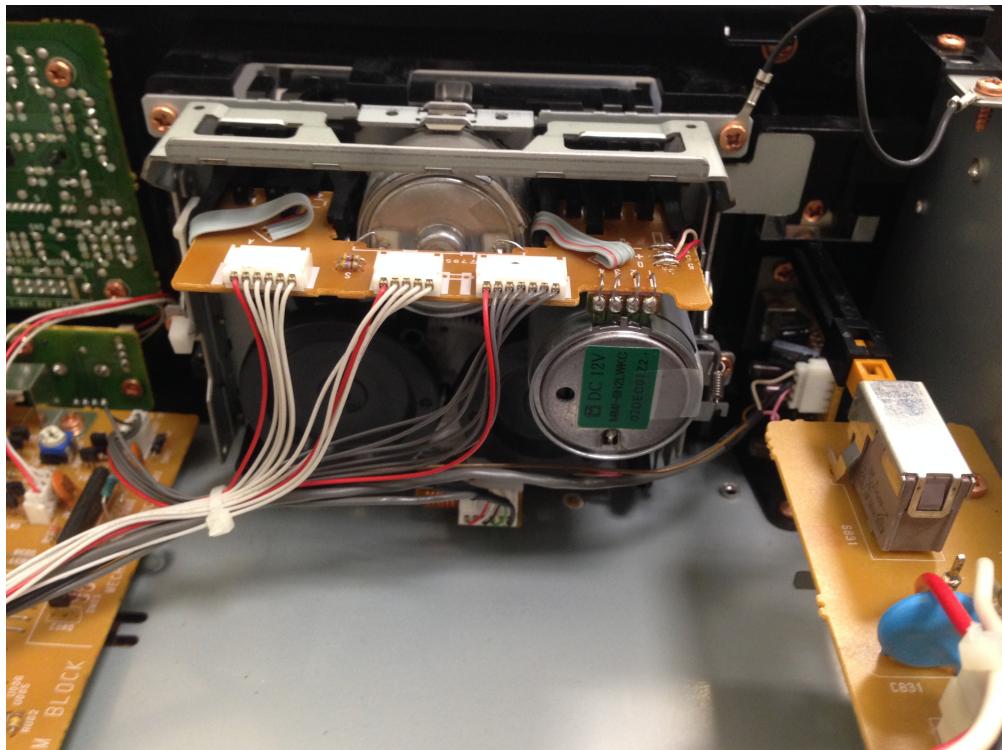
# How To Replace our Cassette Tape Transports

We use Marantz PMD502U tape decks here and, like any analog playback equipment, after enough they're going to break. Specifically, what breaks is the tape transport, the motor, box, and doodads that move the tape across the head. Signs that the tape transport is done include, but are not limited to: mangling a tape; wrapping the tape around the capstan; making a funny, high-pitched whirring noise while playing the tape; not moving at all; playing the tape for 30s then stopping. If the tape deck exhibits any of these behaviors, the easiest and most sure-fire way to fix it is to just replace the tape transport. This document describes that process.

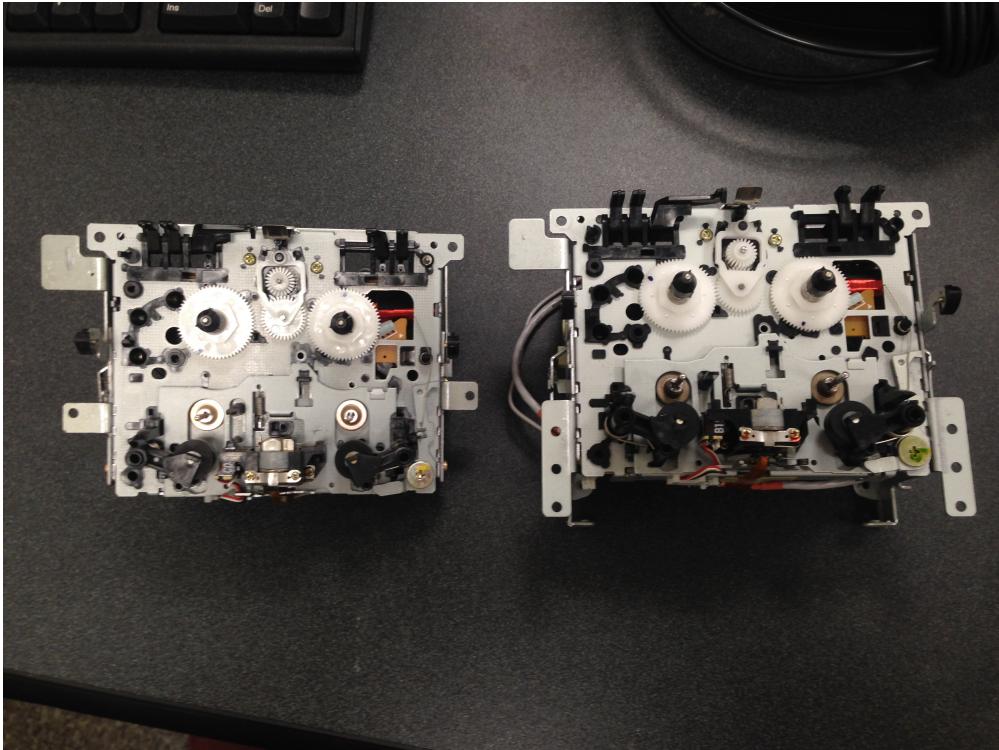
Uh so we have a largish collection of spare tape transports BUT the metal casing surrounding them need to be modified to fit our specific model of tape deck.

To start:

1. Turn off the tape deck, unplug it, remove it from the rack, etc
2. With the power off and the power cable unplugged, remove the three screws on either side of the deck that hold the top cover on.  
-two of these will also hold rack-ear reinforcements because the plastic rack ears on the deck itself are weak and deserving of scorn
3. Remove, if necessary, the screw in the middle, at the top, of the deck that also holds the cover on
4. Remove the top cover from the deck
5. Press eject to disengage the tape cover door from the tape transport
6. Locate the tape transport and the 4 wire-groups that attach to it, remove them (pliers may be necessary)



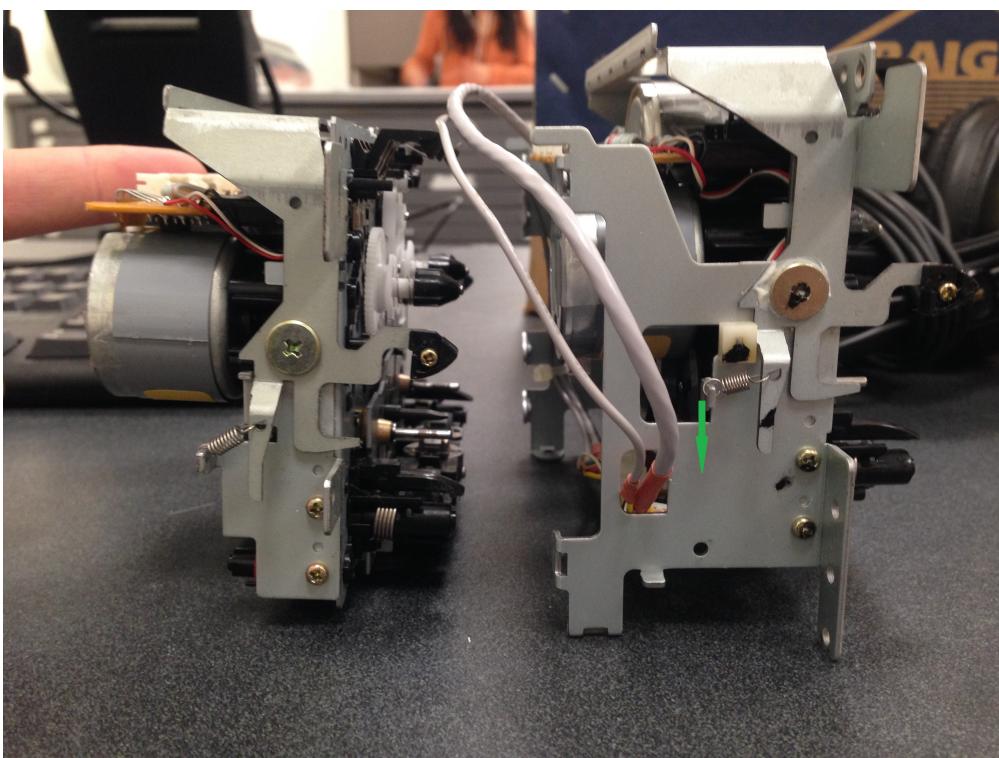
7. Remove the four screws holding the tape transport to the frame of the deck, and gently lift out of the deck.
8. Here's a side-by-side comparison of the old transport and the new transport (old on left, new on right)



-you can see that the metal holes don't line up

-additionally, the legs on the new one are too long and don't allow the transport to sit correctly and the pin on the left-side extends when disengaging with the tape cover door. However, there is no corresponding hole in the tape deck frame to allow for said extension. So, if you somehow mount this in there and don't remove that pin, you'll shut the tape cover door and it'll get stuck (ask me how I know).

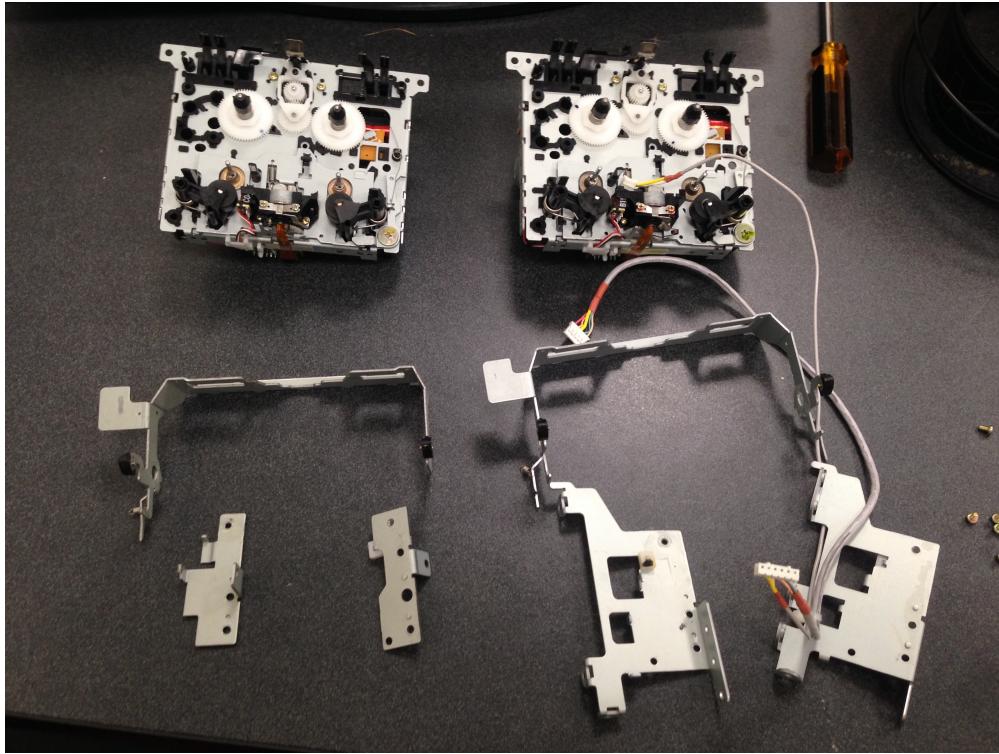
9. Start with the new transport. Remove the spring attached to the top-plate, just slide it down and under its mount



10. Remove the larger screws that hold the top-plate to the transport frame

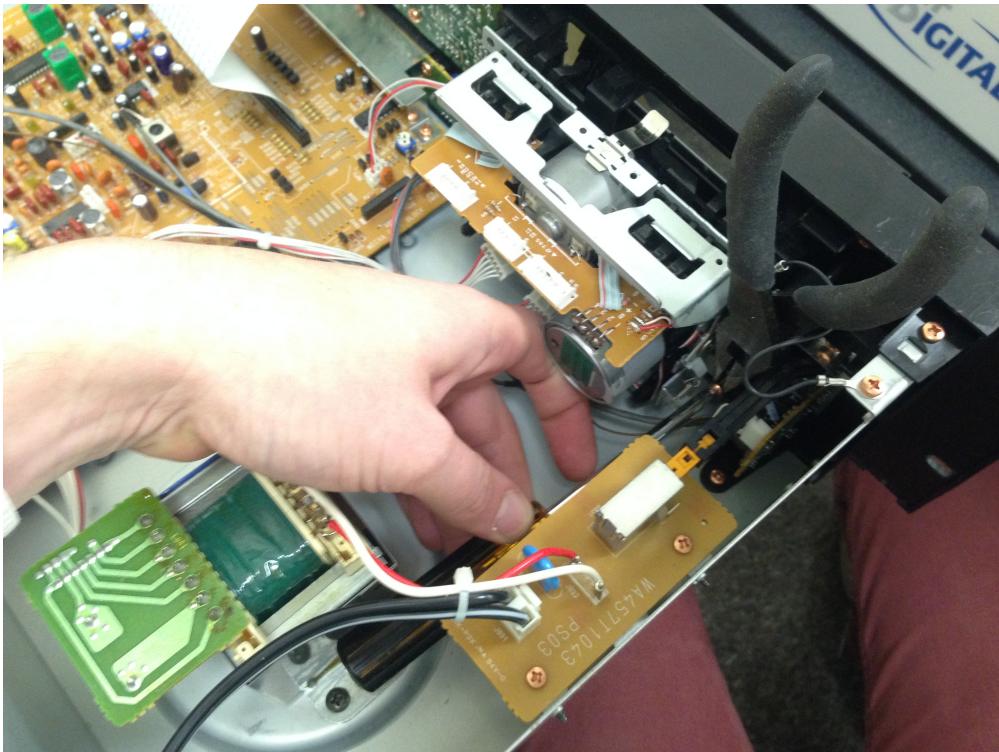
11. Gently remove the top plate

12. Next, remove the side plates by unscrewing the two screws holding them to the transport. One of the side plates may have a wire affixed to it with a zip-tie, just detach it from its mount on the bottom of the transport
13. Now, you have a bare transport, and basically you're just going to swap the (differently shaped) top and side plates from the old transport onto the new one, following the same procedure
14. Here's a pic of the differences, new on the right old on the left



15. Now, attach the old side-plates to the new transport. After attaching the first one, drop the transport into the deck and make sure the screw holes are aligned (ask me how I know)
16. Attach the old top-plate to the new transport with the larger screws, using a bit of lubricant to allow it to rotate easily. Loop the spring under and around its mount
17. Try to pull the top-plate back from the face of the transport. If it's locked, look at the face of the transport for a spring-loaded plate that inhibits the movement of a pin on the top plate - remove it by unscrewing the large screw
18. Set the transport in the deck and hold the back of it while closing the tape cover door. Press the eject button and hopefully it opens lol
19. Affix the 4 screws from the beginning back on there, don't forget to attach the grounding wire!

-The one on the lower right is really a pain, here's one way to get at that screw



20. Put the cover back on and screw the rack ears back (you don't need to put all the screws back just the rack ears it's fine.