

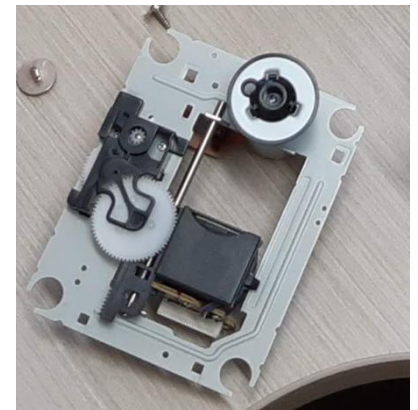
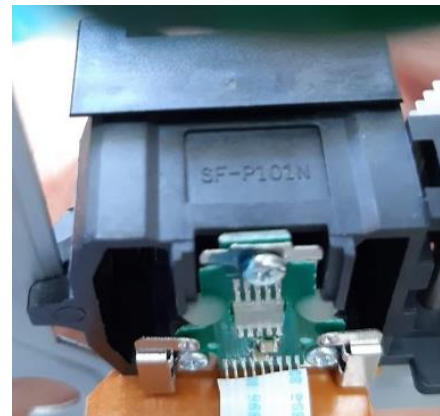
# How to replace Laser Assembly in Numark MP-103

A rough guide only. Tools needed: Screwdrivers, replacement laser assembly, soldering iron, patience.



# Replacement Laser Assembly

- The Numark MP-103 uses a standard Sanyo 16 pin assembly.
- These are dirt-cheap - about \$12 on eBay for the SF-P101N



# Disassemble the CD Player

- Press the Eject Button so the tray is sticking out.
- Unplug from power!
- Remove the six philips screws that hold the top cover on.
- Unplug the ribbon cables from the main PCB.
- Undo the four silver screws that hold the CD Assembly in place.

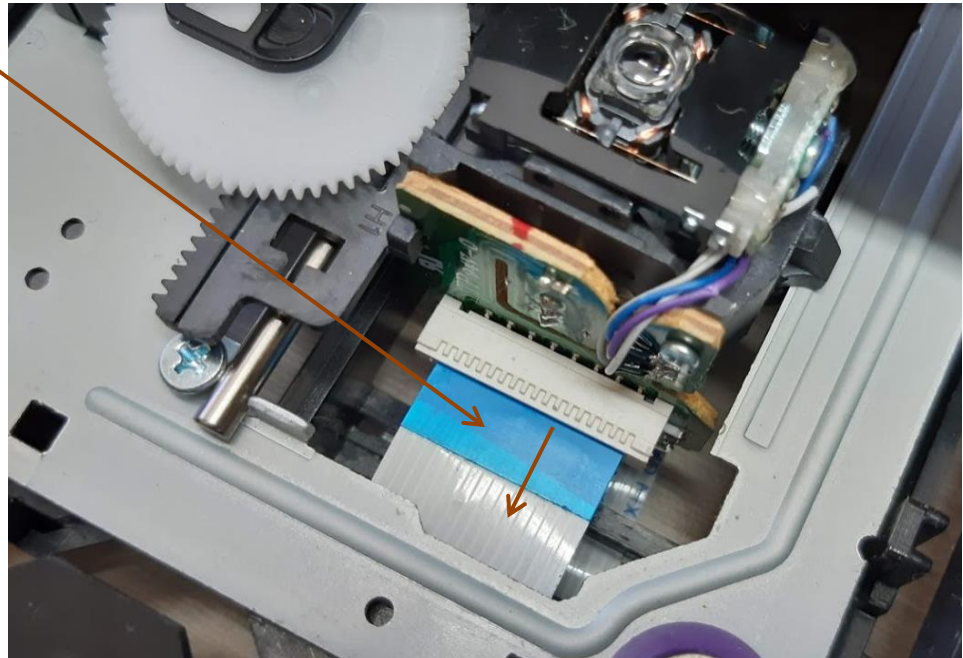
# Remove the CD Tray

- There's a small plastic tab that prevents the CD tray from sliding all the way out.
- Lift this tab a little, and slide the tray all the way out.



# Remove the Laser Assembly

- Disconnect the ribbon cable to the Laser Assembly.
- (You can turn the large white wheel to move the assembly towards the spindle, then pinch the ribbon between your thumb and finger to slide it out.)

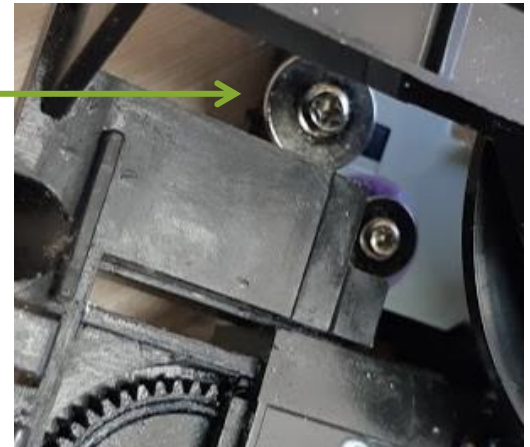


# Undo some screws!

- Undo the four screws on the purple rubber pads.



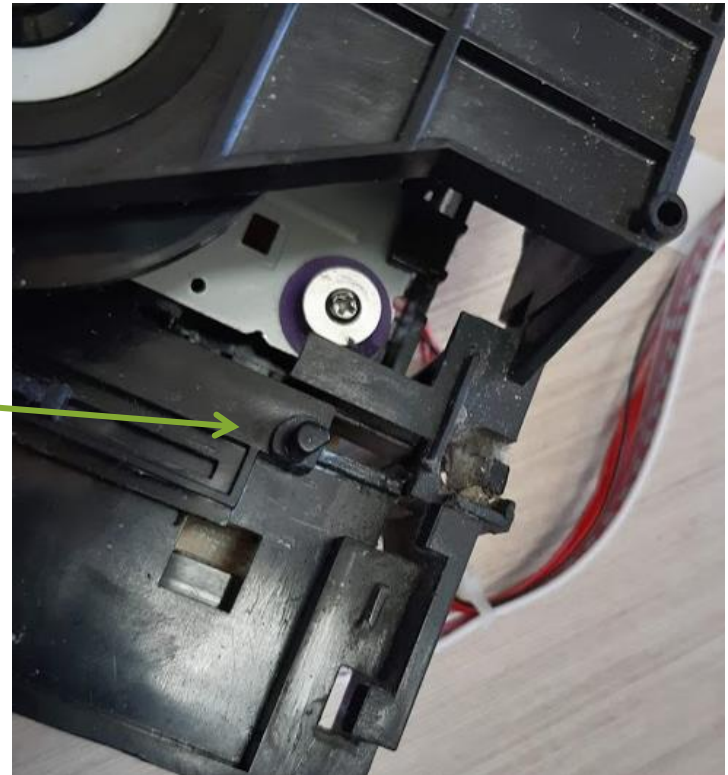
Undo the silver screw that stops the laser assembly from lifting up.



There's four springs underneath the purple pads – try not to let them escape 😊

# Lower the tray...

- You might not need this step. To get the most clearance between the spindle and the top disc, you can slide this tab to the right to lower the tray.



# Lift out the Laser Assembly.

- Caution. Patience required for this bit!
- This plastic tab prevents you from lifting out the laser assembly. Careful, scary wedging and fiddling will allow you to clear it. Or I guess you can cut it off.





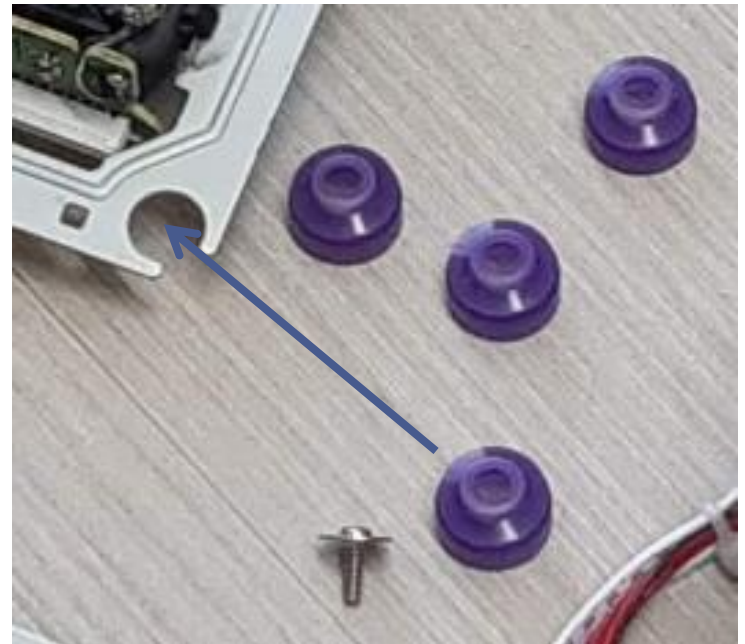
# Preparing the Replacement...

- Your replacement laser assembly may have a factory spot of solder short circuiting the laser pickup output to protect it from static electricity damage in shipping. You'll need to remove it with a soldering iron. (Or brute force.)



# Swap the rubber bits over...

- Slide the purple rubber pads out of the old assembly, and insert them in your replacement assembly.



# Install the new assembly...

- Installation is the reverse of removal.
- - Install the assembly
- - Reconnect the ribbon cable to the laser pickup
- - Add the four screws on the purple rubber bits, plus the one that stops the assembly from raising too high. (Page 6)

# Put the tray back in...

- Slide the tray through the front of the CD player case where it usually lives.
- Hold the black reassembled CD transport assembly behind the tray, and attempt to slide it back where it came from.
- *This can take a few attempts as cogs need to align along with the tab which lowered the laser assembly.*



# Reassemble and test time 😊

- Reattach the various cables.
- Reinstall the CD player guts with the four screws that secure it to the body. Be careful not to pinch any wires underneath the front right corner.
- Attach the outer cover.
- Plug it in and see if it works!

# Did it work?

- I hope so 😊 You save >\$300 !
- These notes written by Michael Kean, volunteer at Armidale Community Radio (2ARM) and [coolhelp.com.au](http://coolhelp.com.au)

