



3D Mechanism Replacement

This guide will show you how to remove the 3D massage mechanism assembly.

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TOOLS:

- [Cordless Drill](#) (1)
- [Zip Ties](#) (1)
- [Adjustable Wrench](#) (1)
- [Paper Clip](#) (1)
- [Flush Wire Cutters](#) (1)
- [Phillips #2 Screwdriver](#) (1)


Step 1 — 3D Mechanism



- Remove all 6 screws

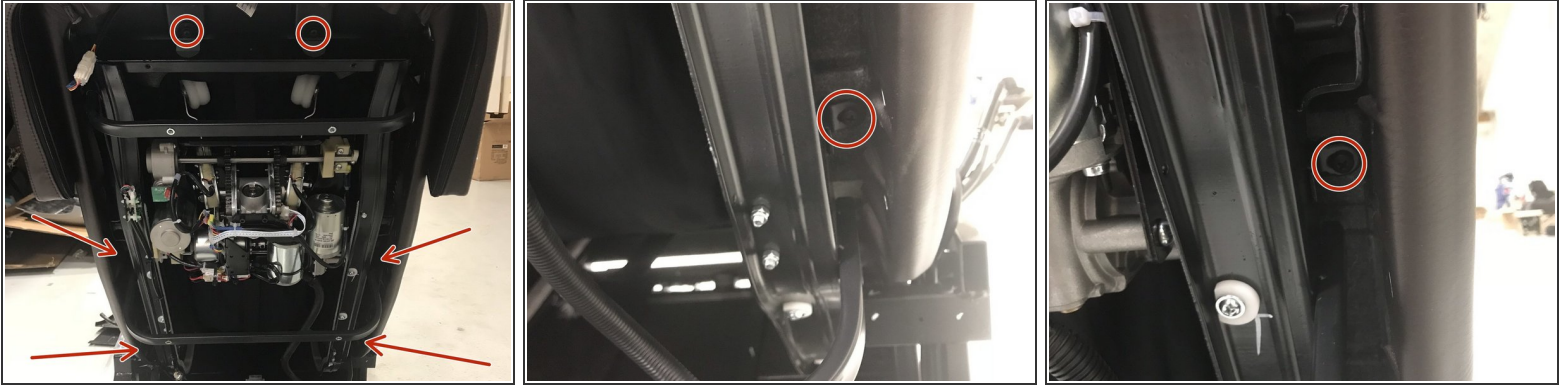
Step 2



-  Armrests Will need to be removed from chair

- Remove the large bolts located on the left and right hand side of the chair. These can be removed using a large adjustable wrench.

Step 3



- Remove all 6 screws on frame. 2 up top and 2 on both sides.

Step 4



- this speaker wire at the top left of the frame will need to be disconnected.

Step 5



- Next we need to unzip the front of the chair . do so by unzipping all zippers shown in this order. 1 on at top of chair and one at bottom, then one underneath the leather back-pad.

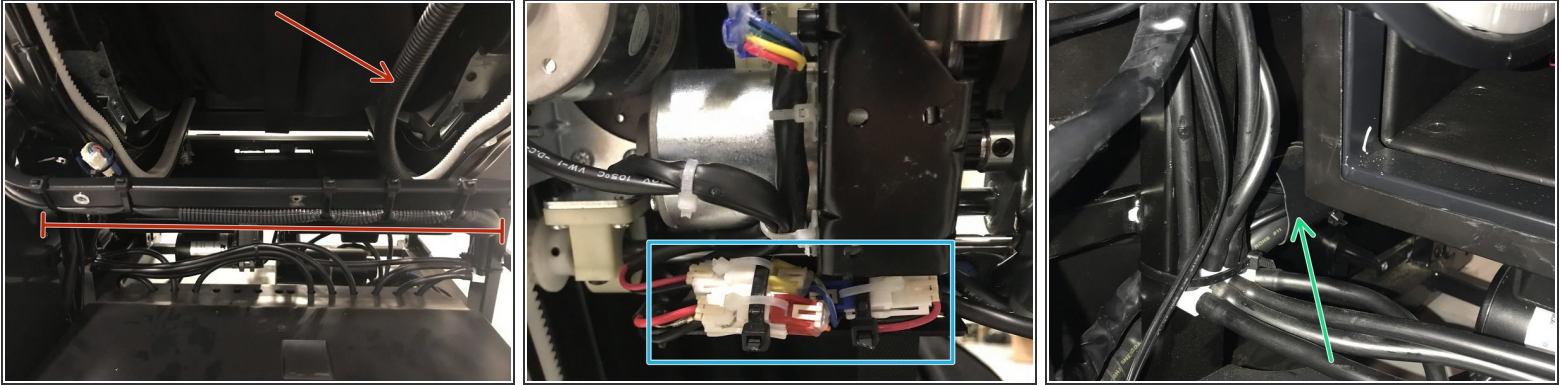
 THESE ZIPPERS ARE WEAK AND WILL BREAK EASILY IF FORCED.

Step 6



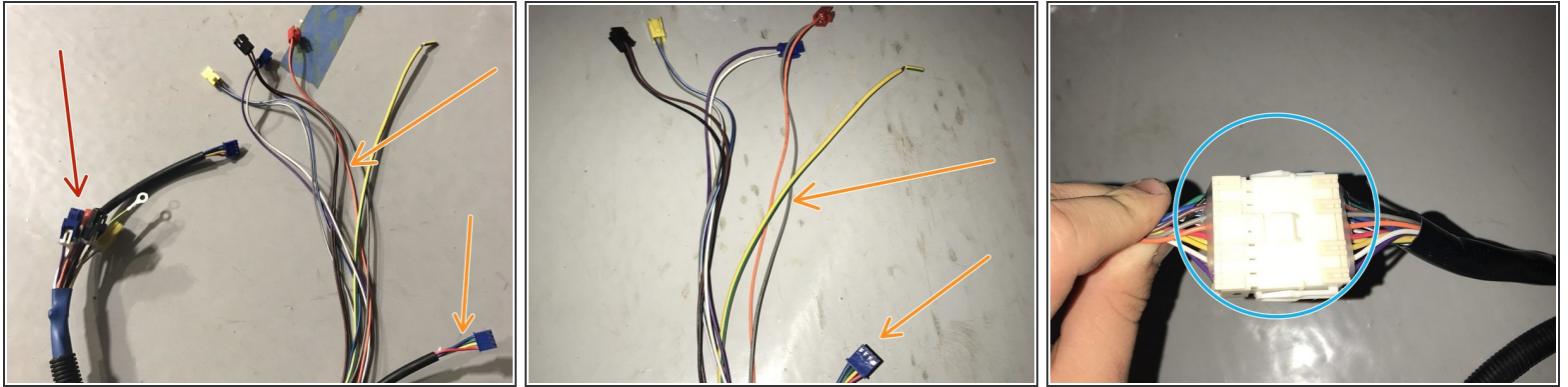
- Now that the front of chair is open remove this small plastic bracket by removing the 2 screws.

Step 7



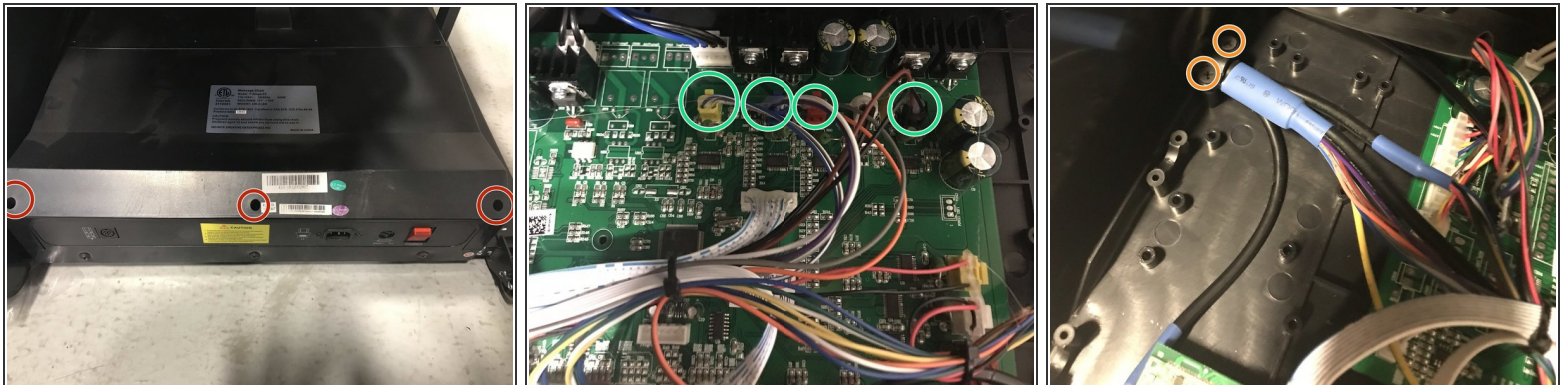
- The mechanism has a wire harness that runs down to the main PCB in the chair. Most of our 3D mechs come with a new harness pre-attached and the old harness will need to be disconnected from the quick disconnect .
 - Don't disconnect these if your new mechanism has them pre-attached.
 - This is an extremely vague photo , but the quick disconnect is located in the sheath on the lower left hand side of the chair . DON'T CUT THE SHEATHING JUST THE ZIP TIES . If you cant get this zip tied onto the frame like the factory had it no worries just make sure its secured in the general location with zip ties .
- ⚠ WHEN RE RUNNING THIS HARNESS BE SURE YOU ARE TAKING NOTE OF THE ORIGINAL ZIP TIE LOCATIONS .

Step 8 — Wire harness



- This is the entire upper harness that connects to the 3D mechanism .
- Lower harness that connects to main PCB . see last step for location
- Quick disconnect . located on frame .

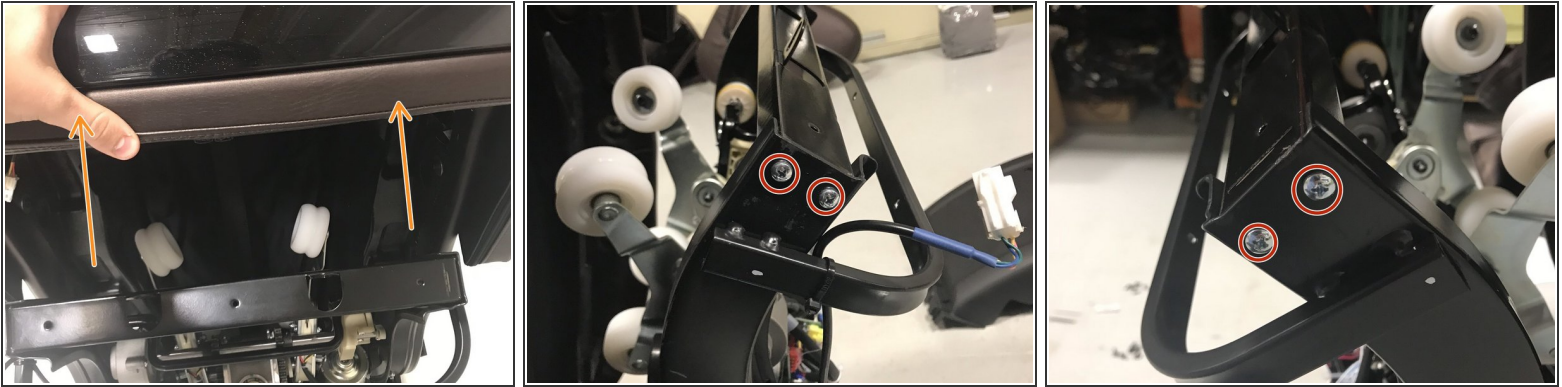
Step 9 — lower harness



⚠ IF YOU ARE REPLACING THE ENTIRE HARNESS FOLLOW THIS STEP, IF NOT THEN SKIP.

- Remove the 3 screws on the lower power box cover to gain access to the lower wire harness
- unscrew the wire harness clip by removing the 2 screws
- These marked connectors are the motor wires and these are not all of the wires on this harness. please see last step

Step 10



- Now lift up on chair piece and push forward. the chair piece should now be separated from the frame piece.
- Next remove all 4 bolts on top bracket.

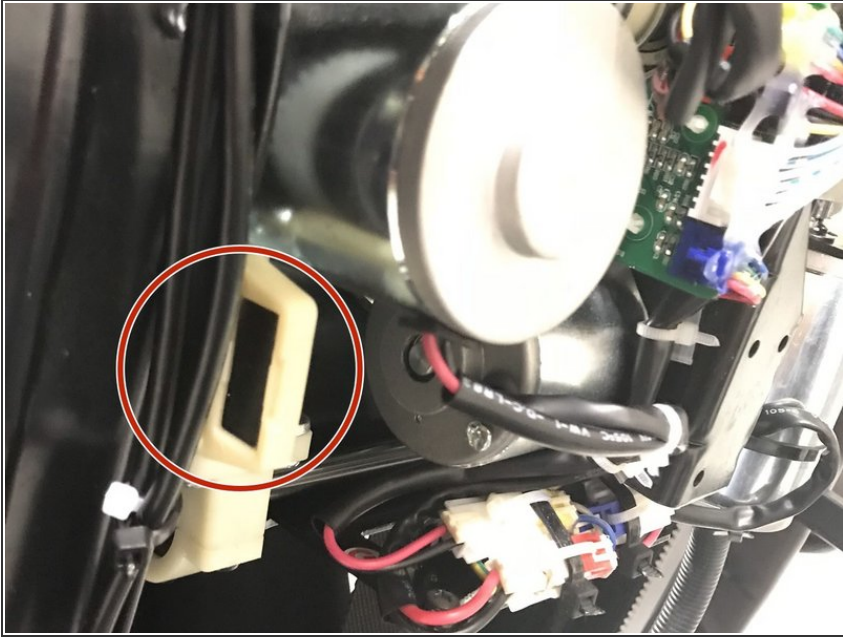
Step 11



- Now remove the upper limit sensor from the 3 plastic pins and move it aside away from the magnet. DO NOT UNPLUG IT
- Put the chair into Manual Shiatsu and hit the zone button 2 times , sometimes 1 press. You will know you did it right because the arrows will light up in the middle.
- Shows if your in shiatsu mode .
- Once these arrows are glowing you can drive the the mech out the top of chair using the UP arrow.

⚠ DO NOT DRIVE THE MECH OUT UNTIL THE HARNESS HAS BEEN FREED . SEE STEP 7&8

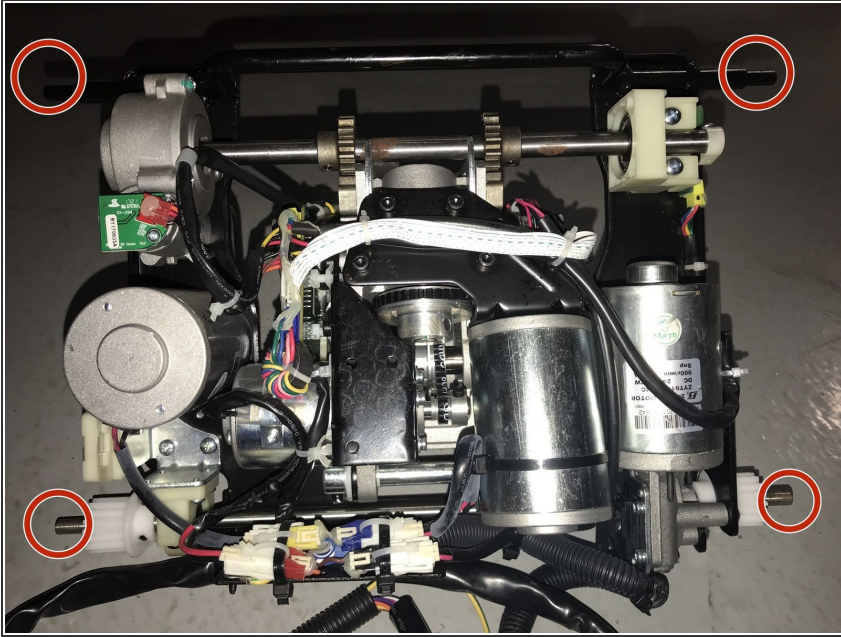
Step 12



- Alternatively you can pop out this magnet instead of the sensor . either way manual shiatsu mode has to be used .

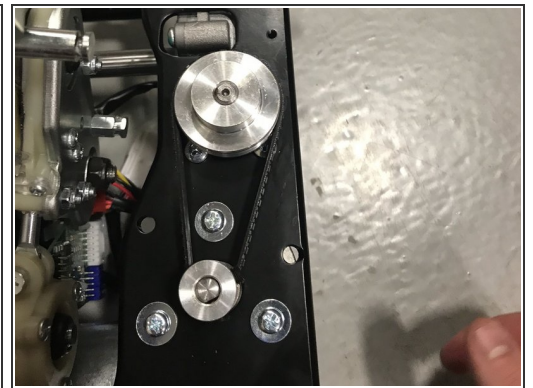
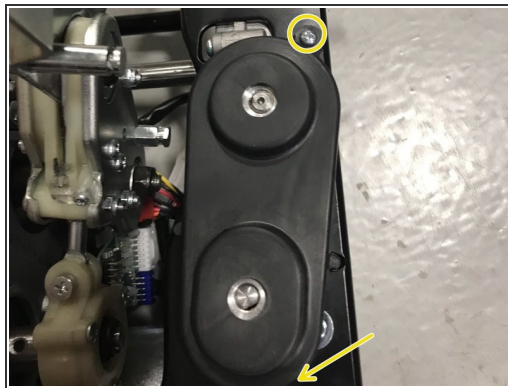
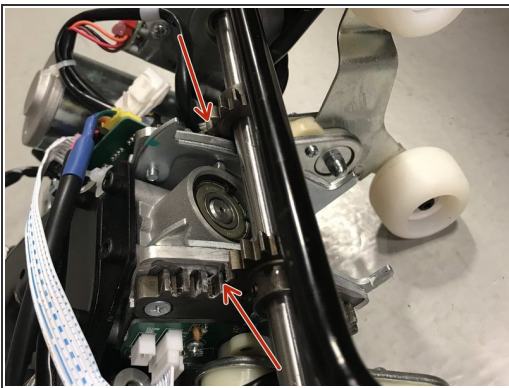
⚠ BE SURE THIS MAGNET IS ON THE NEW 3D ASSEMBLY BEFORE PUTTING IT INTO THE CHAIR.

Step 13



- The new mech will not come with the plastic wheels , these will need to be transferred from the old mech to the new one. see photo for location of wheels.

Step 14 — Tips & Extra Things



- If for some reason you cant get the mechanism into the chair due to the top axle blocking it . Its due to this 3D gear not being set at the correct angle.
- To fix the angle simply remove this cover by removing the 2 screws and spin the motor belt until angle is correct.

Step 15



- New mechanism should be installed below you will see some quick tips and reminders during reassembly.
- ⚠ DO NOT TEST MECHANISM IF TOP TRACK BAR IS NOT INSTALLED . WITHOUT THIS TOP BAR ON THE CHAIR THE MECHANISM WILL HAVE ZERO TRACTION AND COULD DAMAGE THE TRACK . SEE STEP 10
- ⓘ Remember to install any sensors you remove and to install them the way they were found . see step 11
- ⓘ when installing the backrest cover install the 2 middle screws first this will allow the top and bottom screws to automatically line up . see step 1

To reassemble your device, follow these instructions in reverse order.