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ADC176 LIFT CYLINDER KIT INSTALLATION INSTRUCTIONS

REQUIRED TOOLS

- Large Flat Blade Screwdriver
- 18" - 20" Long Support
- Diagonal Cutters
- 3/16" Hex Key
- Pliers
- Hydraulic Fluid (RPI Part #RPF449)
- 5/8" & 9/16" Wrenches
- Paper Towels or Shop Towels

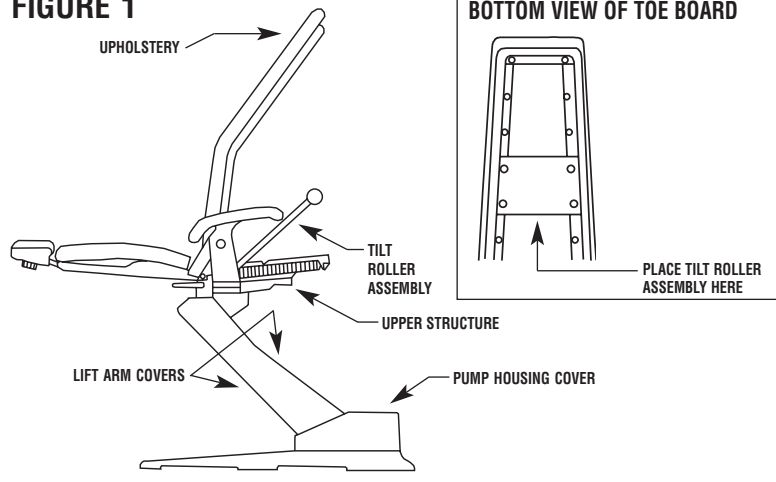
WARNING

IT IS NECESSARY TO HAVE TWO PEOPLE LIFT AND SUPPORT THE CHAIR UPPER STRUCTURE. SERIOUS INJURY MAY RESULT IF THE CHAIR UPPER STRUCTURE IS NOT PROPERLY SUPPORTED.

LIFT CYLINDER REMOVAL

1. Actuate the chair's base and chair's back to complete up position. Raise the toe board and secure using tilt roller assembly. Remove the cover from the pump housing along with the upper and lower lift arm covers. (see Figure 1)
2. Remove the hitch pin and collar (see Figure 2). NOTE: Model 1020 chairs that have serial numbers higher than C238858 do not have a collar, so simply remove the hitch pin and proceed to the next step.
3. Lower the base of the chair all of the way down then disconnect the power.
4. Detach the safety switch bracket from the chair. Using 3/16" hex key, remove the mounting screw and disconnect the moxex plugs to the switches (see Figure 3).

FIGURE 1



5. Position the support under the chair upper structure as shown in Figure 4. Make sure that the tubing is not pinched and the chair is being properly supported.
6. Remove and save the two washers that are on the cylinder shaft (see Figure 5).
7. Disconnect and save the sleeve clamp that holds the tube to the barb (see Figure 5). Disconnect vent tube from barb.
8. Using diagonal cutters, cut the cable tie freeing the high pressure hose from the cylinder. Use the flat blade screwdriver to remove the retainer clip from the pivot pin. Push the pivot pin thru the cylinder body and save both clip and pivot pin.
9. Place towels under the high pressure hose fitting. Use a 5/8" wrench to disconnect the high pressure hose fitting from the cylinder (see Figure 5). Discard the old cylinder.

LIFT CYLINDER INSTALLATION

10. Connect the high pressure hose to the new lift cylinder and finger tighten the nut. The nut will be tightened securely later in the installation.
11. Position the lift cylinder in the chair and install the pivot pin and secure with the retainer clip that was removed from the old cylinder.
12. Install the two washers onto the new cylinder shaft making sure that the steel washer is installed first (see Figure 5).
13. Attach the vent tube to the barb on the cylinder using the sleeve that was removed on disassembly. Reattach the high pressure hose to the cylinder

FIGURE 2

NOTE: Model 1020 chairs that have serial numbers higher than C238858 do not have a collar, so simply remove the hitch pin and proceed to Step 3.

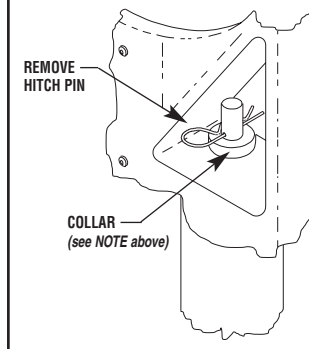


FIGURE 3

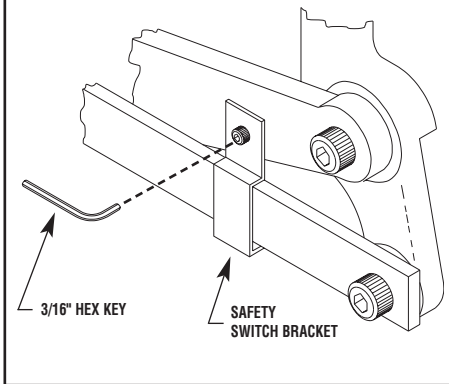


FIGURE 4

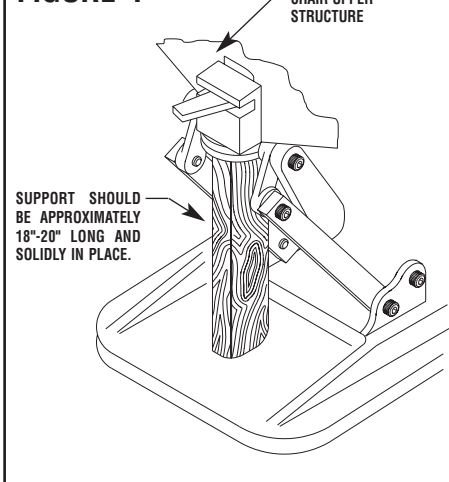
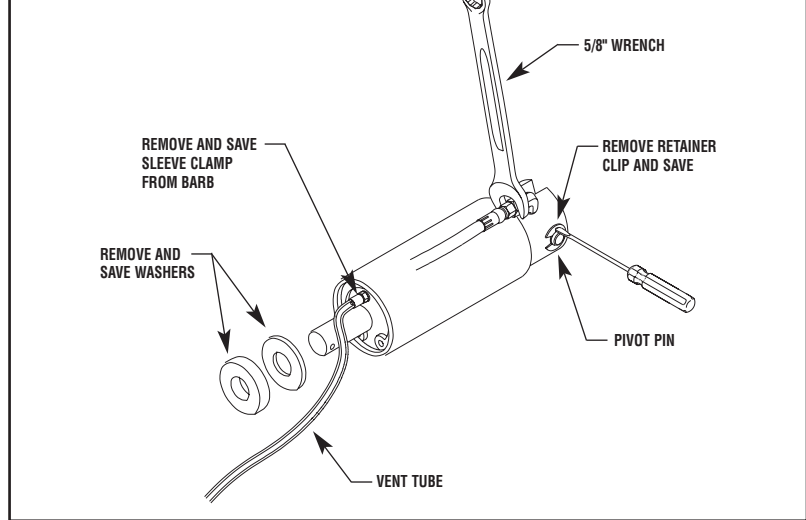


FIGURE 5



body with a cable tie.

14. Manually extend the cylinder rod through the hole in the lower structure. Install the collar included with the cylinder (if applicable) and attach the hitch pin to the cylinder shaft (see Figure 2).
15. Securely tighten high pressure hose using the 5/8" wrench. (Note: The 9/16" wrench may be required to keep hose from twisting.)
16. Connect power to the chair and with the foot switch raise the chair and remove the support.
17. Reattach the safety switch bracket and switch connectors. It does not matter which connector plugs onto which switch.
18. Actuate the chair base up and back several times to purge any air in the lines. If the chair jerks or is noisy it may need Hydraulic Fluid (RPI Part #RPF449).
19. Attach the lower lift arm cover ensuring the slots in the cover's brackets are over the support pins (see Figure 6).
20. While base is being lowered, push up on the lower cover to test the safety switch. The chair base should stop immediately. Always be sure to press up in the middle and on each side of the cover when testing.
21. Install the upper lift arm cover and the pump housing cover. Verify proper operation of the chair. Clean any oil that may have spilled during installation.

FIGURE 6

