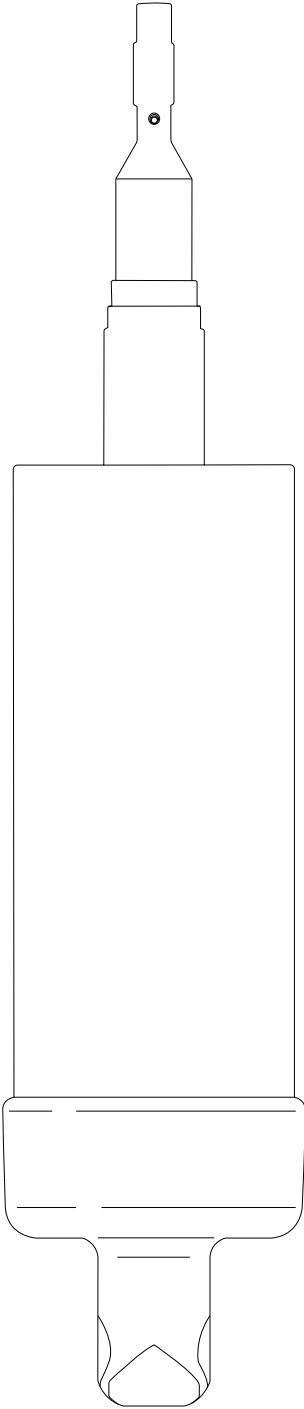


S5 LOWER CYLINDER REPLACEMENT

OVERVIEW



INTRODUCTION

BEFORE YOU BEGIN

Study the unit overview in this booklet and layout dimensions from the owner's manual. Make sure the planned location will have the necessary space available for installation, including room for travel of the chair's base and backrest.

Open all containers and review the contents. It may be helpful to locate all kits containing accessories. (Smaller parts are often packaged together to avoid being lost.)

Locate all documentation supplied with the package. Manuals and installation sheets may be found in one or more boxes accompanying their respective components. Set aside the owner's manual for the end user to review.

TABLE OF CONTENTS

Overview	2
Introduction	3
Lower Cylinder Replacement Instructions	4

SYMBOLS USED IN THIS MANUAL

The following symbols may be used throughout this product manual:



WARNING: Failure to carefully follow the described procedure may result in damage to the equipment or the operator.



CAUTION: Failure to carefully follow the described procedure may result in damage to the equipment.



NOTE: Take note of additional important information. Not a warning or caution.



ELECTRICAL HAZARD: Risk of electrical shock present. Ensure that power is disconnected before attempting procedure.

REGULATORY INFORMATION

Regulatory information is delivered with DCI Edge dental equipment as mandated by agency requirements and can be found in the accompanying Instructions for Use for this device.

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

TOOLS NEEDED FOR INSTALLATION

- 2 x 9/16" Combo Wrench
- Crescent Wrench
- Absorbent Towel

INCLUDED TOOLS

T49990 Tool Kit (see Figure 1)

INCLUDED HARDWARE

- 1 x 51008 -- Cylinder, Lower Hydraulic w/ 51506 Elbow Installed
- 1 x 0070-1 -- 1/4" Clamp Sleeve
- 4 x 15613 -- Scr. Soc. Cap 1/4"-20 x 3/4 SST
- 4 x 59160 -- Split Washer 1/4"

PREPARATION

- 1 Remove rear covers (see Figure 2).

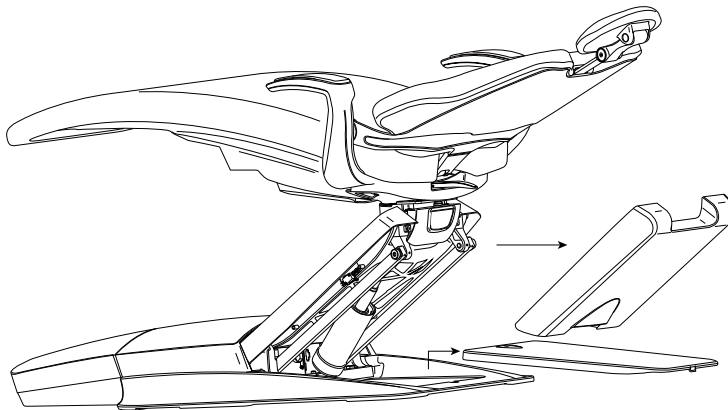


Figure 2. Removing rear covers

- 2 Move all harnesses/tubing to the side (see Figure 3).

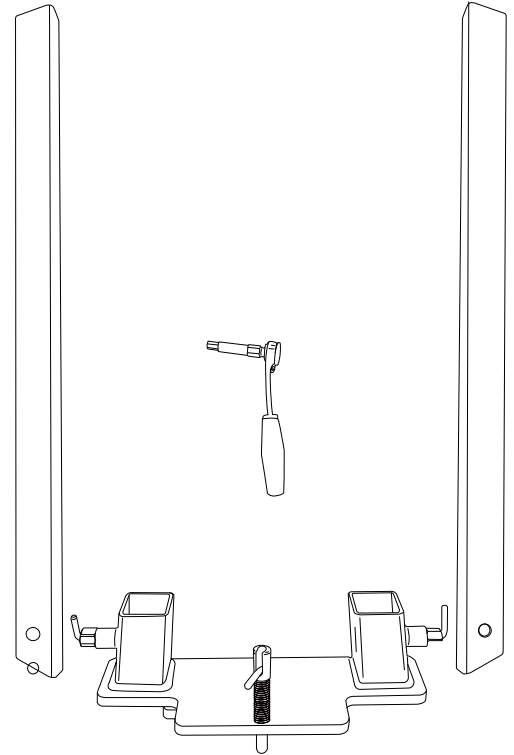


Figure 1. T49990 Tool Kit

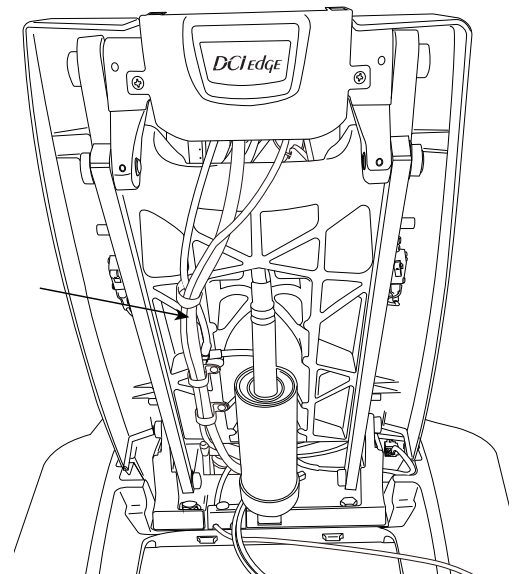


Figure 3. Moving harnesses to the side

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

REMOVING THE OLD LOWER CYLINDER

- 1 Assemble and install the T49990 fixture as shown (Figure 4, item 1 and 3).



NOTE: Ensure the safety latches are fully engaged (item 2).

- 2 Lower the chair until the upper support bars are fully seated in the truss of the chair (see Figure 5).

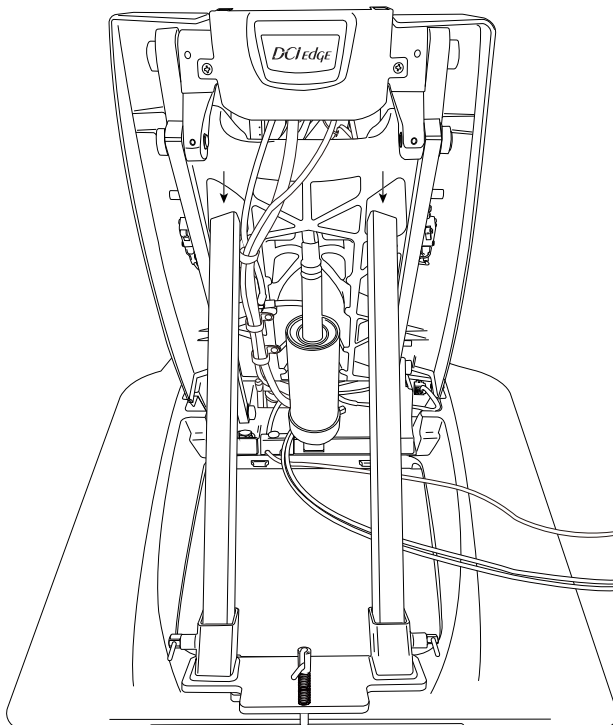


Figure 5. Supporting truss with T49990 bars

- 3 Remove the two upper bolts connecting the lower cylinder to the truss with the 1/4" T49990 Ratchet (see Figure 6).

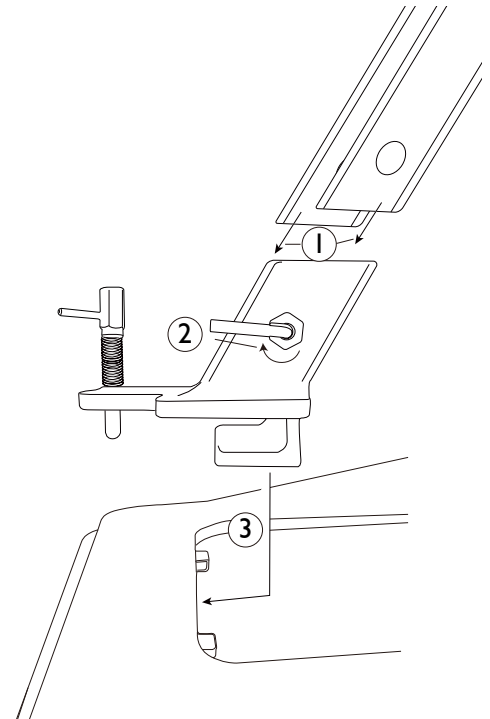


Figure 4. Assembling and installing the T49990 fixture

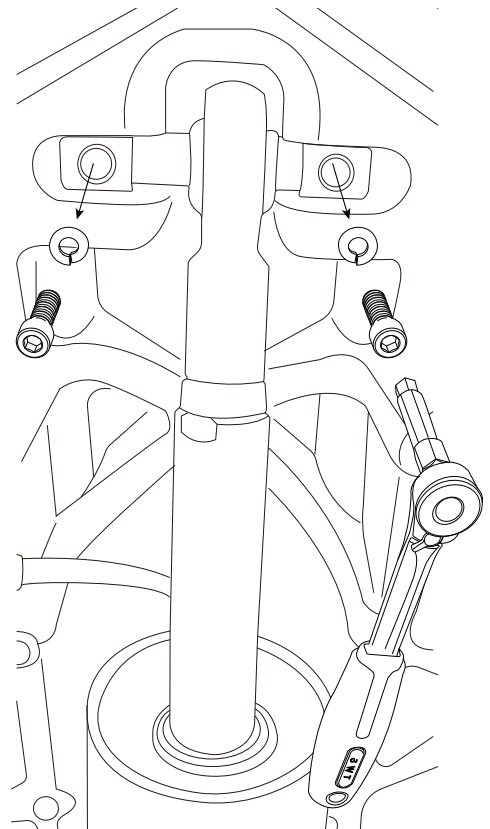


Figure 6. Removing two upper bolts

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

- 4** Remove the hydraulic piston (see Figure 7) by grabbing and pulling/shimmying it loose.



NOTE: It helps to slightly raise and/or lower the chair using the Foot Switch to help shimmy the cylinder end out of place, but **DO NOT** raise the cylinder/chair so high that the T49990 supports are no longer captured by the chair truss.

- 5** Disconnect the vent line (see Figure 8).

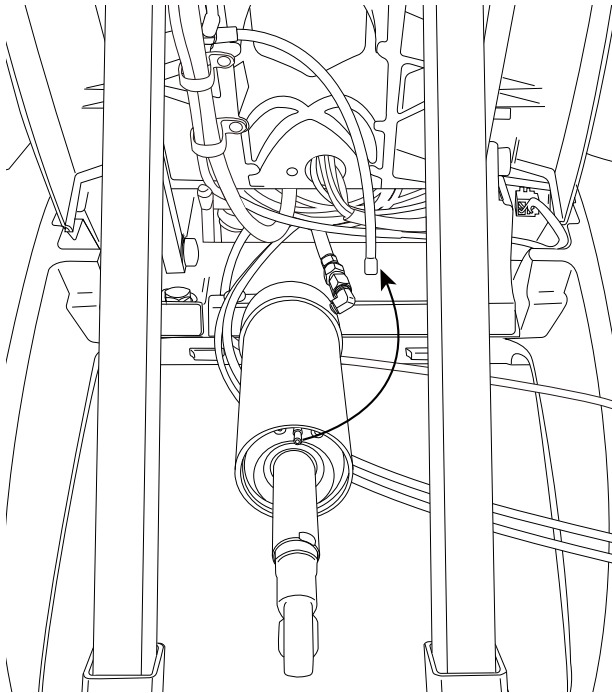


Figure 8. Disconnecting the vent line

- 6** Disconnect the hydraulic line (see Figure 9, item 2) using either a Crescent Wrench or a 9/16" open-end Combo Wrench.



NOTE:

- Place down a towel as shown to catch any hydraulic fluid (item 1).
- A second wrench may be needed to hold the swivel fitting in place while loosening.

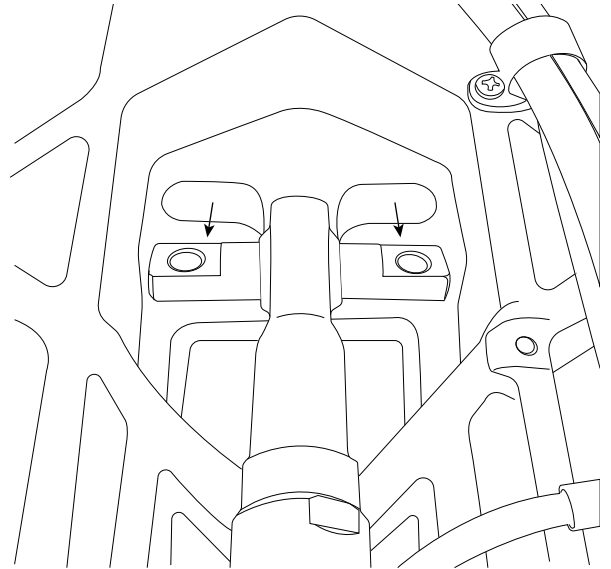


Figure 7. Removing the hydraulic piston

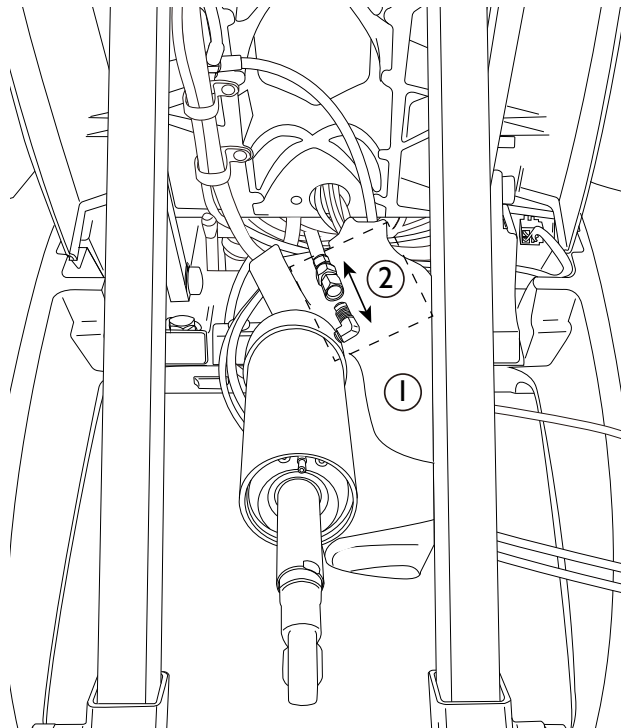


Figure 9. Disconnecting the hydraulic line

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

7 Remove the two lower bolts connecting the hydraulic cylinder to the base of the chair (see Figure 10).

8 Remove the cylinder from the chair (see Figure 11).



NOTE: Set aside all hardware to be reused. Extra bolts and washer have been provided with the kit, save the Upper and Lower Pin.

- 4 x Bolt (item 1)
- 4 x Split Washer (item 2)
- 1 x Upper Pin (item 3)
- 1 x Lower Pin (item 4)

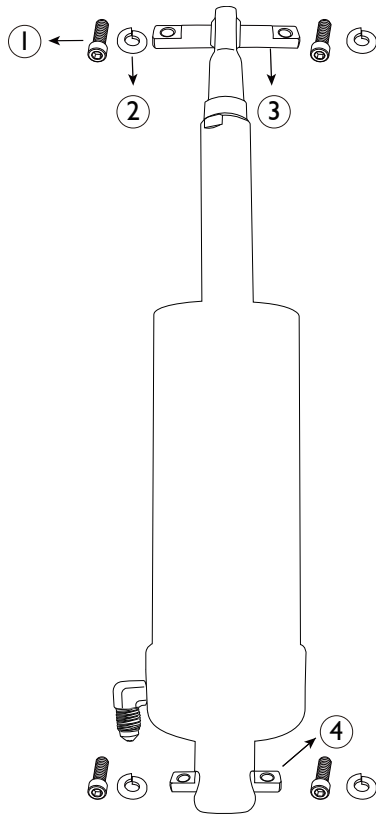


Figure 11. Hydraulic Cylinder Mounting Fasteners

9 Orient the hydraulic fitting (see Figure 12, item 1) so that it's pointing into the hydraulic reservoir (item 2) and compress the hydraulic piston of the failed lower cylinder (item 3) to drain any remaining hydraulic fluid.

10 Dispose of the failed cylinder.

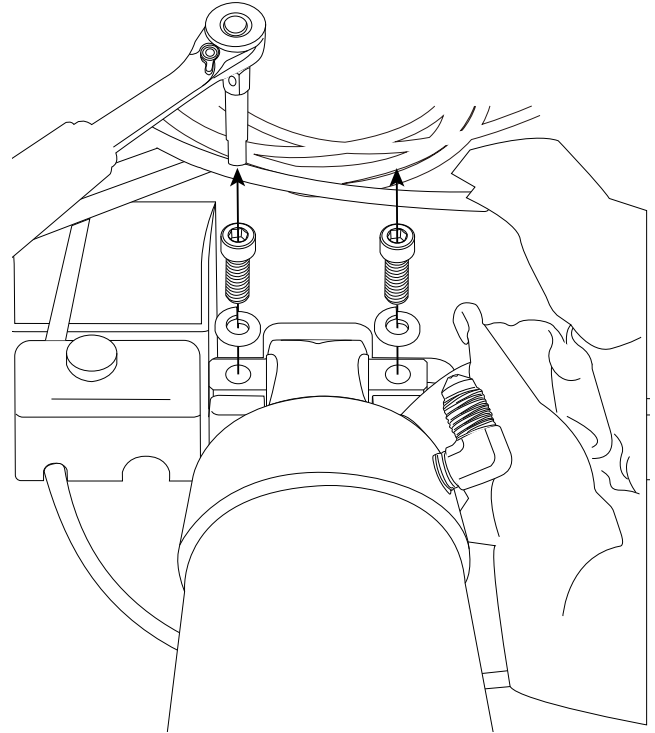


Figure 10. Removing two lower bolts

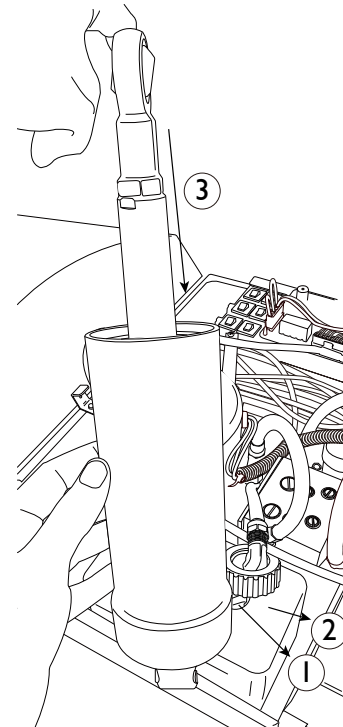


Figure 12. Draining any remaining fluid

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

INSTALLING THE NEW LOWER CYLINDER

1 With the replacement cylinder, reconnect the lower cylinder bolts (see Figure 13, item 1) with washers (item 2).

NOTE:



- Replace the bolts/lower pin if needed.
- Ensure that the flat side of the pin is visible and facing towards you.

2 With the vent line and hydraulic hose disconnected (see Figure 15, item 1), replace the upper pin and install the two upper bolts with washers (see Figure 14).

NOTE:



- This will require you to depress/extend the hydraulic piston. Either the upper pin or a screwdriver can be used to help move the hydraulic piston into the correct orientation (see Figure 15, item 2).
- Ensure that the flat faces of the pin are visible and facing towards you.

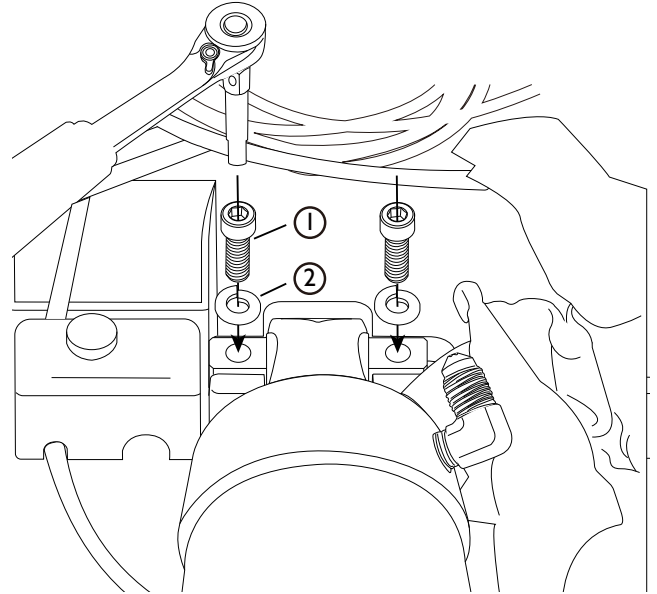


Figure 13. Reconnecting two lower bolts

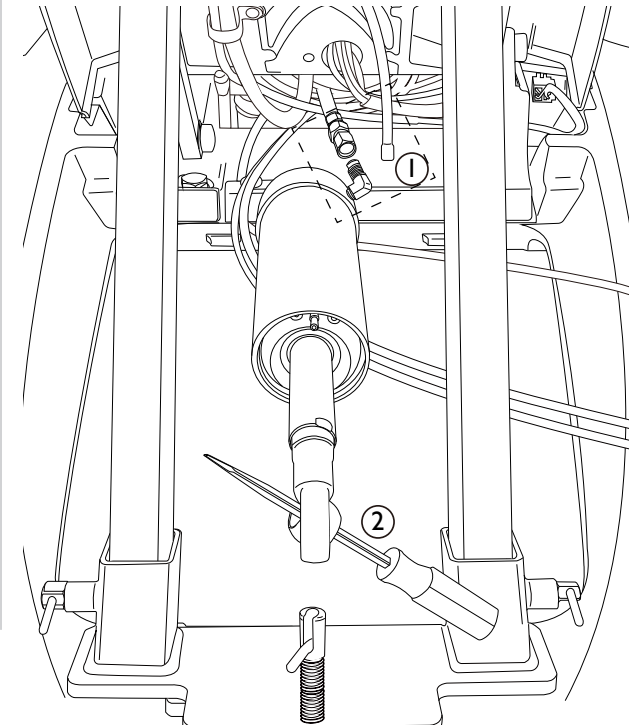


Figure 15. Orienting the hydraulic piston with the screwdriver

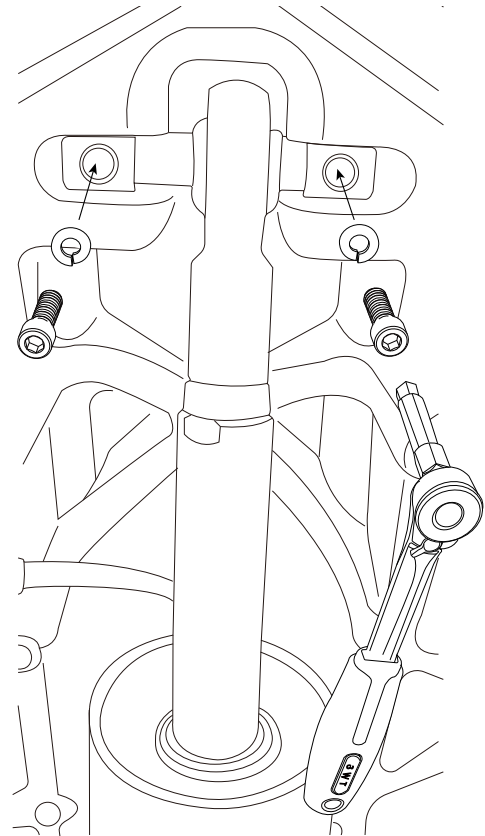


Figure 14. Reconnecting two upper bolts

LOWER CYLINDER REPLACEMENT INSTRUCTIONS

INSTALLING THE NEW LOWER CYLINDER

- 3** Using the provided 0071-I Vent Sleeve, reconnect the hydraulic hose (see Figure 16, item 1) and the upper vent line (item 2). Install the vent sleeve with the semi-transparent side towards the barb.
- 4** Raise the chair base to the full up position and check for leaks around the hydraulic fittings. If leaks are present, lower the chair back onto the T49990 and tighten the fittings.
- 5** If no leaks are present, raise the chair base to the full up position, remove the T49990 fixture from the chair, and cycle the chair base from full up to full down three times to bleed any air from the lines.
- 6** Reinstall all covers removed in step 1 and give the chair a final wipe down.

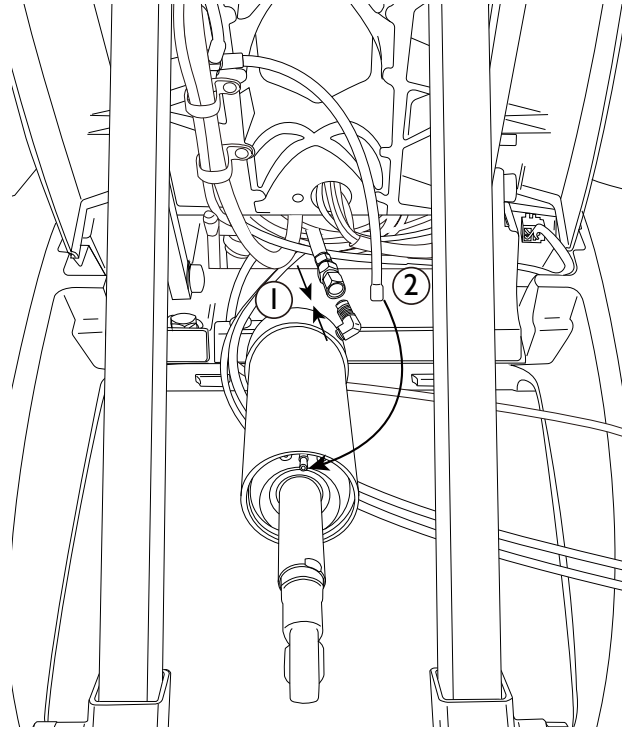


Figure 16. Reconnecting the hydraulic hose and the upper vent line

NOTE:

If the chair is running low on hydraulic fluid, follow the steps below to add the appropriate amount of fluid without overfilling:



1. Put the chair into Soft Limits mode. Drop the chair base and back fully down.
2. Fill the reservoir to the mark line.
3. Exit Soft Limits mode and raise the chair base and back to the full up position to bleed all air from the system.

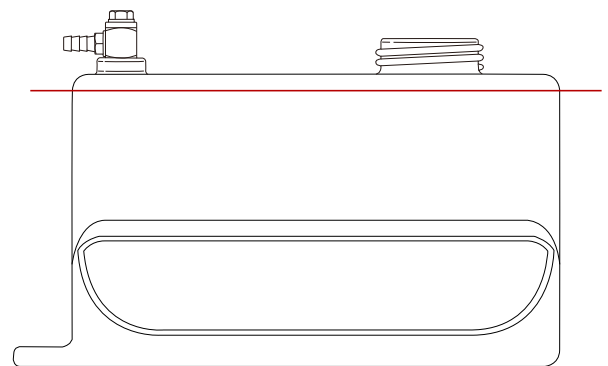


Figure 17. Filling the reservoir to the mark line

