

Instructions for Replacing the Adsorber of the Model SC/SCW/8200 Compressor

Purpose

For use with the Model SC/SCW/8200 Compressor adsorber Kit (CTI-CRYOGENICS Kit No. 8080255K001).

Kit Contents

The Model SC/SCW/8200 Compressor adsorber kit contains the following parts:

Description	Quantity
Adsorber	1
Instruction Sheet (No. 8040091)	1

Adsorber Replacement Instructions

To replace the Model SC/SCW/8200 Compressor adsorber, proceed as follows:

	WARNING Always disconnect the compressor from its source of electrical power before performing any maintenance.
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1. Shut down the compressor.
2. Disconnect the compressor input power cable from its electrical power source.
3. Disconnect the flex lines from the gas-return and gas-supply connectors at the rear of the compressor. Disconnect the self-sealing couplings as shown in Figure 1 and as explained in steps 3A and 3B.

- a. Use the two wrenches supplied in the Installation Tool Kit to avoid loosening the body of the coupling from its adapter. Hold one wrench fast on the coupling half attached to the rear side of the compressor. Use the other wrench to loosen the coupling to the helium supply or return line.
- b. Unscrew the two self-sealing coupling halves quickly to minimize minor gas leakage.

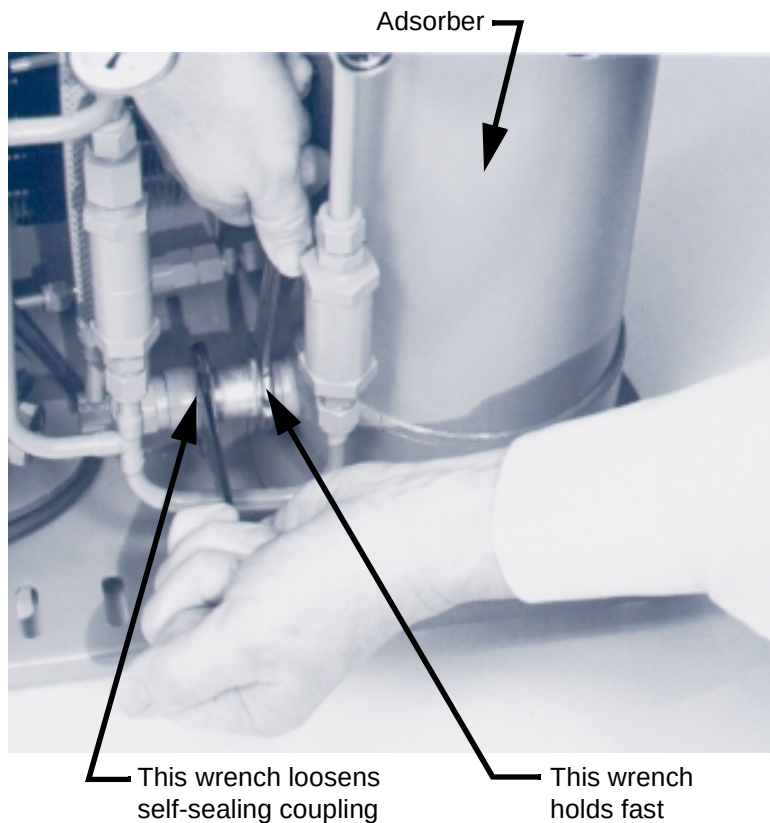


Figure 1: Proper Method for Disconnecting Adsorber Self-Sealing Couplings in the Model SC/SCW 8200 Compressor

4. Remove the screws holding the compressor rear grille, front grille, and cover.

NOTE: *Front and rear panels remain in place.*

5. Remove the adsorber from the compressor as shown in Figure 2 and by performing the following steps:
 - a. Remove the bolts, nuts, and washers that secure the adsorber to the base of the compressor.
 - b. Carefully lift the adsorber inward until the outlet self-sealing coupling clears the rear panel and remove the adsorber.
 - c. Save all nuts, bolts, and washers for installing the replacement adsorber.

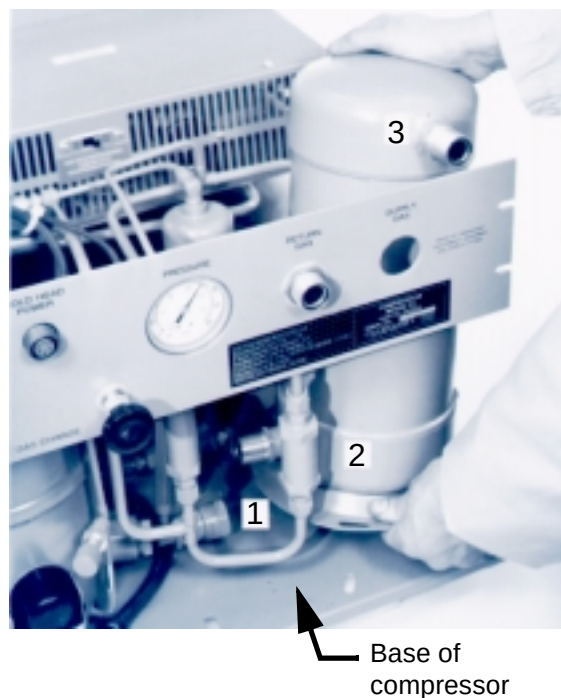


Figure 2: Adsorber Removal from the SC/SCW/8200 Compressor



WARNING

Depressurize the adsorber before disposing of it.

6. Attach the depressurization fitting (included in the installation kit) to the coupling half at either end of the adsorber and slowly tighten. This step will depressurize the adsorber.
7. Install the replacement adsorber using the hardware saved in step 5 as follows:
 - a. Remove the dust caps from the self-sealing coupling halves at each end of the replacement adsorber.
 - b. Ensure that the flat rubber gasket is clean and in place before connecting a self-sealing coupling as shown in Figure 4.
 - c. Use two wrenches (supplied with the Installation Tool Kit) to avoid loosening the body of the coupling from its adapter.
 - d. Screw the two self-sealing coupling halves together (make the first few turns by hand). Minor gas leakage may occur while turning the connection half. Complete the connection quickly to minimize gas leakage.
 - e. Be sure the coupling is firmly seated; do not apply more than 35 foot-pounds of torque.

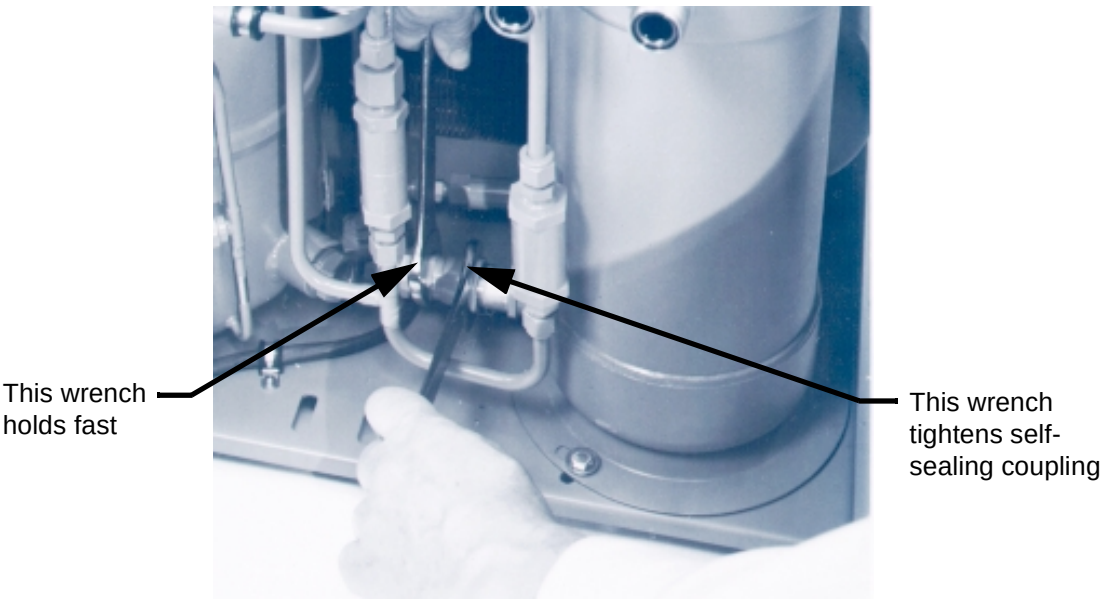


Figure 3: Proper Method for Connecting Self-Sealing Couplings

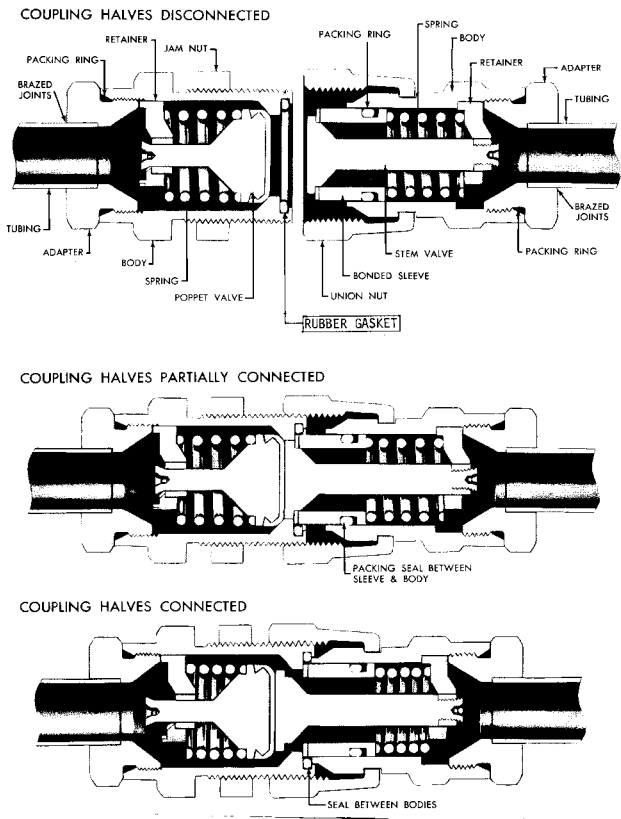


Figure 4: Self Sealing Coupling Cutaway View

8. Replace the cover and the front and rear grilles and secure them with their screws. Make sure that the cover is installed so that the inside metal tab depresses the safety interlock switch. The compressor cannot be started unless this switch is depressed.
9. Reconnect the helium return and supply lines to the connectors at the rear of the compressor.
10. Ensure that the pressure gauge reads the correct static pressure (refer to the applicable manual). If additional gas pressure is required, follow the procedures given in your Cryo-Torr[®] / Cryodyne[®] Installation, Operation and Servicing Instructions.
11. Reconnect the compressor input power cable to the electrical power source.
12. Add 10,000 hours to the reading on the elapsed-time meter, and write this total on the replacement identification decal provided with the replacement adsorber.