

## Adsorber Replacement Instructions for the 9600 Compressor

### Purpose

The parts and instructions within CTI-CRYOGENICS Kit P/N 8080300K001 are used to replace the adsorber within the 9600 Compressor.

### Kit Contents

Item Number	Description	Quantity
0001	Adsorber	1
0002	Instruction Sheet	1

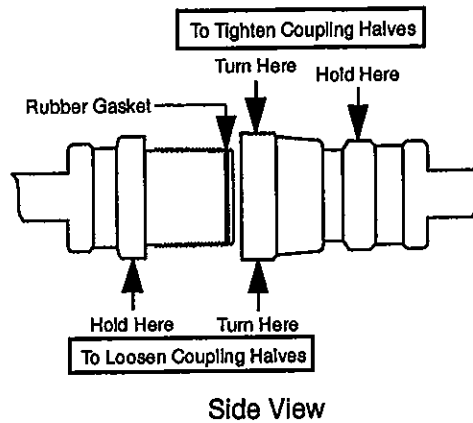
### Adsorber Replacement



#### WARNING

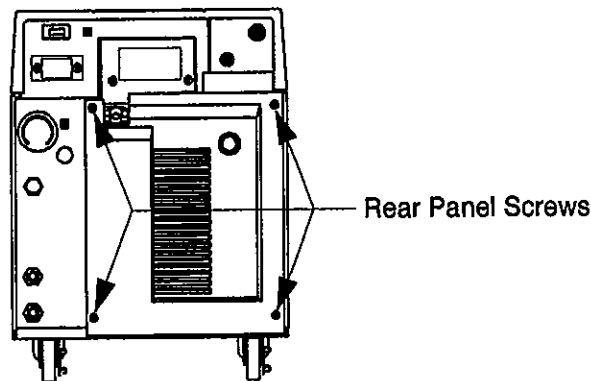
Always disconnect the compressor from its source of electrical power before performing any maintenance.

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.



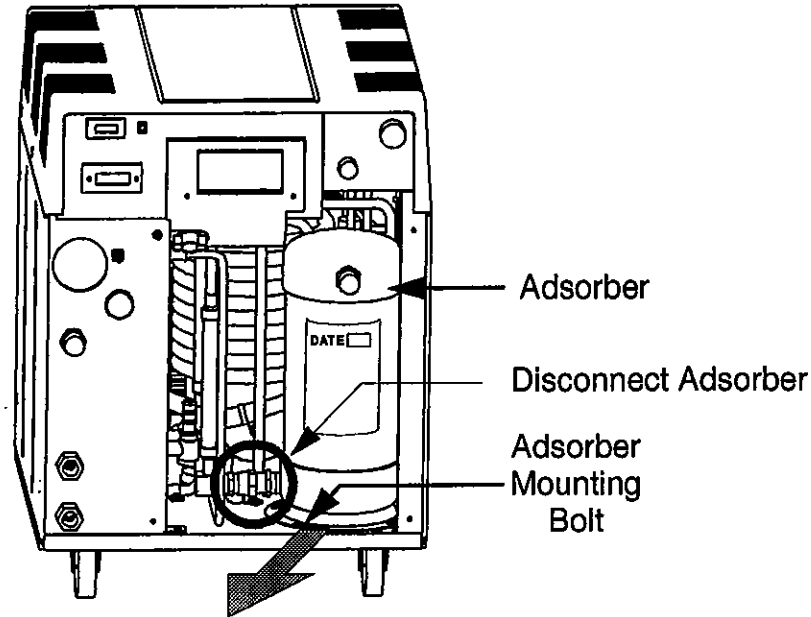
**Figure 1: Connecting/Disconnecting Helium Flex Line Couplings**

4. Remove the four rear panel screws as shown in Figure 2, and remove the rear panel .



**Figure 2: Rear Panel Screw Locations**

5. Using the two wrench method as shown in Figure 1, disconnect the self sealing coupling located at the bottom of the adsorber, as shown in Figure 3, quickly to minimize helium leakage.
6. Using a 7/16 in. (11mm) wrench, remove the adsorber mounting bolt as shown in Figure 3.
7. Move the adsorber from under the mounting tabs in the base as shown in Figure 3 and remove the adsorber from the Compressor.
8. Remove the dust caps from the self-sealing coupling halves at each end of the replacement adsorber.



**Figure 3: Adsorber Location and Disconnection**

9. Install the replacement adsorber under the mounting tabs and secure it into place with the bolt removed during Step 6.
10. Ensure that the flat rubber gasket is clean and in place before connecting a self-sealing coupling as shown in Figure 1.
11. Using the two wrench method as shown in Figure 1, connect the two self sealing couplings quickly to minimize helium leakage.
12. Record the adsorber replacement date on the label as shown in Figure 3, and also note that the next adsorber replacement should be performed in three years.
13. Install the Compressor rear panel.
14. Ensure that the pressure gauge reads 240 - 250 psig (16.5 - 17.2 bars). If additional gas pressure is required, refer to Section 5 of the **9600 Compressor Installation, Operation, and Maintenance** manual P/N 8040437 or 8040444 to either add or reduce helium pressure.
15. Using the two wrench method as shown in Figure 1, connect the supply and return helium line gas self sealing couplings to the rear of the compressor quickly to minimize helium leakage.
16. Connect the compressor input power cable to the electrical power source.
17. Turn the 9600 Compressor ON.

## **Depressurizing the Old Adsorber**

1. Attach the depressurization fitting (included in the installation tool kit - available from CTI-CRYOGENICS) to either connector on the old adsorber.
2. Once the old adsorber has been vented, remove the depressurization fitting and dispose of the adsorber using an environmentally approved method.