

## Instructions for Replacing the Adsorber of the Model MC Compressor

### Purpose

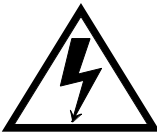
For use with the Model MC Compressor Adsorber Kit (CTI-CRYOGENICS Kit No. 8080265K001).

### Kit Contents

Item Number	Description	Quantity
1	Adsorber	1
2	Replacement Identification Decal	1
3	Instruction Sheet (No. 8040126)	1

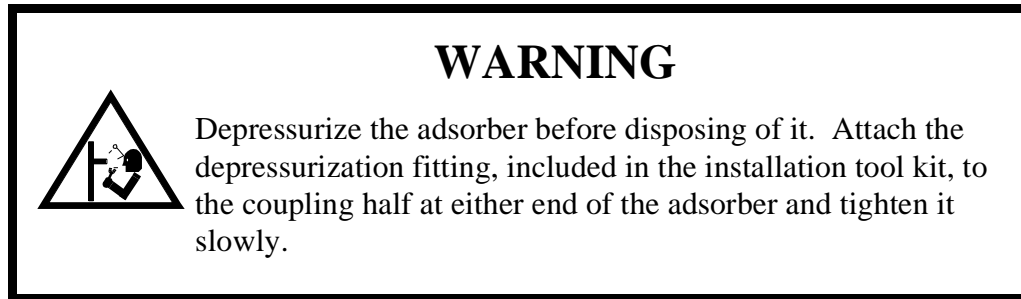
To replace the Model MC Compressor adsorber, proceed as follows:

1. Shut down the compressor.

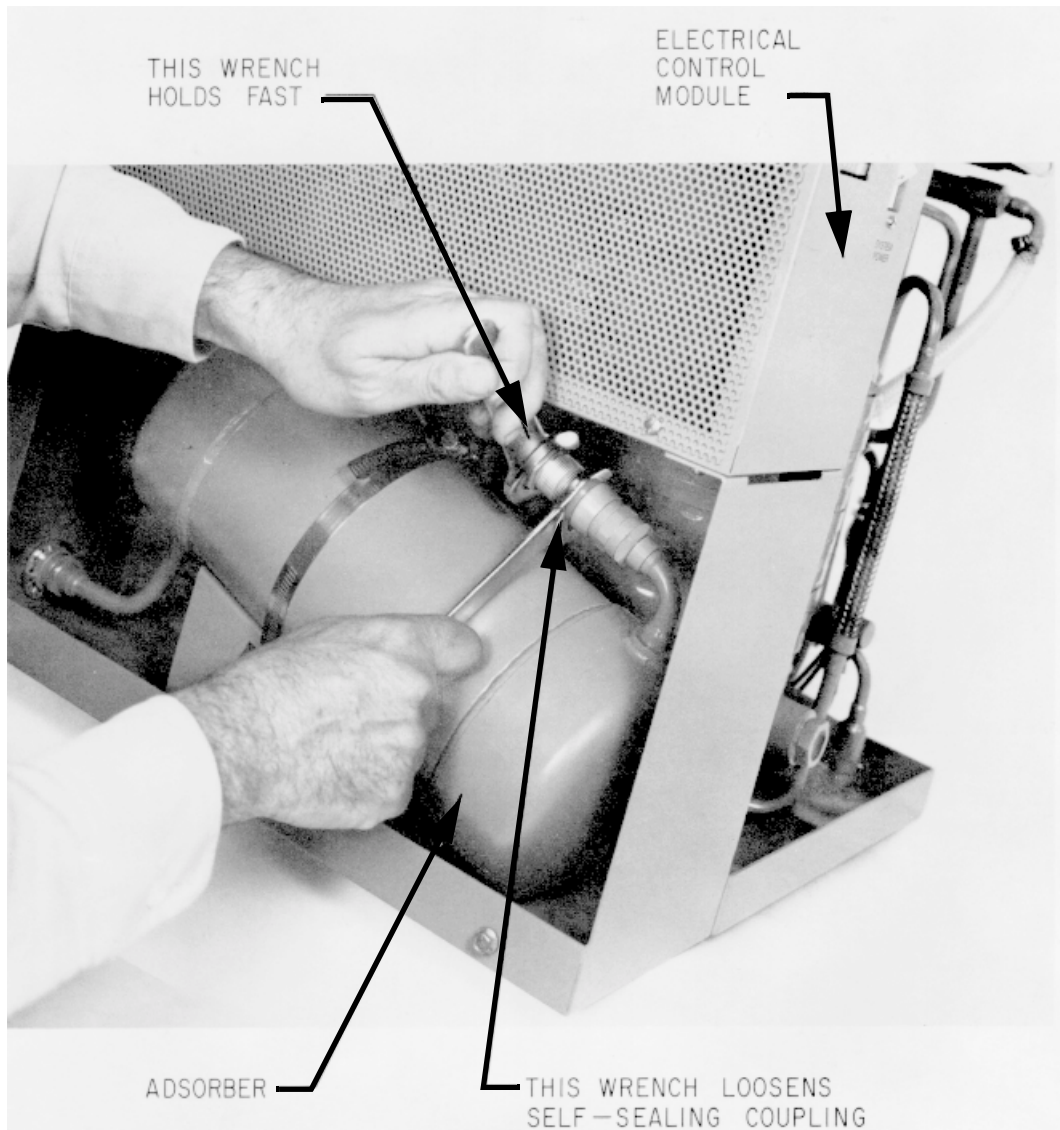
	<h3 style="margin: 0;">WARNING</h3> <p style="margin: 0;">Always disconnect the high vacuum pump from all sources of electrical power before performing any maintenance.</p>
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2. Disconnect the compressor input power cable of the compressor from its electrical power source.
3. Disconnect the flexlines from the gas-return and gas-supply connectors at the rear of the compressor. Disconnect the self-sealing couplings per Figure 1.
  - a. Use the two wrenches supplied in the Installation and Scheduled Maintenance 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.
4. Loosen the four screws that hold the compressor cover in place and remove the cover.
5. Remove the adsorber from the compressor according to Figures 1 and 2. Save all nuts, bolts, and washers for installing the replacement adsorber.

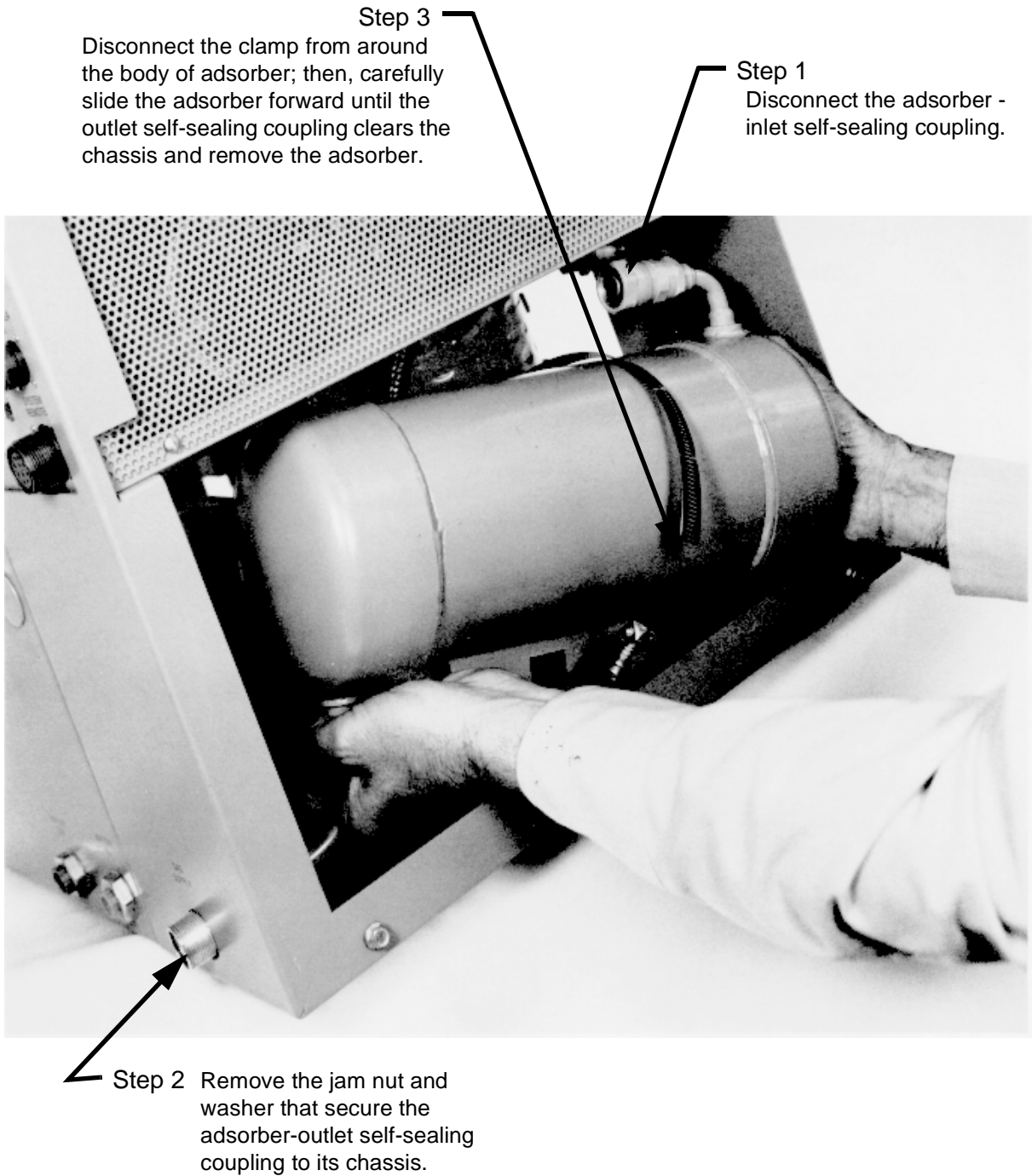


- a. Remove the dust caps from the self-sealing coupling halves at each end of the replacement adsorber.
    - b. Install the replacement adsorber by performing the steps in Figure 2 in the reverse order. Use the hardware saved in step 5 above. Reconnect the self-sealing couplings per Figure 3.
6. Install the replacement adsorber as follows:
7. Replace the cover on the compressor and secure it by tightening the four screws.
8. 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 the applicable Cryo-Torr<sup>®</sup> High-Vacuum Pump or Cryodyne<sup>®</sup> Cryocooler Manual.
9. Write the date that the adsorber was replaced on the decal provided with the replacement adsorber. This decal can be affixed to the front of the compressor.
10. Reconnect the flexlines to the connectors at the rear of the compressor.
11. Reconnect the compressor input power cable to the electrical power source.

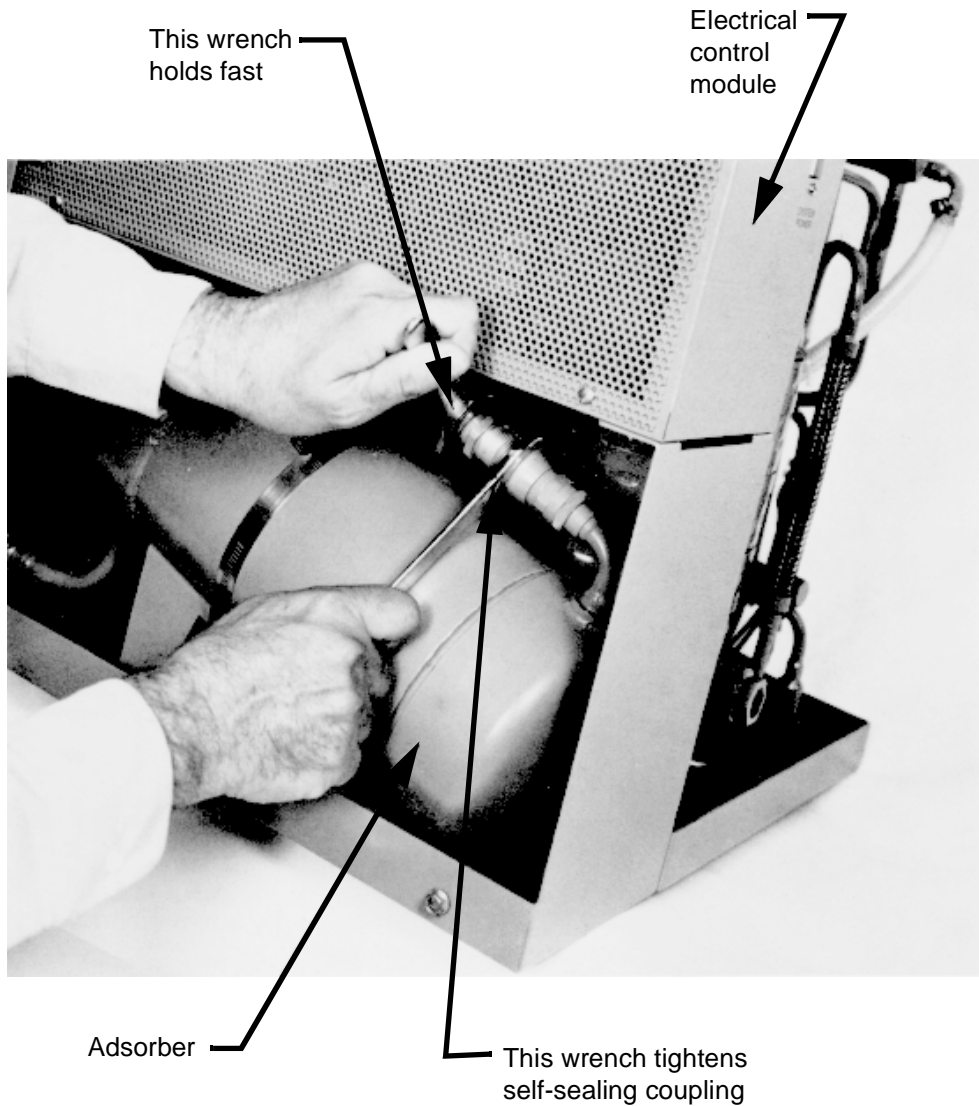


**Figure 1: Procedure for Disconnecting a Self-Sealing Coupling**

1. Use two wrenches (supplied with the Installation Tool Kit) to avoid loosening the body of the coupling from its adapter.
2. Unscrew the two self-sealing coupling halves. Minor gas leakage may occur while turning the connecting half. Complete the disconnection quickly to minimize gas loss.

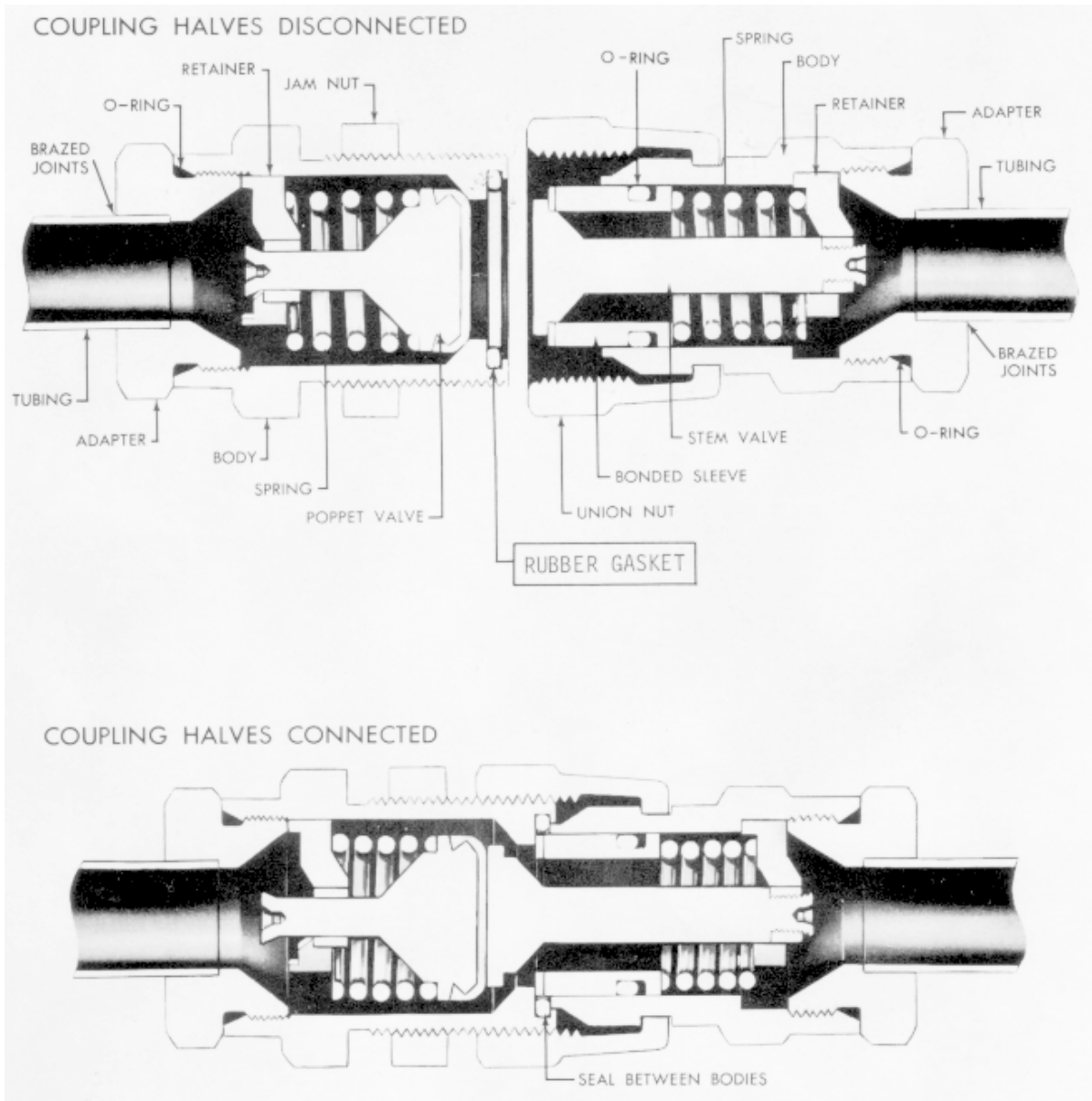


**Figure 2: Removing the Adsorber from the Compressor**



**Figure 3: Procedure for Connecting a Self-Sealing Coupling**

1. Ensure that the flat rubber gasket is clean and in place before connecting a self-sealing coupling. (See Figure 4, COUPLING HALVES DISCONNECTED).
2. Using the two wrenches supplied in the Installation and Scheduled Maintenance Tool Kit, make the connection quickly to minimize minor gas leakage.
3. Make the first turns by hand and then firmly seal the connection using the two wrenches until the fittings "bottom". Refer to Figure 4 for proper coupling of the self-sealing connection.



**Figure 4: Cutaway Views of a Self-Sealing Coupling (Aeroquip)**