



# SERVICE: General Maintenance

Instructions to replace the positive displacement pump and add the pump / motor coupling.

## **Safety Precaution:**

• Disconnect electrical power before servicing chiller.

#### NOTES:

The pump / motor coupling is not used on the RC006 model chillers or MCS products. Do NOT install coupling on RC006 chillers or MCS products.

Pressure relief setting is 90 PSI.

## **Tools Required:**

- Phillips screwdriver
- Flat-head screwdriver
- Medium Channel-Lock pliers
- Container for capturing/filling coolant in chiller
- Dow Corning thread sealant #739 or Teflon tape

## Parts included in this kit:

820-0148	Installation Instructions
410-xxxx-xx	PD Pump
410-0312	Pump / Motor Coupling



#### Figure 1

- 1. Disconnect power from the chiller and follow all Lock-out Tag-out procedures.
- 2. Remove top, right and left side covers.
- 3. Drain all coolant.
- 4. Remove hose clamps from the nipple fittings attached at the pump head noted in figure 2.





- 5. Remove the hoses from these fittings.
- 6. Remove the pump / motor clamp by loosening the screw until the clamp can be slid over the pump housing. (See Figure 3)



#### Figure 3

- 7. Remove pump from unit. Take precautions not to spill coolant inside chiller. Some coolant will remain in pump after draining.
- 8. Remove all fittings from the pump. Do not damage threads of fittings.
- 9. Attach fittings to replacement pump using thread sealant or Teflon tape.

NOTE: Do not leave Teflon tape or sealant near end of fittings. Foreign matter in coolant lines will damage the system.

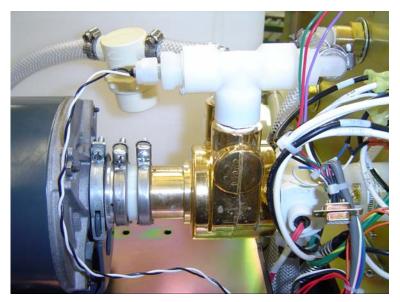
10. Place the coupling with one clamp onto the pump and tighten just enough to keep in place.

11. Place the center of the coupling onto the pump shaft. (See Figure 4)



## Figure 4

- 12. Place the original pump / motor clamp onto the coupling.
- 13. Place the pump / coupling assembly onto the motor. Ensure the coupling is seated into the pump shaft.
- 14. Tighten the clamp screws while ensuring the coupling is seated evenly on both the motor and pump. (See Figure 5)



### Figure 5

- 15. Reattach the hoses to the fittings and tighten the hose clamps.
- 16. Fill the reservoir tank with coolant.
- 17. Wipe up any spills before applying power.
- 18. Start chiller and check for leaks.