

Purging the Oasis CH50 and DM12 coolant system

For the Youtube video instructions on this procedure go to:
<https://www.youtube.com/watch?v=OtQFYb6WdJ0>

The Distribution module contains two valves with ½”NPT connections to be used for filling the heating loop. To initially fill up and bleed the air out of the system, do the following:

Materials 5 Gallon bucket, Self Priming 120 VAC pump, 3/4" hose and Clamps.

Propylene Glycol antifreeze of the same brand already in the system. DO NOT mix the coolants. Ask the manufacturer of the coach which brand is in the system.

1. Connect a 3/4" hose to the outlet of a diaphragm pump and to the “filling inlet” valve on the distribution module. Attach a hose to the inlet of a diaphragm pump and place the hose in a container filled with a 50/50 mixture of propylene glycol and water. (see Figure 1).
2. Connect a hose to the “filling outlet” valve on the distribution module and place the other end of the hose in the same container. Keep these hoses apart so the suction hose does not suck in air from the return hose.
3. Open both valves on the Distribution module.

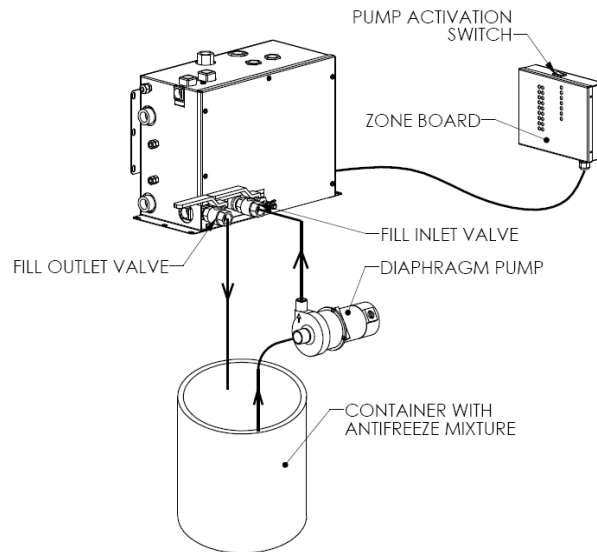


Figure 1: Initial fill up Oasis system

4. Turn ON the diaphragm pump. This will prime the pumps in the Oasis Distribution Module. It may be necessary to fill up the container with more coolant as the air is being bled from the system. It may also be necessary to clamp off one of the two heating loops at a time so the fluid will be forced through each loop and not take the easiest path of resistance.
5. Once the coolant in the container remains at the same level and there appears to be no air in the return stream from the filling outlet hose turn on the pump bypass activation switch, located on top of the zone box, this will activate the pumps inside the distribution module and fill up both heating loops. This could take up to 20 minutes. We do not want to run the pumps inside the distribution module dry as they overheat quickly and be ruined or the life of the pump will greatly be reduced.
6. Leave the priming pump and DM12 pumps running for another 5 to 10 minutes. close the valves on the distribution module and stop the diaphragm pump.
7. Again once the coolant in the container remains at the same level and there appears to be no air in the return stream from the filling outlet hose
8. Turn off the pump activation switch and the self priming AC pump.
9. The Oasis heating system is ready to be operated.

5.2 Part Replacements

5.2.1 Summer pump

To replace the summer pump, do the following:

1. Before proceeding with the next step, disconnect the Oasis Distribution Module from the harness that goes to the distribution module zone board. This ensures the pumps do not run while being serviced.
2. Open the front cover by loosening the 6 Phillips head screws.
3. Locate the summer pump as shown in Figure 25
4. Clamp the hose that is connected to the summer pump inlet so that no coolant can flow through it.
5. The outlet hose is closed by the built in check valve, that only allows flow to go up.

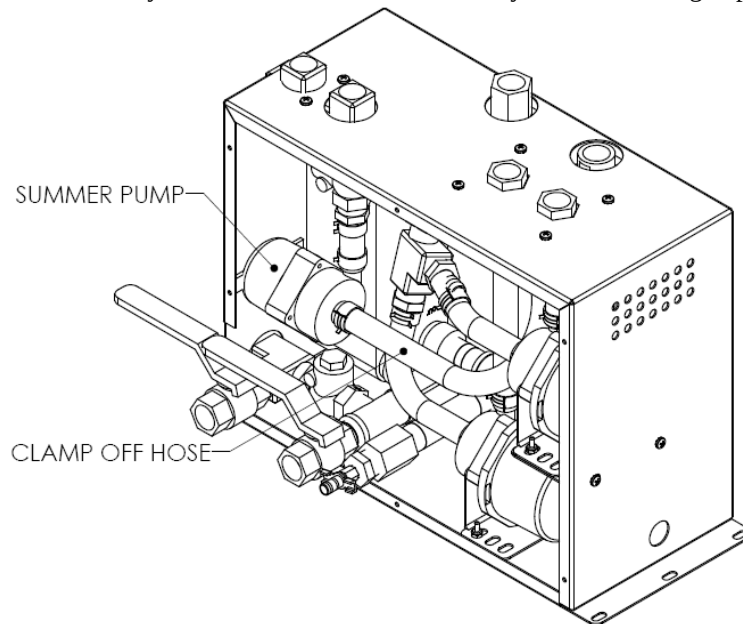


Figure 25: Summer Pump replacement

6. Remove the Spade connectors on the pump.
7. Move the hose clamps on the inlet and outlet of the pump to the other side.
8. Wiggle the pump until the hoses come off.
9. Install a new pump and reconnect the hoses.
10. Reconnect the spade connectors.
11. Remove the clamp from the summer pump inlet hose to allow coolant to flow through it.
12. Connect the Oasis Distribution Module to the harness that goes to the distribution module zone board.
13. If air was introduced into the system, it may be necessary to purge the system again. Run the Oasis heating module and see if heat is distributed throughout the system. If heat does not get distributed throughout the system, purge the system (see section 5.1)

5.2.2 Loop 1 and Loop 2 pumps

To replace the Loop 1 pump, do the following:

1. Before proceeding with the next step, disconnect the Oasis Distribution Module from the harness that goes to the distribution module zone board. This ensures the pumps do not run while being serviced.
2. Open the front cover by loosening the 6 Phillips head screws.
3. Clamp the hose that is connected to the Loop 1 pump inlet so that no coolant can flow through it.
4. The outlet hose is closed by the built in check valve, that only allows flow to go up.
5. Move the hose clamps on the inlet and outlet of the pump to the other side.
6. Remove the Spade connectors to the pump.
7. There is one nylock nut that is holding the pump in place. Remove this nut and carefully move the pump out of its place.
8. Wiggle the pump until the hoses come off.
9. Insert a new pump, tighten the nut and reconnect the hoses.
10. Reconnect the spade connectors.
11. Remove both clamps from the hoses to allow coolant to flow through them.
12. Connect the Oasis Distribution Module to the harness that goes to the distribution module zone board.
13. If air was introduced into the system, it may be necessary to purge the system again. Run the Oasis heating module and see if heat is distributed throughout the system. If heat does not get distributed throughout the system, purge the system (see section 5.1)

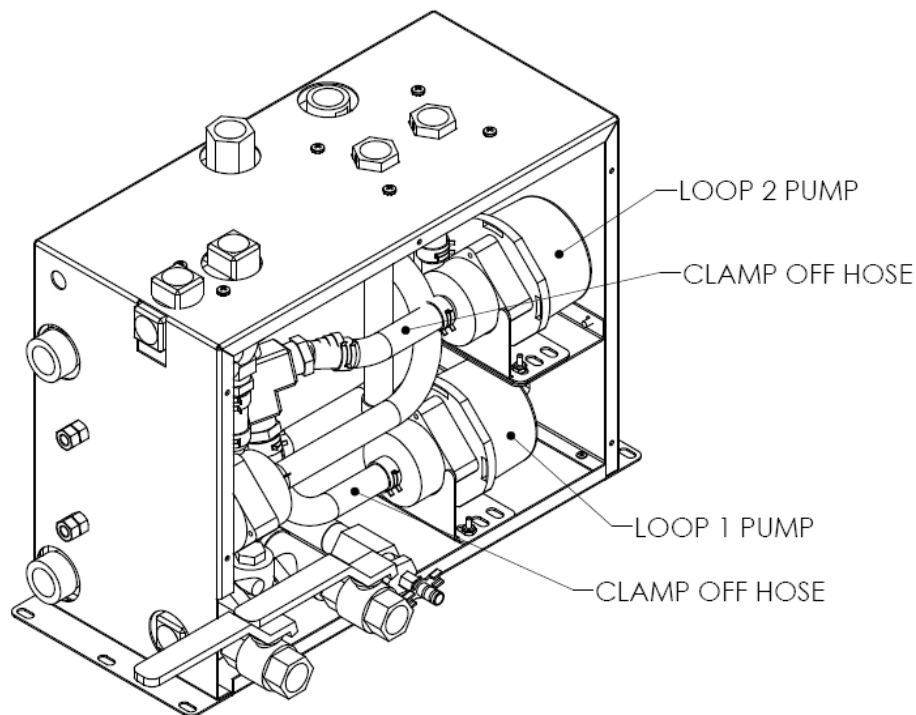


Figure 26: Loop 1&2 pump replacement

To replace the Loop 2 pump, do the following:

1. Before proceeding with the next step, disconnect the Oasis Distribution Module from the harness that goes to the distribution module zone board. This ensures the pumps do not run while being serviced.
2. Open the front cover by loosening the 6 Phillips head screws.
3. Clamp the hose that is connected to the Loop 2 pump inlet so that no coolant can flow through it.
4. The outlet hose is closed by the built in check valve, that only allows flow to go up.

5. Move the hose clamps on the inlet and outlet of the pump to the other side.
6. Remove the Spade connectors to the pump.
7. There are two Phillips head screws located on the side that is holding the pump bracket in place. Remove these screws and carefully move the pump bracket out of its place.
8. The pump is attached to the bracket with 2 nylock nuts. Remove these nuts and insert a new pump.
9. Tighten the new pump with 2 nylock nuts.
10. Insert the new pump inside the case, tighten the screws and reconnect the hoses.
11. Reconnect the spade connectors.
12. Remove the hose clamp from the hose to allow coolant to flow through it.
13. Connect the Oasis Distribution Module to the harness that goes to the distribution module zone board.
14. If air was introduced into the system, it may be necessary to purge the system again. Run the Oasis heating module and see if heat is distributed throughout the system. If heat does not get distributed throughout the system, purge the system (see section 5.1)