

WINTERIZING THE DIPLOMAT

<http://www.robmorgan.net/Dip>

TOOLS NEEDED:

A small air compressor, a water inlet plug with a Schrader valve, a 7/8" Socket for HW drain plug, and a short "winterizing hose" to fit in antifreeze bottles.



AIR or ANTIFREEZE?

I like to winterize with compressed air. I believe it's quicker, and knowing I've blown out all the water lines also affords me peace of mind. As stated in the Monaco Owner's Manual, the use of antifreeze is optional. Some RV owners never use it – even in the Northern States and Canada. However, if the coach is going to sit all winter I'll also use antifreeze for added protection. Even if you intend to use antifreeze, it's a good idea to blow out the water lines first, as water remaining in the lines will dilute the antifreeze. The instructions that follow cover both methods.

FIRST DRAIN TANKS AND ALL WATER LINES

1. Empty and thoroughly flush the black and gray holding tanks.
2. Put the Fresh Water Control Valve in the "Fill Tank" (down) position. (Helps drain tank faster.)
3. Open all faucets including shower and outside spray hose.
4. Open the fresh water tank drain valve, and all three low-point drain valves (hot, cold, and tank).
5. Turn off the ice maker by raising the arm. Remove ice maker feed hoses from BOTH sides of the electric solenoid valve and drain. Blow out the small hose going up to the ice maker and then cover the end with a plastic bag. (If the refrigerator has a water dispenser, that line must be drained as well. It holds almost a quart of water.) Use a rag to remove any water from the drip tray.
6. Close the ice maker feed valve. Do NOT reconnect either line to the solenoid valve.
7. While everything is draining, remove water faucet filter under the galley sink and replace with diverter. (Since the hose to the drinking water faucet is thin flexible tubing, I find it easier to simply use a 1/2" x 2" threaded nipple fitting, instead of the bypass that comes with the filter.)
8. Open the pressure release on the water heater and then take out the drain plug (7/8" socket).
9. When hot water tank is drained close the pressure release valve and replace the drain plug.
10. Place the water heater bypass valve in the BYPASS position.
11. After water tank is drained, turn on the water pump and allow it to run so that all the water is cleared out of the tank and the pump. Then turn off the water pump.
12. After the fresh water tank is drained, put the Control Valve in the "City Water" (up) position. Leave in that position. (Helps to drain the lines and also needed for blowing air through the lines.)
13. After everything is completely drained, close all drains, plugs, and faucets.

WINTERIZING WITH COMPRESSED AIR

1. First drain the water system using the 13 steps above.
2. Connect an air compressor to the water inlet hose connection using the Schrader valve plug. Make sure that the Water Control Valve is in the "City Water" (up) position.
3. Starting with the highest faucet (the galley sink) and working to the lowest (the outside shower) , open the cold and hot faucets one at a time until the air has blown all water from the line. Don't forget the shower. (I usually open the next drain before closing the last one so that the air pressure does not exceed the recommended 40 psi.)
4. Blow out the toilet sprayer hose (if you have one) and flush the toilet until no more water can be seen entering the bowl.
5. When the inside lines are blown free of water, go outside and open the ice maker shut-off valve to blow out that feed line. Lastly, do the outside shower.
6. If you are also going to use antifreeze skip to the **"Winterizing with Antifreeze"** section below. Otherwise, continue with the remaining steps 7-9.
7. If you are NOT going to use antifreeze, do the following steps to winterize the washing machine...
 - a. Rotate the selector knob to a wash position with the Water Temp setting on "WARM" (so that both hot and cold feed lines are cleared). Press the power button to ON.
 - b. After water lines clear, rotate selector knob to SPIN. Allow the pump to drain the drum.
 - c. Set selector knob to RESET and timer to zero. When door unlocks (in two minutes or less), pour in ½ gallon of pink antifreeze.
 - d. Set selector knob to SPIN to pump the antifreeze into the pump and drain.
 - e. Finally, set the selector knob to RESET and turn the power to OFF.
8. Even if you are not going to use antifreeze in the water lines, you must use one gallon to protect the drains. Divide the gallon between the galley sink, bathroom, shower, and toilet black tank. (If you have a Tecma electric macerating toilet, flush about 5 times with antifreeze to protect the pump and drain.)
9. Cap the water inlet hose to prevent contaminants and insects from getting into the hose. Open the low point drain valves and leave open (unless you will be adding antifreeze to the water lines).

WINTERIZING WITH ANTIFREEZE (The "Pink Stuff")

1. First drain the water system using the 13 steps above.
2. It is also a good idea to blow out the water lines before adding antifreeze. That way, the water in the lines will not dilute the antifreeze. Follow steps 1-5 under **"Winterizing with Compressed Air"** above.
3. Make sure that the hot water tank is bypassed and close the water pump shut-off valve between the water pump and the fresh water tank. Cap the fresh water inlet hose to prevent contaminants and insects from getting into the hose.
4. It takes about 4 gallons of antifreeze to winterize all the water lines. Connect a feed hose to the Winterization Connection, and put the other end into the antifreeze bottle.
5. Open the Winterization Valve, and turn on the water pump.

6. I like to start with the outside shower so that I can see that the pump is actually pumping the antifreeze into the system before I go inside. Open first the cold and then the hot side until antifreeze comes out the shower head.
7. While still outside, open the ice maker feed valve to pump anti-freeze through that line. Then shut the valve leaving the feed line disconnected.
8. Go inside and open each faucet one at a time (cold and hot) starting with the galley and then the bathroom sink, shower, toilet sprayer hose, and toilet. Close faucet when antifreeze is seen running freely from the line.
9. Winterize the washing machine using the following steps...
 - a. Rotate the selector knob to a wash position with the Water Temp setting on "WARM" (so that both hot and cold feed lines are winterized). Press the power button to ON, allowing antifreeze to enter the drum. Allow enough antifreeze in the drum to protect the drain when pumped out.
 - b. Next rotate selector knob to SPIN. Allow the pump to drain the drum.
 - c. Set selector knob to RESET and timer to zero. When door unlocks (in two minutes or less), turn the power to OFF.
10. Use one additional gallon of antifreeze to protect the drains. Divide the gallon between the galley sink, bathroom, shower, and toilet black tank. (If you have a Tecma electric macerating toilet, flush about 5 times with antifreeze to protect the pump and drain.)
11. Use a cloth to wipe away any antifreeze from the sink bowls, shower, and toilet (so as not to stain).

DE-WINTERIZING IN THE SPRING

1. Open the water pump shut-off valve (between the water pump and the fresh water tank).
2. Open the fresh water tank drain valve and the three low point drains to drain out any residue in the system. Then close these valves.
3. Put the Water Control Valve in the "Fill Tank" (down) position.
4. Partially fill fresh water tank.
5. While tank is filling run the water pump to prime it, until water freely sprays out the outside shower hose.
6. Open ice maker feed valve to flush out line. Then reconnect both water lines to solenoid valve. (When using ice maker for the first time, discard the first two trays of ice.)
7. Inside the coach, turn on all faucets (hot and cold) to wash out antifreeze from each line.
8. Put hot water tank bypass valve back in "normal" position and fill the tank.
9. Turn off the water pump.
10. Clean or replace the pump filter screen.
11. Flush the fresh water tank and refill. Use "freshener" as necessary.
12. Install a new drinking water filter under the galley sink.
13. Run the washer through a "Warm/Warm" cycle before using it for clothes.