Troubleshooting Tips for Your RV Air Conditioner/Heat Pump

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This information is provided to help you maintain your Duo-Therm product. However, any servicing should be done by a professional.

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Heat Pumps and Air Conditioners: What’s the Difference?

Simply stated, an air conditioner will cool your vehicle while a heat pump can operate in both a heating and cooling mode. With heat pumps, the flow of the refrigerant is reversed compared to an air conditioner. An air conditioner not only lowers the temperature of the air but also conditions the air by removing moisture and filtering it. Because moisture is involved, humidity is a large factor in how efficient your air conditioner will operate.

Climate-Control Hints

Whether you have an air conditioner or a heat pump in your RV, here’s a list of things you can check before you call for a technician:

1. If the air conditioner/heat pump doesn’t run (the fan and/or the compressor), check the AC voltage. If the thermostat has no lights showing, it means it is not receiving DC power. The 12-volt DC fuse should be checked. You may also want to look at the breaker at the electrical source. To check your AC voltage when you arrive at your destination, plug in your electrical cord. Inside your vehicle place a voltmeter into a receptacle and start your air conditioner or heat pump. When the compressor starts after a two-minute delay, check your voltage. It must be over 103.5 volts for the air conditioner to operate.

2. When the fan runs and the compressor tries to start but won’t run, examine the exterior heavy-duty long extension cord, receptacle and plug. If those are in working order, check the AC voltage.

3. If the fan runs, but the compressor cycles on and off and doesn’t cool correctly, it could be improper or poor air flow, a dirty filter, dirty condenser, short cycling (a duct leak) or the AC voltage may be the problem.

4. If the compressor doesn’t cycle at all, a qualified technician should check the filter (which must be clean) and the condenser. It is important to check the condenser to determine if it is blocked. The condenser is visible with the Brisk Air units, but the Penguin air conditioner shroud will need to be removed for inspection. If the condenser is blocked, the debris will need to be removed by a technician.

5. Poor or improper air flow, short cycling, a dirty filter or placing the thermostat on its minimum temperature setting and the fan on low speed in high humidity situations can cause evaporator freeze-up.

6. It’s leaking! What should you do? First, this is something that should be repaired by a certified technician. The technician will take a good look at the mounting bolts, roof gasket and condensation drain holes. It is also good to be sure the technician checks for roof damage.

We’d like to stress that the best way to keep your air conditioner or heat pump in peak operating condition is to have maintenance and repair tasks performed by a qualified technician. This may also be something that’s required by your warranty. Your owner’s manual will supply the specifics if this is the case.

In addition to this brochure, Dometic also offers brochures on refrigerator maintenance, awnings, RV food storage and facts about china RV toilets. For more information on these brochures, call our Communication Center at Dometic Corporation, (574) 294-2511.
Over the years of running a mobile RV repair service, having a dedicated place to access service manuals for all the different appliances and components found on RVs was something that I always had a desire to create.

I hope this resource makes your RV repairs easier, as it has mine, but please be careful and follow proper safety practices when attempting to repair your own RV.

If in doubt, please consult with a professional RV technician!

All service manuals provided on www.myrvworks.com are believed to be released for distribution and/or in the public domain.