A/C Maintenace

After a slow start (at least in Ohio), summer is in full swing. Long hot days lead to air conditioners running full time. Remember even if your air conditioner is running, it may not be functioning at peak performance. Most cooling performance losses are not related to refrigerant loss but stem from poor maintenance procedures. A dirty AC can increase amp draw - lead to freeze up and cause poor overall cooling.

Caution should be used when accessing the roof of your Airstream. At Airstream all personnel are required to wear a fall protection device when working on the roof; taking your Airstream to a Dealer with the proper equipment is recommended.

- Clean filters weekly when in full use most filters can be rinsed off with water.
- Evaporator coils - dirt can get by filter and over time settle on your evaporator coils, this can lead to freeze up. They make spray cleaners that can be applied through the air intake (Enviro-Chem coil cleaner) just apply and run AC moisture will remove minor dirt build up. If dirt is too thick the shroud may need to be removed and clean from roof.
- Condenser coils should be cleaned at least yearly (access from roof only), air can be blown through coils from inside out.
- Inspect condenser coil fins for damage-smashed fins reduce air flow. A fin comb can be used to straighten fins.
- Under the shroud should be inspected for dirt, debris and bugs that may have gotten in.
- Inspect AC drain tube - verify moisture is coming out of tube. Dirt and bugs can get inside AC drain pan and the opening to the tube can become blocked. Blow air back through the tube from the outside.
- Exterior AC shroud should be checked for damage and/or cracks at the mounting screws.

How do you clean filters on a trailer with ducted A/C units?

1. Locate the A/C return air vents located in the ceiling of the trailer. There are 2 vents.

2. Remove the vent covers by pulling down out of the ceiling.

3. Once the vent covers are removed the filters are located on the cover, they can be removed and cleaned by rinsing with water.

4. Once the filters are cleaned, reverse the process and snap the vent covers back into the ceiling careful not to push excessively.

Service should always be provided by qualified service personnel. Always unhook electric before working on the AC; there are high voltage capacitors that may retain a charge even when disconnected from 110 volt power.

AC operating range Voltage 103.5 to 126.5 Amp Draw AC approx. 14-16 Amps

AC Problems

A common problem is overheating caused by low voltage. An air conditioner needs to have 103 to126 volts AC to be in the proper operating range.

If the voltage is too low, the current temperature will rise and this abnormal heat condition will engage the thermal - overload device and the compressor will shut down. This is especially problematic if you operate your AC on an undersized extension cord or in a serviced RV site that is being over - loaded because many users are on that circuit.

Freezing up

A common problem is operating your air conditioner on high when the outside temperature drops below 75º F or 24ºC. This will cause ice to build up on the evaporator coil, which will reduce the air flow and form a blockage. If ice-up occurs, turn off the air conditioner and allow the coil to defrost before putting the unit back into service; also, if the filters are dirty, air flow will be further reduced and will form frost on the cooling coil.

Operational Test

Easy test to determine if your unit is working properly, you can try the f o l l o w i n g tip. First, place a thermometer in the outlet grill or the closest duct and record the temperature, then move the thermostat to the air intake and record that temperature reading.

If you subtract the reading at the in- take grill from the outlet grill, the proper operating system will have a temperature differential of between 18 and 22 degrees.

How they work

RV air conditioners are a compressor - type unit that work on the same principle as a residential unit. They are relatively lightweight and very durable in their ability to endure the vibrations of the highway. Like an RV refrigerator, an air conditioner works by removing heat from the air and transferring it outside. The basic parts of an air conditioner are a sealed or closed system consisting of a compressor, a condenser, an evaporator and a series of copper tubing to connect all of these units together. In addition to these components, there is a motor with two fans which have two functions: one is to move air across the condenser and the other moves air across the evaporator.

The evaporator absorbs heat from the interior of the RV and vaporizes it, then the refrigerant - which is an R-22 mix- is then routed through the condenser where the heat is removed and transferred outside of the RV.

The compressor is the component that pushes the refrigerant through the system and is driven from the electrical circuit provided to the unit. An air conditioner also cools the interior air by working like a dehumidifier - this dry air is always more comfortable than humid air. The moisture in the atmosphere is drawn through the evaporator and condenses into water droplets that you will some- times see dripping from your RV's roof when the air conditioner is operating.

Have a Great Summer!