PREVENTING PROBLEMS WITH ROOF AIR UNITS

The arrival of warm weather means RV air conditioner units, sometimes idle for months, are turned on with customers waiting for cool air to emerge. What steps can be taken to keep the roof air units running smoothly this summer?

Clean the filters at least every two weeks when the air conditioner is in operation. Running the unit with dirty or clogged filters will decrease the flow of air across the cooling (evaporator) coil, potentially causing the coil to freeze up. If the air conditioner is running for long periods of time with dirty/clogged filters, it can lead to a potentially expensive cleaning of the evaporator coil.

If the motor has oil ports, use SAE 30 weight non-detergent oil. The motor requires only 1-2 drops of oil per year. DO NOT OVER OIL. The oil ports will be visible on the fan motor with the unit's plastic cover (shroud) removed.

Clean the outside (condenser) coil at least once a year. Airflow across the condenser is very important. Hail or tree limbs might crush the fins, or airborne debris such as cottonwood seed could cause a restriction of airflow that would prevent proper heat flow. Blow out any debris, which may have collected on the coil. Since the A/C fan forces air thru the coil, it is best to blow compressed air through the coil in the opposite direction of the normal operation. You may also wash this coil with water if you choose to do so. Remember to disconnect all power to the vehicle/air conditioner first. You will also want to follow two simple trouble shooting steps.

First install a voltmeter so you can check voltage at the various RV Parks, do not use the A/C when the voltmeter reads below 104 VAC. If you are in an RV park and the air conditioner in every coach on his or her electrical leg is operating, the transformer or the park wiring may not be able to sustain the electromotive force at the usual 115-volt to 120-volt level.

When the voltage is reduced, the air conditioner's compressor and fan run slower and efficiency decreases. When the voltage drops, amperage goes up, which may trip the breaker. The same situation results when an extension cord is too long or have an inefficient wire gauge (back to the water line example). Most electrical equipment will not function well if the voltage is less than 90 percent of that specified on the data plate. Some air conditioner manufacturers recommend their customers turn the unit off if the voltage falls below 103, and this is sound advice, as continued operation at a low voltage level could cause serious damage if one of the circuit safety items doesn't do its job. You also do not want to use an extension cord while running the A/C.

These simple steps will help keep the roof air unit running smoothly throughout the hot summer season.

Information from Bill Hendrix and RVDA