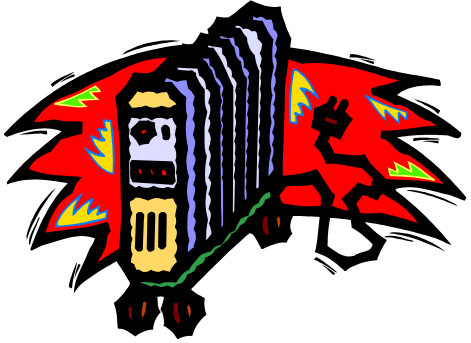
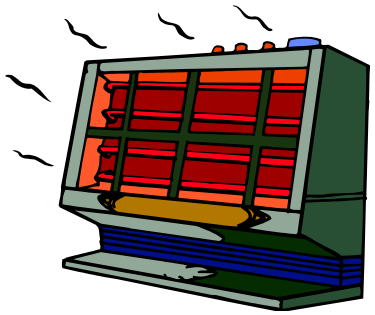


Electric Space Heater Danger!



PROBLEM:

There has been a high incidence of overheated wiring, inverter damage, GFI outlet damage, and electrical fires related to the use of portable electric heaters.

CAUSE:

Long duration use of high wattage electric heating appliance.

RESOLVE:

Limit use of 1500 watt heaters to short duration or use lower settings.

DISCUSSION:

Portable electric heaters convert electricity into heat and in doing so cause an high amount of current to flow through your electric wiring in the RV. Your RVs electrical wiring system is designed to handle short duration use of high wattage appliances such as the microwave, hair dryers or vacuums. The problem arises when a high wattage appliance is used for extended length of time (like overnight).

Your RV electrical system is protected by circuit breakers and GFI outlets to protect against electrical shorts, ground faults and over current conditions. The problem is that most circuits are protected by 15 amp circuit breakers. A 1500 watt electric heater normally pulls 12-13 amps, not enough to trip the breaker but just under its load rating. This amount of current flowing through the wiring components for an extended length of time gets them very hot, hot enough to melt wiring insulation, electrical connectors, outlets, and destroy GFI outlets (if in circuit). This could (and has) resulted in an electrical fire from the insulation or other electrical component overheating to the point of igniting. Your circuit breaker cannot sense the danger until it is too late and a short occurs from overheated wires touching.

A SPECIAL WARNING FOR INVERTER EQUIPPED RVs: If your coach is equipped with a hard wired inverter (usually an inverter/converter combination) and an electric heater is operated (as described above) on one of the inverter supplied outlets, damage to the inverter or fire will likely occur. Sundance Custom RV has seen several inverter fires and many more damaged from use of electric heaters. The reason for the concern is that when shore power is supplied to the inverter, a set of relays (transfer switches) closes and the inverter becomes passive on the circuits it will supply power to, but the current still goes through the inverter relays. These relays are the weakest link in the circuit. Excessive long duration current overheats the contacts on these relays until they either melt together (inverter damage) or overheat and ignite (inverter fire).

RECOMMENDATIONS:

1) Utilize your RVs furnace for space heating.

2) Check the manufacturers label on the electric heater for the wattage of the unit. If it is rated at 1500 watts only – don't use it longer than a few minutes at a time. If it has a lower setting, 1250 or 1000 watts, use the lower settings with caution.

3) Don't use an electric heater on a GFI protected outlet.

4) Don't use an electric heater on a inverter supplied outlet.

5) NEVER leave an electric heater unattended (this includes sleeping).

6) Test your smoke detector regularly.

7) If you smell or see smoke when an electric heater is in operation, turn off main circuit breaker (or park circuit breaker), and evacuate the coach immediately and CALL THE FIRE DEPARTMENT. Some fires occur inside walls and are not readily visible until too late.