



INSTALLATION AND OPERATING INSTRUCTIONS

FOR 6535-3451

2 STAGE HEAT PUMP

WALL THERMOSTAT/SUB-BASE

APPLICATION

The 6535-3451 thermostat/sub-base is intended for use with a RV Products 2 stage heat pump. The thermostat connects to the heat pump with a 9 pin plug through a lifeline (RVP part number 6795C4351). The OEM (Original Equipment Manufacturer) must supply the 12 VDC wiring and the furnace control wiring which connects to the 3 pin plug on the thermostat. The OEM supplies the mating receptacle for the 3 pin plug. RV Products suggests the thermostat wiring be minimum 18 gauge. The furnace control circuit must not exceed 1 amp. The thermostat is equipped with a replaceable 2 amp fuse inside the thermostat body.

The sub-base will allow selection of heating from the electric heat pump or from the gas furnace. If the thermostat is operating in the heat mode and the sub-base is switched to electric heat, gas heat operation will automatically engage if the indoor temperature drops to 45 degrees. At 60 degrees the gas furnace will disengage. This feature insures that if the user is absent, and the outdoor temperature drops to a point which the heat pump can no longer maintain the setpoint, the indoor temperature will not drop below 45 degrees. Normally during these periods, the user will switch the sub-base to gas heat.

INSTALLATION INSTRUCTIONS

BE SURE ALL ELECTRICAL POWER HAS BEEN DISCONNECTED FROM THE AIR CONDITIONER AND THE POWER SUPPLY.

These instructions are provided for the proper mounting of the thermostat itself. An Operation Chart is provided to show thermostat capabilities.

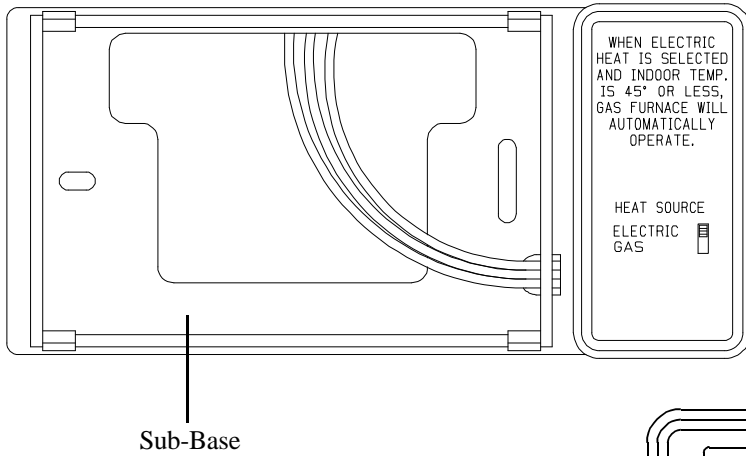
A. THERMOSTAT LOCATION

This thermostat is a sensitive instrument. For accurate temperature control and comfort, the following considerations should be taken into account:

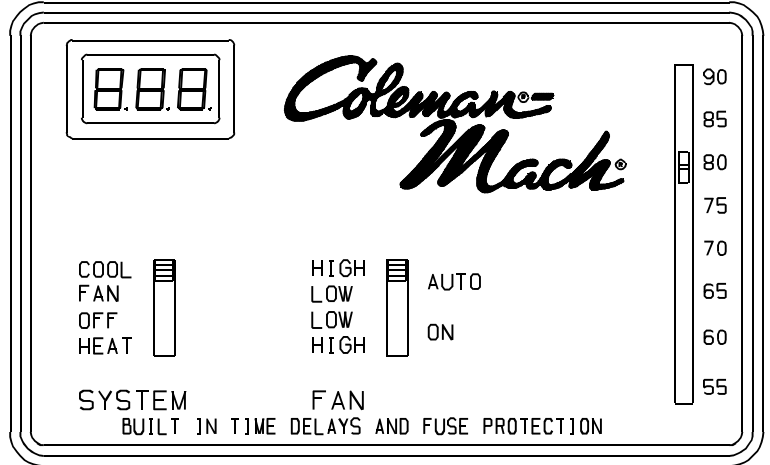
1. Locate the thermostat on an inside wall about five feet above the floor. Pick a dry area where air circulation is good.
2. Do not install the thermostat where there are unusual heating conditions; such as direct sunlight, heat producing appliances (television, radio, wall lamp, etc.) or a furnace or air conditioner supply register.

B. ATTACHING THE WALL THERMOSTAT

1. Separate the thermostat body from the sub-base by gently pulling at the top and bottom. See Figure 1.
2. Attach the new thermostat sub-base to the wall at the desired mounting location. **Mount the sub-base to the wall before connecting the plugs.**



6535-3451 Thermostat



C. WIRING THE WALL THERMOSTAT

OEM must supply these mating parts to connect these thermostats per Figure 2.

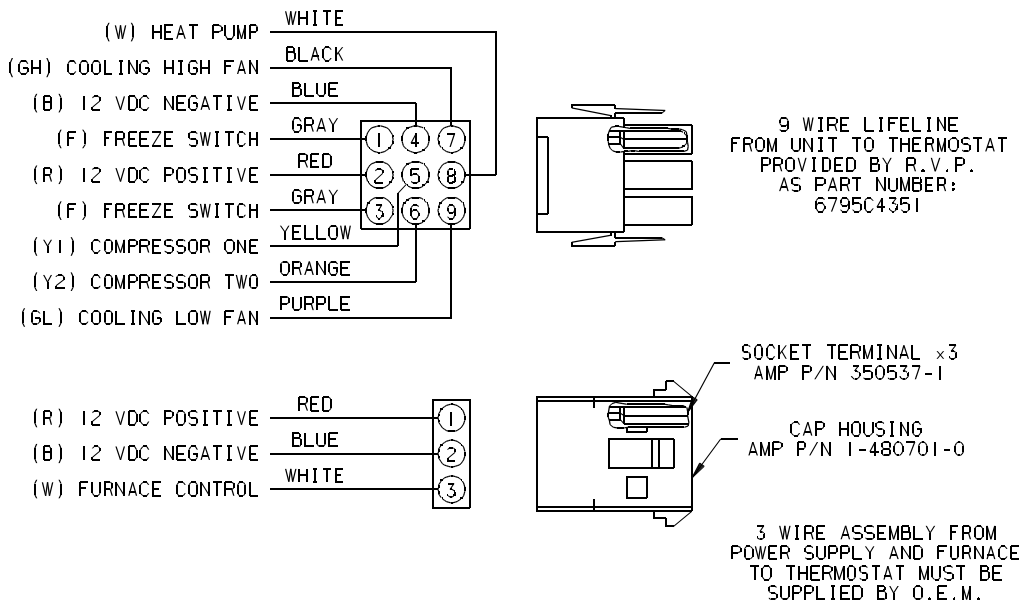


FIGURE 2

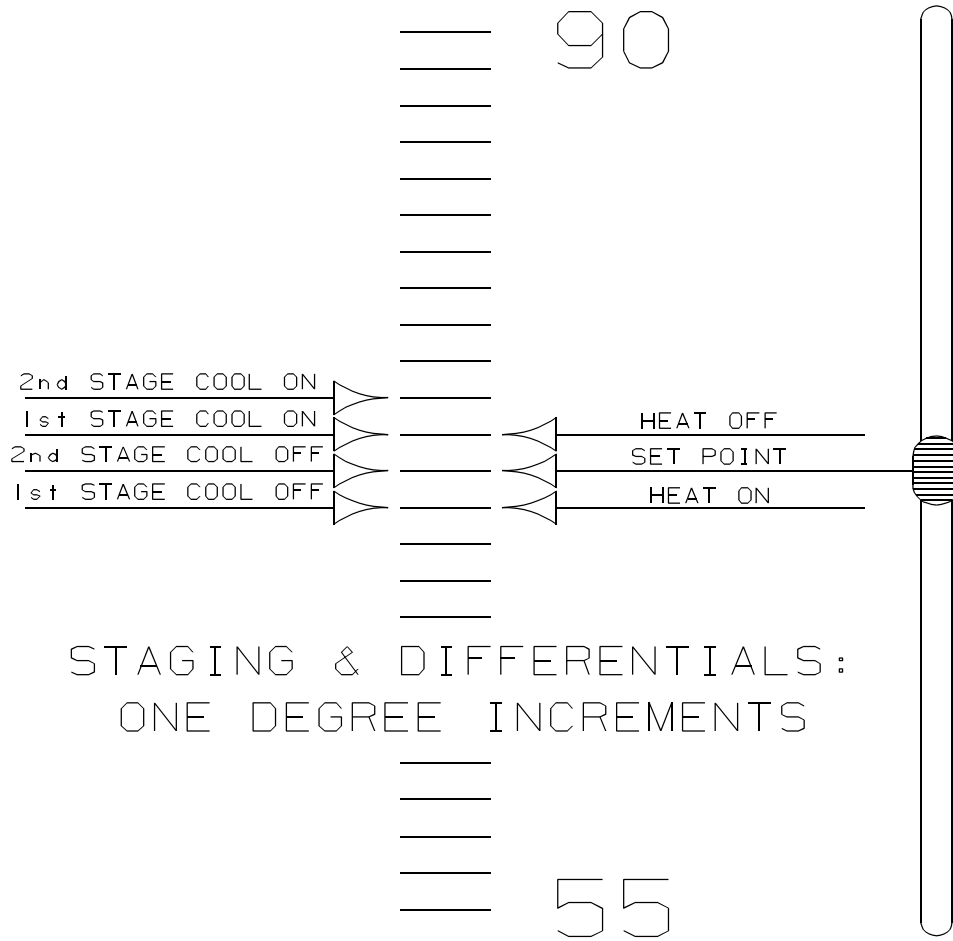


FIGURE 3



OPERATION

The chart below shows the system functions with the 6535-3451 thermostat. After the entire air conditioning system (and furnace system) is installed, check each position function.

<input checked="" type="checkbox"/> SHOWS POSITION OF SWITCH										OPERATION	
SYSTEM				FAN				HEAT SOURCE			
HEAT	COOL	OFF	FAN	AUTO HI LO	ON LO HI	ELEC	GAS				
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No functions occur.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Heat pump fan runs at high speed continuously regardless of fan switch setting. No other functions occur.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressor runs in cooling mode and cycles with high speed fan to satisfy setpoint.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressor runs in cooling mode and cycles with low speed fan to satisfy setpoint.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressor runs in cooling mode and cycles to satisfy setpoint. Low speed fan runs continuously.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressor runs in cooling mode and cycles to satisfy setpoint. High speed fan runs continuously.	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Compressor runs in heating mode and cycles with high speed fan to satisfy setpoint. If heat pump cannot maintain above 45 degrees, furnace will engage.	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Furnace and furnace blower cycle to satisfy setpoint. Heat pump has no function.	

The display indicates room temperature until the temperature selector is moved, at which time the display temporarily indicates setpoint. When a setpoint is selected, it will continue to be displayed for 3 seconds, after which the display reverts to room temperature.

All cooling functions controlling to setpoint have a short cycle protection time delay of 2 1/2 minutes. There will be no delay if the cycle **OFF** time exceeds 2 1/2 minutes.

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