

INSTALLATION INSTRUCTIONS FOR MODEL 7330D3351 & 7330D3361 WALL THERMOSTAT

APPLICATION

These thermostats are designed to operate all R.V. Products ceiling assemblies, which control the air conditioner 115 VAC circuits through 12 VDC relays.

Wiring is required between the thermostat and the ceiling assembly. The thermostat wiring is field installed and must be considered before wall paneling and ceiling panels are in place. Wall thermostat controlled air conditioners are normally OEM (Original Equipment Manufacturer) installed. Wall thermostat controlled air conditioners may be installed for aftermarket applications, with additional considerations given to the thermostat wire routing.

The 7330D3351 thermostat may also operate any RV furnace 12 VDC control circuit not exceeding one amp. All thermostats are equipped with a replaceable 2 amp fuse located on the back of the thermostat body.

INSTALLATION INSTRUCTIONS

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

These instructions are provided for the proper mounting of the thermostat itself. An Operation Chart and Terminal Cross Reference Chart are provided to show thermostat capabilities.

Wiring procedure is dependent upon the ceiling assembly to be matched with this component, and is provided in the ceiling assembly installation instructions.

Recreation Vehicle Products suggests the thermostat wiring be minimum 18 gauge.

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. The thermostat should be mounted within a reasonable distance from the appliance the thermostat will control. This will assure a more accurate temperature relationship between the thermostat and the appliance the thermostat will control.

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. ROUTING THE THERMOSTAT WIRE BUNDLE

A separate wire bundle to power the 12 VDC thermostat will need to be routed between the thermostat and the power supply. Both **positive** and **negative** must be brought up to the thermostat.

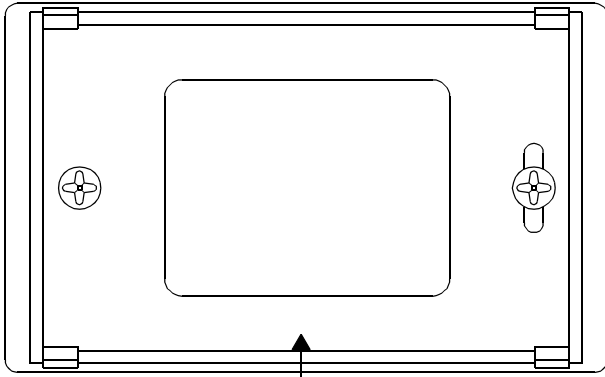
If a 12 VDC furnace is also to be operated, additional wiring will need to be routed and a definite furnace location defined. See Figure 1.

1. Route the wire bundle between the thermostat and the ceiling assembly. Allow an additional 6 inches of length at both the thermostat and the ceiling assembly. This will give the installer the required slack necessary for wiring. See Figure 1.
2. Route the separate 2 wire thermostat bundle between the thermostat and the power supply. Allow 6 inches of additional wiring on both ends. See Figure 1.
3. If a 12 VDC furnace is to be operated, route a wire bundle between the thermostat and the furnace. Allow an additional 6 inches at both ends. See Figure 1.
4. If stapling the wire bundle during the routing process, be careful not to pierce the thermostat wiring insulation.

C. ATTACHING THE WALL THERMOSTAT

1. Separate the thermostat body from the sub-base by gently pulling at the top and bottom. See Figure 2.
2. If this thermostat is a replacement thermostat for one which has failed or no longer meets the needs of the system: note the thermostat wiring on the back of the old thermostat sub-base, and the system function each wire was operating. This will save time and trouble when rewiring the new thermostat. Before removing the thermostat wiring from the old thermostat, make sure the power supply to the thermostat is disconnected.

- Attach the new thermostat sub-base to the wall at the desired mounting location. **Mount the sub-base to the wall before wiring the thermostat.**



Sub-base

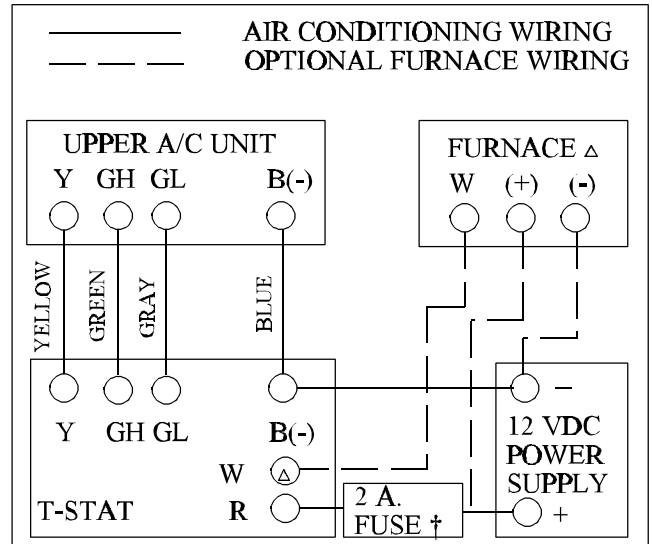
FIGURE 2

7330D3351
Heat/Cool Thermostat Shown
7330D3361
“Cool Only” Model Has No
Reference To Heat On Face Of
Thermostat

D. WIRING THE WALL THERMOSTAT

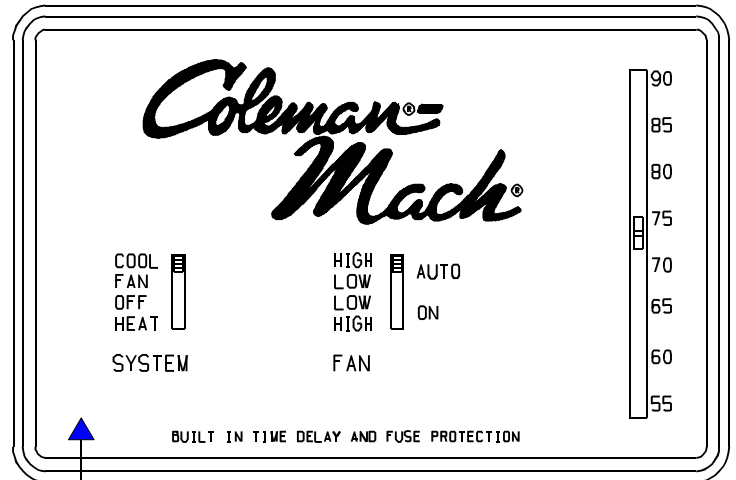
TO PREVENT POSSIBLE DAMAGE TO THE EQUIPMENT OR PERSONAL INJURY DUE TO ELECTRICAL SHOCK, BE SURE THAT ALL ELECTRICAL POWER TO THE THERMOSTAT HAS BEEN DISCONNECTED BEFORE BEGINNING WIRING PROCEDURE.

- Strip the 12 volt supply wire ends approximately 3/8 of an inch.
- Use the Wire Cross Reference Chart and connect the appropriate conductor to the wire which protrudes from the back of the thermostat (See Figure 3). If this is a first time installation, note the thermostat wire color for future reference in order to properly connect the thermostat wiring to the ceiling assembly.



† Suggested Fuse To Protect Wiring Leading To Thermostat
a Not Found in “Cool Only” Applications

FIGURE 1



Thermostat Body

- Attach the negative and positive 12 volt power supply wires to the appropriate wire on the thermostat. It is important to identify the positive and negative power supply wires before connecting to insure proper thermostat operation. **If this is a replacement thermostat and there is no negative 12 VDC supply at the thermostat, a negative wire from the power supply to the thermostat must be added.**
- If a furnace system is to be operated from the thermostat, strip and attach the furnace system wires.

5. Gently push the excess thermostat wiring back into the wall opening. Because the wall may have a different temperature inside when compared to the outside, fill the wall opening with a non-combustible insulation. **Insure that wires cannot contact screws or sharp edges in the wall cavity.**
6. Snap the thermostat body onto the base.
7. Turn the thermostat system switch to the "OFF" position.
8. After the entire system (including the ceiling assembly and roof top air conditioner) has been properly installed, restore the electrical power to the thermostat.

WIRE CROSS REFERENCE CHART	
RVP WIRE DESIGNATION AND COLOR	OTHER MFG'S TERMINAL DESIGNATIONS
B (12 VOLT -) BLUE	N A N A N A N A N A
R (12 VOLT +) RED	4 R H M R S R R C
Y (COOLING) YELLOW	Y Y C Y6 Y Y
W (HEAT) WHITE	W W H Y W W
GH (HIGH FAN) GREEN	G G F G G G
GL (LOW FAN) GRAY	N A N A N A N A N A

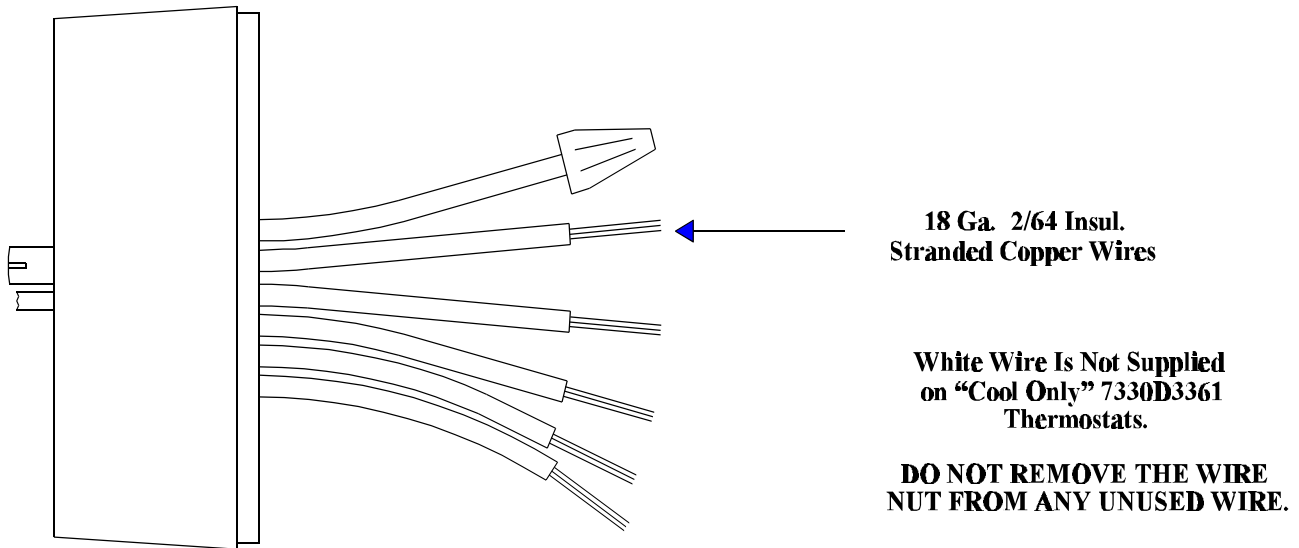


FIGURE 3



OPERATION

The chart below shows the system functions with the 7330D3351 thermostat. After the entire air conditioning system (and furnace system) is installed, check each position function. Disregard references to heat functions when using the 7330D3361 “Cool Only” thermostat.

<input checked="" type="checkbox"/> SHOWS POSITION OF SWITCH								OPERATION
SYSTEM				FAN				
* HEAT	COOL	OFF	FAN	AUTO HI	LO	ON LO	HI	
<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"/>	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"/>	Air conditioner fan runs at high speed continuously regardless of fan switch setting or setpoint. 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"/>	Air conditioner compressor and high speed fan cycle 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"/>	Air conditioner compressor and low speed fan cycle 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"/>	Air conditioner compressor cycles to satisfy setpoint. Air conditioner 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"/>	Air conditioner compressor cycles to satisfy setpoint. Air conditioner high speed fan runs continuously.
<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"/>	Furnace and furnace blower cycles to satisfy setpoint. Furnace blower operates from sequencer or time delay in furnace. Air conditioning fan does not run.
<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 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 checked="" type="checkbox"/> *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

All cooling functions controlling to setpoint have a short cycle protection time delay of 3 minutes. There will be no delay if the cycle **OFF** time exceeds 3 minutes.

* There is no heat switch or furnace function available with the 7330D3361 “Cool Only” thermostat.

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