Dometic

Roof Top Unit

Description	Model	Use With Air Distribution Box		
		3310742.XXX	Control	Indoor Temperature Sensor
Air Conditioner	641415		Analog Board Built In	N/A
	641416		Analog Board Built In	N/A
	641515		CCC Board Built In	Optional 3106486.XXX
	641516		CCC Board Built In	Optional 3106486.XXX
	641715		Digital Board Built In	N/A
	641716		Digital Board Built In	N/A
	641815		CCC 2 Board Built In	Optional 3311931.XXX
	641816		CCC 2 Board Built In	Optional 3311931.XXX
	641915		LCD Board Built In	N/A
	641916		LCD Board Built In	N/A
Air Conditioner W/Electric Heat	641432		Analog Board Built In	N/A
	641435		Analog Board Built In	N/A
	641535		CCC Board Built In	Optional 3106486.XXX
	641732		Digital Board Built In	N/A
	641735		Digital Board Built In	N/A
	641835		CCC 2 Board Built In	Optional 3311931.XXX
	641932		LCD Board Built In	N/A
	641935		LCD Board Built In	N/A
Heat Pump	651515		CCC Board Built In	Optional 3106486.XXX
	651516		CCC Board Built In	Optional 3106486.XXX
	651815		CCC 2 Board Built In	Optional 3311931.XXX
	651816		CCC 2 Board Built In	Optional 3311931.XXX
	651915		LCD Board Built In	N/A
	651916		LCD Board Built In	N/A

Note: Installation requires a #2 phillips screwdriver with 9/32" maximum diameter x 1-1/4" minimum length.

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For Service Center Assistance Call:
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CSA
C US

⚠ WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

⚠ AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de ce produit doit être effectuée par un réparateur qualifié. Toute modification de ce produit peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

MODELS

641415.30X	641815.30X	641935.30X
641416.30X	641815.80X	641935.80X
641432.30X	641816.30X	651515.30X
641435.30X	641816.80X	651516.30X
641515.30X	641835.30X	651815.30X
641516.30X	641835.80X	651815.80X
641535.30X	641915.30X	651816.30X
641715.30X	641915.80X	651816.80X
641716.30X	641916.30X	651915.30X
641732.30X	641916.80X	651916.30X
641735.30X	641932.30X	651916.80X

INSTALLATION INSTRUCTIONS

Important: These instructions must stay with unit. Owner read carefully.

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. It is used to alert you to personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

UNDERSTAND SIGNAL WORDS

A signal word, when used with the safety alert symbol, will identify a safety hazard and its level of risk for personal injury. A signal word, without the safety alert symbol, will be used for property damage messages only.

⚠ WARNING WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE NOTICE is used to address practices not related to personal injury.

⚠ WARNING
Read and follow all safety information and instructions to avoid personal injury.

GENERAL INFORMATION

A. Product features or specifications as described or illustrated are subject to change without notice.

B. This air conditioner/heat pump (hereinafter referred to as the "unit") is designed for:
1. Installation on a recreational vehicle during the time the vehicle is manufactured.
2. Mounting on the roof of a recreational vehicle.
3. Roof construction with rafters/joists on minimum of 16 inch centers.
4. Minimum of 1.00 inch and maximum of 5.5 inches distance between roof to ceiling of recreational vehicle.

C. The ability of the air conditioner to maintain the desired inside temperature depends on the heat gain of the RV.
Some preventative measures taken by the occupants of the RV can reduce the heat gain and improve the performance of the air conditioner. During extremely high outdoor temperatures, the heat gain of the vehicle may be reduced by:
1. Parking the RV in a shaded area
2. Using window shades (blinds and/or curtains)
3. Keeping windows and doors shut or minimizing usage
4. Avoiding the use of heat producing appliances

Operation on High Fan/Cooling mode will give optimum or maximum efficiency in high humidity or high outside temperature.

Starting the air conditioner early in the morning and giving it a "head start" on the expected high outdoor ambient will greatly improve its ability to maintain the desired indoor temperature.

For a more permanent solution to a high heat gain, accessories like Dometic outdoor patio and window awnings will reduce heat gain by removing the direct exposure to the sun. They also add a nice area to enjoy company during the cool of the evening.

D. Condensation

Note: The manufacturer of this unit will not be responsible for damage caused by condensed moisture on ceilings or other surfaces. Air contains moisture and this moisture tends to condense on cold surfaces. When air enters the RV, condensed moisture may appear on the ceiling, windows, metal parts, etc. During normal operation this unit removes moisture from the air. Keeping doors and windows closed when this air conditioner is in operation will minimize condensed moisture on cold surfaces.

SPECIFICATIONS

Model No.	Nominal Capacity (BTU HR) Cooling	Electrical Rating 120 VAC 60Hz. 1PH	Compressor Rated Load Amps	Compressor Locked Rotor Amps	Fan Motor Rated Load Amps	Fan Motor Locked Rotor Amps	Refrigerant R-410A (Oz.)	Minimum Wire Size* 12 AWG Copper Up to 24'	AC Circuit Protection ***Installer Supplied	Minimum Generator Size** 1 Unit / 2 Units
641415.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641416.30X	Hi Cap		12.3	61.0	3.3	8.5	23.0		20 Amp	3.5 KW / 5.0 KW
641432.30X	11,000		10.5	63.0	3.5	10.0	19.0		20 Amp	3.5 KW / 5.0 KW
641435.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641515.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641516.30X	Hi Cap		12.3	61.0	3.3	8.5	23.0		20 Amp	3.5 KW / 5.0 KW
641535.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641715.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641716.30X	Hi Cap		12.3	61.0	3.3	8.5	23.0		20 Amp	3.5 KW / 5.0 KW
641732.30X	11,000		10.5	53.0	3.5	10.0	19.0		20 Amp	3.5 KW / 5.0 KW
641735.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641815.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641815.80X	13,500		12.7	63.0	2.6	8.5	18.0		20 Amp	3.5 KW / 5.0 KW
641816.30X	Hi Cap		12.3	61.0	3.3	8.5	23.0		20 Amp	3.5 KW / 5.0 KW
641816.80X	15,000		13.4	63.0	2.6	8.5	25.0		20 Amp	3.5 KW / 5.0 KW
641835.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641835.80X	13,500		12.7	63.0	2.6	8.5	18.0		20 Amp	3.5 KW / 5.0 KW
641915.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641915.80X	13,500		12.7	63.0	2.6	8.5	18.0		20 Amp	3.5 KW / 5.0 KW
641916.30X	Hi Cap		12.3	61.0	3.3	8.5	23.0		20 Amp	3.5 KW / 5.0 KW
641916.80X	15,000		13.4	63.0	2.6	8.5	25.0		20 Amp	3.5 KW / 5.0 KW
641932.30X	11,000		10.5	53.0	3.5	10.0	19.0		20 Amp	3.5 KW / 5.0 KW
641935.30X	13,500		12.5	61.0	3.5	10.0	17.5		20 Amp	3.5 KW / 5.0 KW
641935.80X	13,500		12.7	63.0	2.6	8.5	18.0		20 Amp	3.5 KW / 5.0 KW
651515.30X	13,500		12.5	61.0	3.5	10.0	25.0		20 Amp	3.5 KW / 5.0 KW
651516.30X	Hi Cap		12.3	61.0	3.3	8.5	24.0		20 Amp	3.5 KW / 5.0 KW
651815.30X	13,500		12.5	61.0	3.5	10.0	25.0		20 Amp	3.5 KW / 5.0 KW
651815.80X	13,500		12.9	63.0	2.6	8.5	24.0		20 Amp	3.5 KW / 5.0 KW
651816.30X	Hi Cap		12.3	61.0	3.3	8.5	24.0		20 Amp	3.5 KW / 5.0 KW
651816.80X	15,000		13.4	63.0	2.6	8.5	27.0		20 Amp	3.5 KW / 5.0 KW
651915.30X	13,500		12.5	61.0	3.5	10.0	25.0		20 Amp	3.5 KW / 5.0 KW
651916.30X	Hi Cap		12.3	61.0	3.3	8.5	24.0		20 Amp	3.5 KW / 5.0 KW
651916.80X	15,000		13.4	63.0	2.6	8.5	27.0		20 Amp	3.5 KW / 5.0 KW

*   For wire length over 24 ft., consult the National Electric Code for proper sizing.
**   Dometic, LLC gives **GENERAL** guidelines for generator requirements. These guidelines come from experiences people have had in actual applications. When sizing the generator, the total power usage of your recreational vehicle must be considered. Keep in mind generators lose power at high altitudes and from lack of maintenance.
*** CIRCUIT PROTECTION: Time Delay Fuse or Circuit Breaker Required.

INSTALLATION INSTRUCTIONS

A. Precautions

> ### ⚠ WARNING
>
> **Personal Injury Hazard. Failure to obey these installation instructions may cause serious personal injury and/or property damage.**

1. Read installation and operating instructions carefully before attempting to start this unit installation.
2. Dometic, LLC will not be liable for any damages or injury incurred due to failure in following these instructions.
3. Installation must comply with the National Electrical Code ANSI/NFPA-70 and CSA Standard C22.1 (latest edition) and any State or Local Codes or regulations.
4. **DO NOT** add any devices or accessories to this unit except those specifically authorized in writing by Dometic, LLC.
5. This equipment must be serviced by qualified personnel and some states require these people to be licensed.

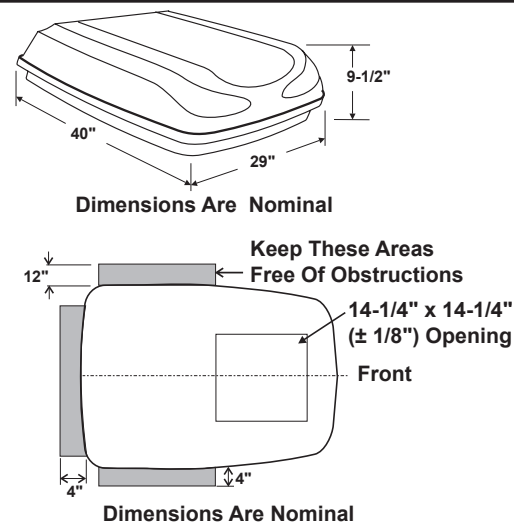## B. Choosing Proper Location For The Unit

This unit is specifically designed for installation on the roof of a recreational vehicle (RV). When determining your cooling requirements, the following should be considered:

- Size of RV;
- Window area (increases heat gain);
- Amount of insulation in walls and roof;
- Geographical location where the RV will be used;
- Personal comfort level required.

1. For one unit installation: The unit should be mounted slightly forward of center (front to back) and centered from side to side.
2. For two unit installations: Install one unit 1/3 and one unit 2/3's from front of RV and centered from side to side.

It is preferred that the unit be installed on a relatively **flat and level** roof section with the RV parked on a level surface, but up to a 8° tilt is acceptable.

3. After Location Has Been Selected
   a. Check for obstructions in the area where unit will be installed. See FIG. 1.
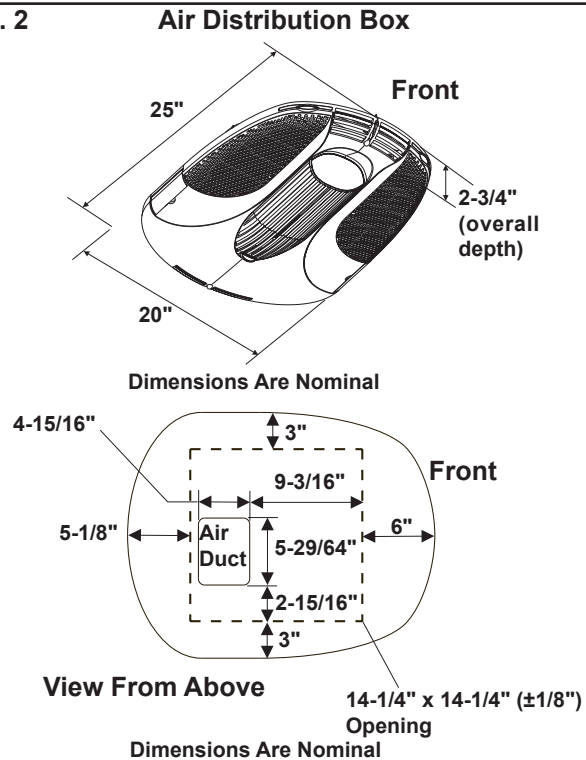

FIG. 1

Dimensions Are Nominal

Keep These Areas Free Of Obstructions

14-1/4" x 14-1/4" (± 1/8") Opening

Front

Dimensions Are Nominal

b. The roof must be designed to support 130 pounds when the RV is in motion. Normally a 200 lb. static load design will meet this requirement.

> ### NOTICE
>
> **Property damage hazard. It is the responsibility of the installer of this system to ensure structural integrity of the RV roof. Never create a low spot on the roof where water will collect. Failure to heed this warning may cause water damage to the product and the RV.**

c. Check inside the RV for air distribution box obstructions. (i.e. door openings, room dividers, curtains, ceiling fixtures, etc.) See FIG. 2.

FIG. 2   Air Distribution Box

Front

2-3/4" (overall depth)

Dimensions Are Nominal

Air Duct

Front

View From Above

14-1/4" x 14-1/4" (±1/8") Opening

Dimensions Are Nominal
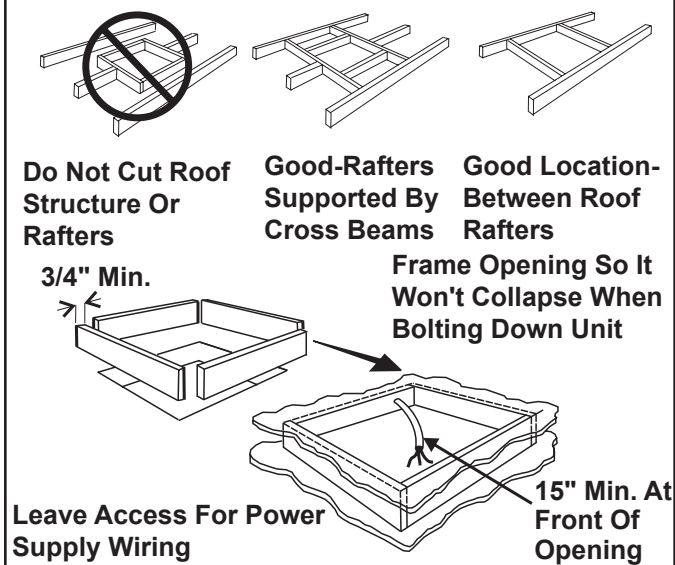
C. Roof Preparation

1. Opening Requirements - Before preparing the ceiling opening, the type of system options must be decided upon. Read all of the following instructions before beginning the installation.

⚠ **WARNING**

Shock Hazard. There may be electrical wiring between the roof and the ceiling. Disconnect 120 VAC power supply and the positive (+) 12 VDC terminal at the supply battery. Failure to obey this warning may cause death or severe personal injury.

2. Mark a 14-1/4" x 14-1/4" (±1/8") square on the roof and carefully cut the opening. The 14-1/4" x 14-1/4" (±1/8") opening is part of the return air system of the unit and must be finished in accordance with ANSI A 119.2.
3. Using the roof opening as a guide, cut the matching hole in the ceiling.
4. The opening created must be framed to provide adequate support and prevent air from being drawn from the roof cavity. Framing stock 3/4" thick or more must be used. Remember to provide an entrance hole at the front of the opening for power supplies, indoor temperature sensor (if applicable), communication cable, and furnace wiring (if applicable). See FIG. 3.

FIG. 3

Do Not Cut Roof Structure Or Rafters

3/4" Min.

Good-Rafters Supported By Cross Beams

Good Location- Between Roof Rafters

Frame Opening So It Won't Collapse When Bolting Down Unit

Leave Access For Power Supply Wiring

15" Min. At Front Of Opening

NOTICE

Property damage hazard. It is the responsibility of the installer of this system to ensure structural integrity of the RV roof. Never create a low spot on the roof where water will collect. Failure to obey this warning may cause water damage to the product and the RV.

D. Wiring Requirements

1. Route a copper, with ground, 120 VAC supply wire from the time delay fuse or circuit breaker box to the roof opening. The proper size wire can be determined from the chart on page 3.
   a. This supply wire must be located in the front portion of the 14-1/4" x 14-1/4" (±1/8") opening.
   b. The power MUST be on an appropriately sized separate time delay fuse or circuit breaker. The proper size protection can be determined from the chart on page 3.
   c. Make sure at least 15" of supply wire extends into the roof opening. This insures an easy connection at the junction box.
   d. Wiring must comply with National Electrical Code ANSI/NFPA-70 and CSA Standard C22.1 (latest edition) and any State or Local Codes or regulations.
   e. Protect the wire where it passes into the opening with approved method. See paragraph "d" above.
2. Route a dedicated 12 VDC supply wire (18-22 AWG) from the RV's converter (filtered side) or battery to the roof opening.

Note: When a Comfort Control Center (hereinafter referred to as CCC) thermostat is being installed with multiple zones, this 12 VDC supply wire needs to be supplied to the unit designated zone 1 only.

Note: When a Comfort Control Center 2 (hereinafter referred to as CCC 2) thermostat is being installed with more than 2 zones, route a dedicated 12 VDC supply wire (18-22 AWG) to zone 1 and zone 3 roof opening.

   a. This supply wire must be located in the front portion of the 14-1/4" x 14-1/4" (±1/8") opening.
   b. Make sure that at least 15" of supply wire extends into the roof opening.
3. Route an indoor temperature sensor (Optional) from the roof opening to the indoor temperature sensor location. The 2 pin connector end on the CCC 2 sensor goes to the roof opening. See indoor temperature sensor installation instructions for proper sensor location.
4. Thermostat Control Cable
   a. CCC, CCC 2 & Digital thermostat.
      i. Route a 4 conductor communication cable from the 14-1/4" x 14-1/4" (±1/8") roof opening to the thermostat mounting location. **Review section E "Choosing Thermostat Location" before routing communication cable.** Choose the shortest most direct route. Make sure that at least 15" of wire extends into the roof opening and 6" extends from the wall at the thermostat mounting location.

Important: **When more than one unit is being installed (additional zones) with the CCC and CCC 2 thermostat, an additional 4 conductor communication cable must be routed to each additional unit 14-1/4" x 14-1/4" (±1/8") roof opening. Make sure at least 15" of wire extends into the roof opening. See FIG. 25.**

    b. Analog Thermostat
       i. Route a 7 conductor cable, 18 to 22 AWG, from the 14-1/4" x 14-1/4" (± 1/8") to the thermostat mounting location. **Review section E "Choosing Thermostat Location" before routing cable.** Make sure 15" of the wire extends into the roof opening and 6" of wire extends from the wall at the thermostat mounting location.

    c. LCD Thermostat
       i. Route a 3 conductor cable, 18 to 22 AWG, from the 14-1/4" x 14-1/4" (± 1/8") roof opening to the Single Zone LCD (hereinafter referred to as SZLCD) thermostat mounting location. **Review section E "Choosing Thermostat Location" before routing cable.** Make sure that at least 15" of the wire extends into the roof opening and 6" extends from the wall at the thermostat mounting location.

5. If system includes a gas furnace, route two 18 gauge thermostat wires from the furnace to the roof opening of the unit that will control it. If more than one furnace is to be used, route the second set of thermostat wires to the second unit. Make sure that 6" of wire extends into the opening.

6. Energy Management System (CCC and CCC 2 Only)
    a. If an Energy Management System (load shed feature) is to be used with the control, two wires must be routed to the roof opening of the zone to be managed. The signal required for this function is normally an open relay contact. When the EMS calls for the compressor to shut off, the relay contacts should close. Make sure at least 15" of the EMS wire extends into the roof opening.

7. Automatic Generator Start Kit (CCC and CCC 2 Only)
    a. If an Automatic Generator Start (AGS) kit will be installed, an additional 4 conductor communication cable must be routed from the last unit to the location of the AGS kit. Follow AGS kit instructions for installation.

E. Choosing Thermostat Location

1. CCC and CCC 2 (**Without** Indoor Temperature Sensor), Analog, Digital, and LCD Thermostat
The proper location of the thermostat is very important to ensure that it will provide a comfortable RV temperature. Observe the following rules when selecting a location.
    a. Locate the thermostat 54" above the floor.
    b. Install the thermostat on a partition, not on an outside wall.
    c. **NEVER** expose the thermostat to direct heat from lamps, sun or other heat producing items.
    d. Avoid locations close to doors that lead outside, windows or adjoining outside walls.
   e. Avoid locations close to supply registers and the air from them.

Note: On CCC and CCC 2 System installations **with** optional indoor temperature sensor, the thermostat may be mounted anywhere that is convenient in the RV. Try to avoid hard to reach and hard to see areas.

## F. Thermostat, Indoor Temperature Sensor, And Thermostat Cable Installation

Note: A 2" hole in the wall is required at the CCC 2 thermostat location. A 3/8" hole in the wall is required at the CCC, Digital, Analog, and LCD thermostat location.

1. CCC Thermostat.
    a. The previously run communication cable (4 conductor telephone cable) must be terminated with two (2) RJ-11-6C4P telephone connectors. Refer to the crimp tool manufacturer for crimping instructions. See FIG. 4 & 5.

Important: **RJ-11-6C4P connectors must be installed as shown in FIG. 4 & 5.**


FIG. 4

FIG. 5
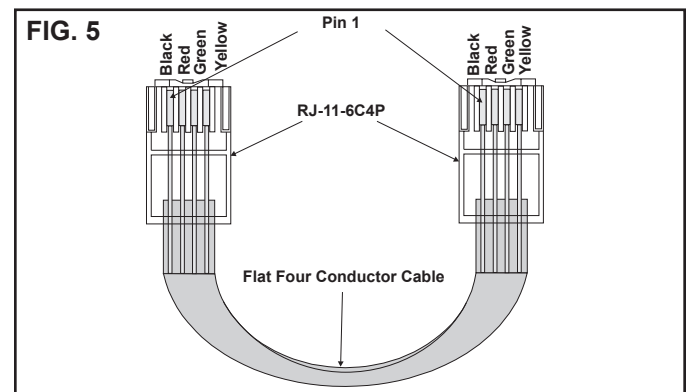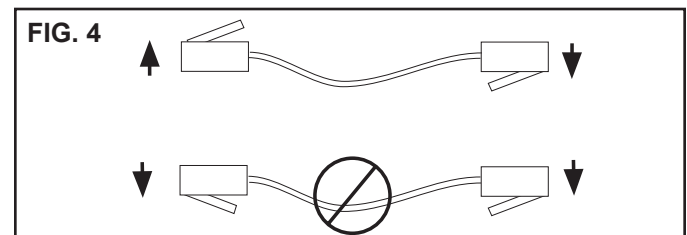
    b. Carefully remove the base plate from the CCC thermostat. This may be accomplished by inserting a small screwdriver under the tab on the bottom edge of the front cover and gently prying. See FIG. 6

FIG. 6   **CCC Thermostat**

Insert Screwdriver Under Tab
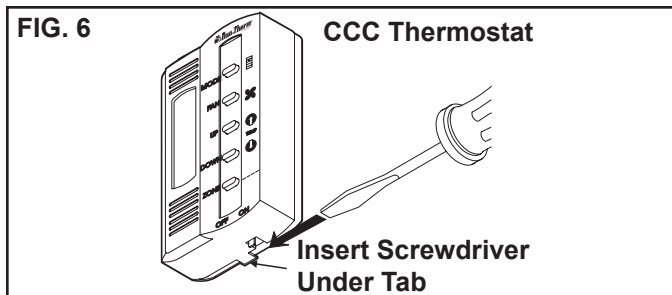
   c. Insert the control cable through the hole in the base plate and mount the plate to the wall with the two (2) screws provided.

   d. Install the control cable RJ-11-6C4P connector into the back of the CCC thermostat and snap on the base plate.

   e. Optional Indoor Temperature Sensor
     i. Refer to the instructions provided with the indoor temperature sensor for details of installation.

  2. CCC 2 Thermostat.
   a. The previously run communication cable (4 conductor telephone cable) must be terminated with two (2) RJ-11-6C4P telephone connectors. Refer to the crimp tool manufacturer for crimping instructions. See FIG. 4 & 5.

Important: **RJ-11-6C4P connectors must be installed as shown in FIG. 4 & 5.**

   b. Choose the shortest, most direct route from the 14-1/4" x 14-1/4" (±1/8") opening to the selected CCC 2 thermostat location. Leave 6" of cable extending through the wall.

   c. Route the communication cable through the 2" diameter hole in the wall required for the thermostat. See FIG. 7.

FIG. 7   **CCC 2 Thermostat (Rear View)**

Wall
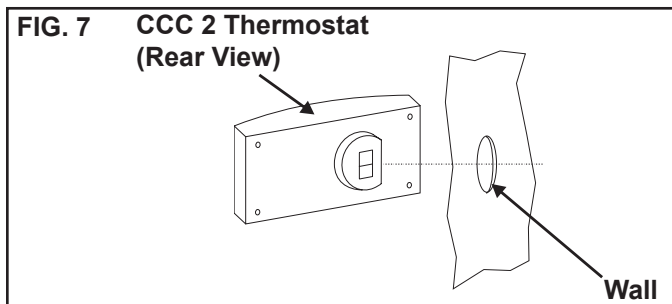
   d. Optional Indoor Temperature Sensor
     i. Refer to the instructions provided with the indoor temperature sensor for details of installation.

   e. CCC 2 Thermostat Installation
     i. Carefully separate the thermostat base plate from the thermostat cover. Insert a small screw driver into the slot on bottom of thermostat and disengage the tab. See FIG. 8.


FIG. 8   **CCC 2 Thermostat**

Disengage Tab
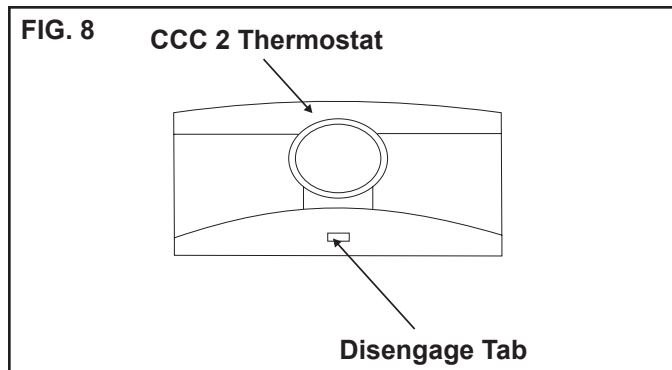
     ii. Insert the 4 conductor communication cable through the hole in base plate. Align thermostat base plate with hole in wall. Make sure base plate is level and attach base plate to wall using the 4 supplied screws.

     iii. Insert the 4 conductor communication cable connector (RJ-11-6C4P) into the connector on the back of the thermostat. See FIG. 9.

FIG. 9   **CCC 2 Thermostat**

4 Conductor Communication Cable
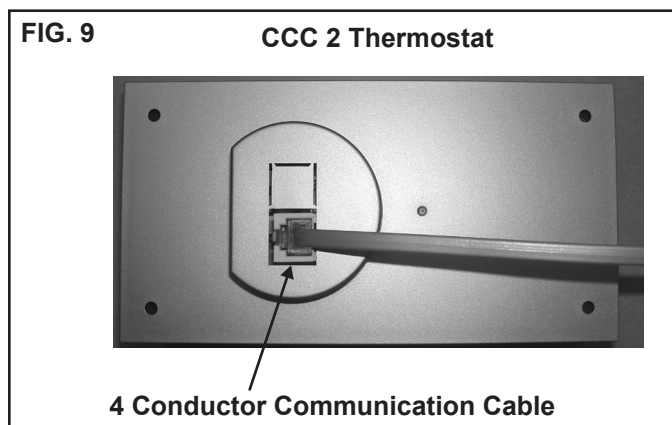
     iv. Align the thermostat with the back plate and snap into position.

  3. Digital thermostat
   a. The previously run communication cable (4 conductor telephone cable) must be terminated with two (2) RJ-11-6C4P telephone connectors. Refer to the crimp to manufacturer for crimping instructions. See FIGS. 4 & 5.

**Important:** **RJ-11-6C4P connectors must be installed as shown in FIGS. 4 & 5.**

   b. Carefully remove the base plate from the digital thermostat. This may be accomplished by lifting the top cover and inserting a small screwdriver into the slot on the bottom edge of the thermostat and base plate. Push the small screwdriver into the slot to release catch. See FIG. 10.

FIG. 10
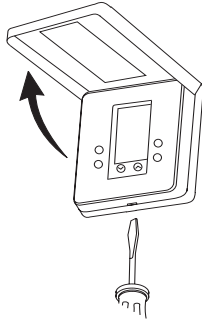
c. Install the communication cable through the hole in the base plate and mount the plate to the wall with the two (2) screws provided. Check the alignment to ensure level installation.

d. Install the communication cable RJ-11-6C4P connector into the back of the thermostat and snap on the base plate.

4. Analog Thermostat

Note: Wire colors listed for the seven conductor cable are the most common used in the RV industry. Wire colors may vary.

FIG. 11
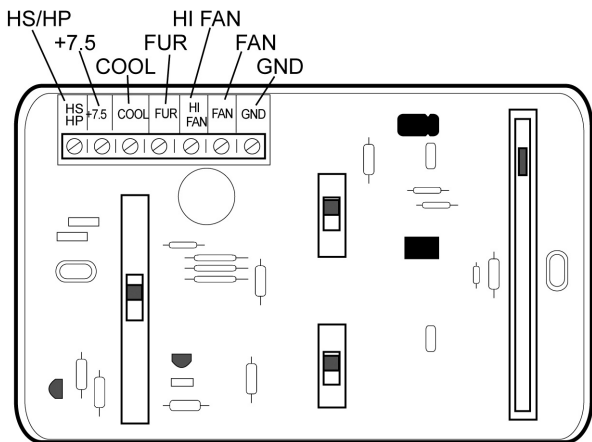
a. Remove the cover from the analog thermostat by starting at one corner and gently lifting it from the base.

b. Insert the previously run seven (7) conductor cable through the hole in the base assembly.

c. Cut back the outer cable shield approximately 3 inches and strip 1/4" insulation from each wire.

d. Mount the thermostat level on the wall using the screws provided.

e. Make the following connections to the thermostat. See FIG 11.
   • Red/white wire to the +7.5 terminal
   • Green wire to the "GND" terminal
   • Yellow wire to "COOL" terminal
   • Tan wire to the "FAN" terminal
   • Blue wire to the "HI FAN" terminal
   • Orange wire to the "HS/HP" terminal
   • White wire to the "FUR" terminal if applicable

f. Inspect all connections to make sure they are tight and not touching any other terminals or wires.

g. Push the wires back through the base into the wall. Place cover on the thermostat and push until an audible click is heard.

5. SZLCD Thermostat

Note: The wire colors listed for the three conductor cable match the wire colors in the harness at the unit Available wire colors may vary.

FIG. 12
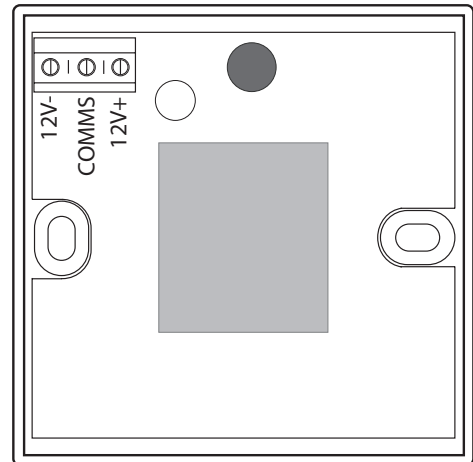
a. Remove the cover from the SZLCD thermostat. Depress tab on bottom of thermostat and separate it from the base.

b. Insert the previously run three (3) conductor cable through the hole in the base assembly.

c. Cut back the outer cable shield approximately 3 inches and strip 1/4" insulation from each wire.

d. Mount the thermostat level on the wall using the screws provided.

e. Make the following connections to the thermostat. See FIG 12.
   • Red/white wire to the 12V+ terminal
   • Black wire to the 12V– terminal
   • Orange wire to the "COMMS" terminal

f. Inspect all connections to make sure they are tight and not touching any other terminals or wires.

g. Push the wires back through the base into the wall. Place cover on the thermostat and push until an audible click is heard.

G. Placing The Unit On The Roof

1. Remove the unit from the carton and discard carton.

> ⚠ **WARNING**
>
> **Personal injury hazard. This unit weighs approximately 100 pounds. To prevent back injury, use a mechanical hoist to place unit on roof. Failure to obey this warning could cause severe personal injury.**

2. Place the unit on the roof.
3. Lift and place the unit over the prepared opening using the gasket on the unit as a guide. See FIG. 13.

> **NOTICE**
>
> **Property damage hazard. Do not slide the unit. Failure to obey this warning may damage the neoprene gasket attached to the bottom and create a leaky installation.**

FIG. 13

FRONT

Lift And Place

Do Not Slide
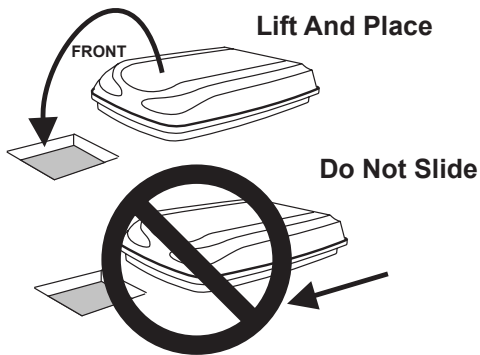
4. Place the air distribution box kit inside the RV. This box contains mounting hardware for the unit and will be used inside the RV.
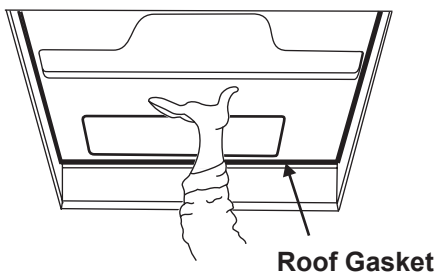
This completes the outside work. Minor adjustments can be done from inside the RV if required.

H. Installing The Unit

1. Check gasket alignment of the unit over the roof opening and adjust if necessary. Unit may be moved from below by slightly lifting. See FIG. 14.

FIG. 14   Center Unit From Below

Roof Gasket

2. Remove air distribution box and mounting hardware from the air distribution box kit carton.
3. Remove wire tie holding center of rear aluminum bracket to plastic template.
4. Reach up into the return air opening and pull the unit electrical wires down for later connection.
5. Mount the junction box with screws to the framing in front of the 14-1/4" x 14-1/4" (±1/8") opening. See FIG. 15.

FIG. 15

Low Voltage Wires

AC Power Supply

Fasten Junction Box To Front Of Opening
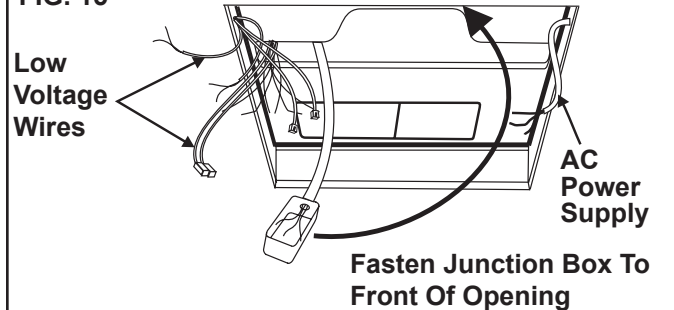
6. Base Pan Duct Adapter.
   a. Remove the liner from the foam tape and position on the base so screw hole and air openings are aligned. See FIG. 16.

FIG. 16

Front

Discharge Opening Place Flange Of Duct On RH Side When Facing Front

Return Air Opening

Base Pan Duct Adapter
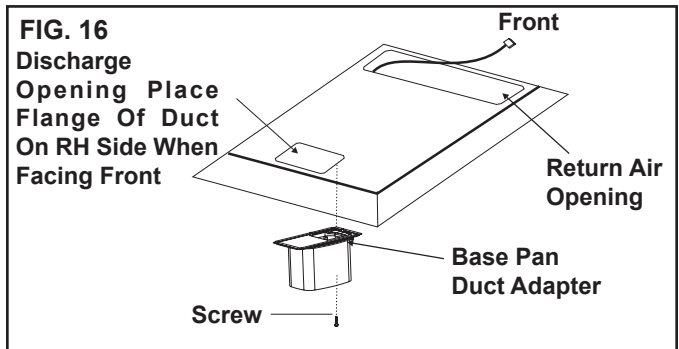
Screw

   b. Install screw to help hold duct adapter to base pan if desired.
7. 120 VAC Power Supply Connection

> ⚠ **WARNING**
>
> **Shock hazard. Disconnect 120 VAC at the source. Failure to obey this warning may cause death or severe personal injury.**

Note: Wiring **must** comply with National Electrical Code ANSI/NFPA-70 and CSA Standard C22.1 (latest edition) and any State or Local Codes or regulations.
   a. Install the strain relief in the junction box.
   b. Route the previously run 120 VAC power supply wire through the strain relief into the junction box. Tighten connector making sure not to damage wire.

Note: Connect wiring per schematic with UL listed wire connectors for size of wire being connected.

c.   Connect white to white; black to black; and green to green or bare wire using appropriate size wire connector.
d.   Tape the connectors to the supply wires to assure they don't vibrate off.
e.   Push the wires into the box.
f.   Install the junction box cover with screws provided.

8.   Ceiling template installation.

Note: The large center hole in the ceiling template goes to the rear.

a.   Start each mounting bolt by hand before tightening any of them. The threaded inserts in the base pan can be seen to aid in starting the bolts.
    i.   This installation uses a 3 bolt pattern, one in the rear center and two in the front corners. See Fig. 17.

FIG. 17   **Mounting Bolt**

Front

Ceiling Template

Do Not Disturb Thermostat Bulb
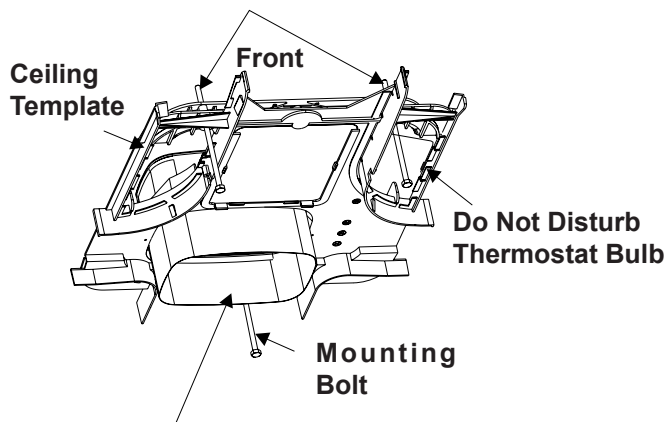
Mounting Bolt

Trim Duct 1/2" to 1 " Below Ceiling Template

Start 3 Mounting Bolts By Hand

•   **EVENLY tighten the bolts to a torque of 40 to 50 inch pounds. This will compress the roof gasket to approximately 1/2". The bolts are self locking so further tightening is not necessary. See FIG. 17.**

9.   Template/Duct connector
    a.   Pull duct down through template opening.
    b.   Cut the duct 1/2"-1" below template opening. See Fig. 17.
    c.   Align the template duct adapter with the template duct hole making sure the screw holes line up (if not rotate 1/2 turn). Insert template duct adapter into duct. Leave one loop of duct wire below the duct adapter groove. Do not insert tabs inside of the duct.
    d.   Snap duct adapter into template and install 2 screws through the duct adapter tabs into the ceiling template. See Fig. 18.

FIG. 18

Fit Duct Adapter Inside Duct

Duct Adapter Screw Holes Must Line Up If Necessary Rotate 1/2 Turn

Install 2 Screws In Tabs
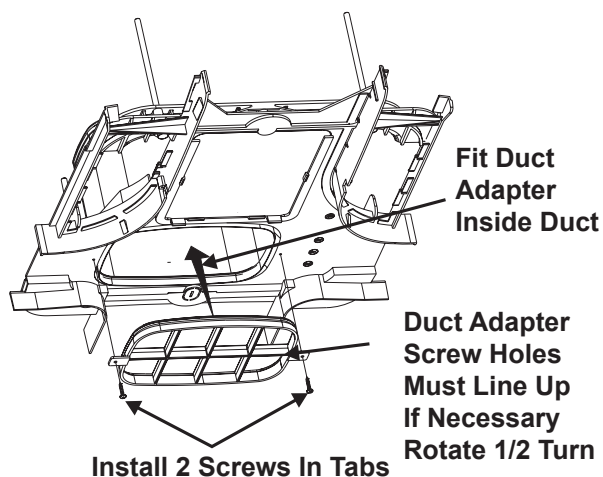
I. Wiring The System (Low Voltage Connections)

1. CCC, CCC 2 & Digital Thermostat

> ### NOTICE
>
> **Property damage hazard. Disconnect the positive (+) 12 VDC terminal at the supply battery. Failure to obey this warning may cause damage to equipment.**

Note: If optional solar panel is to be installed, do so at this time. Follow installation instructions packaged with solar panel.

    a. Connect the previously run 12 VDC supply wire to the red and black wires protruding from the 14-1/4" x 14-1/4" (±1/8) roof opening.

    b. Connect the previously run furnace thermostat wires (if applicable) to the blue wires protruding from the 14-1/4" x 14-1/4"(±1/8") roof opening. The polarity of these connections does not matter.

    c. Terminate the previously run 4 conductor communication cable(s) protruding into the 14-1/4" x 14-1/4" (±1/8") roof opening. The cable(s) must be terminated with a telephone RJ-11-6C4P connector. Refer to the crimp tool manufacturer for crimping instructions. See FIG. 4 & 5.

Important: RJ-11-6C4P connectors must be installed with the same polarity on each end. Standard telephone cables will not operate the controls.

    d. Plug the communication cable(s) into the telephone coupler(s) in the 14-1/4" x 14-1/4" (±1/8") roof opening. If more than one zone is used on the CCC and CCC 2 models, the second coupler will be used to join each additional zone.

    e. Plug the indoor temperature sensor cable (if applicable) into the matching connector protruding from the return air opening.

    f. Energy Management System (CCC an CCC 2 Only). If applicable, connect the previously run Energy Management System wires to the yellow wires protruding from the 14-1/4" x 14-1/4" (±1/8") roof opening. The polarity of this connection does not matter.

2. Analog Thermostat

    a. Connect the previously run 12 VDC supply wire to the red and black wires protruding from the units return air opening. Connect +12 VDC to the red wire; –12 VDC to the black wire.

    b. Connect the previously run furnace thermostat wires (if applicable) to the blue/white wires protruding from the units return air opening. The polarity of these connections does not matter.

    c. Connect red/white wire protruding from the units return air opening to the seven wire cable thermostat +7.5 terminal.

    d. Connect the green wire protruding from the units return air opening to the seven wire cable thermostat "GND" terminal.

    e. Connect the yellow wire protruding from the units return air opening to the seven wire cable thermostat "COOL" Terminal.

    f. Connect the tan wire protruding from the units return air opening to the seven wire cable thermostat "FAN" terminal.

    g. Connect the blue wire protruding from the units return air opening to the seven wire cable thermostat "HI FAN" terminal.

    h. Connect the orange wire protruding from the units return air opening to the seven wire cable thermostat "HS/HP" terminal (if applicable).

    i. Connect the white wire protruding from the units return air opening to the seven wire cable thermostat "FUR" terminal (if applicable).

3. LCD Thermostat

    a. Connect the previously run +12 VDC supply wire to the red wire protruding from the units return air opening.

    b. Connect the previously run –12 VDC supply wire to both the black wire protruding from the units return air opening and to the wire of the three wire cable that goes to the thermostat 12V– terminal.

    c. Connect the previously run furnace thermostat wires (if applicable) to the blue wires protruding from the units return air opening.

    d. Connect the red/white wire protruding from the units return air opening to wire of the three wire cable that goes to thermostat 12V+ terminal.

    e. Connect the orange wire protruding from the units return air opening to wire of the three wire cable that goes to thermostat COMMS terminal.

J. Air Distribution Box Installation

**Important:** The inner walls of the ADB go inside the walls of the ceiling template during installation.

1. Working from the rear looking forward with the rear tipped down, place the air distribution box inner walls against the inside of the ceiling template walls. Slide the air distribution box backwards until it touches the template. Raise the air distribution box to the ceiling. See FIG. 19.
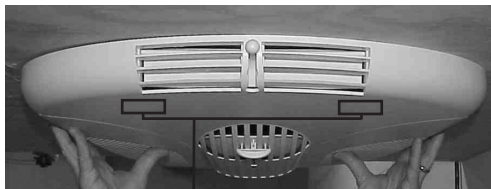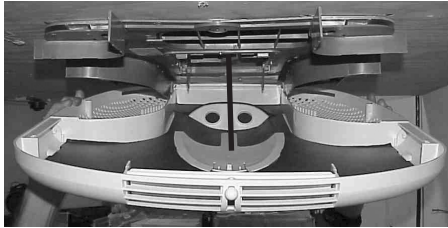
2. Push up on the ADB at the locations indicated by the paper labels to engage the snap locks. There will be a quiet click heard when each latch engages. See FIG. 19.

FIG. 19
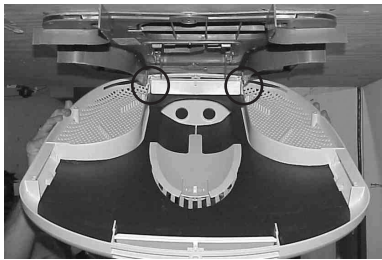
Position ADB Walls Inside And Against End Of Template Walls

Raise Back End Of ADB To Ceiling

Push Here To Engage Latches, Then Remove Labels

3. Hold the air distribution box to the ceiling with one hand and install two coarse threaded 3.5 mm X 19 mm sharp pointed screws in the location shown in FIG. 20.
4. Auxiliary screws may be installed at the locations shown. These are **NOT** required to secure the ADB to the template, but may be desired for aesthetic purposes in some ceiling geometries. See FIG. 20.

FIG. 20   Auxiliary Screw Locations
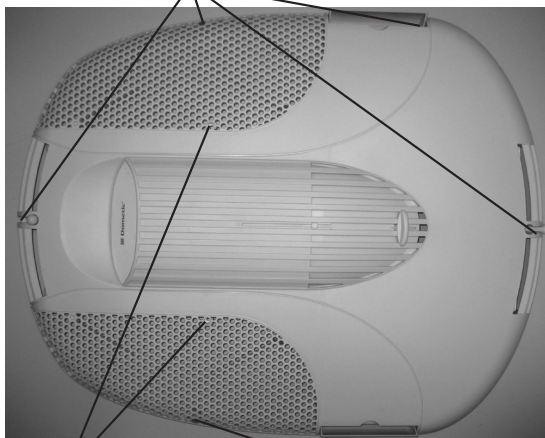
Install 2 Primary Mount Screw First

Auxiliary Screw Locations

5. Filter installation. Slide filters into slots in air distribution box. The outward curved side of the filter handle faces the ceiling. See FIG. 20.

This completes the digital, analog, and LCD thermostat unit installation. (Proceed to section K to complete the CCC and CCC 2 thermostat installation)

Verify that all features of the system work. See digital, analog, or LCD thermostat Operating Instructions or User's Guide. Reconnect the 12 VDC and 120 VAC power supplies. Check fan speeds, cooling mode, heat pump mode, and furnace mode (if connected). If features do not work, disconnect the 12 VDC and 120 VAC power supplies and verify that all wiring is correct.

K. System Configuration, Reset & Check Out (CCC and CCC 2 Thermostat Only)

Now that the system is installed, it is necessary to do a system configuration, reset and check out.

1. Electronic Control Configuration
   Depending on the equipment options installed by the recreational vehicle manufacturer, the appropriate dip switches will need to be switched to the "ON" position. Placing the switch in the "ON" position selects that option. See FIGS. 21, 22 & 23.

FIG. 21

CCC   **CCC 2**

Dip Switches
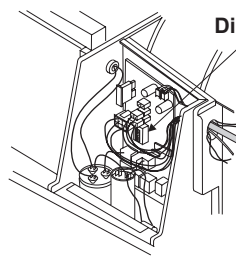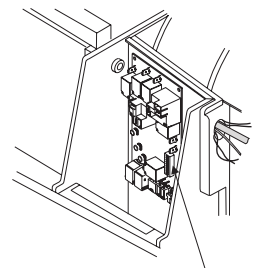
Dip Switches

Note: Dip switches are in the "OFF" position when shipped from the factory except on heat strip models. On heat strip models the heat strip dip switch only is in the "ON" position. To gain access to the dip switches, the outside plastic shroud must be removed from the unit. Next remove the electrical box cover. The electrical box will be on the curb side of the RV after installation. See FIGS. 21, 22 & 23.

FIG. 22   Dip Switches

CCC

#	
1	Heat Strip
2	Zone 2
3	Zone 3
4	Zone 4
5	Furnace
6	Differential
7	Stage
8	Gen Start

OPEN

CCC 2

#	
1	Ext. Stage
2	Zone 2
3	Zone 3
4	Zone 4
5	Stage
6	Heat Strip
7	Heat Pump
8	Furnace
9	Dehumidify
10	Gen Start

OPEN
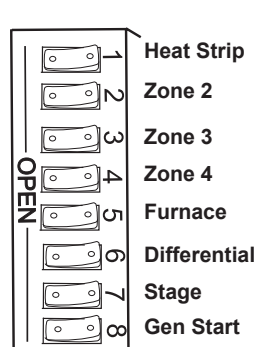
CCC Dip Switch Selection

    a. Each CCC thermostat can have up to 4 zones. When only one unit is installed it becomes Zone 1 and no dip switch setting is required. Each additional unit must be assigned a zone (2 through 4). Each unit must have a different zone setting.

    b. Heat strip selection - Units without heat strips leave in the "OFF" position. Units with a heat strip, the #1 dip switch will be in the "ON" position.

    c. Furnace selection - when a furnace has been connected to a zone, place the furnace dip switch "ON" for that zone.

    d. Differential - differential is the temperature difference between the "ON/OFF" cycle of the thermostat in the furnace mode. The normal differential is preset in the circuit board with the dip switch set to the "OFF" position. In some situations, it may be necessary to decrease the differential. The location of the thermostat may create a condition where the normal differential will not maintain your comfort zone. If this occurs, the differential can be shortened by placing the differential dip switch to the "ON" position.

Note: Setting the differential dip switch should only be required when installation conditions are less than desirable and is not covered under the limited warranty.

    e. Stage selection - stage is not used on these units. Leave in the "OFF" position.

    f. Gen start selection - leave in the "OFF" position.

    g. Replace the unit electrical box cover.

    h. Repeat this procedure for each additional zone

FIG. 23

On Position
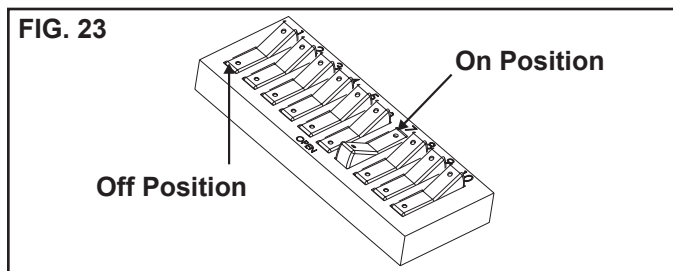
Off Position

CCC 2 Dip Switch Selection

    a. Ext. Stage - Ext. Stage is not used on this unit. Leave in the "OFF" position.

    b. Zone selection - Each CCC 2 thermostat can have up to 4 zones. When only one unit is installed it becomes Zone 1 and no dip switch setting is required. Each additional unit must be assigned a zone (2 through 4). Each unit must have a different zone setting.

    c. Stage selection - Stage is not used on this unit. Leave in the "OFF" position.

    d. Heat Strip - Units without heat strips leave in the "OFF" position. Units with a heat strip, the # 6 dip switch will be in the "ON" position.

    e. Heat Pump - If unit is a heat pump, the heat pump dip switch # 7 is set to the "ON" position from the factory.

    f. Furnace - If a Furnace/Aqua heat system has been connected to this unit, the furnace dip switch must be placed in the "ON" position.

    g. Dehumidify - Dehumidify is not used on this unit. Leave in the "OFF" position.

    h. Gen start selection - Leave in the "OFF" position.

    i. Replace the unit electrical box cover and out side plastic shroud.

    j. Repeat this procedure for each additional zone.

2. System Reset

  a. CCC system

    After setting the dip switches in the electronic control, do a system reset.

    i. Turn the ON/OFF switch to the **"OFF"** position.

    ii. Simultaneously press and hold the **MODE** and **ZONE** push-buttons while turning the **ON/OFF** switch to **"ON"**. FF should appear in LCD display until the mode and zone push-buttons are released.

    iii. When a dip switch is turned on after initial configuration, a system reset will need to be done before the CCC thermostat will recognize the updated selection.

  b. CCC 2 system

    After setting the dip switches in the electronic control, do a system reset.

    i. Reconnect the 12 VDC and 120 VAC power supplies.

    ii. Make sure the CCC 2 thermostat is in the **"OFF"** mode.

    iii. Simultaneously press the **MODE** and **ZONE** buttons. The LCD will display "IniT" and all available zones.

    iv. Release the **MODE** and **ZONE** buttons.

    v. Press the **ON/OFF** button to exit system set up.

    vi. When a dip switch is turned on after initial configuration, a system reset will need to be done before the CCC 2 thermostat will recognize the updated selection.

3. System Checkout

Verify that all features of the installed system work. See CCC and CCC 2 thermostat Operating Instructions or User's Guide. Reconnect the 12 VDC and 120 VAC power supplies. Check fan speeds, cooling mode, heat pump mode, and furnace mode (if connected). If the features do not work disconnect the 12 VDC and 120 VAC power supplies and verify that all wiring is correct and that the correct dip switches have been turned on.
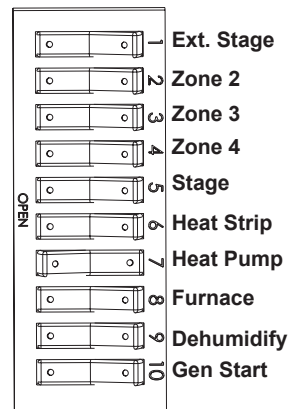
L. Furnace/Aqua Temperature Differential Setting (CCC 2 Only)

This system can be configured to operate using an ON/OFF differential of either 1 degree F. or 2 degree F. See FIG. 24.

1. To set the differential, simultaneously press the **PROGRAM** button and the ∧ up button on the CCC 2 thermostat. "diF1" will appear in the display while the buttons are pressed. See FIG. 24. To set the 2 degree differential, simultaneously press the **PROGRAM** button and the ∨ down button. "diF2 will appear in the display while the buttons are pressed.

FIG. 24
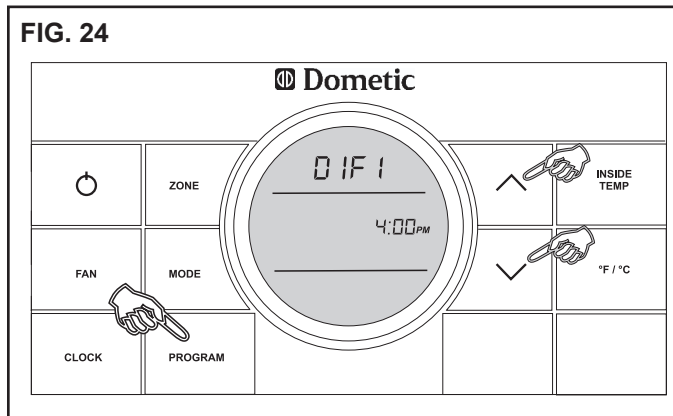
MAINTENANCE

A. Air Filters

1. Periodically (a minimum of every 2 weeks of operation) slide out the return air filters located on the end of the air distribution box. Wash the filters with soap and warm water, let dry and then reinstall.

Note: To insure easy future removal the filters need to be replaced with the domed side of their handle positioned towards the ceiling.

Note: Never run the unit without both return air filters in place. This will plug the unit evaporator coil with dirt and may substantially degrade the performance of the unit over time.

B. Air Distribution Box Housing

1. Clean air distribution box housing with a soft cloth dampened with a mild detergent. Never use furniture polish or scouring powders.

C. Fan Motor

1. The blower motor is factory lubricated and requires no service.

D. Frost Formation On Cooling Coil

1. Frost on a small portion of the coil is not unusual. Under certain conditions, ice may form on the evaporator coil. This is indicated by very cold output at very low air speed and the icing can be seen through the hole network with the filters removed. If this should occur, inspect the filter and clean if dirty. Make sure air vents are open and not obstructed. Units have a greater tendency to frost when the outside temperature is relatively low. This may be prevented by adjusting the thermostat control knob to a warmer setting (counter clockwise). Should frosting continue, operate on any **FAN ONLY** setting until the cooling coil is free of frost; then resume normal operation. If frost condition persist, contact your local service center for assistance.

SERVICE-UNIT DOES NOT OPERATE

If your unit fails to operate or operates improperly, check the following before calling your service center.

A. If RV connected to motor generator, check to be sure motor generator is running and producing power.

B. If RV connected to power supply by a land line, check to be sure line is sized properly to run unit load and it is plugged into power supply.

C. Check your fuse or circuit breaker to see if it is open. Insure fuse is not burnt, or circuit breaker is "ON" and not activated.

D. After the above checks, call your local service center for further help. This unit must be serviced by qualified service personnel only.

E. When calling for service, always give the following:
   1. Unit model and serial number found on identification label located on base pan of unit bottom. (Remove filter and view through network of holes)
   2. Air distribution box model and serial number found on rating plate located on ceiling template. Observe this rating plate through the air distribution box right side vent opening.

FIG. 25

120 VAC INPUT REAR UNIT

AIR CONDITIONER OR HEAT PUMP

4 CONDUCTOR COMMUNICATION CABLE

14-1/4" x 14-1/4" (±1/8") OPENING

FURNACE/AQUA 2 WIRES (optional)

BREAKER BOX

12 VDC INPUT 2 WIRES

AIR CONDITIONER OR HEAT PUMP

4 CONDUCTOR COMMUNICATION CABLE

FURNACE/AQUA (optional)

DOMETIC COMFORT CONTROL CENTER 2 THERMOSTAT

FURNACE/AQUA 2 WIRES (optional)

FURNACE/AQUA (optional)

INDOOR TEMPERATURE SENSOR (Required With Each Additional Air Conditioner/Heat Pump)

14-1/4" x 14-1/4" (±1/8") OPENING

INDOOR TEMPERATURE SENSOR (OPTIONAL)

12 VDC INPUT 2 WIRES

120 VAC INPUT FRONT UNIT

WIRING DIAGRAM
6414 Series

BLU
RED
BLK
WHT
BLK
BLK

FREEZE CONTROL

COMPRESSOR

OL

R   SC

C

14-1/4

BLK

K5

COM

NO

T3

T4

CON 3

FAN MOTOR

G/Y

YEL

BRN

WHT

RUN CAP

FAN

C

HERM

WHT

RED

3   1

WHT   BLK

ELEMENT

LIMIT SWITCH

BLK

K4

COM

NO

RED

BLK

CON 2

CON 1

FUSE

WHT

WHT

START CAP

MOTOR STARTER

BLK

WHT

RED

SPLICE CAP

T2

T1

GRN

BLU/WHT

BLU/WHT

TO FURNACE

G/Y

HEAT ACCESSORY NOT AVAILABLE ON SOME MODELS

SOLAR OR DIRTY FILTER INDICATOR IF USED

+   −   TAN   WHT   ORN   RED/WHT

YEL   BLU

12V

TO LOW VOLT THERMOSTAT CABLE

TO 115 VAC 60 Hz.1Ø USE COPPER CONDUCTORS ONLY

PASSED DIELECTRIC

3308032.071

15

WIRING DIAGRAM

6415 Series

PASSED DIELECTRIC

REMOTE SENSOR CABLE
FREEZE CONTROL
RJ-11 CABLE TO COMFORT CONTROL
BLU COMPRESSOR
GRN/YEL
MOTOR
O.L
R S C
WHT RED
RED
YEL
BLK
BLU
BRN RUN CAP
FAN
C
HERM
RED
WHT
START CAP MOTOR STARTER
WHT
WHT
HEATER ELEMENT
NOT USED ON SOME MODELS
WHT
LIMIT SWITCH
GRY BLK

FIELD WIRING
FACTORY WIRING
WHITE
WHITE
BLK BLK
P3 P4 P5 P2 P1
F1
3 AMP FUSE
A/C POWER MODULE BOARD
T5 BLK
P6
K1 NO COM
LOAD SHED YEL
LOAD SHED YEL
FURNACE BLU
FURNACE BLU
12V - BLK
12V + RED
SOLAR OR DIRTY FILTER INDICATORS IF USED
K6 COM
NO
BLK
T3 T1
T2
BLU

GRN/YEL
GRN/YEL
115 VAC
60 Hz, 1∅
USE COPPER CONDUCTORS ONLY
WHT
BLK

3308032.063

6417 Series

3311172.021

FIELD WIRING
FACTORY WIRING

PASSED DIELECTRIC

RED
YEL
BLK
MOTOR
GRN/YEL

LOW FAN MED FAN HIGH FAN R VLV GND
GRN
WHT BRN

GND GRN
L BLK
N WHT
GRN/YEL
115 VAC 60 Hz, 1∅
USE COPPER CONDUCTORS ONLY
FAN
C
HERM

RELAY BOARD
K1 NO COM
K2 COM NO
TB3 TB4
WHT
WHT

BLU
GRY
O.L
R S RED
C
COMPRESSOR
WHT

J5 J2 J3
BLK BLU
SOLAR OR DIRTY FILTER INDICATORS IF USED
BLK RED BLU BLU
COM +12V FURN FURN

RJ-11 CABLE TO T-STAT
FREEZE CONTROL

HEATER ELEMENT
WHT
LIMIT SWITCH
GRY BLK
NOT USED ON SOME MODELS

START CAP
RED (OPT)
PTCR
RED

6418 Series

3312441.029

FIELD WIRING
FACTORY WIRING

PASSED DIELECTRIC

BLK
YEL
RED
MOTOR
GRN/YEL

T2 T3
K2 RELAY NO COM
T1
T5
BLK
K1 RELAY COM NO
T4

GRN/YEL
BRN
WHT
GRN/YEL
115 VAC 60 Hz, 1∅
USE COPPER CONDUCTORS ONLY
BLK
WHT
FAN
C
HERM
WHT

T7
T6
WHT
BLU
O.L
R S RED
C
COMPRESSOR
WHT

A/C POWER MODULE BOARD

P1 P2
BLK BLK
P6
6 5 3 2 4 1
RED
BLK
BLU
BLU
YEL
YEL

P5 P4 P3

12V +
12V -
FURNACE
FURNACE
LOAD SHED
LOAD SHED
FREEZE SENSOR
INDOOR TEMP SENSOR
OUTDOOR TEMP SENSOR

RJ-11 CABLE TO T-STAT

START CAP
RED (OPT)
PTCR
RED

HEATER ELEMENT
WHT
LIMIT SWITCH
GRY BLK
NOT USED ON SOME MODELS

16

WIRING DIAGRAM
6419 Series

PASSED DIELECTRIC

BLK (LINE)
GRN/YEL (EARTH)
WHT (NEUT)

115 VAC, 60 HZ, 1 Φ
USE COPPER CONDUCTORS ONLY

BLU

WHT — R O L S C
BR
RED — BLU

BLK

K1 RELAY
NO
COM

J5

FREEZE SENSOR

SOLAR OR DIRTY FILTER INDICATOR IF USED

WHT
START CAP
PTCR (OPT)
RED

BR
WHT

MOTOR

YL
BLK — Y9
RED — Y8
• Y5
• Y10

J2
RED — 4 — 12V +
RED/WHT — 3 — 12V + (TO TSTAT)
BLK — 2 — 12V -
ORG — 1 — COMM

12V + — 12V SUPPLY
TO TSTAT

FURNACE Y4 — BLU
FURNACE Y3 — BLU

– – – – FIELD WIRING
———— FACTORY WIRING

3313500.000

6515 Series

PASSED DIELECTRIC

RJ-11 CABLE TO COMFORT CONTROL

FREEZE CONTROL

REMOTE SENSOR CABLE

WHITE

WHITE

A/C POWER MODULE BOARD

P3
P4
F1
3 AMP FUSE

RED
YEL
BLK
BLU

BLK   BLK
P5   P2   P1

AMBIENT SENSOR

BLU
GRN/YEL

MOTOR

COMPRESSOR
O.L.
R   S
WHT   RED

BRN
RUN CAP
FAN
C
HERM

WHT
WHT

T5
BLK

P6

K1
NO   COM

START CAP
MOTOR STARTER
RED

LOAD SHED — YEL
LOAD SHED — YEL
FURNACE — BLU
FURNACE — BLU
12V - — BLK
12V + — RED

BLK

REVERSING VALVE

– – – – FIELD WIRING
———— FACTORY WIRING
● SPLICE CAP

SOLAR OR DIRTY FILTER INDICATORS IF USED

BLK

K6   COM
NO

T3   T1
T2

BLK

GRN/YEL
GRN/YEL
WHT
BLK

115 VAC 60 Hz, 1 Φ
USE COPPER CONDUCTORS ONLY

BLU

3308032.089

6518 Series

3312453.016

– – – – FIELD WIRING
———— FACTORY WIRING

PASSED DIELECTRIC

BLK
YEL
RED

MOTOR
GRN/YEL

T2   T3

T1   T5

K2 RELAY
NO
COM

GRN/YEL

BRN
WHT

K1 RELAY
COM
NO

BLK

T4   T7

GRN/YEL
BLK
WHT

115 VAC 60 Hz, 1 Φ
USE COPPER CONDUCTORS ONLY

FAN
C
HERM

WHT

T6

WHT

A/C POWER MODULE BOARD

BLU

COMPRESSOR
O.L.
R   S
C
RED

WHT

P1 P2   P6
6 5 3 2 4 1
P5 P4 P3

START CAP
RED (OPT)
PTCR
RED

BLK BLK
RED
BLK
BLU
BLU
YEL
YEL

BLK

BLK

REVERSING VALVE

RJ-11 CABLE TO T-STAT
12V +
12V -
FURNACE +
FURNACE -
LOAD SHED
LOAD SHED
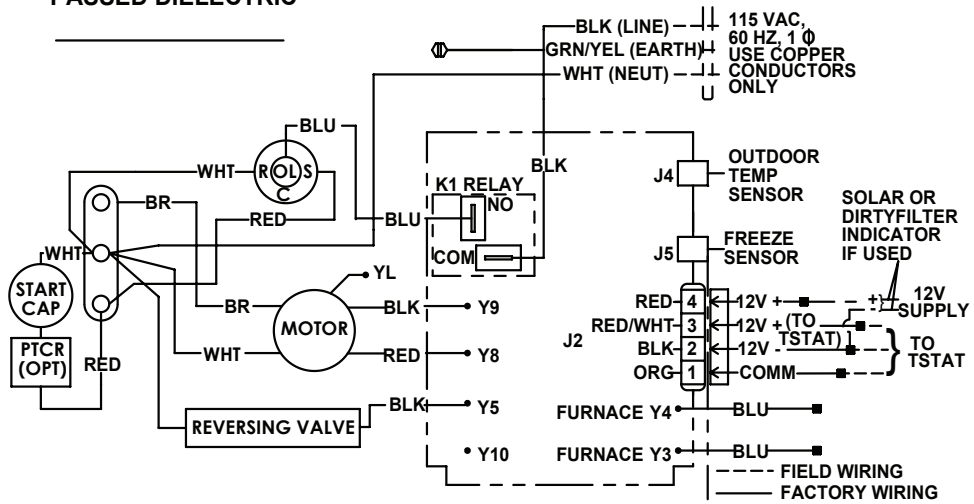FREEZE SENSOR
INDOOR TEMP SENSOR
OUTDOOR TEMP SENSOR

WIRING DIAGRAM

6519 Series

PASSED DIELECTRIC

3313503.000