



**RECORD THIS INFORMATION FOR FUTURE REFERENCE  
BEFORE INSTALLING THE UNIT:**

Model Number \_\_\_\_\_  
Serial Number \_\_\_\_\_  
Date Purchased \_\_\_\_\_  
Place of Purchase \_\_\_\_\_

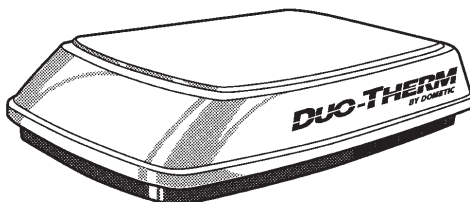
# **MODEL 620215**

## **ROOF-TOP AIR CONDITIONER with Electric Heat**

**USED WITH PART NO. 3105712  
DUCTED ELECTRONIC THERMOSTAT KIT**

**USA**  
SERVICE OFFICE  
The Dometic Corp.  
509 So. Poplar St.  
LaGrange, IN 46761

**CANADA**  
Dometic Dist.  
866 Lings Dr.  
Cambridge, Ontario  
CANADA N3H 2N7



**THIS UNIT IS DESIGNED FOR OEM INSTALLATION  
ALL INITIAL INSTALLATIONS MUST BE APPROVED BY THE SALES DEPT.**

### **WARNING**

**This unit must be serviced by an authorized serviceman. Modification of the appliance can be extremely hazardous and could lead to serious injury or death.**

### **AVIS**

**Cet appareil doit être réparé seulement par un réparateur autorisé. Modification de l'appareil pourrait être extrêmement dangereuse, et pourrait causer mal ou mort.**

## **INSTALLATION & OPERATING INSTRUCTIONS**

**MODEL  
620215.321  
620215.421**



**UNDERWRITERS  
LABORATORIES  
INC. ®**  
LISTED



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## INSTALLATION INSTRUCTIONS

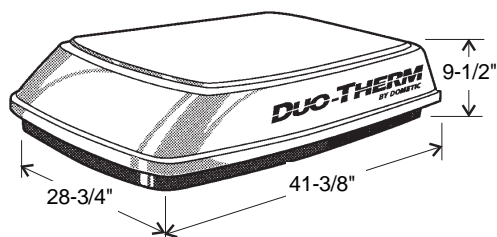
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## 1. GENERAL INFORMATION

This air conditioner is designed for:

- Installation on a recreational vehicle at the time the vehicle is manufactured.
- Mounting on the roof of a recreational vehicle.
- Connection to an air distribution system located in the ceiling/roof cavity of the recreational vehicle.
- Roof construction with rafters/joists on minimum of 16 inch centers.
- Minimum of 1.75 inches and maximum of 4.50 inches distance between roof to ceiling of recreational vehicle. Alternate installation methods will allow for roofs more than 4.50 inches thick.



## SPECIFICATIONS

MODEL NO.	620215.321	620215.421
Nominal Capacity (BTU/HR)	13,500	13,500
Electrical Rating	115 VAC, 60 Hz., 1 ph.	
Compressor Rated Load Amps	12.4	11.5
Fan Motor Rated Load Amps	3.1	3.1
Compressor Locked Rotor Amps	60.0	50.0
Fan Motor Locked Rotor Amps	8.8	8.8
Power, Cooling (kw)	1.7	1.7
Power, Heating (Kw)	1.8	1.8
SCFM-High Speed Max./Min.	335/250	
Total Static - Min/Max.	.12/.65" W.C.	
Refrigerant (R22) Oz.	15.5	17.0
Minimum Wire Size * (AC)	12 AWG Copper Up to 24 ft.	
AC Circuit Protection (User Supplied)	20 Amp Time Delay Fuse or HACR Circuit Breaker	
DC Circuit Protection (User Supplied)	Installation must comply with all National, State, Providence and /or local electrical codes.	
Installed Weight (Pounds)	96	102
Minimum Generator	1 Unit	3.5 KW
Size **	2 Units	5.0 KW

\* For distances over 24 ft. consult the National Electrical Code.

\*\* The Dometic Corporation 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 must be considered. Also keep in mind generators lose power at high altitudes and from lack of maintenance.

## 2. PRECAUTIONS

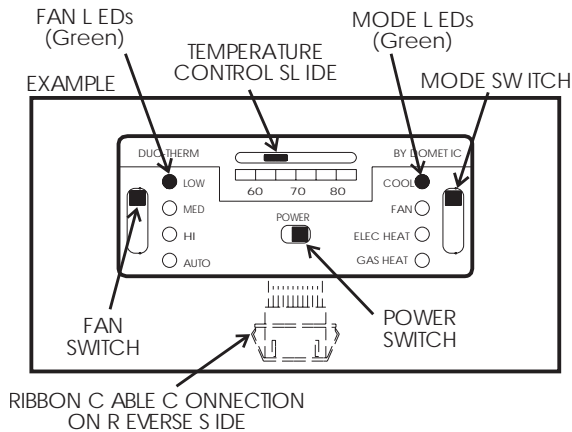
### ! CAUTION

**IMPROPER INSTALLATION MAY DAMAGE EQUIPMENT, COULD ENDANGER LIFE, CAUSE SERIOUS INJURY AND/OR PROPERTY DAMAGE.**

- Read the Installation and Operating Instructions carefully before operating or starting the air conditioner installation.
- The Dometic Corporation will not be liable for any damages or injury incurred due to failure in following these instructions.

- Installation **MUST** comply with the National Electrical code and any State or Local Codes or Regulations.
- DO NOT** add any devices or accessories to this air conditioner except those specifically authorized by The Dometic Corporation.
- This equipment must be serviced by qualified personnel and some states require these people to be licensed.

### 3. CONTROL DESCRIPTION



#### A. POWER SWITCH

1. Located lower center of control.
2. Turns air conditioner or gas furnace ON to set condition.
3. Turns air conditioner or gas furnace OFF.
4. Green LED lights next to MODE switch light up to indicate power ON.
5. No LED lights on when control is OFF.

#### B. MODE SWITCH

1. Four position switch located on right side of control.
2. Used to select COOLING, FAN, ELEC HEAT or GAS HEAT mode operation.
3. Mode selected is indicated by green LED light when control is turned on.

#### C. FAN SWITCH

1. Four position switch located on left side of control.
2. Used to select HIGH, MEDIUM, LOW or AUTOMATIC FAN operation of air conditioner.
3. Fan speed selected is indicated by green LED light when control is turned on.

#### D. TEMPERATURE SLIDE

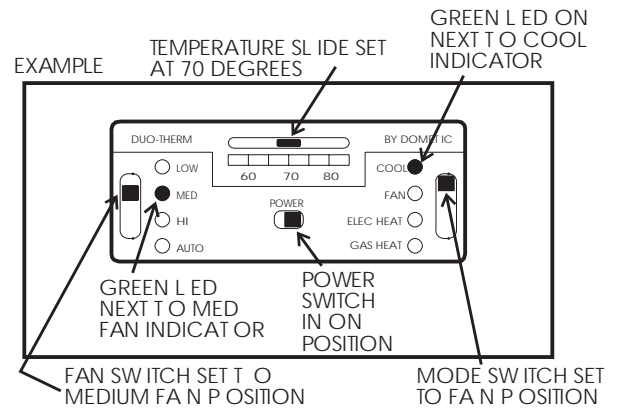
1. Located top center of control.
2. Movable arm on control selects temperature at which the compressor or gas heat is turned ON and OFF.
3. User sets to position to maintain temperature level desired.

### 4. OPERATING INSTRUCTIONS

#### A. COOLING MODE OPERATION

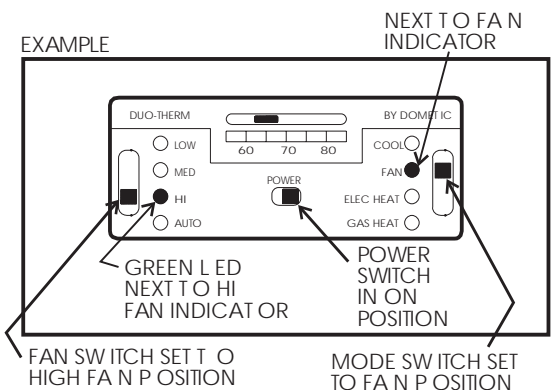
1. Turn POWER switch to ON position.
2. Place mode switch to COOL position.

3. Set temperature slide switch to your desired temperature level.
4. Select your desired fan speed. NOTE: See Special Features Section D. 1 for AUTO Fan Operation.
5. The fan starts immediately and after a delay of approximately two minutes, the compressor will start.
6. The compressor will now cycle OFF per the thermostat set point. The fan will cycle OFF if the FAN switch is in the AUTO position, otherwise the fan will continue to operate in the selected fan speed. The compressor (and fan) will restart in approximately two minutes when the thermostat senses need for cooling.



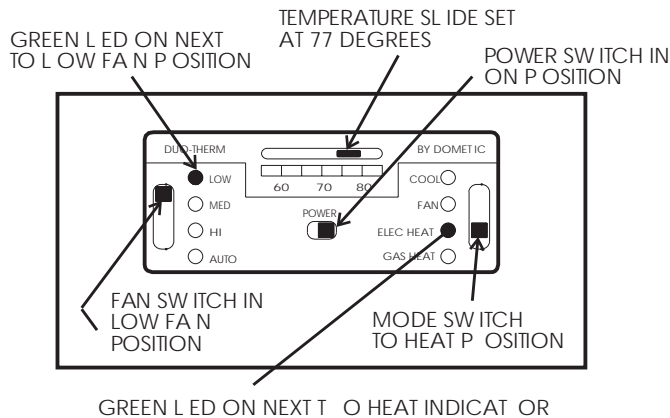
#### B. FAN MODE OPERATION

1. Turn POWER switch to ON position.
2. Place MODE switch in either FAN position.
3. Select the desired fan speed. HI-MED-LOW-AUTO. NOTE: In AUTO position the fan operates only at low speed in FAN mode of operation.



## C. ELECTRIC HEAT MODE OPERATION

1. Turn POWER switch to ON position.
2. Place mode switch in ELEC HEAT position.
3. Set temperature slide switch to your desired temperature level.
4. Select your desired fan speed (HI-MED-LOW-AUTO). NOTE: In AUTO position the fan operates only at low speed in ELEC HEAT mode of operation.
5. The fan runs continuously with the electric heater cycling ON/OFF per the set point to maintain an even comfort range.

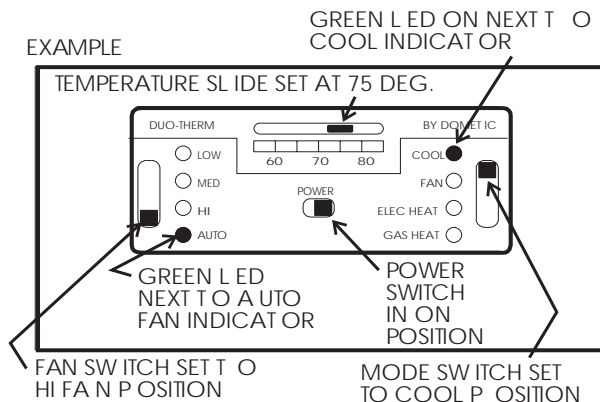


## D. SPECIAL CONTROL FEATURES

### 1. **Auto Fan: (Cooling Mode Only)**

When selected, FAN will:

- a. Automatically select the fan speed depending on the difference between set temperature and room temperature. (COOL MODE ONLY)  
For temperature difference of:  
 8° or more -Fan operates on HIGH  
 4° to 8° -Fan operates on MEDIUM  
 4° or Below -Fan operates on LOW
- b. Cause the fan to cycle ON and OFF with the compressor. Any change of any switch on the thermostat will cause the fan to come ON.



### 2. **Refrigerant Compressor Time Delay:**

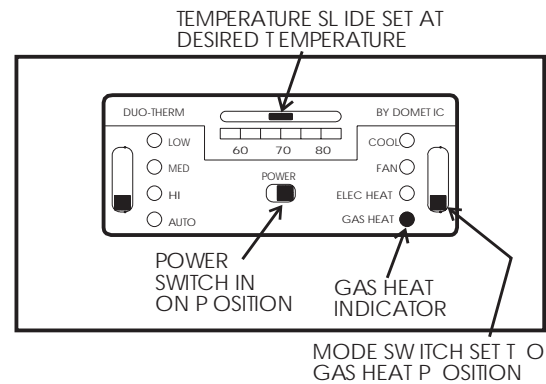
The compressor will always have a delay in starting of approximately two minutes any time it is required to begin the cooling cycle.

### 3. **Power Interruption:**

In the event power to the air conditioner is interrupted for any reason, the system will restart in the condition previously set by user.

## E. GAS HEAT MODE OPERATION (If Installed)

1. Turn POWER switch to ON position.
2. Place mode switch to GAS HEAT position.
3. Notice that the fan indicators extinguish and the GAS HEAT indicator illuminates. (The Dometic A/C fan will not operate in the GAS HEAT mode.)
4. Set temperature slide switch to your desired temperature. The gas furnace will cycle ON and OFF to provide the selected temperature.



## 5. MAINTENANCE

**AIR FILTER:** Periodically remove the return air filter. Wash the filter with soap and warm water; let dry and then reinstall or replace as required.

**NOTE: Never run the air conditioner without return air filter in place. This may plug the unit evaporator coil with dirt and may substantially affect the performance of the unit.**

### **FROST PREVENTION:**

Air conditioners have a tendency to frost during operation in cool temperatures with moderate humidity conditions, particularly on low fan speed. This condition normally exists during the evening or nighttime hours of operation of the air conditioner. To help your air conditioner maintain peak performance without frosting-over during this time period, preset the thermostat to approximately 70 degrees and run on manual fan at medium or high speeds.

The ability of the air conditioner to maintain the desired inside temperature depends not only on the heat gain of the vehicle but also some preventative measures taken by the occupants. During extreme outdoor temperatures, the heat gain of the vehicle may be reduced by:

- ✓ Parking vehicle in a shaded area;
- ✓ Using window shades (blinds and/or curtains);
- ✓ Keeping windows and door shut;
- ✓ Avoiding the use of heat producing appliances.

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

## **! CAUTION**

**The manufacturer of this air conditioner 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 vehicle, condensed moisture may appear on air registers, ceilings, windows, etc. the air conditioner removes this moisture from the air during normal operation. Keeping doors and windows closed when this air conditioner is in operation will minimize condensed moisture on cold surfaces.**

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

## **6. SERVICE - Unit Does Not Operate**

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

- A. If your RV is connected to motor generator, check to be sure motor generator is running and producing power.
- B. If RV is connected to power supply by a land line, check to be sure line is sized properly to run air conditioner load and it is plugged into power supply.
- C. Check your fuse or circuit breaker to see if it is open.
- D. Ensure that the coach 12 volts DC is connected to the thermostat board.
- E. After the above checks, call your local service center for further help. This unit must be serviced by qualified service personnel only.

**When calling for service, always give the air conditioner Model Number and Serial Number. This information can be found on the unit rating plate located on the air conditioner base pan.**

# **INSTALLATION INSTRUCTIONS**

## **1. COOLING REQUIREMENTS**

When determining the cooling requirements, the following should be considered:

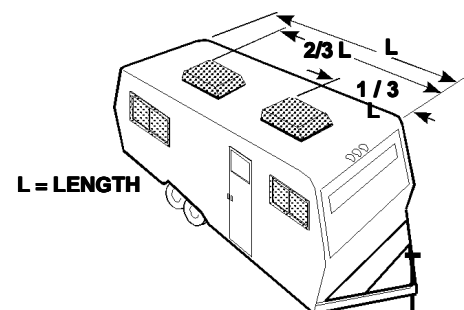
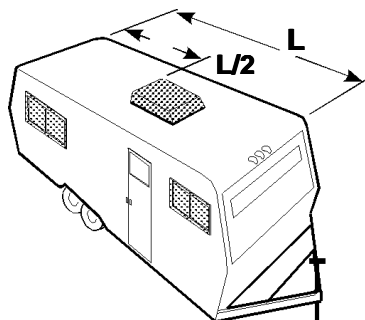
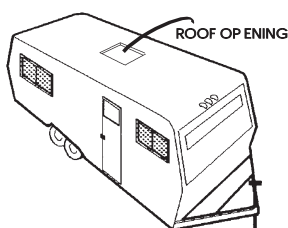
- A. Size of RV.
- B. Amount of insulation in walls and roof of RV.
- C. Geographical location where RV will be used.

From this information the **size** of air conditioner(s) and the **number** of air conditioners needed can be determined.

## **2. LOCATING AIR CONDITIONER ON ROOF**

### **A. NORMAL LOCATION**

The air conditioner is designed to fit over an existing roof opening that is 14" x 14".



### **B. OTHER LOCATIONS**

When no roof opening is available or another location is desired, the following is recommended:

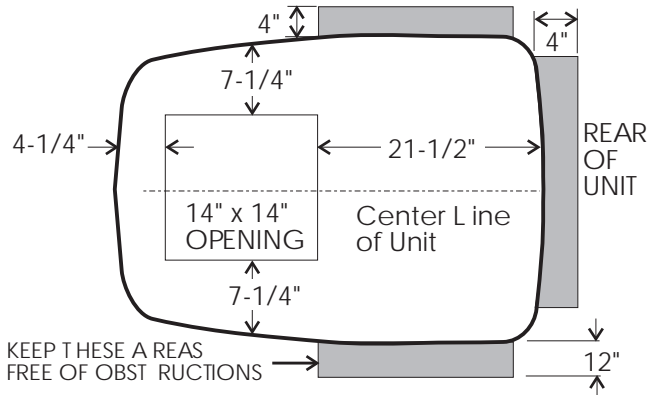
**For One Unit Installation:** The air conditioner should be mounted slightly forward of center (front to back) and centered from side to side.

**For Two Unit Installations:** Install one air conditioner 1/3 and one air conditioner 2/3's from front of RV and centered from side to side.

It is preferred that the air conditioner be installed in a relatively **flat and level** roof section measured with the RV parked on a level surface. **NOTE: UP TO AN 8° SLANT TO EITHER SIDE, OR FRONT TO BACK, IS ACCEPTABLE.**

### C. AFTER LOCATION HAS BEEN SELECTED:

1. Check for obstructions in the area where air conditioner will be installed.



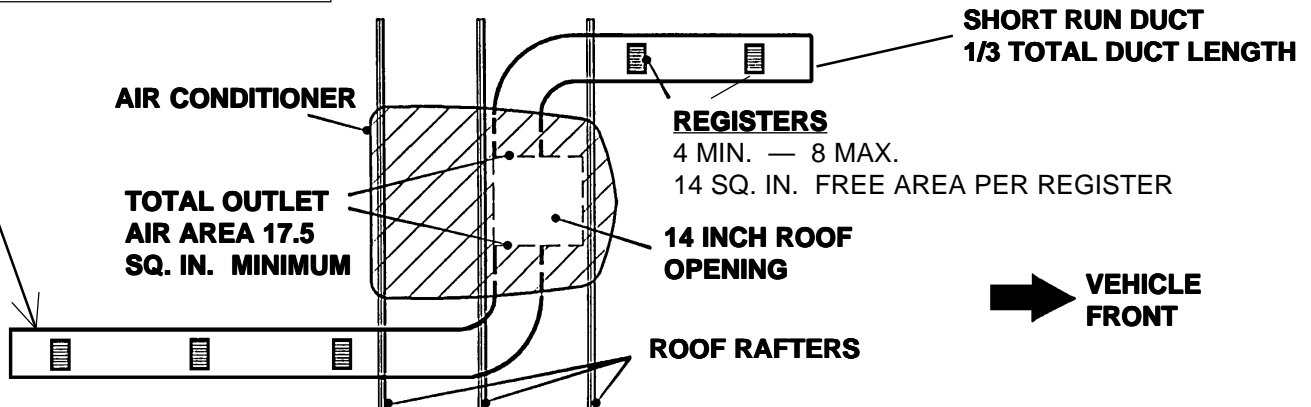
2. The roof must be designed to support 130 pounds when the RV is in motion. Normally 200 pound static load design will meet this requirement.

### 3. AIR DISTRIBUTION SYSTEM SIZING & DESIGN

The Installer of this Air Conditioner System must design the air distribution system for his particular application. Several requirements for this system **MUST** be met for the Air Conditioner to operate properly. These requirements are as follows:

- A. Roof cavity thickness must be between 2.00" to 5.50". This distance is measured between roof and ceiling surface.
- B. The total Cross-Sectional Discharge Area of outlet ducts from the Plenum Area under the Air Conditioner must be a minimum of 17.5 sq. in.

DUCTS	MIN.	MAX.
DEPTH	1-1/4"	2-1/4"
WIDTH	7"	—
TOTAL LENGTH	12'	36'



### C. Duct Sizing Requirements as follows:

	Min.	Max.
1. Duct Depth	1.25"	2.25"
2. Duct Width	7.00	—
3. Total Duct Length	12 ft.	36 ft.
4. Duct Length (Short Run)	1/3 Total Length	

### D. Register Requirements as follows:

	Min.	Max.
1. Distance from Duct End	5"	8'
2. Distance from End of Elbow	15"	—
3. Distance between Registers	24'	—
4. Total Number Required	4	8
5. Number required per Run	2	—
6. Free Area per Register	14 sq. in.	—

- E. The Duct material must meet or exceed any agency or RVIA Standard that may be in existence at the time the RV is produced.

### NOTE

**IT IS THE RESPONSIBILITY OF THE INSTALLER OF THIS SYSTEM TO INSURE THE DUCT-WORK WILL NOT COLLAPSE OR BEND DURING OR AFTER THE INSTALLATION.**

- F. All Discharge Air Ducts must be properly insulated to prevent condensation from forming on their surfaces or adjacent surfaces during operation of the Air Conditioner. This insulation must be R-7 minimum.
- G. Ducts and their joints must be sealed to prevent condensation from forming on adjacent surfaces during operation of the Air Conditioner.

### NOTE

**THE DOMETIC CORPORATION WILL NOT BE HELD LIABLE FOR ROOF STRUCTURAL OR CEILING DAMAGE DUE TO IMPROPERLY INSULATED OR SEALED DUCT-WORK.**

- H. Return Air Opening must have 40 sq. in. minimum free area including the filter.
- I. Return Air to the Air Conditioner must be filtered to prevent dirt accumulation on Air Conditioner Cooling surface.



J. Total System Pressure must be between 0.12 to 0.65 in. W.C. This is to be determined with the Air Conditioner Blower operating on High Speed and Return Air Filter and Grill in place.

#### NOTE

**IT IS THE RESPONSIBILITY OF THE INSTALLER OF THIS AIR CONDITIONER SYSTEM TO INSURE THE STRUCTURAL INTEGRITY OF THE RV ROOF.**

K. The Thermostat must be located on an inside wall of the RV, 54" above the floor. The Thermostat must not be located near a heat source.

## 4. AIR DISTRIBUTION SYSTEM INSTALLATION

The Dometic Corporation recommends the basic configuration shown on Page 6 for installing this Air Conditioner System. We have found by testing, that this configuration works best in most applications of this Air Conditioner System.

It is the responsibility of the Installer of this System to review each RV floor plan and determine the following:

- |                  |                        |
|------------------|------------------------|
| A. Duct size     | D. Register locations  |
| B. Duct layout   | E. Thermostat location |
| C. Register size |                        |

These items must be determined in conjunction with the Air Distribution System Sizing and Design Requirements listed in Section 3 of this manual.

ALTERNATE CONFIGURATIONS AND METHODS MAY BE USED WHICH STILL ALLOW THE AIR CONDITIONER TO OPERATE PROPERLY. HOWEVER, THESE ALTERNATE CONFIGURATIONS AND METHODS MUST BE APPROVED BY THE DOMETIC CORPORATION IN WRITING.

**The following instructions are based upon the use of Dometic Return Air Kit No's. 3105007 or 3105935.** The air conditioner has mounting bolts supplied for use with these Kits.

An alternate roof mounting Kit is available from Dometic to attach the air conditioner to roof of the RV. To use this Kit, order Dometic Part No. 3103682 Bracket Kit.

### A. ROOF AND CEILING OPENING PREPARATION

1. A 14" x 14" opening must be cut through the roof and ceiling of the RV. This opening must be located between the roof reinforcing members.

#### ! WARNING

**THERE MAY BE ELECTRICAL WIRING BETWEEN THE ROOF AND THE CEILING. DISCONNECT ALL POWER SUPPLIES AND THE POSITIVE (+) TERMINAL FROM THE SUPPLY BATTERY. FAILURE TO FOLLOW THIS INSTRUCTION MAY CREATE A SHOCK HAZARD.**

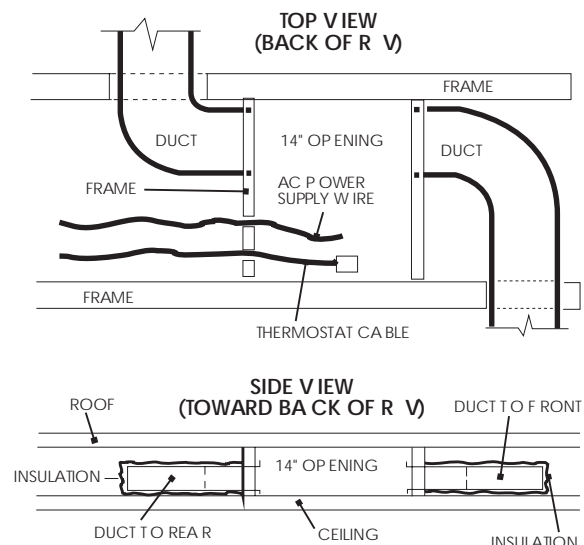
2. Mark a 14" x 14" square on the roof and carefully cut the opening.
3. Using the roof opening as a guide, cut the matching hole in the ceiling.
4. The opening created must be framed to provide adequate support and prevent air from being drawn from the roof cavity. Lumber 3/4" or more in thickness must be used. Remember to provide an entrance hole for power supply wiring and thermostat cable.
5. The 14" opening is part of the return air system of the Air Conditioner and must be finished in accordance with NFPA Standard 501C Section 2.7.
6. Route a copper 12 AWG with ground supply line from the fuse or circuit breaker box to the roof opening.
  - a. This supply line must be located in the front portion of the 14" opening.
  - b. The power supply **MUST** be on a separate 20 amp Time Delay Fuse or HACR Circuit Breaker.
  - c. Make sure at least 15" of supply wire extends into the roof opening. This ensures easy connection at the Air Conditioner Junction Box.
  - d. Wiring must comply with all National, State and Local Wiring Codes.
  - e. Use a steel sleeve and a grommet or equivalent methods to protect the wire where it passes into the opening.

### B. AIR DISTRIBUTION DUCT INSTALLATION

Install the Air Distribution Ducts in the RV Roof Cavity. The Distribution System must meet:

1. RV's requirements
2. System requirements listed in Section 3 of this Manual.

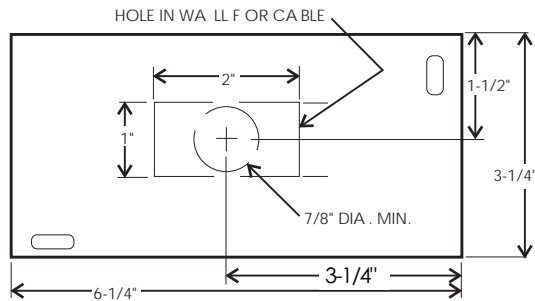
Terminate the start of the Duct at the back edge of the 14" opening previously cut.



## 5. THERMOSTAT & CABLE INSTALLATION

### A. LOCATION

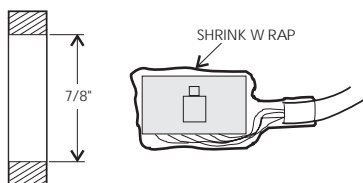
1. The Thermostat should be located on an inside wall approximately 4-1/2 feet (54") above the floor and AWAY FROM ANY HEAT SOURCE. (Example: cook stove, direct sunlight, microwave oven, lights, etc.).
2. A hole at least 7/8" diameter will be needed to route the cable through the wall. SUGGESTION: An opening 2" wide by 1" high will make cable connection easier.
3. The hole should be located 3-1/4" from the right edge of the thermostat and 1-1/2" from the top. The thermostat base is 6-1/4" long by 3 1/4" high.



### B. CABLE INSTALLATION

The cable must be routed from the roof opening to the Thermostat.

1. Choose the shortest, most direct route from the 14" opening to the Thermostat location selected.
2. Three standard cable lengths are available:
  - a. 15 feet Part No. 3101632.010
  - b. 25 feet Part No. 3101632.028
  - c. 30 feet Part No. 3101632.036
3. The Thermostat end of the cable is covered with heat shrink tubing. This allows cable routing through a 7/8" diameter hole without damage to the plug. NOTE: The tubing must be carefully removed before connection to the Thermostat.



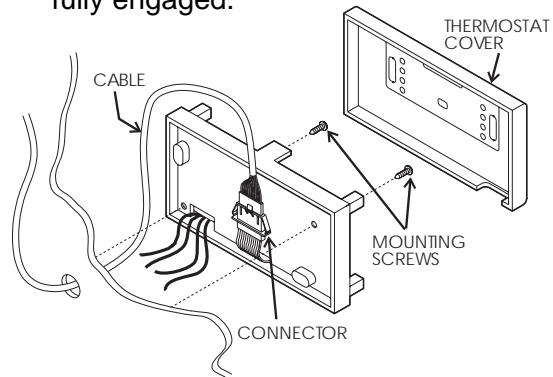
4. Consider where screws, nails or staples might contact the cable.
5. Leave 3" of cable extending through the wall for connection to the Thermostat.

6. Enough cable must extend into the 14" opening to allow connection to the ribbon cable from the upper unit.
7. Route 18 gauge wire from thermostat location to coach DC system.
8. If the system is to control a gas furnace: Route 18 gauge thermostat wire from furnace to wall thermostat location at this time.

### C. THERMOSTAT INSTALLATION

#### THE THERMOSTAT IS LOCATED IN 3105712, DUCTED THERMOSTAT KIT.

1. Remove the cover of the Thermostat by gripping top and bottom and gently pull parts apart.
2. Carefully cut the heat shrink cover from the thermostat cable and connector. Connect the cable to the connector on the Thermostat back. The plug is polarized and latches when fully engaged.

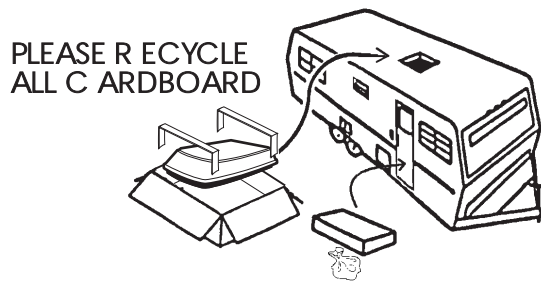


3. Connect the red and black wires protruding from the back of the Thermostat to the coach 12 volt DC system using 18 gauge wire (minimum). Connect the red wire to plus (+) and the black wire to minus (—).
4. If the system is to control a gas furnace, connect the blue wires protruding from the Thermostat to the gas furnace in lieu of another thermostat. If a gas furnace is not to be connected, the blue wires need not be terminated. There is no active signal on these wires.
5. Push the excess wire back into hole and fill hole with insulating material. (NOTE: Make sure mounting screw will not hit cable).
6. Mount base of Thermostat to the wall with two screws provided. CAUTION: Be careful not to damage the user circuit board inside the thermostat.
7. Check alignment, tighten screws and replace Thermostat Cover.



## 6. PLACING AIR CONDITIONER ON THE ROOF

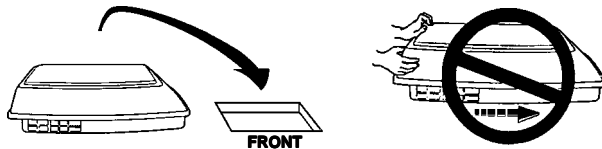
- A. Remove the air conditioner from the carton and discard the carton.



- B. Place the Air Conditioner on the roof.

### **! CAUTION**

**USE CARE IN LIFTING. THIS UNIT WEIGHS APPROXIMATELY ONE HUNDRED (100) POUNDS.**



- C. Lift and place the unit over the prepared opening using the gasket on unit as a guide. The blunt end goes toward the rear of the RV.

### **! CAUTION**

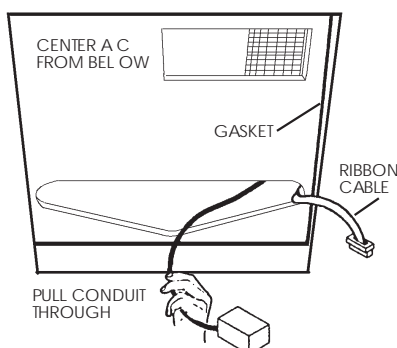
**DO NOT SLIDE THE UNIT. THIS MAY DAMAGE THE NEOPRENE GASKET ATTACHED TO THE BOTTOM AND CREATE A LEAKY INSTALLATION.**

This completes the outside work. Minor adjustments can be done from the inside of the RV if required.

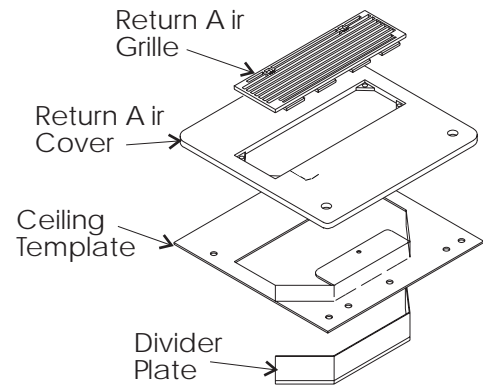
## 7. INSTALLATION OF AIR CONDITIONER

### A. INSTALLATION OF CEILING TEMPLATE

1. Check gasket alignment of the Air Conditioner over roof opening and adjust if necessary. Unit may be moved from below by slightly lifting and sliding.



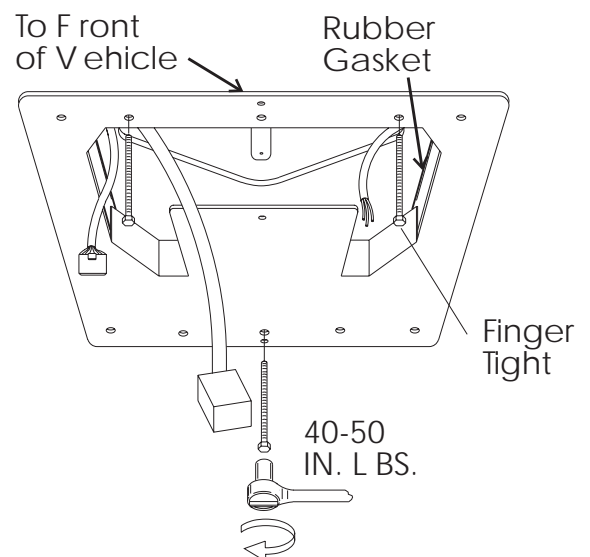
2. Reach up into the return air opening of the Air Conditioner and pull the conduit with the unit junction box and flat ribbon cable down for later connection.
3. Remove the return air cover assembly from the shipping carton.



4. Take the ceiling template and hold up to the 14" opening. Be sure the end with the offset faces the rear of the RV.
5. Hold the ceiling template with one hand and with the other, install the three (3) 1/4" mounting bolts through the template and into the base pan of the Air Conditioner.

**NOTE:** The unit mounting bolts are located inside 3105712, Ducted Thermostat Kit.

- a. Finger-tighten the three (3) bolts and check alignment.
- b. **EVENLY** tighten the bolts to a torque of 40 to 50 inch pounds. This will compress the roof gasket on the air conditioner approximately 1/2".

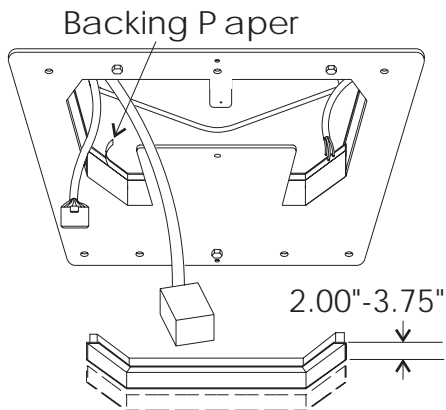


## ! CAUTION

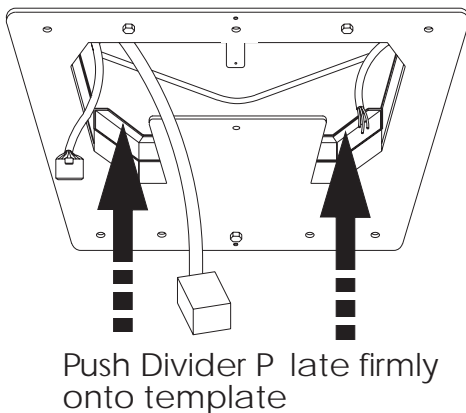
**IF THE BOLTS ARE LEFT LOOSE, THERE MAY NOT BE AN ADEQUATE ROOF SEAL IF BOLTS ARE OVERTIGHTENED DAMAGE MAY OCCUR TO THE AIR CONDITIONER BASE OR CEILING TEMPLATE.**

### B. INSTALLATION OF DIVIDER PLATE

1. Measure the ceiling to roof thickness:
  - a. If distance is 2.00" - 3.75", remove perforated tab from Divider Plate.
  - b. If distance is 3.75" - 5.50", do not remove tabs.
2. Remove the backing paper from double sided tape located on Ceiling Template.



3. Place Divider Plate up to bottom of Air Conditioner base pan firmly. The foam tape on the divider plate must seal to bottom of base pan.



**NOTE: The adhesive on double-sided tape is extremely sticky. Divider Plate must be properly positioned before pressing in place.**

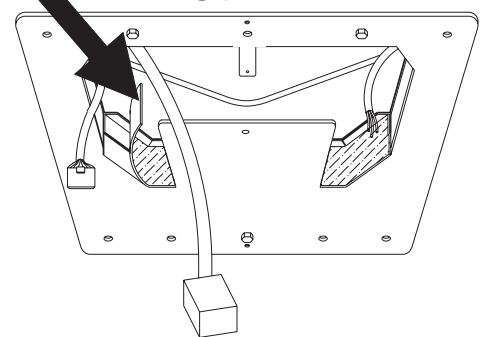
4. With slight pressure, push divider plate against exposed double sided tape on ceiling template.
5. Locate 1/8" x 7" x 18" self-adhesive insulation supplied with the Kit.

6. Remove the backing paper from the insulation and carefully stick onto the ceiling template divider panel.

**Note: The adhesive on insulation is extremely sticky. Be sure part is located where desired before pressing into place. We recommend pulling off part of backing paper, locating part and then remove backing paper as insulation is pressed into place.**

- a. Excess width is intended to SEAL the divider plate to the side of the 14" opening. This is to prevent cold discharge air from circulating into the Air Conditioner return air opening.
- b. If the insulation is too high, stick the excess height of insulation to the Air Conditioner base pan. **NOTE: Do not cover up unit rating plate.**

Place insulation in position  
(Do not cover unit rating plate)



## 8. CONNECTION OF POWER SUPPLY

### A. MOUNTING AIR CONDITIONER JUNCTION BOX

1. Position the Air Conditioner junction box in a convenient location in the front portion of the 14" opening.
2. With two (2) # 8 x 1/2" screws provided, secure to wall of opening.

### B. CONNECTION OF 115 VOLT POWER SUPPLY

#### ! WARNING

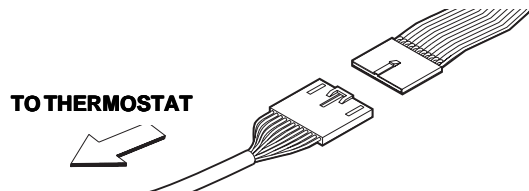
**Disconnect ALL power before wire leads are connected.**



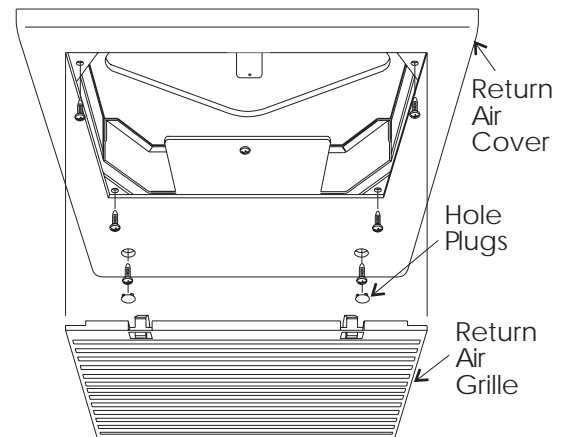
1. Select the best location for entrance of supply wire into the junction box and remove appropriate knockout slug from box.
2. Install the strain relief connector into the junction box. Route the power supply line through this connector.

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- A diagram of a junction box with the following labels and connections:
- POWER SUPPLY LINE**: A cable entering the box from the top left.
  - GREEN TO GROUND**: A wire connecting the green ground wire of the power supply line to a ground terminal inside the box.
  - WHITE TO WHITE**: A wire connecting the white line wire of the power supply line to the white wire of the air conditioner conduit.
  - BLACK TO BLACK**: A wire connecting the black line wire of the power supply line to the black wire of the air conditioner conduit.
  - JUNCTION BOX**: The central enclosure for the wiring.
  - AIR CONDITIONER ELECTRIC CONDUIT**: A flexible conduit entering the box from the bottom right, containing multiple wires.

- Connect the air conditioner ribbon cable connector to the thermostat cable end connector. The connectors are polarized and will easily snap together. **DO NOT FORCE.**



1. Remove Return Air Grille from the Return Air Cover.
2. Place the Return Air Cover up to Ceiling Template.
3. Install Cover to Template with #8x3/8" blunt point phillips head screws provided (6 required).
4. Reinstall Return Air Grille into Return Air Cover.
5. Install two (2) hole plugs into screw holes in back of return air grille. Align tabs with mating notches and snap into place.



**This completes the installation of the air conditioner. We recommend that power be supplied to the air conditioner and the unit checked for proper operation. Refer to the Owner's portion of this Manual for a description of air conditioner operation.**

# WIRING DIAGRAM

