



RECORD THIS UNIT INFORMATION FOR FUTURE REFERENCE:	
Model Number	_____
Serial Number	_____
Date Purchased	_____

USA
SERVICE OFFICE
Dometic, LLC
2320 Industrial Parkway
Elkhart, IN 46516
574-294-2511

CANADA
Dometic, LLC
46 Zatonski, Unit 3
Brantford, ON N3T 5L8
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519-720-9578

For Service Center Assistance Call:
800-544-4881



MODEL
6403 Series Air Conditioner
used with one of the following:
3105007 Return Air Cover
3105935 Quick Cool Return Air Cover
3308120 Genesis Air Filtration System
and
3309697.005 Digital Thermostat Kit, Cool/Furnace

This Unit Is Designed For OEM Installation. All Initial Installations Must Be Approved By Dometic, LLC

⚠ 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 cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

**INSTALLATION
INSTRUCTIONS**

Models
640312.301
640315.301
640315.306

3312832.000

Form No. 3312832.000 10/08
(French 3312833.000)
©2008 Dometic, LLC
LaGrange, IN 46761

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. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, **WARNING OR CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

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

⚠ CAUTION indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury.

CAUTION used without the safety alert symbol indicates, a potentially hazardous situation which, if not avoided may result in property damage.

Read and follow all safety information and instructions.

GENERAL INFORMATION

- A. Product features or specifications as described or illustrated are subject to change without notice.
- B. This "Air Conditioner" (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 2.00 inches and maximum of 5.50 inches distance between roof to ceiling of recreational vehicle. Alternate installation methods will allow for roofs more than 5.50 inches thick.
- C. The ability of the unit 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 unit. 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 temperatures.

Starting the unit 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 high heat gain, accessories like A&E outdoor patio and window awnings will reduce heat gain by removing the direct 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. The unit removes this moisture from the air during normal operation. Keeping doors and windows closed when this unit is in operation will minimize condensed moisture on cold surfaces.

A. Precautions

Improper installation may damage equipment, could endanger life, cause serious injury and/or property damage.

1. Read Installation and Operating Instructions carefully before attempting to start your 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 by Dometic.
5. This equipment must be serviced by qualified personnel and some states require these people to be licensed.

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.

Note: It is preferred that the unit be installed on a relatively **flat and level** roof section measured with the RV parked on a level surface. A 8° slant to **either** side, or front to back, is acceptable for all units.

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

1

40"

29"

9 1/2"

Keep these areas Free of Obstructions

Center Line Of Unit

7-3/8"

14-1/4" x 14-1/4" ($\pm 1/8$ ") Opening

4-3/8"

21-3/8"

7-3/8"

Dimensions Are Nominal

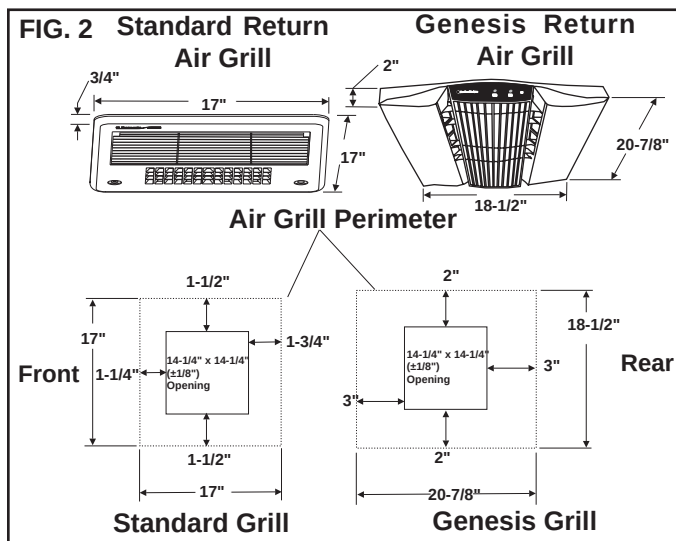
4"

12"

- 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.

It is the responsibility of the installer of this unit to ensure structural integrity of the RV roof. Never create a low spot on the roof where water will collect. Water standing around the unit may leak into the interior causing damage to the product and the RV.

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



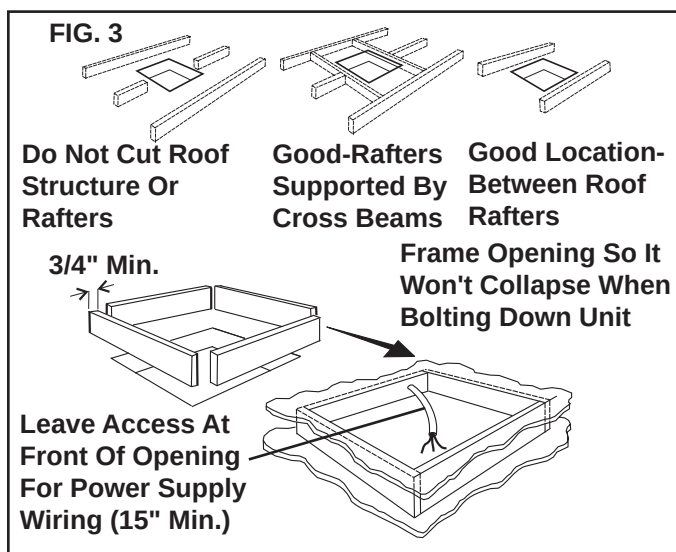
C. Roof Preparation

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

There may be electrical wiring between the roof and the ceiling. Disconnect 120 volt AC power cord and the positive (+) 12 volt DC terminal at the supply battery. Failure to follow this instruction may create a shock hazard causing death or severe personal injury.

- a. A 14-1/4" x 14-1/4" (±1/8") opening must be cut through the roof and ceiling of the RV. This opening must be located between the roof reinforcing members. See FIG. 3.



- b. 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 NFPA Standard 501C Section 2.7.2.
- c. Route a copper 12AWG, with ground, 120 VAC supply line from the time delay fuse or circuit breaker box to the roof opening.
 - This supply line must be located in the front portion of the 14-1/4" x 14-1/4" (±1/8") opening.
 - The power **MUST** be on a separate 20Amp time delay fuse or HACR circuit breaker.
 - Make sure that at least 15" of supply wire extends into the roof opening. This ensures an easy connection at the control box.
 - Wiring must comply with all National, State and Local Wiring Codes.
 - Use a steel sleeve and a grommet or equivalent methods to protect the wire where it passes into the opening.
- d. See Section F. Digital Thermostat and Cable Installation.

D. Air Distribution System Sizing & Design

The Installer of this unit must design the air distribution system for their particular application. Several requirements for this system **MUST** be met for the unit to operate properly. See chart on page 5. These requirements are as follows:

1. The duct material must meet or exceed any agency or RVIA Standard that may be in existence at the time the RV is produced.
2. All discharge air ducts must be properly insulated to prevent condensation from forming on their surfaces or adjacent surfaces during operation of the unit. This insulation must be R-7 minimum.
3. Ducts and their joints must be sealed to prevent condensation from forming on adjacent surfaces during operation of the unit.
4. Return air openings must have 40 square inches minimum free area including the filter.
5. Return air to the unit must be filtered to prevent dirt accumulation on unit cooling surface.

E. Air Distribution System Installation

1. Dometic, LLC recommends the basic configuration shown on page 5, for installing this unit. We have found by testing, that this configuration works best in most applications of this unit. It is the responsibility of the Installer of this system to review each RV floor plan and determine the following:
 - a. Duct size
 - b. Duct layout
 - c. Register size
 - d. Register location
 - e. Thermostat location

These items must be determined in conjunction with the Air Distribution System and Sizing and Design Requirements listed in the chart on page 5.

2. Begin the duct at the back edge of the 14-1/4" x 14-1/4" (±1/8") opening.

Important: Alternate configurations and methods may be used which still allow the unit to operate properly; however, any alternate configurations and methods must be approved by Dometic, LLC in writing. The following instructions are based upon the use of Dometic 3309697.005 Digital Thermostat Kit, Return Air Kits 3105007, 3105935 or 3308120 Genesis Air Filtration System. See FIGS. 4, 5 and 6.

CAUTION

It is the responsibility of the installer to insure the ductwork will not collapse or bend during and after the installation. Dometic, LLC will not be liable for roof structural or ceiling damage due to improperly insulated, sealed or collapsed ductwork.

AIR DISTRIBUTION DUCT SIZING & DESIGN CHART		
Return Air Cover Model	3105007 3105935 Standard Grill	3308120 Genesis Air Filtration System
Roof Cavity Depth	2.0 In. Min. - 5-1/2 In. Max.	2.0 In. Min. - 5-1/2 In. Max.
Duct Cross Sectional Area	21.0 Sq. In. Min.	32.0 Sq. In. Min.
Duct Size Depth Width Total Duct Length Duct Length (short run)	1-1/2 In. Min. - 2-1/2 In. Max. 7.0 In. Min. - 10.0 In. Max. 15.0 Ft. Min. - 40.0 Ft. Max. 1/3 Total Duct Length	2.0 In. Min. - 2-1/2 In. Max. 8.0 In. Min. - 10.0 In. Max. 15.0 Ft. Min. - 40.0 Ft. Max. 1/3 Total Duct Length
Register Requirements Number Required Per Run Register Free Air Area Distance From Duct End Distance From Elbow	2 Min. 14.0 Sq. In. 5.0 In. Min. - 8.0 In. Max. 15.0 In	2 Min. 14.0 Sq. In. 5.0 In. Min. - 8.0 In. Max. 15.0 In
Note: Duct sizes listed are inside dimensions.		

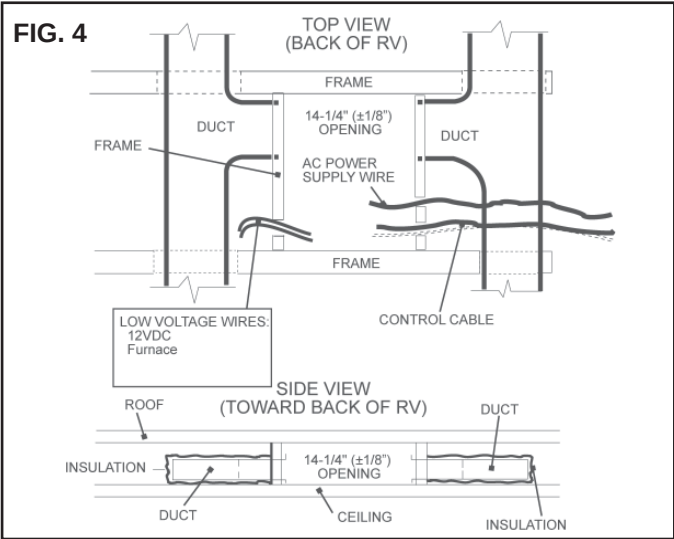


FIG. 5 Duct Size And Requirements For 3105007 And 3105935 Standard Return Air Cover

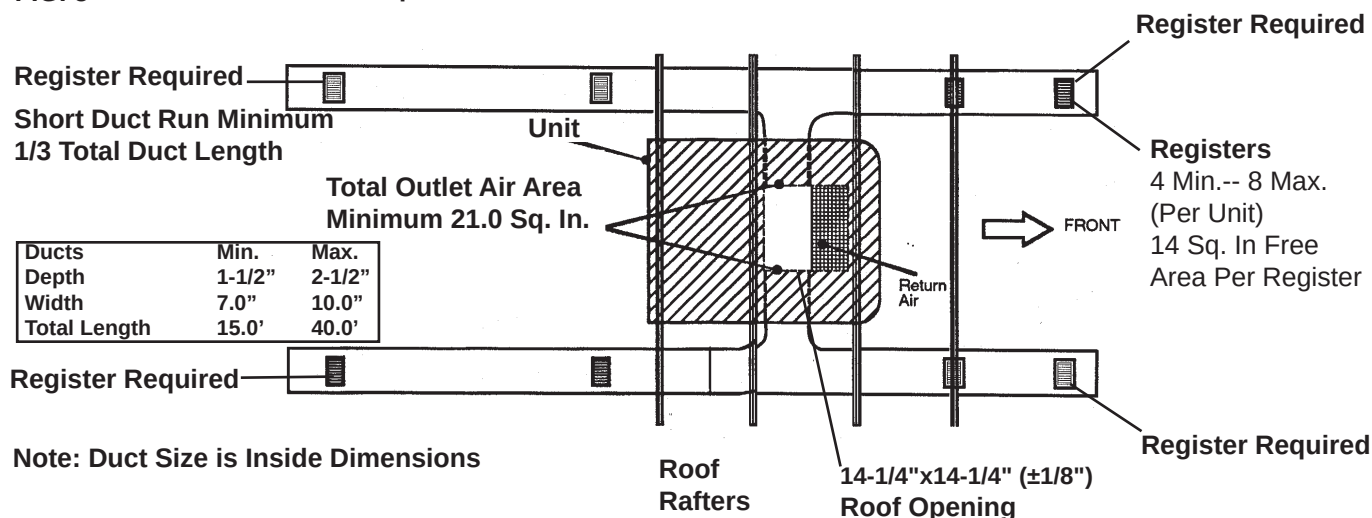
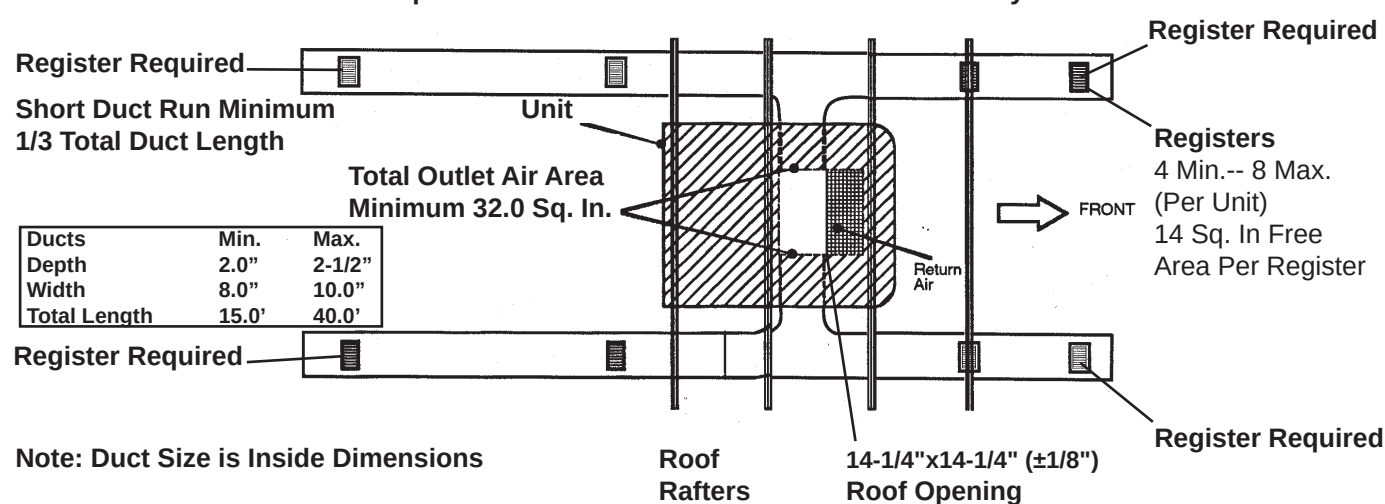


FIG. 6 Duct Size And Requirements For 3308120 Genesis Air Filtration System Kit



F. Dometic Digital Thermostat & Cable Installation

1. Location Of Digital Thermostat

- a. It is very important to ensure proper location of the **Digital Thermostat**, to provide a comfortable RV temperature. Observe the following rules when selecting a location:

- Locate the **Digital Thermostat** 54" above the floor.
- Install the **Digital Thermostat** on a partition, not on an outside wall.
- **NEVER** expose it to direct heat from lamps, sun or other heat producing items.
- Avoid locations close to doors that lead outside, windows or adjoining outside walls.
- Avoid locations close to supply registers and the air from them.
- **NEVER** locate a Digital Thermostat in a room that is warmer or cooler than the rest of the coach - such as the kitchen.

- The major living area is normally a good location.

2. Control Cable Installation:

A 4-conductor control cable must be routed from the roof opening to the **Digital Thermostat**.

- a. Choose the shortest, most direct route from the 14-1/4" x 14-1/4" (±1/8") opening to the **Digital Thermostat** location selected. Leave 6" of cable extending through the wall.
- b. The control cable must be terminated with two (2) RJ-11-6P4C telephone connectors. Refer to the crimp tool manufacture for crimping instructions. See FIGS. 7, 8 & 9.
- c. The RJ-11-6P4C terminals must be connected to the control cable with the same polarity on both end. Pre-made standard telephone cable will not work. See FIGS. 7, 8 & 9.

Important: RJ-11-6P4C connectors must be installed as shown in FIG. 7, 8 & 9.

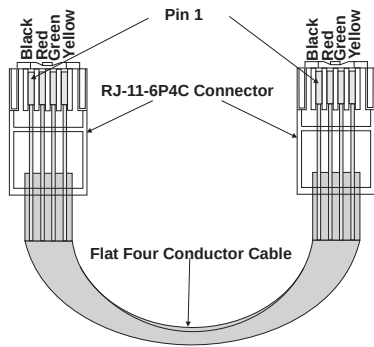
FIG. 7



FIG. 8



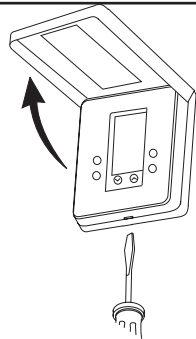
FIG. 9



3. Digital Thermostat Installation:
 - a. Carefully remove the base plate from the **Digital Thermostat**. This may be accomplished by pushing a small screwdriver in the slot on the bottom edge of the front cover to release latch. See FIG. 10.

FIG. 10

Push Screw Driver
In Slot To Release Latch



- b. Insert the control cable through the hole in the base plate and mount the plate to the wall with two (2) screws provided. Check the alignment to ensure level installation.
- c. Install the control cable RJ-11-6P4C connector into the back of the **Digital Thermostat** and snap onto the base plate. See FIG. 10.

G. Placing Unit On The Roof

1. Remove the unit from the carton.

CAUTION

This unit weighs approximately 100 pounds. To prevent back injury, use a mechanical hoist to place unit on roof.

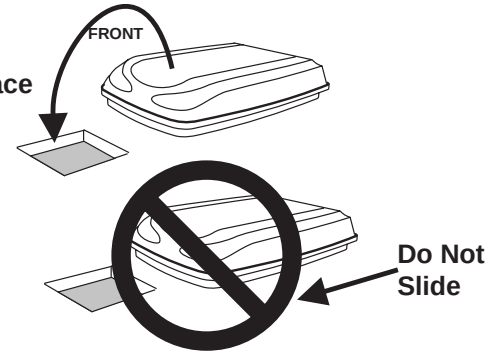
2. Place the unit on the roof.
3. Lift and place the unit over the prepared opening using the gasket on the unit as a guide. See FIG. 11.

CAUTION

Do not slide the unit. This may damage the roof gasket attached to the bottom and may create a leaky installation.

FIG. 11

Lift & Place

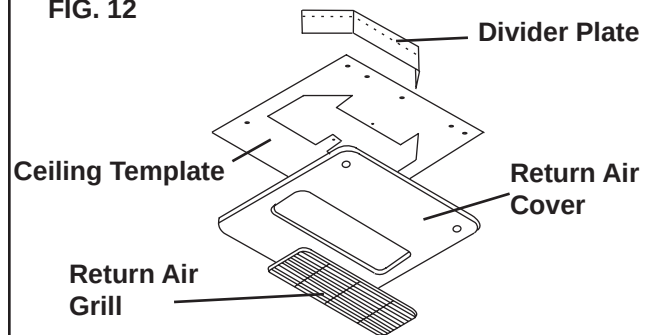


4. Place the 3309697.005 Control Kit and Return Air Kit inside the RV. This box contains mounting hardware for the unit and will be used inside the RV. This completes the outside work. Minor adjustments can be done from the inside of the RV if required.

H. Installing The Unit

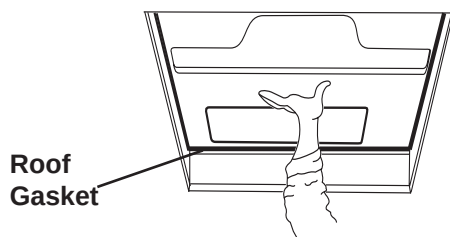
Installing Unit with 3105007 or 3105935 Standard Return Air Kit. For unit with Genesis Air Filtration System, see Section I.

FIG. 12



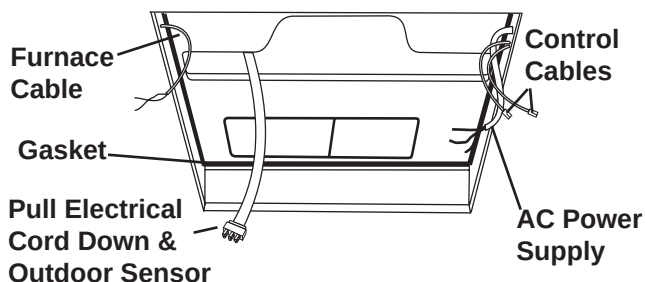
1. Installation Of Ceiling Template:
 - a. Check gasket alignment of the unit over the roof opening and adjust if necessary. Unit may be moved from below by slightly lifting and moving. See FIG. 13.

FIG. 13 Center Unit From Below



- b. Remove return air cover and ceiling template from the 3105007 or 3105935 carton.
- c. Locate the four 8" x 1/4"-20 unit mounting bolts Supplied with relay kit.
- d. Pull down the unit's electrical cord See FIG. 13.
- e. Hold the ceiling template up to the 14-1/4" x 14-1/4" ($\pm 1/8$ ") opening. Be sure the large plate faces the rear of the RV.
 - Start each mounting bolt through the ceiling template and up into the unit base pan by hand. Install wood screw in each end of the ceiling template. This insures a tight fit of the return air cover to ceiling. See FIG. 14.

FIG. 14

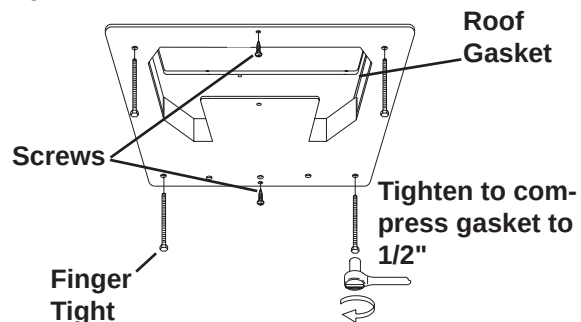


- **EVENLY** tighten the four bolts to a torque of 40 to 50 inch pounds. This will compress the roof gasket to approximately 1/2". The bolts are self locking so over tightening is not necessary. See FIG. 15.

CAUTION

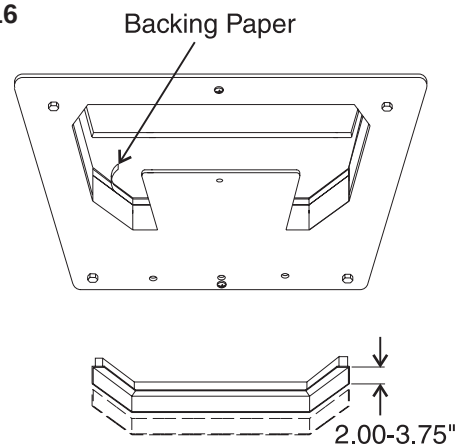
If bolts are left loose there may not be adequate roof seal or if over tightened, damage may occur to the unit base or ceiling template. Tighten to specifications listed in this manual.

FIG. 15 Front of Vehicle



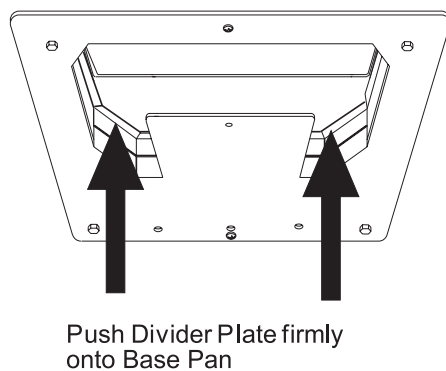
2. Installation Of Divider Plate
 - a. Measure the ceiling to roof thickness:
 - If distance is 2.0" - 3-3/4", remove perforated tab from divider plate.
 - If distance is 3-3/4" - 5-1/2", remove no tabs.
 - b. Remove the backing paper from double sided tape located on ceiling template. See FIG. 16.

FIG. 16



- c. Place divider plate up to bottom of unit base pan firmly. The foam tape on the divider plate must seal to bottom of base pan. See FIG. 17.

FIG. 17



Note: The adhesive on the insulation is extremely sticky. Be sure the part is located where desired before pressing into place.

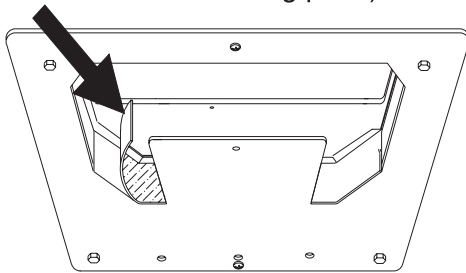
- d. With slight pressure then push the divider plate against the double sided tape on the ceiling template.
- e. Locate the 1/8" x 7" x 18" self-adhesive insulation supplied with the return air kit. Remove the backing paper from the insulation and carefully stick onto the ceiling template divider panel. See FIG. 18.

CAUTION

Improper installation and sealing of divider plate will cause the compressor to quick cycle on the cold control. This may result in fuse or circuit breaker opening and/or lack of cooling.

FIG. 18

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



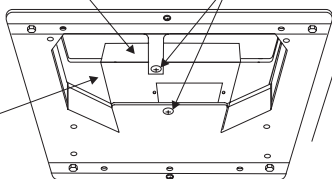
- Excess width is intended to seal the divider plate to the sides of the 14-1/4" x 14-1/4" (±1/8") opening. This is to help prevent cold air discharge from circulating into the unit return air opening.
 - If the insulation is too high, stick excess height of insulation to the unit base pan. Do not cover up unit rating plate.
3. Wiring the control box
 - a. Connect the 6 pin plug to the control box. The plug is polarized and will only fit in one direction. See FIG. 19

FIG. 19

Electronic Control Box
Blunt Self-Tapping Screws

Curb Side

Front



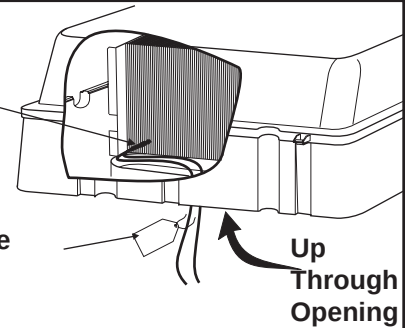
- b. Insert the Freeze Control Sensor approximately 1" into the evaporator coil fins located at the curb side. See FIG. 20.

Insert Sensor 1"
Into Coil, And 1"
above Bottom
Of Coil. Bend
Fins Closed To
Secure

FIG. 20

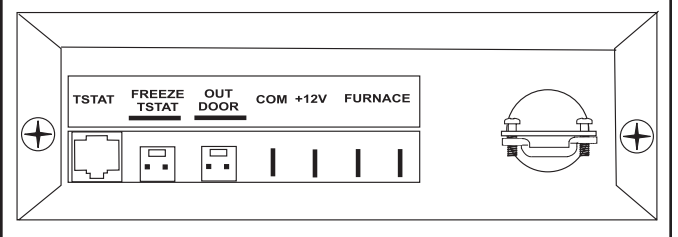
Remove
Hang
Tag

Up
Through
Opening



- c. Bend fins over sensor to secure in place.
- d. Connect the 2 pin connector with BLUE wires on the control box terminals labeled "FREEZE STAT". See FIG. 21.

FIG. 21



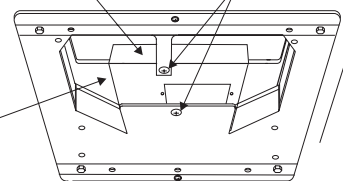
- e. Attach the relay control box on the ceiling template with the white 6 connector plug on the curb side of RV. Secure the control box to the ceiling template with 2 blunt self tapping screws. See FIG. 22.

FIG. 22

Electronic Control Box
Blunt Self-Tapping Screws

Curb Side

Front



- f. Reach up into the return air opening and pull the remaining wires down.

4. Connection Of 120 Volt Power Supply

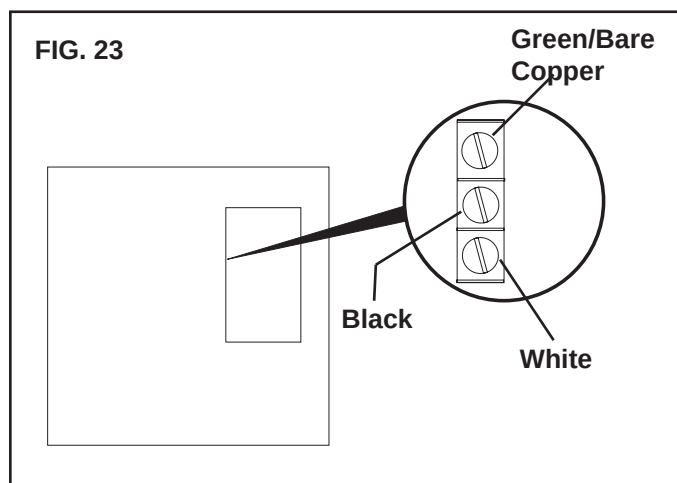
WARNING

Disconnect 120 volt AC. Failure to follow these instructions could create a shock hazard causing death or severe personal injury.

⚠ WARNING

This product is equipped with a 3-wire (grounded) system for protection against shock hazard. Make sure that the appliance is wired into a properly grounded 120 volt AC circuit and the polarity is correct. Failure to do so could result in death, personal injury or damage to the equipment.

- Route power supply line through Romex connector into control box. Tighten connector making sure not to pinch or short wires.
- Terminate the green/bare copper, black and white wires with spade terminals to fit a #8 screw. Fasten wires in control box as shown in FIG. 23.



- Install the cover onto the control box.

5. Connection Of Low Voltage Wires

CAUTION

Disconnect the positive (+) 12 volt DC terminal at the supply battery. Damage to equipment could occur if the 12 volt DC is not shut off.

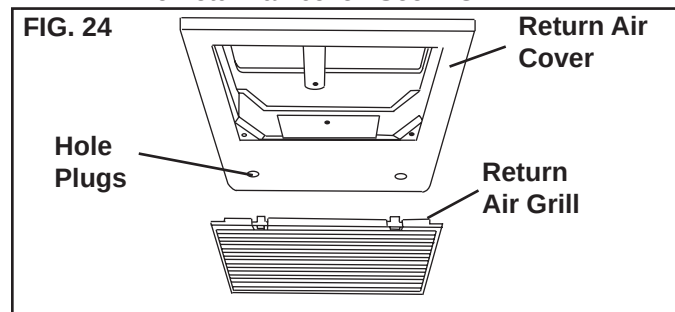
Note: If solar panel is installed see instructions packaged with solar panel option.

- Terminate the previously run 12 VDC wires with female 1/4" x 0.032 disconnects. Connect +12 VDC red wire to the "+12V" and the -12 VDC black wire to terminal labeled "COM" at the electrical control box. See FIG. 21.
- Terminate the previously run furnace wires (if applicable) with 1/4" x 0.032" female terminals. Connect these to the spade terminals labeled "FURNACE" at the electronic control box. The polarity of these connections does not matter. See FIG. 21.

- Terminate the flat 4-conductor control cable protruding into the 14-1/4" x 14-1/4" (±1/8") roof opening. The cable must be terminated with a telephone RJ-11-6P4C connector. See FIGS. 7, 8 & 9. Refer to the crimp tool manufacturer for crimping instructions.

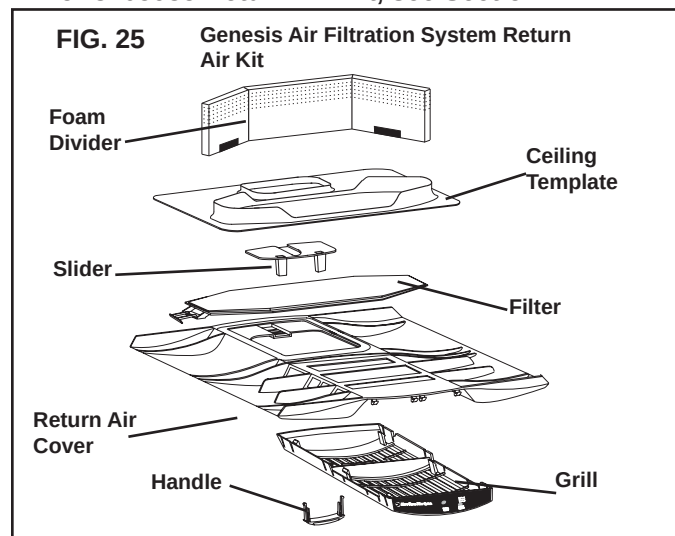
Important: RJ-11-6P4C connectors must be installed as shown in FIG. 7, 8 & 9.

- Plug the control cable into the telephone jack on the control box. See FIG. 21.
- #### 4. Installing Decorative Inside Cover
- Remove the return air grill from the return air cover.
 - Place the return air cover up to the ceiling template.
 - Install cover to template with #8 x 3/8" blunt point Phillips head screws provided (6 required).
 - Reinstall filter return air grill into return air cover. Align tabs with mating notches and snap into place.
 - Install two hole plugs into screw holes in back of return air cover. See FIG. 24.

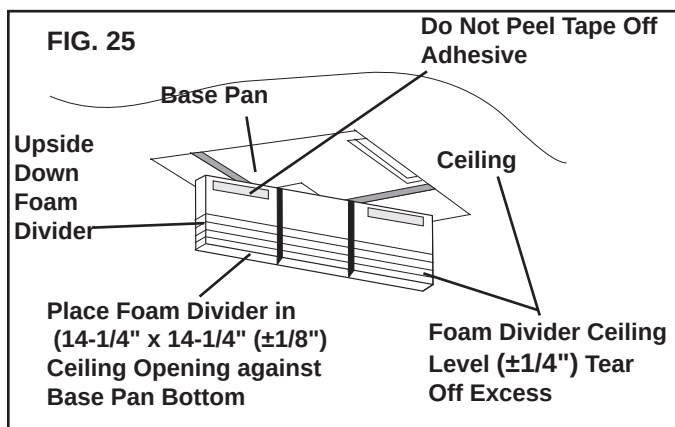


- Verify that all features of the installed system work. Please read Unit Operating Instructions before proceeding. Check fan speed, cooling and furnace (if connected). If the features do not work disconnect the 12 VDC and 120 VAC power supplies and verify that all wiring is correct.

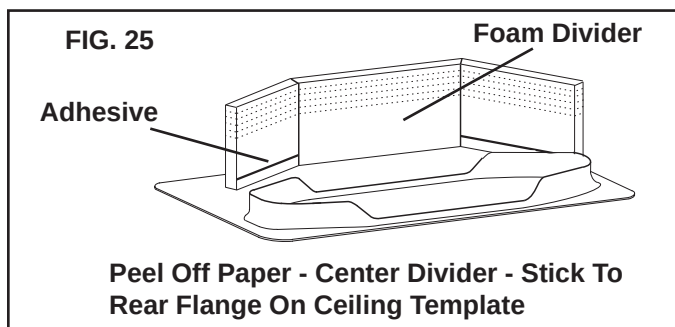
I. Installing Unit with 3308120 Genesis Air Filtration System. For installation of 3105007 or 3105935 Return Air Kit, see Section H.



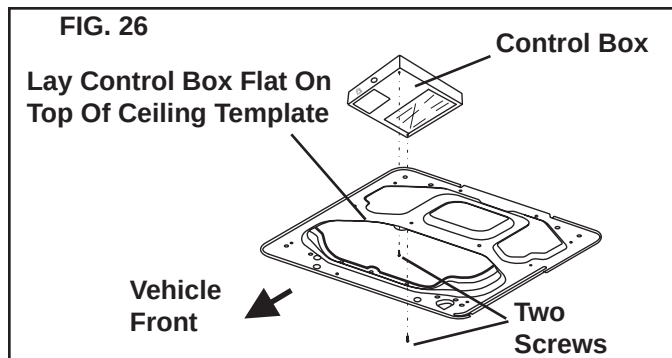
1. Check gasket alignment of the unit over the roof opening and adjust if necessary. Unit may be moved from below by slightly lifting and moving. See FIG. 13.
- a. Remove return air cover, ceiling template, foam divider and air filter from the 3308120 carton.
- b. Locate the four (8" x 1/4-20) unit mounting bolts.
- c. Pull down the unit's electrical cord. See FIG. 14.
2. Installing Foam Divider
 - a. Locate the foam divider and insert it corner to corner in the 14-1/4" x 14-1/4" ($\pm 1/8$ ") opening with the adhesive tape up (Do not remove paper to expose adhesive). The foam divider should be level with the ceiling ($\pm 1/4$ "). Tear off the excess at the pre-cut perforations in divider. See FIG. 25.



- b. Peel the paper off of the foam divider and stick it in place on the center of the rear flange of the return air opening on the ceiling template. See FIG. 25.



3. Install control box on ceiling template with blunt self-tapping screws. See FIG. 26.

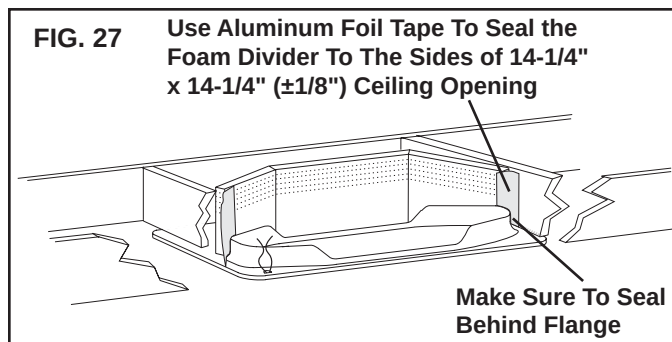


4. Place the ceiling template up into the return air opening and plug the unit's control cable into the control box before installing the mounting bolts.
5. Insert the Freeze Control Sensor as shown in FIG. 20.
6. Start each mounting bolt through the ceiling template and up into the unit base pan by hand. **EVENLY** tighten the four 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 over tightening is not necessary.

CAUTION

If bolts are left loose there may not be adequate roof seal or if over tightened, damage may occur to the unit base or ceiling template. Tighten to specifications listed in this manual.

7. Use Aluminum foil tape (not supplied) to seal the ends of the foam divider to the sides of the opening. Make sure the area behind the flange on the ceiling template is sealed. See FIG. 27.



CAUTION

Improper installation and sealing of foam divider will cause the compressor to quick cycle on the cold control. This may result in fuse or circuit breaker opening and/or lack of cooling.

8. Wiring The Control Box.
 - a. Connect the 6 pin plug to the control box. The plug is polarized and will only fit in one direction.
 - b. Insert the Freeze Control Sensor approximately 1" into the evaporator coil fins located at the curb side. See FIG. 20.
 - c. Bend fins over sensor to secure in place.
 - d. Connect the 2 pin connector with BLUE wires on the control box terminals labeled "FREEZE STAT". See FIG. 21.
 - e. Reach up into the return air opening and pull the remaining wires down.
9. Connection Of 120 Volt Power Supply

⚠ WARNING

Disconnect 120 volt AC. Failure to follow these instructions could create a shock hazard causing death or severe personal injury.

⚠ WARNING

This product is equipped with a 3-wire (grounded) system for protection against shock hazard. Make sure that the appliance is wired into a properly grounded 120 volt AC circuit and the polarity is correct. Failure to do so could result in death, personal injury or damage to the equipment.

- a. Route power supply line through Romex connector into control box. Tighten connector making sure not to pinch or short wires.
- b. Terminate the green/bare copper, black and white wires with spade terminals to fit a #8 screw. Fasten wires in control box as shown in FIG. 23.
- c. Install the cover onto the control box.

10. Connection Of Low Voltage Wires

CAUTION

Disconnect the positive (+) 12 volt DC terminal at the supply battery. Damage to equipment could occur if the 12 volt DC is not shut off.

Note: If solar panel is installed see instructions packaged with solar panel option.

- a. Terminate the previously run furnace wires (if applicable) with 1/4" x 0.032" female terminals. Connect these to the spade terminals labeled "FURNACE" at the electronic control box. The polarity of these connections does not matter. See FIG. 21.

- b. Terminate the flat 4-conductor control cable protruding into the 14-1/4" x 14-1/4" (±1/8") roof opening. The cable must be terminated with a telephone RJ-11-6P4C connector. See FIGS. 7, 8 & 9. Refer to the crimp tool manufacturer for crimping instructions.

Important: RJ-11-6P4C connectors must be installed as shown in FIG. 7, 8 & 9.

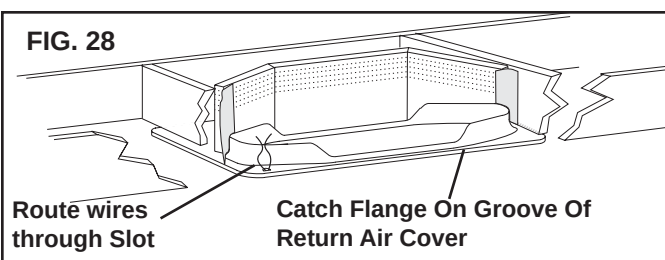
- c. Plug the control cable into the telephone jack on the control box. See FIG. 21.

11. Installation of 3308120 Genesis Air Filtration System Decorative Cover

Note: If solar panel is installed see instructions packaged with solar panel option.

- a. Install the slider in the return air cover and raise it to the ceiling template. See FIG. 25.
- b. Route the filter indicator wires from the return air cover through the template slot leaving 3" extended. See FIG. 28.

FIG. 28



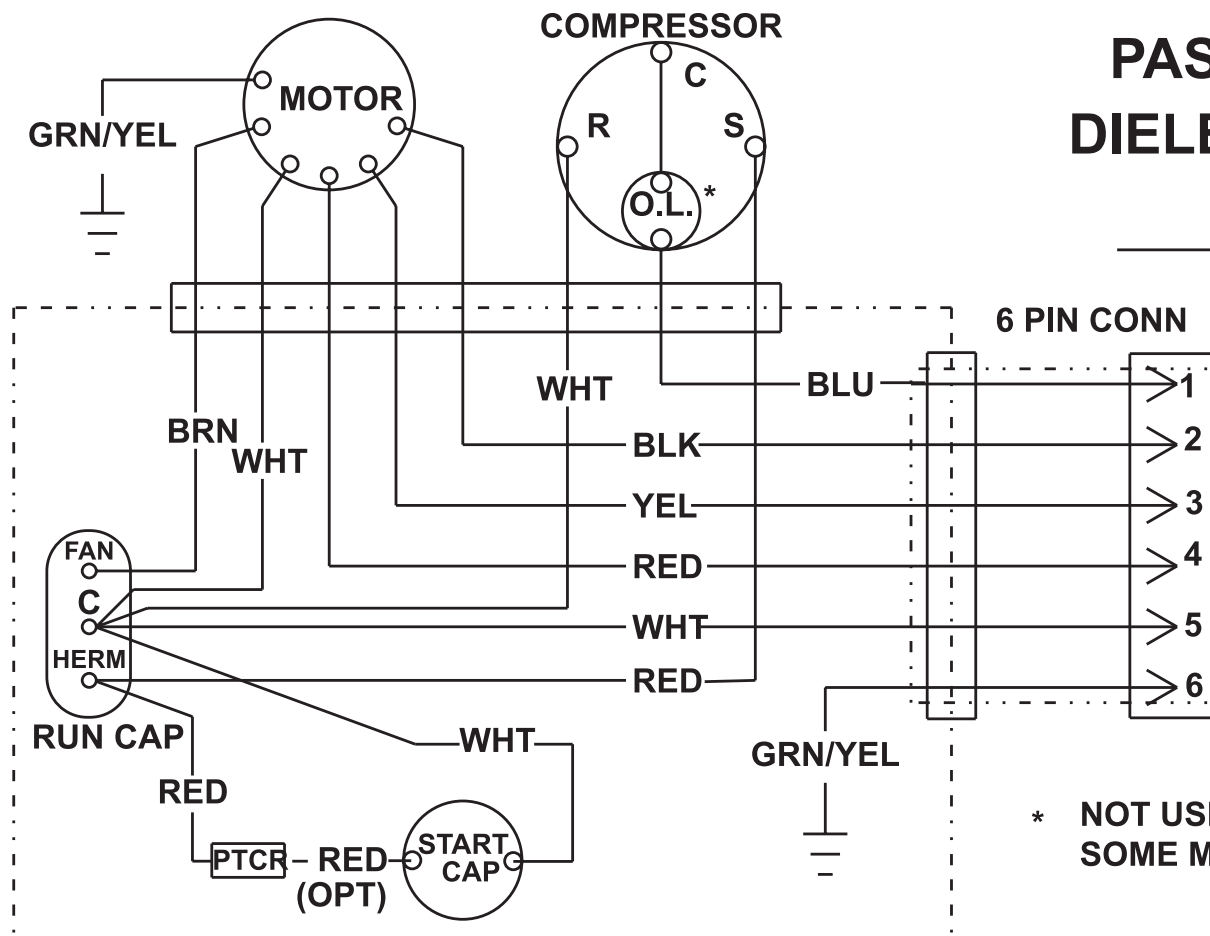
- c. Place the wires where they can be reached after plastic cover is installed. Place the front of the return air cover against the ceiling and slide towards the rear. The flange on the ceiling template will catch in the groove on the return cover. Adjust the position (right to left) and install the front two screws. Start and tighten the remaining screws to hold it in place.
- d. Cut one each Black & Red wire 18 - 22 AWG. 6"-8" long. Terminate end of both cut wires with female 1/4" x 0.032" terminals. Strip opposite end of the wires.
- e. Splice together using a "listed" connector the + 12 VDC supply Red wire, Red filter indicator wire, the Red wire from the solar panel (if applicable) and the stripped end of the Red female 1/4" x 0.032" terminated 6"-8" red wire. Connect the 1/4" x 0.32 female terminal on the 6"-8" Red wire to the spade connector marked +12V. on the electrical control box. Do the same on the black leads. Attach black to spade terminal labeled COM. on the control box. See FIG. 21.

Note: Number 10 cabinet screw can be used to replace the two front screws when the ceiling material is hard.

- f. Tighten the screws holding the return air cover. Slide the filter from the right side (looking toward the RV front) over the wires. Make sure the wires are above the filter and are out of its way.

- g. Place grill on return air cover and snap in place, and install decal on end over circuit board.
- h. Place slide handle through slots in grill into the slide posts. Handle will fit in either direction.
- i. Verify that all features of the installed system work. Please read Unit Operating Instructions before proceeding. Check fan speed, cooling and furnace (if connected). If the features do not work disconnect the 12 VDC and 120 VAC power supplies and verify that all wiring is correct.

**640312.301, 640315.301 & 640315.306
AIR CONDITIONER WIRING DIAGRAM**



3308032.097

3309697.005 CONTROL KIT WIRING DIAGRAM

