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**SERVICE CENTER &
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Please Visit:
www.eDometic.com

**3314537.000
COLEMAN TO BRISK**

**3314537.014
COLEMAN TO PENGUIN**

**CONVERSION KITS FOR
DUCTED AIR CONDITIONERS ONLY
(NOT FOR USE ON HEAT PUMPS)
(NOT FOR USE ON MODELS WITH
PRE-INSTALLED CONTROL BOARDS)**

This kit will convert the following
COLEMAN (flush-mounted, cool or cool/
heat, no heat strip) models ONLY with
single zone, cool/heat only thermostat

R-410A: 48 Series

R-410A: 49 Series

R-22: 83,84,86 Series

R-22: 92 Series

SERVICE INSTRUCTIONS

**3314537.000
3314537.014
CONVERSION KITS**

REVISION A

Form No. 3314526.041 01/17
(French 3314582.044_A)
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LaGrange, IN 46761



Read these instructions carefully. These
instructions **MUST** stay with this product.

INTRODUCTION

These instructions apply to our Coleman to Brisk and Coleman to Penguin conversion kits. This kit allows you to use your existing (single zone, cool/heat only thermostat) control devices with a new Brisk or Penguin air conditioner (hereinafter referred to as “unit,” “product,” or “air conditioner”). This kit will convert Coleman ducted air conditioners (flush-mounted, cool/heat, no heat strip models) **ONLY** (not for use on heat pumps). Please make sure your model is supported before proceeding with this procedure. Use the following procedure to ensure a properly installed, and properly functioning unit.

Dometic Corporation reserves the right to modify appearances and specifications without notice.

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DOCUMENT SYMBOLS



Indicates additional information that is **NOT** related to physical injury.



Indicates step-by-step instructions.

IMPORTANT SAFETY INSTRUCTIONS

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

A. Recognize Safety Information



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

B. Understand Signal Words

A signal word will identify safety messages and property damage messages, and will indicate the degree or level of hazard seriousness.

⚠ WARNING indicates a hazardous situation that, if **NOT** avoided, could result in death or serious injury.

⚠ CAUTION indicates a hazardous situation that, if **NOT** avoided, could result in minor or moderate injury.

NOTICE is used to address practices **NOT** related to physical injury.

C. Supplemental Directives



Read and follow all safety information and instructions to avoid possible injury or death.

Read and understand these instructions before [installing / using / servicing / performing maintenance on] this product.

Incorrect [installation / operation / servicing / maintaining] of this product can lead to serious injury. Follow all instructions.



The installation **MUST** comply with all applicable local or national codes, including the latest edition of the following standards:

U.S.A.

- ANSI/NFPA70, National Electrical Code (NEC)
- ANSI/NFPA 1192, Recreational Vehicles Code

CANADA

- CSA C22.1, Parts I & II, Canadian Electrical Code
- CSA Z240 RV Series, Recreational Vehicles

D. General Safety Messages

⚠ WARNING Failure to obey the following warnings could result in death or serious injury:

- This product **MUST** be [installed / serviced] by a qualified service technician.
- Do **NOT** modify this product beyond the scope of these service instructions. Modification (beyond these service instructions) can be extremely hazardous.

⚠ CAUTION CUT HAZARD. Wear protective gloves while handling or working near sheet metal components. Sheet metal parts could have sharp edges. Failure to obey this caution could result in injury.

GENERAL INFORMATION

A. Scope Of Delivery

Common items:

- (1) Service Instructions
- (1) Hole Template (Decal)
- (1) Wire Harness Adapter
- (4) 1/4"-20 X 7" L Mounting Bolt
- (2) 10-24 X 1" Screw
- (2) 10-24 Wing Nut

Penguin only:

- (1) Front Adapter Bar
- (1) Rear Adapter Bar
- (4) 1/4"-20 X 4" L Mounting Bolt

B. Optional Components & Kits

- (1) 3100895.014 9.5" Roof Bolts (Kit)

C. Required tools

Common items:

- Torque Wrench
- Electric Drill
- 1/8" Drill Bit
- 3/16" Drill Bit
- 5/16" Drill Bit
- #2 Phillips Head Screwdriver / Bit
- #2 Square Screwdriver / Bit
- 5/16" Hex Nut Driver / Bit
- 3/8" Hex Nut Driver / Bit

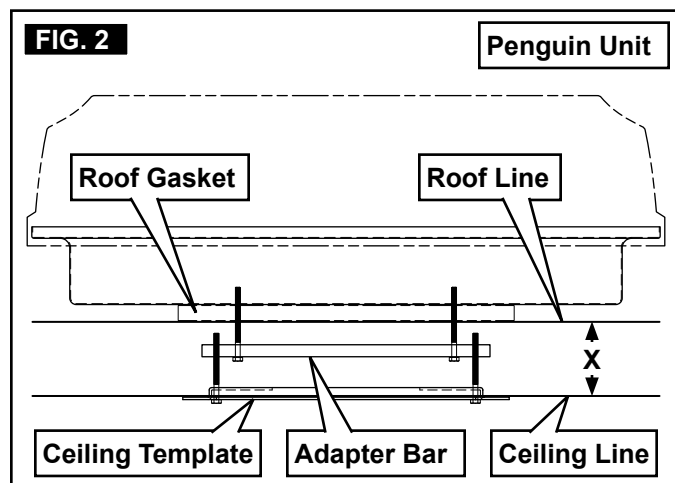
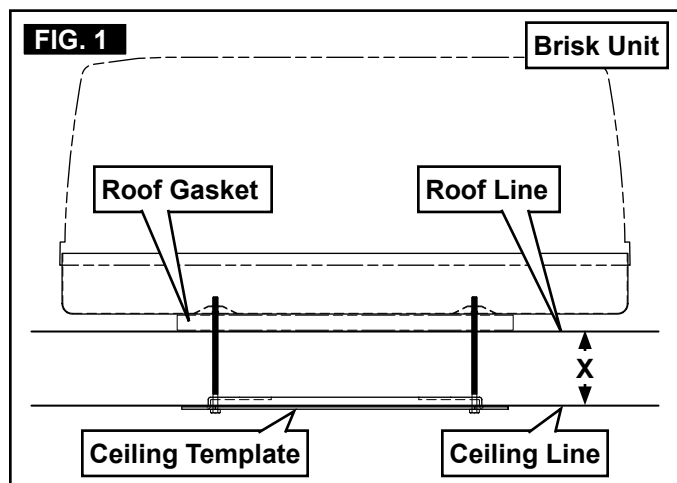
Penguin only:

- 1/4" Hex Nut Driver / Bit

SPECIFICATIONS

A. Roof Thickness Range

Air Conditioner Type		"X" - Using 7" Roof Bolts (Supplied)		"X" - Using 9.5" Roof Bolts (Kit 3100895.014)	
		Minimum	Maximum	Minimum	Maximum
Brisk Unit	See (FIG. 1)	1"	5 1/8"	1"	7 5/8"
Penguin Unit	See (FIG. 2)	4"	7 1/8"	4"	9 5/8"



PROCEDURE

A. Remove Coleman Unit

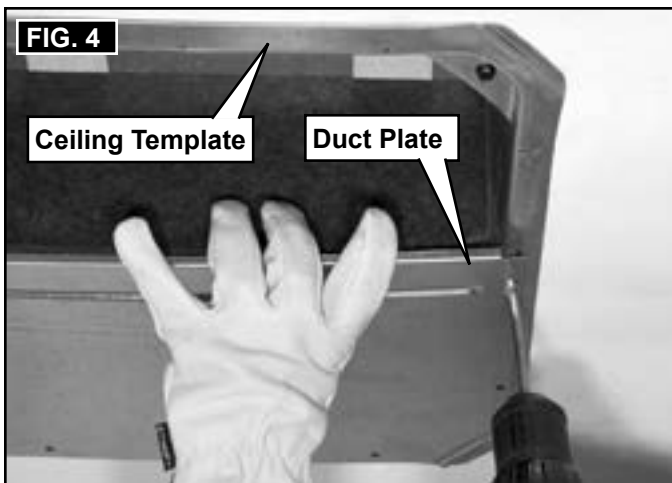
i Your old Coleman unit may have minor differences from what's pictured within these instructions.

- 1. ⚠️ WARNING** ELECTRICAL SHOCK HAZARD. Disconnect power from RV before accessing wiring connections. If wiring is damaged, it **MUST** be replaced by a qualified service technician. Failure to obey these warnings could result in death or serious injury.
- 2. NOTICE** Disconnect the positive (+) 12 Vdc terminal from supply battery. Otherwise, damage to unit could occur.
- 3.** Remove return air cover (with screws and filter) from unit. Save for reinstallation later. See (FIG. 3).

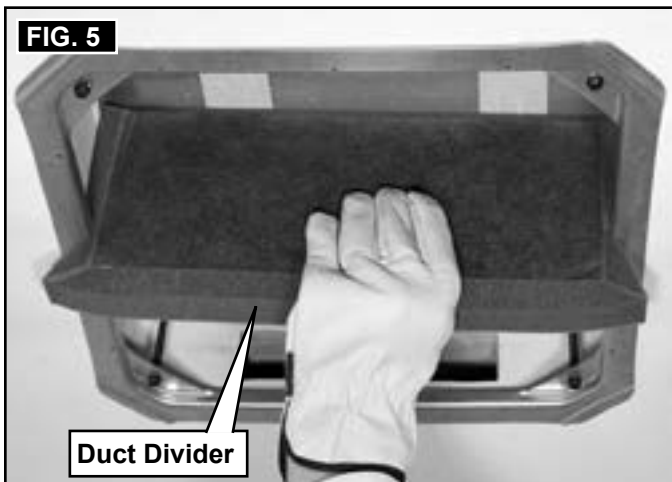


- 4.** Remove duct plate (with screws) from ceiling template. See (FIG. 4).

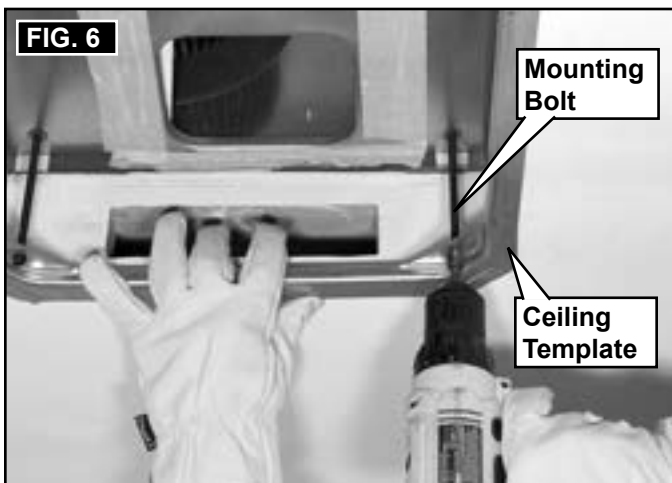
PROCEDURE



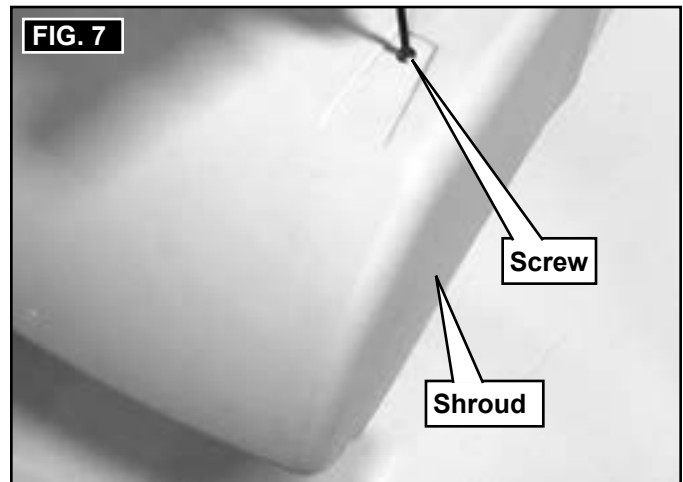
5. Remove duct divider from unit. See (FIG. 5).



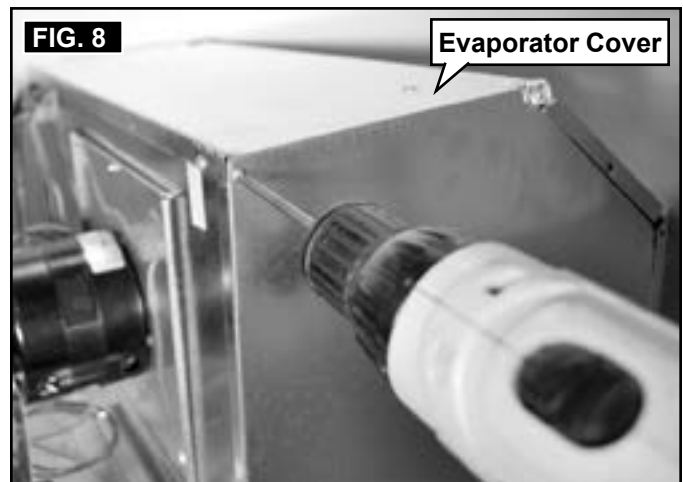
6. Disconnect all wiring attached from RV to Coleman unit.
7. Remove ceiling template (with mounting bolts). Save ceiling template for reinstallation later. Discard mounting bolts. See (FIG. 6).



8. **⚠ CAUTION** LIFTING HAZARD. Use proper lifting technique and control when lifting product. Failure to obey this caution could result in injury. With a mechanical lift, remove Coleman unit from RV roof.
9. Remove shroud (with screws) from Coleman unit. See (FIG. 7).

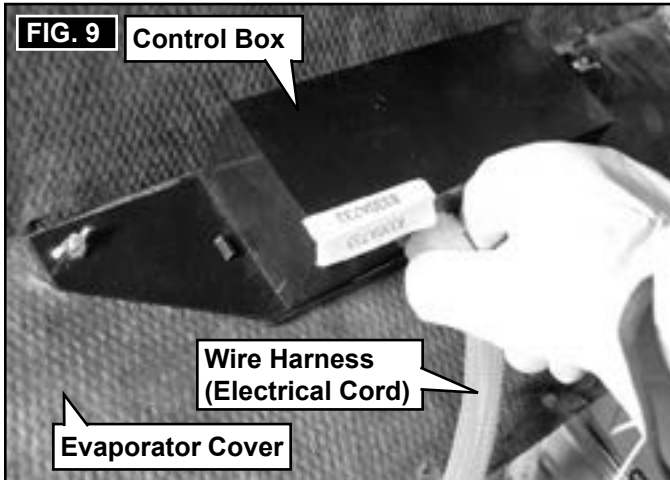


10. Remove evaporator cover (with screws) from Coleman unit. See (FIG. 8).

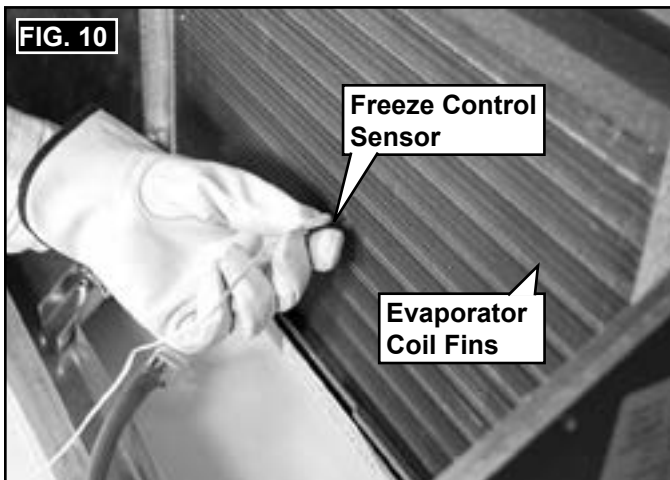


PROCEDURE

11. Disconnect Coleman unit's wiring harness (electrical cord) from control box (inside evaporator cover). See (FIG. 9).

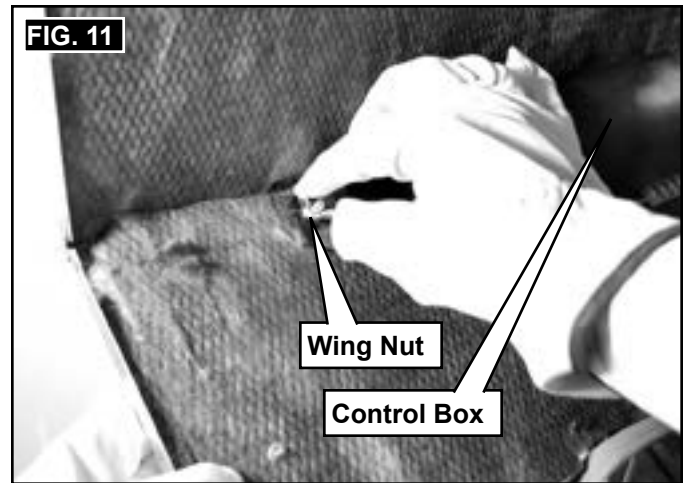


12. Pull freeze control sensor out from evaporator coil fins. Save for reinstallation later. See (FIG. 10).



13. Remove control box (with screws and wing nuts) from inside surface of evaporator cover. Discard screws and wing nuts. Save control box for reinstallation later. See (FIG. 11).

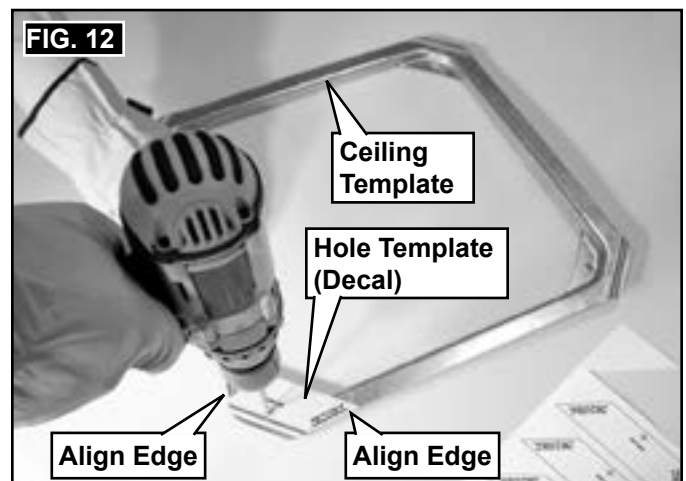
i Allow control box to hang freely under roof opening (inside RV).



B. Prepare Coleman Ceiling Template

1. Drill (4) pilot holes into ceiling template. See (FIG. 12).
 - a. Remove hole template from decal backing. Then align hole template edges to ceiling template edges, and press into place.

i Some decal sheets may **NOT** be die cut, and will require cutting out the (4) hole templates along printed edges.
 - b. Drill 1/8" pilot hole through ceiling template (at marked location on hole template).
 - c. Remove hole template from ceiling template.
 - d. Repeat steps (a) through (c) for each corner.



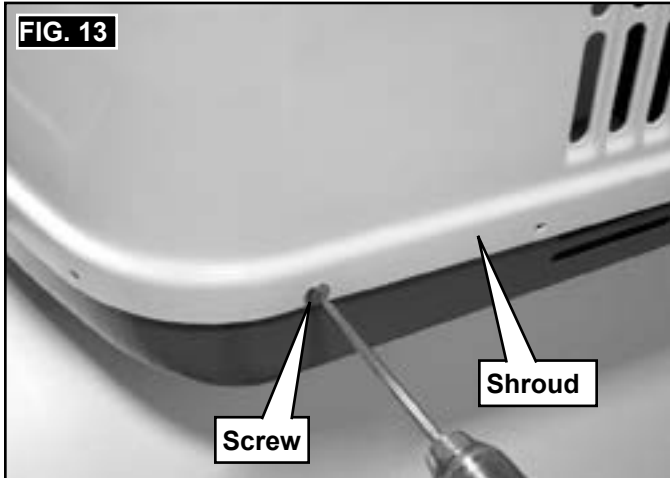
2. Drill (4) 5/16" holes through ceiling template at previously drilled pilot holes. See (FIG. 12).

PROCEDURE

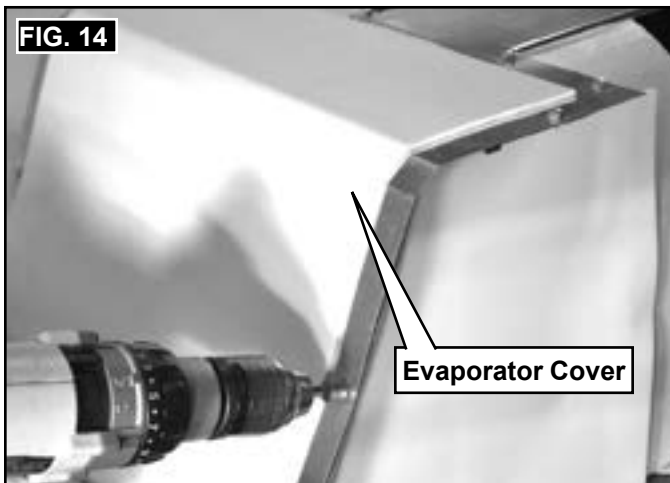
C. Prepare Dometic Brisk Unit

This section is for Brisk units only. For Penguin units, skip to section, "D. Prepare Dometic Penguin Unit" on page (7).

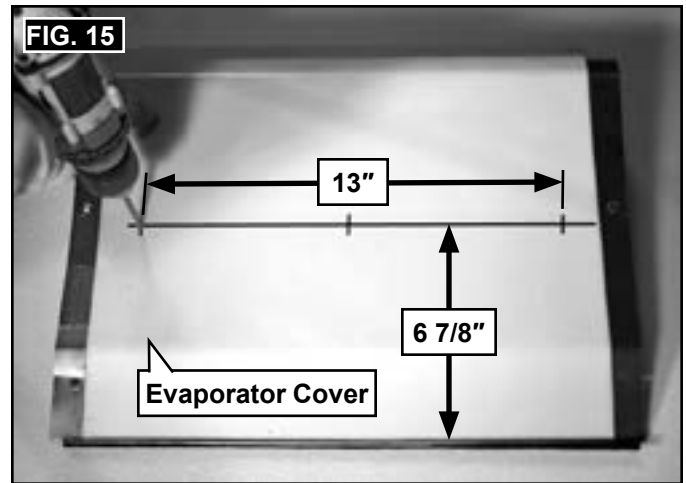
-  1. Remove shroud (with screws) from Dometic unit. Save for reinstallation later. See (FIG. 13).



2. Remove evaporator cover (with screws) from Dometic unit. Save for reinstallation later. See (FIG. 14).



3. Drill mounting holes for control box. See (FIG. 15).
- Mark a line on outside surface of evaporator cover that's 6 7/8" from (and parallel to) bottom edge.
 - Mark (2) hole locations centered on marked line and 13" apart.
 - Drill (2) 3/16" holes on marked locations.

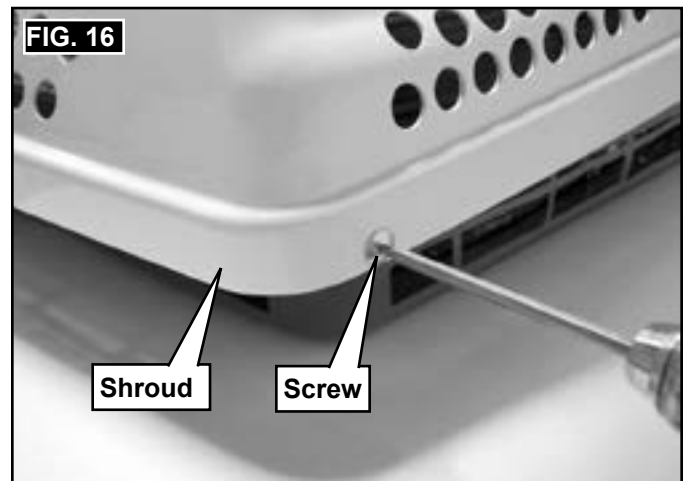


4. Proceed to section, "E. Place Dometic Unit On Roof" on page (8).

D. Prepare Dometic Penguin Unit

This section is for Penguin units only. For Brisk units, skip to section, "E. Place Dometic Unit On Roof" on page (8).

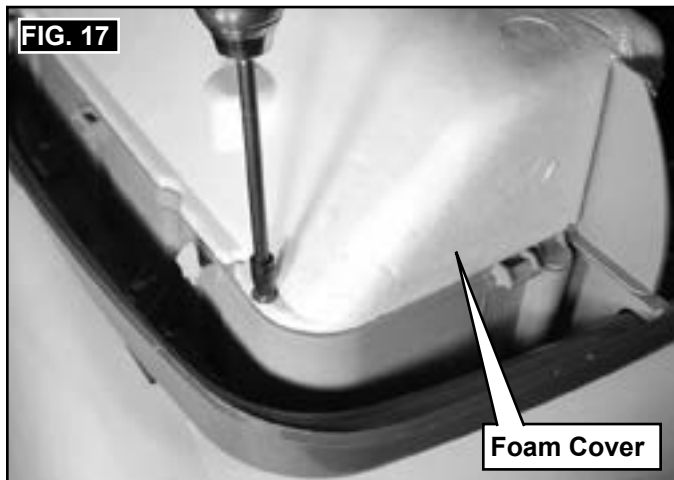
-  1. Remove shroud (with screws) from unit. Save for reinstallation later. See (FIG. 16).



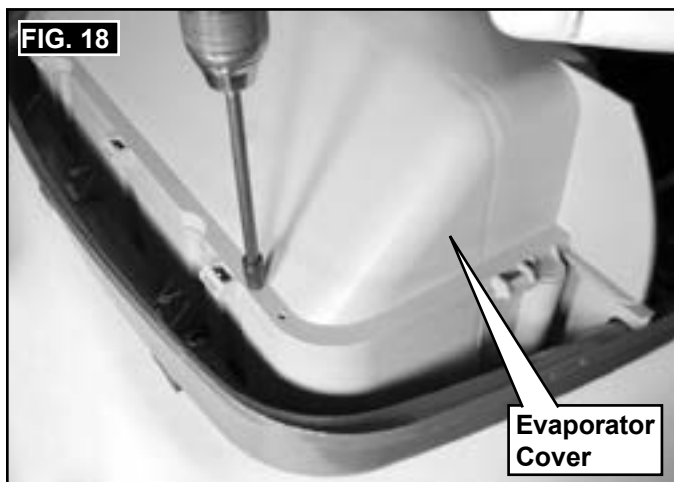
PROCEDURE

2. Remove foam cover (with screws) from Dometic unit's evaporator cover. Save for reinstallation later. See (FIG. 17).

 Some units may **NOT** have a foam cover on evaporator cover. Disregard this step for those units.



3. Remove evaporator cover (with screws) from Dometic unit. Save for reinstallation later. See (FIG. 18).

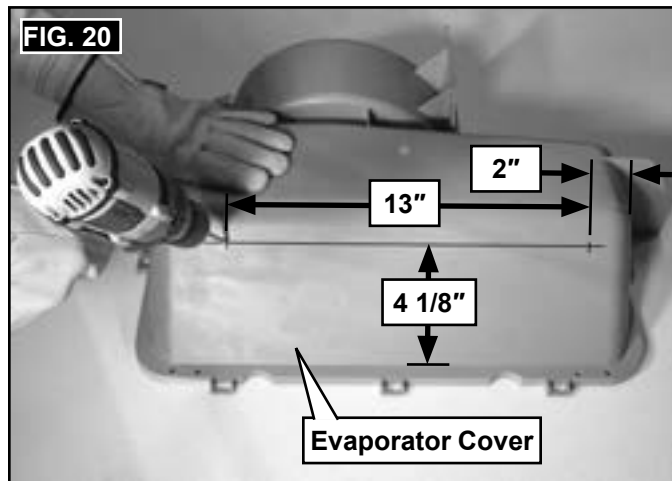
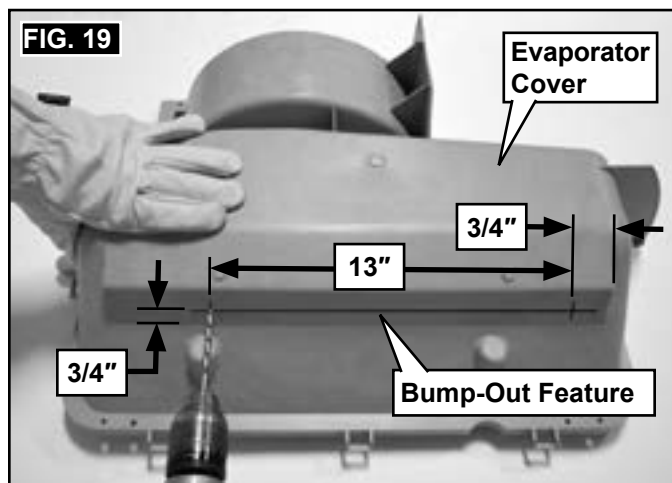


4. Drill mounting holes in evaporator cover for control box.

 There are (2) possible styles of evaporator cover. See appropriate step below for the style on your unit.

- a. For evaporator cover **WITH** bump-out feature, follow this step. See (FIG. 19).
 - I. Mark a line on outside surface of evaporator cover that's 3/4" above (and parallel to) bottom corner of bump-out feature.
 - II. Mark (2) hole locations on marked line: One at 3/4" from right side of bump-out feature, and another 13" left of the first.

- III. Drill (2) 3/16" holes on marked locations.
- b. For evaporator cover **WITHOUT** bump-out feature, follow this step. See (FIG. 20).
 - I. Mark a line on outside surface of evaporator cover that's 4 1/8" from (and parallel to) bottom corner of rim.
 - II. Mark (2) hole locations on marked line: One at 2" from right wall, and another 13" left of the first.
 - III. Drill (2) 3/16" holes on marked locations.



E. Place Dometic Unit On Roof

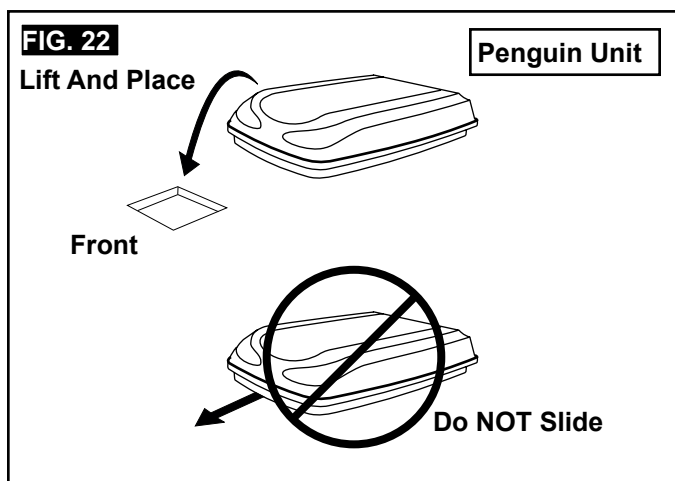
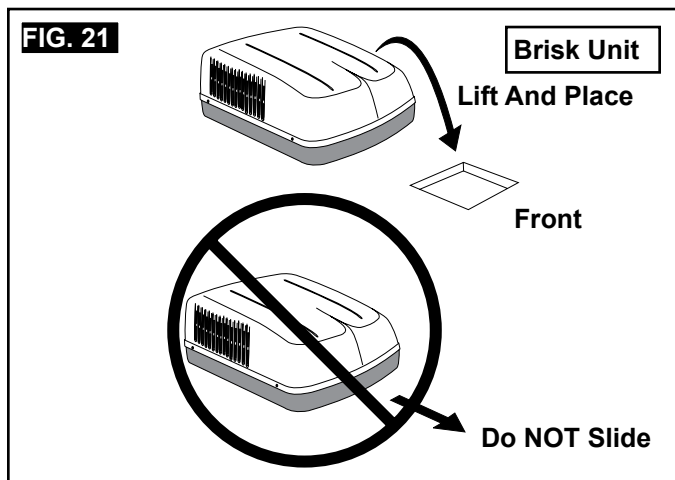
-  1. **WARNING** Inspect previous installation. These instructions assume that prior installation was performed and designed correctly. See Installation Instructions (provided with Dometic unit) for proper location, roof preparation, system design, and wiring requirements. Failure to obey this warning could result in death or serious injury.

PROCEDURE

2. **⚠ CAUTION** LIFTING HAZARD. Use proper lifting technique and control when lifting product. Failure to obey this caution could result in injury.

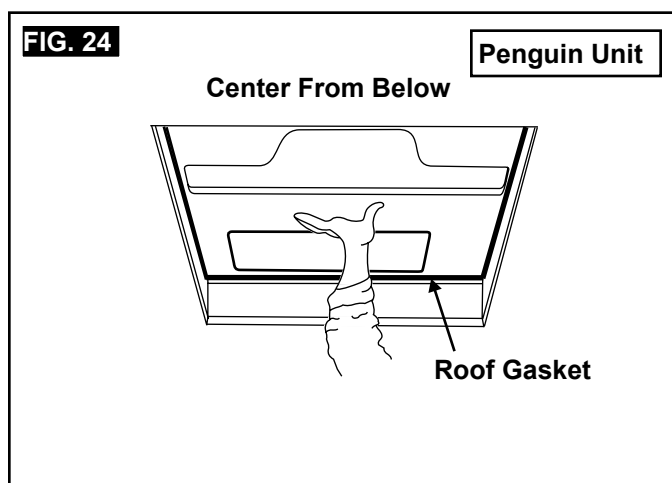
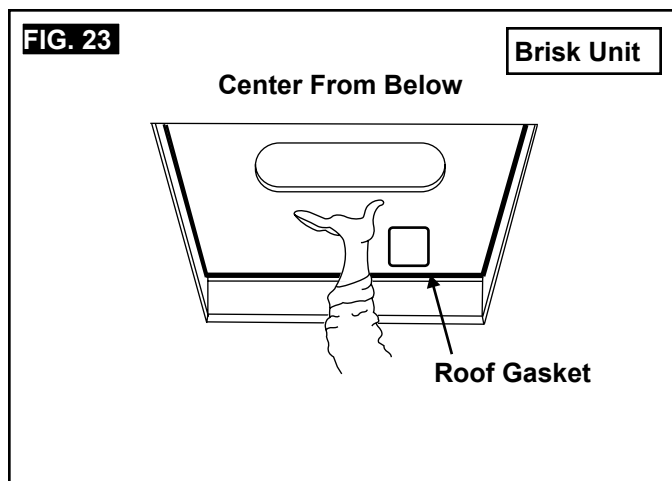
NOTICE Do **NOT** slide unit. Otherwise, damage to gasket (on bottom of unit) may occur, and could cause a leak.

With a mechanical lift, place Dometic unit on RV roof, then lift and place over opening using unit's gasket as a guide. See (FIG. 21) & (FIG. 22).



3. Check gasket alignment of unit over 14" X 14" roof opening, and adjust to center if necessary. See (FIG. 23) & (FIG. 24).

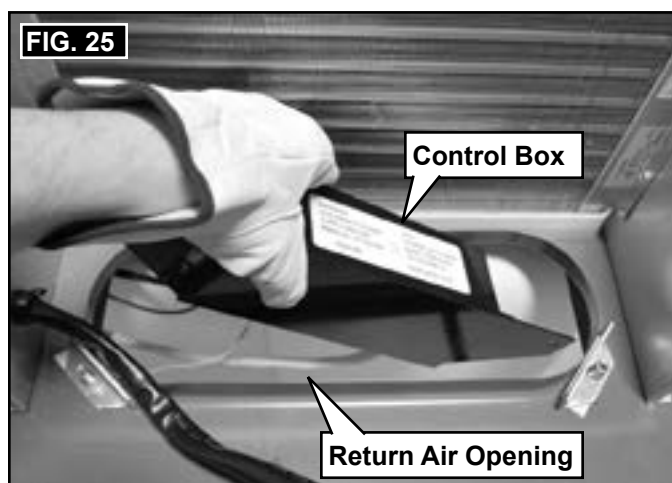
i Unit may be moved from below by slightly lifting.



F. Install Dometic Brisk Unit

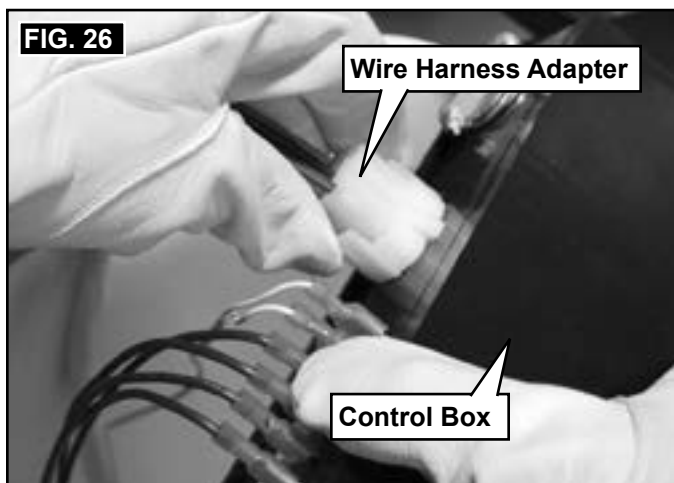
This section is for Brisk units only. For Penguin units, skip to section, "G. Install Dometic Penguin Unit" on page (11).

1. Carefully pull control box through roof opening and unit's return air opening. See (FIG. 25).

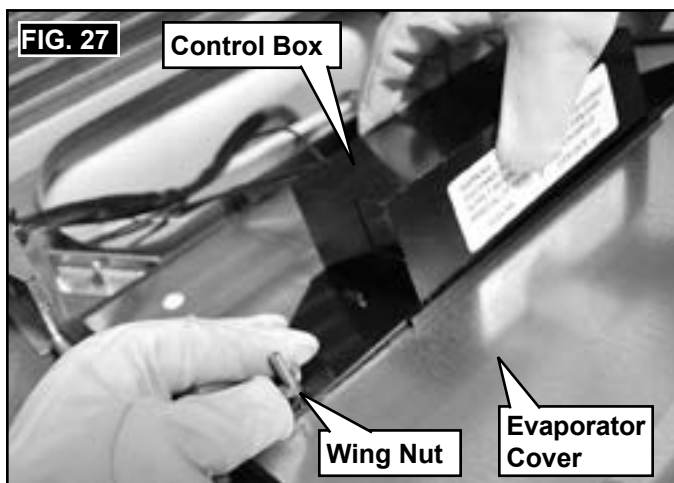


PROCEDURE

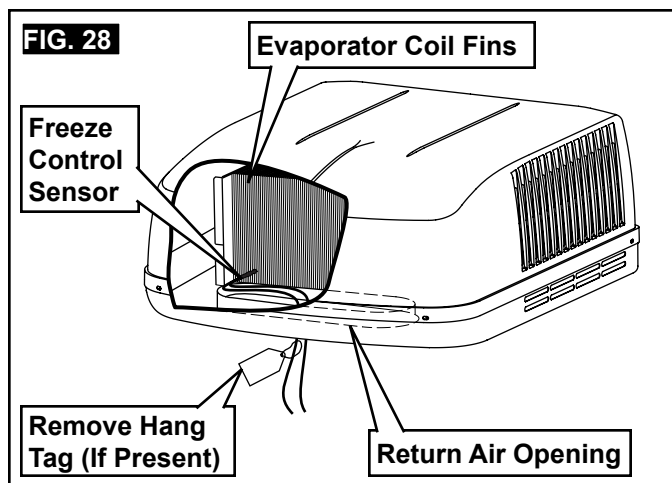
2. Connect wire harness adapter to control box. See (FIG. 26).



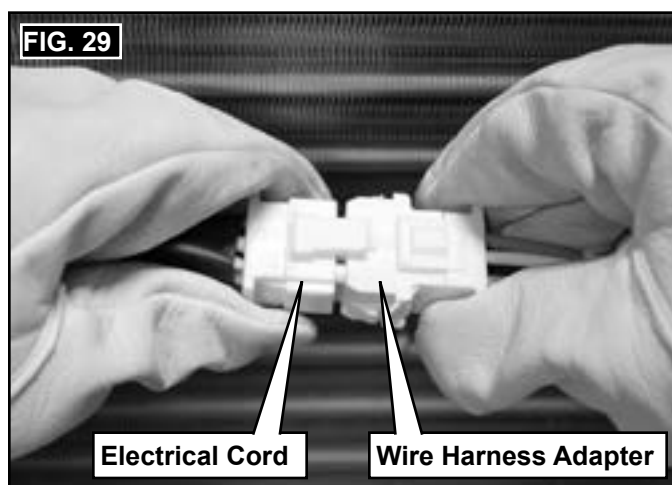
3. Install control box (with screws and wing nuts) onto inside surface of Dometic evaporator cover. See (FIG. 27).
 - a. Place pan head screws from outside of evaporator cover, and through control box.
 - b. Place and tighten wing nuts onto pan head screws from inside of evaporator cover.



4. Insert freeze control sensor into evaporator coil fins approximately 1" above bottom of coil fins and on left side of unit. Bend fins over sensor to secure in place. See (FIG. 10) & (FIG. 28).



5. Connect wire harness adapter to unit's electrical cord. See (FIG. 29).



6. Reinstall evaporator cover (with screws) onto unit. See (FIG. 14).
7. Reinstall shroud (with screws) onto unit. See (FIG. 13).
8. Reinstall ceiling template. See (FIG. 30).

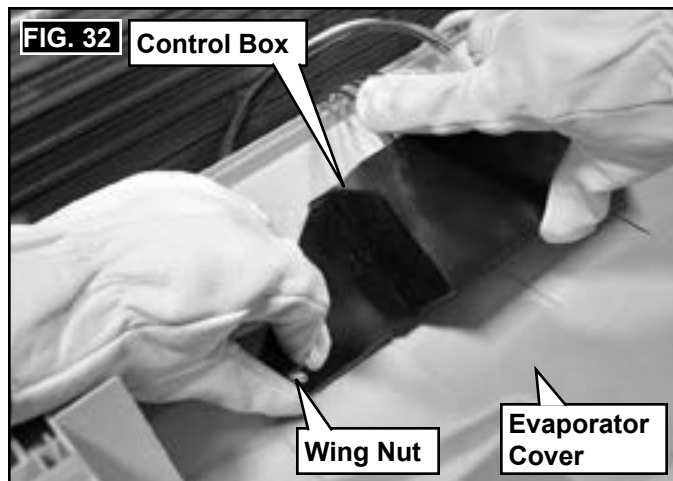
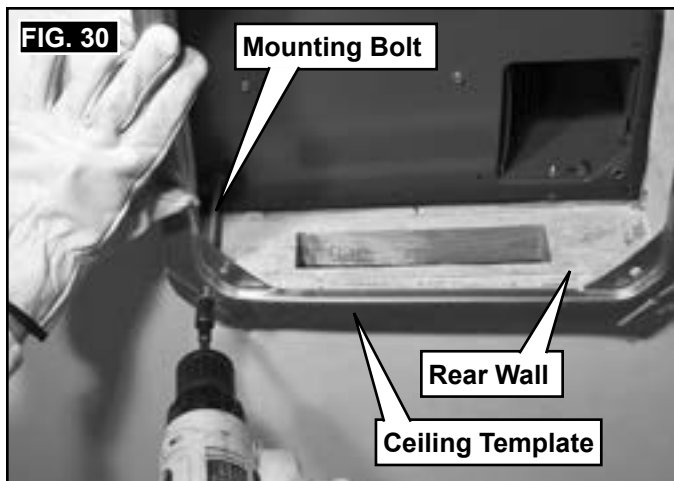
i Make sure ceiling template has the (4) holes added under section, "B. Prepare Coleman Ceiling Template" on page (6).

- a. Align ceiling template with roof opening.
- b. Screw 1/4"-20 X 7" L mounting bolts through drilled holes in ceiling template, and into unit's base pan.

i If roof is over 5 1/8" thick, use 9" roof bolts (optional kit).

- c. Tighten until ceiling template is hand-snug against ceiling.

PROCEDURE

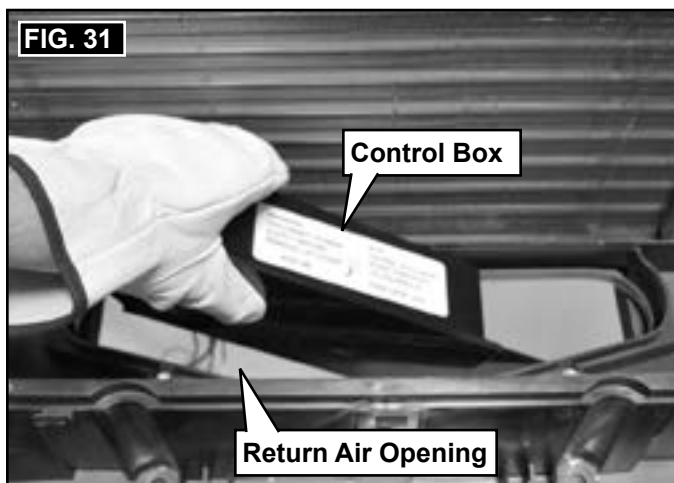


9. Proceed to section, "H. Complete Installation" on page (12).

G. Install Dometic Penguin Unit

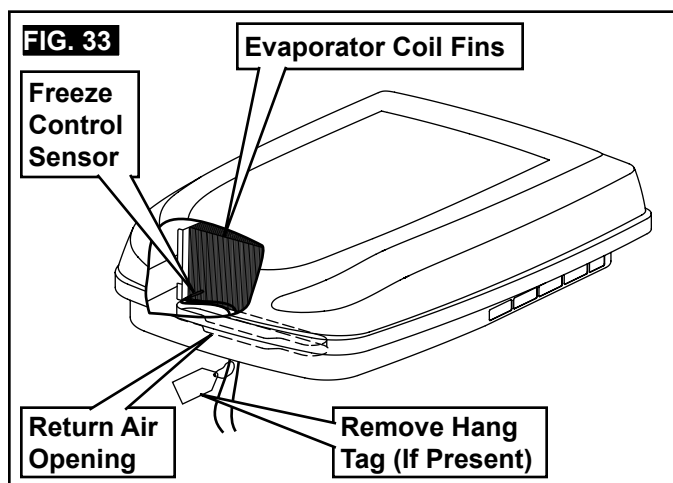
This section is for Penguin units only. For Brisk units, skip to section, "H. Complete Installation" on page (12).

1. Carefully pull control box through roof opening and unit's return air opening. See (FIG. 31).



2. Connect wire harness adapter to control box. See (FIG. 26).
3. Install control box (with screws and wing nuts) onto inside surface of Dometic evaporator cover. See (FIG. 32).
 - a. Place pan head screws from outside of evaporator cover, and through control box.
 - b. Place and tighten wing nuts onto pan head screws from inside of evaporator cover.

4. Insert freeze control sensor into evaporator coil fins approximately 1" above bottom of coil fins and on left side of unit. Bend fins over sensor to secure in place. See (FIG. 10) & (FIG. 33).



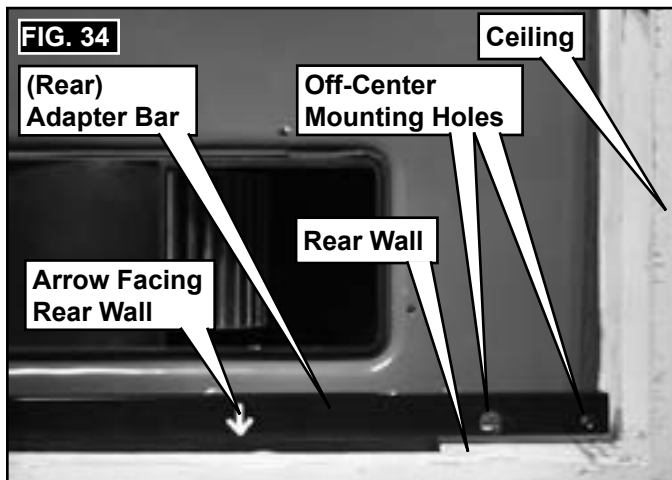
5. Connect wire harness adapter to unit's electrical cord. See (FIG. 29).
6. Reinstall evaporator cover (with screws) onto unit. See (FIG. 18).
7. Reinstall foam cover (with screws) onto evaporator cover (if applicable). See (FIG. 17).
8. Reinstall shroud (with screws) onto unit. See (FIG. 16).



Some units may **NOT** have a foam cover on evaporator cover. Disregard this step for those units.

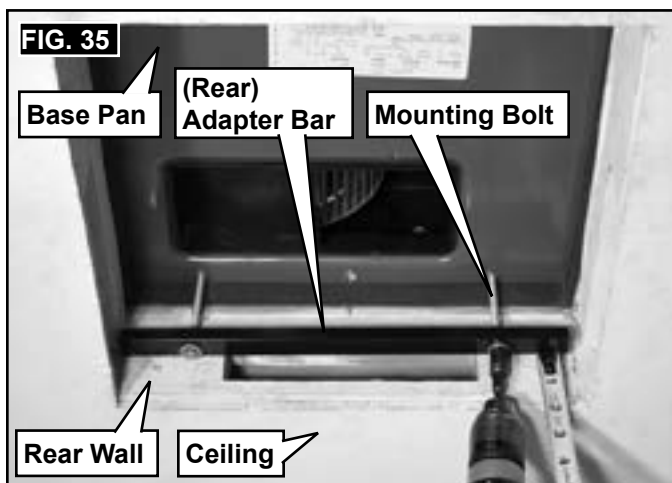
PROCEDURE

9. Place adapter bar inside roof opening, facing arrow toward correct (front or rear) wall of opening. See (FIG. 34).

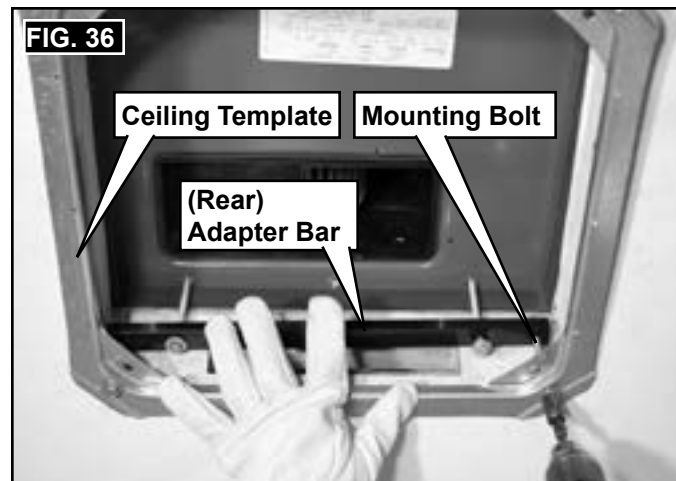


10. Screw both 1/4"-20 X 7" L mounting bolts through adapter bar and into unit's base pan until there's a 2" gap between bottom of adapter bar and ceiling surface. See (FIG. 35).

 If roof is over 7 1/8" thick, use 9" roof bolts (optional kit).



11. Repeat steps (9) through (10) for remaining adapter bar.
12. Reinstall ceiling template. See (FIG. 36).
 - a. Align ceiling template with roof opening.
 - b. Screw 1/4"-20 X 4" L mounting bolts through drilled holes in ceiling template, and into (front & rear) adapter bars.
 - c. Tighten until ceiling template is hand-snug against ceiling.



13. Proceed to section, "H. Complete Installation" on page (12).

H. Complete Installation

-  1. **NOTICE** Tighten mounting bolts to correct torque specifications. Overtightening could damage unit's base pan or ceiling template. Not enough torque will allow an inadequate roof seal, and could cause a leak.

Tighten all (4) mounting bolts **EVENLY** within 40 to 50 in·lb of torque. See (FIG. 30) & (FIG. 36).

 This will compress the roof gasket to approximately 1/2" (50%).

2. Verify all wires are properly connected to correct ports / terminals on unit's control box.
3. Reinstall duct divider into roof opening (seal against unit). See (FIG. 5).
4. Reinstall duct plate (with screws) onto ceiling template. See (FIG. 4).
5. Reinstall return air cover (with screws and filter) onto ceiling template. See (FIG. 3).

I. Unit Checkout

-  1. Reconnect the positive (+) 12 Vdc terminal to supply battery, and 120 Vac power to RV.
2. Test operation of unit to verify all features are functioning properly.

 Refer to the thermostat and unit operating instructions before testing system functions.