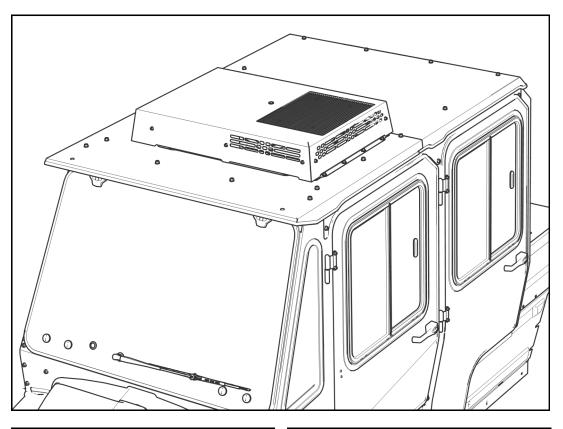


A/C Roof Kit p/n: 1ACCA17RFK Fits Club Car Carryall 1700 or XRT 1550 SE

Must be installed with Curtis cab: 47617514001

Must be installed with Curtis Air Conditioner: 1ACUNIT-G2

Must be installed with Curtis Alternator Kit: 1ACCA15DRK



Approximate Installation Time *

Experienced Dealer Technician – 45 Minutes

Average Dealer Technician – 1 Hour

Do-It-Yourself – 1.5 Hours

(*=Not including cab & other accessories)

Approximate Product Specifications

Ground to Top of Air Conditioner: 83 inches

Weight: 32 lbs. (not including 1ACUNIT-G2)

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

Rev. B, 03/22/2023

TABLE OF CONTENTS

| WARNINGS, TIPS, & REQUIRED TOOLS | 2 |
|----------------------------------|------|
| VEHICLE PREPARATION | |
| INSTALLATION | 4-10 |
| FINISHING TOUCHES | 11 |
| CARE AND MAINTENANCE | |
| BEACON LIGHT DRILL TEMPLATE | |
| SERVICE PARTS | 13 |

WARNINGS, TIPS, & REQUIRED TOOLS

For accurate installation, proper operation, and years of satisfaction, please read and understand the installation and owner's manual fully prior to installing this accessory.

From all of us at Curtis, we thank you for choosing our product.



Curtis Cabs, blades and general accessories add additional weight to the base vehicle. All Curtis accessory weights are listed in product brochures. Deduct the accessory's total weight from the vehicle's rated capacity and never exceed the vehicle's rated capacity including driver and passenger. **California Health and Safety Proposition 65 Warning:** This product may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

GENERAL INFORMATION BEFORE YOU START

HELPFUL HINTS:

- •To assist with installation, leave all fasteners loose for later adjustment unless otherwise specified.
- •Read and understand all instructions before beginning.
- •Apply a silicone sealant to seal any minor gaps that may occur due to vehicle variations.
- •Caution: Never turn the air conditioner upside down or on its side.

TOOLS REQUIRED:

- •Set of metric & standard sockets
- •Set of metric & standard open-end wrenches
- Inch series Allen wrenches
- Ratchet and extension
- •#2 and #3 Phillips head screwdriver
- Scissors or Snips
- Anti seize
- •9/32", 3/16", 7/16" and 5/8" drill bits
- •#2 Square Drive Bit
- •Hand Drill
- •Wire Cutters

STEP 1: (VEHICLE PREP)

- Remove the seat from the vehicle.
 OPTIONAL: remove the cab doors for better access inside the cab.
- **1.2** Disconnect both wires from the battery, negative then positive.
 - <u>Tools</u>

1/2" wrench or socket

- **NOTE:** If installing the air conditioner the same time as a new cab, use the A/C Roof in place of the standard cab roof, and install any accessories per the instructions in this manual.
- **1.3** Skip this step if an overhead console is not installed.

Remove the interior mirror (if present) from its mount, then remove the four 1/4-20 screws from the corners of the overhead console. Allow the console to hang from the windshield support via the cable tethers in the console. Figure 1.3. Retain the four screws for re-use.

Tools 3/8" and 7/16" wrenches or sockets

1.4 If front LED lights are installed, disconnect the wires and remove the lights from the roof. See Figure 1.4.

If a Beacon light is installed, disconnect wires and remove the light from the roof. Save all hardware including grommets from this step for re-installation at the end of this procedure.

- **NOTE:** If installing or re-installing a Beacon Light, follow the installation steps specific for the A/C in step 7.2 on page 10.
- **1.5** Remove the standard cab front roof assembly via twelve bolts, washers and nuts around the perimeter of the roof. See Figure 1.5. Retain the hardware for re-use with the A/C roof assembly.

The standard cab roof will not be reused.

<u>Tools</u>

Two 1/2" wrenches or sockets

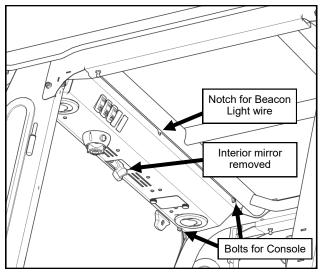


Fig. 1.3 (Disconnect overhead console)

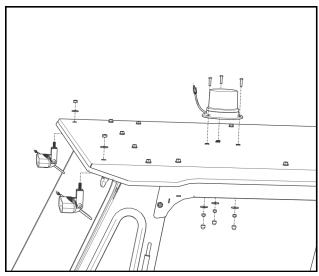
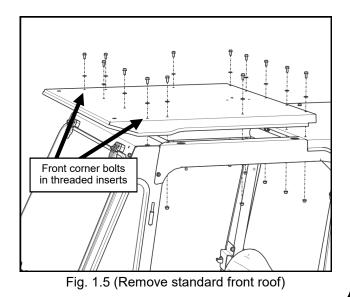


Fig. 1.4 (Remove accessories from roof)



STEP 2: (A/C UNIT PREP)

CAUTION: Never turn the air conditioner upside down or on its side. Doing so will drain the compressor of its oil and will void the warranty.

- **2.1** Before removing the A/C Unit from shipping pallet, installation of the (3) related A/C Unit harnesses must be completed. First, remove the dome plug on the side of the A/C Unit per Fig 2.1.
- **2.2** Install two 1-7/8" O.D. Grommets onto the end of the Power Supply Wire Harness per Fig. 2.2. Make sure small lip of both grommets are pointed towards this end.
- **2.3** Install A/C Power Supply Wire Harness into the side of the A/C Unit where the dome plug was removed in step 2.1.
- **2.4** Per fig. 2.4, route the power harness under the evaporator duct and forward to the power solenoid. Snake it below the refrigerant line making sure nothing is protruding too high above the unit that will interfere with A/C Cap installation and install the first of the two grommets into the hole.
- **2.5** If a Beacon Light is to be installed, remove the dome plug from the front of the A/C Unit as shown in Figure 2.1 and install a 1-7/8" O.D. Grommet in the hole with the small lip on the inside of the A/C Unit.

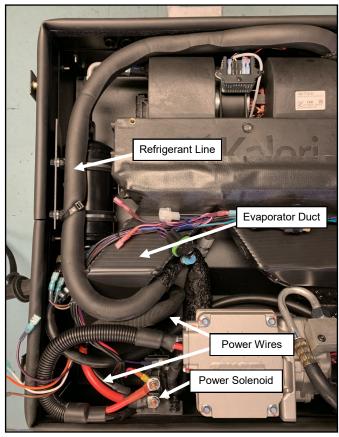


Fig. 2.4 (Route harness inside A/C Unit)

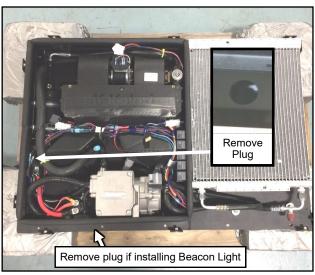


Fig. 2.1 (Remove dome plug from A/C Unit)

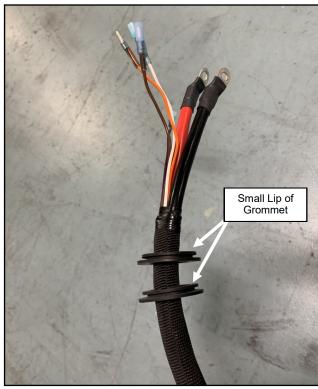


Fig. 2.2 (Install grommets on this end of power harness)

STEP 2: (A/C UNIT PREP CONT'D.)

2.6 Inside the A/C Unit, remove the nut securing the ground wires to the solenoid mounting plate. Next, install the Power Supply Wire Harness' black ground wire onto the bolt, re-install the nut, but leave loose as shown in fig. 2.6.

<u>Tools</u>

5/32" Allen Wrench 7/16" wrench or socket

2.7 Install the red power wire found on the A/C Power Supply Wire Harness onto the empty terminal found on the solenoid per fig 2.7.

Tools

1/2" wrench or socket

- **2.8** Install Jumper Harness supplied in the alternator kit onto the A/C Unit's main control harness per fig 2.8.
- **2.9** Install the (2) relays supplied onto the Controller Jumper Harness per fig 2.9.

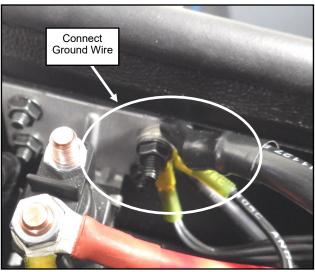


Fig. 2.6 (Connect ground to A/C Unit)

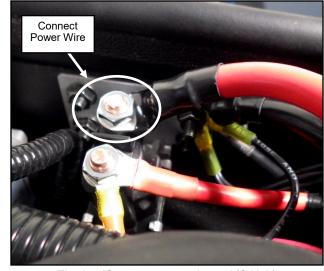


Fig. 2.7 (Connect power wire to A/C Unit)

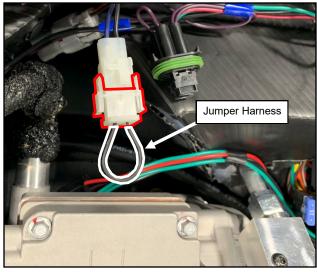


Fig. 2.8 (Install Jumper Harness)



Fig. 2.9 (Install relay into Controller Jumper Harness)

STEP 2: (A/C UNIT PREP CONT'D.)

2.10 Connect the Controller Wire Harness' white, purple, brown, and orange wires to the mating connectors found on A/C Power Supply Wire Harness per fig. 2.10.

Connect the Controller Wire Harness' purple wire with the female push on terminal to the A/C Unit's main control harness' purple wire as shown.

The long Orange wire will be connected at a later step.

2.11 Cut the cable tie off the fuse holder wiring shown in fig. 2.11a. Orient the fuse holder per fig. 2.11b

Long Orange Black Orange Brown Brown Urple w/ Female Terminal

Fig. 2.10 (Connect Controller Wire Harness)

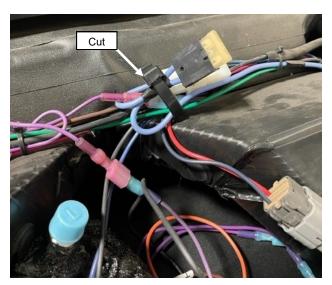


Fig. 2.11a (Cut Cable Tie)

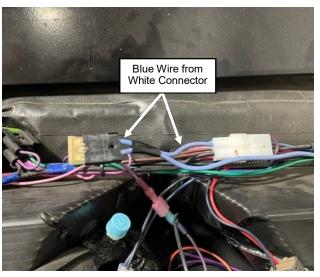


Fig. 2.11b (Orient Fuse Holder)

STEP 2: (A/C UNIT PREP CONT'D.)

2.12 Remove the 25amp fuse from the fuse holder and install the fuse tap as shown in fig. 2.12.

Make sure the fuse tap is oriented so that the red wire is on the same side as the blue wire from the white connector.

Note: Failure to orient the fuse tap properly will cause the fuses to blow.

Use a cable tie to secure the fuse tap and fuses to the fuse holder with blue wires.

Connect the female connector on the long orange wire from the relay harness to the red wire from the fuse tap harness. The male terminal on the long orange wire does not get used.

2.13 Bundle the wires in the tray formed by the ductwork as shown in fig. 2.13 and use the supplied tie wraps to hold the harnesses together.

Hardware Used 8" Wire Ties Tools Wire Cutters

2.14 Install the Controller Wire Harness' black ground wire onto the ground stud and tighten nut as shown in fig. 2.14.

Tools 5/32" Allen Wrench 7/16" wrench or socket

2.15 Locate the black drain tubes included in this kit. Attach drain tube to the side of the air conditioner on the right side of the vehicle. If required, rotate the nipples towards the rear of the vehicle at a slight downward angle.

Repeat this step for the opposite side of the A/C Unit.

Tip: Apply a little water to the nipple to lubricate and ease the installation of the drain tube.

Hardware Used PVC Tube, 3/8" Inside Dia. <u>Qty</u> 2

Qty

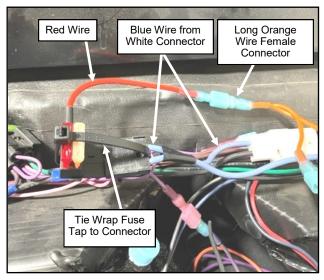


Fig. 2.12 (Connect Fuse Tap Wire Harness)

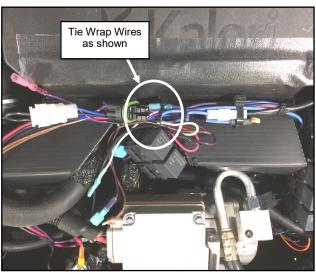


Fig. 2.13 (Tie Wrap Harnesses together)

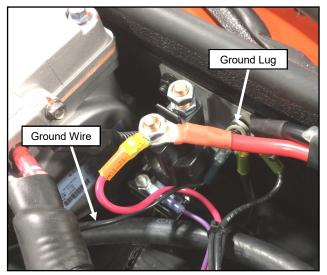


Fig. 2.14 (Install Ground Wire, A/C Unit)

STEP 3: (ROOF ADAPTER RING)

- **3.1** Orient the Roof Adapter Ring as shown, with the larger flange on the bottom. With assistance, place the air conditioner unit into the ring with the Power Wire Harness and drain tubes inside the ring. See Figure 3.1.
- **3.2** Loosely install all fasteners to the ring and air conditioner along the perimeter of the air conditioner so that the smaller diameter plastic washers are under the heads of the screws and nuts under the adapter ring. Tighten once all screws are installed. Note: the 5/16" ID plastic washers are very easy to mix with the 1/4" ID washers. It is best to separate them before proceeding.

| Hardware Used | Qty |
|-------------------------------|-----|
| 1/4-20 x 3/4" flange bolt | 18 |
| 1/4" x 3/4" OD plastic washer | 18 |
| 1/4-20 flanged lock nut | 18 |

Tools

3/8" wrench or socket 7/16" wrench or socket

STEP 4: (A/C UNIT TO ROOF)

4.1 With assistance, support the A/C unit with adapter assembly above the A/C roof. See Figure 4.1.

Feed the drain hoses through the long slots toward the back of the roof, on either side of the roof.

Carefully feed the Power Harness through the large rectangular cutout making sure that the wire covering does not tear on the edge of the opening.

Lower the A/C assembly onto the roof with the power harness in the round cutout. Make sure the drain hoses are not kinked.

4.2 Loosely install a total of 11 sets of 1/4-20 hardware along the sides and front of the air conditioner assembly.

Leave the three holes at the back of the A/C assembly open. These will be used to bolt the A/C Roof assembly onto the cab later.

Install hardware so that the plastic washers are under the heads of the screws and the steel fender washers are on the underside of the roof. Once all screws are installed, they can be tightened and nut covers installed.

| Hardware Used | <u>Qty</u> |
|-------------------------------|------------|
| 1/4-20 x 3/4" flange bolt | 11 |
| 1/4" x 3/4" OD plastic washer | 11 |
| 1/4" x 1" OD steel washer | 11 |
| 1/4-20 flanged lock nut | 11 |
| 1/4" nut caps | 11 |

Tools

3/8" wrench or socket 7/16" wrench or socket

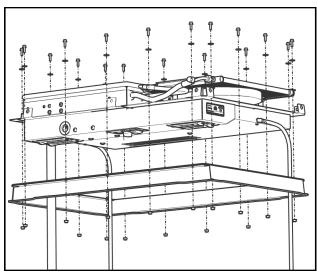


Fig. 3.1 (Attach Roof Adapter Ring)

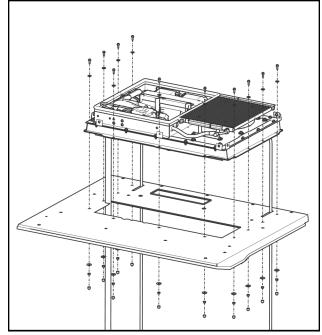


Fig. 4.1 (A/C Unit to Roof)

STEP 5: (INSTALL ROOF TO CAB)

- **5.1** Apply the supplied 1" x 6" strip of foam rubber onto the top of the ROPS, on the center bar just behind the front cross bar. See Figure 5.1.
- **5.2** With an assistant, place the roof with A/C assembly onto the top of the cab and align to the holes in the cab. With a plastic washer on each bolt, insert 5/16 x 3/4" bolts through the roof into the threaded inserts in the A-pillars first, then through the rest of the holes in the roof with nuts underneath, excluding the three holes at the rear of the A/C assembly. Leave bolts loose. See Figure 5.1.

| Hardware Used (retained from Step 1.5) | Qty |
|--|-----|
| 5/16-18 x 3/4" flange bolt | 10 |
| 5/16 x 3/4" OD plastic washer | 10 |
| 5/16-18 flanged lock nut | 8 |

<u>Tools</u>

Two 1/2" wrenches or sockets

5.3 Per Figure 5.2, for the three holes at the rear of the A/C assembly, use the separate 5/16" hardware kit from the A/C roof kit, including longer bolts, fender washers and nut covers. Check alignment of the roof and tighten all roof hardware.

| Hardware Used | Qty |
|-------------------------------|-----|
| 5/16-18 x 1" flange bolt | 3 |
| 5/16 x 3/4" OD plastic washer | 3 |
| 5/16 x 1-1/4" OD steel washer | 3 |
| 5/16-18 flanged lock nut | 3 |
| 5/16" nut covers | 3 |

<u>Tools</u>

Two 1/2" wrenches or sockets

5.4 Inside the cab, remove the bolt closest to the front, center of the A/C assembly and use it to install a ROPS bracket to the underside of the vehicle ROPS. See Figure 5.4.

| Hardware Used (re-used) | <u>Qty</u> |
|--|------------|
| 5/16-18 x 3/4" flange button head bolt | 1 |

<u>Tools</u>

3/16" Allen Wrench

5.5 Locate the hole in the underside of the roof, just behind the center of the vents of the A/C Unit. Install a self-drilling screw with a 3/4" washer through this hole and into the A/C Unit. See Figure 5.5.

| <u>Qty</u> |
|------------|
| 1 |
| 1 |
| |

Tools Cordless Drill #2 square drive bit

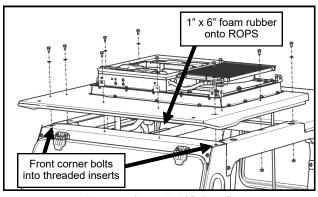


Fig. 5.1 (Install A/C Roof)

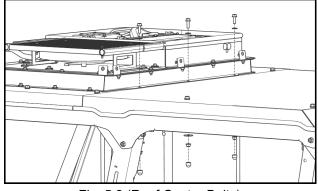
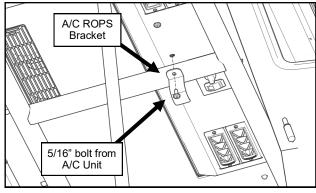


Fig. 5.2 (Roof Center Bolts)





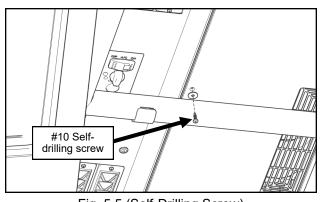


Fig. 5.5 (Self-Drilling Screw)

10 of 13

A/C ROOF KIT INSTALLATION

STEP 6: (ROUTE POWER HARNESS & DRAIN TUBES)

- **6.1** Route the power wire harness along the inside of the right side upper ROPS bar and secure with 2 wire ties to the upper bar per Figure 6.1. Secure the power harness to the rear ROPS tube and the drain tube along the center-side ROPS tube. Feed the power harness through the gap between the plastic trim and the metal seat frame at the corner of the rear seat base. Leave wire ties fairly loose.
- **CAUTION:** Do not attach the wire harness to the grab bar on the upper ROPS on the right side.
- **CAUTION:** Make sure not to crush the drain tubes and keep the tubes away from any moving parts.

Hardware Used 11" wire ties

6.2 Continue the power harness and drain along the ROPS, with the drain tube behind the cross bar for the seat per Figure 6.2. Loosely secure the harness and drain to the ROPS with two wire ties as shown.

Route the drain tube behind the fuel tank and secure the drain tube to the vertical frame rail with wire ties.

| Hardware Used | <u>Qty</u> |
|---------------|------------|
| 11" wire tie | 4 |

6.3 Route the left side drain tube along the same path as the right, with the drain tube attached to the vertical frame rail behind the relay box under the seat. See Figure 6.3.

| Hardware Used | |
|---------------|--|
| 11" wire tie | |

<u>Qty</u>

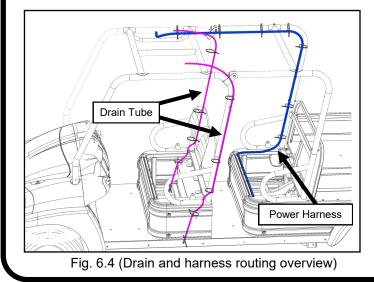
<u>Qty</u>

6.4 Working from top to bottom, tighten the wire ties without crushing the drain tubes and trim excess. Cut the drain tubes to length at or just above the bottom of the frame. Place a slit rubber tube cap over the lower end of each drain tube.

| Hardware Used | <u>Qty</u> |
|----------------------|------------|
| Slit rubber tube cap | 2 |

Tools Wire Cutters





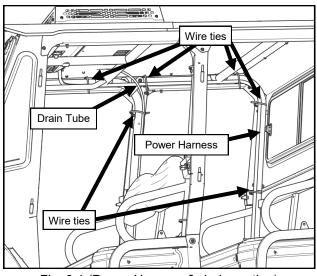


Fig. 6.1 (Power Harness & drain routing)

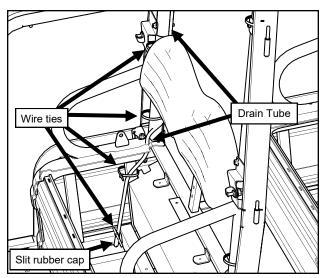
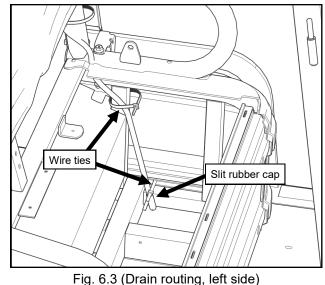


Fig. 6.2 (Drain routing, right side)



STEP 7: (FINISHING TOUCHES)

- 7.1 Electrically connect the air conditioner and test its operation by following the installation instructions provided with the A/C Alternator Kit.
- **7.2** If installing or re-installing a beacon light, Curtis recommends installing the beacon light onto the top cover for the A/C unit. See fig. 7.2. Use the template on page 11 to locate and drill four 7/16" holes in the cover at the spots marked "A" on the template, referencing the cutout in the cover and the 3/8" hole marked "B" on the template.

Pull the beacon light harness through the grommet in the front of the A/C unit, under the roof. Install the Beacon light onto the A/C cover and connect to the yellow/black wires. Test the operation of the Beacon light before installing the cover onto the A/C unit.

| Hardware Used | Qty |
|--|-----|
| (From Beacon Light Kit or prior install) | |
| 1/4-20 x 3/4" button head screw | 3 |
| 1/4-20 flanged lock nut | 3 |
| 1/4" x 1" fender washer | 3 |
| Rubber grommet, 1/4" I.D. | 5 |
| | |

<u>Tools</u>

5/32" Allen wrench 7/16" wrench or socket Drill and 7/16" drill bit

- **7.3** Install or re-install any other accessories, including front work lights, overhead console, and interior mirror. Verify that the beacon light wire is in the notch in the console, if applicable.
- 7.4 Per Figure 7.4, install cover to air conditioner. Use antiseize on all screws and bolts when fastening the cover. Poke a hole through the insulation and install the M6 screw first, then install the 1/4-20 bolts. Tighten 1/4-20 bolts to 5 ft-lbs and tighten M6 screw until the rubber washer begins to bulge.

<u>Hardware Used</u> 1/4-20 x 3/4" flange bolt M6X1 X 16mm truss head screw M6 Rubber Washer

<u>Tools</u>

3/8" wrench or socket #3 Phillips head screwdriver Apply anti seize to bolt threads

7.5 Secure any loose fasteners or wires.

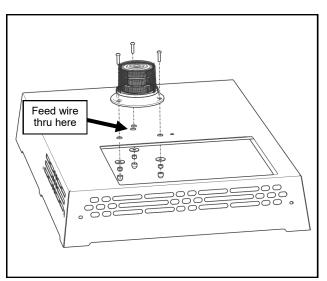
CARE AND MAINTENANCE

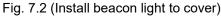
- •Check and tighten hardware after 40 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's life.
- •Wash the painted surfaces of the unit with commercial automotive cleaning products.

<u>Qty</u>

10

1





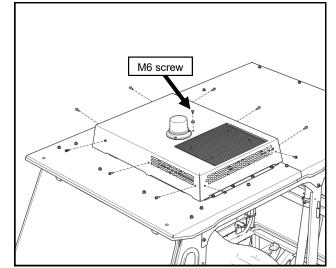


Fig. 7.4 (Install cover to air conditioner)

