



A/C ROOF KIT

**Sandstone (P/N: 1ACYDR2RFK-SS)
Texture Black (P/N: 1ACYDR2RFK-TB)
(Fits Yamaha Drive + Drive2)**

Recommended it be installed with Curtis Cab:

Sandstone (p/n 1GCRYD1-A, 1GCRYD1)

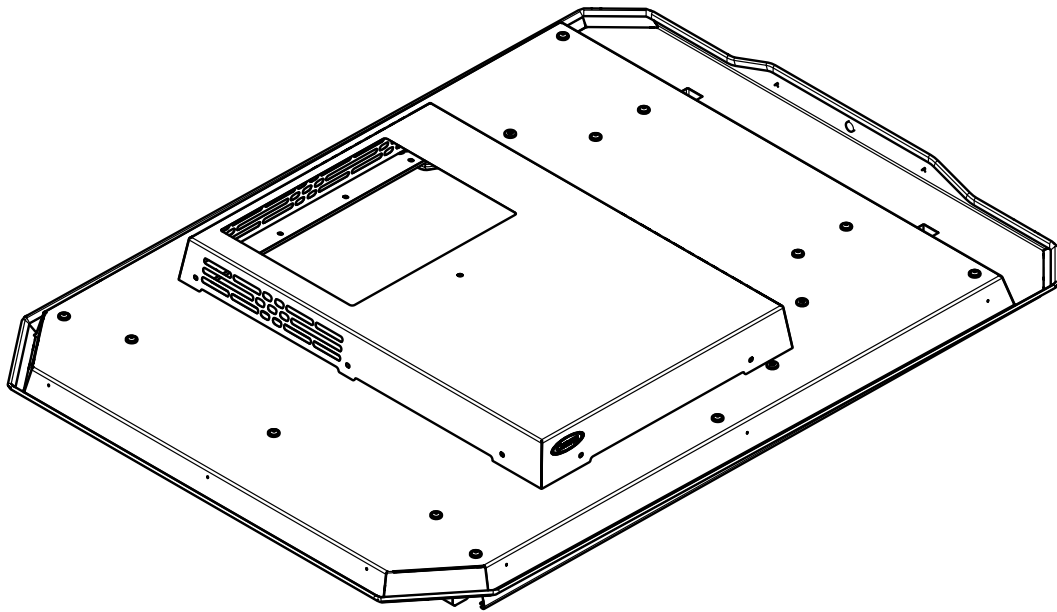
Black (p/n 1GCRYD2-A, 1GCRYD2)

White (p/n 1GCRYD3-A, 1GCRYD3)

Black & White Security (p/n 1GCRYD4)

Must be installed with Curtis Air Conditioner 1ACUNIT-G2

Must be installed with Curtis A/C Alternator Kit 1ACYDR2DRK



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: 74 inches

Weight: 20 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. C, 9/4/2018

p/n: IM-1ACYDR2RFK


TABLE OF CONTENTS

WARNINGS, TIPS, & REQUIRED TOOLS	3
VEHICLE PREPARATION	4
INSTALLATION.....	4-10
FINISHING TOUCHES	11
CARE AND MAINTENANCE	11
SERVICE PARTS	12

WARNINGS, TIPS, & REQUIRED TOOLS

Curtis accessories feature an assembly of parts designed for your vehicle which require adjustment and alignment of components to accommodate vehicle variations. For accurate installation, proper operation, and years of satisfaction, please read and understand the installation and owner's manual fully prior to installing the A/C Roof Kit.

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

	NOTICE
<p>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.</p>	

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.

TOOLS REQUIRED

- Set of metric & standard sockets
- Set of metric & standard open-end wrenches
- Set of metric & standard Allen wrenches
- Ratchet and extension
- #2 & #3 Phillips head screwdriver
- Silicone sealant
- Cordless drill
- 1/2" drill bit
- #2 Phillips head driver bit
- Scissors
- Anti seize

A/C ROOF KIT INSTALLATION

STEP 1: (VEHICLE PREPARATION)

- 1.1 Remove plastic roof. Save the rubber downspout connectors, these will be reused.

The roof will not be reused, new roof and hardware are provided in this kit.

Tools

13mm wrench
13mm socket
5mm Allen wrench

- 1.2 Per Figure 1.2, drill a 1/2" hole through the top of each downspout. This will be the final routing point of the drain hoses in a later step.

Tools

Cordless drill
1/2" drill bit

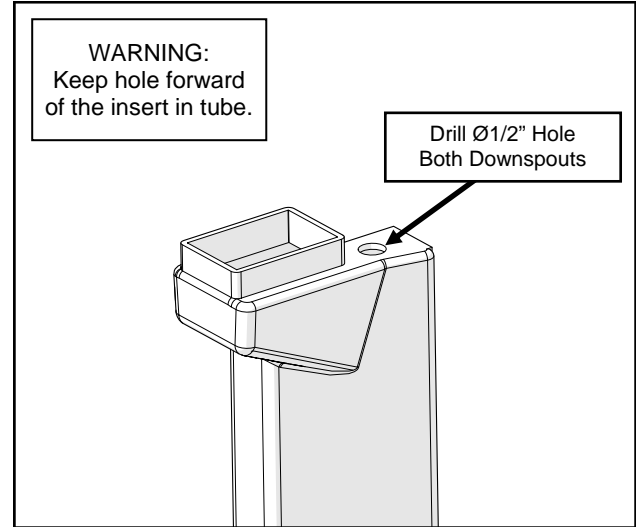


Fig. 1.2 (Drill Holes In Downspouts)

STEP 2: (INSTALLATION)

Note: Installation of this accessory with a vinyl sided cab may be possible. Due to the wide variety of vinyl sided cabs, Curtis cannot provide specific instructions to install this roof kit with a vinyl sided cab, nor can Curtis guarantee compatibility.

- 2.1 With assistance, lower the roof assembly onto the top of the installed cab. Figure 2.1.

NOTE: Due to vehicle tolerances, pre-installed brackets on the roof may need to be loosened prior to assembly.

- 2.2 Install fasteners through the roof's side brackets, then vehicle frame tube, and finally cab upper front mounts. Leave bolts loose. Figure 2.2.

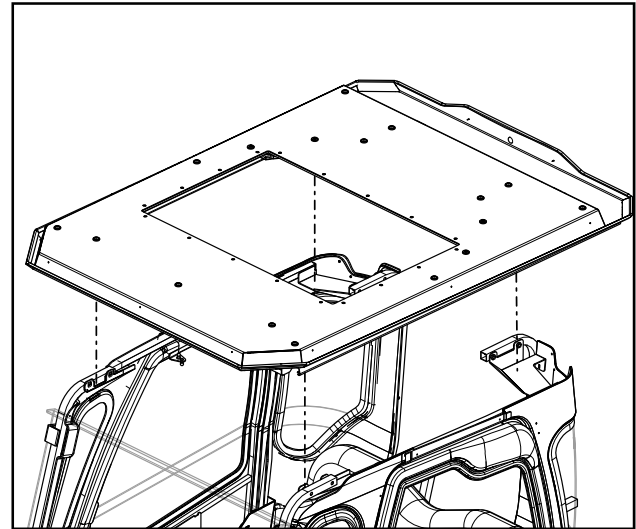


Fig. 2.1 (Install New Roof)

Hardware Used

	<u>Qty</u>
5/16-18 x 2" bolt	4
5/16" steel washer	8
5/16-18 nut	4
5/16" nut caps	4

Tools

1/2" wrenches or sockets

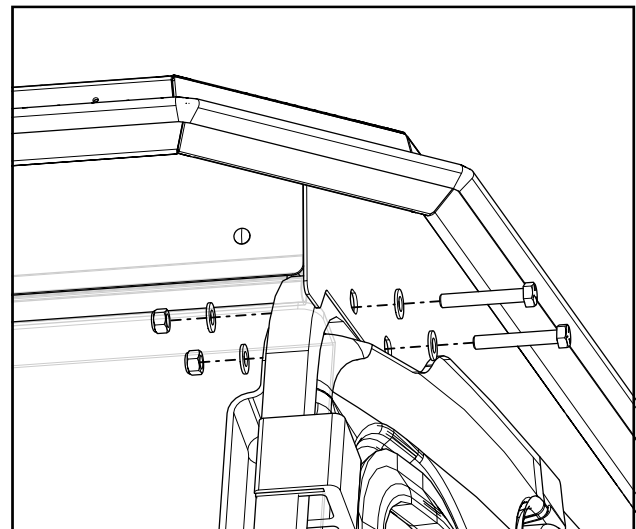


Fig. 2.2 (Install Front Bolts)

A/C ROOF KIT INSTALLATION

STEP 2: (INSTALLATION)

- 2.3 Replace the rubber downspout connectors, then install fasteners through new roof bracket, then vehicle frame tube, and finally cab rear mounts. Leave bolts loose. Figure 2.3.

Hardware Used

	<u>Qty</u>
5/16-18 x 2" bolt	4
5/16" steel washer	8
5/16-18 nut	4
5/16" Nut Caps	4

Tools

1/2" wrenches or sockets

- 2.4 Using 8 ft-lbs, tighten hardware once all brackets are aligned. Do not over-tighten or damage to the vehicle will occur.
- 2.5 Inspect the windshield and the windshield filler panel that bridges to the roof. If it is not long enough, the adjustable windshield filler panel will be used to close the gap. Continue this step only if the rubber is not sealing to the windshield.

Remove the hole plugs and rubber bulb from the windshield filler panel as shown in Fig. 2.5a. The windshield filler panel may be removed from the roof as shown in Fig. 2.5b, but is not necessary in most circumstances.

Fasten the adjustable windshield filler panel as shown in Fig. 2.5b. The rubber bulb removed earlier in this step is to be re-installed to the adjustable windshield filler panel.

Hardware Used

	<u>Qty</u>
1/4-20 x 5/8" flanged button head cap screw	4
1/4-20 flanged lock nut	4
1/4" nut caps	4

Tools

7/16" wrenches
5/32" Allen wrench

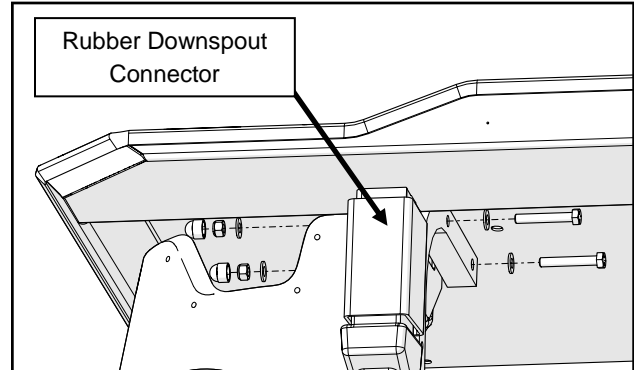


Fig. 2.3 (Install Rear Bolts)

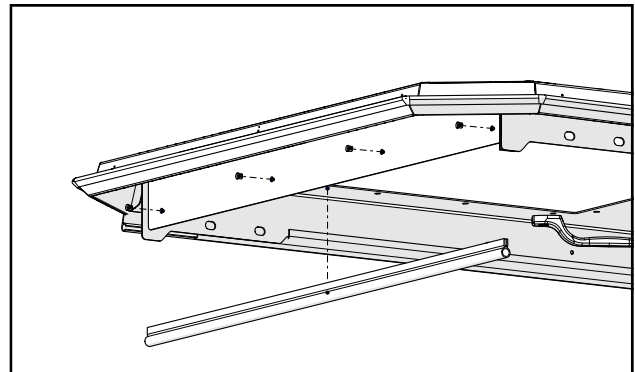


Fig. 2.5a (Remove Rubber & Hole Plugs)

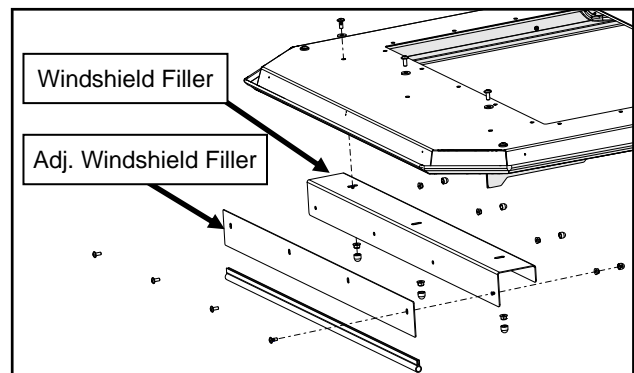


Fig. 2.5b (Install Adjustable Windshield Filler)

A/C ROOF KIT INSTALLATION

STEP 3: (PREPARE A/C)

- 3.1 Place the A/C unit on a bench with padding underneath to protect the switches and vents from being damaged.

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.

- 3.2 Locate the controller (8SV-114-00017) (located in alternator kit). Install the controller to the air conditioner housing using the two fasteners already in place in the air conditioner. Figure 3.2.

Tools

3/8" wrench
#2 Phillips screw driver



Fig. 3.2 (Install Controller)

- 3.3 Per Figure 3.3, remove the plastic hole plug on the underside of the air conditioner next to the rotary and rocker switches. Replace this plug with the red push button found in the hardware box in the alternator kit.

Tighten the plastic nut for the button inside the A/C Unit, no more than 1/4 turn past finger tight.

Once installed, pushing this button will temporarily disengage the auxiliary alternator. This provides a power boost by removing the load on the alternator. The button does not need to be held down, the alternator will re-engage after a few moments.

Hardware Used

Push Button

Qty

1

Tools

1-1/16" wrench or long needle nose pliers

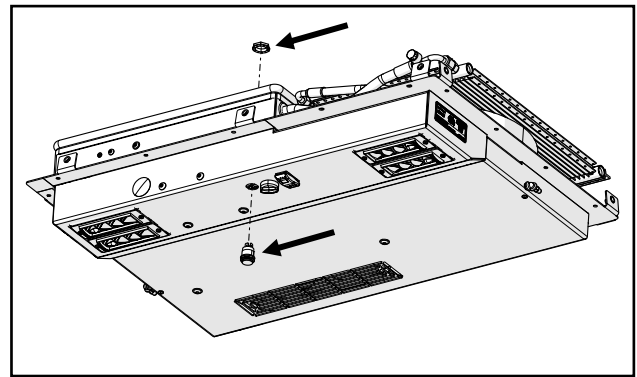


Fig. 3.3 (Button Installation)

A/C ROOF KIT INSTALLATION

3.4 Locate relay wire harness 9SV-WH-00074 (alternator kit).

Connect the relay wire harness to the A/C as follows:

NOTE: Not all connections will be made in this step. Several more will take place once unit is positioned on top of the roof and the main power harness is installed.

Relay Harness Terminal	Destination
Male Plug (White)	Female Plug of A/C Harness
Female Plug (White)	Male Plug of Controller
Red Wires	Red w/ White Stripe Wire of Controller 114-00017
Green Wire	Terminal 1 of the alternator bypass button (Step 3.3)
Black Wire	Terminal 2 of the alternator bypass button (Step 3.3)

NOTE: Green and black wires may be connected to either of the parallel terminals on the bypass button.

Controller Wire	Destination
Red Wire	Pink Wire of A/C Case (located on wire harness connected to the trigger on the main power solenoid)

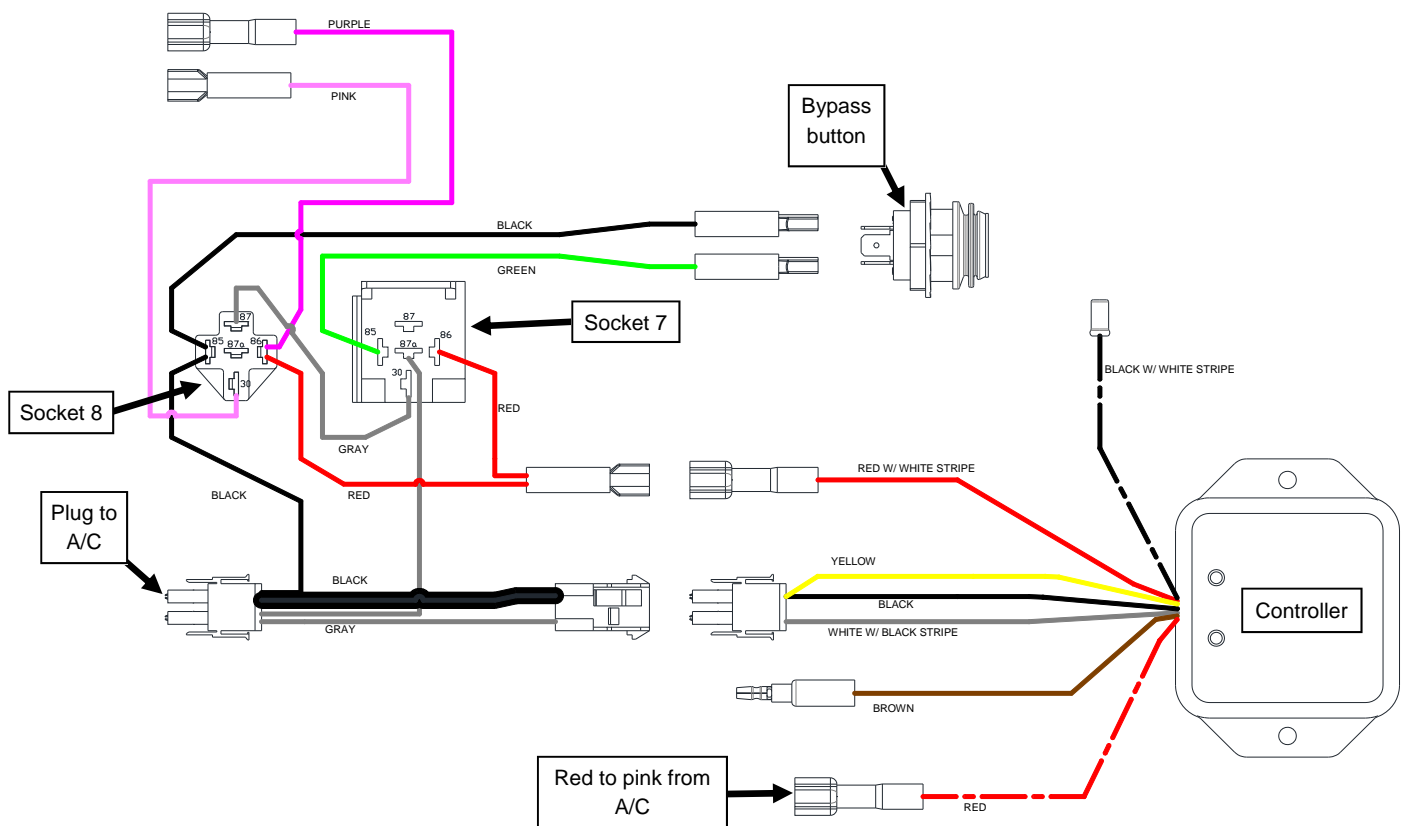


Fig. 3.4 (Connect Relay Harness)

A/C ROOF KIT INSTALLATION

- 3.5 Per Figure 3.5, remove relays from sockets 2 and 4 on the air conditioner. One of these relays will be reused in a later step, the other may be used as a spare part (9SV-85-01-0022).

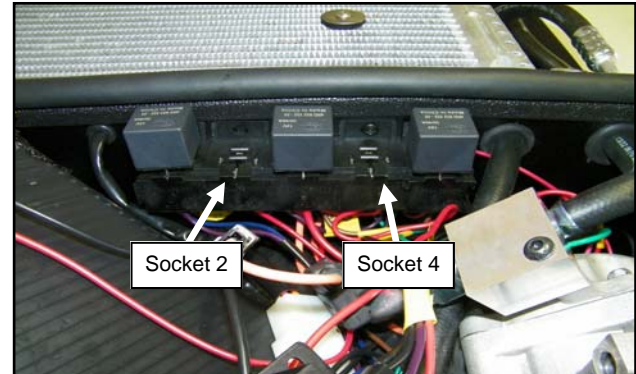


Fig. 3.5 (Remove Relays 2 & 4)

- 3.6 Per Figure 3.6, install 2 relays into the A/C unit. See Relay Guide in Fig. 3.7b below for assistance identifying each relay.

Install the Beüler time delay relay (9SV-85-01-0031) into relay socket 2 of the air conditioner.

Leave socket 4 empty.

Install time delay solid state relay (0-2 min) off-delay (9SV-85-01-0029) into relay socket 6 of the Air Conditioner. Note that relay socket 6 is attached to the harness feeding relay socket 4 and not in line with sockets 1-5.

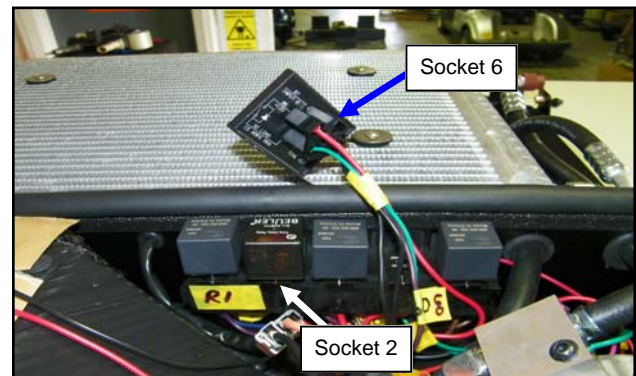


Fig. 3.6 (Install Timed Relays to Sockets 2 & 6)

- 3.7 Install one of the relays removed in step 3.5 into socket 7 of the relay harness (square shape). See previous page for socket identification.

Per Figure 3.7a, install time delay solid state relay on-delay (0-10 sec) (9SV-85-01-0030) into socket 8 of relay harness. Note that the solid state relay can only fit into socket 8, due to its shape.

NOTE: Verify that all of the relays are in the correct positions.

CAUTION: Never replace any timed relay in this device with a standard automotive relay.

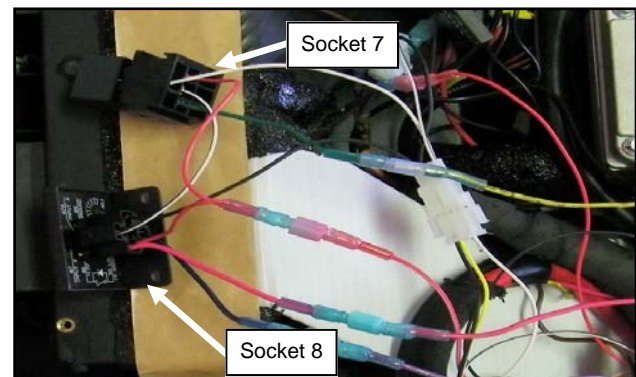


Fig. 3.7a (Install Timed Relays to Relay Harness)

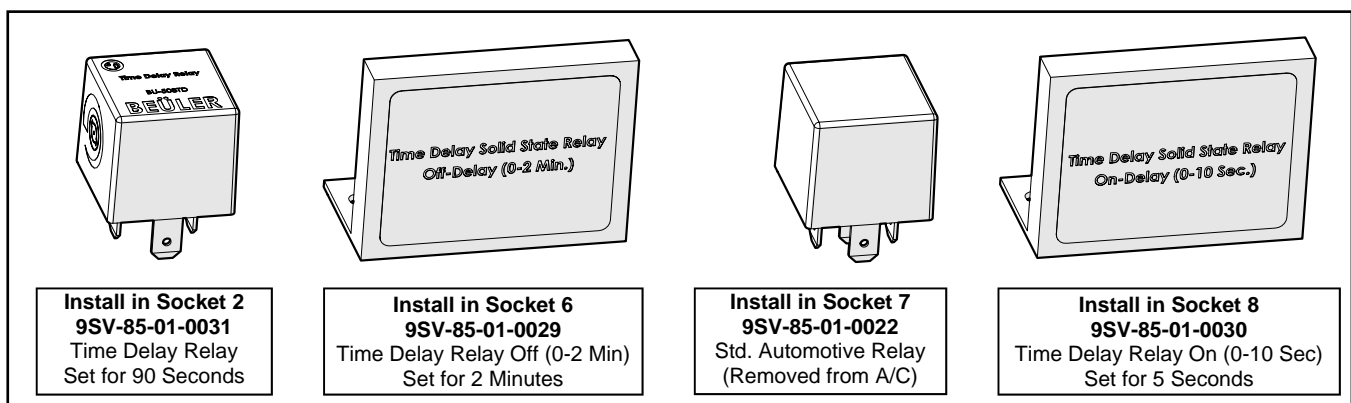


Fig. 3.7b (Relay Guide)

A/C ROOF KIT INSTALLATION

STEP 4: (A/C INSTALLATION)

- 4.1 Apply a bead of silicone along the perimeter of the rectangular opening in the roof (the top, outside surface). The bead shall be inside of the fastener holes as illustrated with the dashed lines of Figure 4.1.

Tools

Silicone

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.

- 4.2 With assistance, place the air conditioner unit onto the roof, center it inside of the roof's rectangular opening. Wipe away any excess silicone from inside and outside of the roof assembly. See Figure 4.2.

Note: Orient the unit as shown when installing so the vents are over the seat.

Loosely install fasteners to the roof and air conditioner along the perimeter of the air conditioner.

Hardware Used

	<u>Qty</u>
1/4-20 x 3/4" stainless flange bolt	18
1/4-20 flanged lock nut	18
1/4" plastic washer	18
1/4" nut caps	18

Tools

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

- 4.3 Fully tighten all fasteners to 5 ft-lbs.
- 4.4 Attach drain tube to the side of the air conditioner on the passenger's side of the vehicle. Rotate the nipples towards the rear of the vehicle, keeping the drain tubing away from the doorway.

The passenger's side of the vehicle is shown in Fig. 4.4, with the door removed for clarity.

Repeat this step for the opposite side of the vehicle.

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

Hardware Used

	<u>Qty</u>
PVC Tube, 3/8" Inside Dia., 90"	2

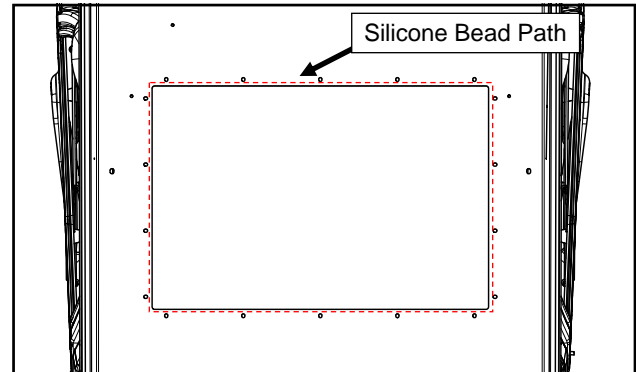


Fig. 4.1 (Apply Silicone)

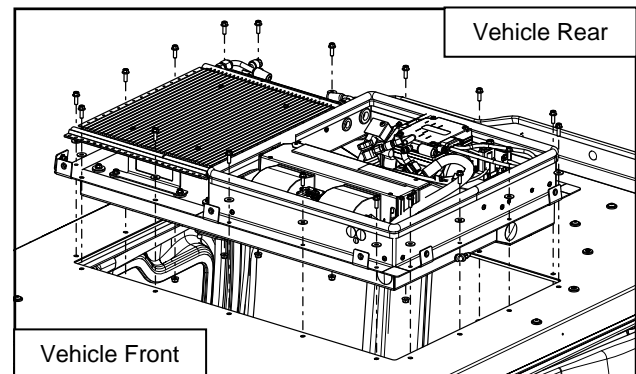


Fig. 4.2 (Insert A/C Unit)

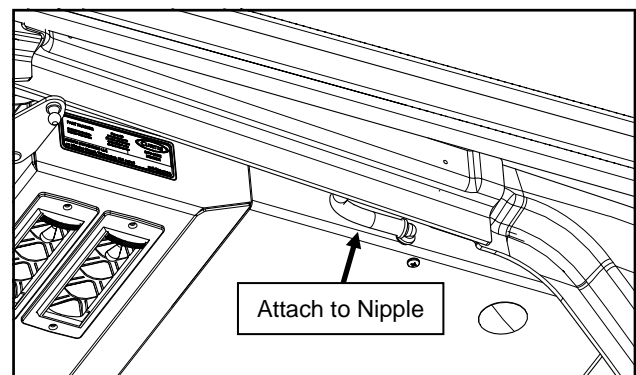


Fig. 4.4 (Attach Drain Tubes)

A/C ROOF KIT INSTALLATION

- 4.5 Route the Air Conditioner's drain tube rearward along the brackets extending down from the roof. Fasten the drain tube to the roof brackets with 1/2" p-clamps, machine screws and nuts as shown in Figure 4.5a. Through holes are provided for mounting the p-clamps.

Route the drain tube out the rear of the cab.

Per Figure 4.5b, insert the drain tube into the hole that was drilled through the downspout in Step 1.2. Trim excess tubing with scissors, leaving at least 3" of tubing in the downspout.

Important: Be sure that the drain hose is free from kinks and that the path is always **lower** than where it exits the air conditioner case in order to prevent backups and internal leaks. Repeat this step for the opposite side of the vehicle.

Hardware Used

	<u>Qty</u>
#10-32 x 5/8" machine screw	4
#10-32 nut	4
1/2" p-clamp	4

Tools

3/8" wrench
#2 Phillips head screw driver
Scissors

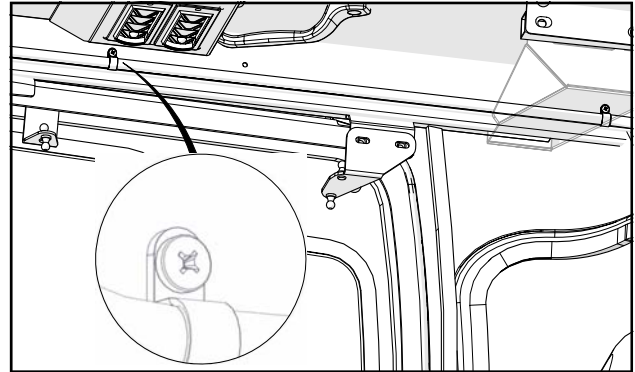


Fig. 4.5a (Routing Drain Tubes)

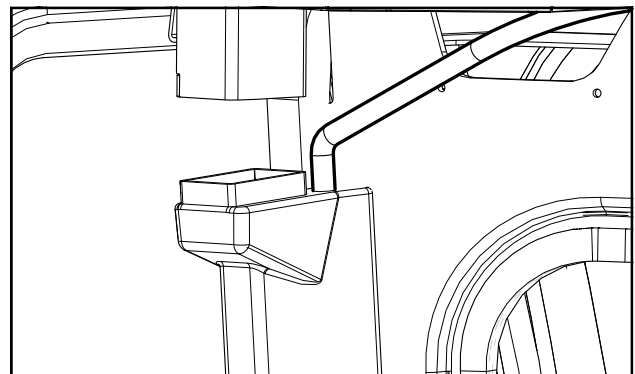


Fig. 4.5b (Routing Drain Tubes)

A/C ROOF KIT INSTALLATION

STEP 5: FINISHING TOUCHES

- 5.1 Electrically connect the air conditioner and test its operation by following the installation instructions provided with the A/C Alternator Kit (1ACYDR2DRK).
- 5.2 Per Figure 5.2, install cover to air conditioner. Use anti-seize on all screws and bolts when fastening the cover. 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.

Hardware Used

	<u>Qty</u>
1/4-20 x 3/4" flange bolt	10
M6X1 X 16mm truss head screw	1
M6 Rubber Washer	1

Tools

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

- 5.3 Re-install any accessories that were removed during this procedure.
- 5.4 Inspect for loose fasteners or wires.

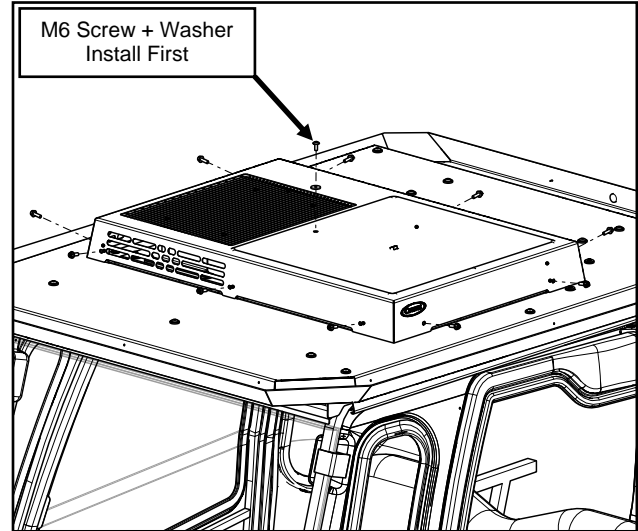


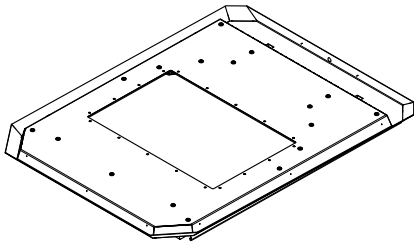
Fig. 5.2 (A/C Cover Fasteners)

CARE AND MAINTENANCE

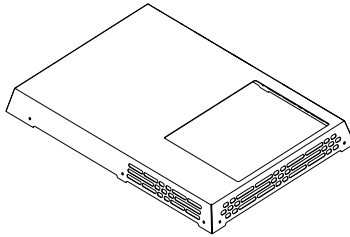
- Check and tighten hardware after 40 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's life.
- Wash the painted surfaces of the unit with commercial automotive cleaning products.

SERVICE PARTS

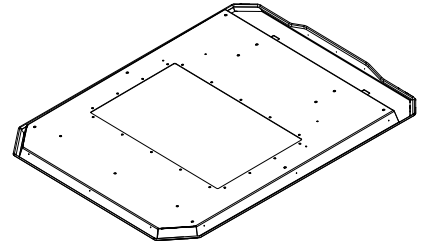
ROOF ASSEMBLY W/ BRACKETS
PART NUMBERS
8SV-101-00019SS (SANDSTONE)
8SV-101-00019TB (TEXT BLACK)



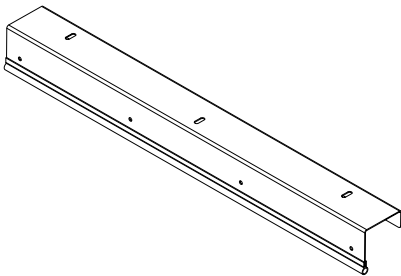
COVER ASSEMBLY, A/C, W/O CUT-
OUTS, TEXT BLACK
PART NUMBERS
P/N: 8SV-303-00003TB



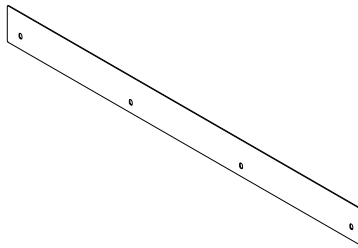
ROOF ASSEMBLY W/ TRIM ONLY
PART NUMBERS
8SV-WA-00168-SS (SANDSTONE)
8SV-WA-00168-TB (TEXT BLACK)



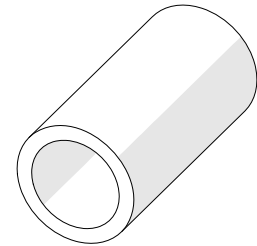
WINDSHIELD FILLER PANEL ASSY
P/N: 8SV-111-00018



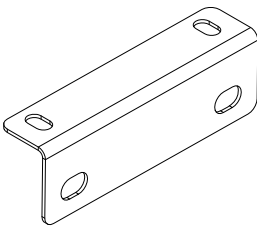
ADJ. WINDSHIELD FILLER PANEL
P/N: 8SV-SM-00787



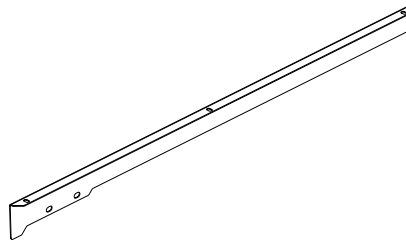
DRAIN HOSE
9SV-AC-00019-20



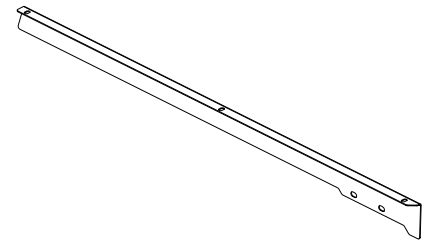
ROOF BRACKET, REAR
P/N: 8SV-SM-00702



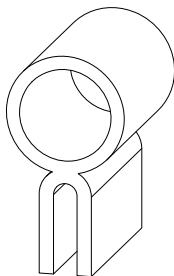
SIDE BRACKET ASSEMBLY, LEFT
P/N: 8SV-113-00093-L



SIDE BRACKET ASSEMBLY, RIGHT
P/N: 8SV-113-00093-R



5/8" STD BULB, 1/16" GRIP
9SV-9PRO2-5



TRIM LOK, STD, 1/16" - 1/8" GRIP
P/N: 9SV-PRO1-20

