



## A/C ROOF KIT

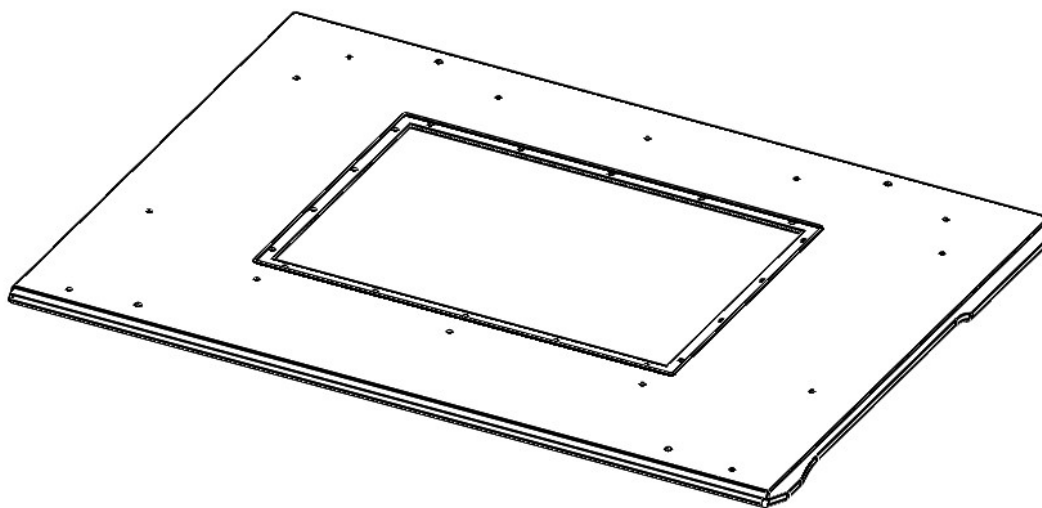
**(P/N: 1ACKAPFXDXRFK)**

**(Fits Kawasaki Pro FX and DX)**

**Must be installed with Curtis Cab: 1KAPFXCA or 1KAPFXCAS1**

**Must be installed with Curtis Air Conditioner 1ACUNIT-TBCOVER**

**Must be installed with Curtis A/C Alternator Kit 1ACKAPFXXTDRK or 1ACKAPDXXTDRK**



### 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 AC Unit)

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

Rev. A, 7/12/2019

p/n: IM-1KAPFXCA-AC



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## 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 this accessory.*

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

**NOTICE**

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.

### TOOLS REQUIRED

- Set of metric & standard sockets
- Set of metric & standard open-end wrenches
- Ratchet and extension
- #3 Phillips head screwdriver
- Scissors or Snips
- Anti seize



# A/C ROOF KIT INSTALLATION

## STEP 1: (VEHICLE PREPARATION)

- 1.1 Install alternator kit up to the point of connecting A/C wiring prior to installing roof.
- 1.2 Remove existing roof from cab. Be sure to save all hardware.

### Tools

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

## STEP 2: (INSTALL A/C UNIT)

**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.

**Note:** Ensure the main power harness and relay harnesses have been installed in the A/C unit as per the Alternator Kit install manual.

- 2.1 With assistance, place the air conditioner unit onto the roof, center it inside of the roof's rectangular opening. See Figure 2.1.

**Note:** Orient the unit as shown when installing so the vents are closer to the front edge.

Loosely install all fasteners to the roof 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 the larger diameter steel washers are between the lock nuts and headliner. 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	18
1/4" x 3/4" OD plastic washer	18
1/4" x 1" OD steel washer	18
1/4-20 flanged lock nut	18
1/4" nut caps	18

### Tools

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

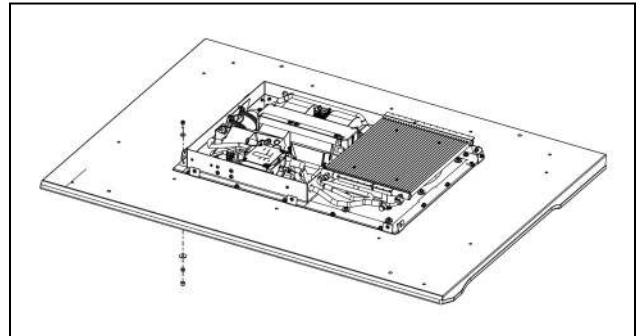


Fig. 2.1 Install A/C Unit



# A/C ROOF KIT INSTALLATION

## STEP 3: (INSTALL ROOF)

- 3.1 With assistance, place the roof onto the top of the vehicle as shown in Figure 3.1.
- 3.2 Secure the Roof to the ROPS and cab components with 1/4-20 x 3/4" screws, nylon washers, 1/4-20 nuts. The Nylon washers shall be on top of the roof. See location A in figure 3.1 Do not fully tighten.

<u>Hardware Used</u>	<u>Qty</u>
1/4-20 x 3/4" Flanged hex bolt	5
5/16" Nylon Washer	5
1/4-20 Flanged Nut	5

- 3.3 Secure the Roof to the Upper Rear Panel with 1/4-20 x 3/4" screws, nylon washers, steel washers, rubber washers, 1/4-20 nuts. The Nylon washers shall be on top of the roof, the rubber washer shall be in contact with the polycarbonate of the Upper Rear Panel, and the steel washer outside of the rubber washer. See location B in figure 3.1. Do not fully tighten.

<u>Hardware Used</u>	<u>Qty</u>
1/4-20 x 3/4" Flanged hex bolt	5
5/16" Nylon Washer	5
1/4" Steel Washer	5
1/4" Rubber Washer	5
1/4-20 Flanged Nut	5

- 3.4 Secure the Roof to the Headers with 1/4-20 x 2-1/2" screws, nylon washers, 1/4-20 nuts. The nylon washers shall be on top of the roof. See location C in figure 3.1. Do not fully tighten.

<u>Hardware Used</u>	<u>Qty</u>
1/4-20 x 2-1/2" Flanged hex bolt	2
5/16" Nylon Washer	2
1/4-20 Flanged Nut	2

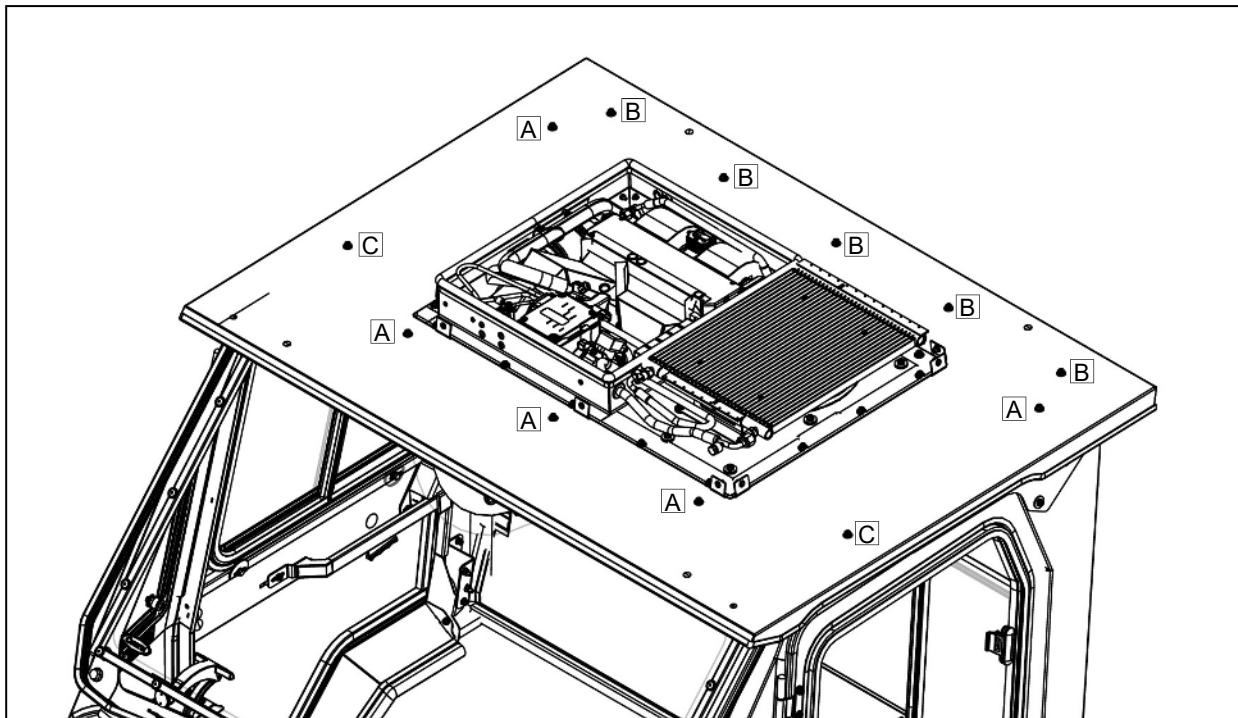


Fig. 3.1 Roof Fasteners



## A/C ROOF KIT INSTALLATION

### STEP 4: (ROUTE POWER HARNESS)

- 4.1 Route the wire harness along the rear ROPS cross tube and turn to route down the rear passenger side ROPS tube as shown in Figures 4.1a and 4.1b. Ensure that the harness is outside and behind the upper seat belt mount.
- 4.2 Continue to route the wire harness down the rear ROPS tube and pass behind it to get behind the seat as shown in figure 4.2.
- 4.3 Route the harness out the hole underneath where the ROPS mounts to the vehicle.
- 4.4 Secure the harness with the supplied cable ties. Leave ties loose at this time to allow drain hose to be routed along side the harness.



Fig. 4.1a Route Harness

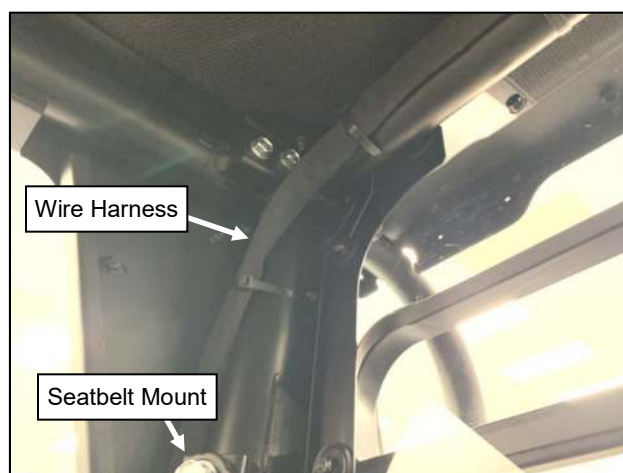


Fig. 4.1b Route Harness



Fig. 4.2 Route Harness



# A/C ROOF KIT INSTALLATION

## STEP 5: (DRAIN HOSE INSTALL)

- 5.1 Locate the black drain tube included in the alternator kit. Attach drain tube to the side of the air conditioner on the passenger's 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 vehicle.

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

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

- 5.2 Route the Air Conditioner's drain tube rearward and down along the rear ROPS tube along side the main power harness. Run the hose out of the cab and down under the vehicle. Mirror the routing for the opposite side. Secure with cable ties at this time.

**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 in order to prevent backups and internal leaks.

<b><u>Hardware Used</u></b>	<b><u>Qty</u></b>
11" Cable ties	10

**Tools**  
Scissors or Snips

- 5.3 Install the slitted-rubber Tube Caps supplied in the alternator kit on the lower end of the two drain tubes by sliding on.



Fig. 5.1 Connect Drain Tube

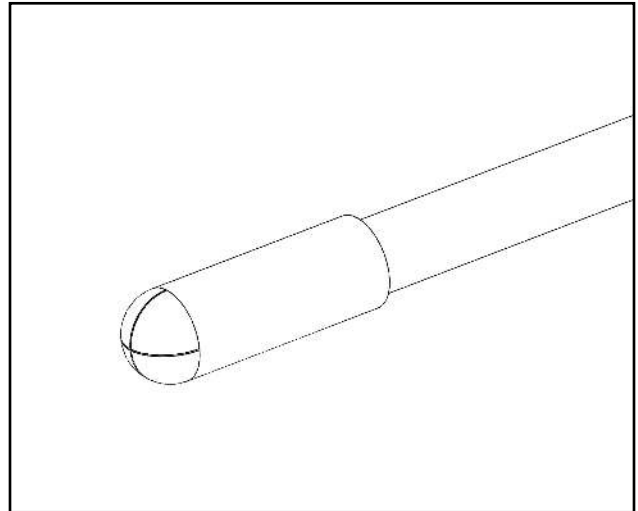


Fig. 5.3 Tube Cap



# A/C ROOF KIT INSTALLATION

## STEP 6: FINISHING TOUCHES

- 6.1 Electrically connect the air conditioner and test its operation by following the installation instructions provided with the A/C Alternator Kit.
- 6.2 Per Figure 6.2, re-install cover to air conditioner. Use anti-seize on all screws and bolts when fastening the cover. Poke a hole through the insulation and install the M6 screw first, then re-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

	Qty
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

- 6.3 Re-install any accessories that were removed during this procedure.
- 6.4 Secure any loose fasteners or wires.

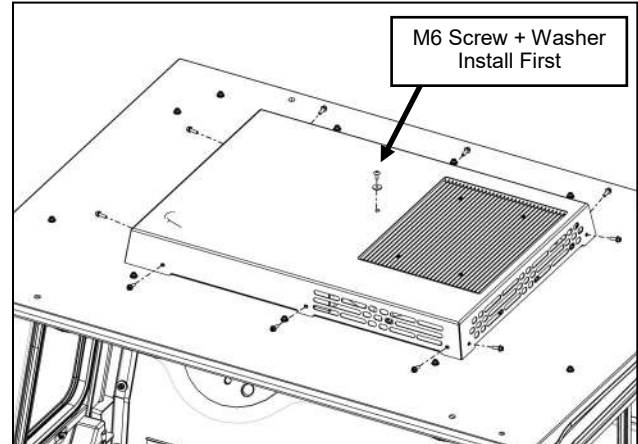


Fig. 6.2 A/C Cover Fasteners

## 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.