



## A/C Alternator Kit

### P/N: 1ACKAPFXFXTDRK

(fits KAWASAKI MULE PRO-FX & PRO-FXT)

Must be installed with Curtis Cab:  
 Pro-FX: 1KAPFXCA-AC (poly windshield) or 1KAPFXCAS1-AC (glass windshield)  
 Pro-FXT: 1KAPFXTCA-AC (poly windshield) or 1KAPFXTCAS1-AC (glass windshield)

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

For vehicles with cabs already installed, order Curtis A/C Roof Kit:  
 1ACKAPFXDXRFK (for Pro-FX) or 1ACKAPFXDXTRFK (for Pro-FXT)

#### Approximate Installation Time \*

Experienced Dealer Technician – 1 Hour
Average Dealer Technician – 1.5 Hours
Do-It-Yourself – 2 Hours

(\*Not including cab & other accessories)

#### Approximate Product Specifications

Weight: 38 lbs.

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

Rev. A, 07/12/2019

P/N: IM-1ACKAPFXDRK

## TABLE OF CONTENTS

WARNINGS, TIPS, & REQUIRED TOOLS.....	2
INSTALLATION .....	3-14
CARE AND MAINTENANCE .....	14
SERVICE PARTS .....	15-16
BOLT TORQUE SPECIFICATIONS .....	17

### 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:

- Refer to parts diagram found in the service parts section of this manual to help identify parts during the assembly process.
- To assist with the installation, leave all fasteners loose for later adjustment unless otherwise specified.
- Read and understand all instructions before beginning.
- Use proper personal protective equipment during all phases of installation.
- ALWAYS shut off engine before leaving the operator's seat to perform any portion of the procedures listed in this manual.
- ALWAYS disconnect the ground cable from the battery when working with any electronics components.
- Follow Lock-out / Tag-out procedures to maintain a safe work environment.

### TOOLS REQUIRED

- Set of metric & standard sockets (1/4" or 3/8" drive)
- Set of metric & standard open-end wrenches
- Set of standard Allen wrenches
- Ratchet and extensions
- 3/8", 1/2" drive socket and ratchet
- #2 & #3 Phillips screw driver
- Flathead screw driver
- Torque wrench
- Snips
- Scotch-Brite Pad
- Diagonal Cutters

# KIT INSTALLATION

## STEP 1: (A/C UNIT PREP)

- 1.1 Before removing the A/C Unit from shipping pallet, installation of the (3) related A/C Unit harnesses must be completed. First remove dome plug on the side of the A/C Unit per Fig 1.1.
- 1.2 Install 1-7/8" O.D. Grommet onto the end of the Power Supply Wire Harness per Fig. 1.2. Make sure small lip of the grommet is pointed towards this end.
- 1.3 Install A/C Power Supply Wire Harness into the side of the A/C Unit where the dome plug was removed from step 1.1.
- 1.4 Route the Power Supply Harness per fig 1.4.

**On Pro-FX:** Route harness 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 grommet into the hole.

**On Pro-FXT:** Determine how vehicle will be used most often. If in a single seat configuration more often, route harness more like FX. If it will be used in 2 row configuration, route as shown for FXT and install the grommet into the hole.

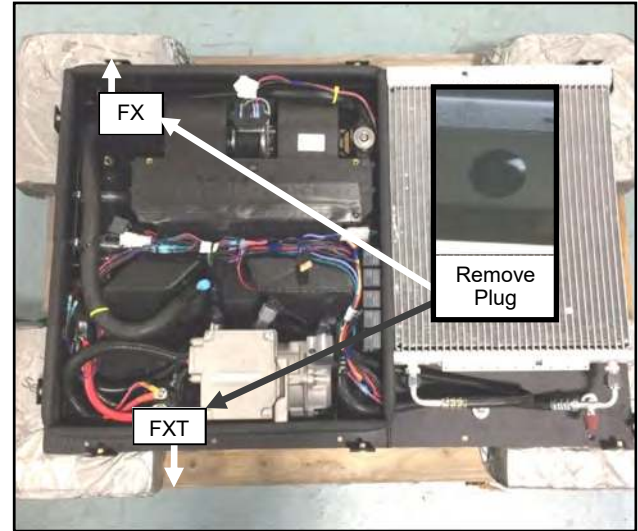


Fig. 1.1 (Remove dome plug from A/C Unit)

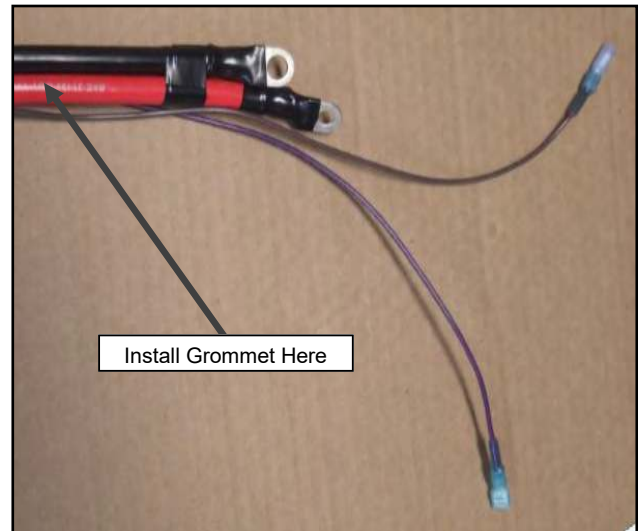


Fig. 1.2 (Install grommet on this end of power harness)

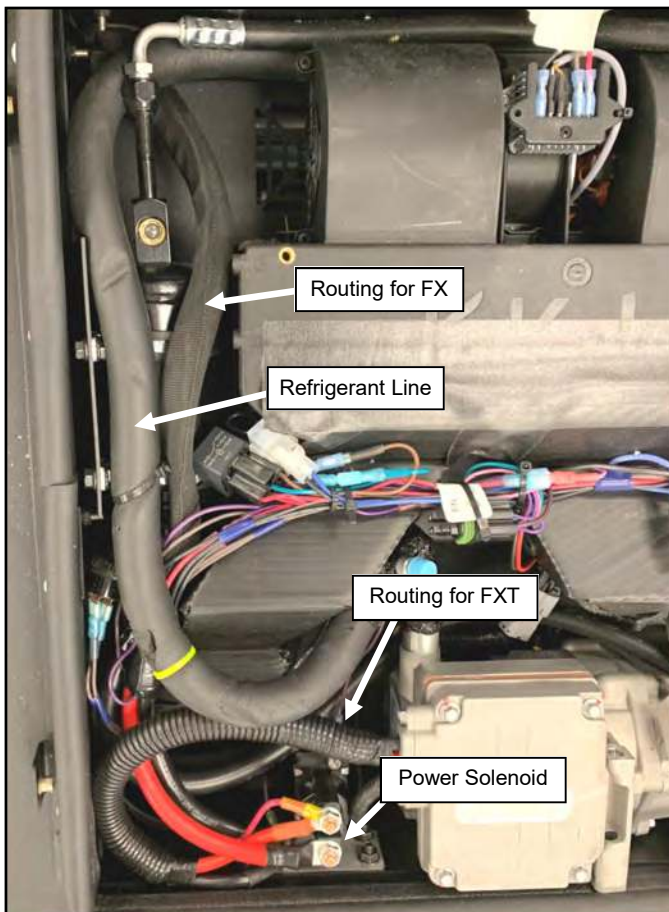


Fig. 1.4 (Route harness inside A/C Unit)

# KIT INSTALLATION

## STEP 1: (A/C UNIT PREP CONT'D.)

- 1.5 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 and then tighten as shown in fig. 1.5.

### Tools

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

- 1.6 Install the red power wire found on the A/C Power Supply Wire Harness onto the empty terminal found on the solenoid per fig 1.6.

### Tools

1/2" wrench or socket

- 1.7 Install Jumper Harness supplied in this alternator kit onto the A/C Unit's main control harness per fig 1.7.
- 1.8 Install the supplied Relay onto the Controller Jumper Harness per fig 1.8.

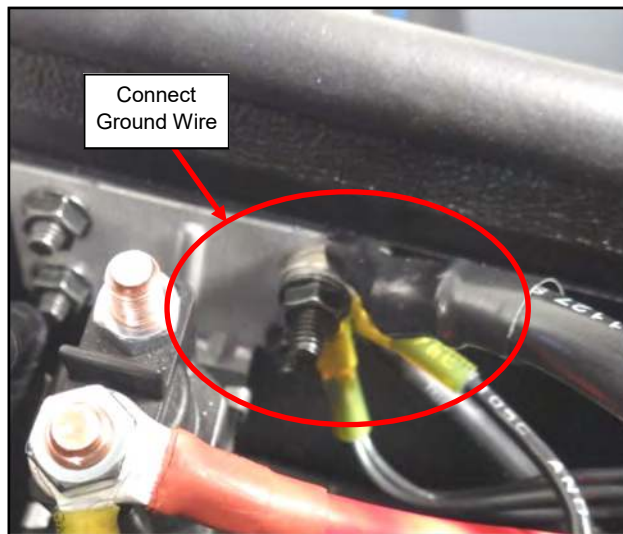


Fig. 1.5 (Connect ground to A/C Unit)

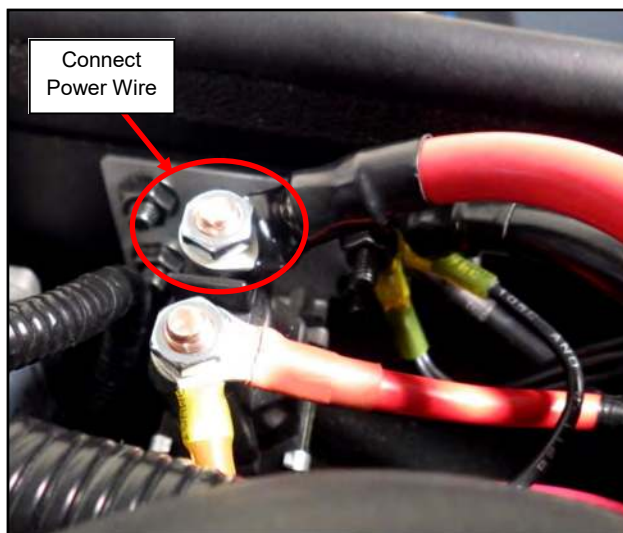


Fig. 1.6 (Connect power wire to A/C Unit)

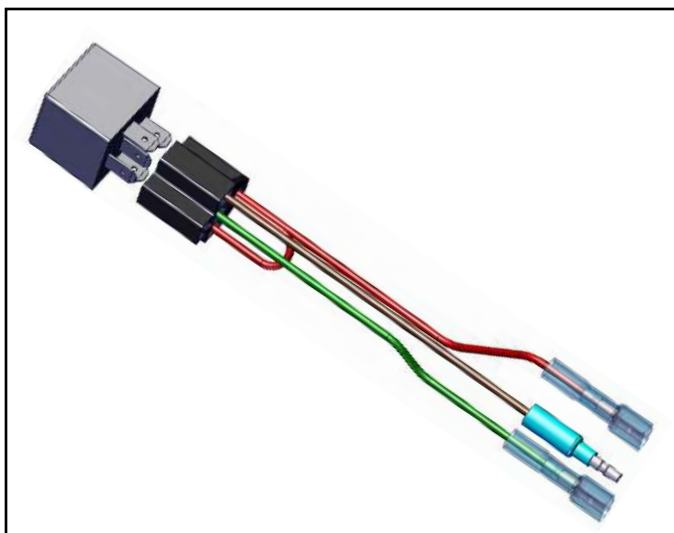


Fig. 1.8 (Install relay into Controller Jumper Harness )

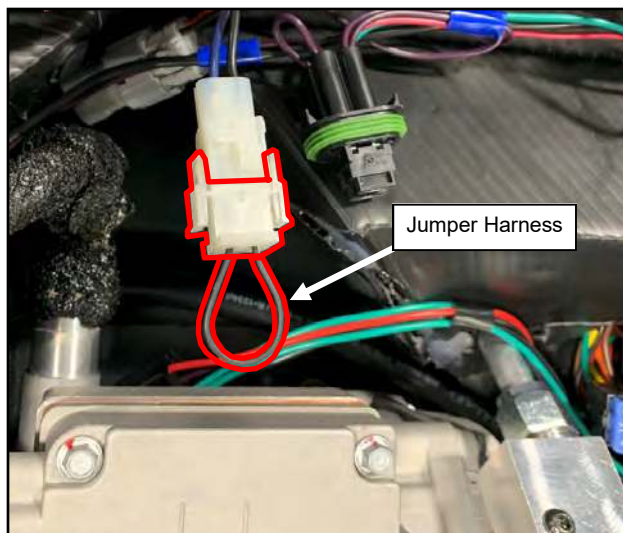


Fig. 1.7 (Install Jumper Harness)



# KIT INSTALLATION

## STEP 1: (A/C UNIT PREP CONT'D.)

- 1.9** Connect the Controller Jumper Harness' brown and purple wires to the brown and red wires found on A/C Power Supply Wire Harness per fig. 1.9. Connect the Controller Jumper Harness' green wire to the A/C Unit's main control harness' pink wire as shown in fig. 1.9.
- 1.10** Bundle the wires in the tray formed by the ductwork as shown in fig. 1.10. and use the supplied tie wraps to hold the harnesses together.

### Hardware Used

8" Wire Ties

### Qty

4

### Tools

Diagonal Cutters

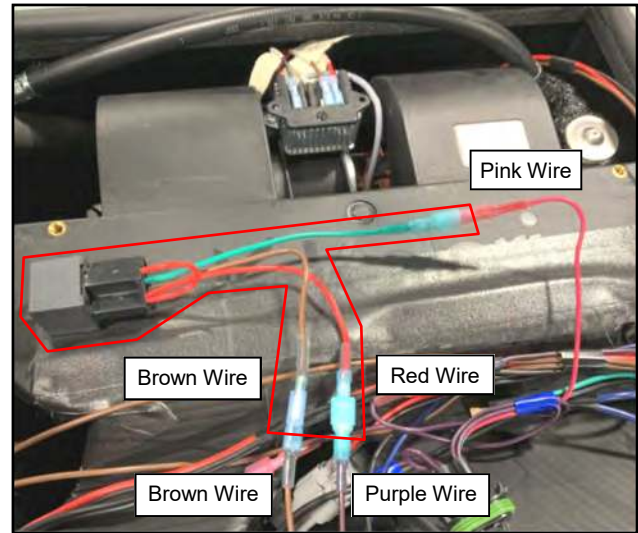


Fig. 1.9 (Connect Controller Jumper Harness)

## STEP 2: (VEHICLE PREP)

### For Mule PRO-FXT

*If installing alternator kit on Mule Pro-FX vehicle, proceed to step 2.6 on the next page.*

- 2.1** Disconnect the (2) latches on either side of the vehicle in front of the bed and tilt the back seat bottom forwards per fig 2.1.
- 2.2** Grab handles on the side of the bed and tilt the bed backwards per fig. 2.2.

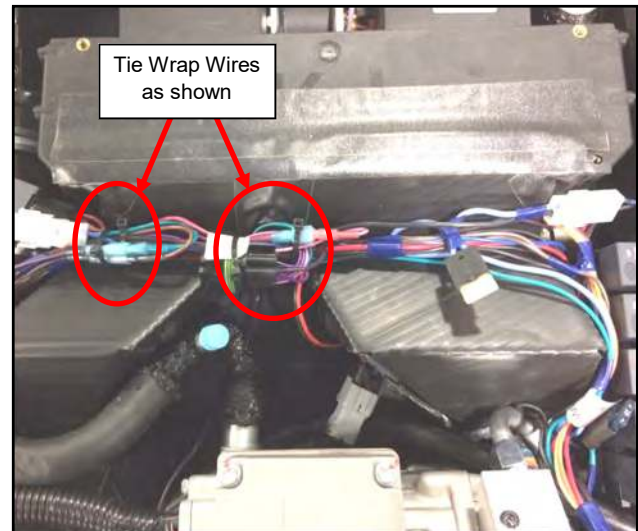


Fig. 1.10 (Tie Wrap Harnesses together)

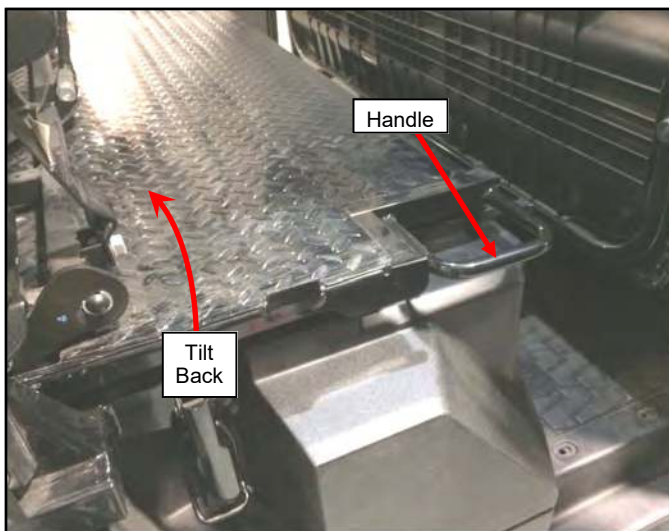


Fig. 2.2 (Tilt Bed, Pro-FXT)

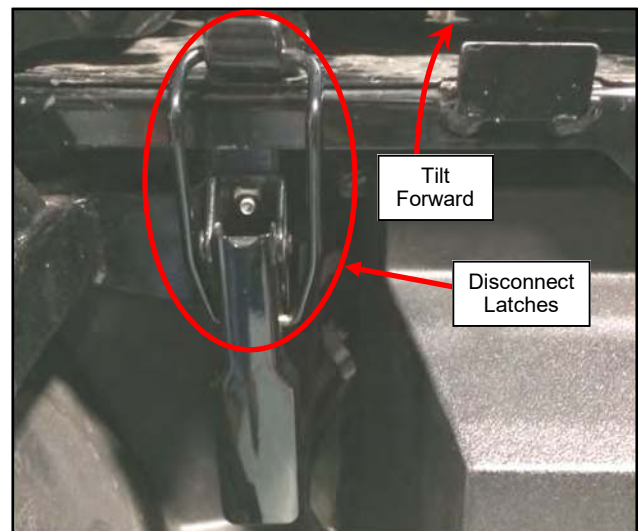


Fig. 2.1 (Tilt Seat Forward, Pro-FXT)

# KIT INSTALLATION

## STEP 2: (VEHICLE PREP CONT'D.)

### For Mule PRO-FXT

- 2.3 Disconnect the (2) small latches found on either side of the battery cover and set aside the cover per fig. 2.3.
- 2.4 Remove right rear side cover and hardware per fig 2.4.

#### Tools

Flathead Screwdriver  
#3 Phillips Screwdriver

- 2.5 Remove and discard foam corner per fig 2.5.

### For Mule PRO-FX

*If installing alternator kit on Mule Pro-FXT vehicle, proceed to step 2.9 on the next page.*

- 2.6 Disconnect the (2) latches on either side of the vehicle in front of the bed and tilt the back seat bottom forwards per fig 2.6.



Fig. 2.3 (Remove Battery Cover, Pro-FXT)

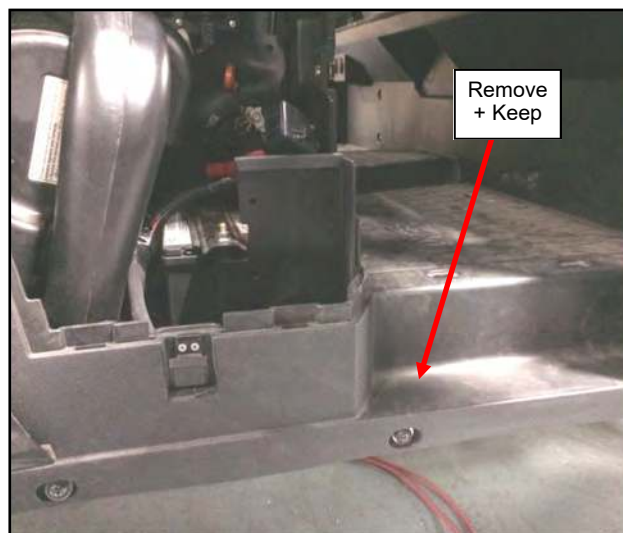


Fig. 2.4 (Remove right side cover)

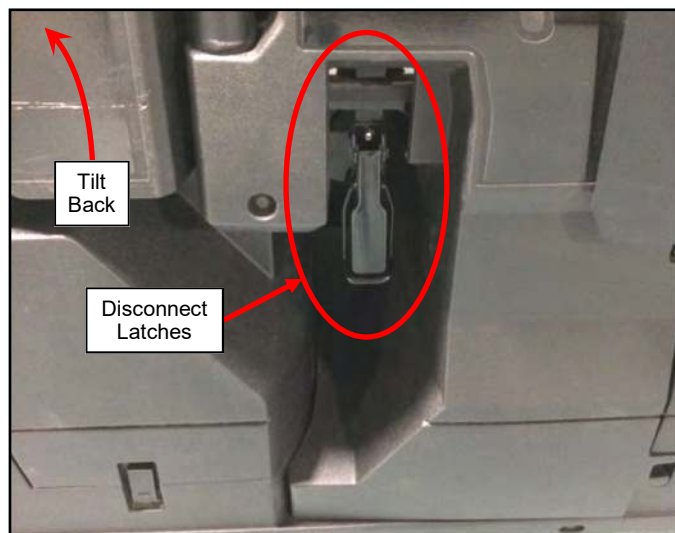


Fig. 2.6 (Tilt Bed, Pro-FX)

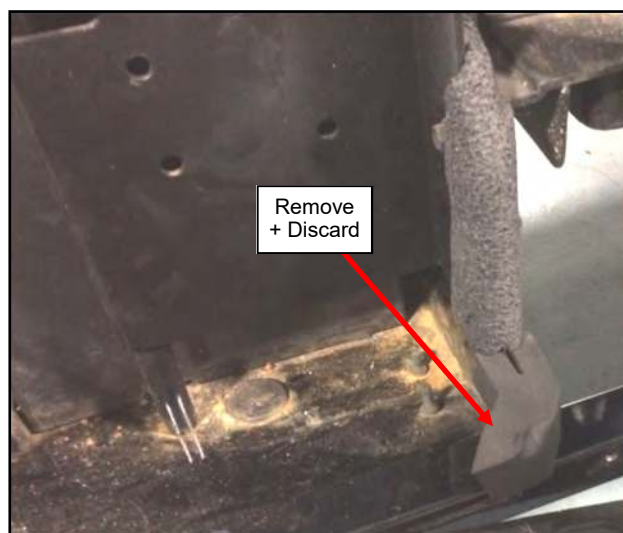


Fig. 2.5 (Remove Foam Corner)

## KIT INSTALLATION

### STEP 2: (VEHICLE PREP CONT'D.)

#### For Mule PRO-FX

- 2.7 Disconnect the (2) small latches found on either side of the battery cover and set aside the cover per fig. 2.7.
- 2.8 Remove and set aside seat back cover with its (6) Plastic Rivets & (3) Screws per fig. 2.8.

#### Tools

Flathead Screwdriver  
#3 Phillips Screwdriver

#### For both Mule PRO-FX & PRO-FXT

- 2.9 Disconnect the ground from the battery as shown on fig. 2.9.

#### Tools

1/2" Wrench



Fig. 2.7 (Remove Battery Cover, Pro-FX)



Fig. 2.8 (Remove Seat Back Cover)



Fig. 2.9 (Disconnect Ground On Battery)



# KIT INSTALLATION

## STEP 2: (VEHICLE PREP CONT'D.)

- 2.10** Remove and set aside exhaust duct assembly by loosening the lower clamp per fig. 2.10.

### Tools

#2 Phillips Screwdriver

- 2.11** Remove and set aside intake duct assembly by loosening the lower clamp and (2) mounting screws found on the vehicle's frame per fig. 2.11a & 2.11b.

### Tools

#2 Phillips Screwdriver

#3 Phillips Screwdriver

- 2.12** Disconnect both the alternator power wire and 2-pin connector from the back of the alternator per fig 2.12.

### Tools

10mm wrench or socket

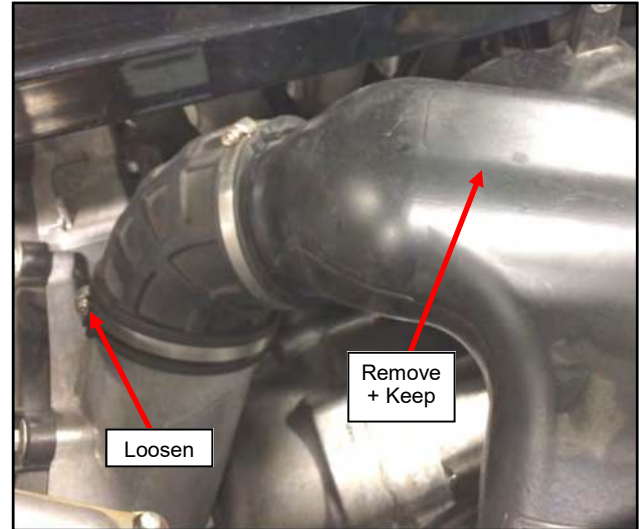


Fig. 2.11 (Remove Exhaust Duct Assembly)

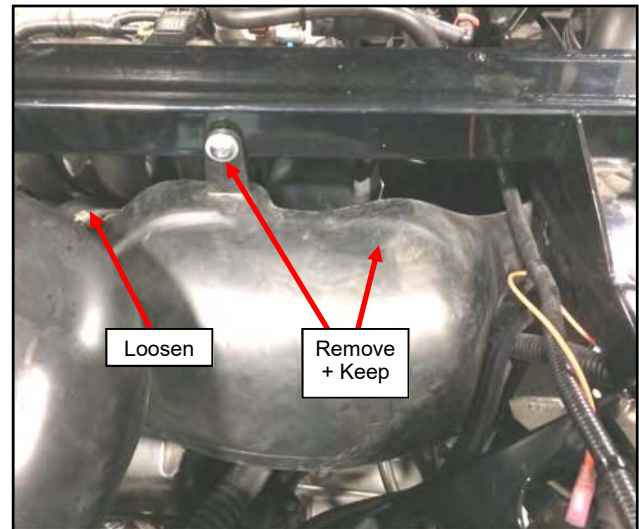


Fig. 2.11a (Remove Intake Duct Assembly, Back View)

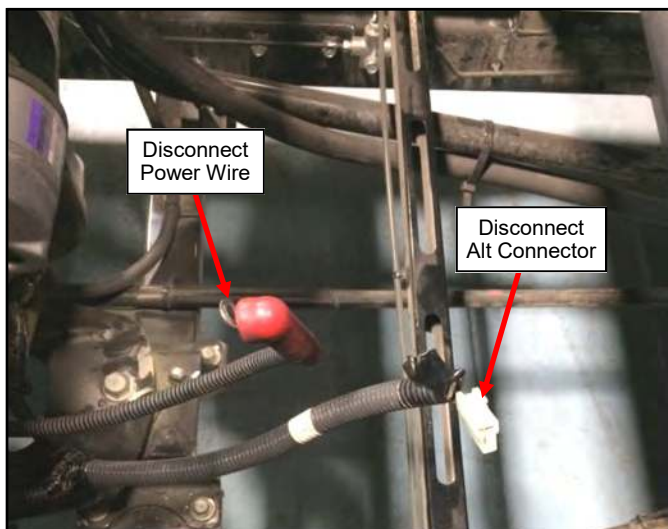


Fig. 2.12 (Disconnect Wires from Alternator)



Fig. 2.11b (Remove Intake Duct Assembly, Right View)



# KIT INSTALLATION

## STEP 2: (VEHICLE PREP CONT'D.)

- 2.13 Loosen alternator mounting hardware, rotate alternator forward and remove factory belt per fig. 2.13.

### Tools

13mm wrench or socket

- 2.14 Remove factory alternator, alternator bracket and mounting hardware per fig. 2.14. Make sure to keep upper mount screws.

### Tools

13mm wrench or socket

- 2.15 Remove factory pulley from alternator and set aside per fig. 2.15.

### Tools

24 mm wrench or socket

- 2.16 Per fig. 2.16, remove pulley from Curtis supplied alternator and install factory pulley removed from step 2.15. **Note: torque nut on alternator to 68-108 N-m (50 ft-lb to 80 ft-lb)**

### Tools

Torque Wrench

24 mm socket

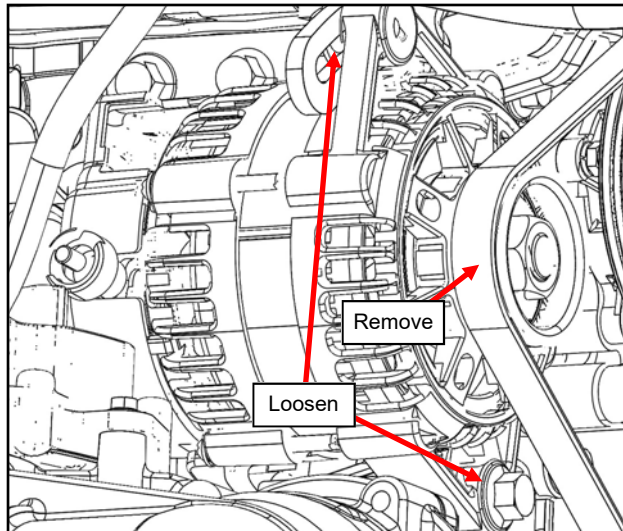


Fig. 2.13 (Loosen Alt Hardware & Remove Belt)

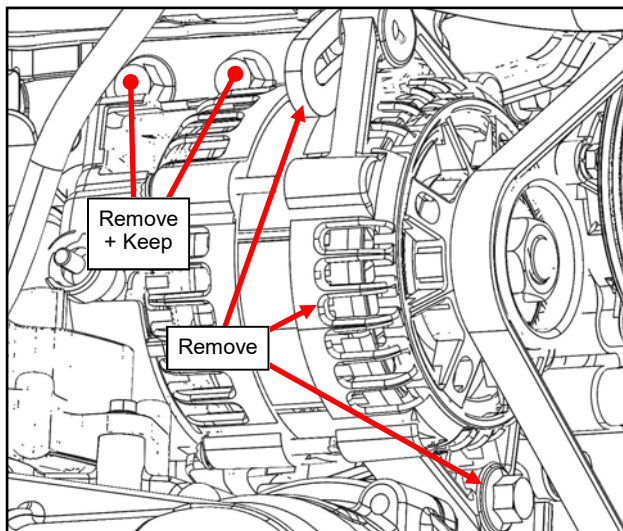


Fig. 2.14 (Remove Alternator)

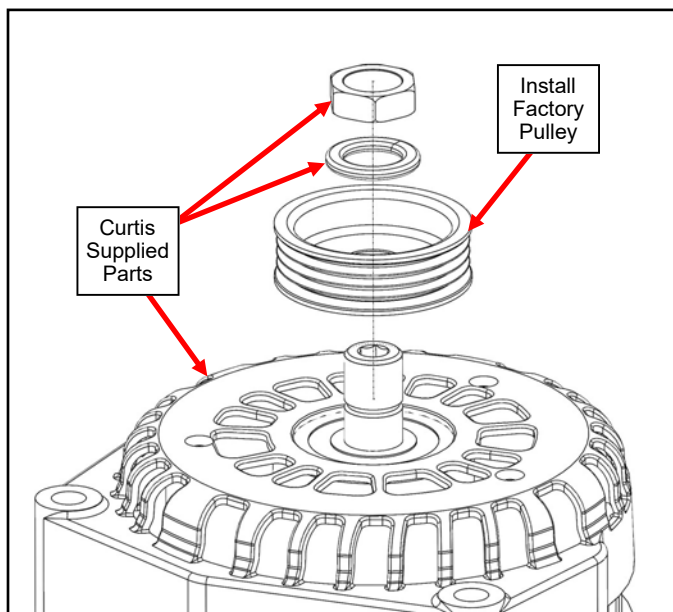


Fig. 2.16 (Install Alternator Pulley and Hardware)

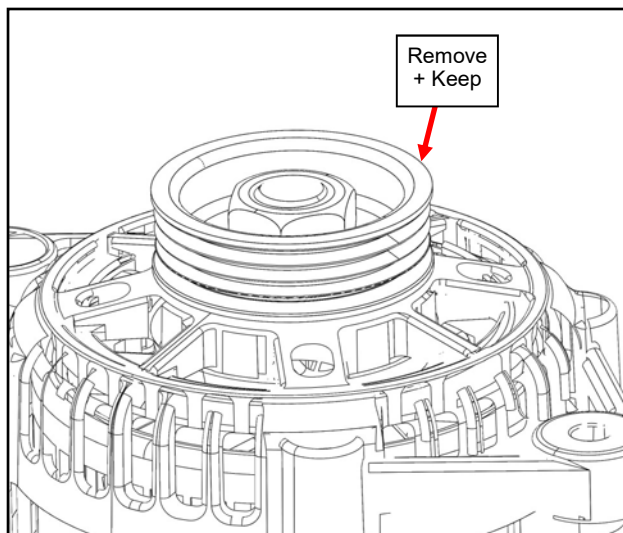


Fig. 2.15 (Remove Alternator Pulley and Hardware)

# KIT INSTALLATION

## STEP 3: (ALTERNATOR INSTALLATION)

- 3.1 Install Adjustment Plate onto Upper Mount with supplied hardware . See figure. 3.1.

### Tools

9/16" wrench or socket

### Hardware Used

3/8-16 X 1" Flange Bolt

### Qty

1

- 3.2 Install Upper Alternator Mounting Weldment w/ Adjustment Plate onto engine block per figures 3.2.

### Tools

13mm wrench or socket

- 3.3 Install the front and back lower plates with the shorter 7/8" long spacer onto the lower alternator ear as shown in figure. 3.3.

### Tools

9/16" wrench or socket

### Hardware Used

3/8-16 X 4" Flange Bolt (Clear Zinc)

### Qty

1

3/8-16 Flange Lock Nut (Clear Zinc)

1

5/8" OD X 7/8" Long Spacer

1

- 3.4 With Scotch-Brite Pad remove rust from non painted sides of the engine block's alternator mount per fig. 3.4.

### Tools

Scotch-Brite Pad



Fig. 3.1 (Install Adjustment Plate onto Upper Mount)

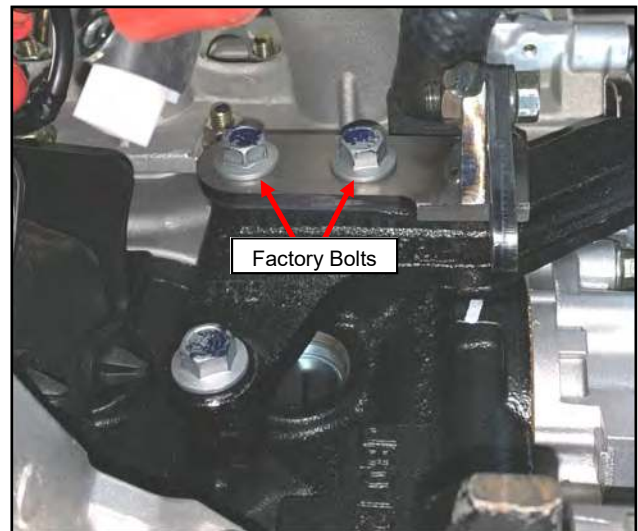


Fig. 3.2 (Install Upper Mount & Adj Plate)

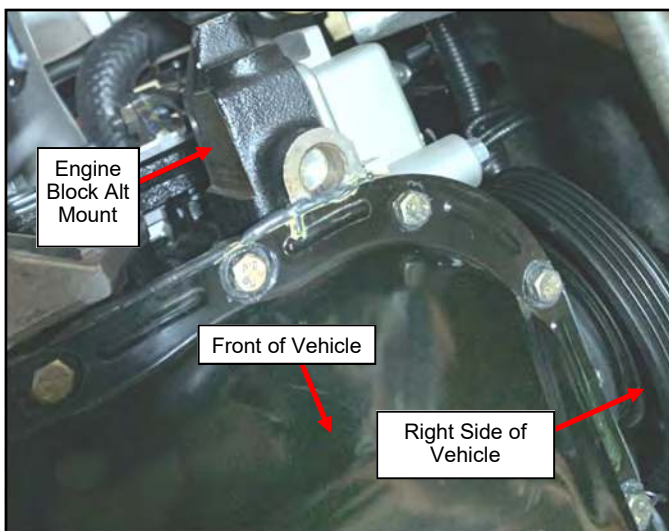


Fig. 3.4 (Clean Surface of Alternator Mount )

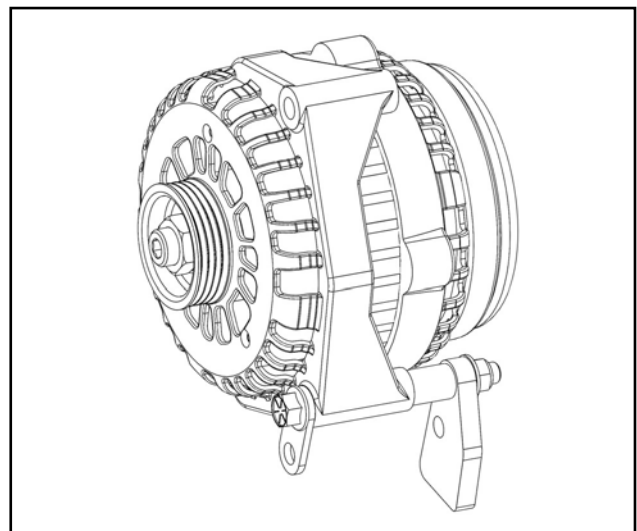


Fig. 3.3 (Lower Plates & Spacer on Alternator)



# KIT INSTALLATION

## STEP 3: (ALTERNATOR INSTALLATION CONT'D.)

3.5 Insert alternator with plates and spacers into the engine compartment from below the vehicle as shown in figure 3.5.

3.6 Install the alternator into the engine block's alternator mount as shown in figure. 3.6.

### Tools

9/16" wrench or socket

### Hardware Used

	Qty
3/8-16 X 4" Flange Bolt (Clear Zinc)	1
3/8-16 Flange Lock Nut (Clear Zinc)	1
5/8" OD X 1-1/16" Long Spacer	1

3.7 Make sure to rotate the adjustment bracket up to clear alternator as shown on figure 3.7.

3.8 Loosely install new Belt provided in kit per fig 3.8.

**Note:** Before moving onto the next step, start the installation of the vehicle's cab and the A/C Roof Kit.

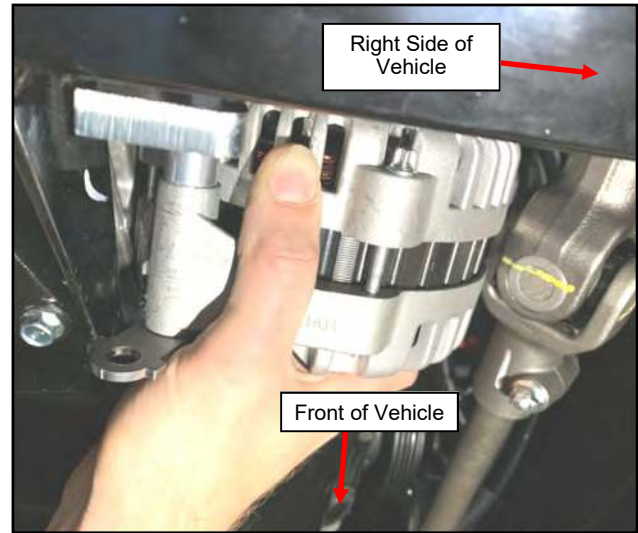


Fig. 3.5 (Insert Alternator into Engine Component)

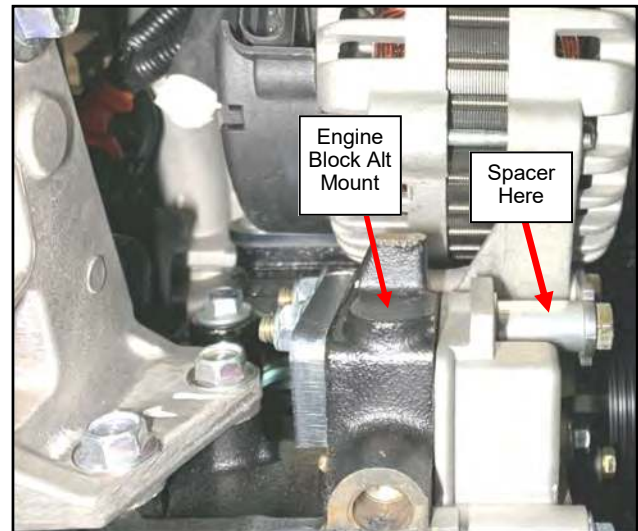


Fig. 3.6 (Install Alternator, Lower Mount)

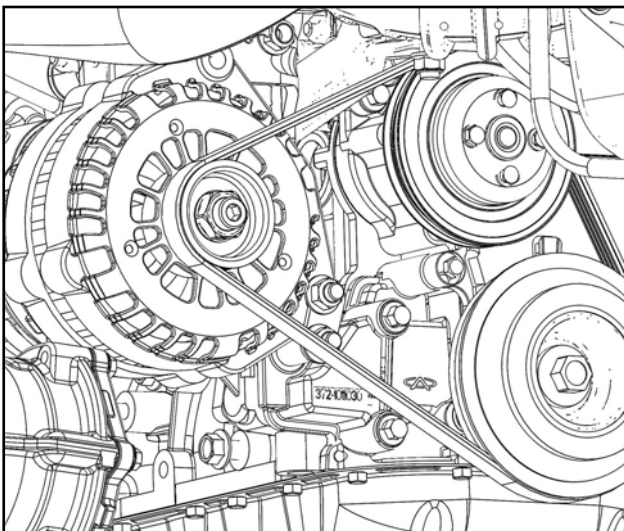


Fig. 3.8 (Install Belt)

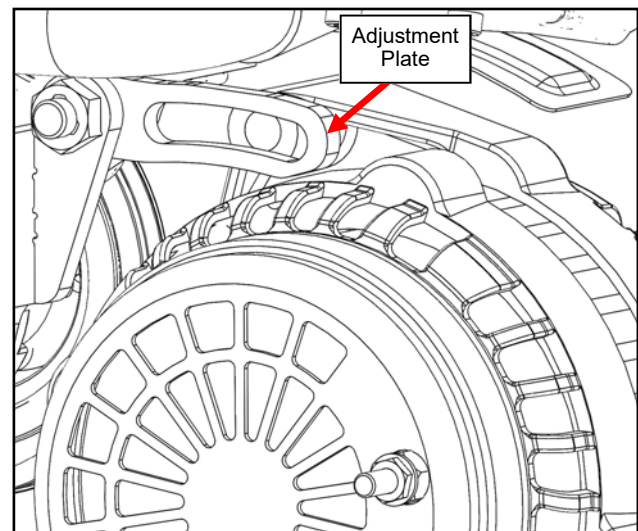


Fig. 3.7 (Install Alternator, Upper Mount/Adj. Plate)



# KIT INSTALLATION

## STEP 4: (ALTERNATOR WIRING)

- 4.1** Install Ground Wire to front of the upper ear of the alternator using the supplied hardware, per fig 4.1. Make sure bolt goes thru the slot found on the adjustment plate. Next, tension the belt and tighten the screws that secure the alternator.

### Tools

9/16" wrench or socket

Flathead Screwdriver or Small Prybar

### Hardware Used

	Qty
3/8-16 X 3" Flange Bolt (Clear Zinc)	1
3/8-16 Flange Lock Nut (Clear Zinc)	1

- 4.2** Install 100 amp fuse and fuse mounting bar onto either end of the Engine Side Power Supply Harness (P/N: 9SV-WH-00117), per fig 4.2.

### Hardware Used

	Qty
1/4-20 Lock Nut (Clear Zinc)	1

### Tools

7/16" wrench or socket

- 4.3** Install Fuse Mounting Bar with Engine Side Harness and the vehicle's power wire (disconnected on step 2.12) to the back of the alternator power stud as shown in fig 4.3. Next, route the engine side harness towards the vehicle's battery.

### Tools

10mm wrench or socket

- 4.4** Install Fuse Mounting Bar, 100 amp fuse and both engine and cab side A/C Power Supply harnesses to the positive terminal found on the vehicle's battery. See fig 4.4.

### Tools

7/16" wrench or socket

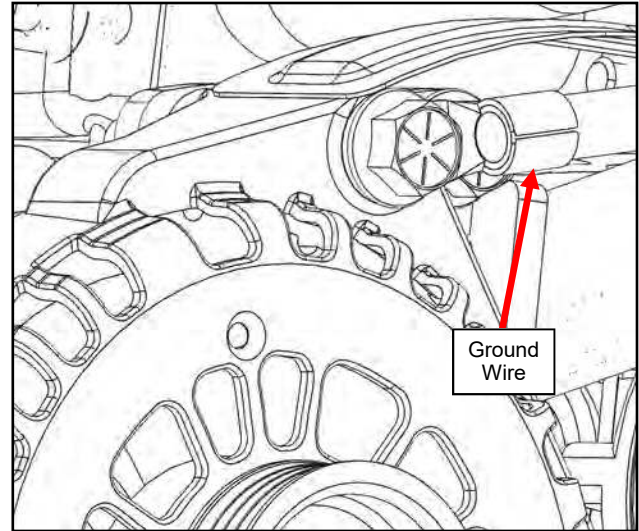


Fig. 4.1 (Install Ground Wire)

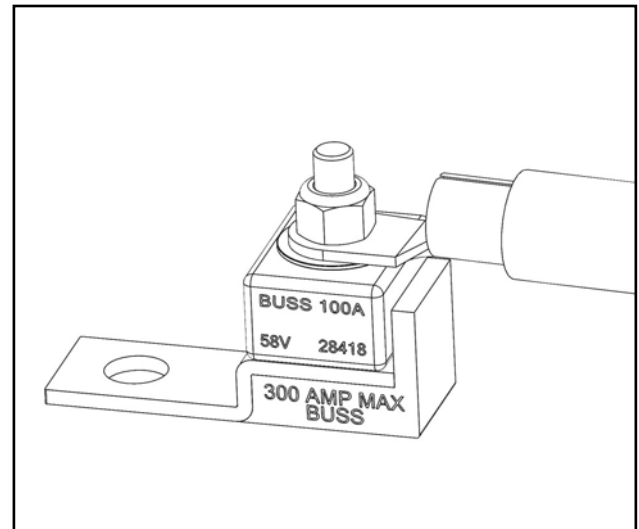


Fig. 4.2 (Install Fuse & Fuse Mounting Bar; Note: Rubber Boot Not Shown)

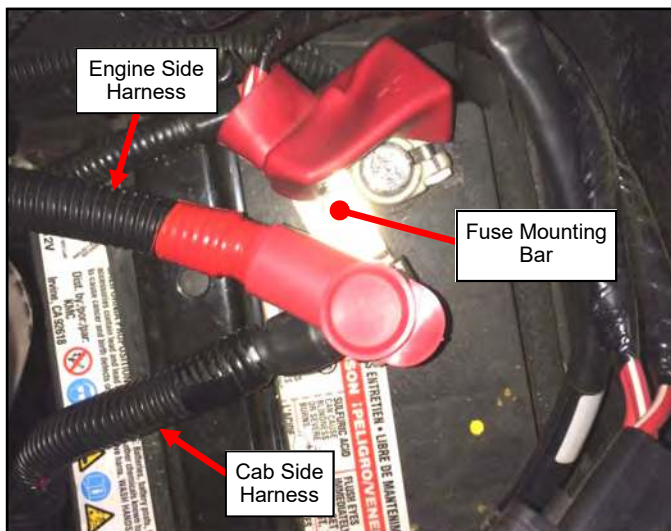


Fig. 4.4 (Install A/C Power Supply Harnesses, Battery Side)

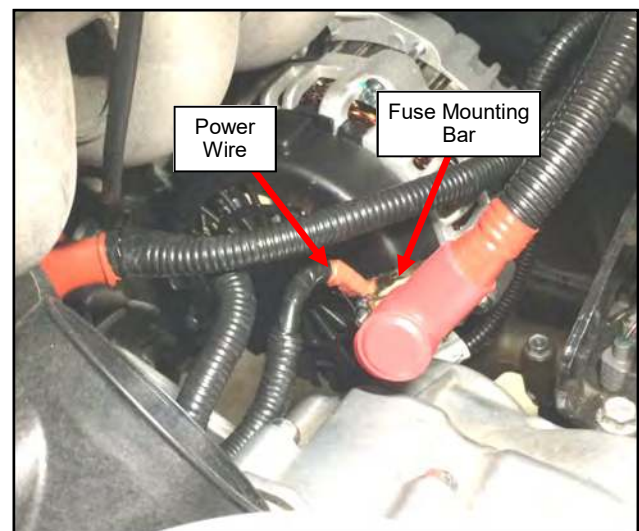


Fig. 4.3 (Install Vehicle's Power Wire)

# KIT INSTALLATION

## STEP 4: (ALTERNATOR WIRING CONT'D.)

- 4.5 Connect 2-pin alternator end of Alternator Harness to the Vehicle's Alternator Connector found in Step 2.12. Next, connect female push-on terminal to A/C Power Supply Cab Harness' male push-on terminal. See figures 4.5a and 4.5b.
- 4.6 Connect 4-pin connector found on the Cab Side A/C Power Supply Harness to the back of the alternator as shown in fig. 4.6.

## STEP 5: (FINISHING TOUCHES)

- 5.1 Inspect all belts for tightness, adjust as necessary.
- 5.2 Inspect all fasteners, they should be fully tightened before starting the vehicle.
- 5.3 Inspect all wires to make sure they are sufficiently tied down and away from hot or moving parts.
- 5.4 Reconnect the negative battery terminal.
- 5.5 Re-install Air Filter & Cover, which was previously removed in Step 2 section.

### For Mule PRO-FXT

If installing on Mule Pro-FX vehicle, proceed to step 5.10 on the next page.

- 5.6 Cut and install a 1" strip of trim-lok supplied in this kit to the exposed sheet metal corner underneath the right side cover as shown in fig. 5.6.

#### Tools

Snips

- 5.7 Re-install right rear side cover and hardware previously removed in Step 2 section.

#### Tools

Flathead Screwdriver

#3 Phillips Screwdriver

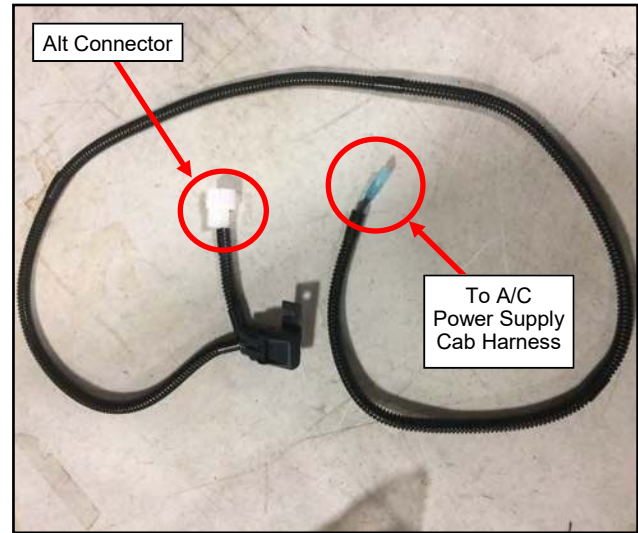


Fig. 4.5a (Connect Alternator Harness)

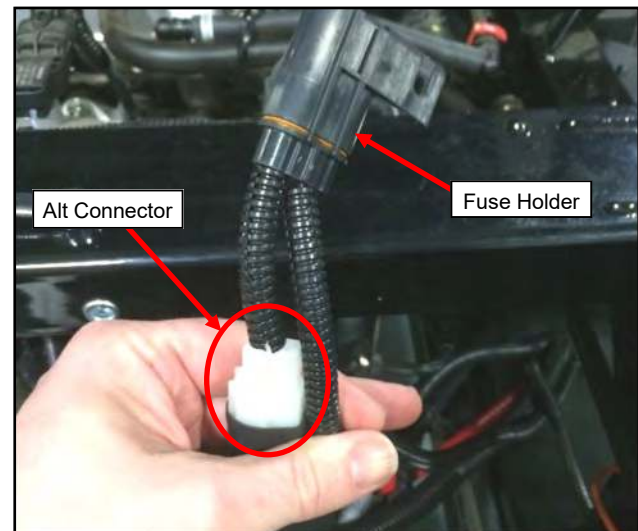


Fig. 4.5b (Connect Alternator Harness, Fuse Holder)



Fig. 5.6 (Install Trim Lock, Pro-DXT)

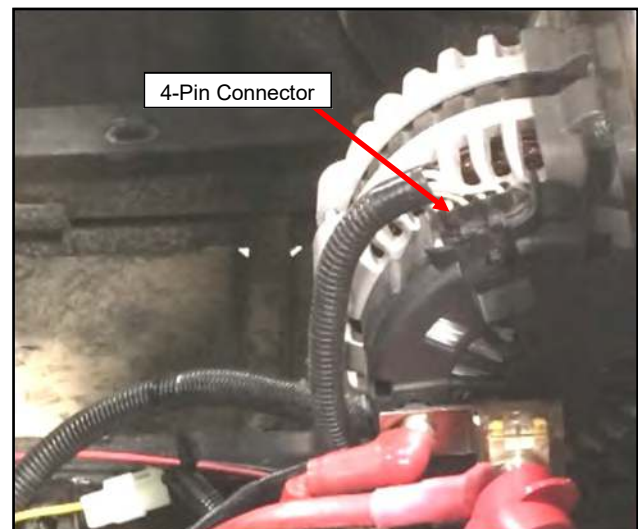


Fig. 4.6 (4-Pin Connector, A/C Power Supply Harness (Cab))

## KIT INSTALLATION

### STEP 5: (FINISHING TOUCHES CONT'D.)

#### For Mule PRO-FX

If installing alternator kit on Mule Pro-FXT vehicle, proceed to step 5.10.

- 5.8 Re-install the previously removed seat back cover with its (6) Plastic Rivets & (3) Screws.

#### Tools

Flathead Screwdriver  
#3 Phillips Screwdriver

- 5.9 Install 6" strip of trim-lok provided in kit to the lower rear panel's upper flange as shown in fig. 5.9 to keep the wire from being chaffed.

#### For both Mule PRO-DX & PRO-DXT

- 5.10 Re-install exhaust & then intake duct assemblies previously removed in section 2.

#### Tools

#2 Phillips Screwdriver  
#3 Phillips Screwdriver

- 5.11 Re-install the battery cover.
- 5.12 Tilt the vehicle's bed back down and re-latch the bed. On Pro-FXT, tilt rear seat back and re-latch.
- 5.13 See figure below. Start the vehicle and turn on the air conditioner. Run the engine at idle. Cool air should begin to flow after 60 to 90 seconds. Verify that the air conditioner is functioning. If it is not functioning, refer to the troubleshooting section in the A/C manual.
- 5.14 Alternator kit is now complete. Continue with the completion of the cab and roof kit installations.

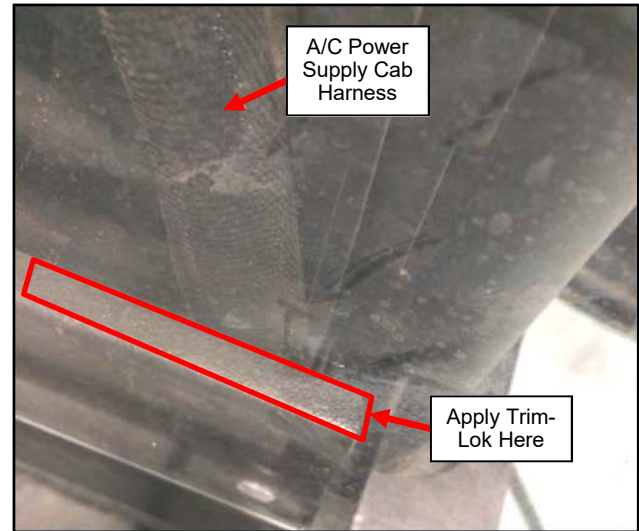
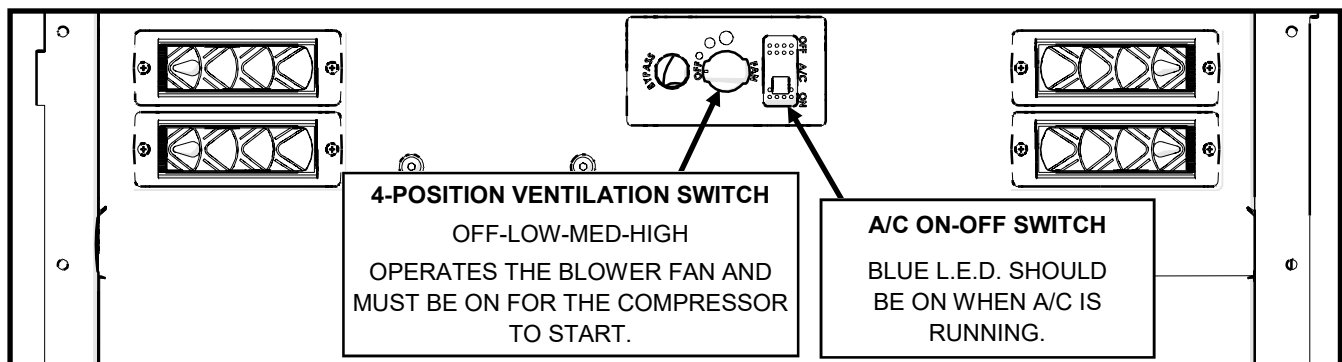


Fig. 5.9 (Apply Trim-Lok Lower Rear Panel, Pro-FX)



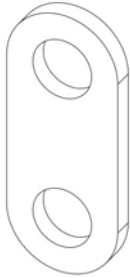
## CARE AND MAINTENANCE

- Readjust the belts after the initial 8-10 hours of use.
- Check and tighten hardware after 20 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's life.

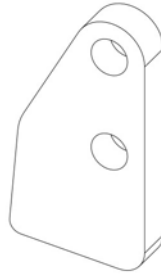


# KAWASAKI MULE PRO-DX & PRO-DXT A/C ALTERNATOR KIT SERVICE PARTS

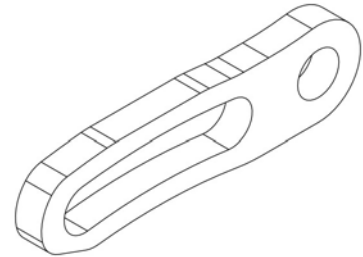
ALT. MNT PLATE, FRONT, LOWER  
P/N: 8SV-SM-01251-ZC



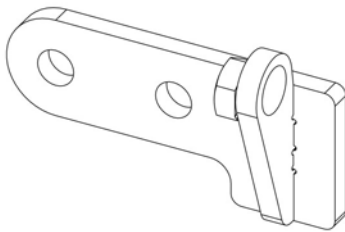
ALT. MNT PLATE, REAR, LOWER  
P/N: 8SV-SM-01252-ZC



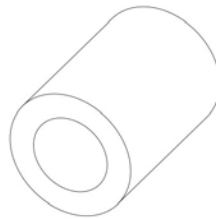
ALTERNATOR ADJ PLATE, PRO-FX  
P/N: 8SV-SM-01254



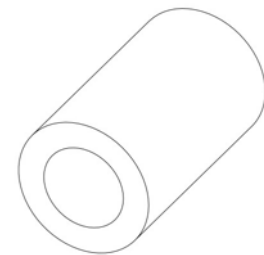
ALT. MOUNTING WELDMENT, UPPER,  
PRO-FX; P/N: 8SV-WA-00296



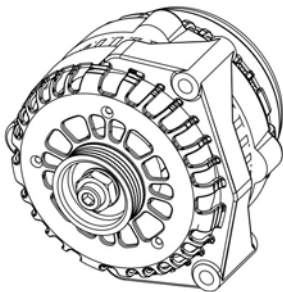
SPACER, .382 ID X .625 OD X  
.875 LG; P/N: 9SV-T-00215



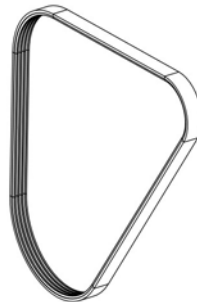
SPACER, .382 ID X .625 OD X  
1.063 LG; P/N: 9SV-T-00216



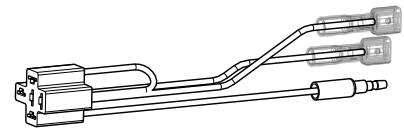
ALTERNATOR, AD244 FRAME  
P/N: 8SV-114-00030



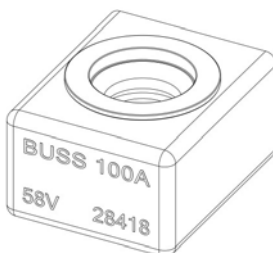
BELT, W PROFILE, POLY (4) RIB, 32.09  
OUTSIDE CIRCUMFERENCE; P/N: 9SV-9BLT-08



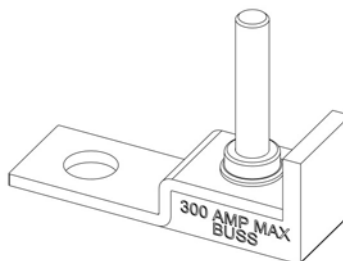
CONTROLLER JUMPER HARNESS  
P/N: 9SV-WH-00095



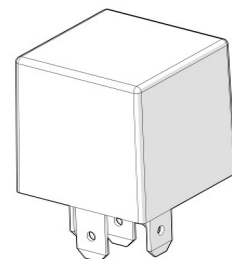
FUSE, 100 AMP, 58 VOLT, MARINE RATED  
BATTERY, IP66; P/N: 9SV-85-00-0050



FUSE MOUNTING BAR, 58 VOLT, 1/4" STUD,  
3/8" MOUNTING HOLE; P/N: 9SV-85-16-0051

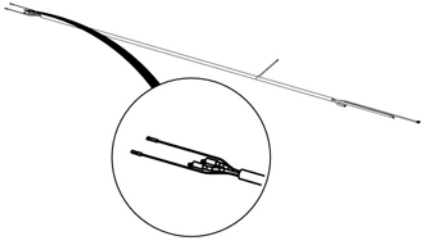


RELAY, 12V, 20/40A, SPDT, MINI ISO  
P/N: 9SV-85-01-0022

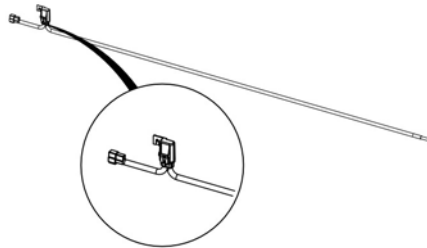


## KAWASAKI MULE PRO-DX & PRO-DXT A/C ALTERNATOR KIT SERVICE PARTS

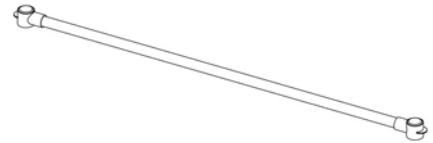
WIRE HARNESS, A/C POWER SUPPLY,  
CAB SIDE, ACMRX; P/N: 9SV-WH-00096



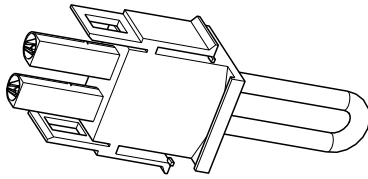
ALTERNATOR HARNESS, KAWASAKI  
MULE PRO-FX; P/N: 9SV-WH-00116



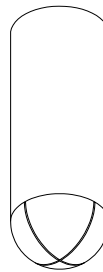
WIRE HARNESS, A/C POWER SUPPLY,  
ENGINE SIDE, MULE PRO-FX  
P/N: 9SV-WH-00117



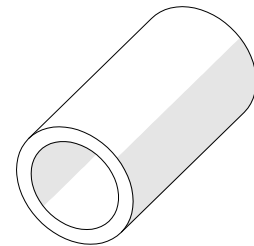
JUMPER HARNESS  
P/N: 9SV-WH-00094



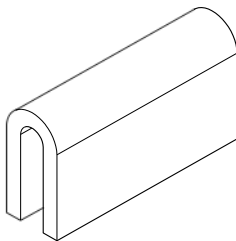
TUBE CAPS (BAG OF 10)  
9SV-74-01-0010



DRAIN HOSE  
9SV-AC-00019-15



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






# BOLT TORQUE

## BOLT TORQUE SPECIFICATIONS

### GENERAL TORQUE SPECIFICATION TABLE

Use the following torques when special torques are not given. These values apply to fasteners as received from suppliers, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads. Remember to always use grade five or better when replacing bolts.

**IMPORTANT: On all PLATED GRADE 8 bolts, reduce torque 15% from listed bolt torque specification.**

SAE Grade No.		2				5				8*			
Bolt head identification mark as per grade. NOTE: Manufacturing Marks Will Vary													
Bolt Size		TORQUE				TORQUE				TORQUE			
Inches	Millimeters	Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	6.35	5	6	7	8	9	11	12	15	12	15	16	20
5/16	7.94	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	9.53	20	23	27	31	35	42	48	57	45	54	61	73
7/16	11.11	30	35	41	47	54	64	73	87	70	84	95	114
1/2	12.70	45	52	61	70	80	96	109	130	110	132	149	179
9/16	14.29	65	75	88	102	110	132	149	179	160	192	217	260
5/8	15.88	95	105	129	142	150	180	203	244	220	264	298	358
3/4	19.05	150	185	203	251	270	324	366	439	380	456	515	618
7/8	22.23	160	200	217	271	400	480	542	651	600	720	814	976
1	25.40	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8	25.58	-	-	-	-	800	880	1085	1193	1280	1440	1736	1953
1-1/4	31.75	-	-	-	-	1120	1240	1519	1681	1820	2000	2468	2712
1-3/8	34.93	-	-	-	-	1460	1680	1980	2278	2380	2720	3227	3688
1-1/2	38.10	-	-	-	-	1940	2200	2631	2983	3160	3560	4285	4827

\*Thick Nuts must be used with Grade 8 bolts

### METRIC BOLT TORQUE SPECIFICATIONS

Size of Screw	Property Class	Course Thread			Fine Thread		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	5.6	1.0	3.6-5.8	4.9-7.9	-	-	-
	8.8		5.8-9.4	7.9-12.7		-	-
	10.9		7.2-10	9.8-13.6		-	-
M8	5.6	1.25	7.2-14	9.8-19	1.0	12-17	16.3-23
	8.8		17-22	23-29.8		19-27	25.7-36.6
	10.9		20-26	27.1-35.2		22-31	29.8-42
M10	5.6	1.5	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	8.8		34-40	46.1-54.2		35-47	47.4-63.7
	10.9		38-46	51.5-62.3		40-52	54.2-70.5
M12	5.6	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	8.8		51-59	69.1-79.9		55-68	75.9-92.1
	10.9		57-66	77.2-89.4		62-75	84-101.6
M14	5.6	2.0	49-56	66.4-75.9	1.5	52-64	70.5-86.7
	8.8		81-93	109.8-126		90-106	122-143.6
	10.9		96-109	130.1-147.7		107-124	145-168
M16	5.6	2.0	67-77	90.8-104.3	1.5	69-83	93.6-112.5
	8.8		116-130	157.2-176.2		120-138	162.6-187
	10.9		129-145	174.8-196.5		140-158	189.7-214.1
M18	5.6	2.0	88-100	119.2-136	1.5	100-117	136-158.5
	8.8		150-168	203.3-227.6		177-199	239.8-269.6
	10.9		175-194	237.1-262.9		202-231	273.7-313
M20	5.6	2.5	108-130	146.3-176.2	1.5	132-150	178.9-203.3
	8.8		186-205	252-277.8		206-242	279.1-327.9
	10.9		213-249	288.6-337.4		246-289	333.3-391.6

5.6

8.8

10.9