Kawasaki Mule Pro FXT

Part #: 101230 Hardware Kit: HK-129, HK-031 Contents: 1x 101231 - Winch Mount 1x 101236 - Support Channel Hardware Kit: 3/8"-16 x 1-1/4" Hex Flange Bolt 4x 3/8"-16 x 1" Hex Flange Bolt 2x 3/8"-16 Hex Flanged Nylock Nut 6x 22-18GA Male Insulated Terminal 1xHK-031 (UTV Mini-Rocker Hardware) 1x

IMPORTANT: Installation of this winch mount requires KFI Part# <u>UTV-WEK</u>.

INSTALLATIONINSTRUCTIONS:

PREPARE MACHINE

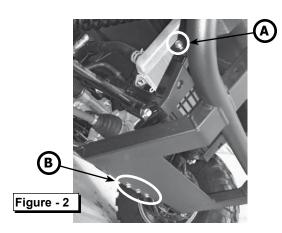
1. Begin by turning the vehicle off. Locate and remove the battery compartment cover on the passenger side, behind the rear bench (Figure 1).

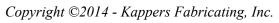


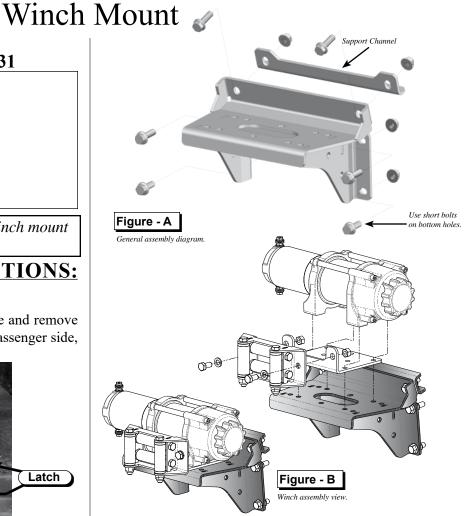
2. Remove both the front & rear skid plates under the vehicle, and the front hood panel. Figure 12 shows both skid plates removed.

**Note, you you have a 2018 or newer model, you do not need to remove the skid plates.

 Remove the front bumper by unfastening bolts shown in <u>Figure 2</u> at locations (A) on both sides of frame, and three bolts at location (B).

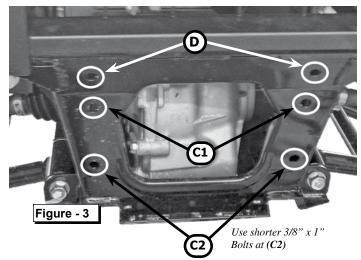






INSTALL WINCH MOUNT TO FRAME

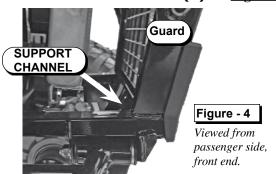
Position the winch mount plate against the frame according to Figure A & Figure 3. First, loosely install two 3/8" x 1-1/4" Bolts with 3/8" Nylock Nuts at location (C1), then two 3/8" x 1" Bolts with Nuts at location (C2). Do not fully tighten hardware at this time.



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5. Position the Support Channel behind and below the front radiator guard according to Figure A and Figure 4, sandwiching the winch mount plate and machine frame at bolt locations (D) in Figure 3.



Pass two 3/8" x 1-1/4" Bolts through holes (**D**) in the winch mount plate, the machine frame, and Support Channel according to assembly Figure A. Loosely affix two 3/8" Nylock Nuts.

6. Fully tighten all winch mount hardware evenly.

INSTALL WINCH TO WINCH MOUNT

7. Assemble your winch, fairlead bracket, and roller fairlead or hawse fairlead to the winch mount as shown in Figure B using hardware included with your winch.

> Note: If your winch did not come with a roller fairlead or fairlead bracket, you can purchase either separately. See www.kfiproducts.com or contact your local dealer.

8. Replace front bumper, using hardware removed in <u>Step 3</u>.

WIRING INSTRUCTIONS

OVERVIEW

Installation requires the use of KFI #UTV-WEK (Extended Wiring Kit). All wiring will first be routed from the hood compartment where the Contactor Block is mounted through a small wiring outlet (E), then either to the battery or the winch.

KFI

#UTV-WEK

REOUIRED!

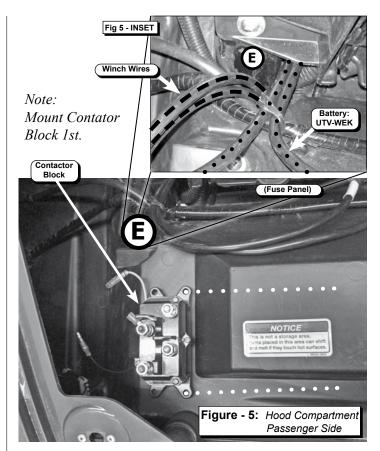
Leave all ends loose until instructed to connect them. You will then work your way back to the front while securing wires to the frame and pulling slack into the hood compartment.

INSTALL CONTACTOR

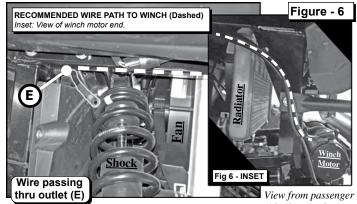
9. Position and install the Contactor Block to the preferred location as shown in Figure 5. It must be placed as in the photo to avoid radiator hoses directly below the plastic. Use the dotted lines as a guide and visually center the Contactor Block as shown in Figure 5. Install using hardware included with your winch, or alternatively, short drywall/multi-purpose screws.

ROUTE WINCH WIRES

Feed the shortest wires included with your 10. winch (usually RED & BLACK) from the hood compartment, through a wire outlet (E) as shown in Figure 5.



11. Run the winch wires down through the oulet, over top the passenger side shock support, and toward the Winch Motor end following the *dashed* path in Figure 6.



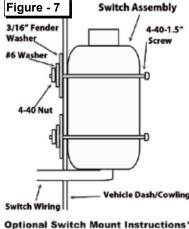
side, front end.

- Loosely secure winch wires to the frame with zip ties, 12. but do not fully tighten them to allow adjustment.
- ALTERNATE WINCH WIRING 13. Per the **DIAGRAM (pg 5)**, connect the BLACK wire to the NEG (-) BLUE winch post; connect the RED wire to POS (+) YELLOW winch post.
- Working your way back to the outlet (E), secure 14. winch wires tight to the frame and push slack back into the hood compartment. DO NOT CONNECT to Contactor Block at this time.

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INSTALL SWITCH

- 15. Use included Mini-Rocker Switch Hardware Kit (HK-031) to fasten a handle bar mounted mini-rocker switch to the dash or any desired location.
 - a. Remove handlebar mount hardware from the switch.
 - b.Locate desired mounting location.
 - c. Mark & drill 2 switch holes thru dash using switch housing as a template.

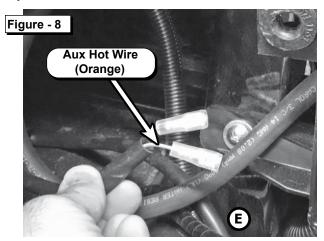


e. Assemble per Figure 7.

switch wiring.

d.Drill a 3rd hole for

16. Connect the red ignition fed wire for a Mini-Rocker Switch or other controller to the orange terminal of the auxilliary wiring harness that is pre-installed on the passenger side in the front hood compartment. See <u>Figure 8</u>. Attach using the supplied 22-18GA Male Insulated Terminal. Wire to Contactor per your winch manual. Secure wires as needed.



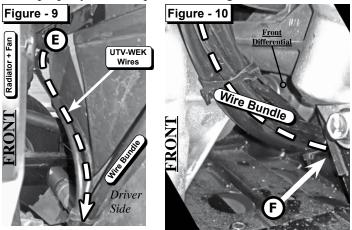
ROUTE BATTERY WIRES

**For 2018- current models, skip to step 29

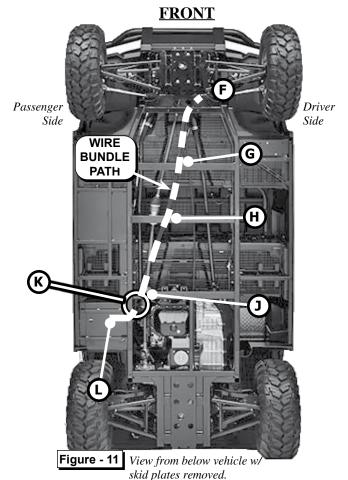
You will route the wires from UTV-WEK to the battery along the same path as the parking brake wire bundle. (See <u>Fig 11</u>)

- This vehicle requires extended 11FT battery wires included with the Wire Extension Kit (KFI#: UTV-WEK, sold separately). Use only the BLUE & YELLOW color coded wires found in UTV-WEK to connect the battery.
- 18. Feed the wires from #UTV-WEK through outlet (E) in the hood compartment shown in <u>Figure 5</u>, then down behind the fan, going from the passenger side strut support toward the driver side and the parking brake wire bundle as shown in <u>Figure 9</u>.

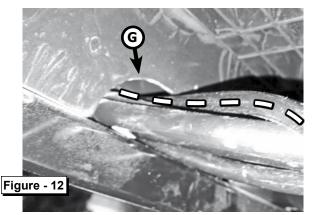
19. Before moving on to the next steps, **tape off the YELLOW wire end** left in the hood compartment with electrical tape for safety. You will be connecting these wires to the battery once they are routed properly, and this prevents arcing.



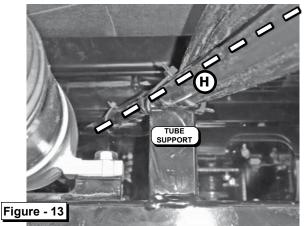
- 20. Locate a wire bundle (**Figure 10**) and follow its path under the vehicle. Route the **UTV-WEK** wires *along this cable bundle* (as shown in **Figure 11**) towards the rear of the vehicle to the battery compartment. Using zip ties, loosely secure the **UTV-WEK** wires to the wire bundle and pass it through the following key junction points:
- 21. **Point F** Passing under the front differential (see <u>Figure 10</u>).



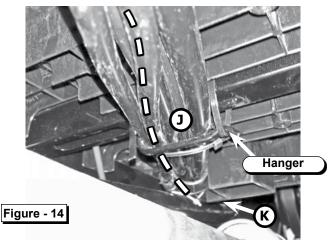
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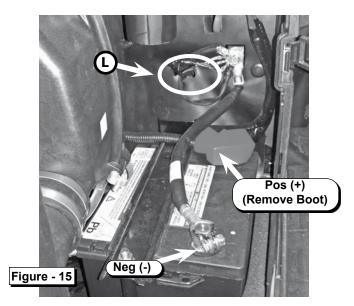
22. **Point G** - Through a wire hole in the plastic (see Figure 12).



23. **Point H** - Across and on top of a tube support (see Figure 13).



- 24. **Point J** Through a hanger (see Figure 14).
- 25. **Point K** Special Note: KFI recommends using a 12" Wire Loom on the UTV-WEK wires in the location where the wires cross paths with the radiator lines at point **(K)**.
- 26. **Point L** Into the battery compartment; feed both ends of the wires from UTV-WEK, from under the vehicle, up through a hole found at location **(L)** directly above the wire bundle as shown in Figure 15.



- 27. Per the ALTERNATE WINCH WIRING DIAGRAM, attach the YELLOW wire to the screw on the POS(+) battery post. Attach the BLUE wire to the NEG(-) battery post.
- 28. Working your way back to the front hood compartment, pull wires taught and take out any slack as you go. Secure them with additional zip ties and tighten loosely placed zip ties from earlier steps.

Note: Keep battery wires tight & secure against the wire bundle! DO NOT let them come in contact with any heat source or moving components!

ROUTE BATTERY WIRES (2018-Current Models)

- 29. This vehicle requires extended 11FT battery wires included with the Wire Extension Kit (KFI#: UTV-WEK, sold separately). Use only the BLUE & YELLOW color coded wires found in UTV-WEK to connect the battery.
- 30. Before moving on to the next steps, **tape off the YELLOW wire end** left in the hood compartment with electrical tape for safety. You will be connecting these wires to the battery once they are routed properly, and this prevents arcing.
- 31. Remove the caps from the loom and feed the wires from #UTV-WEK through the wire loom in the hood compartment shown in **Figure 16.**
- *Note: It may be easiest to tape the ends of the 2 wires together so they do not get hung up while going through the loom.
- 32. From the battery compartment, you should be able to see the end of the wire loom, as shown in **Figure 17**.
- 33. Per the ALTERNATE WINCH WIRING DIA-GRAM, attach the YELLOW wire to the screw on the POS(+) battery post. Attach the BLUE wire to the NEG(-) battery post.

COMPLETING INSTALLATION

34. In the hood compartment, finally connect the winch and battery wires to the Contactor Block per the **ALTERNATE WINCH WIRING DIAGRAM** shown on **Page 5**.

Note: Remove the electrical tape from the YELLOW wire end applied in <u>Step 19</u> before making connections!

• Wire Winch NEG (BLACK WIRE) to BLUE Contactor post.

• Wire Winch POS (RED WIRE) to YELLOW Contactor post.

• Wire Battery NEG (BLUE WIRE) to BLACK Contactor post.

• *Wire Battery POS (YELLOW WIRE) to RED Contactor post.*

- 35. If applicable, connect the small GREEN & BLACK wires from a Mini-Rocker switch or similar to the standard Contactor Block. Consult your Winch manual for specific wiring instructions.
- 36. Finish securing wires in the hood compartment, bundle up slack, and zip tie as needed. Replace the hood panel.
- 37. Replace skid plates removed in previous steps.
- 38. Replace battery compartment cover.





Note: Battery shown in this diagram represents a *battery fed source*. Depending on your vehicle configuration, power leads may attach to a primary/secondary battery or starter solenoid. Follow all vehicle specific installation instructions.

