#### **Tusk Plug and Play UTV Signal & Horn Kit**

Part #: 2102330013, 2102330017, 2102330018

Thanks for your purchase of the Tusk UTV Signal Kit. Please follow instructions carefully to complete a successful installation. If you are not comfortable working around electricity and related components, please seek professional assistance.

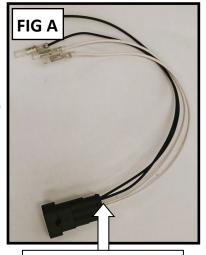


Assembly: Before you throw any packaging away, make sure you received all the necessary components. Note that you will receive either option 1 parts or option 2 parts, based on your kit selection.

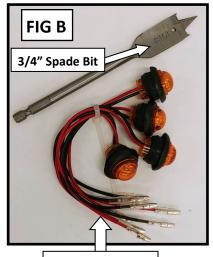
Parts:	
Main Harness	(1)
Tail Light Harness	(1)
Power Adapter	(1)
Front Turn Signal Adapters	(1)
Rocker Switch Harness	(1)
Turn Signal Rocker Switch	(1)
Horn Rocker Switch	(1)
License Light	(1)
License Plate Mount	(1)
Grounded LED Flasher Relay	(1)
5-Pin, 40A Relay	(2)
Horn	(1)
Horn Mounting Bolt	(1)
Horn Mounting Nut	(1)
Cable Ties	(35)
2-wire Dash Pin Harness	(1)
1-wire Dash Pin Harness	(1)
M6 Flange Nut (Defender Only)	(2)

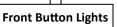
Vehicle Fitment:
2020-2023 Can-Am Defender
2018-2023 Can-Am Trail
2019-2023 Can-Am Sport

# Option 1 Additional Parts: Front Button Light Harness FIG A (2) 3/4" Spade Bit FIG B (1) Round LED Turn Signals (4-Pack) FIG B (1) Option 2 Additional Parts: Vehicle Specific Front Accent/Turn Light(s) (1) (Can-AM Trail or Defender Signature Lights) FIG C FIG D



**Front Button Light Harness** 



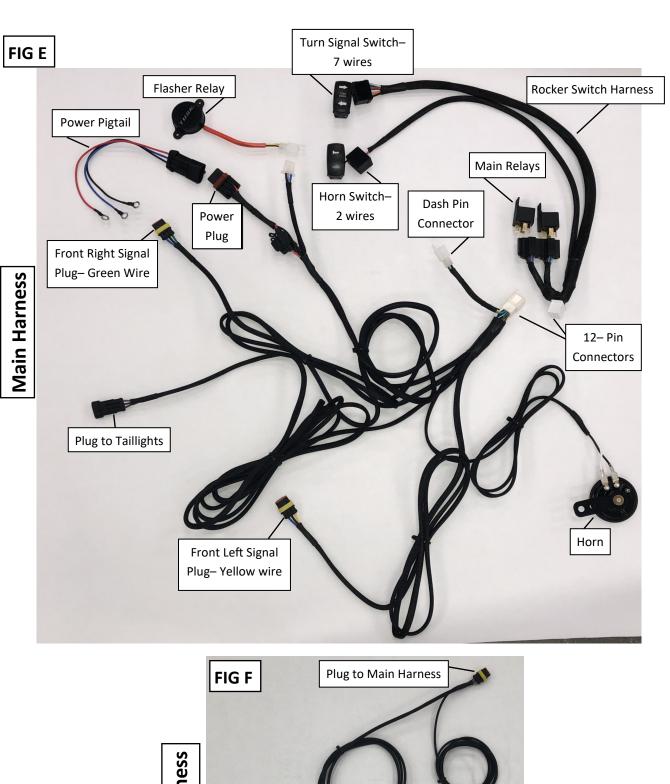


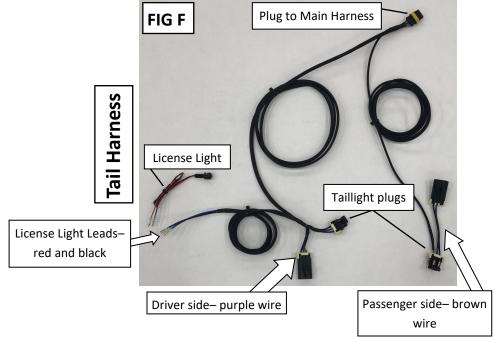


Sport/Trail Accent Lights



**Defender Accent Lights** 





#### **Installation**

<u>CAUTION: Always</u> disconnect the vehicle battery before attempting any work with electrical components. Locate the battery and remove the negative terminal connection. Ensure the wire is held away from falling back into contact with the terminal.

**NOTE:** While routing wires, ensure the wire is secured clear of any hot components such as coolant lines. Keep good clearance from sharp or rotating objects while routing wiring. Do not route wires in a manner that will put strain on the connections.

Layout the Main and Tail Harnesses. Use this time to plan routing and familiarize yourself with the harnesses/plugs. See the images on page 2 for reference throughout the installation process. We opted to run wiring under the dash and through the center console for a clean look, however, doing so is not required. If you opt to route wiring differently be sure to keep wires clear of hot, sharp, and rotating components and to not put strain on the connectors. Layout all harnesses completely before any cable ties are used.

**NOTE:** Occasionally there will be a bent or misaligned pin inside a connector. Check each connector before assembly and carefully adjust any misaligned pins with a pick or small screwdriver. This will ensure a smooth and reliable connection. **FIG 1/1A** 

- 2. If routing through the tunnel remove seats and tunnel covers for easier access.
- 3. Locate a spot (there are generally precut holes with grommets) in the front bulkhead near the center. Pass both front turn signal plugs and the horn leads through the dash towards the front of the machine.
- 4. Position the 12 pin connector (**FIG 1**) so that it is behind the ignition button on the dash.
- 5. Follow the Power Pigtail Instructions below for your specific machine:

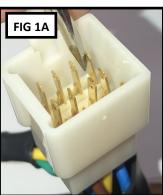
#### Can-Am Trail/Sport — Power Pigtail Installation

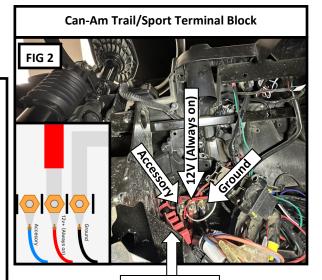
- A. Run the main harnesses underneath the dash of the machine, so the power pigtails can connect to the terminal block found under the center of the dash.
- B. Connect the ring terminals from the power pigtail to the terminal block. (Fig 2) Black to ground, red to 12v+ (always on), and blue to accessory. Then connect the power pigtail to the main harness power plug. (Refer to FIG E on the page 2).
- C. Run the tail harness through the center tunnel, so the tail harness connector is near the rear firewall.

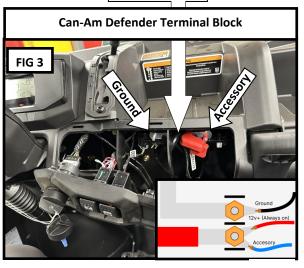
### Can-Am Defender — Power Pigtail Installation

- A. Run the main harnesses underneath the dash of the machine, so the power pigtails can connect to the terminal block found under the center of the dash.
- B. Connect the ring terminals from the power pigtail to the terminal block. (Fig 3) Black to ground, red and blue to accessory power. Then connect the power pigtail to the main harness power plug. (Refer to FIG E on page 2).
- C. Run the tail harness behind the front bulkhead cover and under the passenger side floor , so the tail harness connector is near the rear firewall.





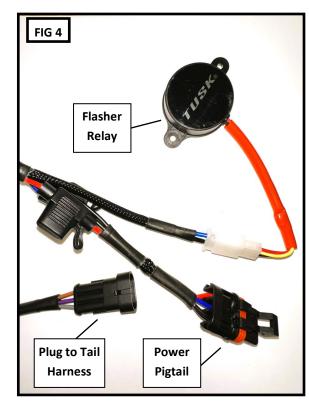


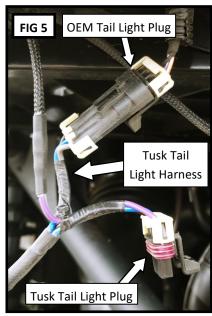


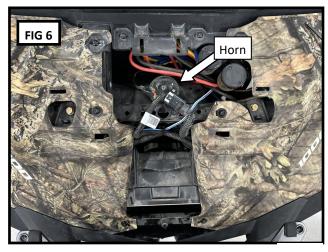
Terminal block

#### **Instructions Continued:**

- 6. Near the power pigtail in the main harness is a white 3 wire flat connector (FIG 4) that is for the flasher relay. Locate a suitable location and connect the flasher relay to the main harness then secure the relay to the machine. (Refer to Fig E on Page 2 for Flasher Relay)
- 7. Feed the main connector for the tail harness (FIG 4) through the rear firewall and attach to the main harness.
- 8. Route the left tail light lead (purple wire and license light leads) and right tail light lead (brown wire) along the existing wiring to their respective corners.
- Tee in to each of the existing taillight connections with the Tusk
   Taillight harness. Disconnect OEM tail light plug and plug directly
   into the Tusk tail light harness. Then connect the tusk tail light plug
   directly into the tail light. Do this on both sides. FIG 5
- 10. Route the license light lead to your desired location. The license light can be used in place of a license plate fastener.
- 11. Using the supplied cable ties, secure wiring starting from the tail lights and working forward. Stop once you reach the tail harness to main harness connector.
- Mount the horn to a solid surface under the front dash. Connect the blade connectors from the Tusk Main Harness into it, either wire can go to either blade. FIG 6
- 13. Using the supplied cable ties, secure the wiring from the front lights and the horn back to the dash. Start at the front and work into the dash. Make sure that all connectors have some strain relief so that is no tension on them.







# **Button Light Installation:**

14.Install button light turn indicators: (if using accent lights, skip to step 15)

A. Choose a location to drill two holes for the **Button Lights**. A location where others outside of the vehicle can see the indicators clearly is best. **FIG 7** 

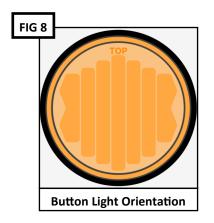
B. Verify there are no electrical, cooling, or other components behind chosen location. It is best to remove the panel(s) that are being drilled (trust us on this one...) with the supplied 3/4" spade bit. Mount them so there is visibility from the front and side.

C. Once the holes are drilled, remove the black retaining rubber grommet from the lights and insert them into the holes. Then insert the lights into the grommets with "TOP" located at the top. **FIG 8** 

D. Reinstall any panels that were removed.

E. Connect the button light harness. FIG 9





# Note: Notice the color of the wires on the LED Button lights.

#### If the wires on the LED's are Black and White:

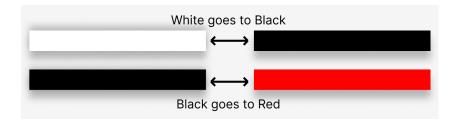
White goes to White

Black to Black.

#### If the wires on the LED's are Black and Red:

White goes to Black

Black goes to Red





# Can- Am Trail/Sport Accent Lights:

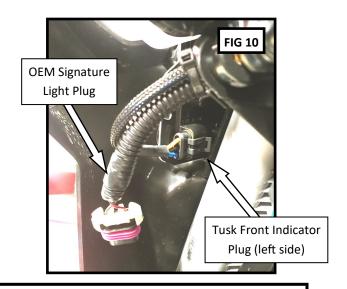


- 15. Remove necessary body work/panels to access accent lights location.
  - A. Remove OEM lights or plastic filler pieces and replace with the Tusk Accent Lights
  - B. Plug in connectors from Tusk Harness to front turn signals (3 wire lead with yellow is the left side and the 3 wire lead with green is the right side). **FIG 10**
  - C. Secure OEM Lighting plugs out of the way as they are not used. **FIG 10**
  - D. Reinstall body panels. FIG 11



## Can- Am Defender Accent Lights:

- 16. Remove necessary body work/panels to access OEM lights.
  - A. Remove OEM lights or plastic filler pieces and replace with the Tusk Accent Lights.
  - B. Plug in connectors from Tusk Harness to front turn signals (3 wire lead with yellow is the left side and the 3 wire lead with green is the right side). **FIG 12**
  - C. Secure OEM Lighting plugs out of the way as they are not used. FIG 10
  - D. Reinstall body panels. FIG 12







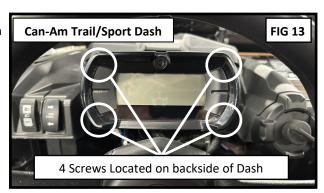
#### Instructions Continued: \*\*Can Am Trail/Sport Only\*\*

\*\*Not all instrument clusters are equipped with turn signal arrows. Your display may look different from the images below. It is best to check and see if there is a silhouette of the arrows inside the dash before attempting any modifications to the instrument cluster. Look closely at the connection and choose the instructions on this page or the next page based on your connector type.\*\*

#### 17. <u>Digital Dash Pin Installation</u>:

\*\*This step is optional. The arrows in the provided rocker switch will flash with the corresponding side's turn lights. To also utilize the OEM dash indicators follow the steps below\*\*

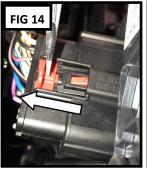
**WARNING:** Disconnect the vehicle battery before attempting any work with electrical components. Locate the battery and remove the negative terminal connection. Ensure the wire is held away from falling back into contact with the terminal.



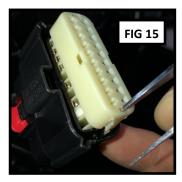
<u>WARNING</u>: This optional process if very involved with delicate components. If done improperly, your dash may become inoperable.

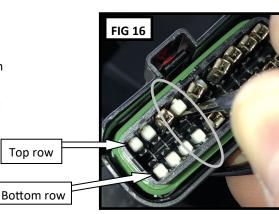
Proceed at your own risk.

- A. Dismount instrument cluster by removing the four screws in the back of the dash panel. **FIG 13**
- B. Remove connector from backside of cluster by sliding the red locking tab out towards the wires and then press the black clip to release the connector. FIG 14/14A
- C. Set the cluster aside.
- D. Remove the white pin cover from inside the plug by inserting the tip of tweezers or similar tool and gently prying toward the center of the plug and up/outward. FIG 15
- E. With the plug oriented as shown in FIG 16 count 4 pins over from the left on both the top and bottom rows. Remove the white plug from both positions.
- F. Locate the Tusk dash connector harness with 2 wires. Install the green wire into the top row and the yellow wire into the bottom row by going through the black wire holder and into the back of the plug. Fig 16
- G. Verify all the pins are aligned and locked in place. Reinstall the white pin cover and double check that all the pins are in place.
- H. Connect the gauge cluster and re-install cover.









#### **Instructions Continued:**

#### 18. Analog Dash pin Installation:

\*\*This step is optional. The provided rocker switch arrows will flash with the corresponding side's turn lights. To also utilize the OEM dash indicators follow the steps below\*\*

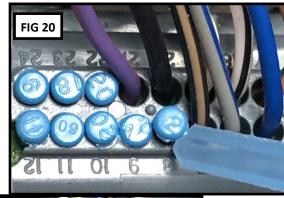
<u>WARNING:</u> disconnect the vehicle battery before attempting any work with electrical components. Locate the battery and remove the negative terminal connection. Ensure the wire is held away from falling back into contact with the terminal.

<u>WARNING</u>: This optional process if very involved with delicate components. If done improperly, your dash may become inoperable. Proceed at your own risk.

- A. Remove the front of the gauge cluster bezel by removing the four screws shown in **FIG 17.**
- B. Gently pull the gauge cluster forward and disconnect the electrical connector on the back by depressing the locking tab. Set gauge cluster aside. FIG 18
- Remove the dark grey translucent connector cover by depressing the white locking tabs. FIG 19
- D. Open the light grey clam shell cover on the back side of the connector.
- E. Locate Pin 8 (ignore the numbers on the blue plugs), remove the blue plastic plug. **FIG 20**
- F. Locate the Tusk dash connector harness with one wire. Insert the pin from the Tusk dash harness. Be sure it is all the way in. It should be at the same height as the other pins on the pin side of the connector. FIG 21/22
- G. Re-install the dark grey translucent pin cover and close the clam shell cover over the wires on the back side of the plug.
- H. Reconnect the gauge cluster and install it back into the dash. Re-install the bezel.







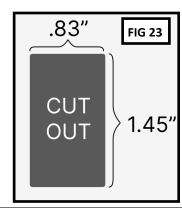




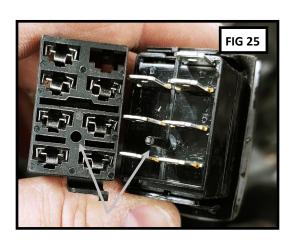
#### **Instructions Continued:**

- 19. Route and connect the dash harness to the main harness via the 3 pin connector located near the 12 pin connector on the Tusk Harness.
- 20. Locate the positions you want for the horn and turn signal switches. We recommend using factory cutouts that are easy for the driver to reach. If your machine does not have cutouts, then refer to the information below.
  - A. Before cutting a hole, check for anything behind the dash that may interfere, or can be cut in the process.
  - B. Cut out a .83" Width by 1.45" Height in your desired rocker switch location. It may be best to cut the hole on the smaller side of the dimensions and then file the rest to the final size. **Fig 26**
- 20. Locate the rocker switch Harness. Install the two 40 amp, 5 pin main relays into both of the connectors near the main 12 pin connector. Either relay will work in either connector. (Refer to **FIG E** on **pg. 2**)
- 21. Connect the rocker switch harness to the main harness via the 12 pin connector then route the rocker switch leads up to the selected switch locations. Be sure to keep wires clear of steering components. **FIG 27**
- 22. Connect the rocker switch harness lead with 7 wires to the turn signal switch, and the lead with 2 wires to the horn switch. These are keyed and will only go on one way. Note the pin on the switch and hole in the connector in **FIG 28**.
- 23. Verify all connections then secure the rest of the wiring harness, from outside to inside. Loop excess loom under the dash or in the center tunnel. Be sure to keep it away from coolant lines/high heat sources and sharp edges.
- 24. Reconnect battery and verify proper operation of the horn and signals.









Enjoy the use of your new

Tusk Plug and Play UTV Signal & Horn Kit!