



WITH WHITE RUNNING LIGHTS



INSTRUCTION MANUAL



RAVEK

HONDA PIONEER 2022+

***PLUG & PLAY AUTO-CANCEL UTV TURN SIGNAL KIT
WITH WHITE RUNNING LIGHTS***

Part #: 66-100

Fitment: HONDA PIONEER 2022+

PARTS INCLUDED:

- Turn Signal Controller (1x)
- Switchback Apex Light (2x)
- Taillight Harness (2x)
- Power Harness (1x)
- Horn (1x)
- Turn Signal Rocker Switch w/
Extension Harness (1x)
- Horn/Hazards Rocker Switch (1x)
- Turn Signal Rocker Switch
Extension Harness (1x)
- Horn/Hazards Rocker Switch
Extension Harness (1x)
- Right Taillight Extension Harness (1x)
- Left Taillight Extension Harness (1x)
- Right Turn Signal Extension
Harness (1x)
- Left Turn Signal Extension Harness (1x)
- Right Dash Indicator Harness (1x)
- Left Dash Indicator Harness (1x)
- Dash Indicator (2x)
- Dielectric Grease (1x)
- Heat Shrink (1x)
- Wire Loom (1x)
- Roll Bar Adapter (2x)
- Strap (2x)
- Zip Tie (20x)
- Double Sided Tape (2x)
- M6 Flat Washer (2x)
- M5 x 0.8 x 6mm Allen Screw (4x)
- M6 x 1.0 x 10mm Allen
Cap Screw (2x)
- Adhesive Promoter Wipe (3x)
- Rubbing Alcohol Wipe (3x)
- License Plate Extension Harness (1x)
- License Plate Illuminator (1x)

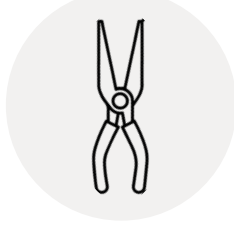
TOOLS NEEDED: **OPTIONAL*



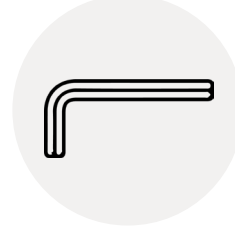
Side Cutter Pliers



Push Pin Pliers



Needle Nose Pliers



3mm Allen Wrench



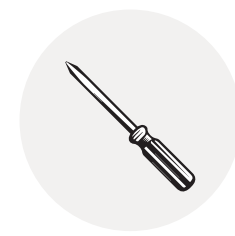
4mm Allen Wrench



*Small Flathead
Screwdriver*



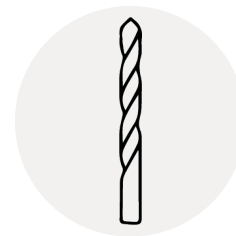
Lighter/Heat Gun



*Phillips
Screwdriver*



*1/4" drill bit**



*11/32" drill bit**



*Drill**



*Wire Fish**

INSTALL VIDEO TUTORIAL

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TO ACCESS THE
VIDEO TUTORIAL.**



General Notes:

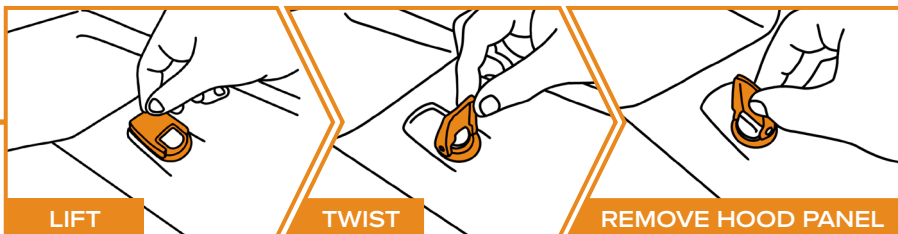
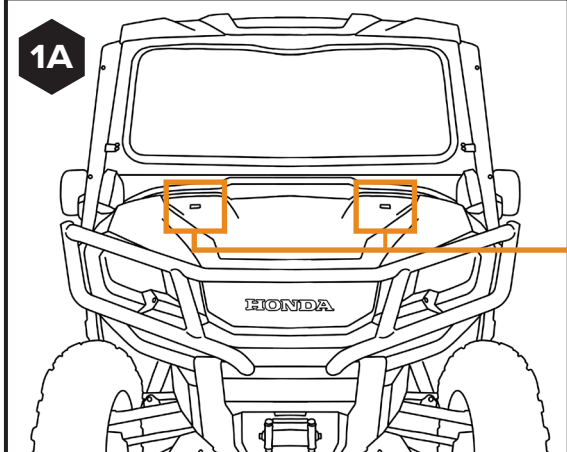
- *Throughout this process, be sure to keep track of any screws or fasteners you remove and reinstall them in the exact location.*
- *Dielectric grease is provided, and you may use it for added protection.*

i

Remove hood panel. [SEE FIGURES 1A & 1B]

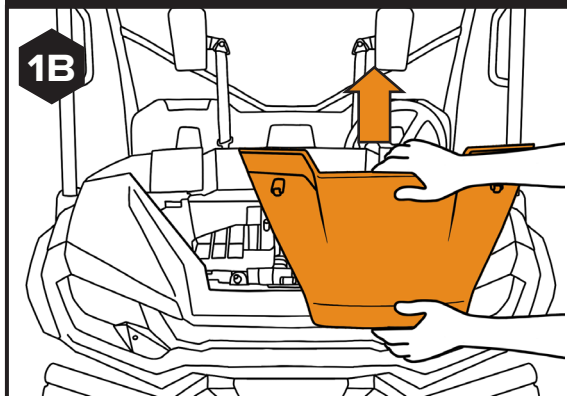
RELEASE QUARTER TURN LATCHES

1A



REMOVE HOOD

1B

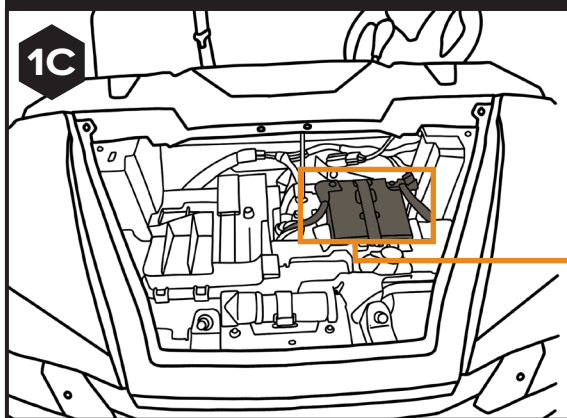
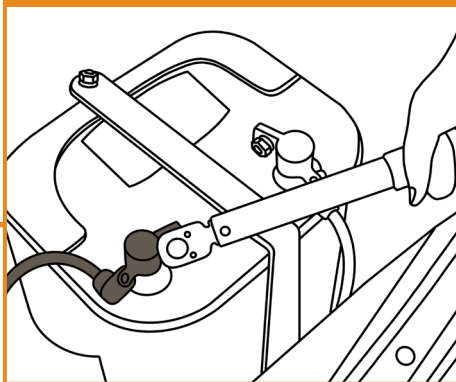
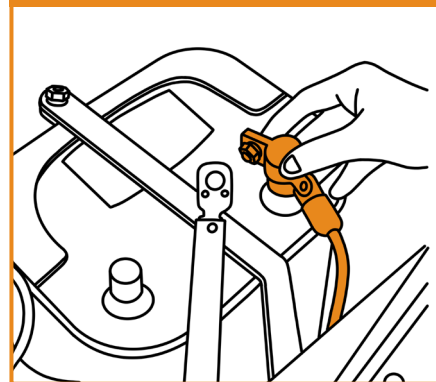


ii

Locate your battery and disconnect the negative terminal first, then the positive. [SEE FIGURE 1C]

LOCATE BATTERY

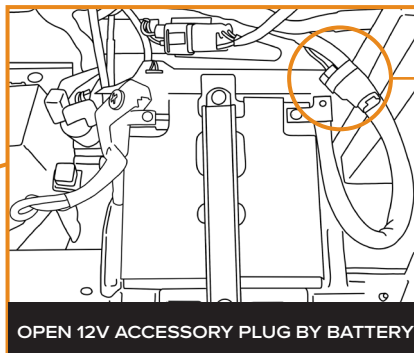
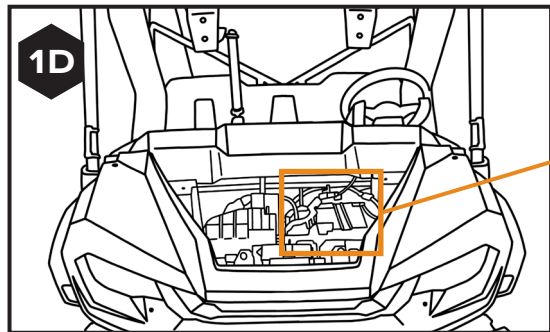
1C

DISCONNECT
NEGATIVE FIRSTDISCONNECT
POSITIVE NEXT

iii

Locate the open 12V accessory plug. [SEE FIGURE 1D]

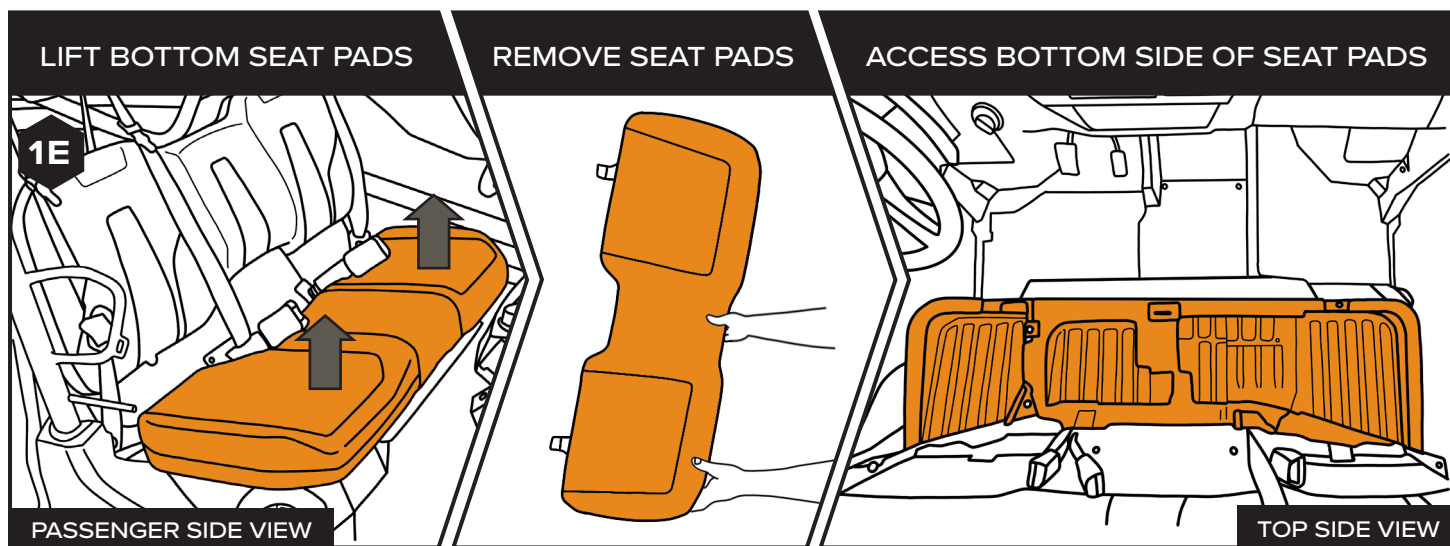
1D



OPEN 12V ACCESSORY PLUG BY BATTERY

iv

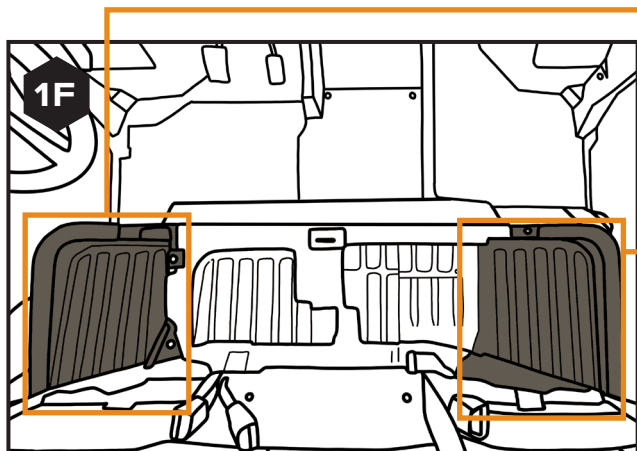
Remove bottom seat pads. [SEE FIGURE 1E]



v

Remove bottom seat pad panel. [SEE FIGURES 1F & 1G]

REMOVE PUSH PINS UNDER SEAT PADS

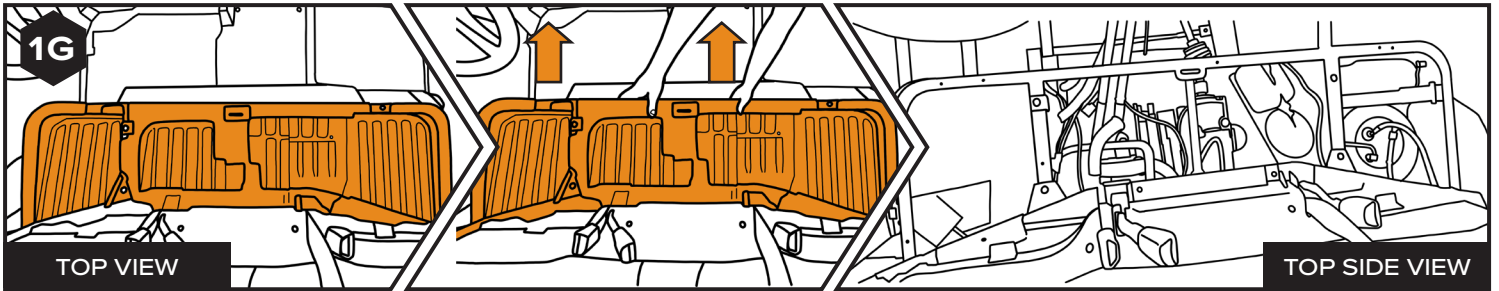


PASSENGER SIDE VIEW



PASSENGER SIDE VIEW

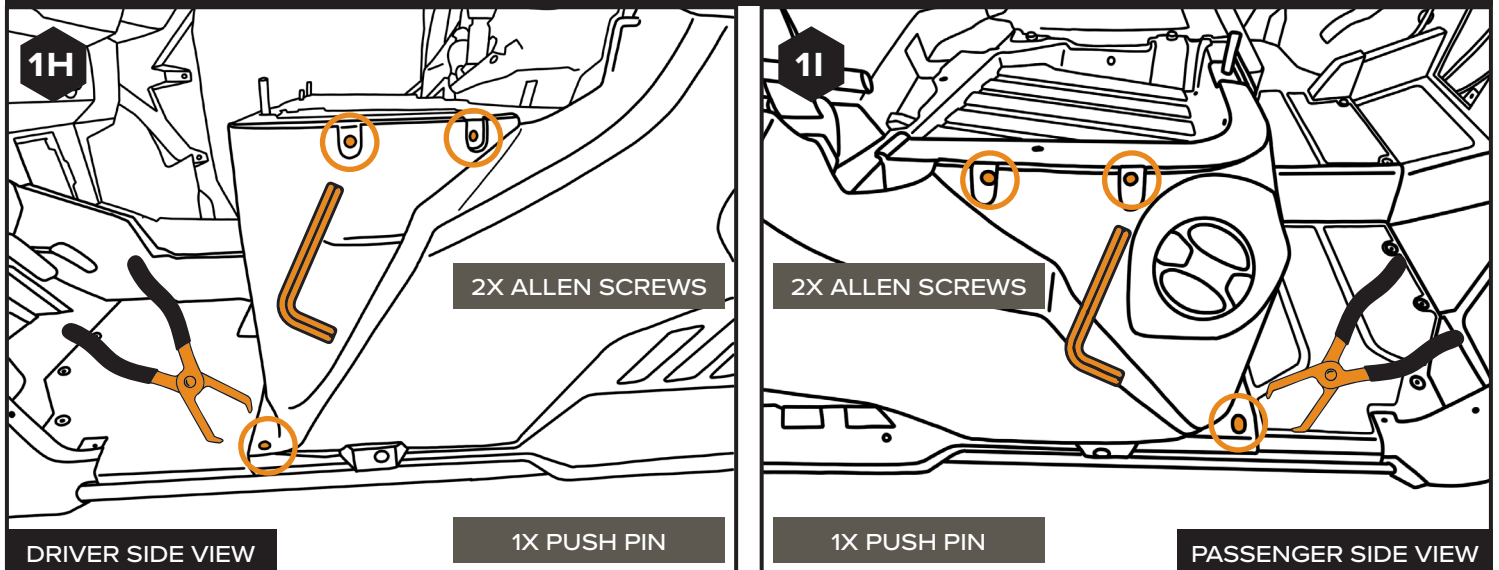
REMOVE PANEL



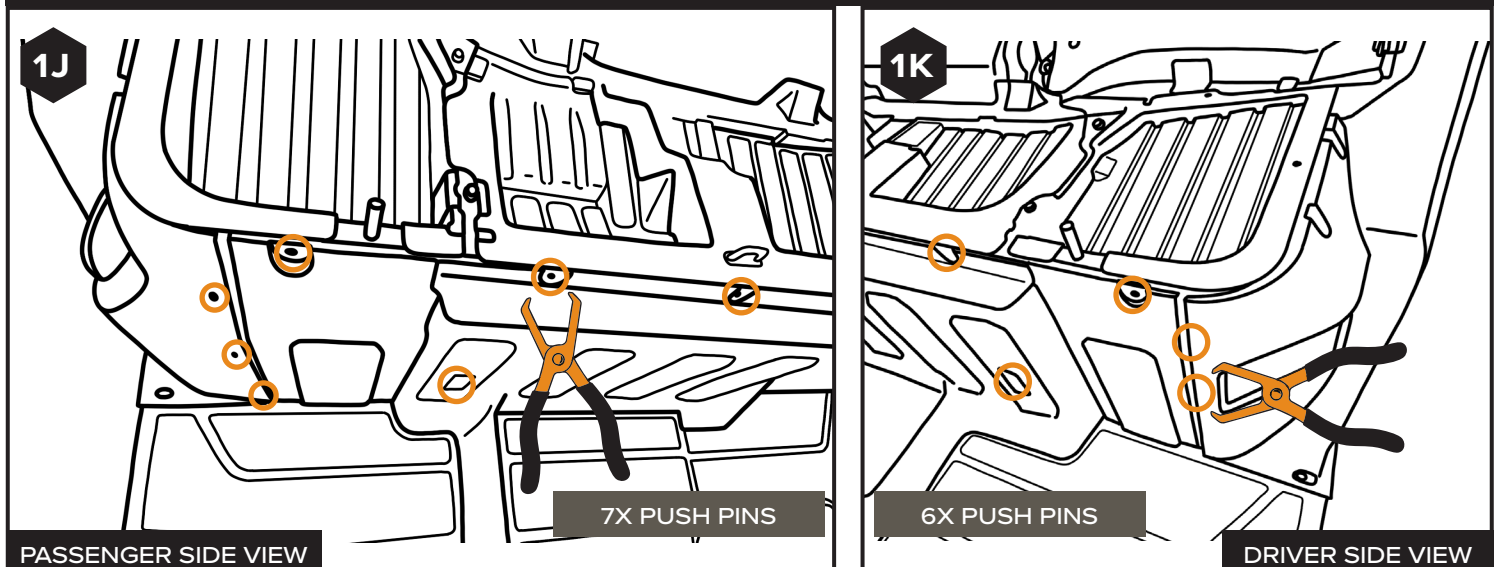
vi

Remove the floor tunnel to access the underside for wire routing. [SEE FIGURES 1H – 1N]

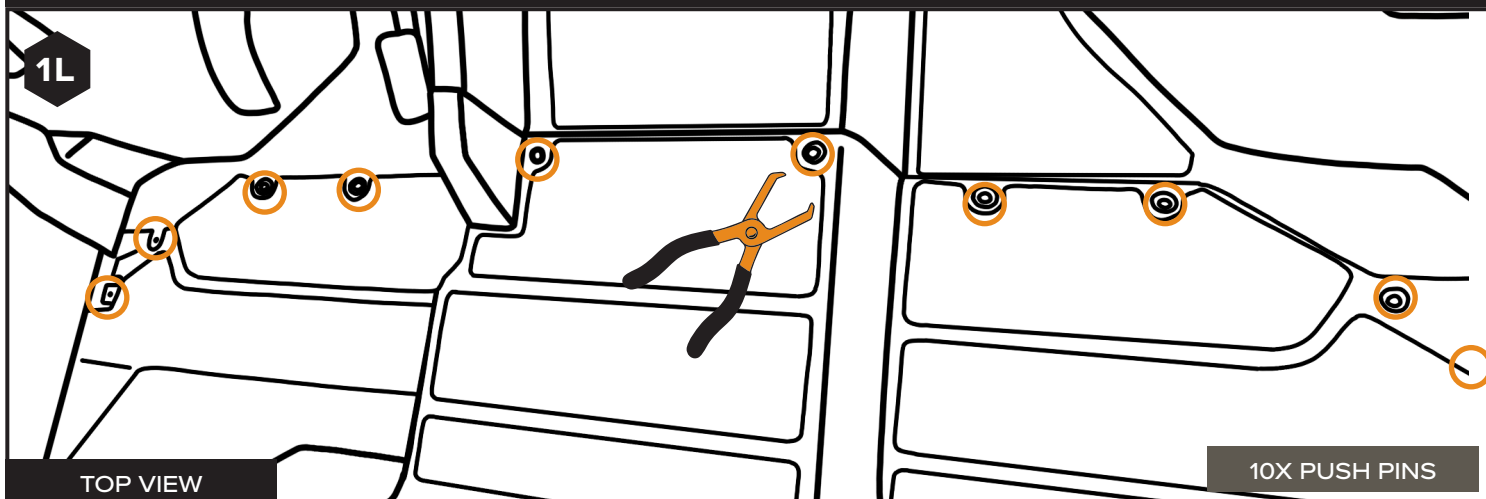
REMOVE THE ALLEN SCREWS ON BOTH SIDES OF THE FLOOR TUNNEL



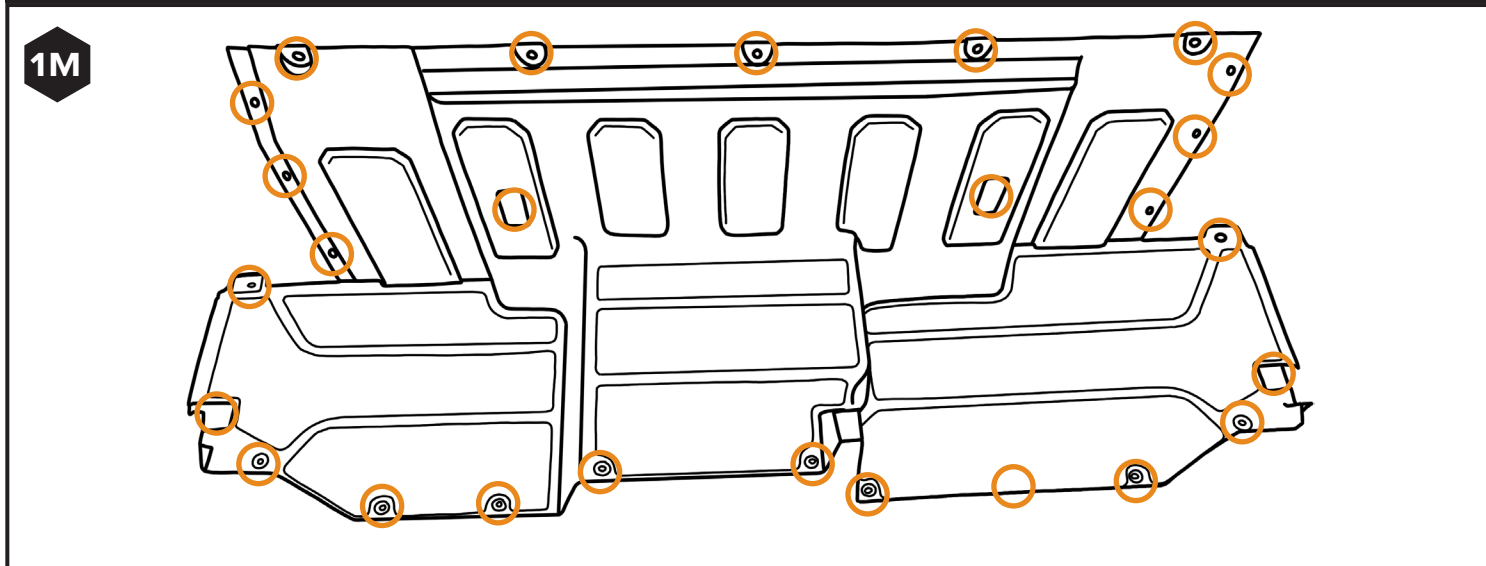
REMOVE PUSH PINS ON THE FLOOR TUNNEL



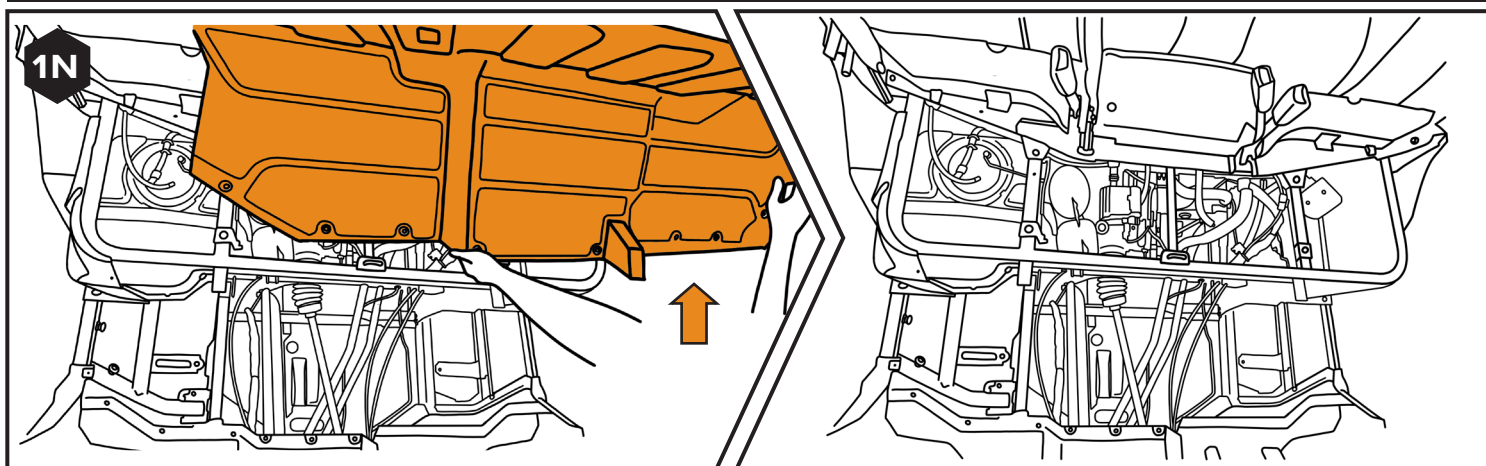
REMOVE PUSH PINS ON THE FLOOR TUNNEL



OVERVIEW OF ALL PREVIOUSLY REMOVED PUSH PINS HOLDING THE FLOOR TUNNEL

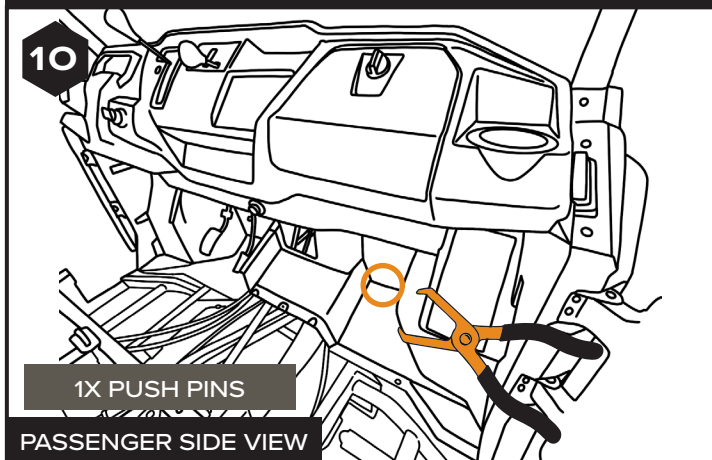


REMOVE FLOOR TUNNEL

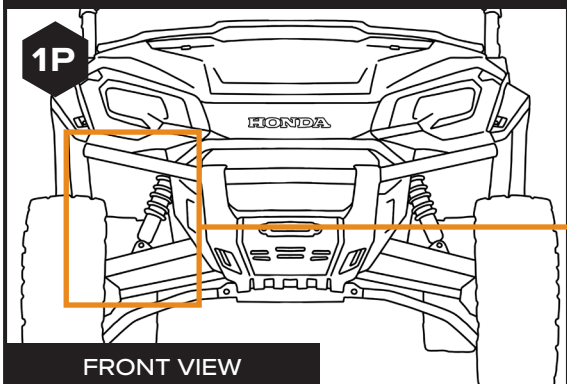


Remove the front passenger wheel well, using push pin pliers and a 5mm Allen wrench. [SEE FIGURES 1O – 1Q]

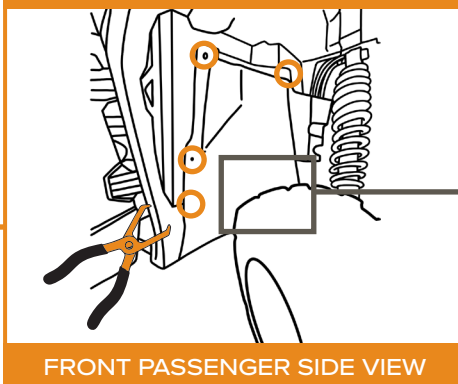
REMOVE PASSENGER FLOOR SIDE PUSH PIN



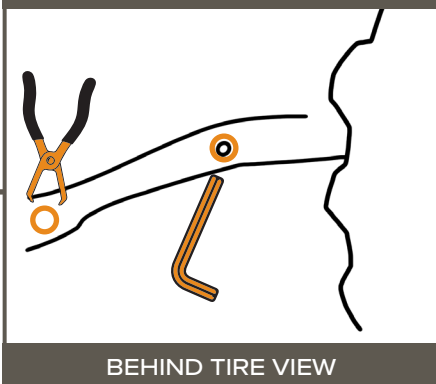
LOCATE FRONT PASSENGER SIDE OUTER WHEEL WELL



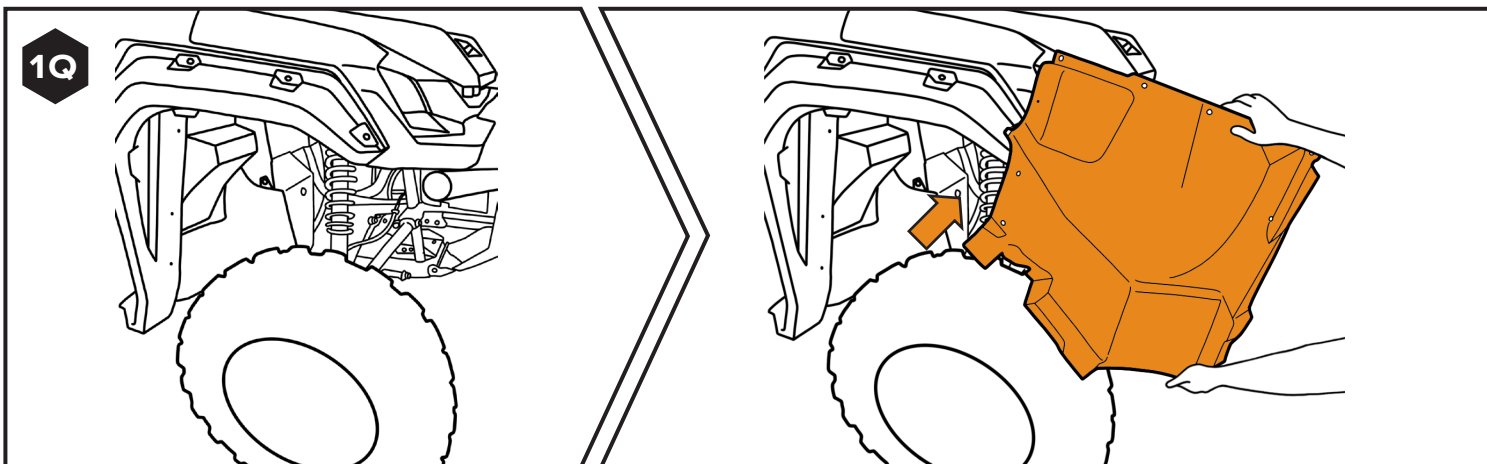
REMOVE FOUR PUSH PINS



REMOVE ONE PUSH PIN AND ONE 5MM ALLEN SCREW

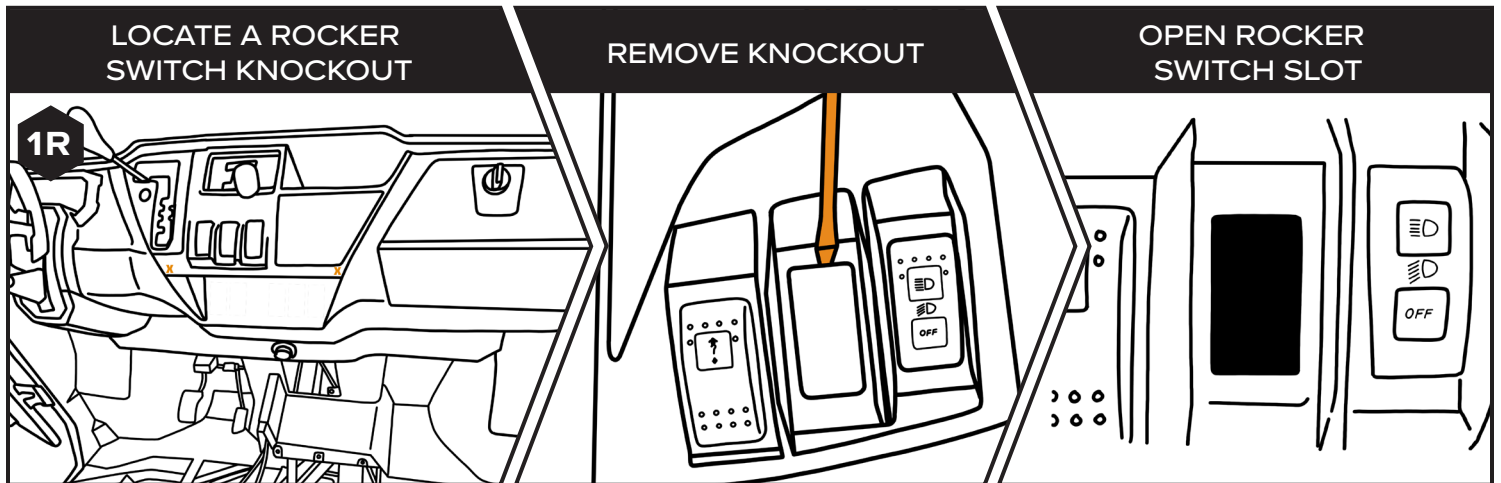


REMOVE WHEEL WELL



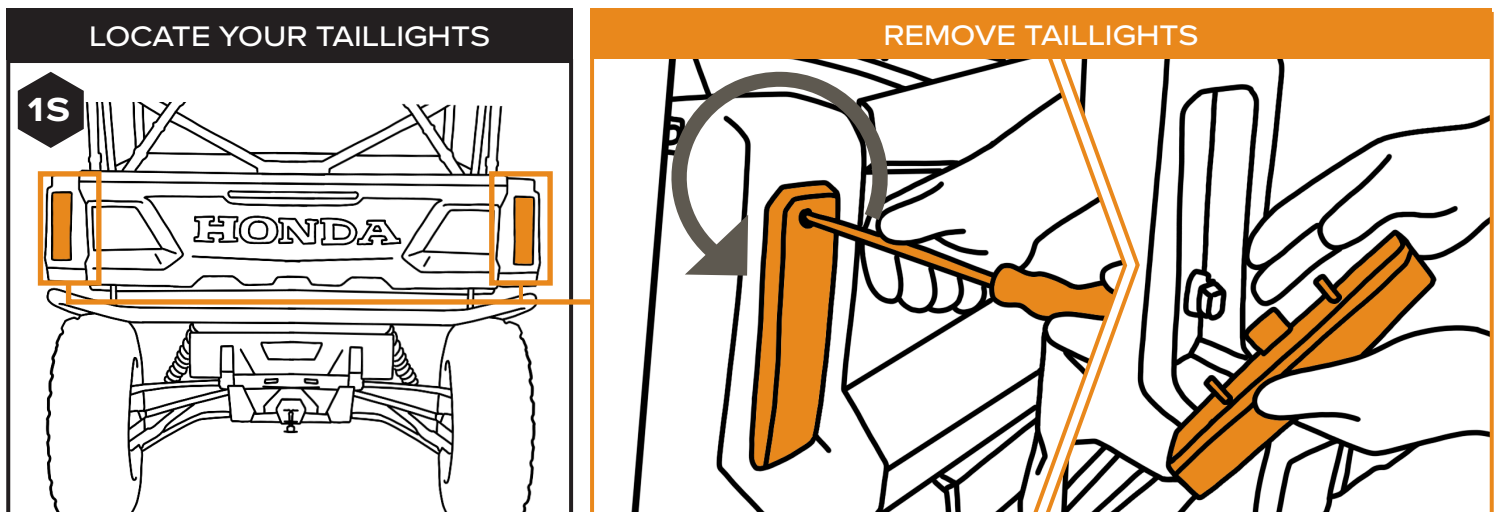
viii

Find an open rocker switch knockout on the dashboard. Use a flathead screwdriver to carefully remove it. [SEE FIGURE 1R]



ix

Remove taillights using a Phillips screwdriver. [SEE FIGURE 1S]

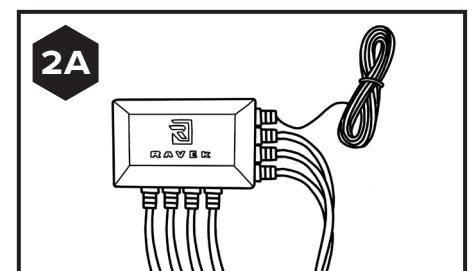


2 INSTALL THE WIRING TO THE TURN SIGNAL CONTROLLER

i

Grab your Turn Signal controller and place it where you plan to permanently mount it in a future step. [SEE FIGURE 2A]

NOTE: We recommend mounting your controller under the hood removed in step 1i.

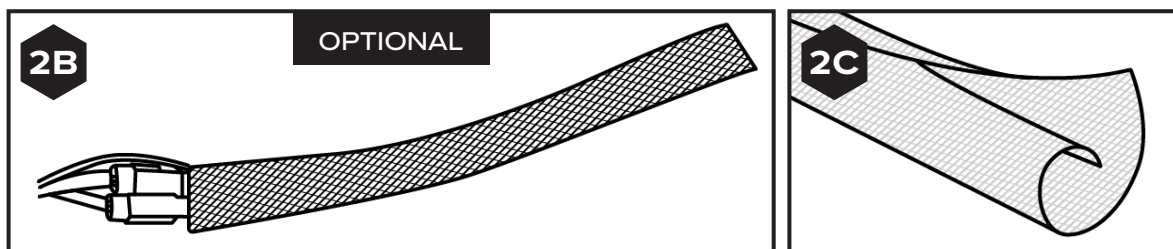


ii

Connect your rear extension wires, optionally adding mesh wire loom to the left rear and rear brake input wires. Although the connectors are waterproof, we recommend applying a small amount of dielectric grease to each connection for extra protection. [SEE FIGURES 2B & 2C AND DIAGRAM A FOR CONNECTION OVERVIEW]

NOTE: Each extension harness has labeled heat shrink to show where it plugs in. [SEE DIAGRAM A]

NOTE: The Brake Input red wire does not have an extension harness and will be connected directly to the driver's side taillight harness in a later step.



3

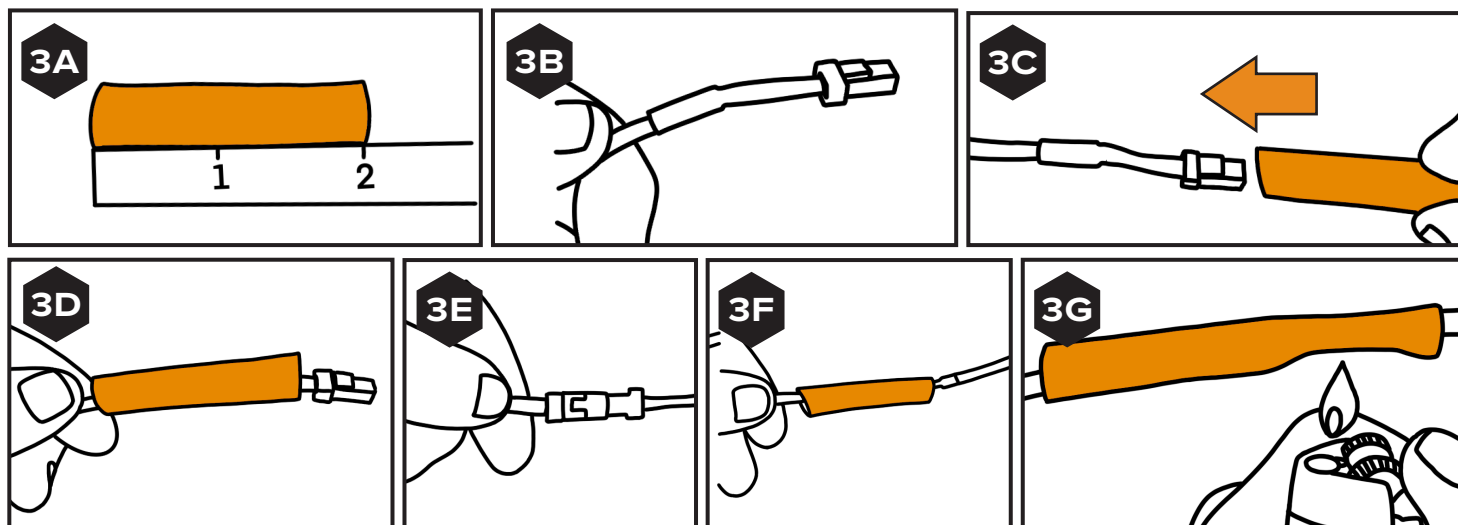
HEAT SHRINK YOUR CONNECTIONS

i

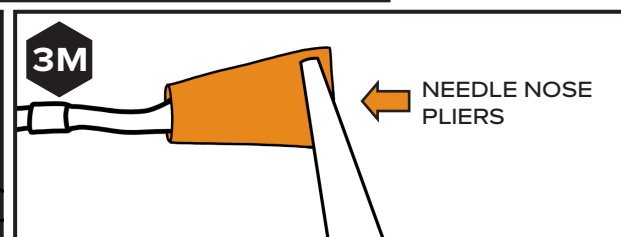
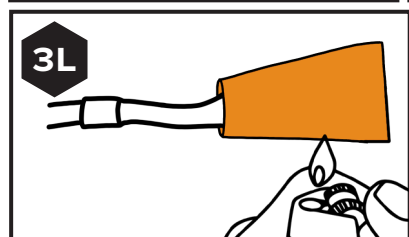
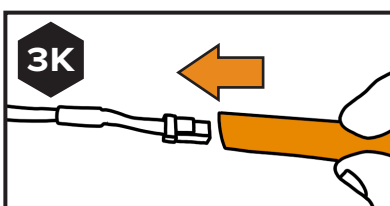
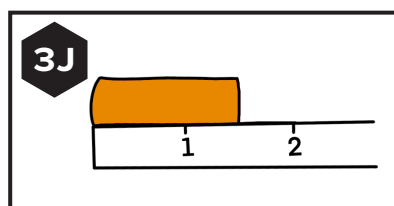
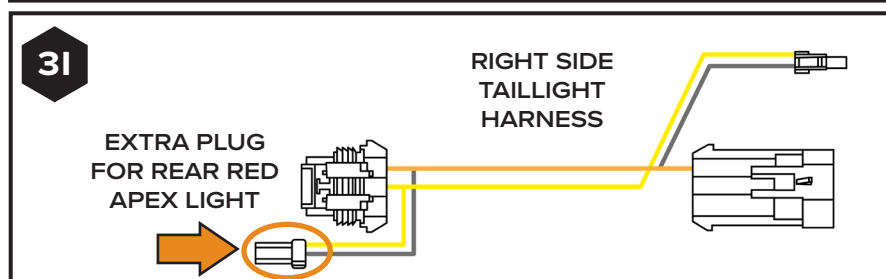
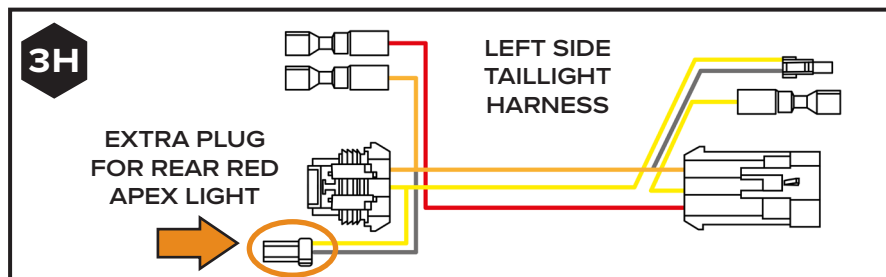
As you make plug & play connections, use the heat shrink tubing, provided to protect your connections from dirt on the trails.

Go over the connection points you make and cut 2" of heat shrink for each. Use a lighter or heat gun to shrink the tubing. [SEE FIGURES 3A – 3G]

HEAT SHRINK CONNECTIONS



If you don't need the extra Taillight Harness connectors (mentioned in a future step), cut a 1.5-inch piece of heat shrink tubing and slide it over the connector. Use a lighter or heat gun to shrink the tubing, then use needle-nose pliers to pinch the end. This will seal the connector and keep dirt out. [SEE FIGURES 3H – 3M]



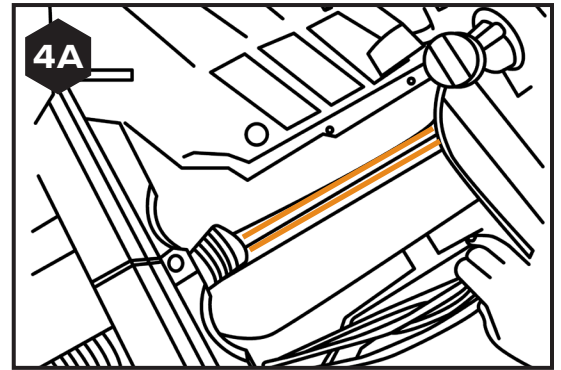
4

ROUTE THE REAR LIGHT WIRING

i

Grab your Rear Left extension, Rear Right extension, and Brake Input wire.

Route the LEFT REAR and Brake Input wires through the floor tunnel panels to the left taillight and route the RIGHT REAR wire to the right taillight. [SEE FIGURE 4A]



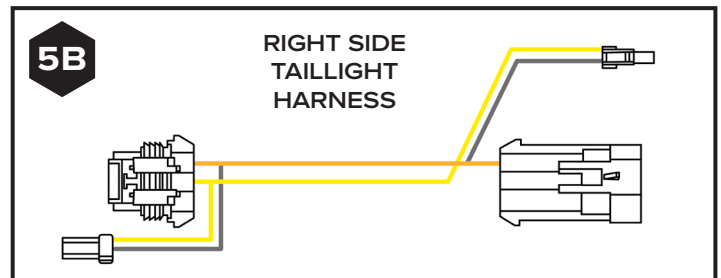
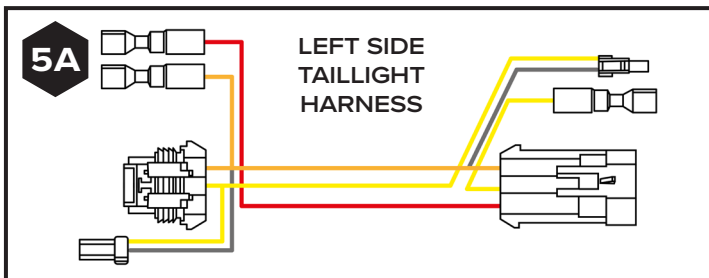
5

PLUG IN YOUR REAR LIGHTS WIRING

i

With the rear wiring connected to the controller and routed to the taillights, you can now install the taillight harnesses included in the kit. [SEE FIGURES 5A & 5B]

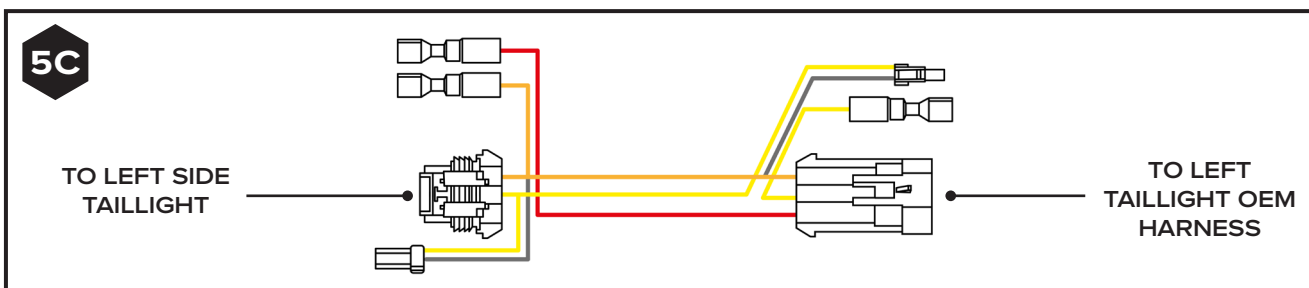
NOTE: The left-side Taillight Harness can be identified by having the most connectors attached to it.



ii

Unplug the OEM connector from the left taillight and connect the provided left taillight harness between the OEM connector and the taillight. [SEE FIGURE 5C]

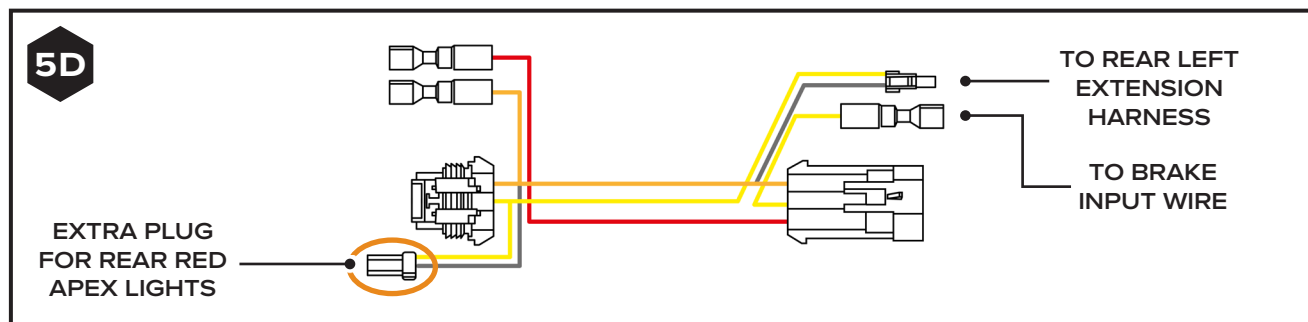
NOTE: The left-side taillight harness is the one with the most connectors attached.



iii

Plug the REAR LEFT extension harness into the corresponding labeled connector on the left taillight harness. Connect the Brake Input wire to the labeled connector on the left taillight harness. [SEE FIGURE 5D]

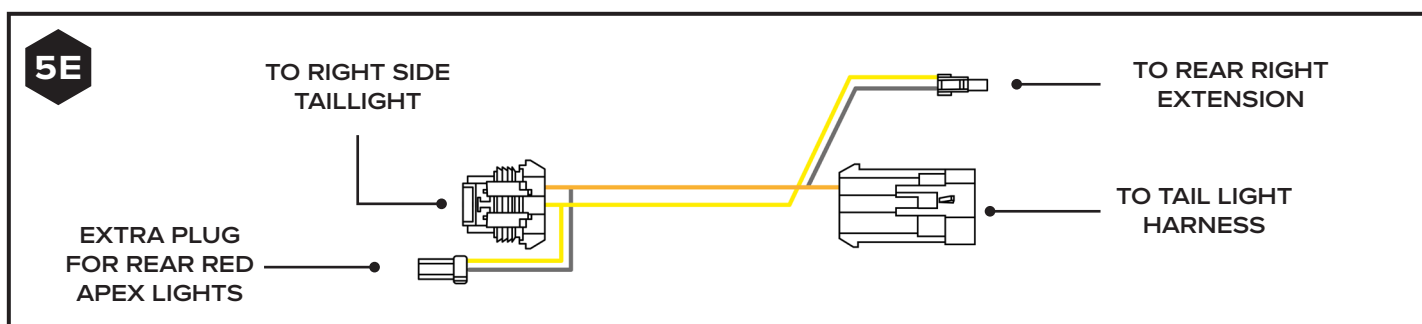
NOTE: The extra plug on the taillight harness is provided to easily add RAVEK Rear Running & Brake Apex Lights to your Pioneer (RAVEK Part #66-102), which will add running light, brake light, and turn signal functionality to your machine.



iv

Repeat the previous two steps on the right Taillight with the right- side harness provided (excluding the Brake Input information). [SEE FIGURE 5E]

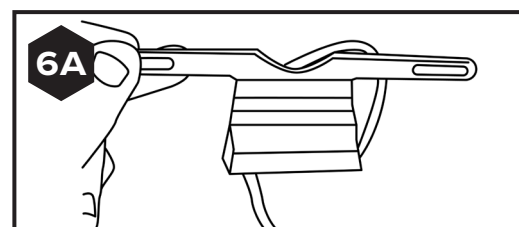
NOTE: Route your wiring away from the exhaust system.



6 PLUG IN YOUR LICENSE PLATE ILLUMINATOR (OPTIONAL)

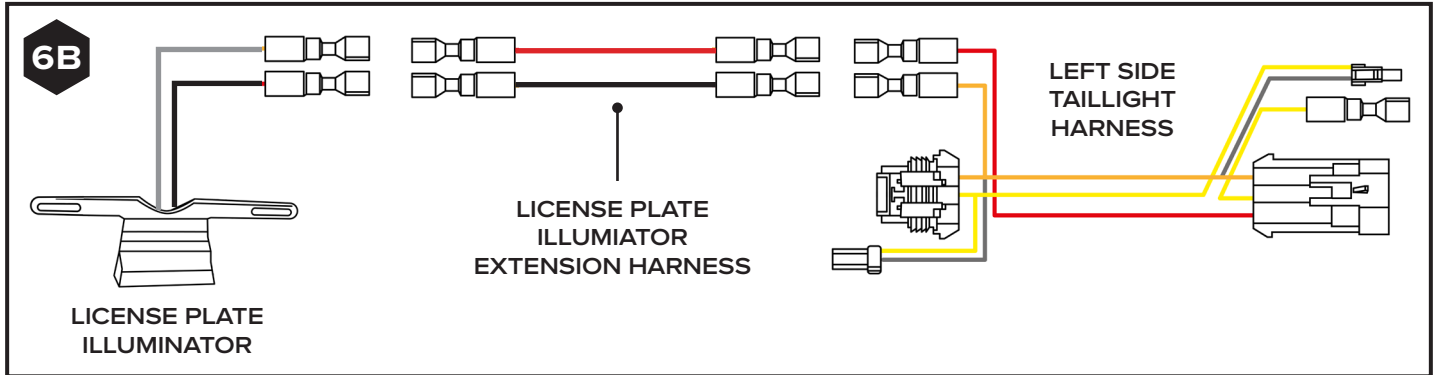
i

Locate the License Plate Illuminator provided with your kit. [SEE FIGURE 6A]



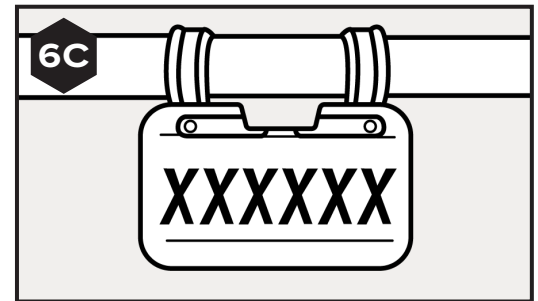
ii

Connect the License Plate Illuminator wires (White = Power, Black = Ground) to the License Plate Illuminator Extension Harness. Then, plug the extension harness into the left Taillight Harness as labeled. [SEE FIGURE 6B]



iii

Attach the License Plate Illuminator to your license plate using the existing hardware. [SEE FIGURE 6C]



NOTE: Before driving your UTV on public roads, check your local laws to ensure compliance, including whether a license plate illuminator is required.

7

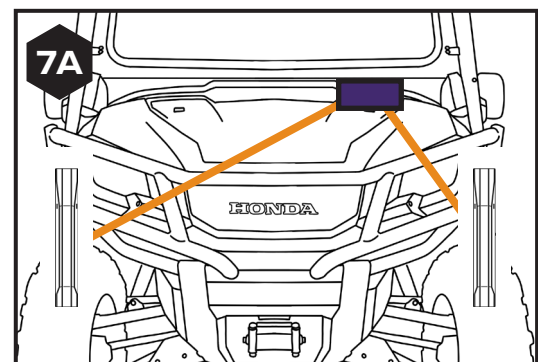
ROUTE FRONT LEFT & RIGHT TURN WIRING

i

With all the rear wiring routed (but not secured yet), go to the location of your Turn Signal Controller and take the FRONT LEFT and FRONT RIGHT wires.

ii

Route your FRONT LEFT and FRONT RIGHT extension harnesses to the front of the Pioneer, where you plan to permanently mount your Apex Turn Signal Lights. (See the next step for all mounting options.) [SEE FIGURE 7A]



8 SELECT LOCATIONS FOR APEX LIGHTS

i

Your options include:

- **Exterior Body Panel**
Any exterior panel with 8" of flat surface for mounting
- **Roof Mounting**
- **Roll Bar/Bumper Mounting**



Check out the video to the right (see QR code) for a 50 second walkthrough of the different Apex light mounting options.

9 READY TO MOUNT APEX LIGHT

i

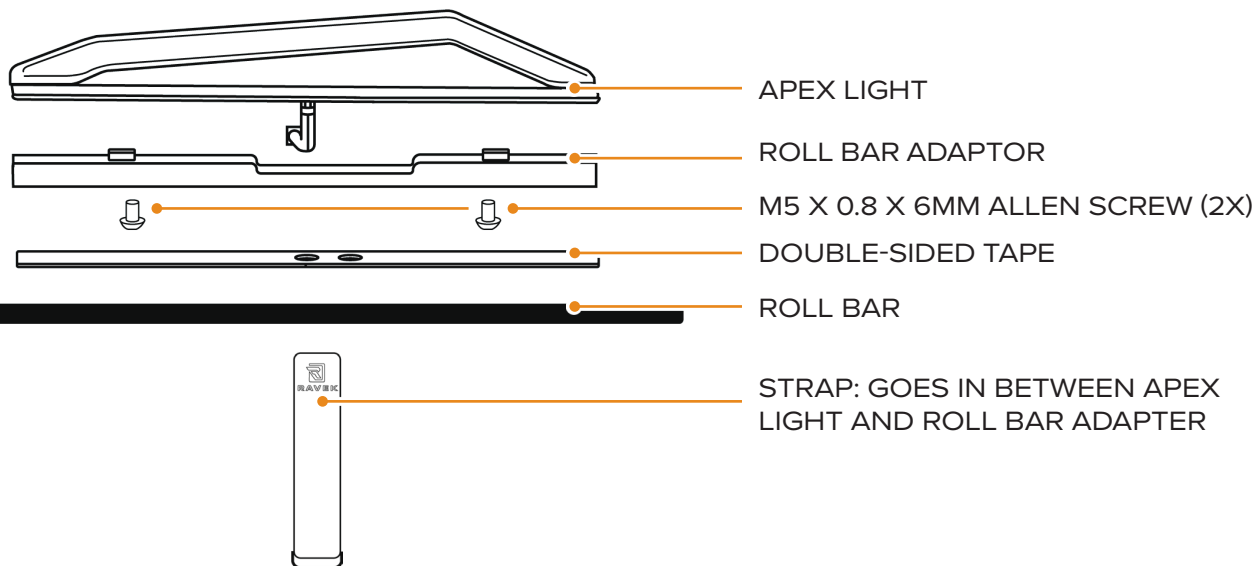
If you've chosen to mount your Apex Lights to a roll bar or bumper, follow the Roll Bar mounting steps in step 9A.

If you've decided to mount your Apex lights to an exterior panel or the roof, you'll need to choose your preferred mounting method:

- Adhesive mount (i.e. no drill) → follow step 9B**
- Drill-mount for increased security → follow step 9C**

9A OPTION A - ROLL BAR MOUNTING:

OPTION A DIAGRAM - ROLL BAR MOUNTING

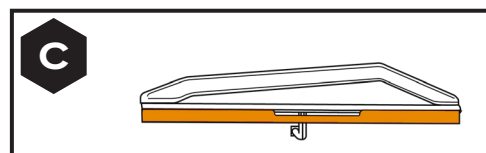
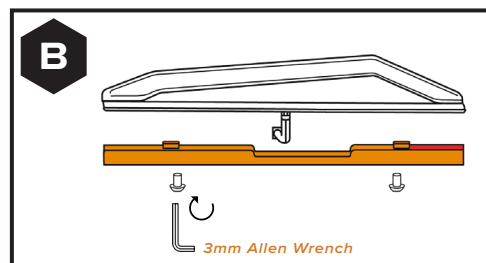
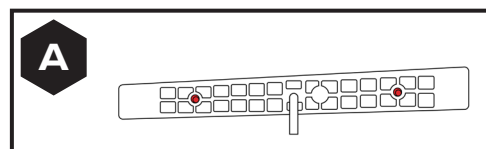




INSTALL ROLL BAR ADAPTOR

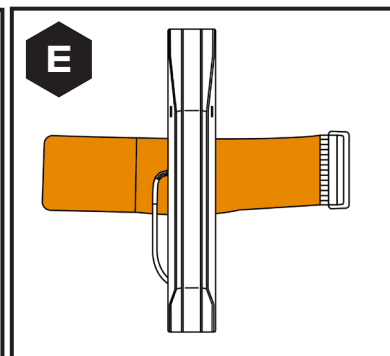
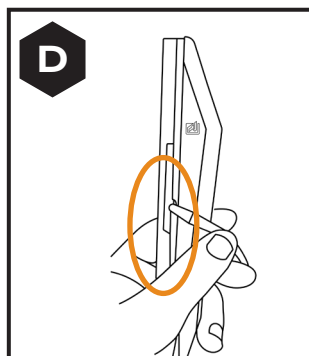
Install the roll bar adaptor to the base of the light using two M5 x 0.8 x 6mm Allen screws and a 3mm Allen wrench. [SEE FIGURES A – C]

NOTE: Choose the side where you'd like the wire to exit, based on which position helps you hide the wires best.



INSTALL STRAP

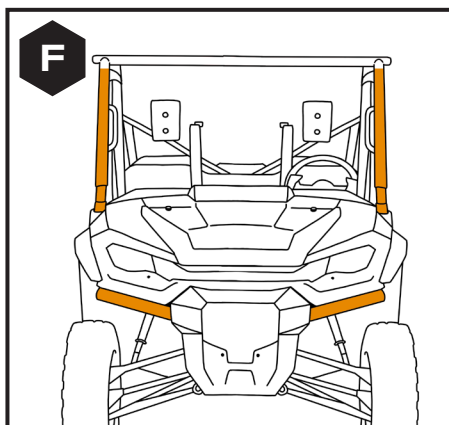
Once the roll bar adaptor is securely attached to the light, thread the provided strap through the opening between the light base and the roll bar adaptor. [SEE FIGURES D & E]

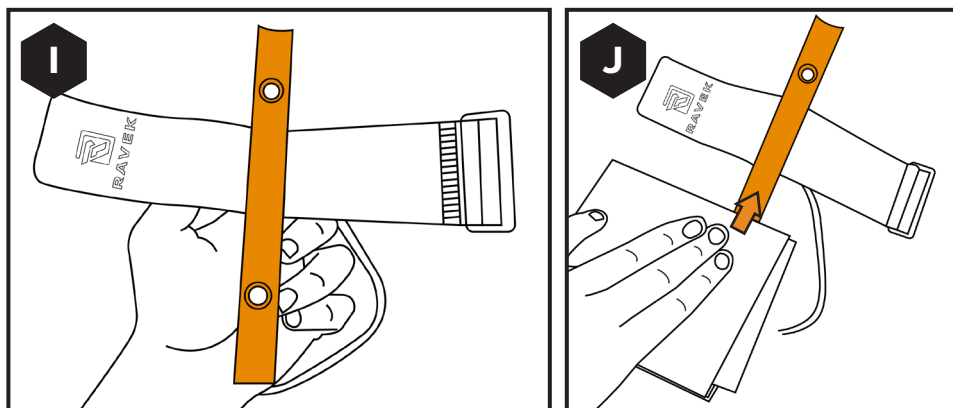


WIPE WITH RUBBING ALCOHOL

Before permanently installing your Apex Light to the UTV's roll bar, use the rubbing alcohol wipe provided to clean both the roll bar and the light base. Allow them to dry.

Next, use the adhesion promoter wipe provided to clean the roll bar and light base. Let them dry. [SEE FIGURES F – J]

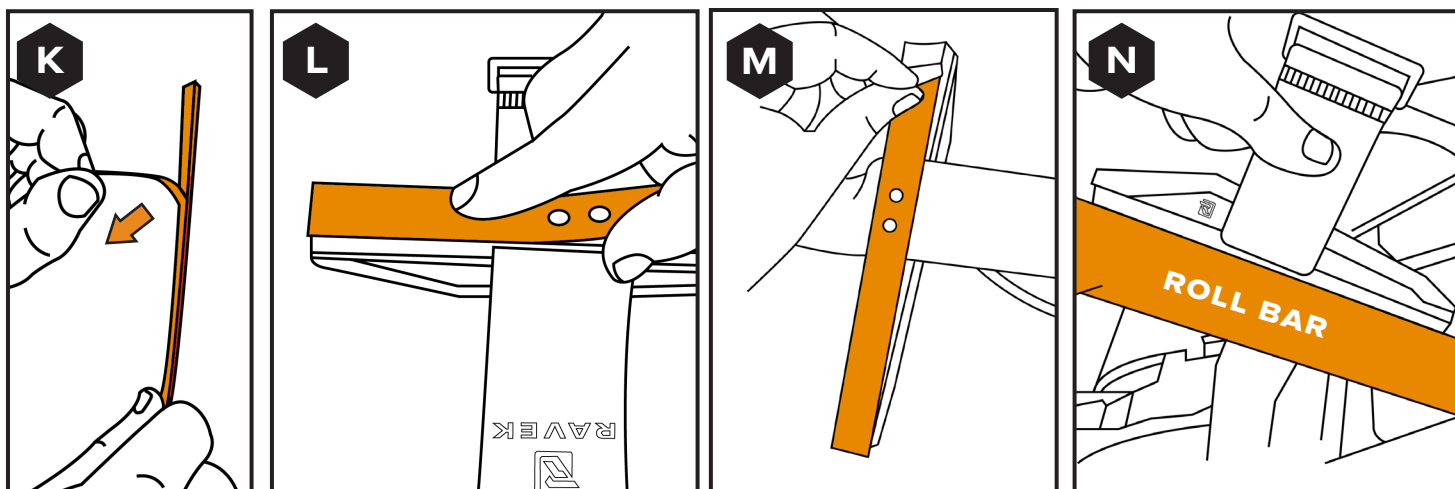




iv

APPLY TAPE

Apply the double-sided tape to the dry roll bar adapter of the Apex Light, then attach the light to the cleaned and prepared surface. [SEE FIGURES K – N]

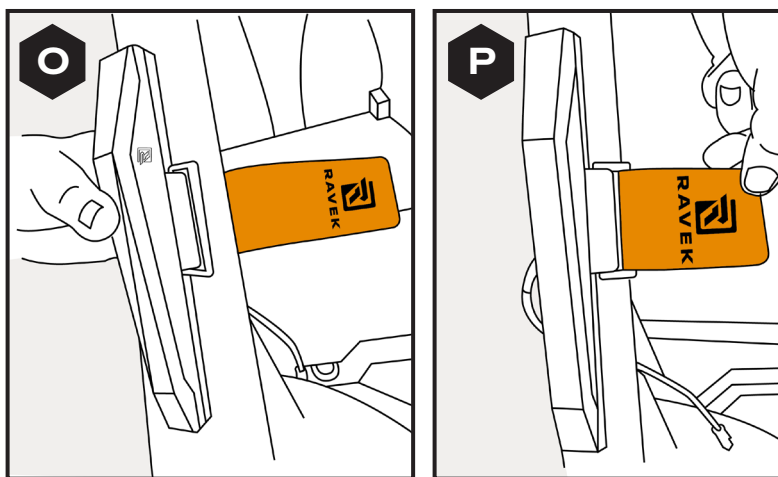


v

TIGHTEN STRAP

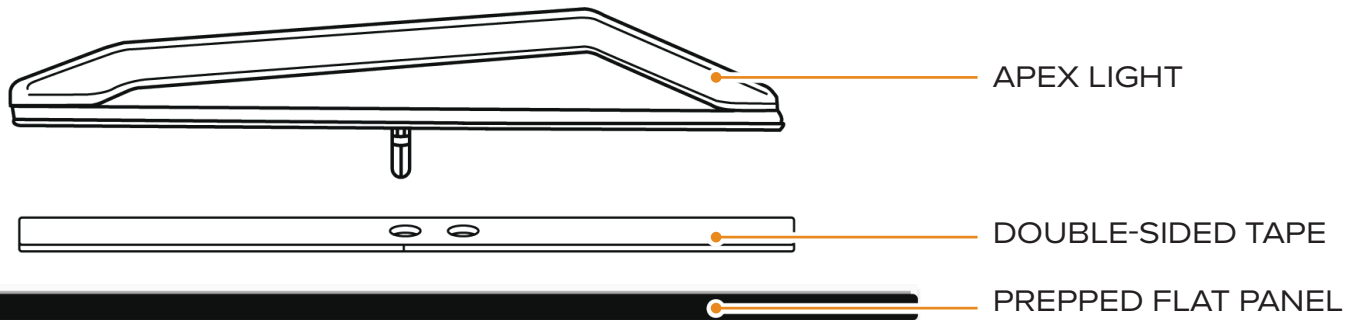
Tighten straps onto base and roll bar. [SEE FIGURES O & P]

NOTE: If you have excess length of strap you can rotate the buckle away from the slack to reduce the slack in the strap.



JUMP TO STEPS 10-15 TO FINISH INSTALL

OPTION B DIAGRAM - ADHESIVE ONLY MOUNTING



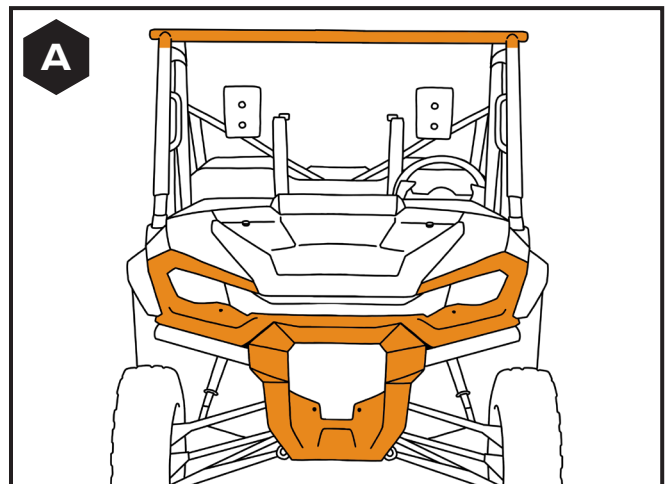
i

LOCATE A SURFACE TO MOUNT TO

Locate an exterior panel with 8" of flat surface for mounting.
[SEE FIGURE A]

NOTE: If you're adhesive mounting the Apex Lights to the roof, we recommend drilling a hole to feed the wires through. The Apex Light adhesive creates a water-tight seal.

A

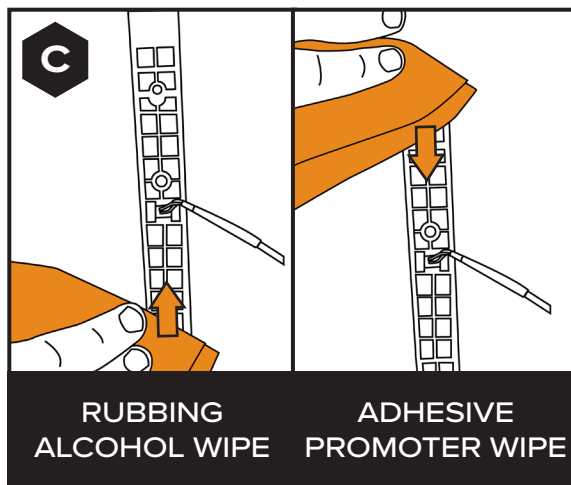


ii

WIPE DOWN SURFACES

Before you permanently install your Apex light to the UTV's flat panel you've chosen, wipe down the panel and the base of the light with the rubbing alcohol wipe provided and let dry.

Next wipe down the panel and light base with the adhesion promoter wipe provided. Let dry. [SEE FIGURES B & C]

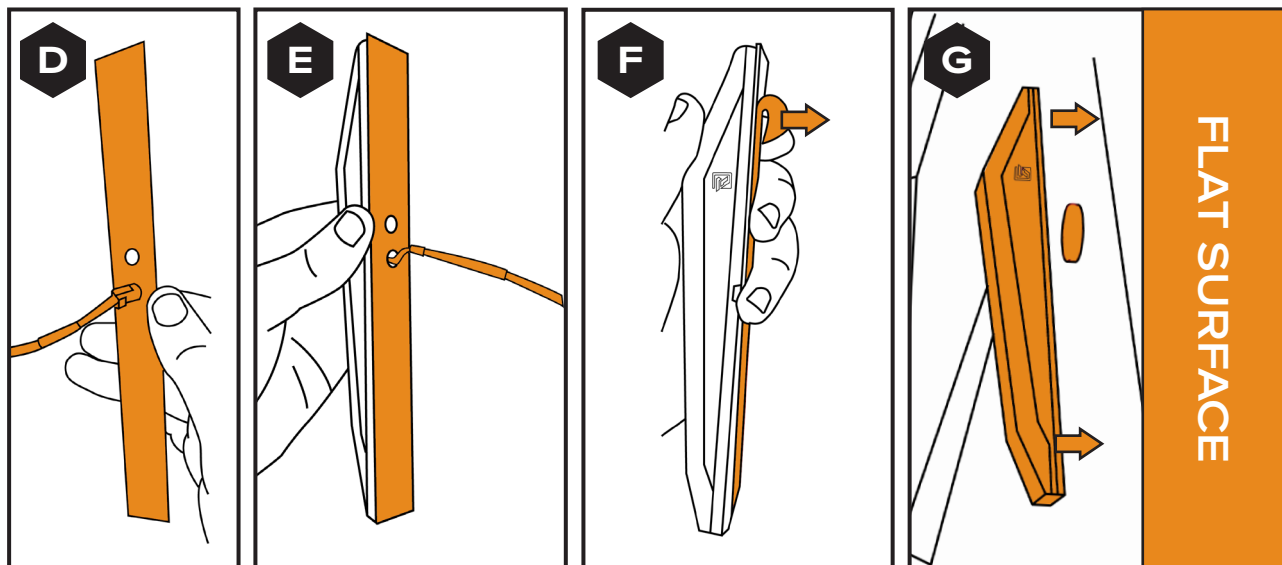


iii

APPLY TAPE

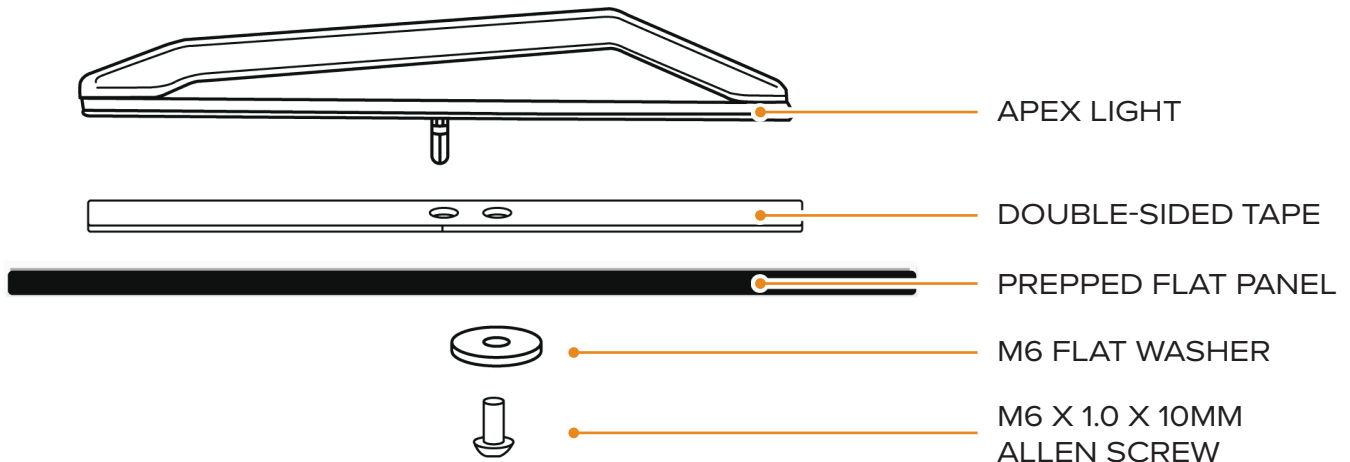
Apply the double-sided tape to the Apex light's base and affix the light to the prepped surface. [SEE FIGURES D – G]

NOTE: Be sure the whole light's base is in contact with the surface of the UTV to ensure the light will hold up permanently.



JUMP TO STEPS 10-15 TO FINISH INSTALL

OPTION C DIAGRAM - DRILLED AND ADHESIVE MOUNTING

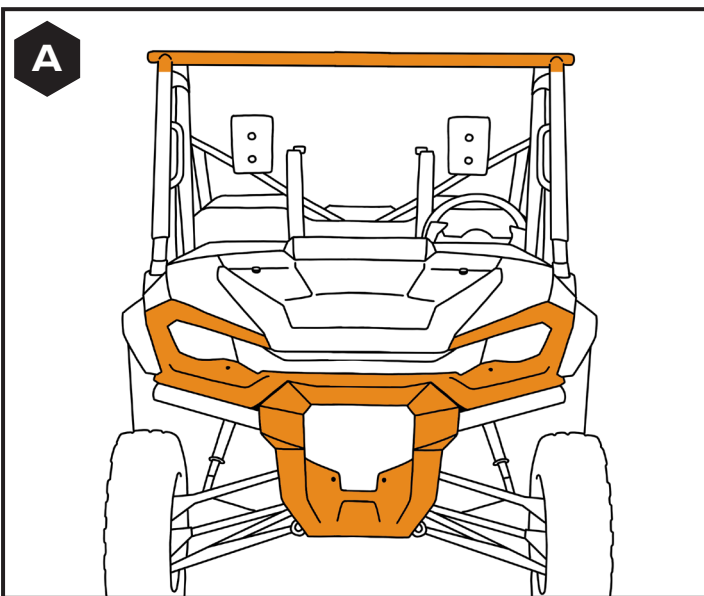


i

LOCATE A SURFACE TO MOUNT TO

Find an exterior panel with 8" of flat surface for mounting.
[SEE FIGURE A]

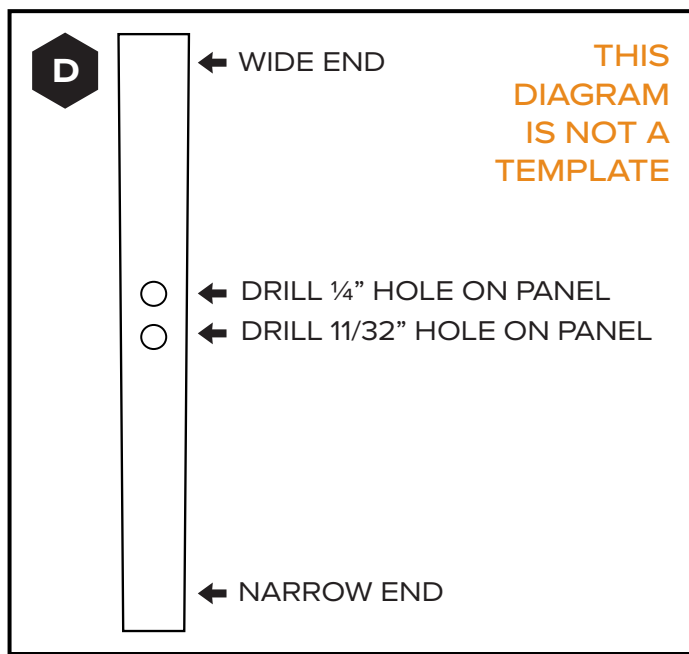
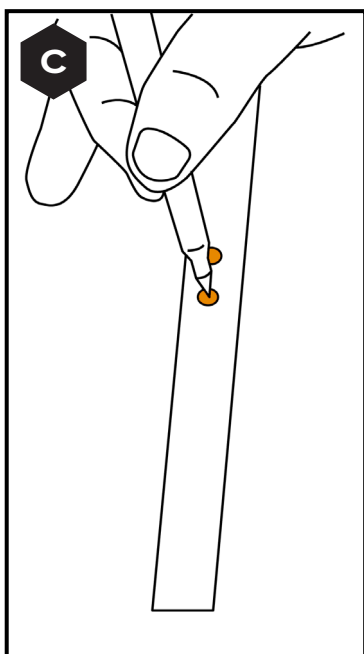
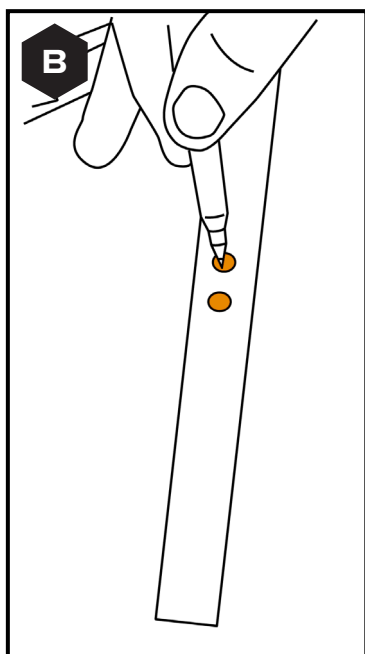
A





MARK HOLES TO DRILL

Use the holes in the double-sided tape as a guide for drilling. Make sure you can access the inside of the panel where you'll need to place the flat washer. [SEE FIGURES B - D]



DRILL 1/4" HOLE

Once your holes are marked, drill a 1/4" hole for the screw.

NOTE: We recommend using a *brad point drill bit* to prevent damaging the panel.



DRILL 11/32" HOLE

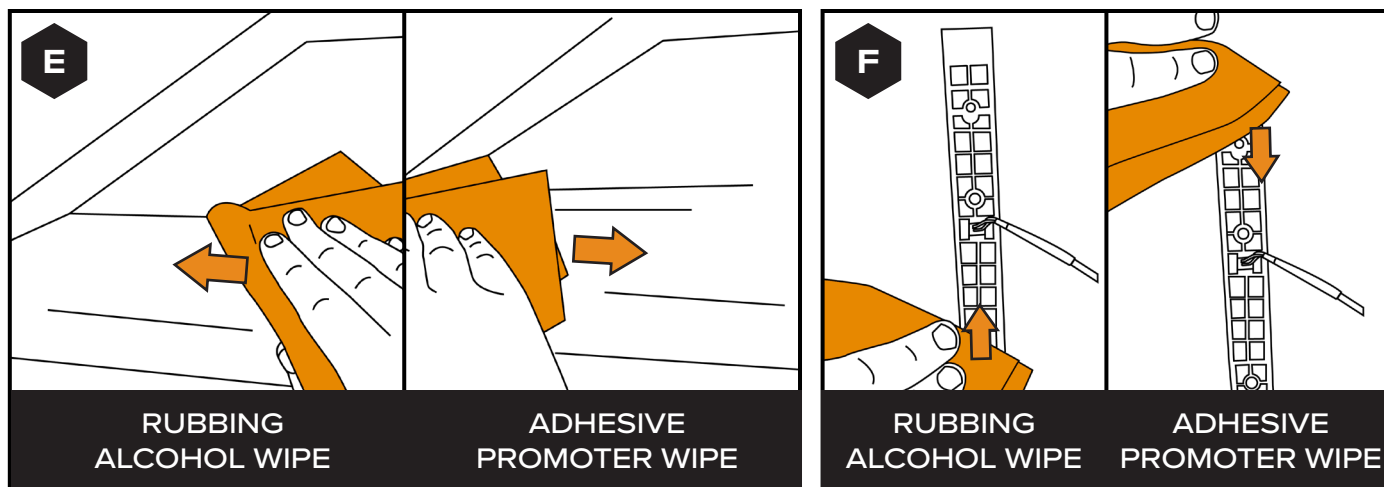
Drill an 11/32" hole to feed the Apex light's wire connector through.



WIPE SURFACE WITH RUBBING ALCOHOL

Before permanently installing your Apex light to the chosen flat panel, clean both the panel and the light base with the rubbing alcohol wipe provided. Let them dry.

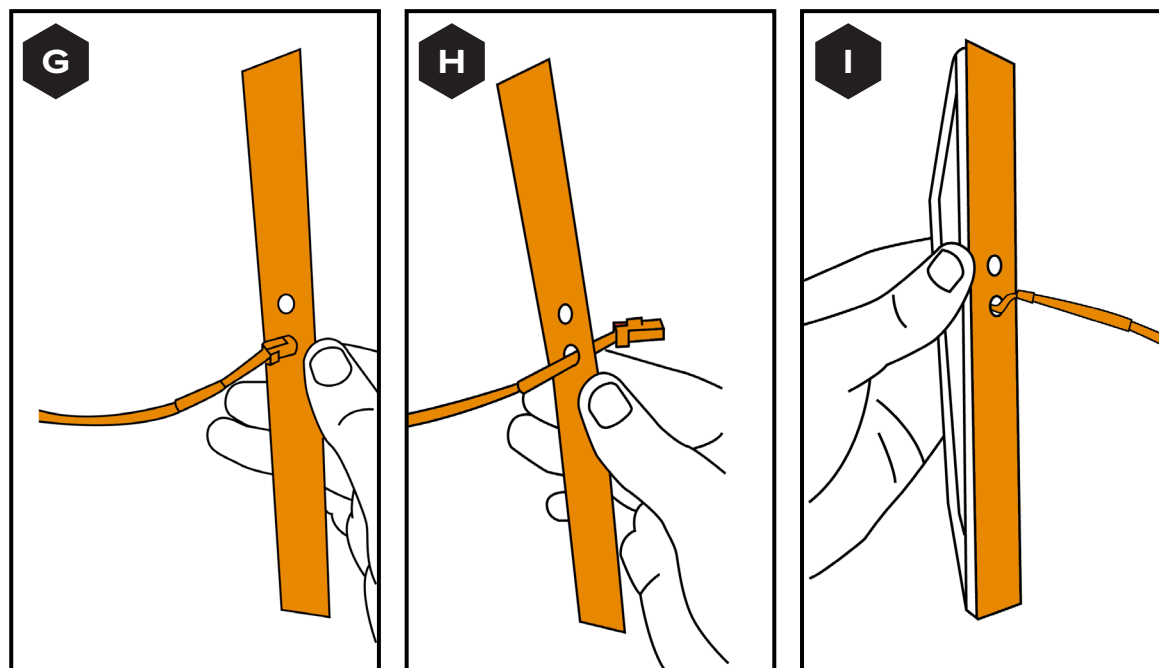
Next, wipe down the panel and light base with the adhesion promoter wipe provided. Let them dry. [SEE FIGURES E & F]



vi

APPLY TAPE

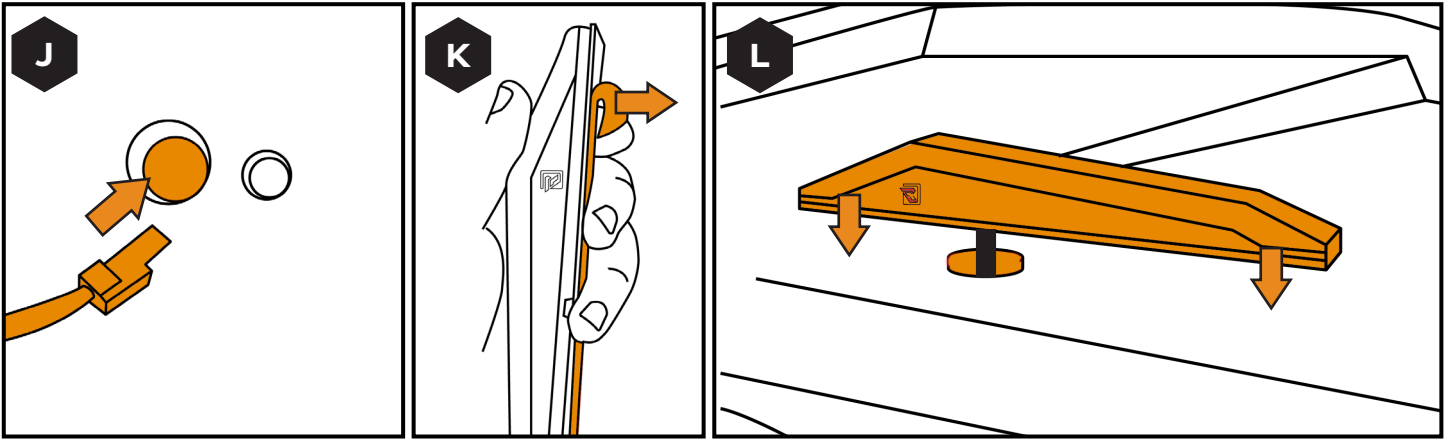
Apply the double-sided tape to the Apex light's base. [SEE FIGURES G - I]



vii

ADHERE LIGHT TO PREPPED SURFACE

Feed the light's wiring through the 11/32" hole. Remove the cover from the double-sided tape and attach the Apex light to the prepared surface. [SEE FIGURES J - L]



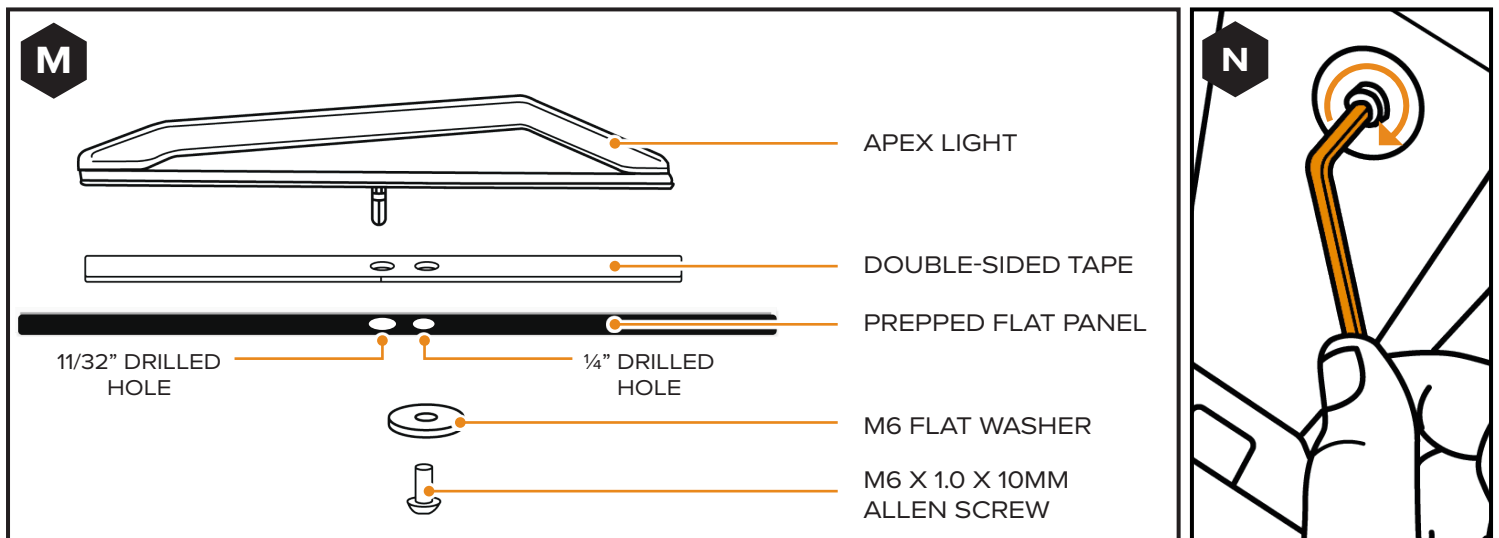
viii

THREAD IN SCREW

Thread the M6 x 1.0 x 10mm Socket Allen screw with an M6 Flat Washer through the backside of the panel into the light's base using a 4mm Allen wrench. [SEE FIGURES M, N, & OPTION C DIAGRAM]

NOTE: If you need a longer screw, you have two options:

1. Call or email us, and we'll express mail you the correct screw.
2. Visit your local hardware store and purchase an M6 x 1.0 x (desired length) screw.



JUMP TO STEPS 10-15 TO FINISH INSTALL

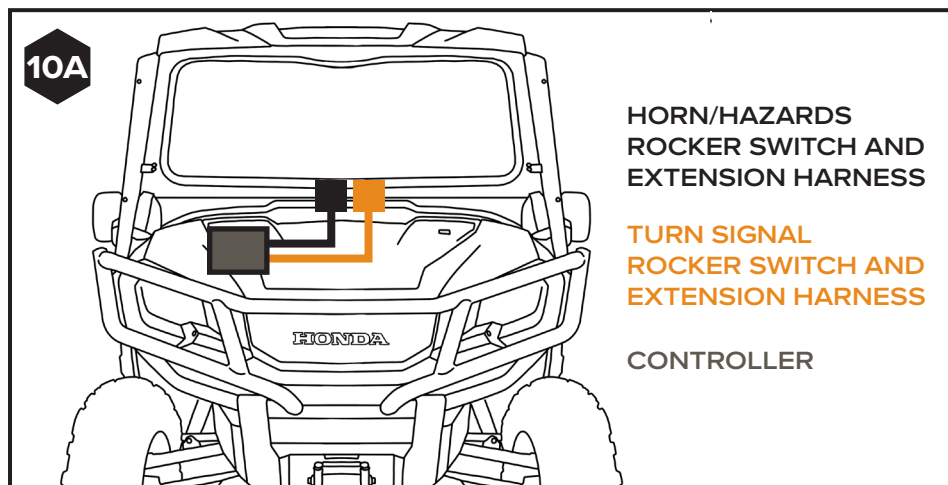
i

Grab your Turn Signal rocker switch and extension wire. Feed the extension wire through the open slot in your switch panel.

Route the small plug on the extension to the controller and plug it in. [SEE FIGURE 10A]

NOTE: The easiest way to route the extension wire is through the rocker switch slot and to the controller, as described above.

NOTE: Repeat this process for the Horn/Hazard Switch extension wire.



i

Return to the Turn Signal Controller and route the Horn Extension harness to the front of the Pioneer. There, you will permanently mount the Horn using an OEM bolt of your choice.

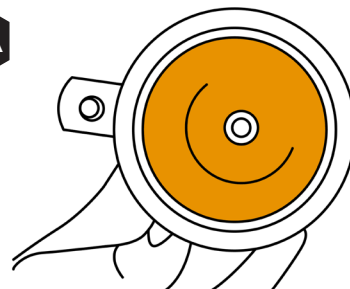
ii

Mount your horn from the kit once the wiring is routed to the front area. [SEE FIGURE 11A]

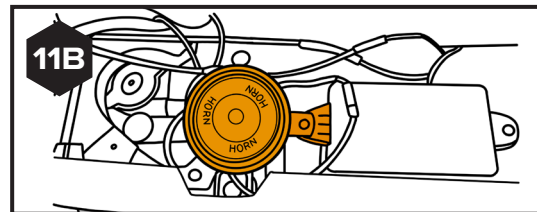
iii

Install the horn in an open area, away from the suspension or moving parts of the Pioneer, using a bolt location of your choice on the front of the Pioneer. [SEE FIGURE 11B]

11A

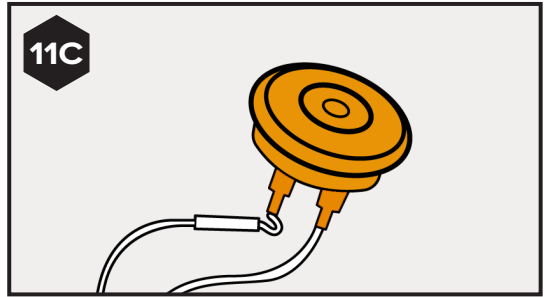


11B



iv

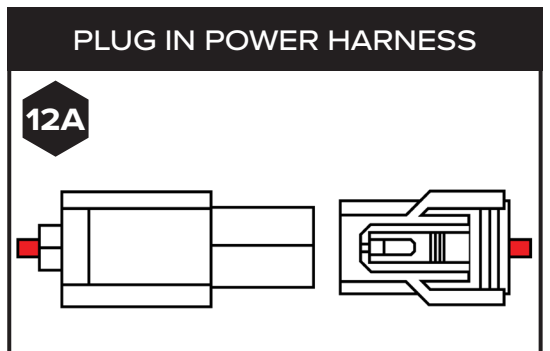
Connect both spade connectors from the extension harness to the connectors on the backside of the horn (there is no specific connector to plug into). [SEE FIGURE 11C]



12 PLUG IN YOUR TURN SIGNAL CONTROLLER TO POWER

i

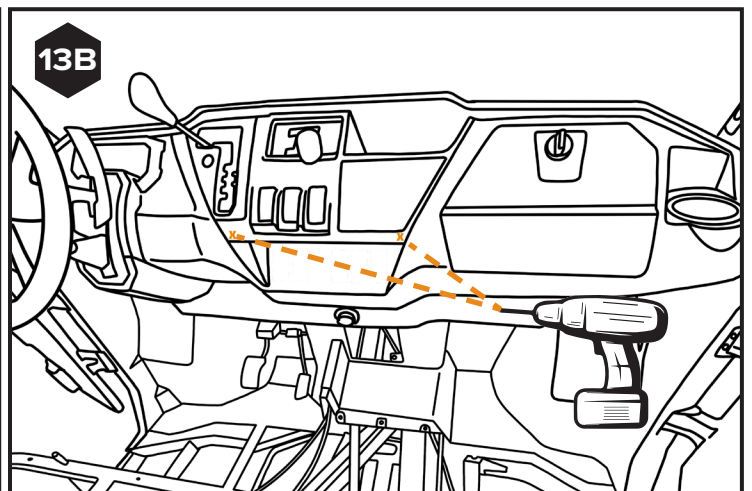
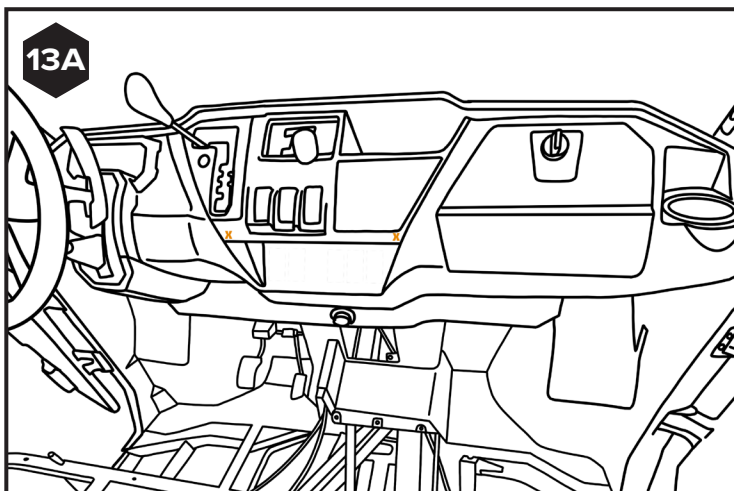
Go to the Turn Signal Controller and plug the connector from the Power Harness into the open 12V accessory plug. [SEE FIGURE 12A]



13 INSTALL DASH INDICATORS

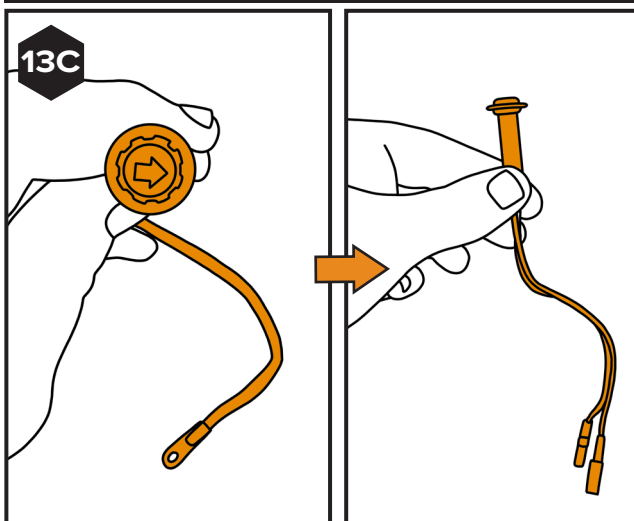
i

Mark two locations on your dash where the indicators will be installed. Ensure they are positioned side by side, not overlapping one another. Drill two 5/16" holes. [SEE FIGURES 13A & 13B]

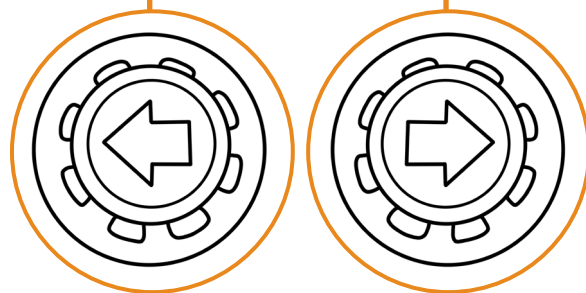
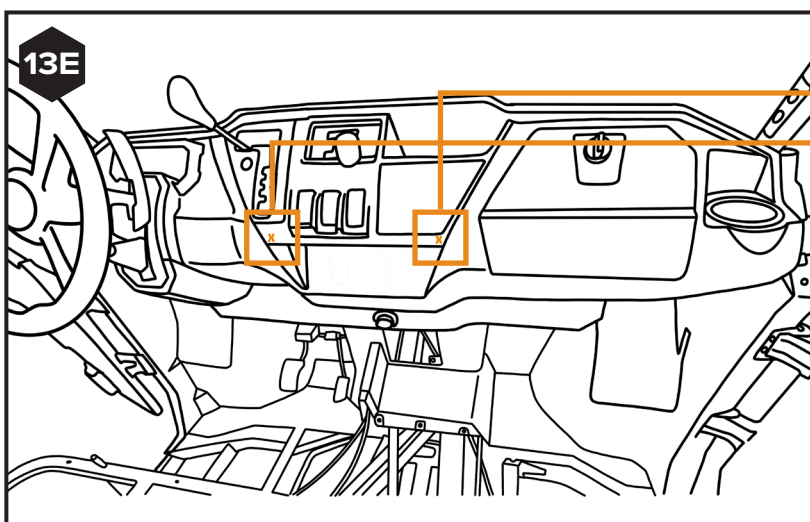
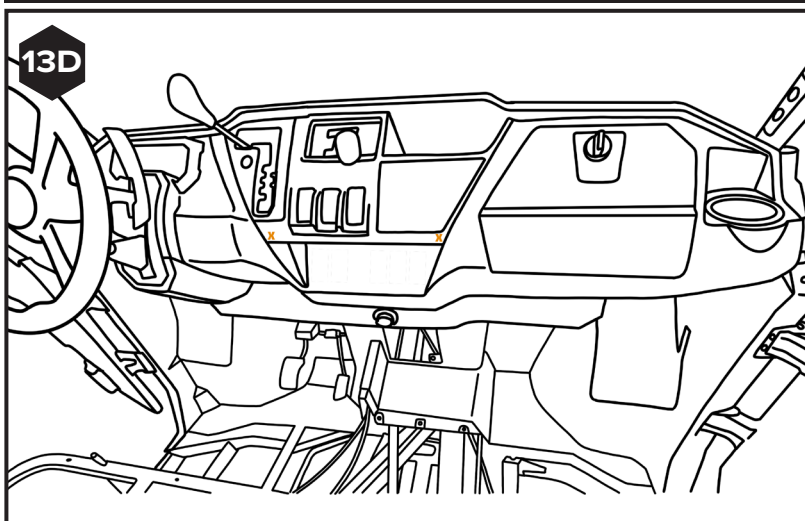


Insert the dash indicators into the pre-drilled holes. [SEE FIGURES 13C – 13E]

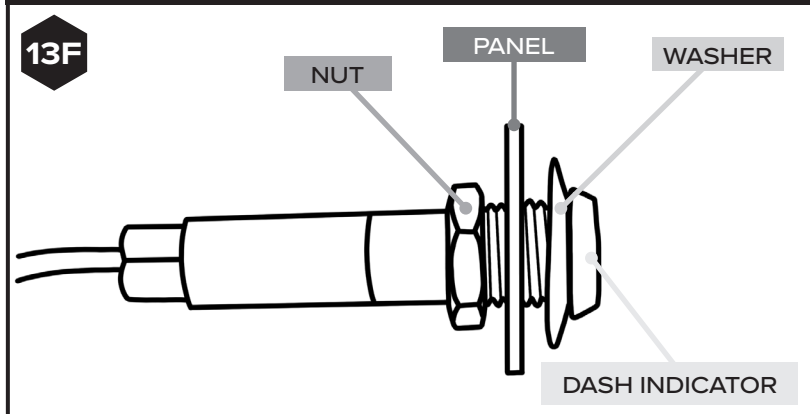
LOCATE YOUR DASH INDICATORS



FEED YOUR DASH INDICATORS THROUGH DRILLED HOLES



INSTALLED DASH INDICATOR SIDE PROFILE



i

Now, it's time to confirm the kit is working as expected. Before doing that, reconnect your battery by reversing step 1.ii.

Once the battery is connected, turn your Pioneer's power on and test all the kit's features:

- **Running brake lights**
- **Running white lights**
- **Brake light w/ pulse effect**
- **Left turn signal:**
 - **Push Once: Activates a 20-second auto-cancel timer.**
 - **Push Twice: Extends the timer to 40 seconds.**
 - **Push Three Times: Sets the timer to 90 seconds.**
- **Left turn signal dash indicator**
- **Right turn signal:**
 - **Push Once: Activates a 20-second auto-cancel timer.**
 - **Push Twice: Extends the timer to 40 seconds.**
 - **Push Three Times: Sets the timer to 90 seconds.**
- **Right turn signal dash indicator**
- **Hazards**
- **Horn (plug your ears)**

i

Once the kit's functions are verified and everything is working properly, check all your connection points and apply heat shrink to them if not already done, as described in step 3.

ii

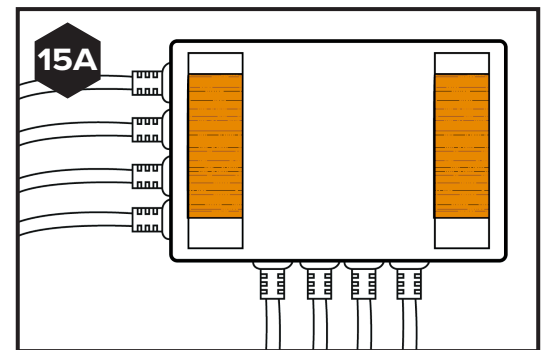
Use the zip ties provided in the kit to secure all wiring to frame tubes or roll bars, keeping it away from hot or moving parts.

iii

Once all wiring is secured with zip ties, use side cutter pliers to trim any excess zip tie ends.

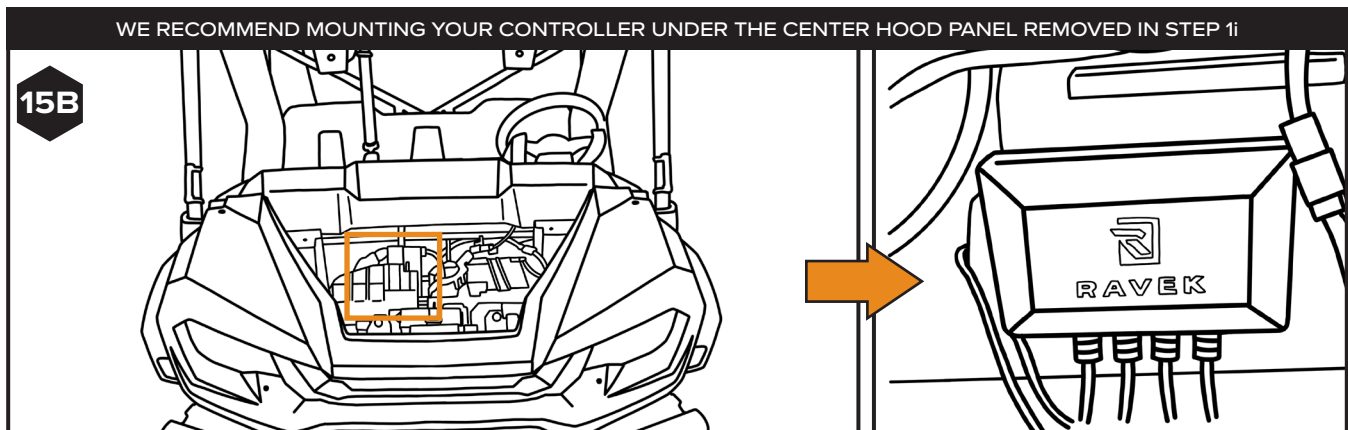
iv

Apply the two strips of double-sided tape from the kit to the backside cavities of the controller. [SEE FIGURE 15A]



v

Once the surface is clean and dry, press the controller into your chosen location and let the tape cure for 24 hours before use. [SEE FIGURE 15B]



vi

Reverse steps 1.i - 1.ix to reinstall all of your Pioneer body panels and parts that were previously removed.



RAVEK
BUILT FOR MORE

WHY RAVEK

Stock UTVs don't come with enough storage, lighting, comfort, and protection. That's why we started RAVEK.

We live to design, manufacture, and test innovative SxS upgrades that elevate the riding experience. Here's what you can expect from us:

- Durable products built to last (100% lifetime guarantee)
- UTV upgrades thoughtfully designed & tested by riders
- Outstanding installation support (videos & USA customer service)
- Constant flow of epic riding content (check out our social media)

We're confident your RAVEK product will earn its place on your machine. Please call or e-mail us if we can help.

- Harry & Ricky (Brothers & Owners)

MESSAGE FROM THE DESIGNER

All UTVs come without turn signals, and even though you can ride them on the road, people need to make hand signals to indicate to other riders that you are making a turn! Not only is it tiring, but not safe!

That is why I created this kit: you can easily install a turn signal kit to your UTV, add some personality to your ride, and make your ride safe at any time of the day.



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