



RAVEK

CAN-AM DEFENDER HD10 2020-2025

***GEN3 SPEAKEASY
TURN SIGNAL KIT***

WITH WHITE RUNNING SIGNATURE LIGHTS



INSTALLATION INSTRUCTIONS



RAVEK

CAN-AM DEFENDER 2020 - 2025 ***SPEAKEASY UTV TURN SIGNAL*** ***KIT WITH SIGNATURE LIGHTS***

Part #: 65-1000SR Fitment: CAN-AM DEFENDER 2020 - 2025

TOOLS NEEDED: *OPTIONAL



*Side Cutter
Pliers*



*Push Pin
Pliers*



Pick



*3mm Allen
Wrench*



*4mm Allen
Wrench*



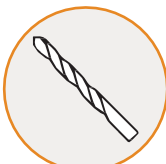
Ratchet



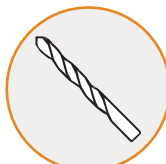
*10mm Deep
Well Socket*



*Drill**



*11/32"
Drill Bit**



*1/4"
Drill Bit**



*Wire
Fish**



*8mm
Wrench*

PARTS INCLUDED:

- **Controller (1x)**
- **Signature Light (2x)**
- **Horn (1x)**
- **Power Harness (1x)**
- **Turn Rocker(1x)**
- **License Plate Bracket (1x)**
- **Dash Indicator Harness (2x)**
- **Wireless Receiver (1x)**
- **Input Harness (1x)**

- **Adhesive Promoter Wipe (1x)**
- **Rubbing Alcohol Wipe (1x)**
- **Output Harness (1x)**
- **Horn/Hazards Rocker (1x)**

Notice: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

INSTALLATION VIDEO GUIDE

SCAN CODE FOR VIDEO WALKTHROUGH

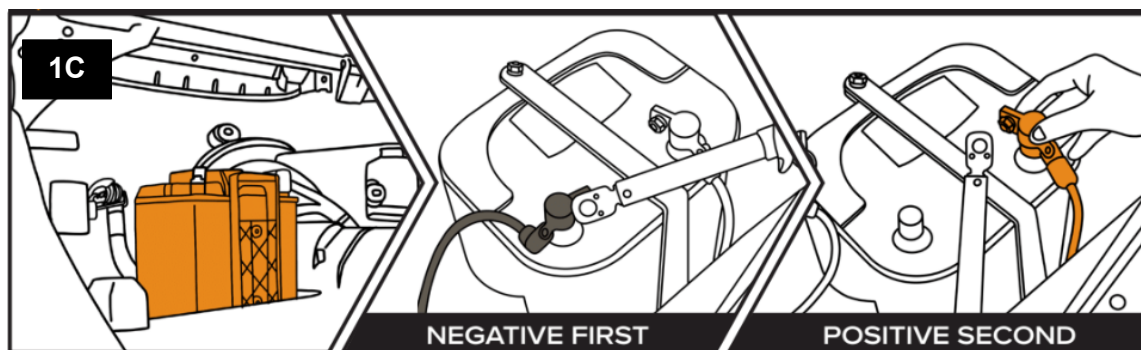
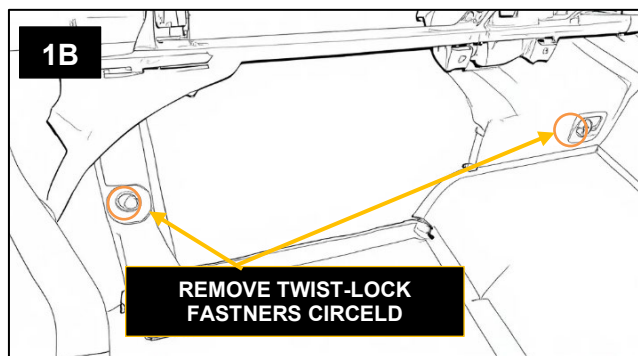
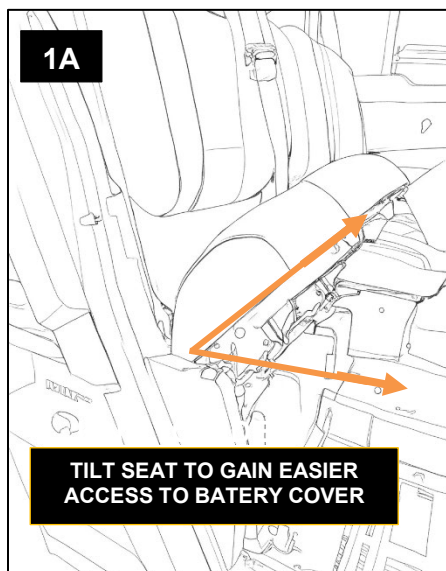


1

PREPARE THE FRONT END OF THE MACHINE

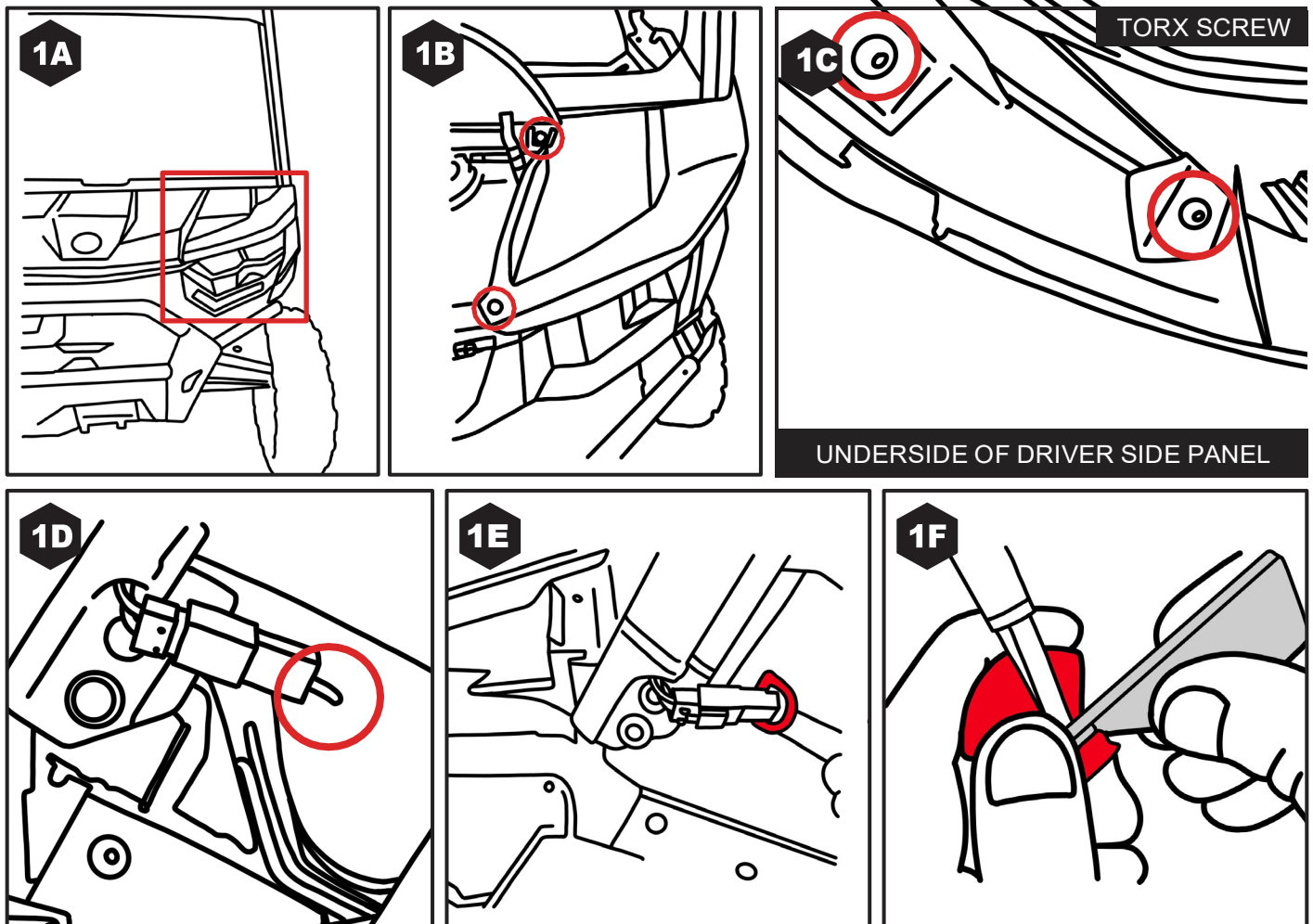
1

- Before you begin the installation, disconnect the battery to prevent any electrical damage.
- Tilt the seat upward to gain easier access to the battery area. [SEE FIG. 1A]
- Locate and release the two twist-lock fasteners securing the plastic battery cover, then remove the cover. [SEE FIG. 1B]
- Slide the battery cover forward and slightly upward to fully expose the battery, and disconnect it as shown using **10MM SOCKET**. [SEE FIG. 1C]



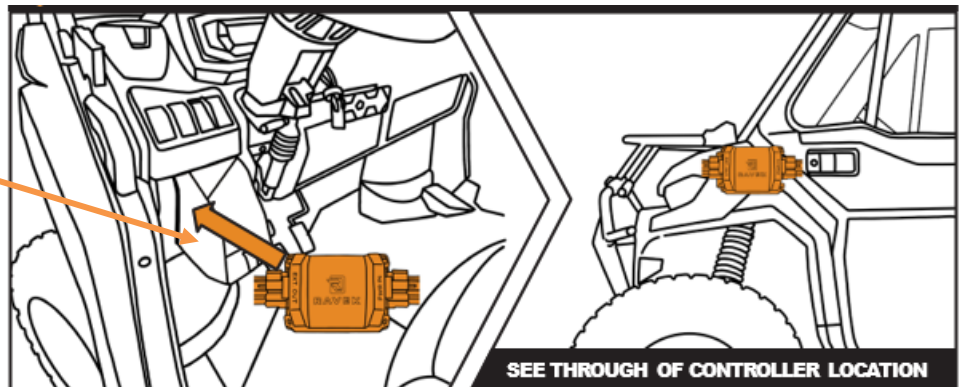
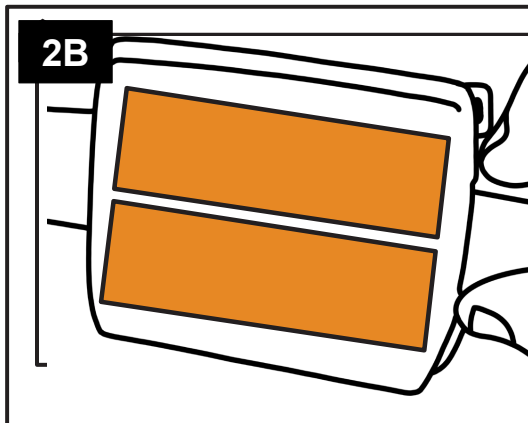
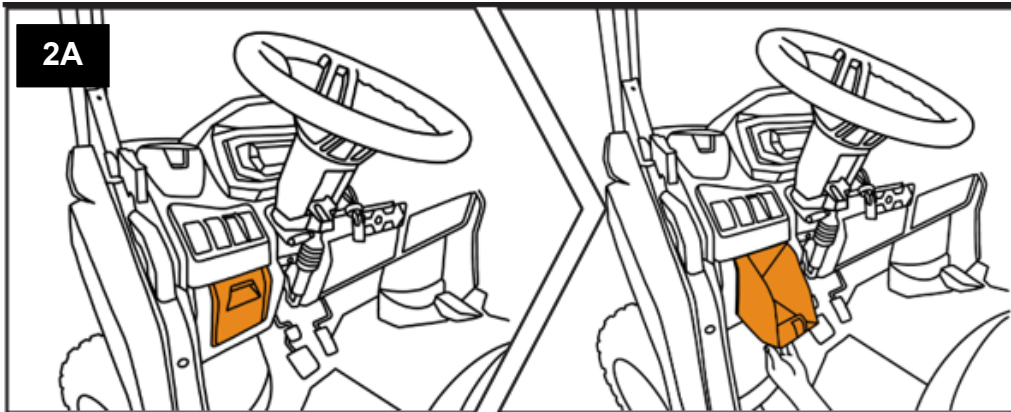
1

- Remove the driver-side front fender panel. Using **PUSH-PIN PLIERS**, remove the two plastic push pins securing the panel below the hood. [SEE FIGS. 1A & 1B]
- Next, use a **T-30 TORX BIT** to remove the two Torx screws located on the underside of the panel near the wheel, as shown in FIG. 1C.
- Once all hardware is removed, carefully pry the panel outward to release the retaining clips and remove the panel from the machine.
- At the base of the A-pillar, locate the factory plug and the rubber grommet. Using a utility knife, carefully enlarge the opening in the grommet. [SEE FIGS. 1D & 1F]
- This enlarged opening will be used in a later step to route the kit wiring between the under-hood area and the dash. This routing method is recommended, as it provides a clean, secure, and well-concealed path for the wiring.



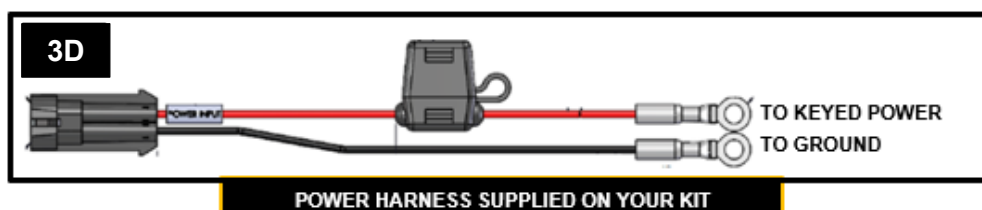
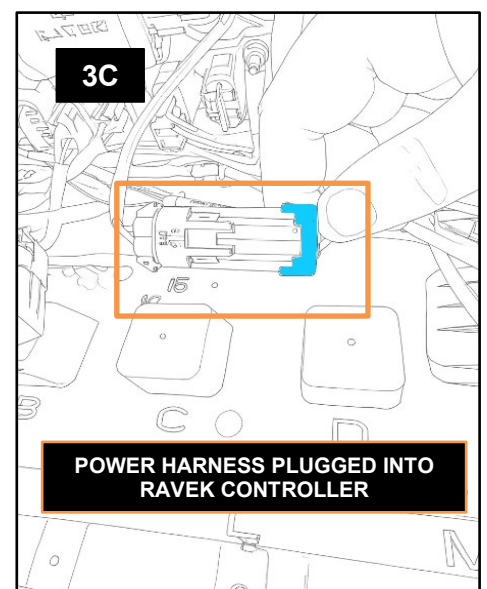
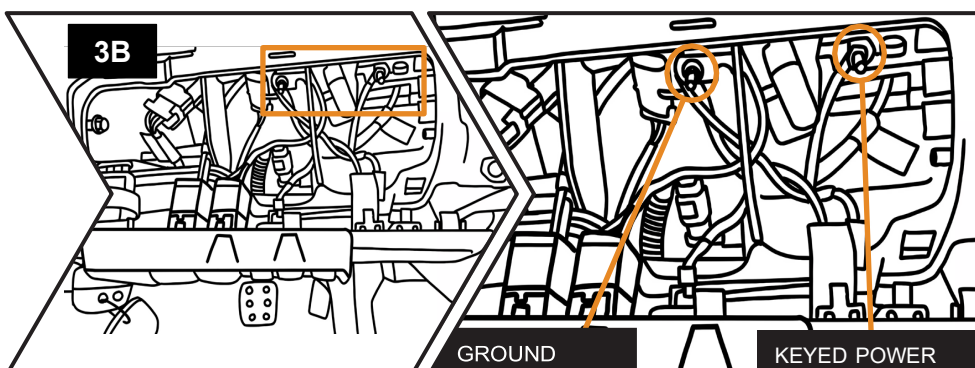
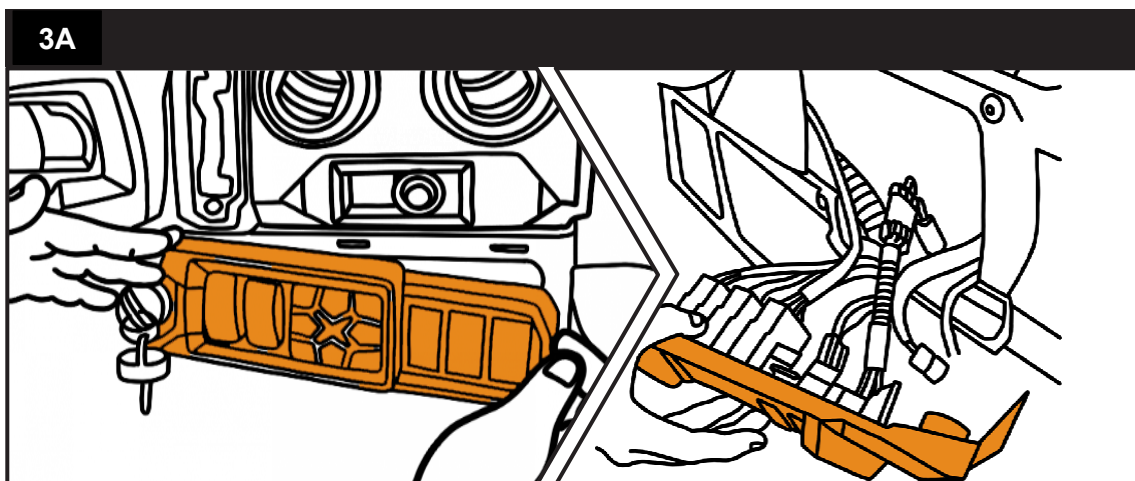
2

- Remove the cubby located next to the steering wheel by carefully pulling it outward and downward to release the retaining clips. [SEE FIG. 2A]
- Once the cubby is removed, clean and prepare the flat mounting surface behind it using the supplied alcohol wipe, followed by the adhesive promoter. [SEE FIG. 2B]
- After the surface has fully dried, mount the RAVEK turn signal controller in this location as shown.

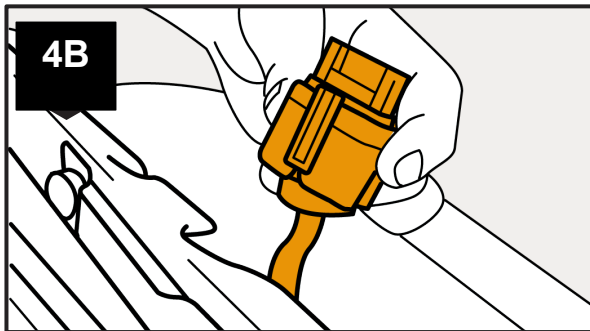
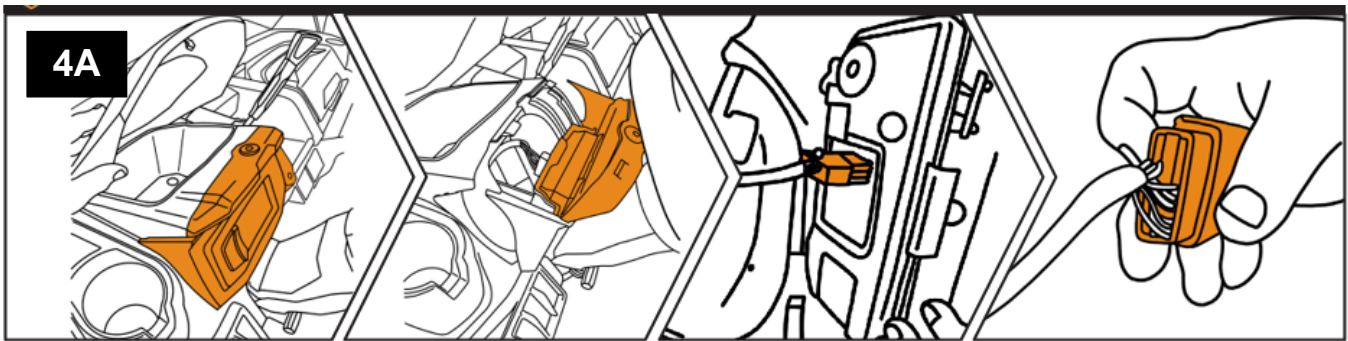


3

- Access the Defender's bus bar by locating the switch panel and gently pulling it partially outward. Remove the panel just far enough to reach the two studs behind it that provide keyed power and ground. [SEE FIG. 3A]
- Once the switch panel is detached, allow it to hang carefully while you locate the studs. [SEE FIG. 3B]
- At this step, connect the power harness supplied with your kit to the positive (power) and negative (ground) terminals accordingly, using a **10MM SOCKET**. [SEE FIG. 3C]
- Next, follow the opposite end of the power harness and connect it to the wire labeled "POWER" coming from the RAVEK turn signal controller.
 - Refer to FIG. 3D to ensure correct identification of power harness.

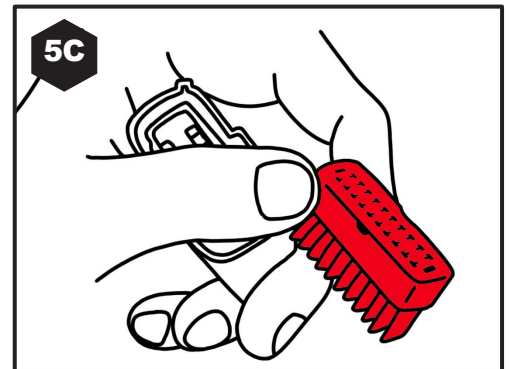
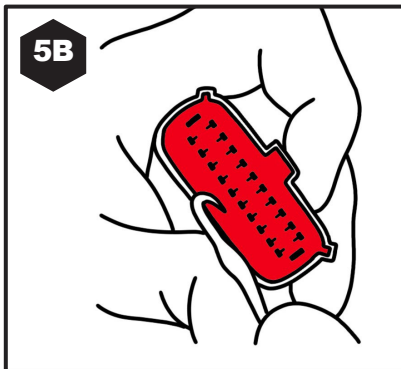
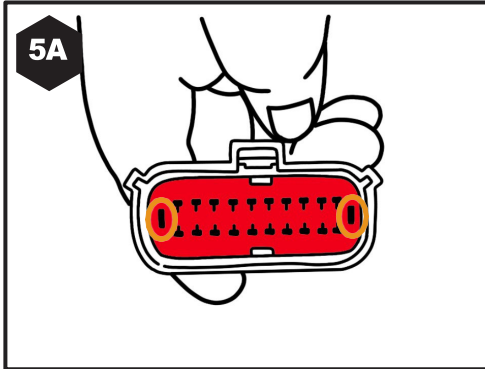


- To install the dash indicators on your Defender, first open the cubby located behind the gauge cluster. [SEE FIG. 4A]
- With the cubby open, grasp the gauge cluster and gently pull it rearward to expose the gauge cluster connector. [SEE FIG. 4B]
- This will provide the necessary access to wire the built-in dash indicators in the following steps.

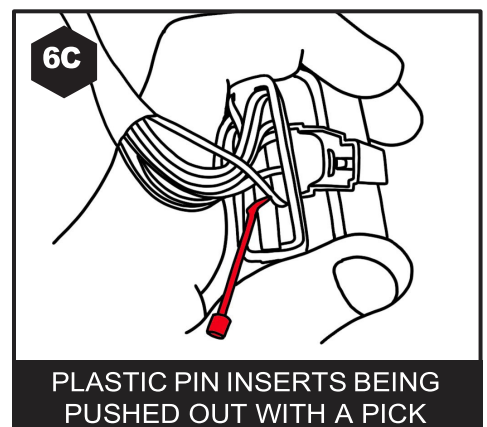
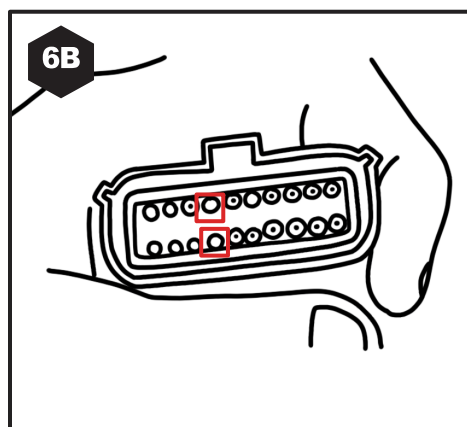
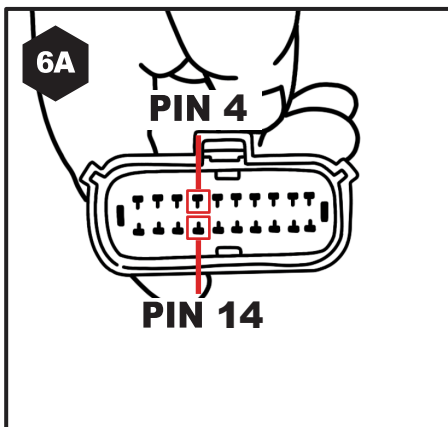


5

- Remove the white pin connector cover.
- Using a **PICK TOOL**, depress the two locking tabs located at each end of the connector to release the cover. [SEE FIGS. 5A & 5B]
- Once the tabs are disengaged, carefully pry the cover outward and remove it completely. [SEE FIG. 5C]

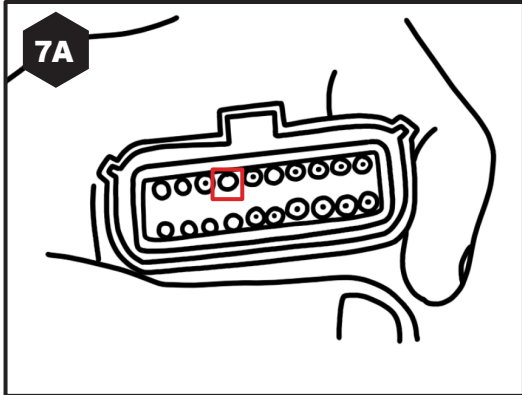
**6**

- Remove the plastic pin inserts from terminals 4 and 14 by pushing them outward from the wire side of the connector until they are released. [SEE FIG. 6A]
- When viewing the connector with the push tab facing up, terminal 4 is the fourth pin on the top row and terminal 14 is the fourth pin on the bottom row. [SEE FIGS. 6B & 6C]



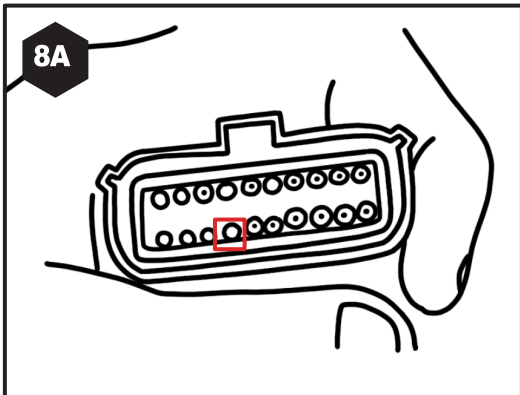
7

- Take the RIGHT DI wire and insert its pin from the wire side of the connector into terminal 4. Push the pin in until it is fully seated and aligned evenly with the other pins. [SEE FIG. 7A]



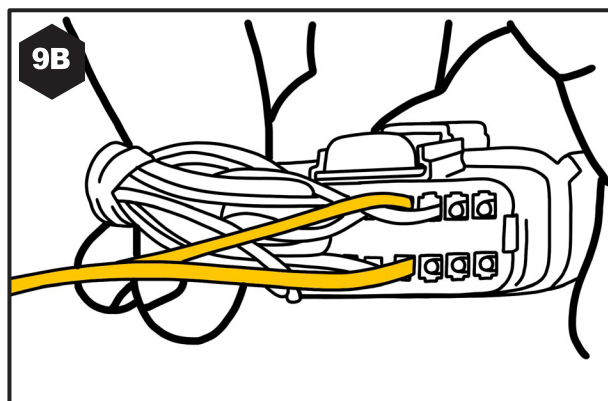
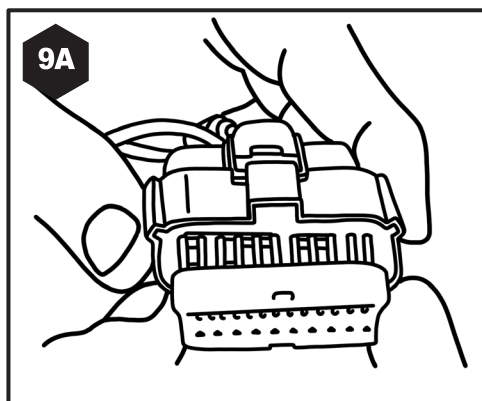
8

- Take the LEFT DI wire and insert its pin from the wire side of the connector into terminal 14. Push the pin in until it is fully seated and aligned evenly with the other pins. [SEE FIG. 8A]

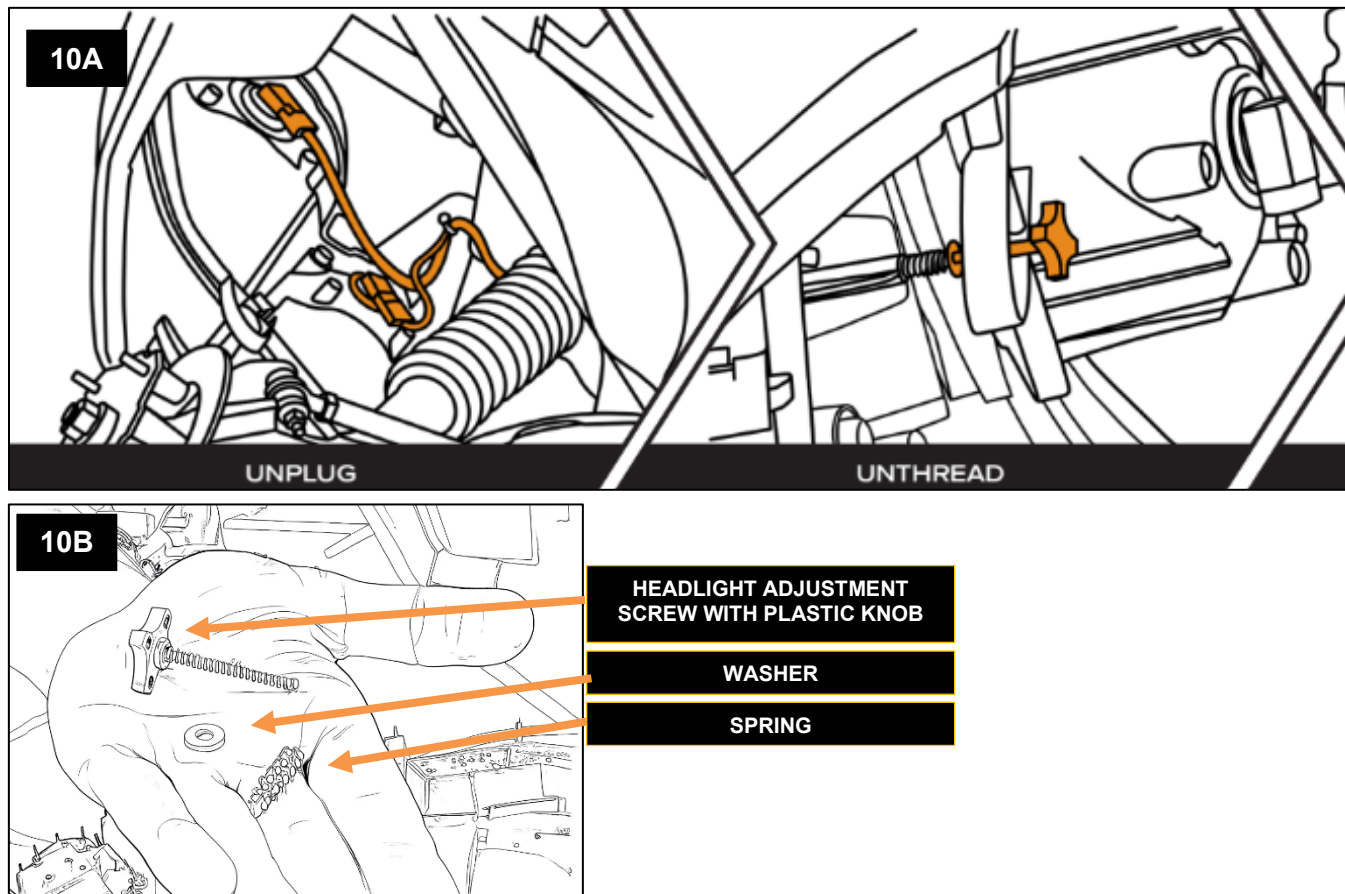


9

- Once both pins are fully seated in their respective terminals, snap the connector back into its closed position. [SEE FIG. 9A]
- Reinstall the white pin cover that was previously removed by pressing it into place until it clips securely. [SEE FIG. 9B]

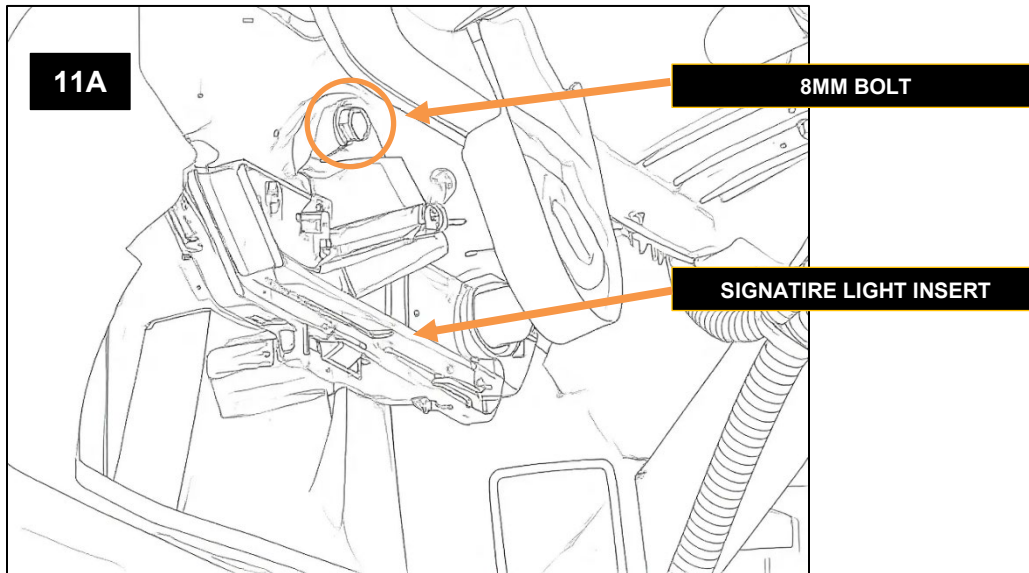


- Access the area behind the signature light insert and release the locking tab to unplug the connector from the insert. [SEE FIG. 10A]
- After disconnecting the insert, remove the headlight adjustment screw with the plastic knob. Make sure to also remove the washer and spring attached to this screw. [SEE FIG. 10B]
- Set all components aside in a safe place, as they will be reused when installing the signature light included with your kit.

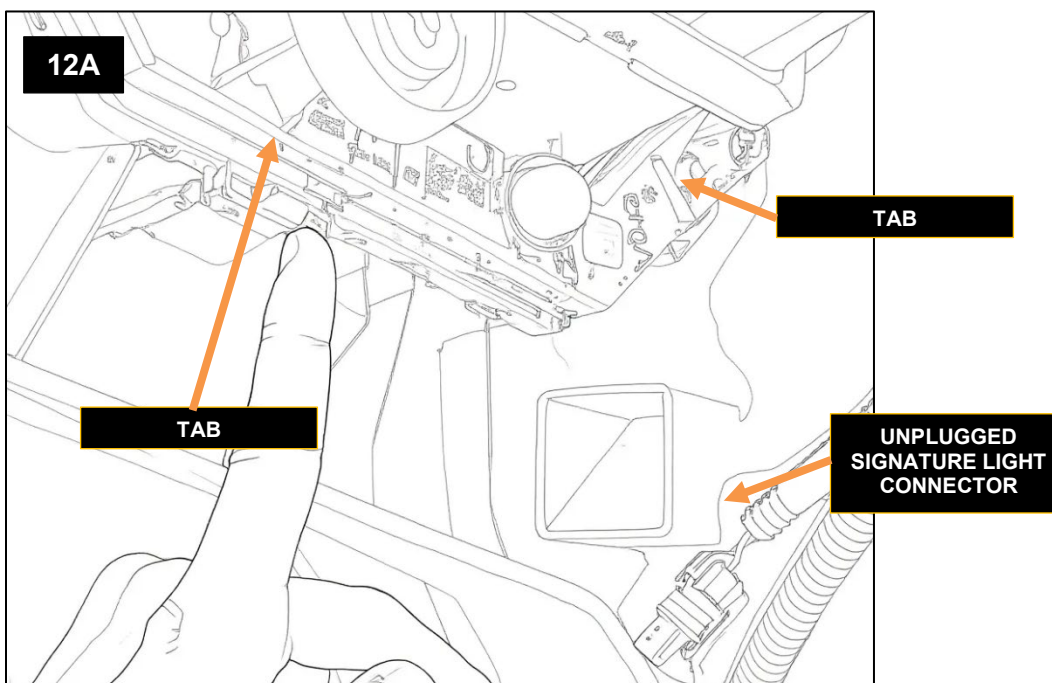


11

- Remove the 8 mm bolt located on the top side of the signature light insert housing using an **8 MM WRENCH**. This step provides easier access in the limited space. [SEE FIG. 11A]
- Set the bolt aside in a safe location, as it will be reused to install the signature lights included with your kit.

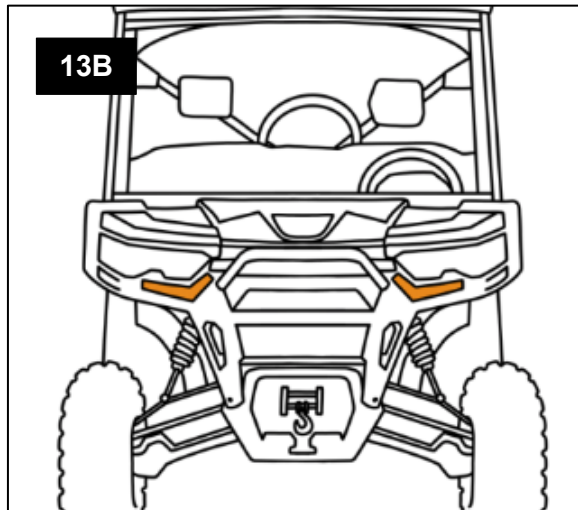
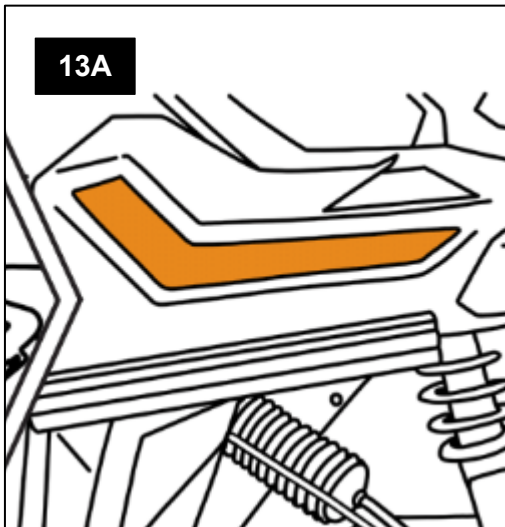
**12**

- Using a flathead screwdriver, release the two retaining tabs that secure the signature light insert in place.
- Carefully pry the insert free, making sure not to damage the mounting tabs on the panel, as these tabs will be reused when installing the signature light included with your kit. [SEE FIG. 12A]



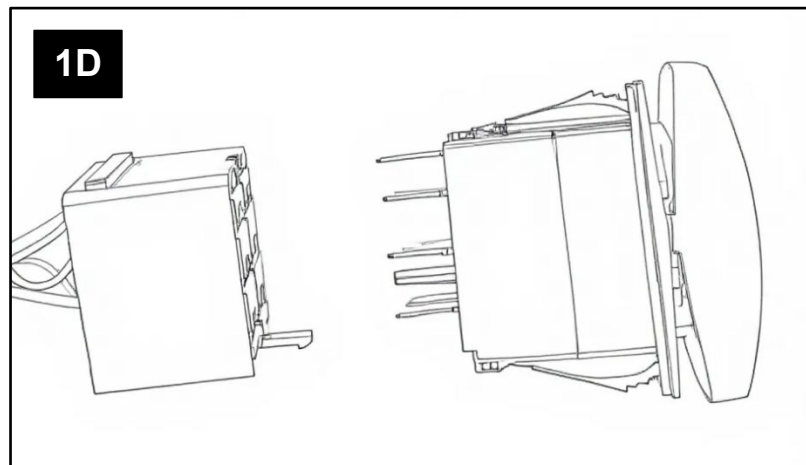
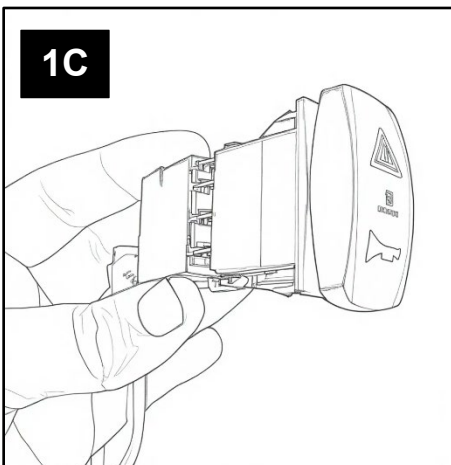
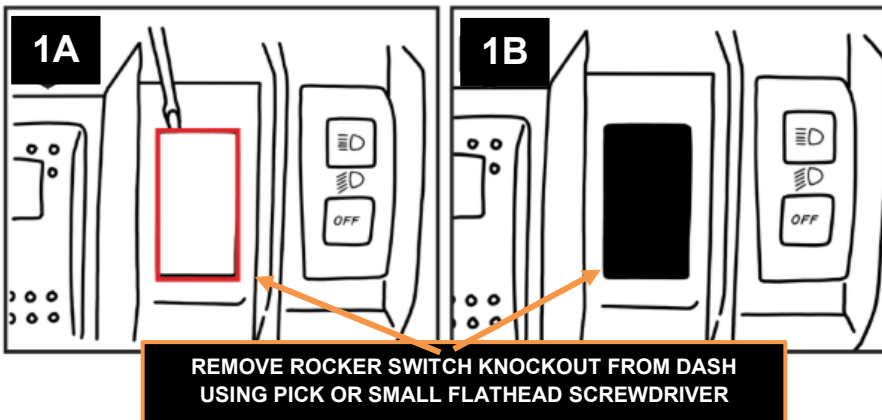
13

- Install the supplied signature lights by reversing **Steps 10–12** and securing each light into its mounting position.
- Do not connect the lights to the OEM connectors.
- Instead, plug the left signature light into the RAVEK controller port labeled “FRONT LEFT.”
- Plug the right signature light into the RAVEK controller port labeled “FRONT RIGHT.” [SEE FIGS. 13A & 13B]
- Use the extensions provided with your kit to reach the RAVEK controller. Route all wiring toward the RAVEK controller through the small side firewall grommet that was exposed at the beginning of the instruction set.



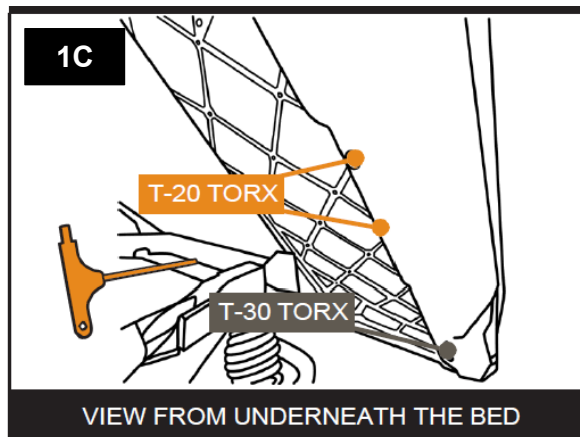
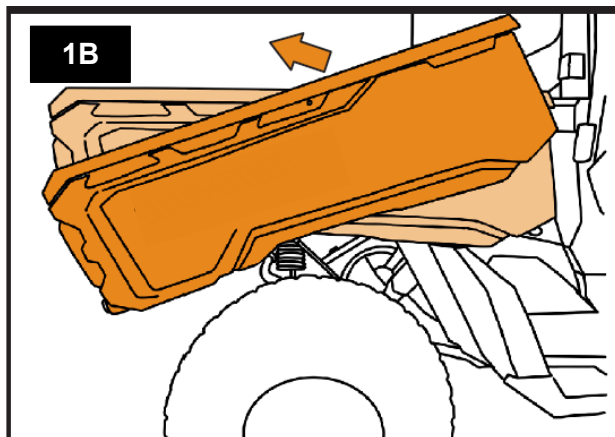
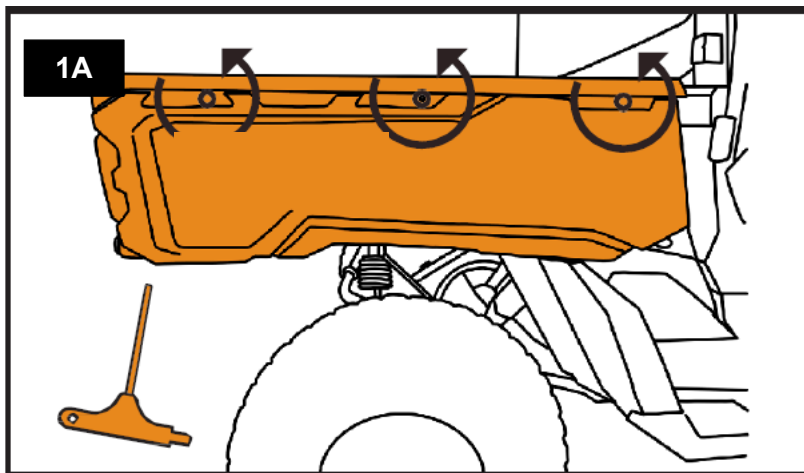
1

- Gather the Turn Signal and Horn/Hazards rocker switches included in your kit.
- Using a **SMALL FLATHEAD SCREWDRIVER** or **PICK TOOL**, remove two rocker switch knockouts from the dash where the Horn/Hazards and Turn Signal rocker switches will be installed.
- With the knockouts removed, disconnect the rocker switches from their switch harnesses so the switches can be inserted into the dash.
- Insert each rocker switch into the open dash ports, ensuring each switch snaps securely into place.
- From the backside of the dash, reconnect each rocker switch to its respective switch harness.
- Once reconnected, route the wiring from the rocker switches to the RAVEK controller:
 - Connect the Horn/Hazard switch harness to the HORN-labeled port on the RAVEK controller.
 - Connect the Turn Signal rocker harness to the TURN SWITCH-labeled port on the RAVEK controller. [SEE FIGS. 1A – 1D]



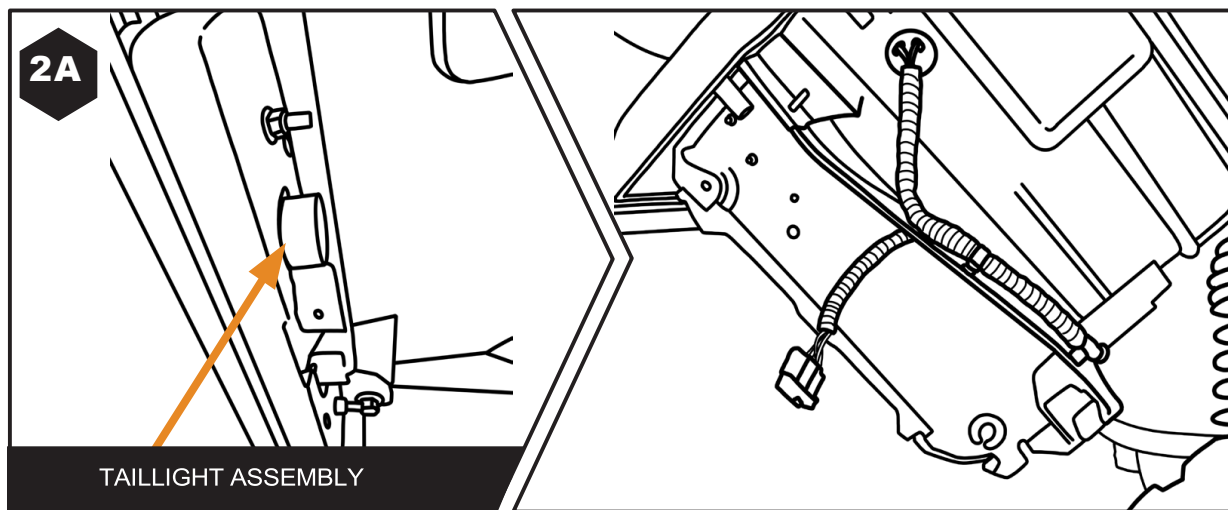
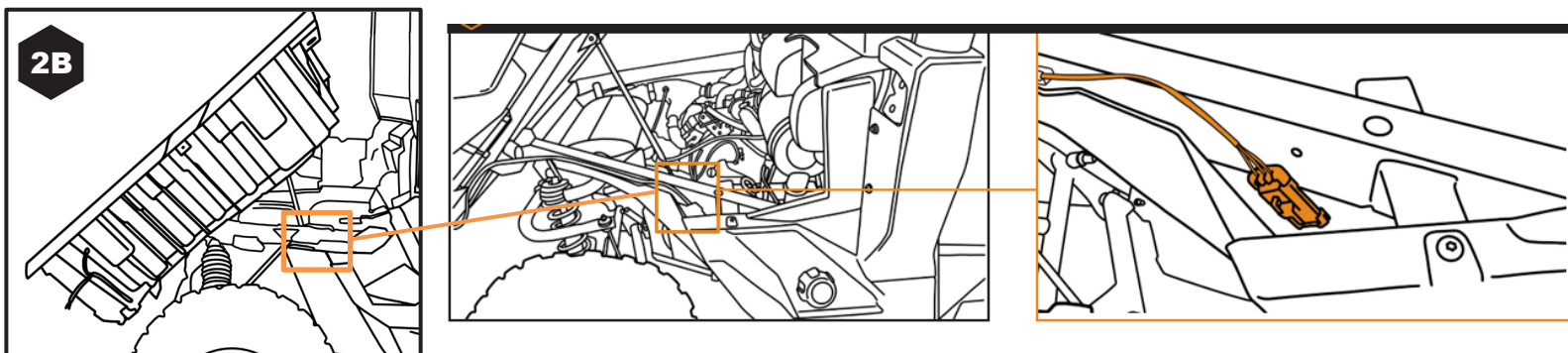
1

- Using a **T-30 TORX BIT**, remove the three screws securing the top front edge of the side bed cover. [SEE FIG. 1A]
- Dump the bed to access the underside of the panel. [SEE FIG. 1B]
- From underneath, use a **T-30 TORX DRIVER** to remove the screw located near the taillight — this is the rearmost upper screw on the underside of the side cover. [SEE FIG. 1C]
- Then use a **T-20 TORX DRIVER** to remove the two screws located underneath the side cover as well, positioned toward the center of the panel, as shown. [SEE FIG. 1C]



2

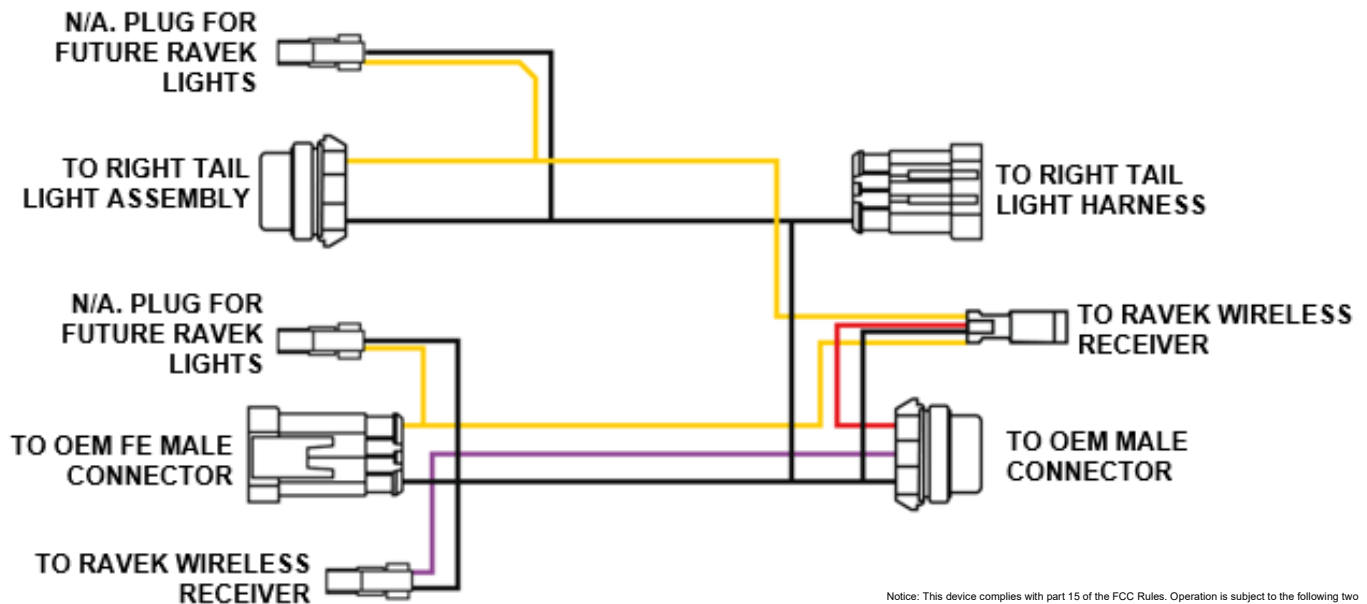
- With the passenger-side bed panel removed, unplug the taillight connector. [SEE FIG. 2A]
- Then follow the right-side frame rail to locate the OEM multipin rear harness. Release the locking tabs and carefully disconnect the harness without forcing it. [SEE FIG. 2B]

**2B**

- Grab the supplied rear harness.
- Connect the rear harness in-line with the OEM multipin rear harness that was disconnected in the previous step.
- Take the other end of the rear harness and route it through the frame toward the right-hand taillight that was previously unplugged. Connect the rear harness to the taillight assembly and its factory harness.
- Plug the 4-pin connector from the wireless receiver into the connector labeled “REAR HARN.” on the rear harness.
- Plug the 2-pin connector from the wireless receiver into the connector labeled “LIC. PLATE” on the rear harness.
- Refer to the diagram below for visual reference. [SEE DIAGRAM A]

REAR HARNESS DIAGRAM

DIAGRAM A



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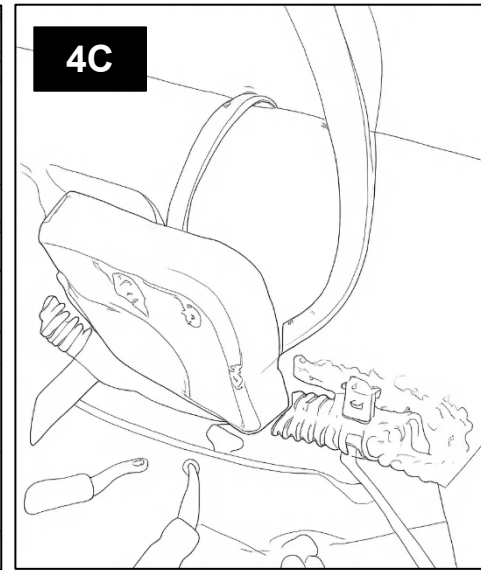
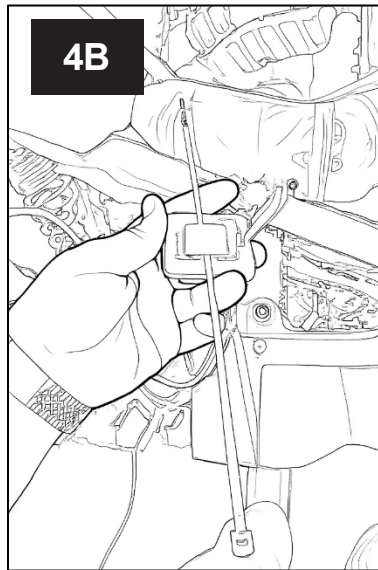
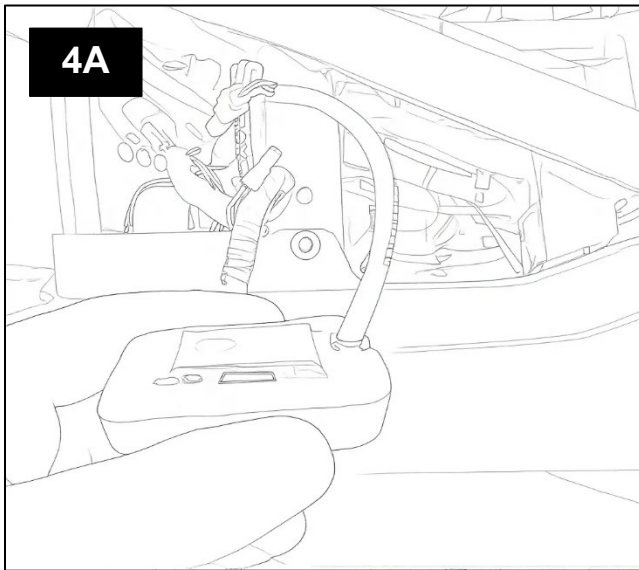
REAR HARNESS ON YOUR KIT



WIRELESS RECEIVER ON YOUR KIT

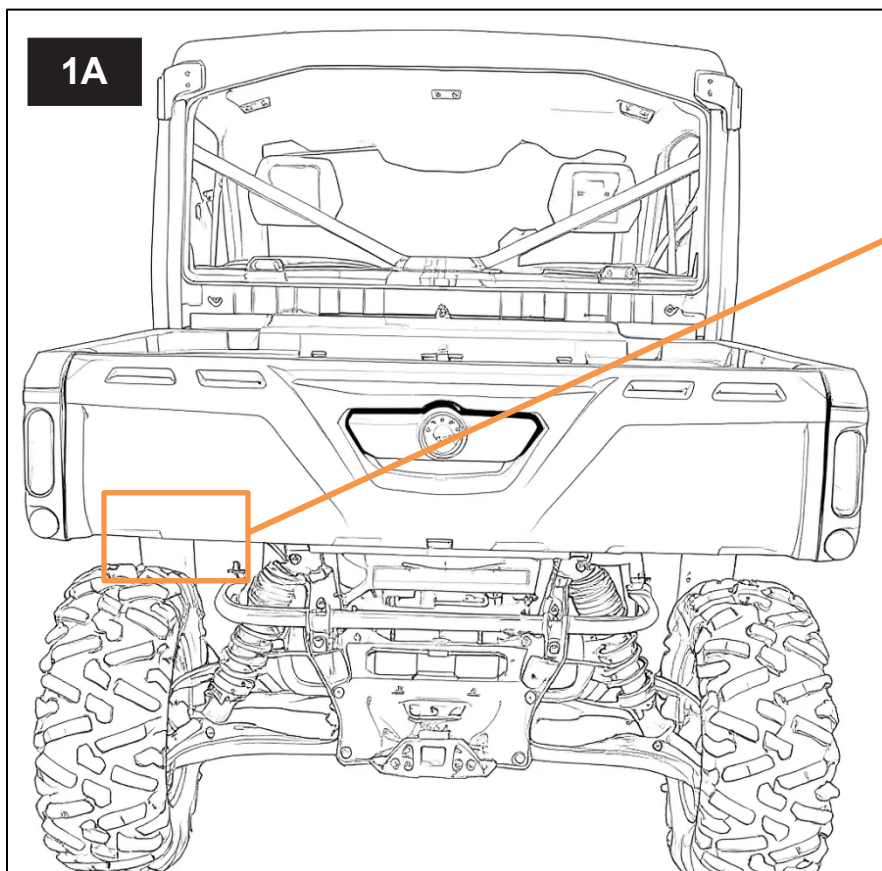
4

- With the wireless receiver plugged into the rear harness:
- Route one of the supplied zip ties through the backside slot of the receiver. (Double-sided tape is also provided if you prefer to mount the receiver to a clean, prepared surface.) [SEE FIGS. 2A & 2B]
- Position the receiver against the machine's frame. [SEE FIG. 4C]
- Tighten the zip tie securely to hold the receiver firmly in place.
- Verify the receiver is not loose and does not interfere with any moving components.

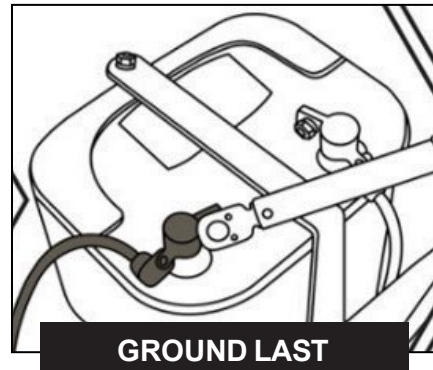
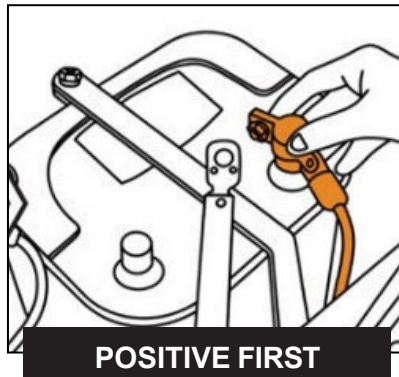
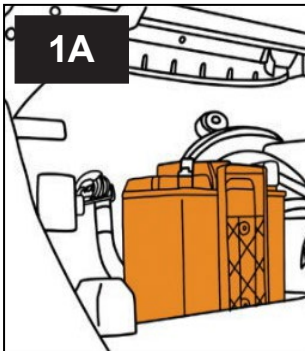


1

- Grab your license plate bracket and position it on your machine.
- Align the bracket with the frame rail as shown in the images below.
- Using a **10 MM SOCKET** with an impact driver (recommended) — or a ratchet if needed — secure the bracket to the frame with the supplied self-tapping screws.
- Tighten the hardware until the bracket is firmly mounted and does not move. [SEE FIG. 1A]
- **NOTE:** License plate light is sold separately.



Go back to the battery and reconnect the terminals to supply power to the kit for the next step. [FIG. 1A]



1

Turn your key to the ON position and test your lights.

- **Hazard Lights:** Press the **Hazards** icon on the Horn/Hazards rocker switch to activate the hazard lights.
- **Turn Signals:** Press the arrow pointing **left** for a left turn, or the arrow pointing **right** for a right turn.
 - The rocker is momentary, so it automatically returns to the neutral position—no manual reset required.
 - Turn Signal Duration:
 - 1 press: 10-second signal
 - 2 presses: 20-second signal
 - 3 presses: 30-second signal
 - **NOTE:** You can manually cancel the turn signal at any time by pressing the rocker in the opposite direction.
- Running brake lights
- Running white lights
- Brake light w/ pulse effect
- Left turn signal dash indicator
- Right turn signal dash indicator

1A

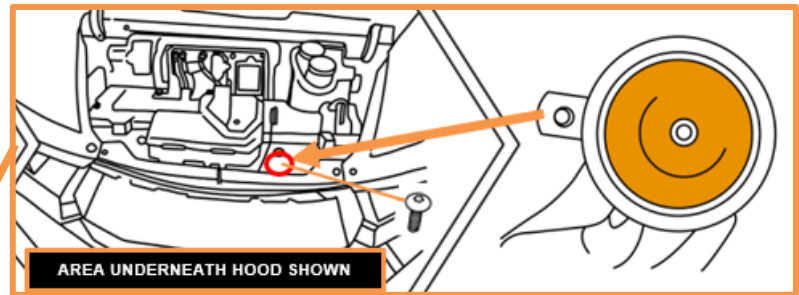
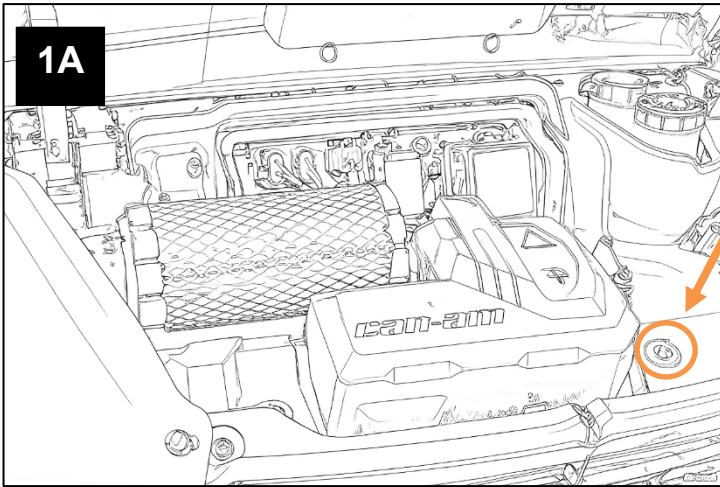


1B



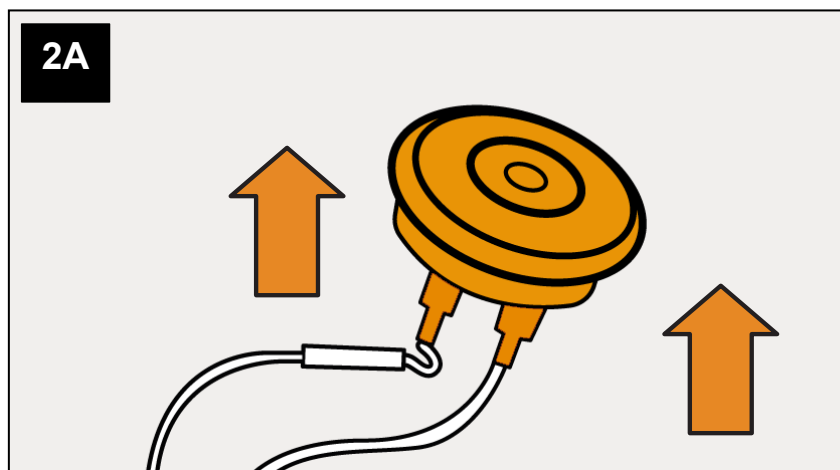
1

- Under the hood, mount the horn using the OEM hardware.
- Refer to the recommended bolt location shown for proper placement. [SEE FIG. 1A]
- Use a **T-30 TORX DRIVER** to remove the bolt and secure the horn in position.
- Ensure the horn does not contact any surrounding surfaces or panels, as this can reduce or muffle the sound output.



2

- If not already connected, connect both spade terminals from the extension harness to the horn's connectors — either terminal can be used [SEE FIG. 2A]



1

Close the hood, turn the key to the ON position, and test the horn.

1. **Horn:** To activate the horn, simply press the **Horn** icon on the Horn/Hazards rocker switch. [SEE FIG. 1A]

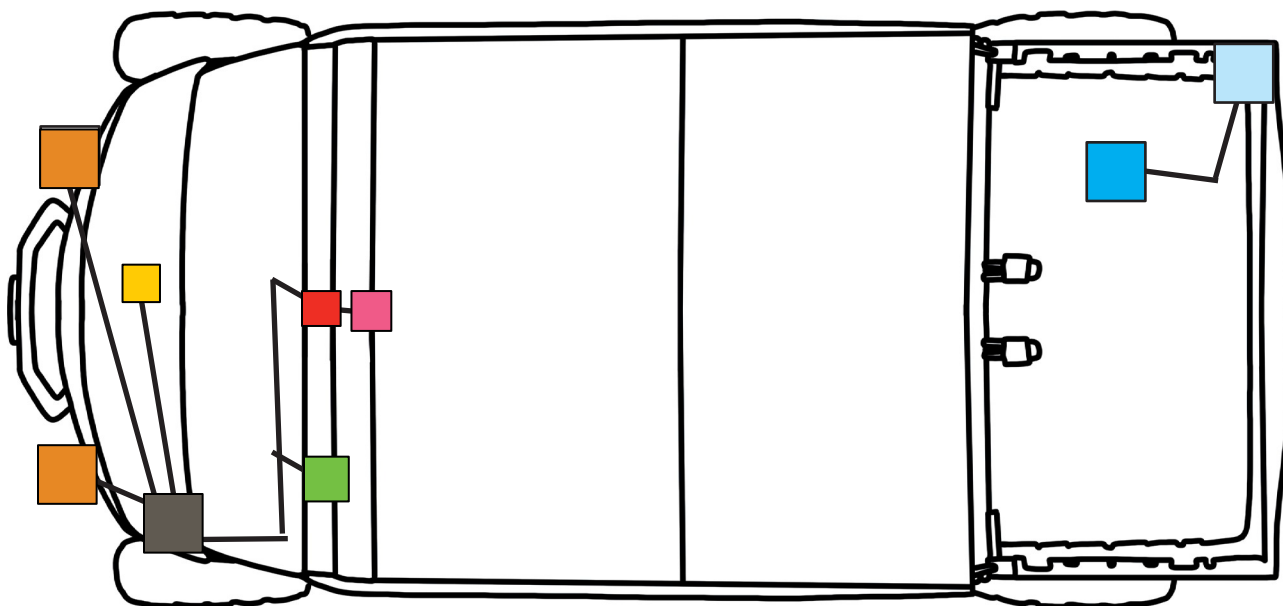
1A



2

Once you have tested the kit and verified proper operation, reassemble your machine by placing all panels back in their corresponding positions.

See FIG. 1A for the Kit Overview Diagram.



SIGNATURE LIGHTS



HORN



BUS BAR



GAUGE CLUSTER



CONTROLLER



ROCKER SWITCHES

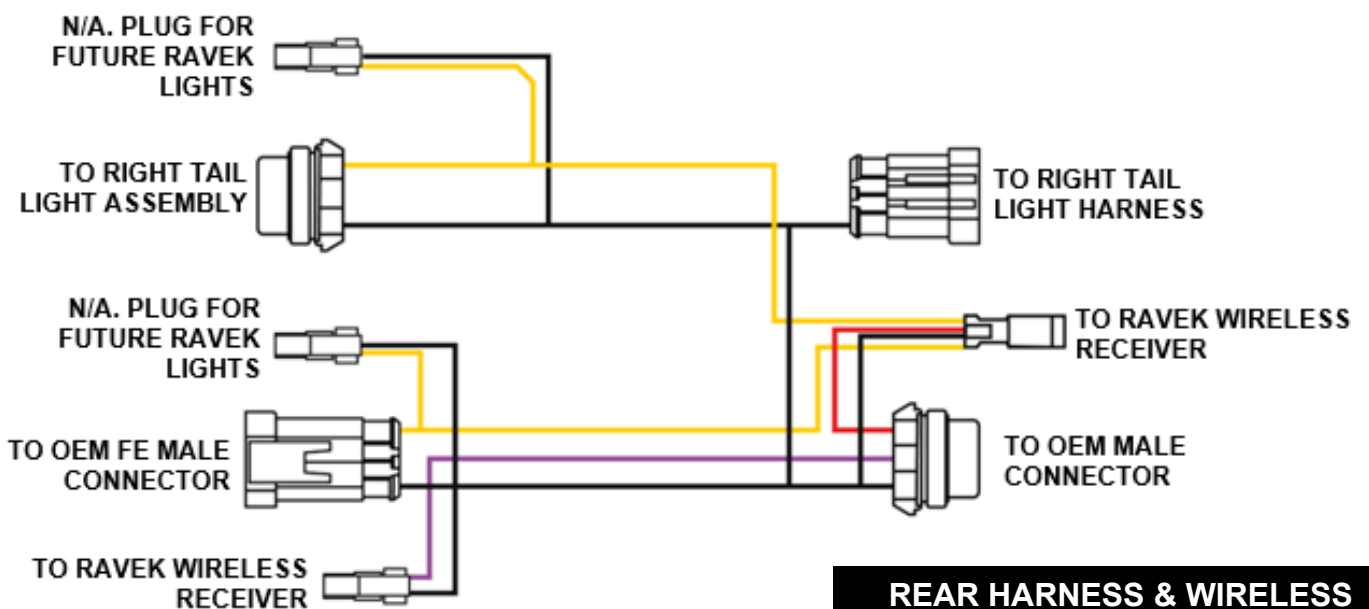
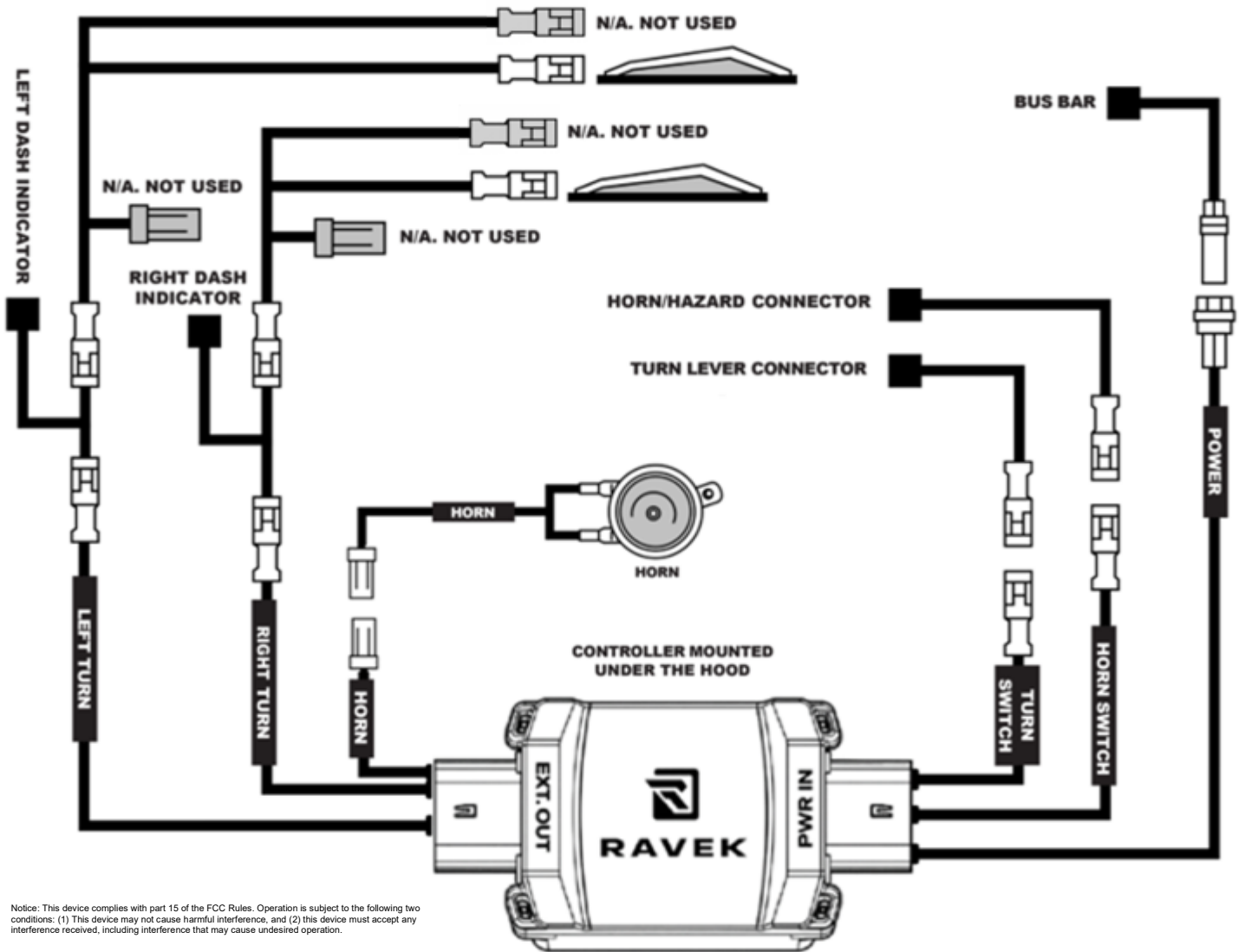


**OEM MULTIPIN HARNESS CONNECTION POINT
AND WIRELESS RECEIVER LOCATION**



**REAR TAILLIGHT
CONNECTION POINT**

RAVEK CONTROLLER WIRING DIAGRAM



REAR HARNESS & WIRELESS RECIEVER DIAGRAM



RAVEK
BUILT FOR MORE

RAVEK WISCONSIN TECH SUPPORT LINE: 855-617-2787