



# HITCH INSTALLATION INSTRUCTIONS

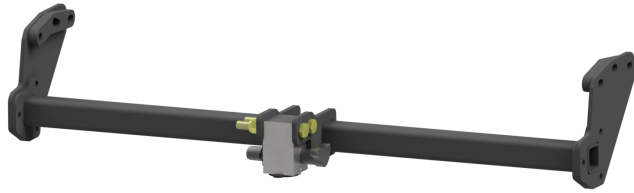
MAKE: YEARS: MODEL/TRIM:  
 HYUNDAI 2023 - 2024 Ioniq 6

www.stealthhitches.com 833-694-4824

RACK RECEIVER KIT#: **SHR62004**

COMPATIBLE WITH TOW KIT: **SHT25068**

**2" RACK RECEIVER MAXIMUM PAYLOAD: 350 LBS**  
**MAXIMUM TOW RATING: 3500 LBS**  
**MAXIMUM TONGUE WEIGHT: 350 LBS**



## UNDER VEHICLE TRIMMING:

HEAT SHIELD: **NO**  
 FASCIA: **YES**  
 GRAVEL GUARD TRIMMING: **YES**



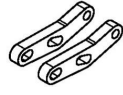



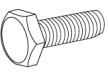







**READ ALL INSTRUCTION WARNINGS AND LABELS**







**NO WELDING, METAL DRILLING OR VISIBLE TRIMMING REQUIRED**










## PARTS SUPPLIED WITH RACK RECEIVER KIT:

- |  |   |  |
|--|---|--|
| <br>LATCH BLOCK & KEYS                    | <br>(2) BOLTS<br>5/8"-11 x 5"    | <br>(2) 5/8"<br>NYLOCK NUTS           |
| <br>2" RACK RECEIVER                    | <br>(2) SPACERS                | <br>(2) SIDE PLATES                  |
| <br>(6) 1/2" X 2-1/2"<br>CARRIAGE BOLTS | <br>(6) 1/2" FLAT<br>WASHERS   | <br>(6) 1/2" x 1-1/2"<br>CAP SCREWS |
| <br>(12) 1/2" LOCK<br>WASHERS           | <br>(12) 1/2" NUTS             | <br>(6) LOCKING<br>STRAPS           |
| <br>(6) FISH WIRE                       | <br>(2) ADHESIVE<br>FOAM STRIP | <br>(2) 14" CABLE<br>TIES           |

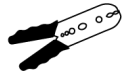






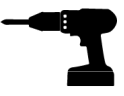
## ADDITIONAL PARTS FOR TOW KIT:

- |   |  |  |
|---|--|--|
| <br>BALL MOUNT<br>7" RISE, SHORT | <br>CHAIN HOOKS | <br>2" BALL |
| <br>WIRING KIT BOX               |  |  |

## TOOLS REQUIRED:

- |   |   |  |   |
|---|---|--|---|
| <br>3/4", & 15/16"<br>OPEN END<br>WRENCH | <br>10mm, 12mm,<br>14mm, 3/4", &<br>15/16" SOCKETS | <br>RATCHET     | <br>TORQUE<br>WRENCH   |
| <br>PRY BAR                            | <br>SAFETY GLASSES                                 | <br>FLASHLIGHT | <br>90 DEGREE<br>PICK |
| <br>CUTTING TOOL                       |   |  |   |

## ADDITIONAL TOOLS FOR TOW KIT:

- |  |  |  |  |
|--|--|--|--|
| <br>STRIPPER/<br>CRIMPING<br>TOOL | <br>PHILLIPS HEAD<br>SCREWDRIVER | <br>FLATHEAD<br>SCREWDRIVER | <br>PLIERS              |
| <br>SILICONE                      | <br>MULTIMETER                   | <br>PLASTIC<br>PRY TOOLS    | <br>DRILL &<br>3/8" BIT |

**RACK RECEIVER INSTALLATION: USE STEPS 1-13, 34-37**  
**PASSIVE TOW KIT INSTALLATION: USE STEPS 1-37**

# <THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER>

**NOTICE:** Installation of Stealth products may or may not require the addition of a wiring harness to the vehicle.

- The Rack Receiver only product does not require adding a wiring harness.
- The Rack Receiver plus Tow Kit Requires the addition of a "Passive" wiring harness to the vehicle. The passive harness "reads" the output of the vehicle's lights and translates the signals to the trailer without being connected to the vehicle computer.

**INSTALLATION NOTE:** In most instances, these instructions will only outline disassembly of vehicle components.

Re-installation of components will require the installer to retain vehicle hardware and work through disassembly instructions in reverse order. When installation is complete, double check that all vehicle components have been replaced and are secured.

## IMPORTANT SAFETY NOTICE FOR STEALTH HITCH INSTALLERS AND CUSTOMERS.

Read all installation and operating instructions along with all labels before installing or using this product. Do not perform any installation or towing procedures without fully understanding the correct tools and actions for all steps. Call for support if needed.

### **⚠ WARNING** Failure to comply with the safety information in these instructions could result in serious injury or death.

- ⚠ Do not modify this product in any manner. Doing so could alter its integrity and lead to a loss of attachment between the trailer and the tow vehicle.
- ⚠ Adding Stealth hitch components to the chassis of any vehicle can be hazardous. There is potential for unexpected combustion of fuel, electric shock, burns, shifting or falling of unstable vehicle, damage to vehicle, injury from tool usage and many other hazards. This installation must be completed by someone who is aware of the hazards involved. This person must be knowledgeable of proper safety procedures for a vehicle modification of this nature, and for usage of the equipment required to perform the installation.
- ⚠ Without proper knowledge, towing can be a dangerous activity. Understand all the risks involved with towing before proceeding. For information on towing safety, see "**The Trailer Handbook: A Guide to Understanding Trailer and Towing Safety**" from the National Association of Trailer Manufacturers, [www.NATM.com](http://www.NATM.com) and your trailer and tow vehicle manufacturer's owner's manual.
- ⚠ Do not exceed tow or tongue rating of coupler, tow or tongue rating of hitch, or tow or weight ratings of tow vehicle or trailer. See vehicle and trailer manufacturer information for ratings. Exceeding these ratings may cause damage to towing components or loss of attachment between the trailer and vehicle.
- ⚠ While installation is being performed, check for signs of damage or excessive corrosion. Do not install hitch components over vehicle parts that are broken or have compromised structural integrity.
- ⚠ This product was designed to fit vehicles in their original, "as manufactured" condition. Compatibility with vehicles having replacement parts, or other modifications is not guaranteed. Inspect vehicle for modifications before installation of this product.
- ⚠ Some accessories, like the rack receiver, are not rated for towing. Do not use any accessories without proper knowledge of their use.
- ⚠ A visual inspection of the hitch should be performed before each use. Regularly check that all connections are secure, including those that secure the hitch to the vehicle. Check for cracks or damage to the hitch. Do not use the hitch if cracks or damage outside of normal wear is found. Using a hitch that has unsecure connections and/or cracks or damage could result in damage to the tow vehicle, trailer, towing components and loss of attachment between the tow vehicle and trailer.
- ⚠ Stealth hitches are not compatible with any weight distribution or sway control products. Adding additional products to the trailer or chassis which modifies the function of the Stealth hitch may cause hitch failure.

**NOTICE:** Installation of hitch requires removal of vehicle parts and interaction with vehicular electronics. Before installation, check the condition of body panels and note any locations where panels are not flush. Check the electronic functions of the vehicle, such as: headlights, taillights, turn signals, cameras, backup sensors, Parking Distance Controller (PDC), foot activated cargo access, etc. It is the responsibility of the installer to restore the fit and function of the vehicle.

### GAIN ACCESS TO MOUNTING AREA



90 DEGREE PICK

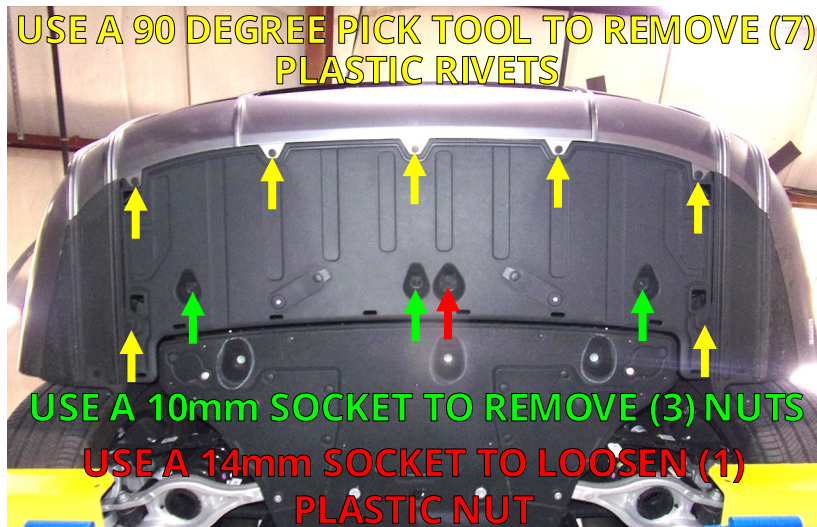


10mm SOCKET



14mm SOCKET

1. Under the rear of the vehicle use a 90 degree pick tool to remove (7) plastic rivets (yellow arrows). Use a socket to remove (3) nuts (green arrows). Use a socket to loosen (1) plastic nut (red arrow). Remove the underbody panel.



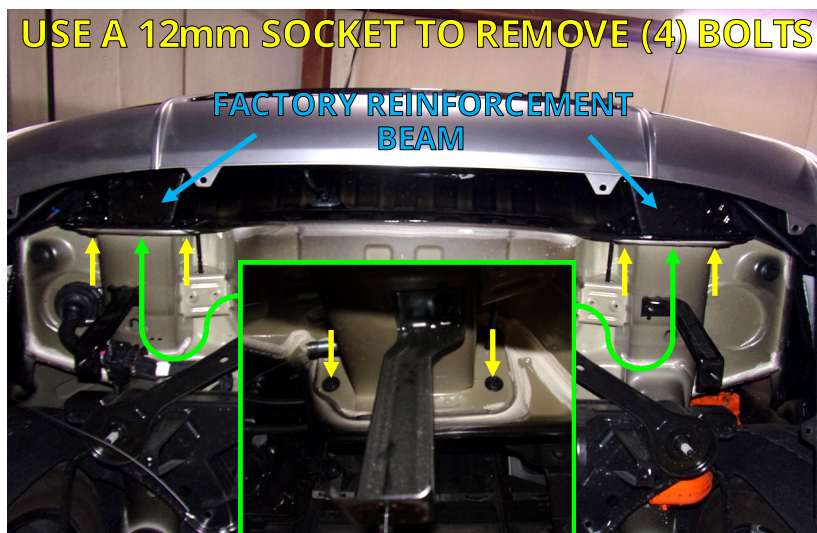
CUTTING TOOL

2. Use a cutting tool to remove the center tab on the bottom of the fascia as shown in the image.



12mm SOCKET

3. Locate the factory reinforcement beam behind the fascia. The beam is attached to the chassis under the vehicle with (4) bolts, (2) on each side. Use a socket to remove the (4) bolts.

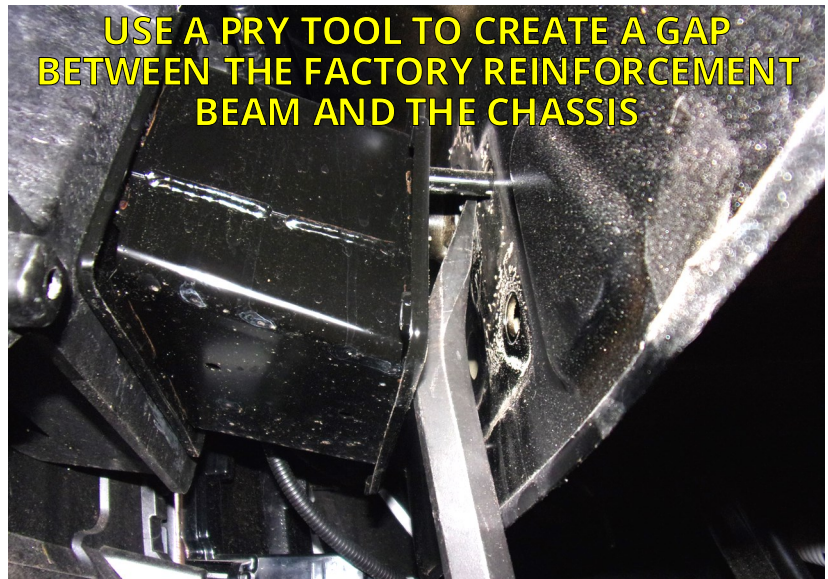




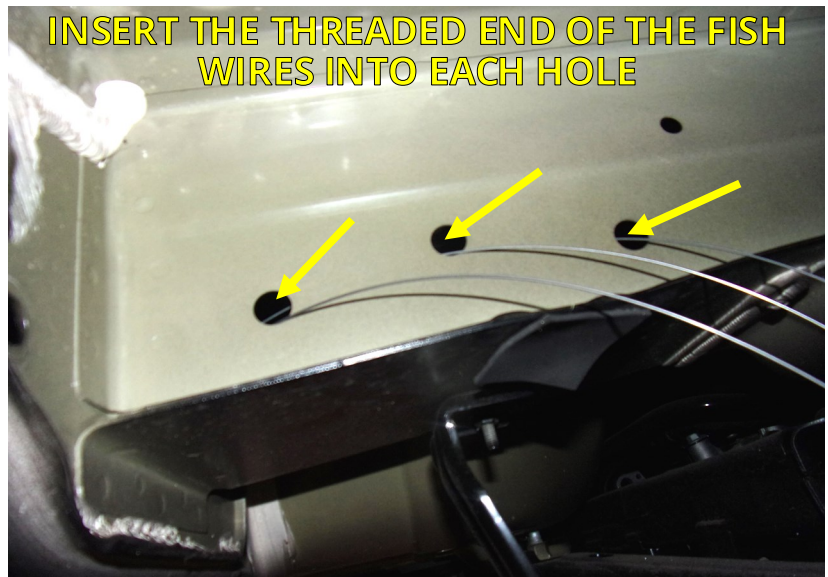
## GAIN ACCESS TO MOUNTING AREA CONTINUED



4. To install the side plates, the area between the factory reinforcement beam and the vehicle chassis will need to be opened up. Use a pry tool to create a gap between the beam and the chassis, as shown.



5. Locate the (3) holes on each side of the vehicle chassis near the rear of the vehicle. Insert the threaded end of a fish wire into each hole and pass it through the gap between the factory reinforcement beam and the chassis.

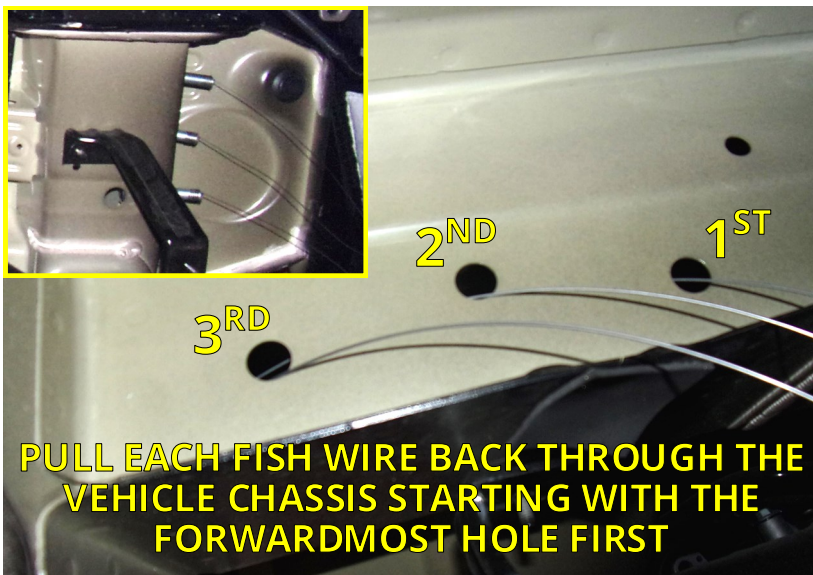


6. Retrieve the locking straps and 1/2" x 2-1/2" carriage bolts. Pass a locking strap and carriage bolt onto each fish wire, as shown.



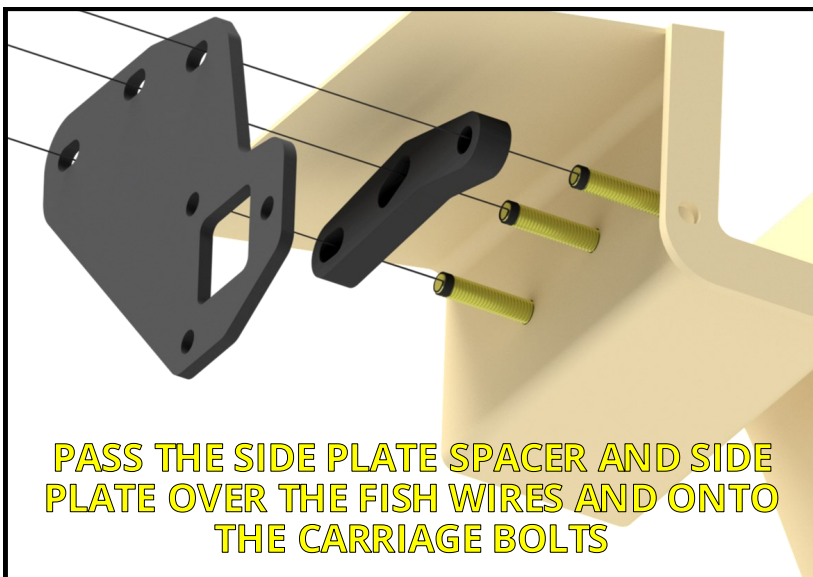
## GAIN ACCESS TO MOUNTING AREA CONTINUED

7. Starting with the forwardmost hole, pull each fish wire back through the vehicle chassis until the carriage bolt is pulled completely through the hole. Do not remove the fish wires at this time.
8. Remove the pry bar and repeat Steps 4-8 on the other side of the vehicle.



9. Pass the spacer and side plate over the fish wires and onto the 1/2" carriage bolts as shown.

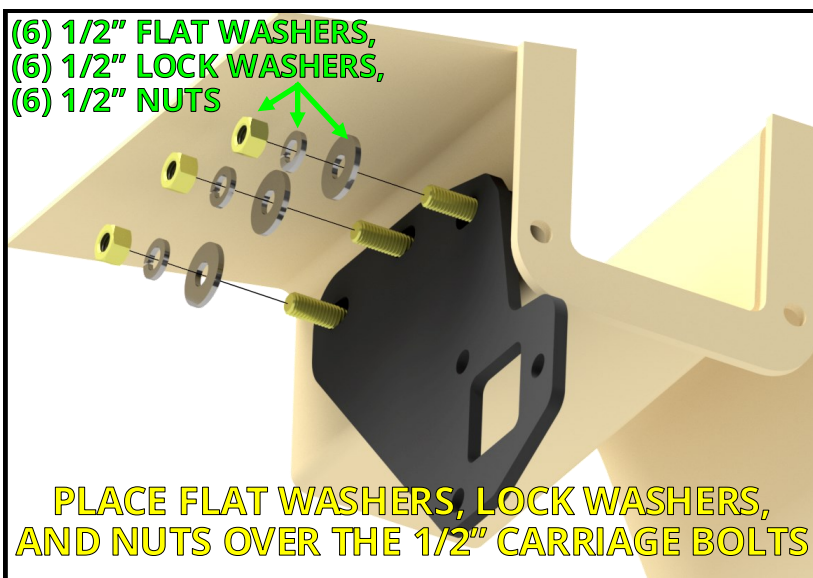
**NOTE:** Double sided adhesive foam tape is provided to stick the side plate spacer and side plate together, if desired.



3/4"  
SOCKET

10. Carefully remove the fish wires from the bolts one at a time. As each fish wire is removed hold the carriage bolt in place and secure with 1/2" flat washers, 1/2" lock washers, and 1/2" nuts. Repeat steps 9-10 on the other side of the vehicle.

**NOTICE:** Do not fully tighten hardware at this time.





## GAIN ACCESS TO MOUNTING AREA CONTINUED



3/4" SOCKET

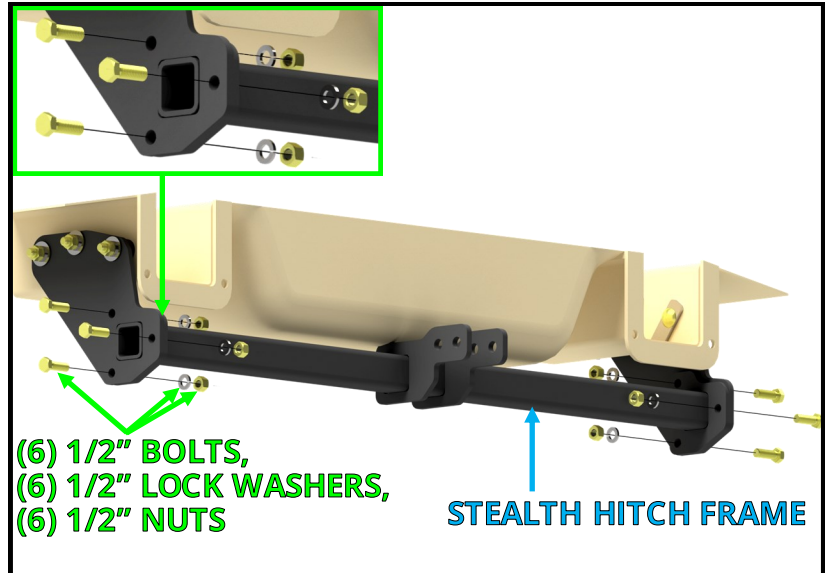


3/4" OPEN END WRENCH



TORQUE WRENCH

11. Retrieve the Stealth hitch frame. Raise the frame between the side plates. Attach the frame to the side plates using (6) 1/2" bolts, 1/2" lock washers, and 1/2" nuts, as shown.
12. Torque all of the 1/2" bolts and nuts to 100 ft.-lbs.



## MOUNT LATCH BLOCK



15/16" SOCKET



15/16" OPEN END WRENCH

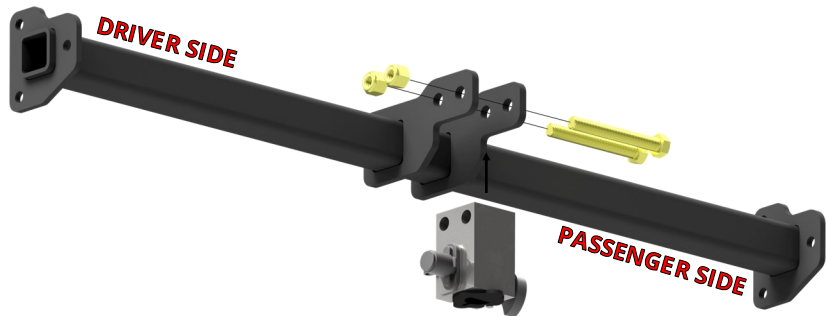


TORQUE WRENCH

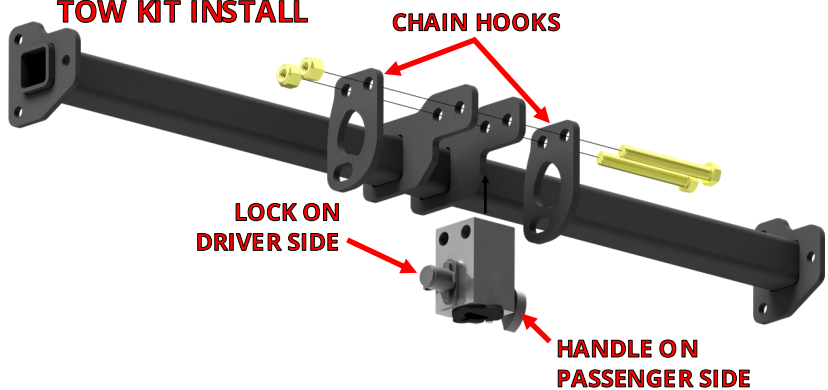
13. Installation of the latch block varies depending on which kit you are installing.
  - **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
  - **Tow Kit:** Install the latch block and (2) chain hooks with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.

**NOTICE:** Keys are packaged within the latch block, remove keys and store in safe location.

### RACK RECEIVER KIT INSTALL



### TOW KIT INSTALL



**IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 34.  
IF INSTALLING A TOW KIT, CONTINUE TO STEP 14.**

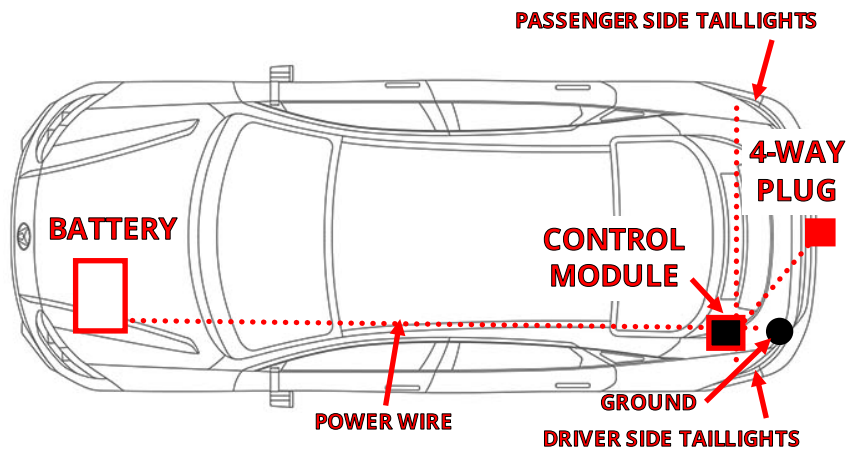
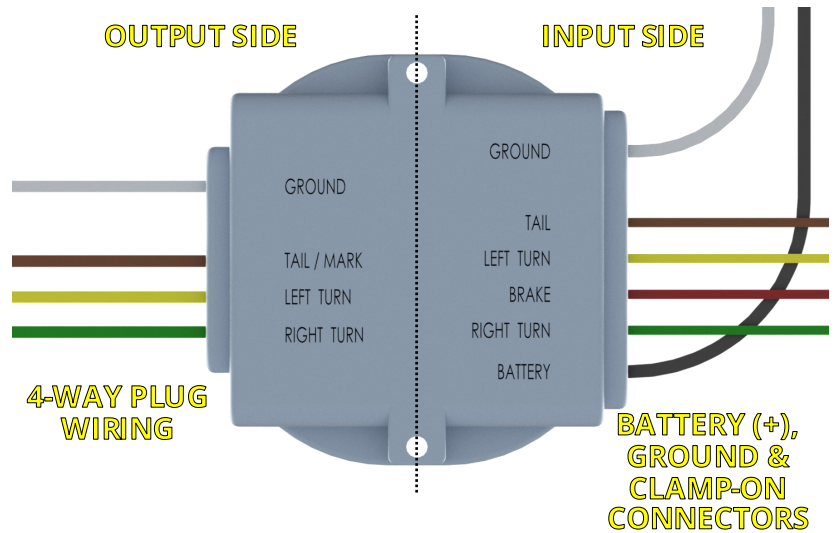
# INSTALL PASSIVE WIRING KIT

#	DESCRIPTION	QTY
1	4-WAY CONNECTOR HARNESS	1
2	CONTROL MODULE	1
3	4-WAY CONNECTOR COVER	1
4	CABLE TIE - 8"	8
5	CABLE TIE - 14"	2
6	MAGNETIC CABLE HOLDER	1
7	M6 FLANGE NUT	1
8	FORK TERMINAL	1
9	ADHESIVE FOAM STRIP	2
10	BUTT CONNECTOR (BLUE)	1
11	BUTT CONNECTOR (RED)	4
12	CLAMP-ON CONNECTORS	4
13	POWER WIRE	1



14. Locate the wiring kit box. Review the contents of the box against the list above to check for missing components. The passive wiring kit uses a control module to manage the functions of the trailer lighting. The module has an "input" side that receives power from the vehicle's battery and signals from the vehicle's taillights. The "output" side of the module delivers this information to the 4-way plug. The control module is connected to the vehicle's battery and taillight wiring as outlined in the next steps.

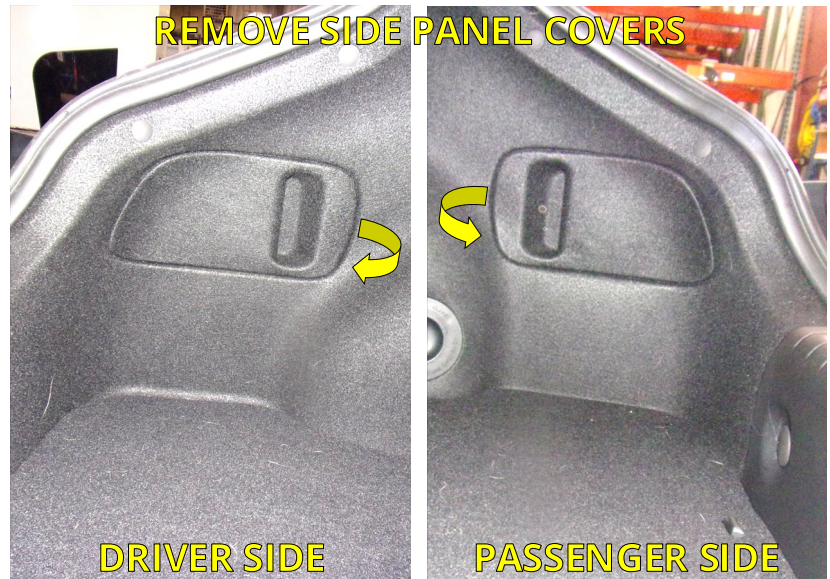
**NOTICE: Do not allow electrical system to become disconnected from power or ground. Doing so may interrupt electrical systems.**





## INSTALL PASSIVE WIRING KIT CONTINUED

15. Inside the vehicle cargo area locate and remove the (2) side panel covers.



16. Lift up and remove the cargo area floor panel.



17. Inside the rear cargo area locate (2) plastic nuts on the front of the rear threshold. use a flat head screwdriver to remove the nuts. Lift up on the threshold to remove it.



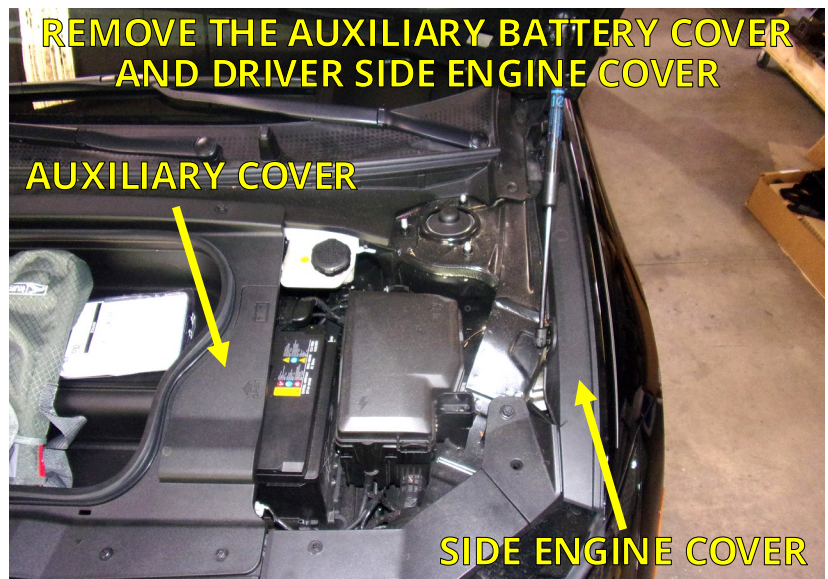


## INSTALL PASSIVE WIRING KIT CONTINUED

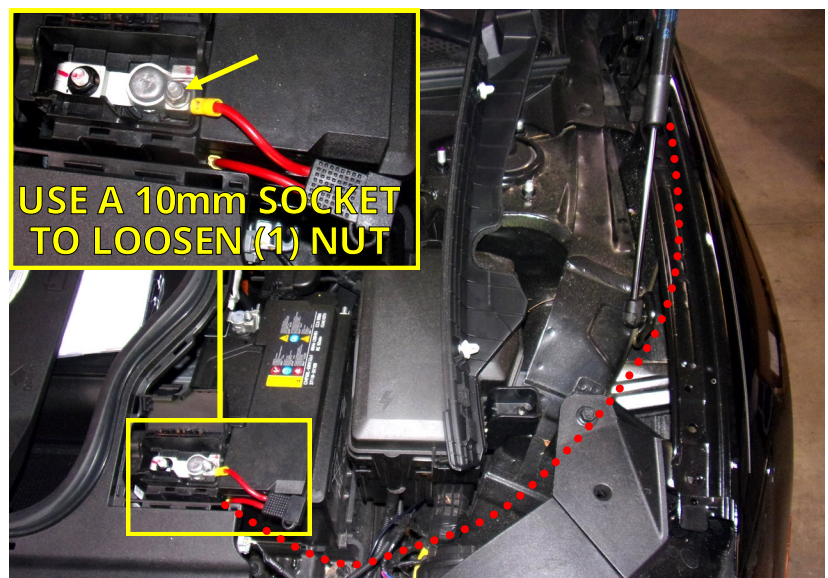
18. Retrieve the control module from the wiring kit box. Place the module behind the driver side wall panel.



19. Inside the engine compartment, locate and remove the plastic auxiliary battery cover and the plastic driver side engine cover.



20. Open the positive battery terminal cover. Locate the power wire and fuse holder supplied in the wiring kit box. Remove the fuse from the fuse holder. Crimp fuse lead to power wire. Use a 10mm socket to loosen (1) nut, as shown. Connect fuse ring terminal to the positive battery terminal (+) and tighten the nut.



21. Route the power wire to the driver side. Use a wire to "fish" the power wire down behind the liner behind the driver side front tire.

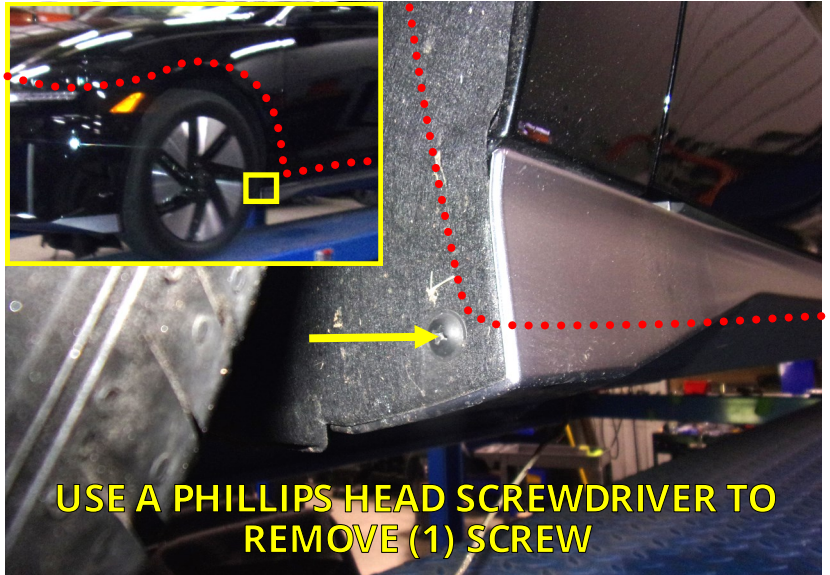


## INSTALL PASSIVE WIRING KIT CONTINUED

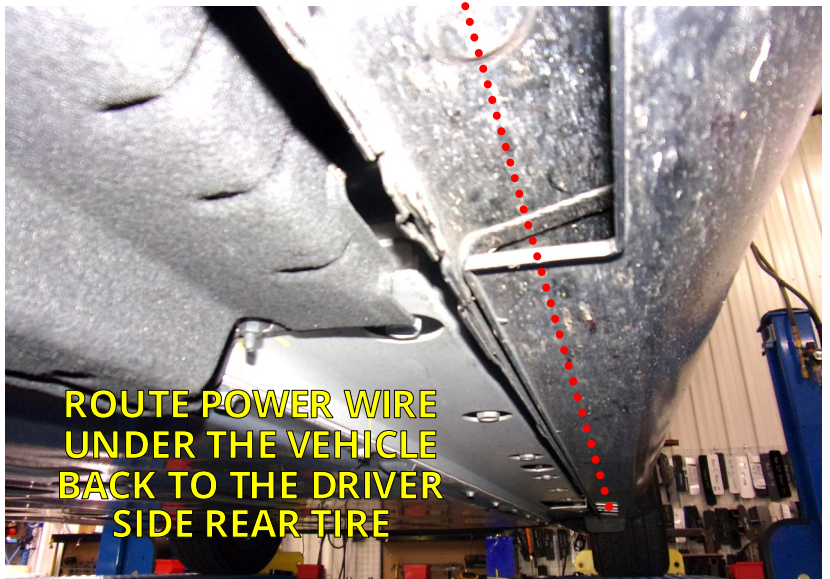


PHILLIPS HEAD  
SCREWDRIVER

22. Locate the screw holding the liner behind the front driver side tire as shown in the image. Use a Phillips head screwdriver to remove the screw. Retrieve the power wire from behind the liner.

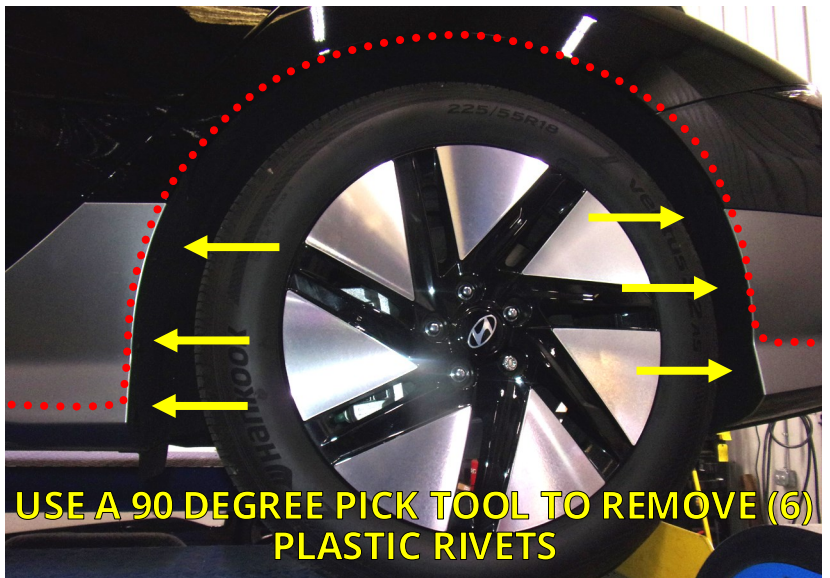


23. Under the vehicle, route the power wire toward the rear of the vehicle on the driver side. Pass the wire above and through existing vehicle components to secure and protect the wire as much as possible.



90 DEGREE  
PICK

24. Use a 90 degree pick tool to remove (6) plastic rivets holding the wheel well liner around the rear driver side tire. Route the power wire behind the liner and around the tire to the rear of the vehicle.





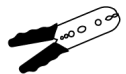
## INSTALL PASSIVE WIRING KIT CONTINUED



DRILL &  
3/8" BIT

25. Route the power wire from the rear of the driver side wheel well to the indicated grommet under the cargo area. Use a drill with a 3/8" bit to drill a hole in the grommet. Feed the end of the power wire into the cargo area, through the grommet, and to the control module.

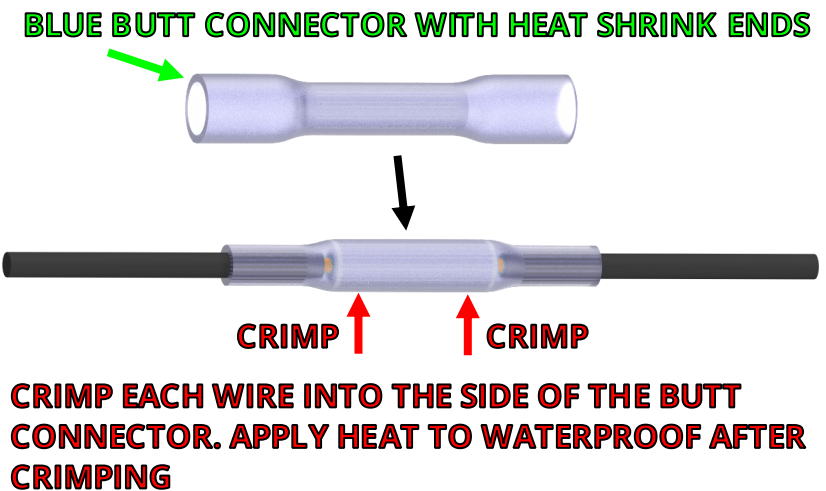
26. Locate the 4-way connector harness in the wiring kit box. Feed the input wires through the hole in the grommet into the cargo area.



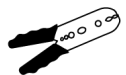
STRIPPER/  
CRIMPING  
TOOL

27. Route the power wire to the control module in the cargo area. Trim the power wires to remove excess length. Use the included blue butt connector to crimp the power wires together.

**NOTICE (OPTIONAL):** The butt connectors are heat shrink connectors. Apply heat to waterproof the connectors after crimping.



10mm  
SOCKET



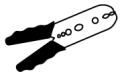
STRIPPER/  
CRIMPING  
TOOL

28. Locate the ground stud inside the driver side cargo compartment behind the driver side panel. Trim the white ground wire so it will reach the stud without excess wire. Crimp the supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the stud.

**NOTICE:** Loosen ground stud just enough to install fork terminal, so vehicle wiring does not lose ground.



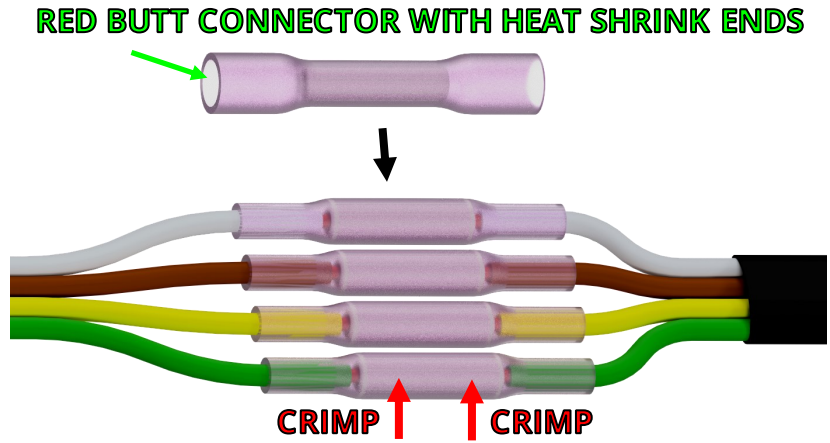
## INSTALL PASSIVE WIRING KIT CONTINUED



STRIPPER/  
CRIMPING  
TOOL

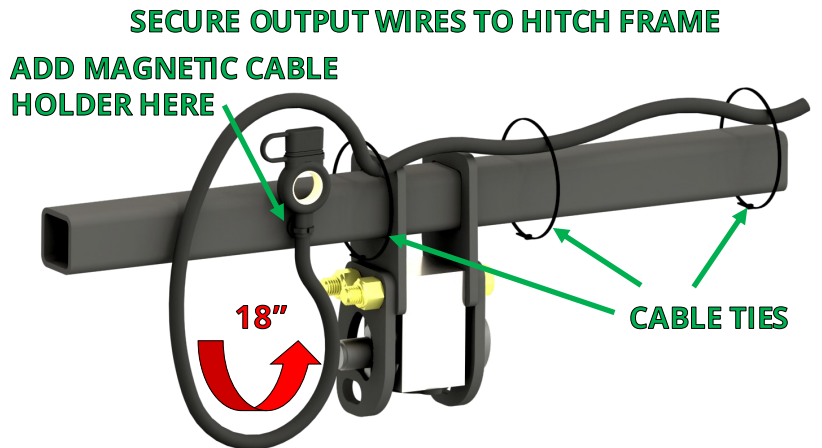
29. Route the tail of the 4-way connector harness to the control module. Trim the output side wires of the control module to remove excess length. Attach each similar color wire to each other using a red butt connector and crimping tool.

**NOTICE (OPTIONAL):** The butt connectors are heat shrink connectors. Apply heat to waterproof the connectors after crimping.



**MATCH THE WIRE COLORS AND CRIMP EACH WIRE INTO THE SIDE OF EACH BUTT CONNECTOR. APPLY HEAT TO WATERPROOF AFTER CRIMPING**

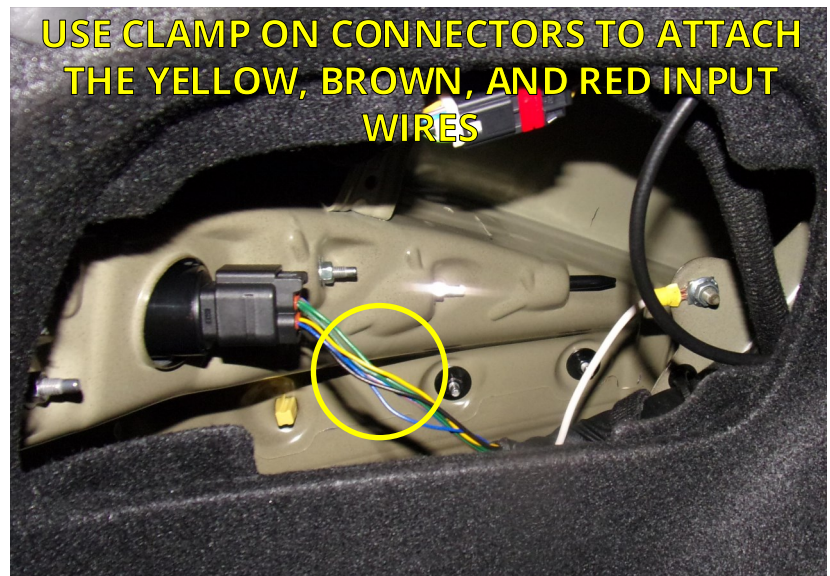
30. Secure harness to Stealth hitch frame with cable ties. Maintain an 18" loop from the cable tie to the 4-way plug. Add the magnetic cable holder and secure to the harness close to the 4-way plug, with a cable tie.



PLIERS

31. The wires on the input side of the module need to be attached to the vehicle wiring. Behind the panel on the driver side of the cargo area locate the indicated part of the vehicle wiring harness behind the taillight. Use clamp-on connectors to connect the yellow, brown, and red wires (As shown in reference table on the next page.)

**NOTE:** Vehicles may have different wire colors than those shown. Verify circuits (wire colors) with multimeter.



**USE CLAMP ON CONNECTORS TO ATTACH THE YELLOW, BROWN, AND RED INPUT WIRES**



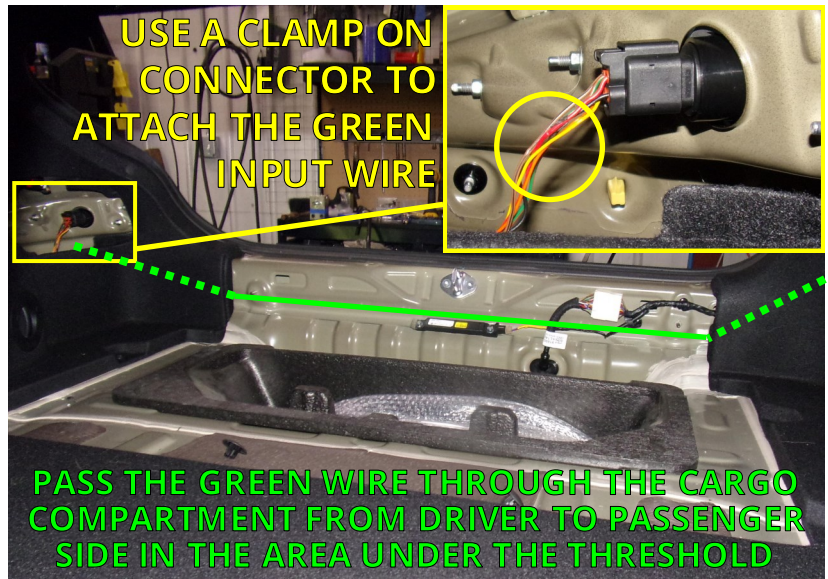
## INSTALL PASSIVE WIRING KIT CONTINUED



PLIERS

32. Route the green wire from the driver side through the area under the threshold to the passenger side. Use a clamp-on connector to connect the green wire in the area shown behind the passenger taillight. (As shown in reference table below.)

**NOTE:** Vehicles may have different wire colors than those shown. Verify circuits (wire colors) with multimeter.



### CLAMP-ON CONNECTOR COLOR REFERENCE TABLE

SIGNAL INPUT WIRES			POWER & GROUND WIRES		
FUNCTION	HARNESS	VEHICLE			
LEFT TURN	YELLOW	BLUE/PINK	<u>12V+ (POWER)</u>	BLACK	BATTERY (+)
RIGHT TURN	GREEN	RED/ORANGE	<u>GROUND</u>	WHITE	GROUND STUD
MARKER	BROWN	GREEN/BLACK			
BRAKE	RED	GREEN			

**NOTE:** If two colors are listed, the first color is the dominant color.



SILICONE



MULTIMETER

33. Complete wiring installation.

- Reinstall the 20 Amp fuse in the fuse holder located near the fuse box under the hood. Test the 4-way plug using a multimeter or connect the plug to a trailer and verify that the lights and brakes work correctly.
- Secure all wires and wiring components.
- Use silicone to waterproof the grommet.
- Use the remaining cable ties to secure wiring so that it is not loose and will not interfere with replacement of the fascia. Wiring should not be visible once the vehicle is reassembled.
- Reattach and secure the side cover panels, cargo floor panel, threshold, auxiliary battery cover, side engine cover, and tire liners. Refer to Steps 15-24.

## CUT ACCESS TO LATCH BLOCK



DREMEL TOOL

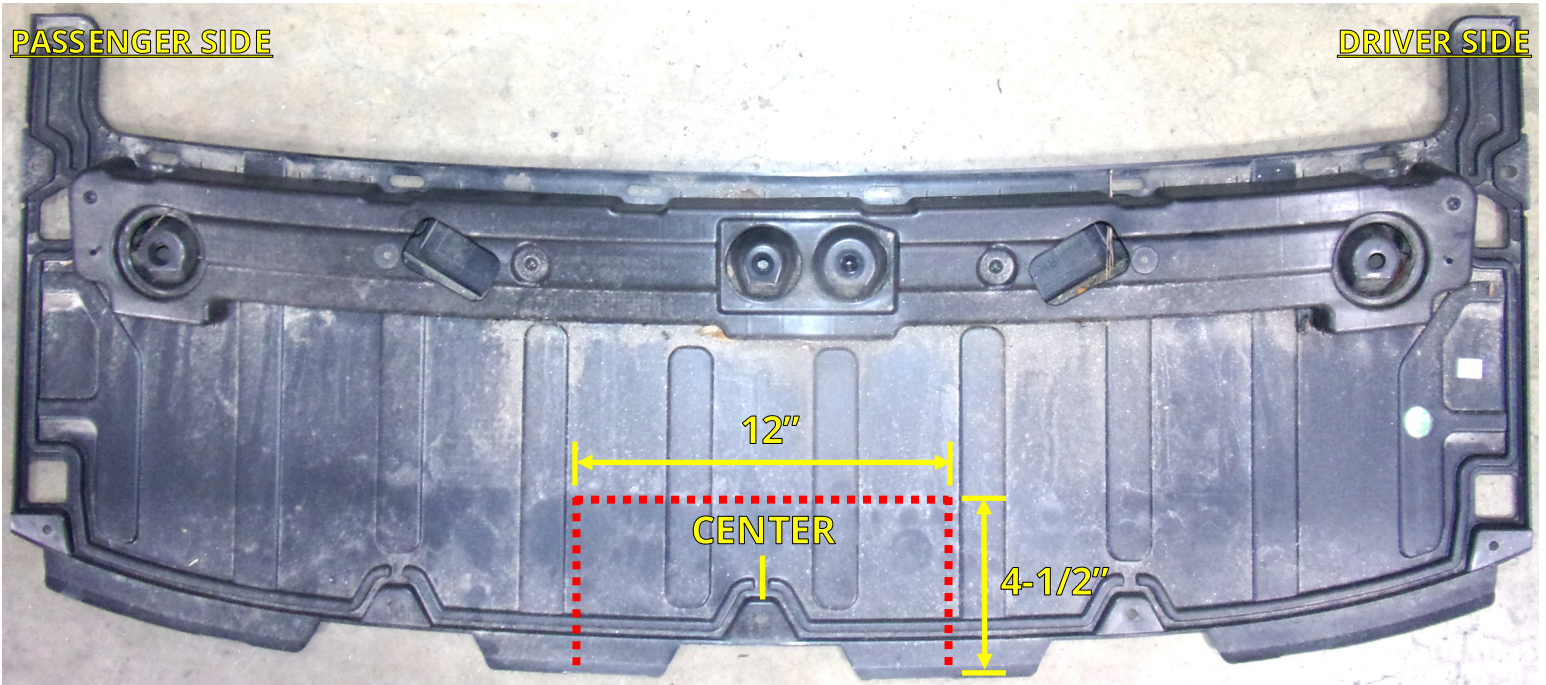


FILE

34. Use a Dremel tool to cut out the underbody panel, as shown. Use file to smooth out the cut.

**PASSENGER SIDE**

**DRIVER SIDE**



## REINSTALL VEHICLE COMPONENTS

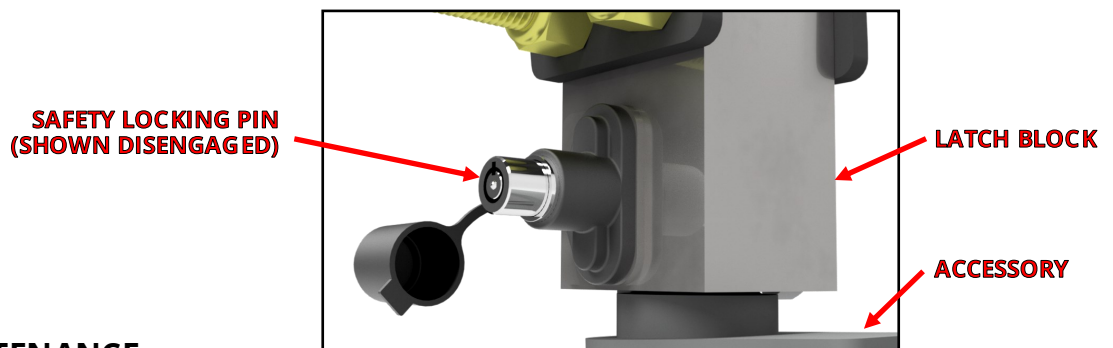
35. Reattach the bolts removed from the chassis beam and replace the underbody panel, Refer to Steps 1-3. Pictured is the finished install from underneath the vehicle.





## FINAL VEHICLE EXAMINATION

36. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
37. Ensure that hitch components work properly.
  - **Verify that the lock works correctly.** Push in the safety lock on the latch block then unlock with key. The lock should slide back out with the key when unlocked.
  - **Verify that each accessory can be installed correctly.** Use the following steps to install and remove each accessory that will be used with the hitch. (*Rack Receiver* and *Ball Mount* if purchased.)
    1. Prepare latching mechanism. Turn handle clockwise if needed.
    2. Firmly insert "post" of accessory into latch block until handle releases indicating that the accessory is latched.
    3. Push in the safety locking pin until it fully engages. The locking pin prevents the handle from turning when pushed in, and confirms that the block is securely latched onto the accessory. The safety locking pin will not depress if the accessory is not fully latched.
    4. Use key to release safety locking pin.
    5. While holding on to the accessory, rotate handle clockwise to release and remove the accessory.
  - **Verify that no part of the accessories come into contact with the body of the vehicle.**



## PRODUCT USE AND MAINTENANCE

**NOTICE:** *If the hitch is being installed by a professional, the installer is responsible for training the end user in the use and maintenance of the product.*

- **Accessory installation procedure:**
  1. Prepare latching mechanism. Turn handle clockwise if needed.
  2. Firmly insert "post" of accessory into latch block until handle spins counter-clockwise indicating that the accessory is latched.
  3. Always depress the safety locking pin and check that it has fully engaged.
- **Never use any accessory with the safety lock disengaged.** Until the safety locking pin is engaged, the handle is able to turn. A fully engaged safety locking pin is confirmation that the accessory is properly latched into the latch block.
- **Never use the rack receiver for towing.** The rack receiver accessory is only to be used with payload carrying products, such as bike racks or luggage racks.
- **Before each use, give the post of the accessory a light coating of lithium based grease.**
- **Before each use, inspect the hitch to ensure that all bolted connections are secure and that no cracks or damage are present.** Do not tow with the hitch if cracks or damage outside of normal wear is found.
- **Remove the Stealth accessories from the latch block after each use.** Do not leave accessories plugged in for extended periods of time.