



HITCH INSTALLATION INSTRUCTIONS

MAKE: GENESIS YEARS: 2023 MODEL/TRIM: GV60

www.stealthhitches.com 833-694-4824

RACK RECEIVER KIT#: **SHR70002**

COMPATIBLE WITH TOW KITS: **SHT25050**

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

UNDER VEHICLE TRIMMING:

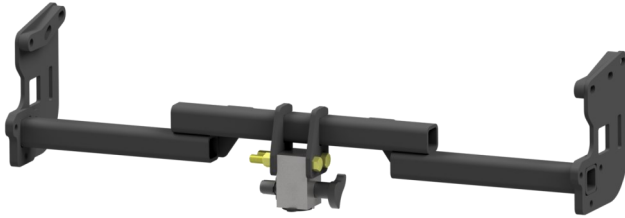
HEAT SHIELD: **NO**
 FASCIA: **YES**
 GRAVEL GUARD TRIMMING: **YES**



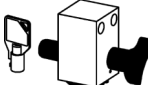




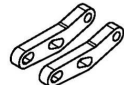
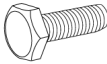
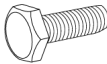



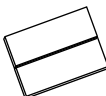

READ ALL INSTRUCTION WARNINGS AND LABELS







NO WELDING, METAL DRILLING OR VISIBLE TRIMMING REQUIRED






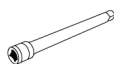








PARTS SUPPLIED WITH RACK RECEIVER KIT:

- | | | |
|--|---|--|
| 
LATCH BLOCK & KEYS | 
(2) BOLTS
5/8"-11 x 5" | 
(2) 5/8"
NYLOCK NUTS |
| 
2" RACK RECEIVER | 
(2) SIDE PLATES | 
(2) SPACERS |
| 
(6) M12 1.25 x 50mm BOLTS | 
(8) 1/2" - 13 x 1-1/2" BOLTS | 
(6) 1/2" FLAT WASHERS |
| 
(14) 1/2" LOCK WASHERS | 
(8) 1/2" NUTS | 
(1) ADHESIVE FOAM STRIP |
| | | 
(2) 14" CABLE TIES |







ADDITIONAL PARTS FOR TOW KIT:

- | | | |
|---|--|--|
| 
BALL MOUNT
7" RISE, EXTRA LONG | 
CHAIN HOOKS | 
2" BALL |
| 
PASSIVE WIRING HARNESS KIT BOX | | |

TOOLS REQUIRED:

- | | | | |
|---|--|--|--|
| 
15/16" OPEN END WRENCH | 
10mm, 12mm, 14mm, 19mm, & 15/16" SOCKETS | 
TORQUE WRENCH | 
SOCKET EXTENSION |
| 
RATCHET | 
SAFETY GLASSES | 
FLASHLIGHT | 
FILE |
| 
DREMEL TOOL | 
90 DEGREE PICK | 
PLASTIC PRY TOOLS | 
PHILLIPS HEAD SCREWDRIVER |

ADDITIONAL TOOLS FOR PASSIVE TOW KIT:

- | | | | |
|--|--|---|---|
| 
PLIERS | 
STRIPPER/CRIMPING TOOL | 
DRILL & 3/8" BIT | 
SILICONE |
| 
13mm SOCKET | 
MULTIMETER | | |

RACK RECEIVER INSTALLATION: USE STEPS 1-16 & 37-42
PASSIVE TOW KIT INSTALLATION: USE STEPS 1-42

<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 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



PLASTIC PRY TOOLS



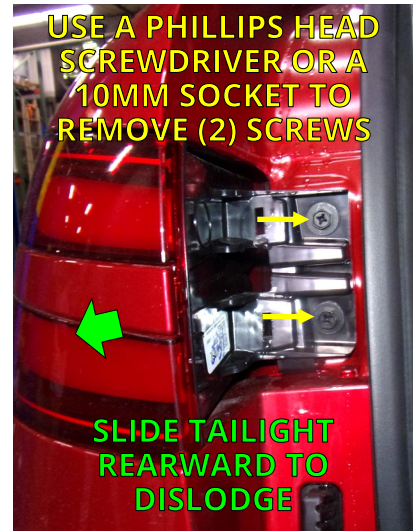
10mm SOCKET

-or-



PHILLIPS HEAD SCREWDRIVER

1. Open the rear hatch of the vehicle. Use a plastic pry tool to find the gap between the plastic cover and the taillight. Pry inward on the cover trim to release (3) clips holding the cover. Remove the plastic cover.
2. Use a screwdriver or socket to remove (2) screws holding the taillight to the vehicle. Slide the taillight rearward to dislodge.



90 DEGREE PICK

3. Unplug the taillight and place in a safe location. Use a 90 degree pick tool to remove (2) rivets located in the bottom of the taillight housing. Repeat Steps 1-3 on the other side of the vehicle.



PHILLIPS HEAD SCREWDRIVER

4. Inside the rear wheel well, behind the tire, use a Phillips head screwdriver to remove (4) screws which are holding the wheel well liner.



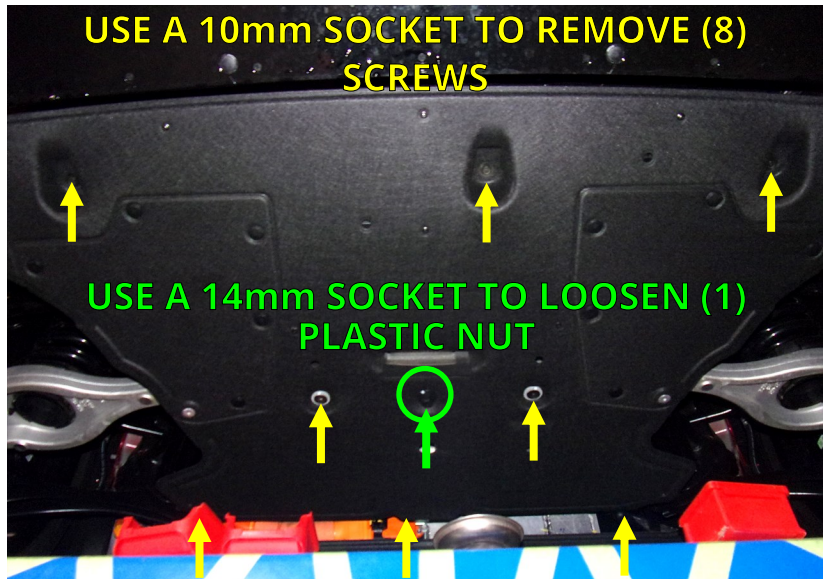
GAIN ACCESS TO MOUNTING AREA CONTINUED



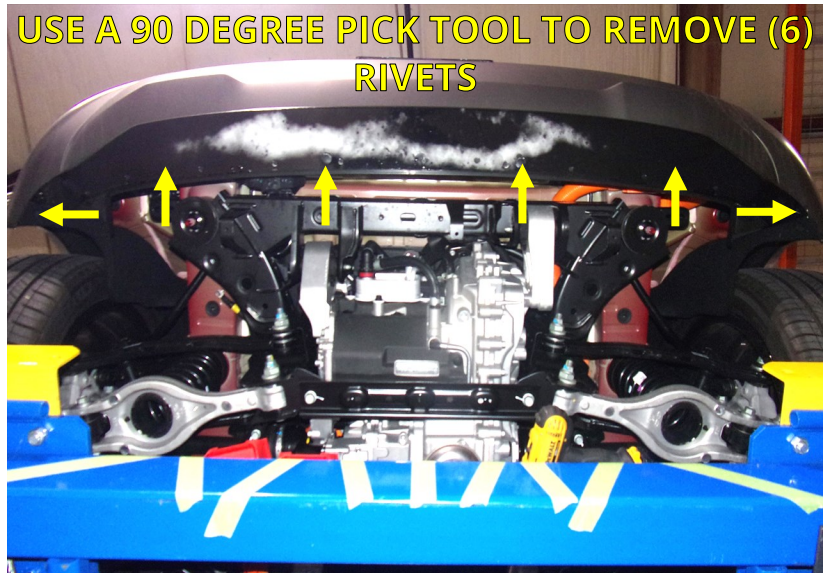
5. The wheel well trim will need to be partially removed in order to remove the fascia. Use a plastic pry tool to release the (5) clips and (1) plastic rivet as shown. Repeat Steps 4-5 on the other side of the vehicle.



6. Underneath the rear of the vehicle, use a socket to remove (8) screws and loosen (1) plastic nut from the bottom of the fascia. Remove the gravel guard.



7. Use a 90 degree pick tool to remove (6) rivets from the bottom of the fascia.

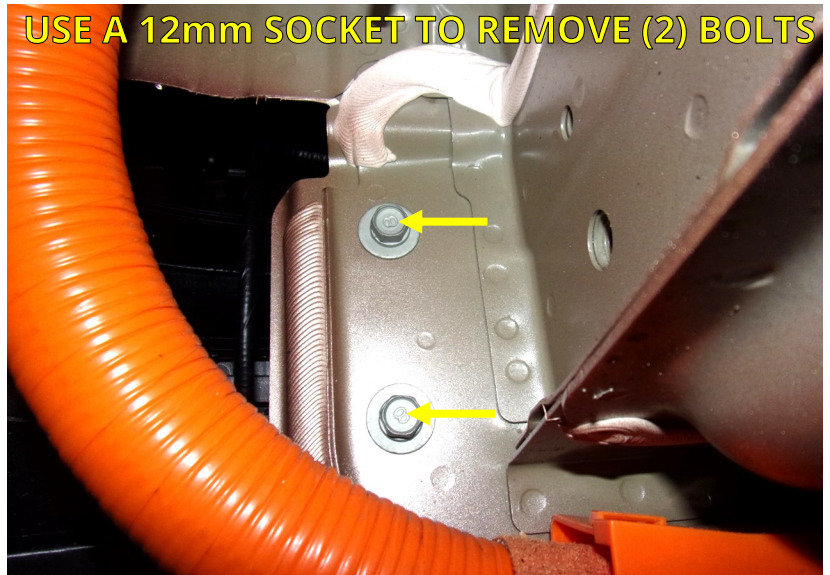


GAIN ACCESS TO MOUNTING AREA CONTINUED



12mm
SOCKET

8. Under the vehicle, on the rear inside portion of the fascia, use a socket to remove (2) bolts attaching the fascia to the vehicle chassis. Repeat on both sides of the vehicle.



PLASTIC
PRY TOOLS

9. The rear fascia is clipped to the vehicle body behind the wheel wells. Pull outward on the top front of the rear fascia to expose a clip in the seam. With a plastic pry tool, push down on the exposed clip to disconnect. Continue to pull outward on the fascia and disconnect clips as they are exposed until they are all released. Repeat this step on the other side of the vehicle.



10. This step requires a partner. Slide the fascia rearward enough to access and disconnect the electrical harness plug on the driver side. Remove the fascia completely.

NOTE: The Factory reinforcement beam will be attached to the fascia when it is removed.

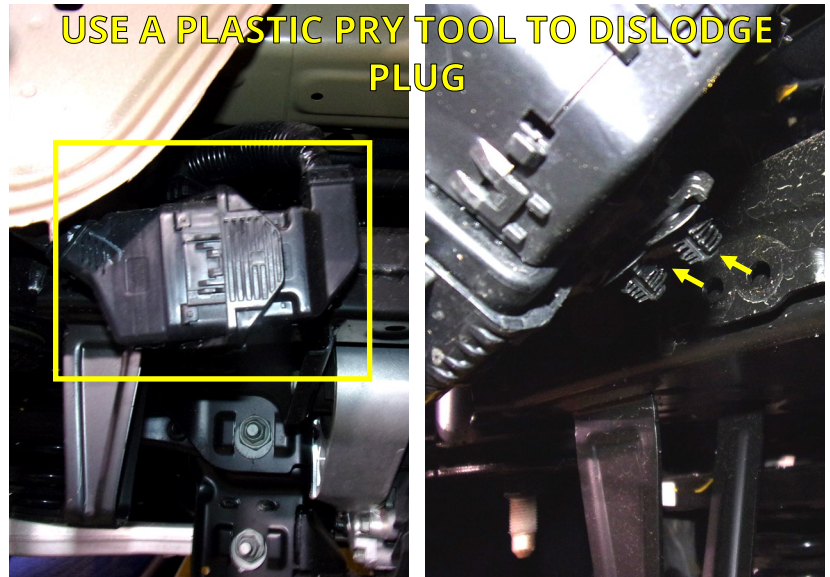
NOTICE: Carefully remove the fascia and place on a blanket or pad.



GAIN ACCESS TO MOUNTING AREA CONTINUED



11. Below the rear end of the vehicle, use a plastic pry tool to dislodge the plug shown in the image. This plug will be attached to the Stealth hitch frame with a cable tie in a later step.



12. Retrieve (3) M12 bolts from the bolt bag. Locate the (3) holes on each side of the vehicle frame near the rear of the vehicle. Screw a bolt into each hole. This will help ensure that there are no obstructions in the hole. If the bolt will not easily thread into any hole, clean the threads with an M12-1.25 thread chaser.

NOTICE: There are 1/2" bolts included in the bolt bag. Do not thread the 1/2" bolts into the vehicle frame, doing so may damage the threads.



INSTALL SIDE PLATES

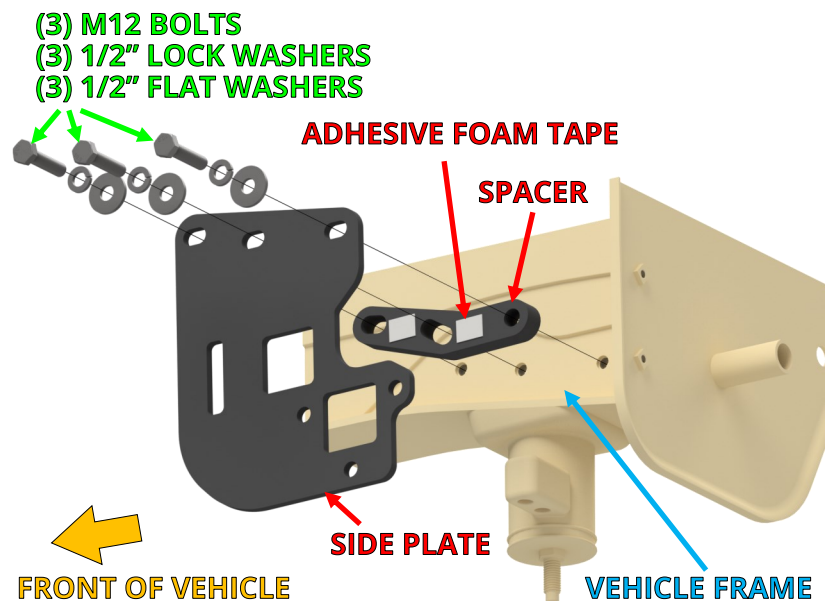


19mm
SOCKET

13. Using (3) M12 bolts, 1/2" lock washers and 1/2" flat washers loosely attach the side plate and spacer to the outside of the vehicle frame, as shown. Repeat on other side of vehicle.

NOTICE: Do not tighten hardware at this time.

NOTE: Use the provided adhesive foam tape to attach the spacers to the side plates before installation to simplify the procedure.



INSTALL FRAME



19mm
SOCKET



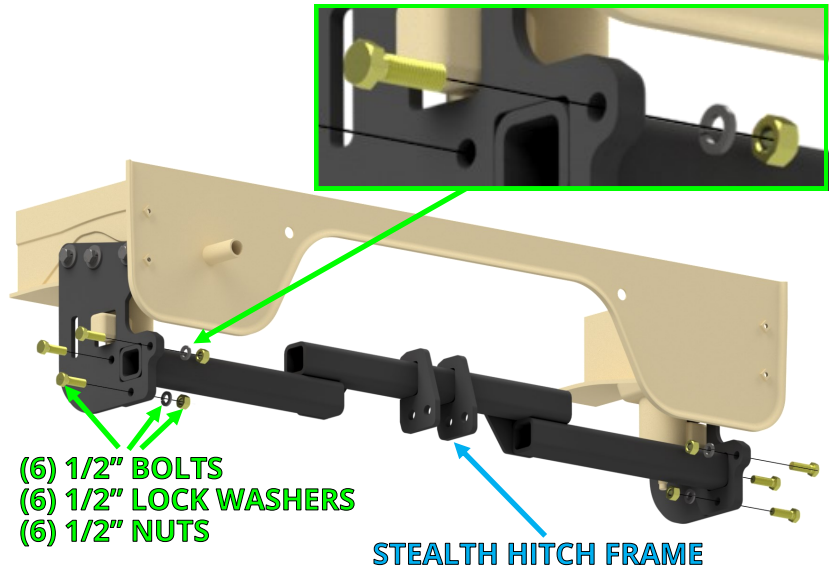
TORQUE
WRENCH

14. 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.

NOTICE: Before tightening the bolts securing the Stealth hitch frame to the vehicle, make sure to pull/slide the hitch frame all the way to the rear, away from the vehicle.

15. Torque the M12 bolts to 85 ft.-lbs. Next, torque the 1/2" bolts and nuts to 100 ft.-lbs.

NOTE: There are (2) extra sets of 1/2" hardware in the bolt bag, which may be discarded.



MOUNT LATCH BLOCK



15/16"
SOCKET



15/16" OPEN
END WRENCH

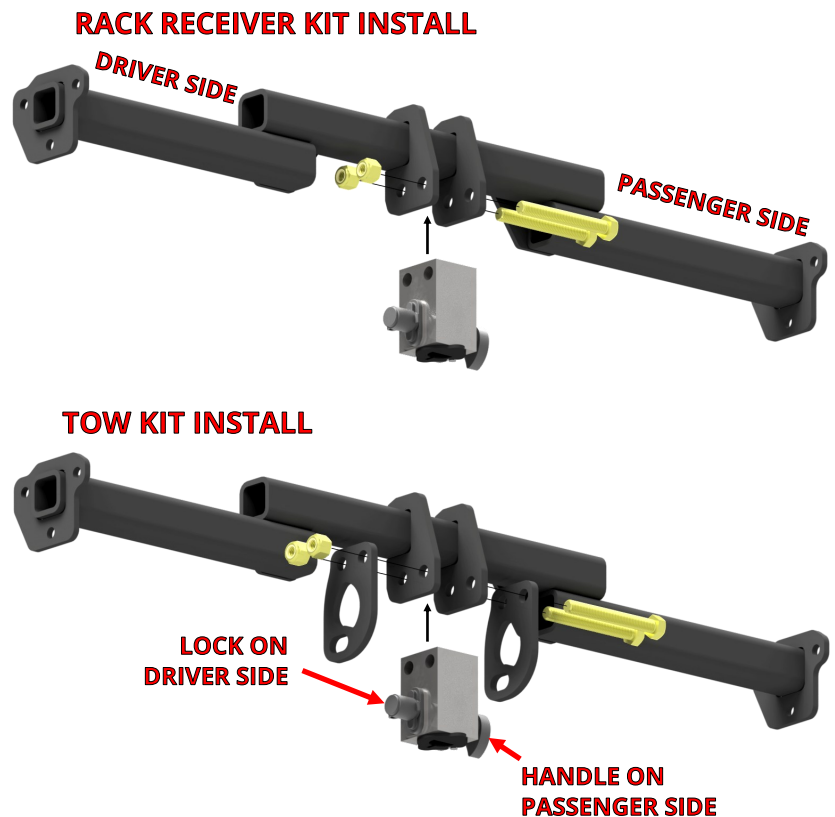


TORQUE
WRENCH

16. 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.

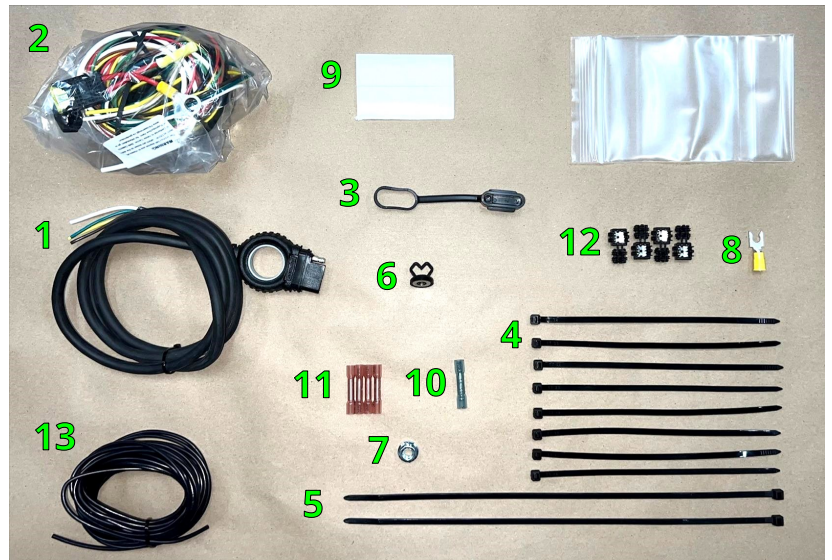
NOTICE: Keys are packaged within the latch block, remove keys and store in safe location.



IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 37.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 17.

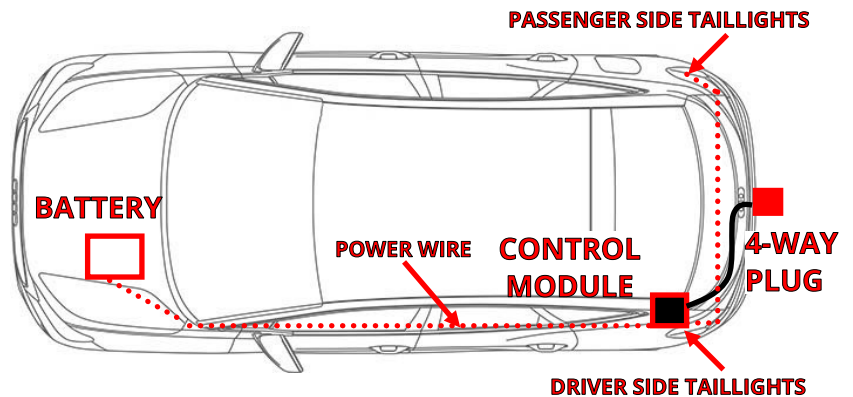
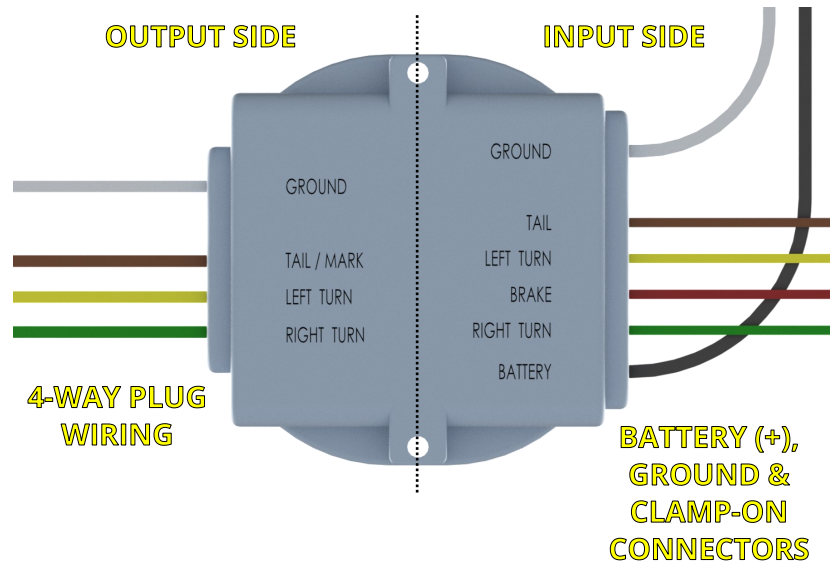
INSTALL PASSIVE WIRING KIT

#	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	M8 SERRATED 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



17. 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 WIRING KIT CONTINUED

18. Open the rear hatch. Lift and remove the trunk floor panel from the cargo area.



19. Inside the rear wall of the cargo area lift and remove the threshold as shown.



20. Lift and remove the cargo panel out of the cargo area.



INSTALL WIRING KIT CONTINUED



10mm
SOCKET

21. On each side of the cargo area, use a socket to remove (4) screws securing the plastic side panels. Use a plastic pry tool to dislodge and partially open up both side panels.



22. Behind each of the plastic side panels, locate and unplug the cargo area lights.

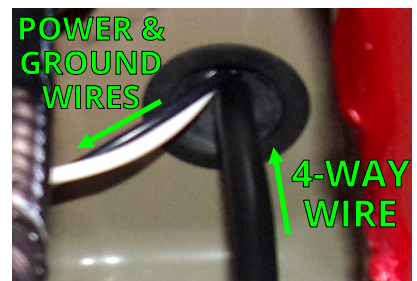


DRILL &
3/8" BIT

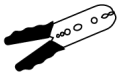
23. Locate the control module in the wiring kit box. Place the control module behind the driver side panel.
24. Locate and remove the grommet on the floor behind driver side panel. Drill a 3/8" hole in grommet. Route the wires of the 4-way connector harness through the grommet from outside of the vehicle to the inside of the vehicle. Route the power and ground wires of the control module through the grommet from inside of the vehicle to the outside. Replace the grommet.



DRILL 3/8" HOLE IN GROMMET



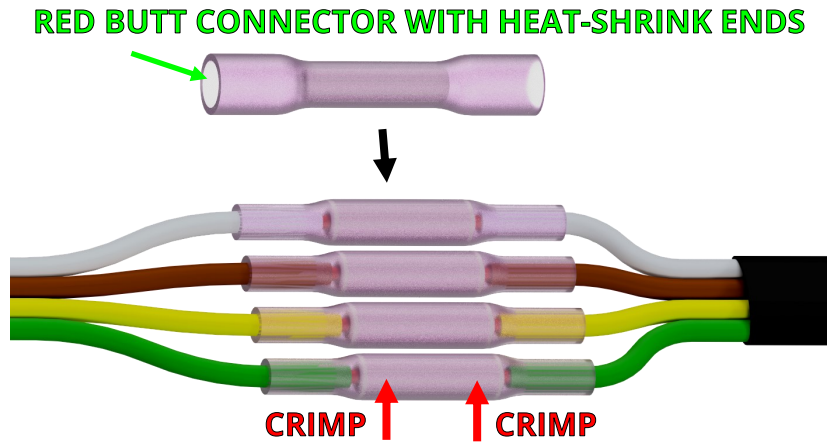
INSTALL WIRING KIT CONTINUED



STRIPPER/
CRIMPING
TOOL

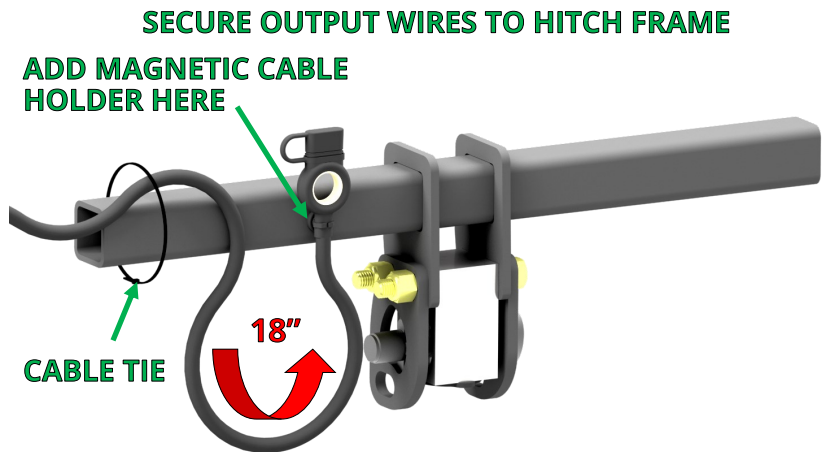
25. Locate the tail of the 4-way connector wire and the output side wires of the control module. Attach each similar color wire to each other using a red butt connector and crimping tool.

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

26. 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.

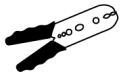


90 DEGREE
PICK

27. On the driver side of the engine compartment locate the plastic panel shown in the image. Use a 90 degree pick tool to remove (3) plastic rivets. Lift up and dislodge the panel.



INSTALL WIRING KIT CONTINUED

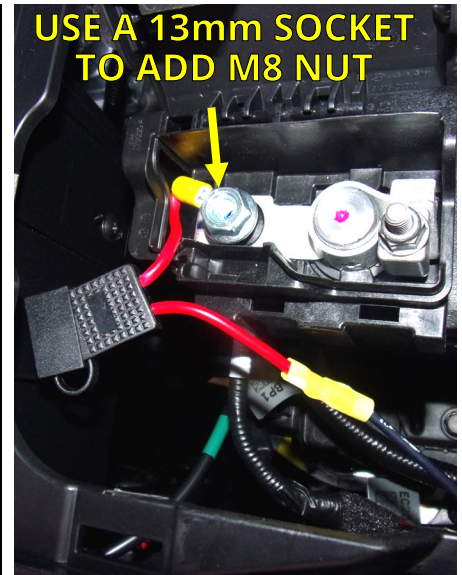
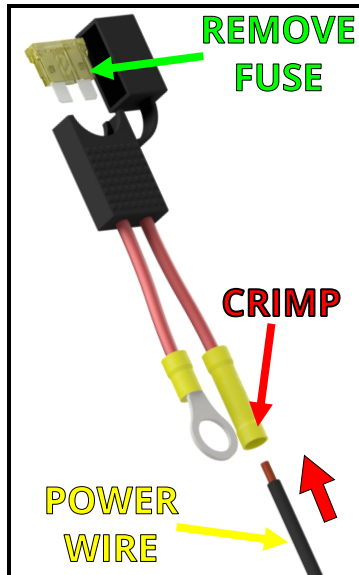


STRIPPER/
CRIMPING
TOOL



13mm
SOCKET

28. Locate the fuse holder in the wiring kit box and remove the fuse. Locate the battery terminal under the hood. Locate the power wire and unroll it. Use a crimping tool to attach one end of the power wire to the fuse holder. Retrieve the M8 nut from the wiring kit box. Use a socket to connect the eyelet to the battery with the M8 nut, as shown.



29. Route the power wire from the battery terminal over to the panel area. Pass the wire down to the area behind the driver side front tire. Replace the side panel.

NOTE: Use a stiff wire to "fish" the power wire to the correct area if needed.



90 DEGREE
PICK

30. Underneath the vehicle behind the driver side front tire, use a 90 degree pick tool to remove (3) plastic rivets. Open up the wheel well liner and find the power wire (and fish wire). Route the power wire towards the rear of the vehicle by tucking it under the plastic side trim.

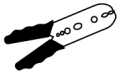
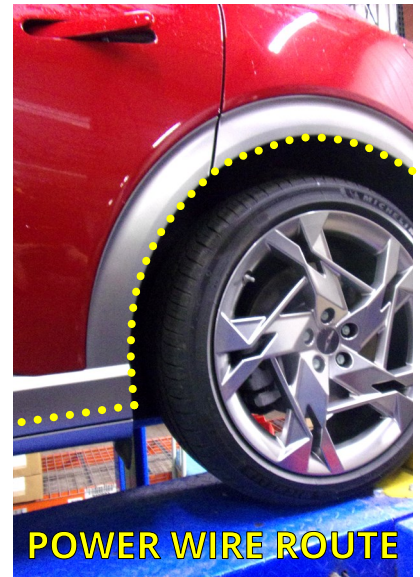
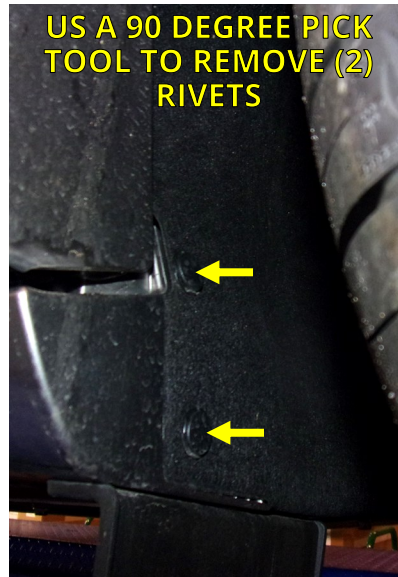


INSTALL WIRING KIT CONTINUED



90 DEGREE PICK

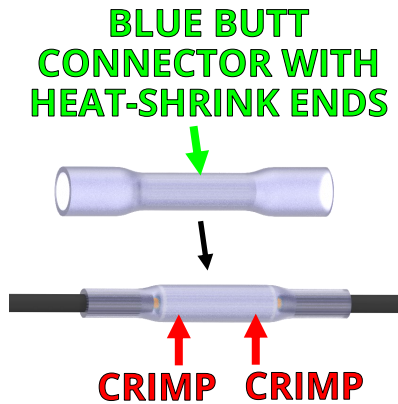
31. Use a 90 degree pick tool to remove (3) plastic rivets in front of the rear tire. Route the power wire from the underbody trim to the rear wheel well. Route the power wire around the rear tire behind the wheel well liner to the rear of the vehicle.



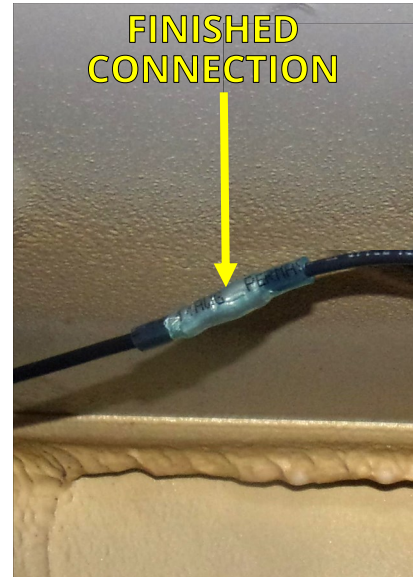
STRIPPER/CRIMPING TOOL

32. Use the blue butt connector and a crimping tool to join the power wire from the engine compartment to the power wire from the control module.

NOTICE (OPTIONAL): The butt connector is a heat shrink connector. Apply heat to waterproof the connector after crimping.

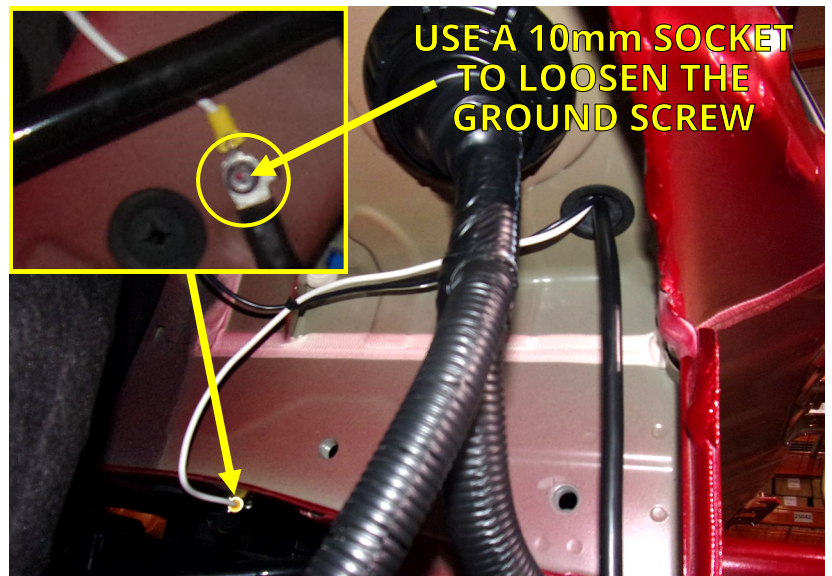


CRIMP EACH WIRE INTO THE SIDE OF EACH BUTT CONNECTOR. APPLY HEAT TO WATERPROOF AFTER CRIMPING

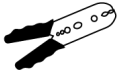


10mm SOCKET

33. Locate the ground screw under the driver side vehicle frame. Trim white control module ground wire so it will reach 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 terminal.



INSTALL WIRING KIT CONTINUED



STRIPPER/
CRIMPING
TOOL



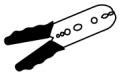
MULTIMETER



PLIERS

34. The wires on the input side of the module need to be attached to the vehicle wiring. Behind the driver side cargo compartment panel locate the indicated part of the vehicle wiring harness. Use clamp-on connectors to connect the yellow and brown input wires to the vehicle harness. (As shown in reference table below.)

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



STRIPPER/
CRIMPING
TOOL



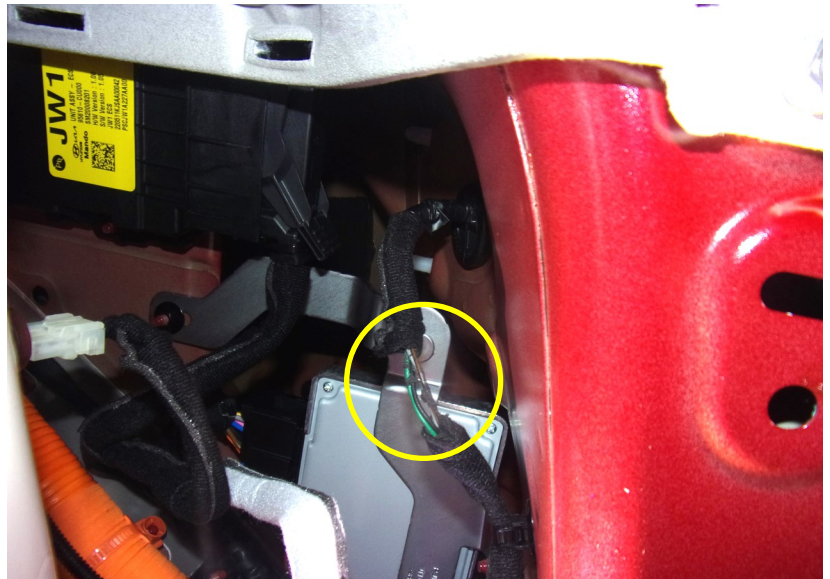
MULTIMETER












PLIERS

35. Route the green input wire from the driver side to the area behind the passenger side panel. Route the wire along existing vehicle harness wires inside the cargo area. Behind the passenger side panel locate the indicated part of the vehicle wiring harness. Use a clamp-on connector to connect the green input wire to the vehicle harness. (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	 GREEN	<u>12V+ (POWER)</u>	 BLACK	BATTERY (+)
RIGHT TURN	 GREEN	 GREEN	<u>GROUND</u>	 WHITE	GROUND STUD
MARKER	 BROWN	 GREEN/BLACK	NOTICE: Do not connect the red brake wire. This vehicle does not utilize a separate brake circuit. The brake signal is sent down the left and right turn circuits simultaneously.		
BRAKE	 RED	NOT USED			

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

INSTALL WIRING KIT CONTINUED



MULTIMETER



SILICONE

36. Complete wiring installation.

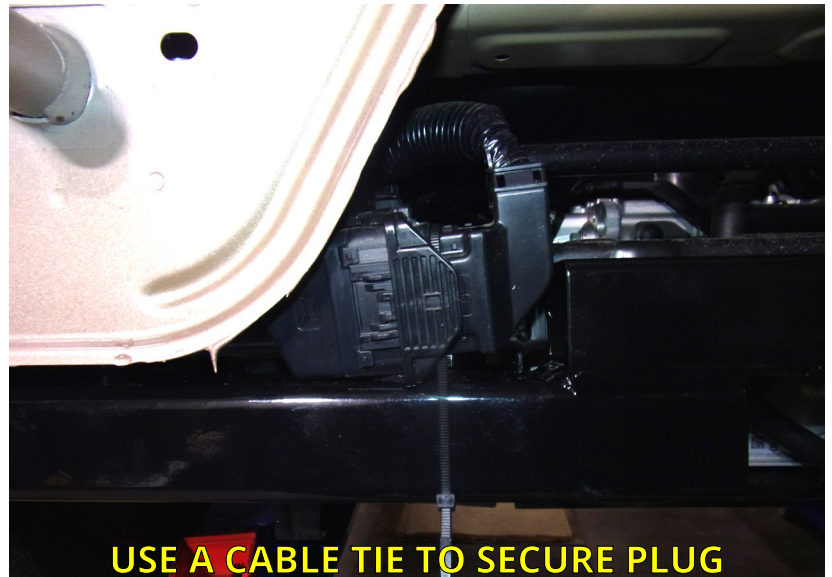
- Reinstall the 20 Amp fuse in the fuse holder located near the battery terminal box under the hood. Test the 4-way plug using a multimeter or connect the plug to a trailer and verify that the lights and brakes work correctly.

NOTE: *Taillights will need to be temporarily plugged in during testing.*

- 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 cargo area side panels, body trim panels, and cargo area floor panel. Refer to Steps 18-31.

CUT ACCESS TO LATCH BLOCK

37. Re-attach the plug detached in Step 11 with a provided 14" cable tie as shown in the image.



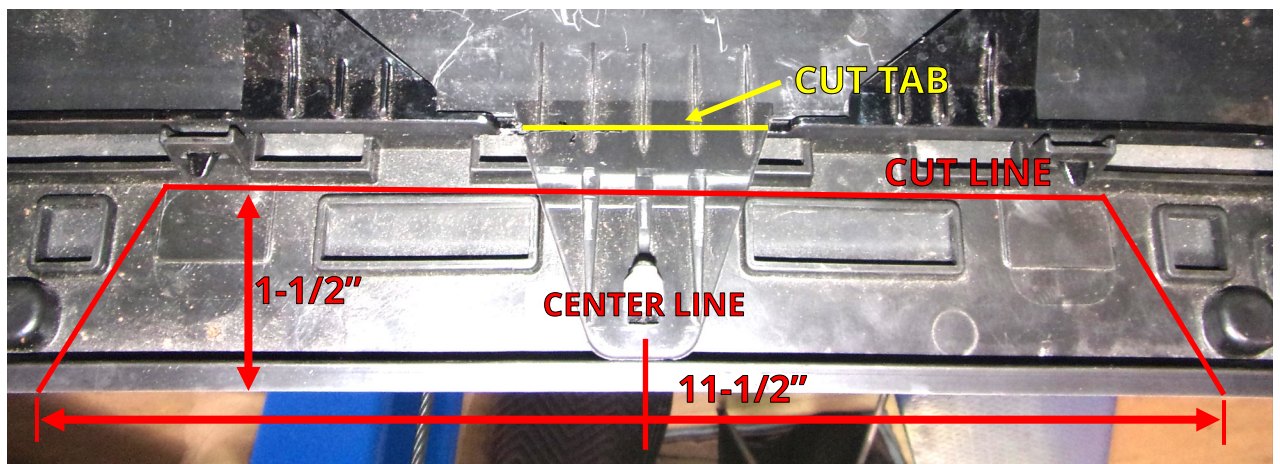
38. Locate the area of the fascia shown in the image. Use a Dremel tool to cut off the tab in the middle of the fascia where the yellow line is drawn. Use a Dremel tool to cut out the section of fascia outlined in red. Use a file to smooth out both cuts.



DREMEL TOOL



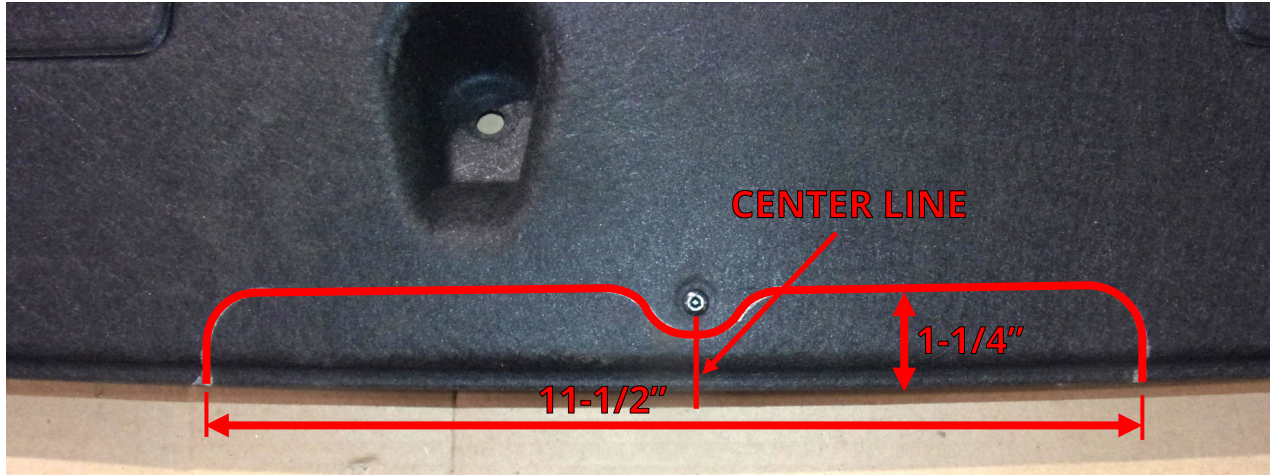
FILE



CUT ACCESS TO LATCH BLOCK CONTINUED



39. Locate the area of the gravel guard shown in the image. Use a Dremel tool to cut out the section of gravel guard outlined in red. Use a file to smooth out both cuts.



REINSTALL VEHICLE COMPONENTS

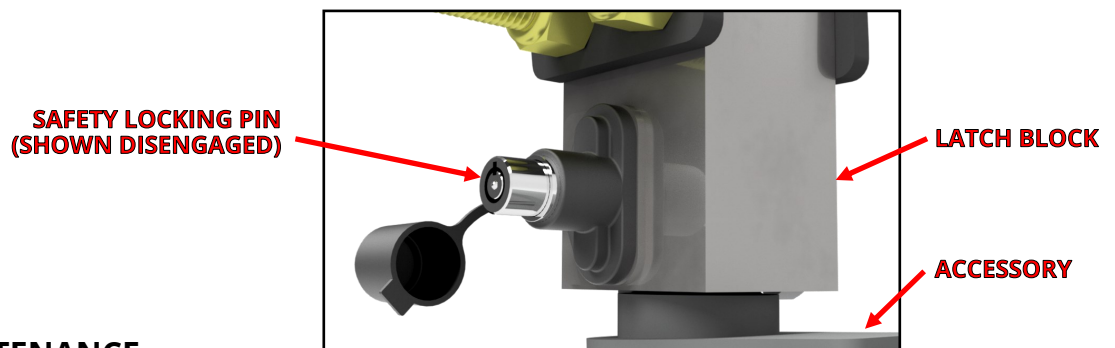
40. Reattach and secure the fascia, wheel well trim, and other vehicle components in reverse order. Refer to Steps 1-10.

NOTICE: Remember to plug in the sensor plug in Step 10 before reinstalling the fascia.



FINAL VEHICLE EXAMINATION

41. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
42. 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.

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