STEALTH HITCHES

www.stealthhitches.com 833•694•4824

HITCH INSTALLATION INSTRUCTIONS

MAKE:	YEARS:	MODEL/TRIM:
MERCEDES	2022	EQB

RACK RECEIVER KIT#: **SHR32030**

COMPATIBLE WITH TOW KIT: **SHT25050**

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

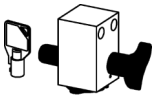
UNDER VEHICLE TRIMMING:

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

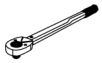

(6) M10 NYLOCK NUTS

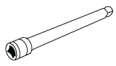

(6) M10 FLAT WASHERS

TOOLS REQUIRED:


15/16" OPEN END WRENCH


16mm DEEP WELL, 8mm, 10mm & 15/16" SOCKETS


TORQUE WRENCH


SOCKET EXTENSION


SAFETY GLASSES


RATCHET


FLASHLIGHT


PAINTER'S TAPE


PLASTIC PRY TOOLS

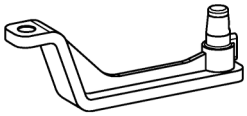

90 DEGREE PICK


10 mm HOLLOW NUT DRIVER


DREMEL TOOL

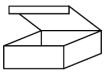

FILE

ADDITIONAL PARTS FOR TOW KIT:


BALL MOUNT 7" RISE, EXTRA LONG


CHAIN HOOKS


2" BALL


WIRING KIT BOX

ADDITIONAL TOOLS FOR TOW KIT:

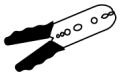

12mm SOCKET


PLIERS


SILICONE


MULTIMETER


SIDE CUTTERS


STRIPPER/ CRIMPING TOOL


T40 TORX


T20 TORX

RACK RECEIVER INSTALLATION: USE STEPS 1-14 & 33-38
TOW KIT INSTALLATION: USE STEPS 1-38

<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.

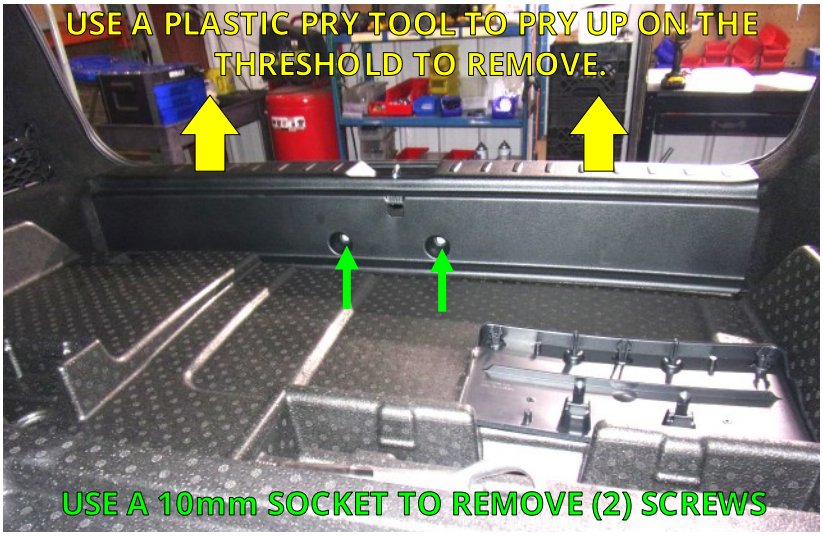
GAIN ACCESS TO MOUNTING AREA

1. Open vehicle cargo area. Lift up and remove rear floor panel.

PLASTIC PRY TOOLS

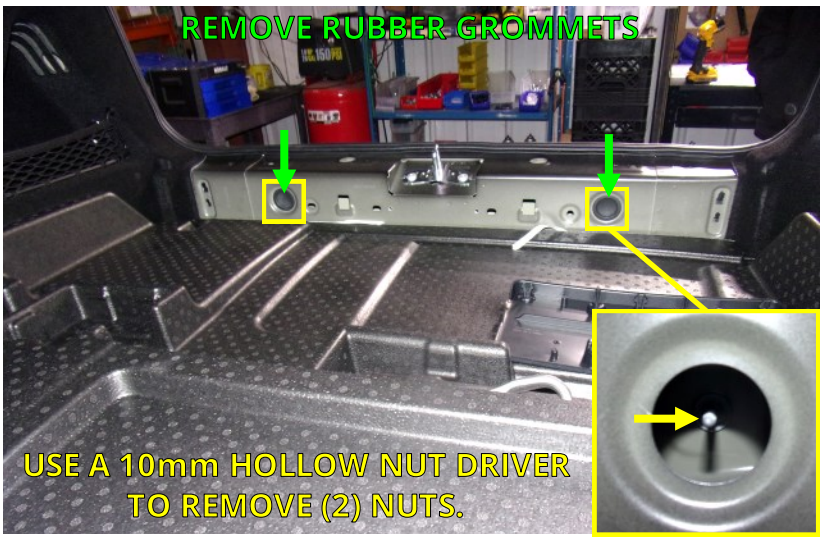
10mm SOCKET

2. On the rear wall of the cargo area use a socket to remove (2) screws from the threshold (green arrows). Use a plastic pry tool to pry up on the threshold, lift up to remove.



10 mm HOLLOW NUT DRIVER

3. Under where the threshold was removed, locate and remove (2) rubber grommets. In the holes where the grommets were removed, use a hollow nut driver to remove the (2) nuts securing the fascia.



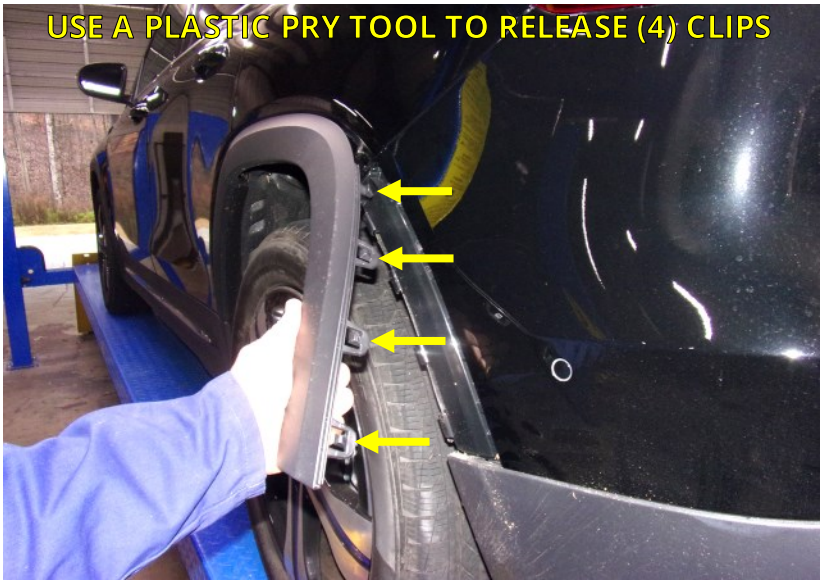
GAIN ACCESS TO MOUNTING AREA CONTINUED

90 DEGREE PICK

4. Inside the rear wheel well behind the tire, locate (4) rivets which are holding the wheel well liner. Use a 90 degree pick to remove these (4) rivets, **save** for reinstallation. Repeat on other side of vehicle.

PLASTIC PRY TOOLS

5. To remove the fascia, the wheel well trim will need to be partially detached. Find the end of the clips inside the wheel well and using a plastic pry tool or your fingers press down while using outward pressure to release each clip. Remove the (4) clips closest to the rear of the vehicle as shown. Repeat on other side of vehicle.



8mm SOCKET

90 DEGREE PICK

6. Under the bottom rear of the vehicle, use a socket to remove (9) screws holding the underbody panel (yellow arrows). Use a 90 degree pick tool to remove (4) plastic rivets (green arrows). Push in to release the central underbody panel clip (red arrow). Remove the underbody panel from beneath the vehicle and set aside.

GAIN ACCESS TO MOUNTING AREA CONTINUED

8mm
SOCKET

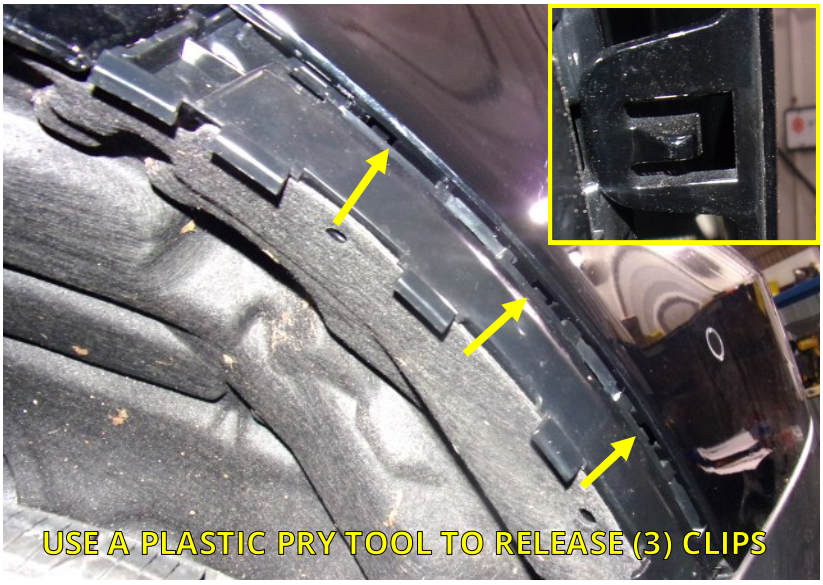
7. Locate the fascia support brackets under the rear of the vehicle. Use a socket to remove the (2) screws connecting the brackets to the bottom of the vehicle.

PLASTIC
PRY TOOLS

8. Behind the rear tire locate the bottom edge trim piece shown in the image. Pull the trim piece outward while using a plastic pry tool to release the indicated clip. Repeat on other side of vehicle.

PLASTIC
PRY TOOLS

9. The fascia can now be unclipped and removed from the vehicle. Start by releasing (3) clips under where the rear wheel trim was pulled up. Pull the fascia outward and use a plastic pry tool to release the clips where shown. Repeat on other side of vehicle.

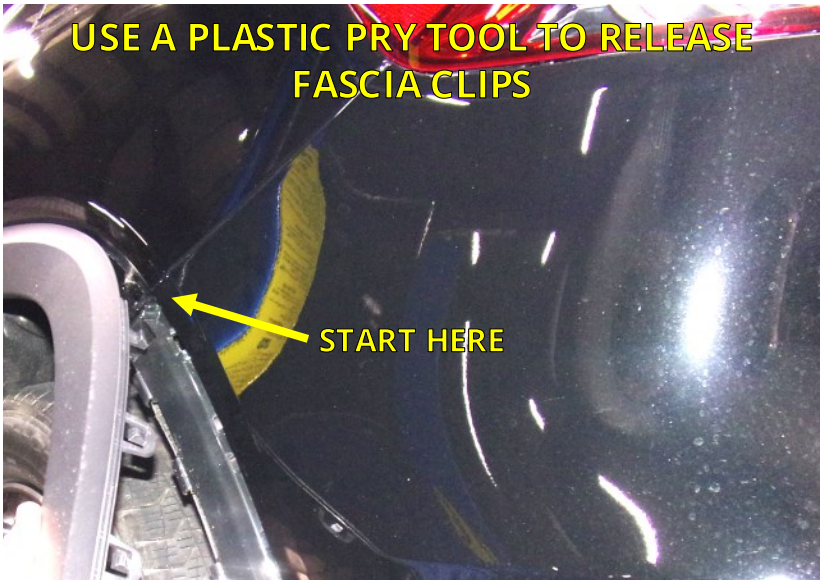


GAIN ACCESS TO MOUNTING AREA CONTINUED

PLASTIC PRY TOOLS

10. The rear fascia is clipped to the vehicle body above and 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. Repeat on other side of vehicle.

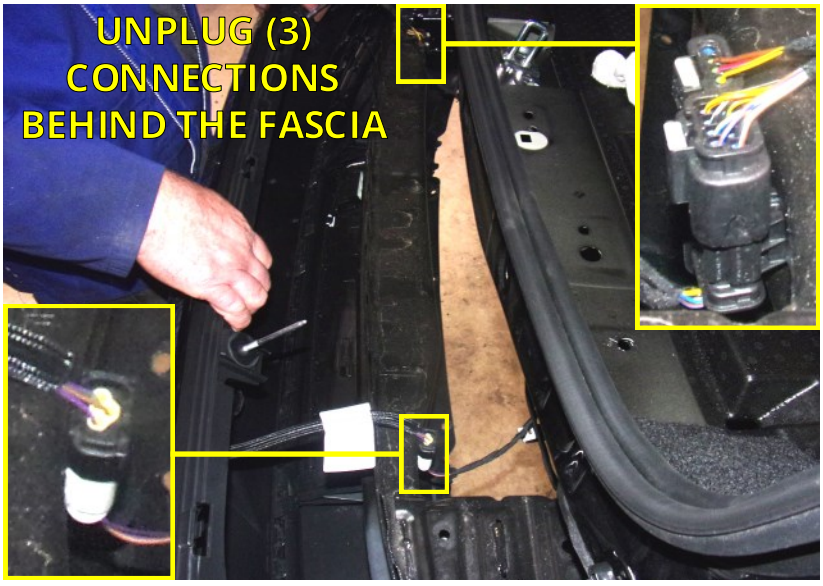
NOTE: *Use caution when pulling the fascia rearward. The fascia is still connected to the vehicle by a wire harness.*



90 DEGREE PICK

11. This step requires a partner. Pull the fascia rearward enough to access (2) sensor plugs on the driver side and (1) tag light plug on the passenger side. Use a 90 degree pick tool to unclip and unplug each plug. Remove the fascia completely.

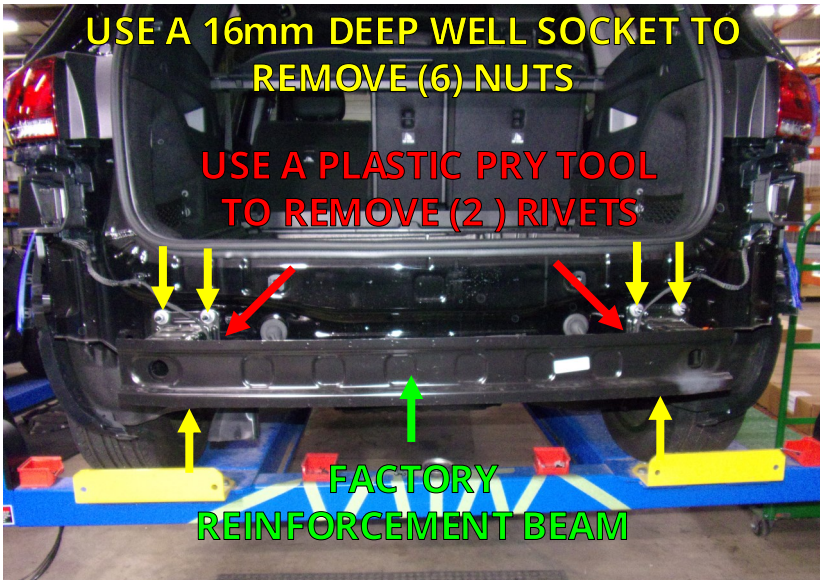
NOTICE: Carefully remove the fascia and place on a blanket or pad.



16mm DEEP WELL SOCKET

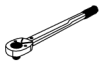
PLASTIC PRY TOOLS

12. Locate the (2) factory wiring harnesses that are connected to the factory reinforcement beam with plastic rivets. Use a plastic pry tool to disconnect the rivets (red arrows). Use a deep well socket to remove the (6) nuts holding the factory reinforcement beam to the vehicle. Discard the nuts and save the beam for reinstallation.



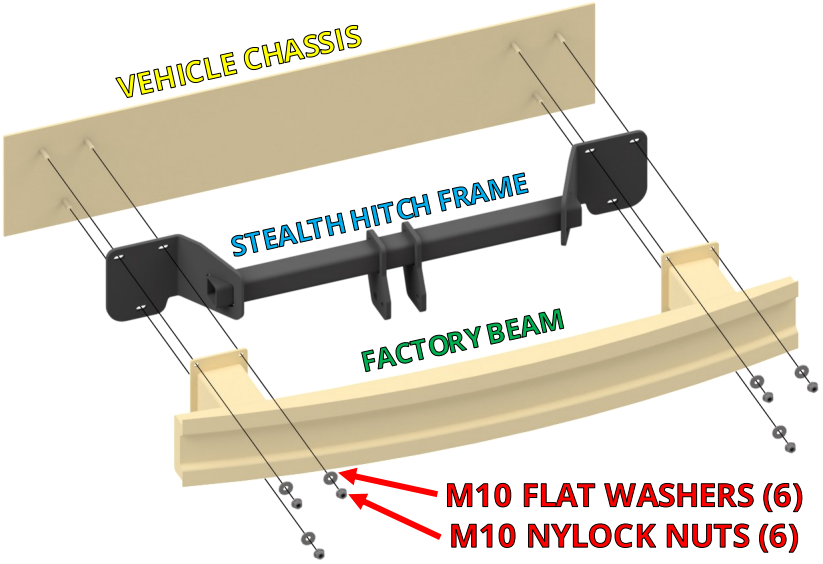
INSTALL STEALTH HITCH FRAME

16mm DEEP WELL SOCKET



TORQUE WRENCH

13. Mount the Stealth hitch frame onto the vehicle studs and place the factory reinforcement beam on top. Use the (6) nylock nuts and flat washers provided and torque to 35 ft.-lbs.

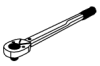


USE 16mm DEEP WELL SOCKET TO INSTALL (6) NUTS

MOUNT LATCH BLOCK

15/16" SOCKET

15/16" OPEN END WRENCH



TORQUE WRENCH

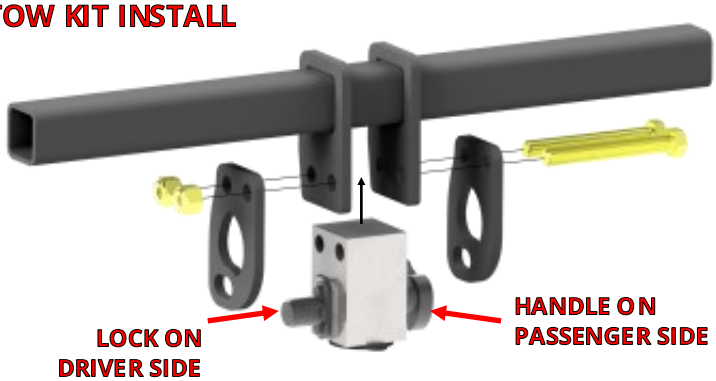
14. Installation of the latch block varies depending on which kit you are installing.

- ***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

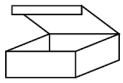
TOW KIT INSTALL



IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 33.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 15.

INSTALL PASSIVE WIRING KIT

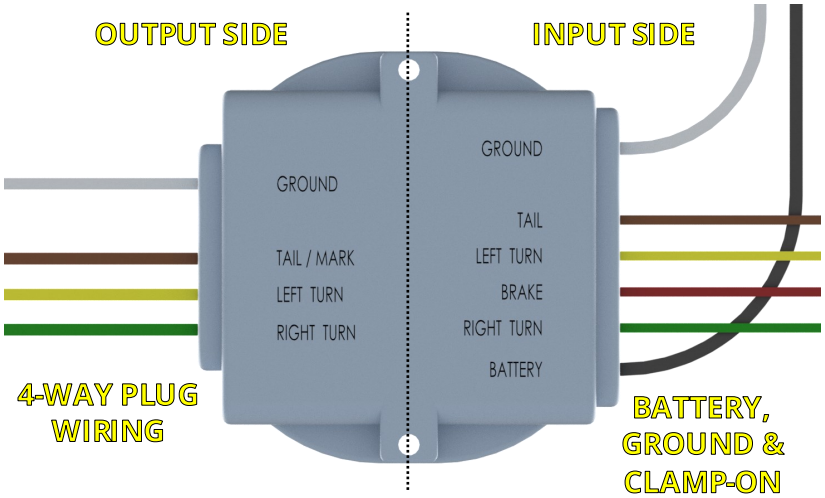
#	DESCRIPTION	QTY
1	4-WAY CONNECTOR HARNESS	1
2	CONTROL MODULE	1
3	4-WAY CONNECTOR COVER	1
4	CABLE TIE – 8”	8
5	CABLE TIE – 14”	2
6	MAGNETIC CABLE HOLDER	1
7	M8 SERRATED FLANGE NUT	1
8	FORK TERMINAL	1
9	ADHESIVE FOAM STRIP	2
10	BUTT CONNECTOR (BLUE)	1
11	BUTT CONNECTOR (RED)	4
12	CLAMP-ON CONNECTORS	4
13	POWER WIRE	1

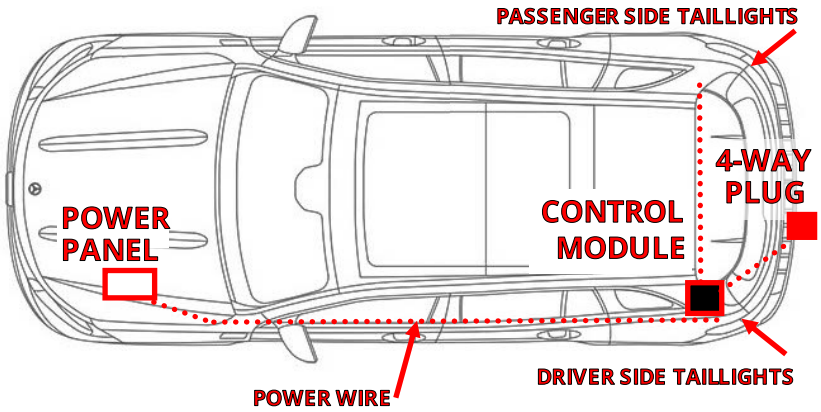


PASSIVE WIRING KIT BOX

15. 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

16. Inside the cargo area, lift and remove the large foam panel in the floor. Lift the panel until the back end is higher than the threshold. Underneath the panel, unclip the front end and slide it back to remove.

90 DEGREE PICK

T40 TORX

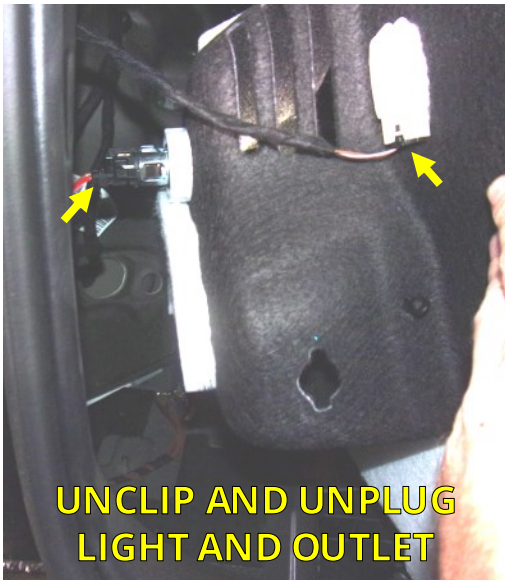
17. Inside the cargo area locate the (2) plastic rivets connecting the bottom of the side panel to the cargo area floor. Use a 90 degree pick tool to remove the rivets (yellow arrows). Locate and remove the cargo anchor cover with a 90 degree pick tool (red arrow). Use a Torx to remove the cargo anchor (green arrow). Repeat on other side of cargo area.

PLASTIC PRY TOOLS

18. Use a plastic pry tool to partially dislodge each cargo area side panel.

INSTALL WIRING KIT CONTINUED

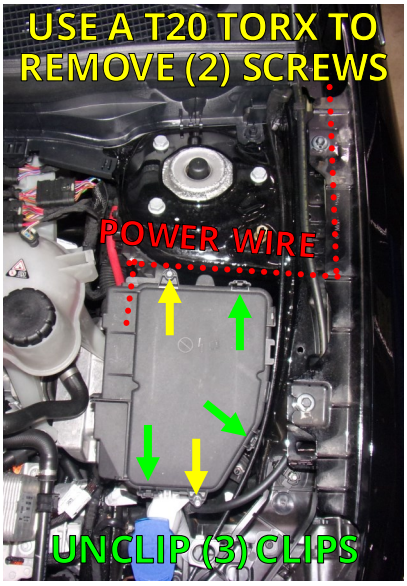
19. Behind each side panel locate the wiring which runs to the cargo area lights and 12v power outlet. Unclip and unplug each of the lights and outlet in the side panels. Retrieve the control module from the wiring kit box. Place the control module behind the driver side panel where indicated.

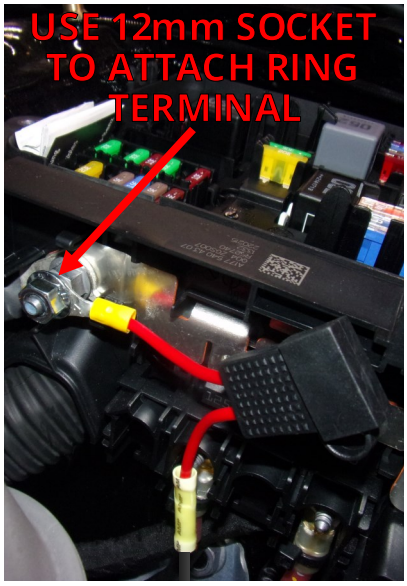


T20 TORX

12mm
SOCKET

20. Under the driver side of the hood locate the fuse box. Use a Torx to remove (2) screws (yellow arrows). Release (3) clips to open the fuse box lid. Find the power terminal (+) shown in the image. 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 the supplied M8 nut to connect fuse ring terminal to the power terminal (+). Route the power wire to the outside of the engine compartment and down behind the front tire.





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

8mm
SOCKET

90 DEGREE
PICK

21. Behind the front driver side tire use a 90 degree pick tool to remove (3) rivets (yellow arrows). Use a socket to remove (3) screws where shown (green arrows). With the fasteners removed, open up the panels and locate the power wire (and fish wire).

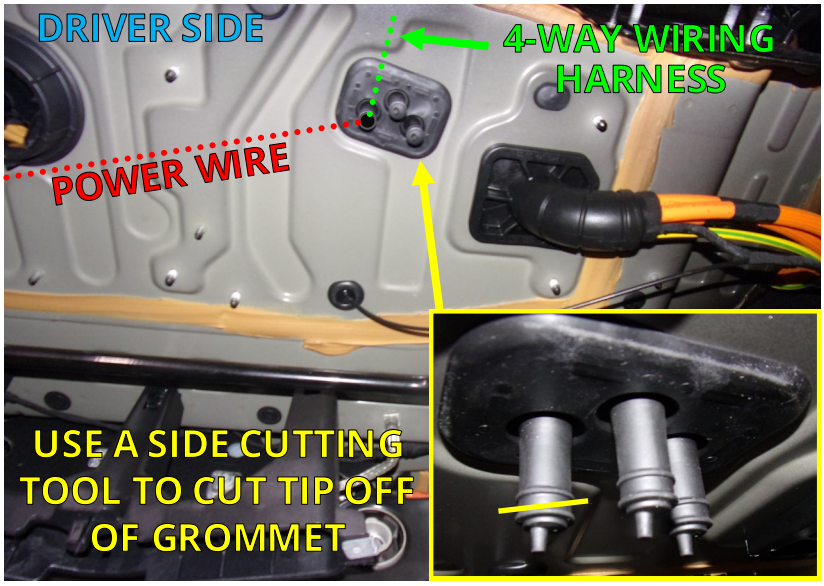
8mm SOCKET

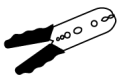
22. Route the power wire along the bottom of the driver side of the vehicle. Use a socket to remove (6) screws in the trim. Use the underbody trim to hold and hide the power wire as much as possible. Avoid areas where the power wire can be pinched or damaged.

SIDE CUTTERS

23. Route the power wire from the rear of the driver side trim to the indicated grommet under the cargo area. Use a side cutting tool to cut off one of the grommet tips as shown. Feed the end of the power wire into the cargo area, through the grommet, and to the control module.

24. Locate the 4-way connector harness and feed the input wires through the cut grommet into the cargo area.

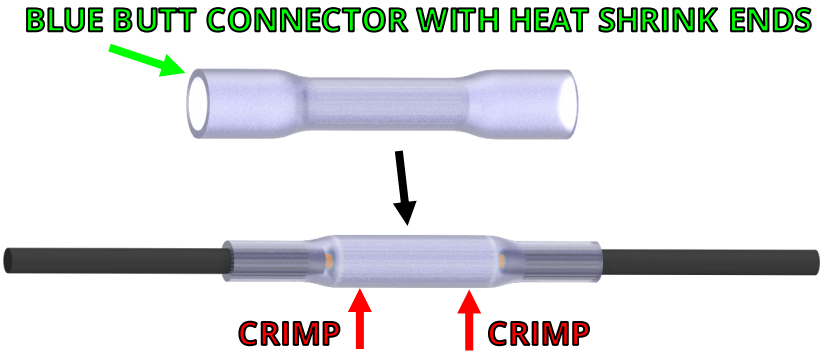




STRIPPER/ CRIMPING TOOL

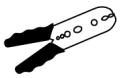
25. Locate the power wire coming from the fuse box power terminal and the power wire coming from the control module. Trim the power wires to remove excess length. Use the included blue butt connector to crimp the power wires together.

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



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

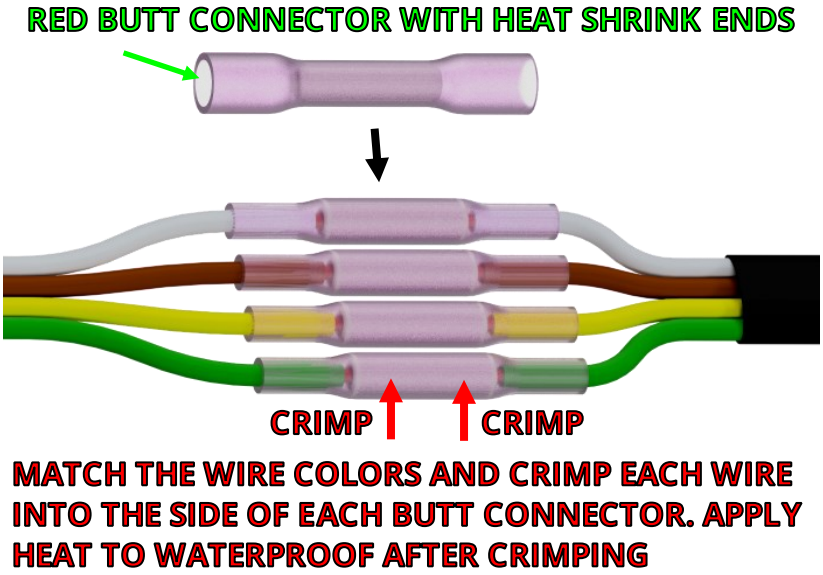
INSTALL WIRING KIT CONTINUED



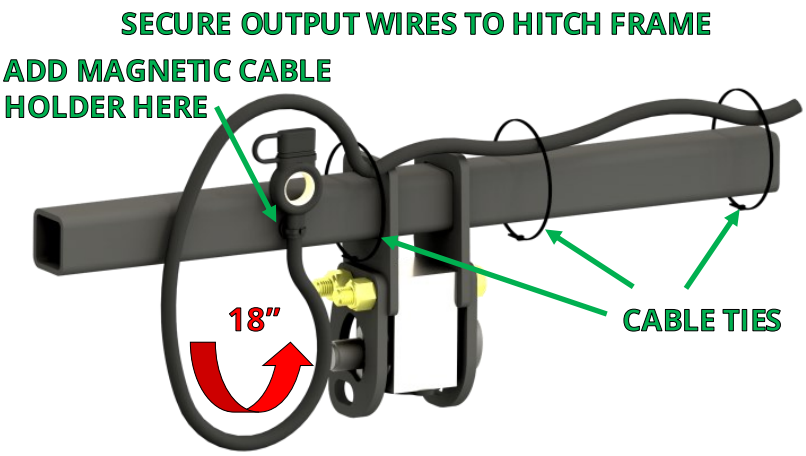
STRIPPER/ CRIMPING TOOL

26. Locate the tail of the 4-way connector harness 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.

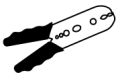
NOTICE (OPTIONAL): The butt connectors are heat shrink connectors. Apply heat to waterproof the connectors after crimping.



27. 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.



10mm SOCKET

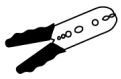


STRIPPER/ CRIMPING TOOL

28. Locate the ground stud inside the driver side cargo compartment. 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 WIRING KIT CONTINUED



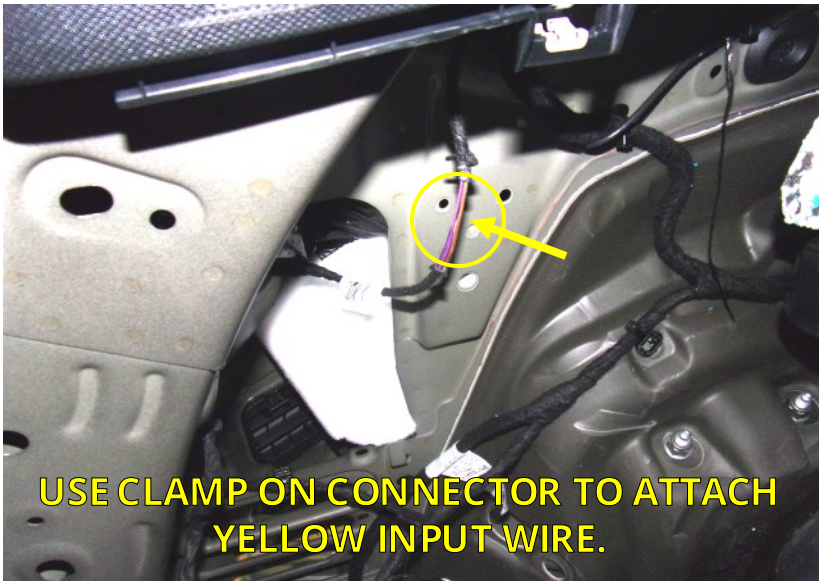
STRIPPER/ CRIMPING TOOL

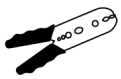
MULTIMETER

PLIERS

29. 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 a clamp-on connector to connect the yellow wire (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.*





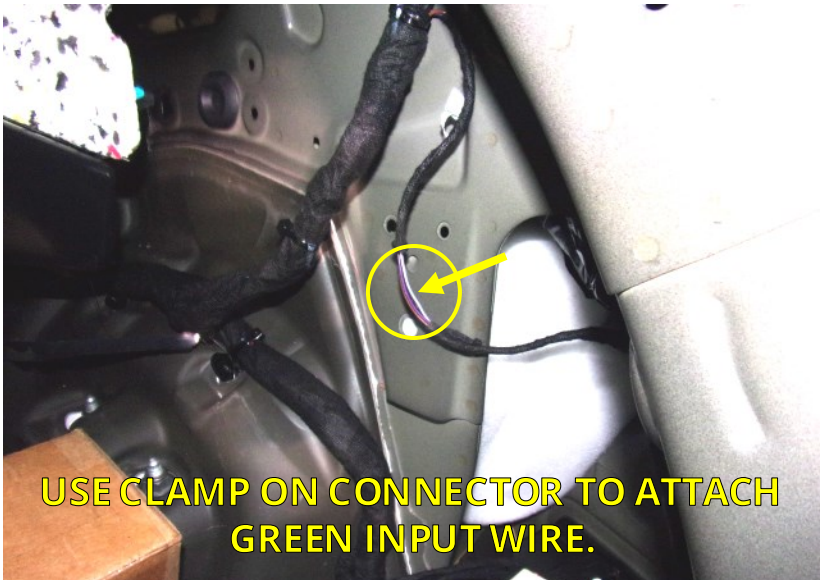
STRIPPER/ CRIMPING TOOL

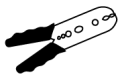
MULTIMETER

PLIERS

30. Route the green and brown wires from the driver side of the vehicle to the passenger side. Behind the panel on the passenger side of the cargo area locate the indicated part of the vehicle wiring harness behind the taillight. Use a clamp-on connector to connect the green wire (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.*





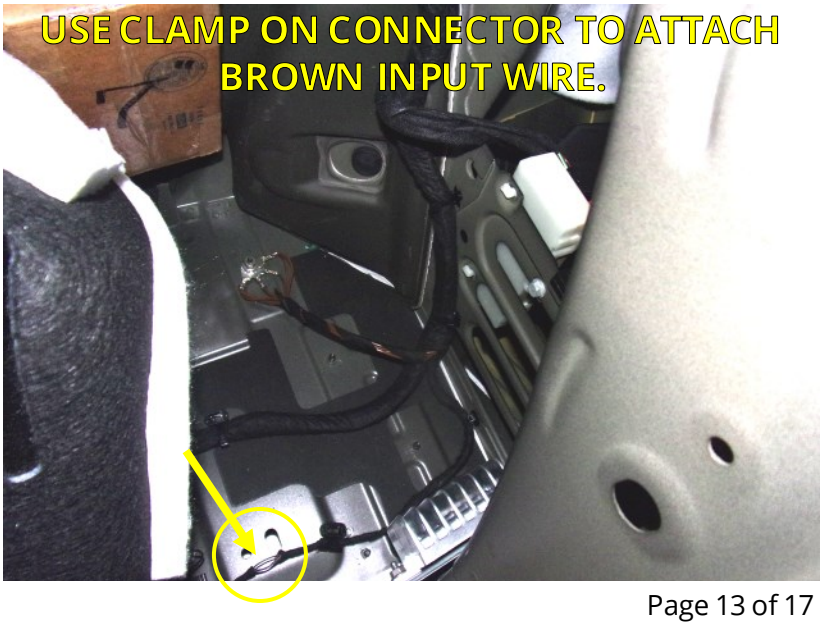
STRIPPER/ CRIMPING TOOL

MULTIMETER

PLIERS

31. Behind the same panel on the passenger side of the cargo area locate the indicated part of the vehicle wiring harness on the cargo area floor. Use a clamp-on connector to connect the brown wire (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.*



CLAMP-ON CONNECTOR COLOR REFERENCE TABLE					
SIGNAL INPUT WIRES			**POWER & GROUND WIRES**		
FUNCTION	HARNESS	VEHICLE			
LEFT TURN	YELLOW	GRAY/WHITE	12V+ (POWER)	BLACK	BATTERY (+)
RIGHT TURN	GREEN	GRAY/WHITE	GROUND	WHITE	GROUND STUD
MARKER	BROWN	PURPLE/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.

SILICONE

MULTIMETER

32. Complete wiring installation.

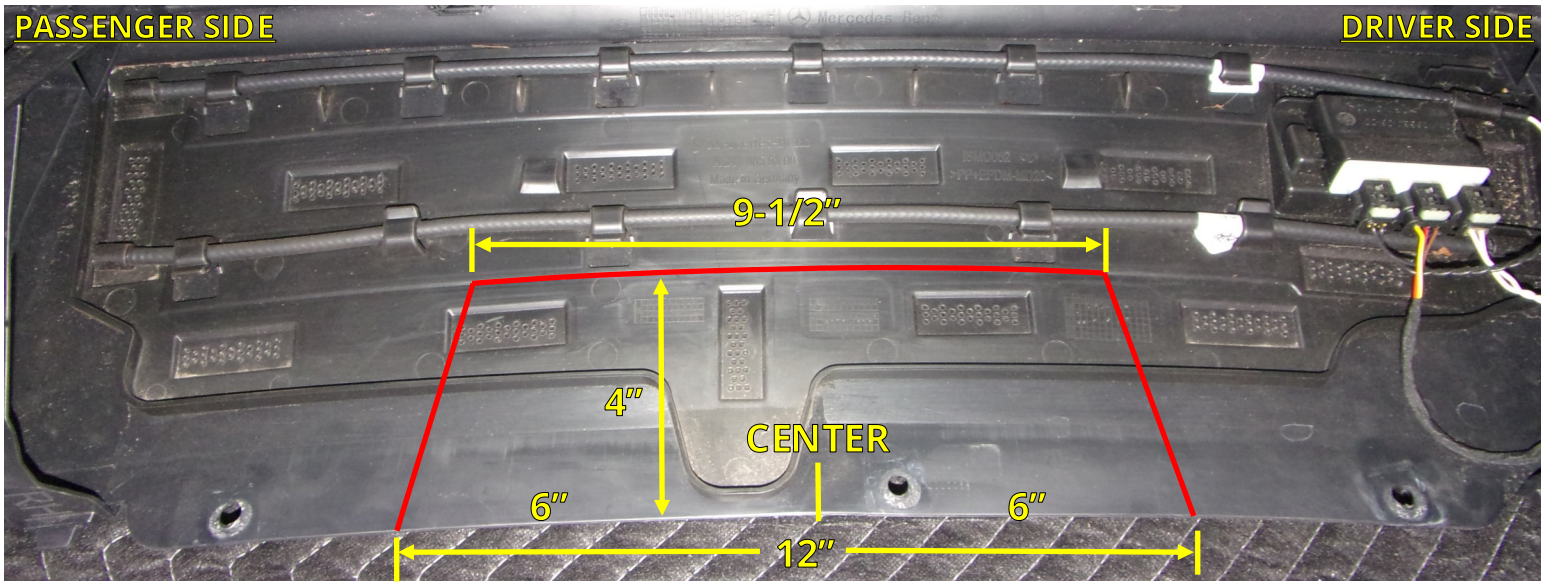
- Reinstall the 20 Amp fuse in the fuse holder located near the fuse box under the hood. Test the 4-way plug using a multimeter or connect the plug to a trailer and verify that the lights and brakes work correctly.
- Secure all wires and wiring components.
- Use silicone to waterproof the grommet with the cut end.
- 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, cargo lights, power outlets, body trim panels, and cargo area foam panel. Refer to Steps 16-22.

CUT ACCESS TO LATCH BLOCK

DREMEL TOOL

FILE

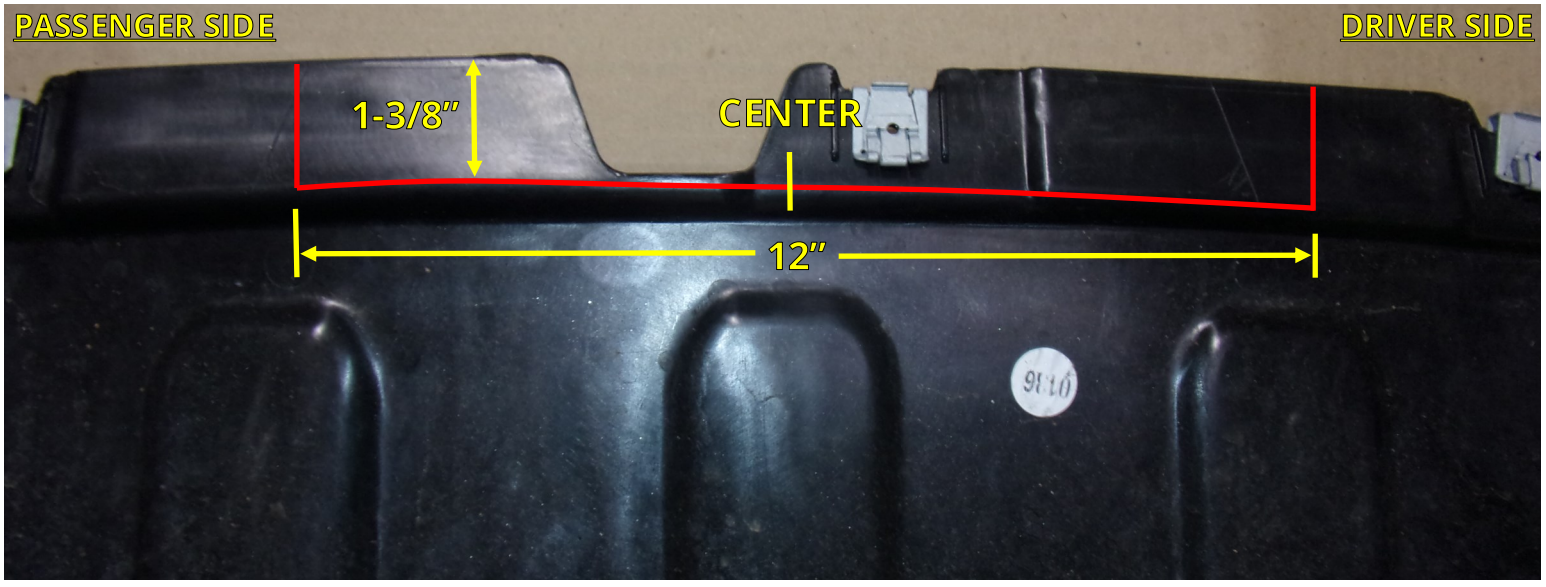
33. Use a Dremel tool to cut out the fascia, as shown. Use file to smooth out the cut.



DREMEL TOOL

FILE

34. Use a Dremel tool to cut out the gravel guard, as shown. Use file to smooth out the cut.



REINSTALL VEHICLE COMPONENTS

35. Reattach and secure the fascia, gravel guard and other vehicle components in reverse order. Refer to Steps 1-11.

NOTICE: It's important to remember to plug in the plugs in Step 11 before you completely install the fascia

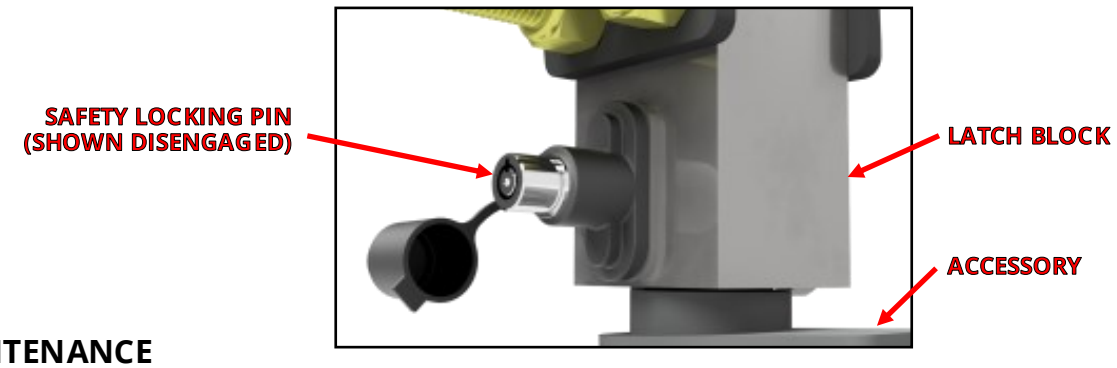
36. Finished view.

FINAL VEHICLE EXAMINATION

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

38. 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.