



# HITCH INSTALLATION INSTRUCTIONS

MAKE:

YEARS:

MODEL/TRIM:

GENESIS

2021-2024

GV80

www.stealthhitches.com 833•694•4824

RACK RECEIVER KIT#: **SHR70001**

COMPATIBLE WITH TOW KIT: **SHT25057A**



**2" RACK RECEIVER MAXIMUM PAYLOAD:** 600 LBS

**MAXIMUM TOW RATING:** 6000 LBS

**MAXIMUM TONGUE WEIGHT:** 600 LBS

## UNDER VEHICLE TRIMMING:

HEAT SHIELD: **NO**

FASCIA: **YES**

GRAVEL GUARD TRIMMING: **NO**

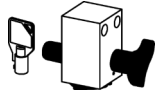


**READ ALL INSTRUCTION WARNINGS AND LABELS**



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

### PARTS SUPPLIED WITH RACK RECEIVER KIT:



LATCH BLOCK & KEYS



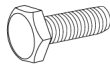
(2) BOLTS  
5/8"-11 x 5"



(2) 5/8"  
NYLOCK NUTS



2" RACK  
RECEIVER



(8) M12 1.25 x  
50mm BOLTS



(8) M12 LOCK  
WASHERS



(8) 1/2" FLAT  
WASHERS

### ADDITIONAL PARTS FOR TOW KIT:



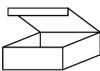
BALL MOUNT  
5" RISE, LONG



CHAIN HOOKS



2" BALL



ACTIVE WIRING  
KIT BOX

### TOOLS REQUIRED:



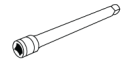
15/16" OPEN  
END WRENCH



10mm, 19mm, &  
15/16" SOCKETS



TORQUE  
WRENCH



SOCKET  
EXTENSION



SAFETY GLASSES



PRY BAR



FLASHLIGHT



RATCHET



PLASTIC  
PRY TOOLS



RATCHET  
STRAP



90 DEGREE  
PICK



DREMEL TOOL



FILE



10 mm  
HOLLOW NUT  
DRIVER

### ADDITIONAL TOOLS FOR TOW KIT:



MULTIMETER



PLIERS



PHILLIPS HEAD  
SCREWDRIVER



12mm  
SOCKET

# <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 wiring harness that is compatible with the vehicle's wiring. The **Active Harness** plugs into the vehicle's wiring so that the vehicle's computer can communicate with the trailer wiring. This allows certain functions such as cameras or backup alarms to continue to operate as designed.










**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**

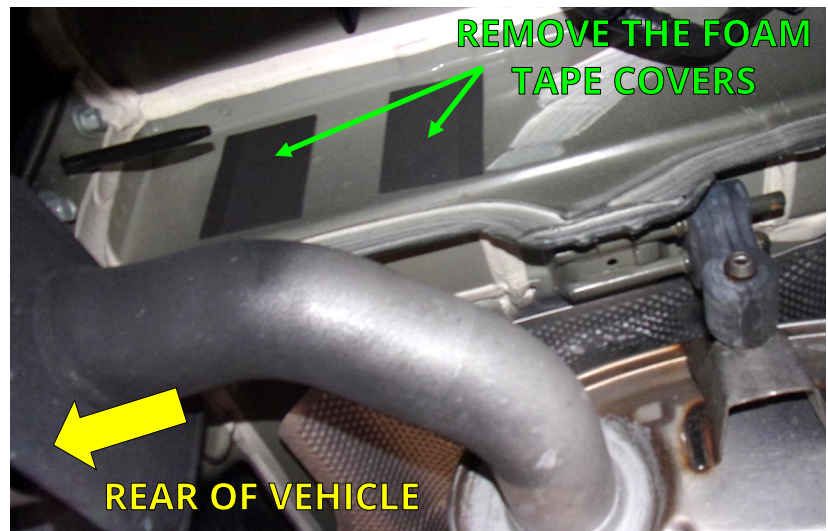
### **Failure to comply with the safety information in these instructions could result in serious injury or death.**

-  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.

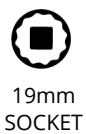
**NOTICE:** Installation of hitch requires removal of vehicle parts and interaction with vehicular electronics. Before installation, check the condition of body panels and note any locations where panels are not flush. Check the electronic functions of the vehicle, such as: headlights, taillights, turn 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

1. Under the rear of the vehicle, directly above the side of the muffler, locate and remove the foam tape covers as shown in image.



2. Locate the bumper locating pin, shown in the image. Use a pry bar to bend the pin out of the way. This will allow access to the bottom rear threaded hole.



3. Using the provided M12 Bolts, screw a bolt into each hole which was under the removed foam tape. 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.

Repeat Steps 1-3 on other side of vehicle.



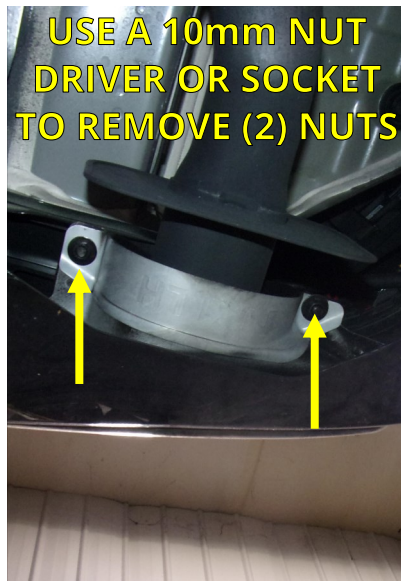
## GAIN ACCESS TO MOUNTING AREA CONTINUED



- or -



4. Locate the exhaust bezels near the end of the tailpipes. Use a 10mm nut driver or socket to remove (2) nuts from each bezel.

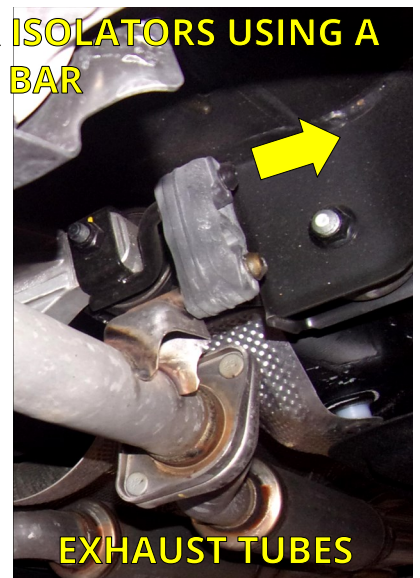


5. To install the Stealth hitch frame the muffler will need to be lowered. To begin, place a ratchet strap under the vehicle so that it supports the muffler and exhaust, as shown.

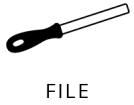


6. Locate the (2) rear bracket hangers under the vehicle which support the muffler. Next locate the (2) bracket hangers forward of the muffler which support the exhaust tubes. Use a pry bar to disconnect the tops of all (4) rubber isolators.

**NOTE:** Spray lubricant on the connection point to ease removal.

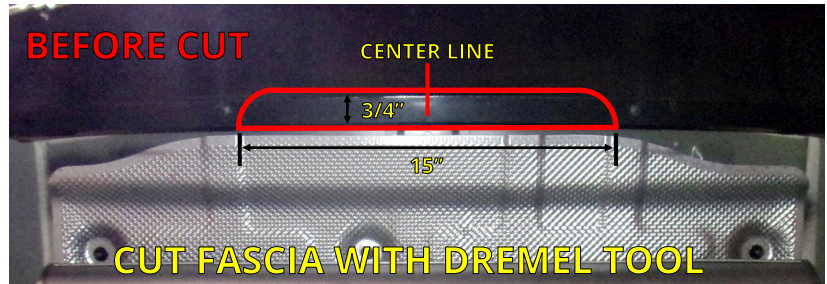


## CUT ACCESS HOLE IN FASCIA



7. Installation of the hitch will require cutting out a portion of the fascia with a Dremel tool. The area to cut is under the vehicle directly behind the muffler. Use the image to mark and cut the fascia as shown. Use a file to smooth the edges of the cut.

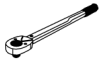
**NOTICE:** Check for the presence of a hands free trunk release cable in the cut location. If present, remove the cable before cutting.



## INSTALL STEALTH HITCH FRAME



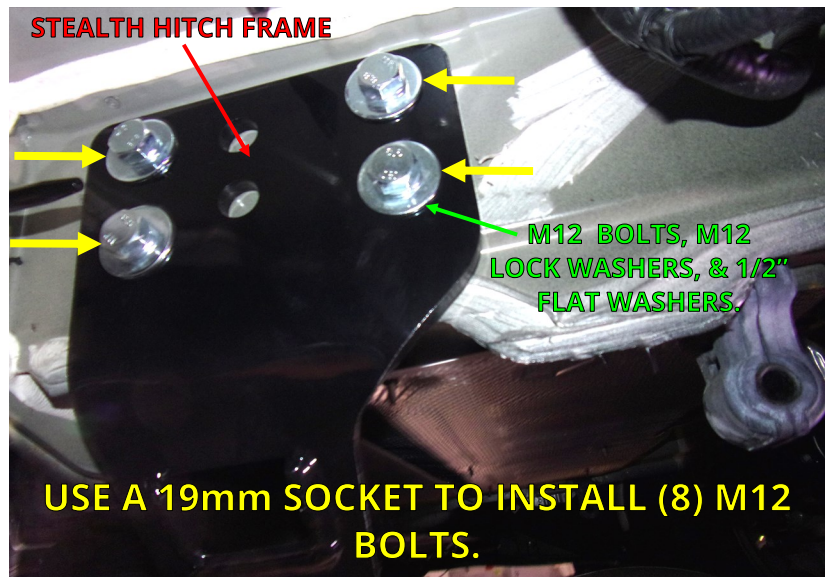
19mm  
SOCKET



TORQUE  
WRENCH

8. Install the Stealth hitch frame onto the vehicle. Before beginning, lower the muffler and exhaust by loosening the ratchet strap. Next, raise the hitch over the muffler while aligning the holes on either side of the hitch with the (8) threaded holes in the frame. Install (8) supplied M12 bolts, M12 lock washers and 1/2" flat washers as shown in the image. Use a torque wrench to tighten the bolts to 85 ft.-lbs.

**NOTE:** Move the Stealth hitch frame up and back as much as possible, away from the muffler, before tightening the bolts.



## MOUNT LATCH BLOCK



15/16"  
SOCKET



15/16" OPEN  
END WRENCH



TORQUE  
WRENCH

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

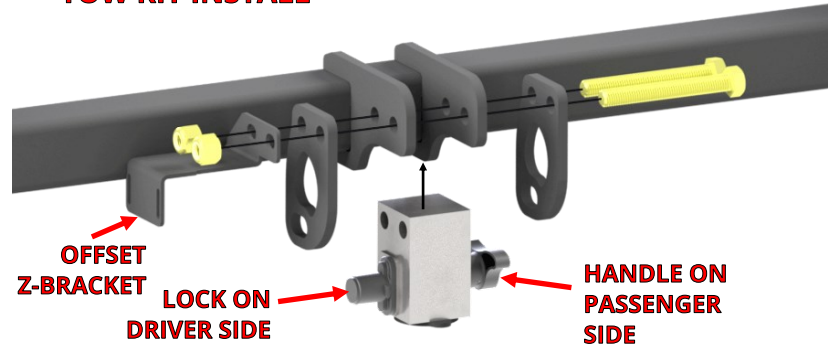
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
- **Tow Kit:** Retrieve offset Z-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and offset Z-bracket with (2) 5/8"-11 x 5" bolts and (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 32.  
IF INSTALLING A TOW KIT, CONTINUE TO STEP 10.

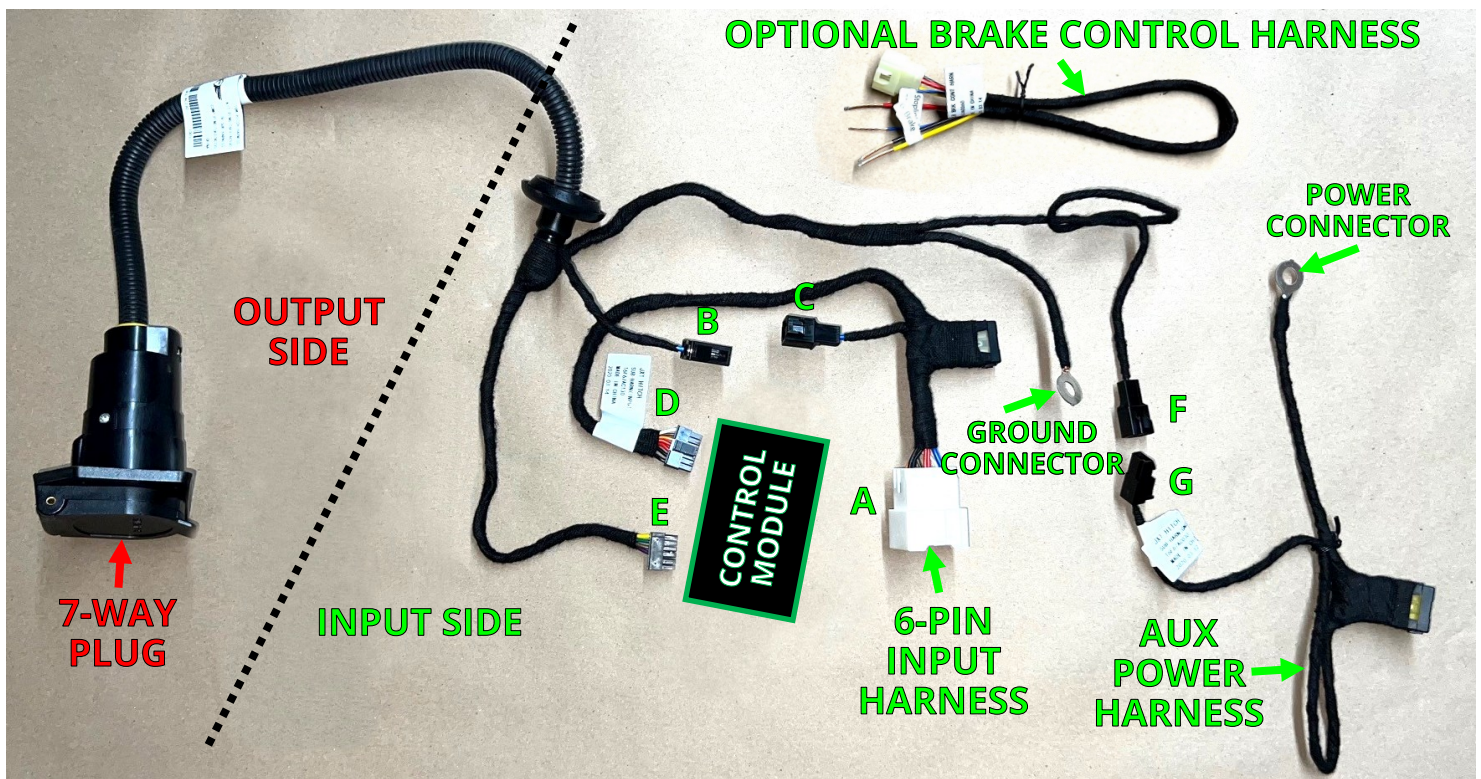
## INSTALL ACTIVE WIRING KIT

#	DESCRIPTION	QTY
1	7-WAY WIRING HARNESS (OEM)	1
	• OUTPUT HARNESS AND 7-WAY PLUG	1
	• OPTIONAL BRAKE CONTROL PLUG	1
	• AUX POWER HARNESS W/FUSE	1
	• 6-PIN INPUT HARNESS	1
2	CONTROL MODULE	1
3	SCREW AND NUT BAG	1
4	CABLE TIE - 8"	12
5	CABLE TIE - 14"	2
6	ADHESIVE FOAM STRIP	2
7	OFFSET Z-BRACKET	1
8	MOUNTING BRACKET	1
9	7-POLE TO 4-POLE ADAPTER	1



10. Locate the wiring kit box. Review the contents of the box against the list above to check for missing components. The active 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 wiring harness. The **"output"** side of the module delivers this information to the 7-way plug. The control module is connected to the vehicle 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 ACTIVE WIRING KIT CONTINUED

11. In the rear cargo area, lift up and remove the floor panel (some models may vary in design).



12. On the passenger side of the cargo area lift up and remove the side floor panel as shown.



13. Next, lift up on the cargo trunk cover to remove.



14. Remove the threshold in the rear cargo area. Use a pry tool on the sides of the threshold to lift up and remove.





## INSTALL ACTIVE WIRING KIT CONTINUED



10mm  
SOCKET



90 DEGREE  
PICK

15. Under the area where the threshold was removed, use a 10mm socket to remove (4) screws.
16. Use a 90 degree pick tool to dislodge (2) plastic covers (green arrows) to gain access to (2) screws. Use a 10mm socket to remove the screws.



17. Remove the battery cover as shown.

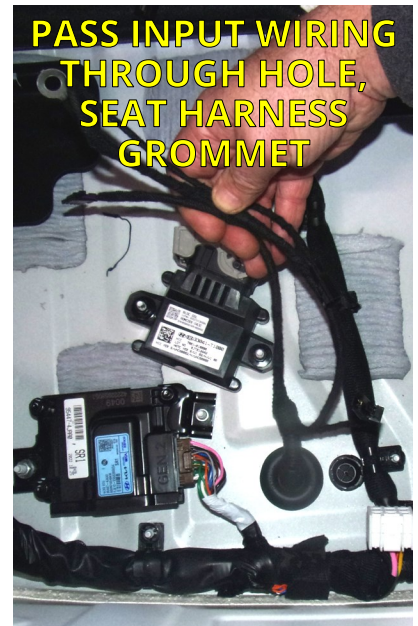


18. Lift up and remove the plastic trunk bin and lid from the rear cargo area.



## INSTALL ACTIVE WIRING KIT CONTINUED

19. Find the rubber grommet shown in the image inside the floor of the rear cargo area, and remove it.
20. Retrieve the output wiring harness from the wiring kit box. This harness comes with a 7-way plug and grommet attached to it. Pass the input plugs of the harness from the outside of the vehicle to the inside, through the hole. Keep pulling the harness through until the grommet is fully through the hole. Seat the grommet in the hole and ensure it is secured.



21. Retrieve the 6-pin input harness from the wiring kit box. Locate the corresponding 6-pin connector located at the back of the vehicle's cargo area. Plug the two connectors into each other securely.
22. Refer to the diagram on Page 7. Identify the plugs labeled "B" and "C" on the diagram. Locate the two plugs inside the vehicle cargo area. connect these two plugs together as shown in the image.



12mm  
SOCKET

23. Use a socket to secure the output harness ground connector with the indicated ground screw.

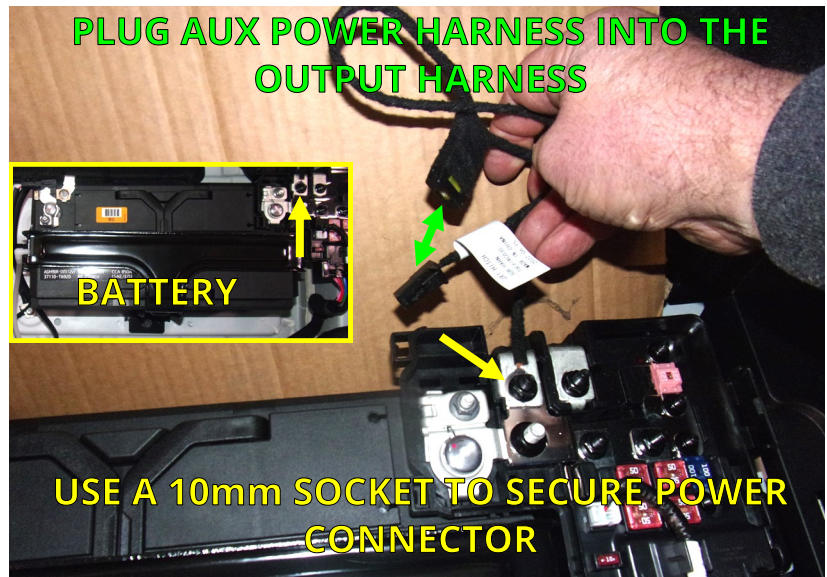


## INSTALL ACTIVE WIRING KIT CONTINUED

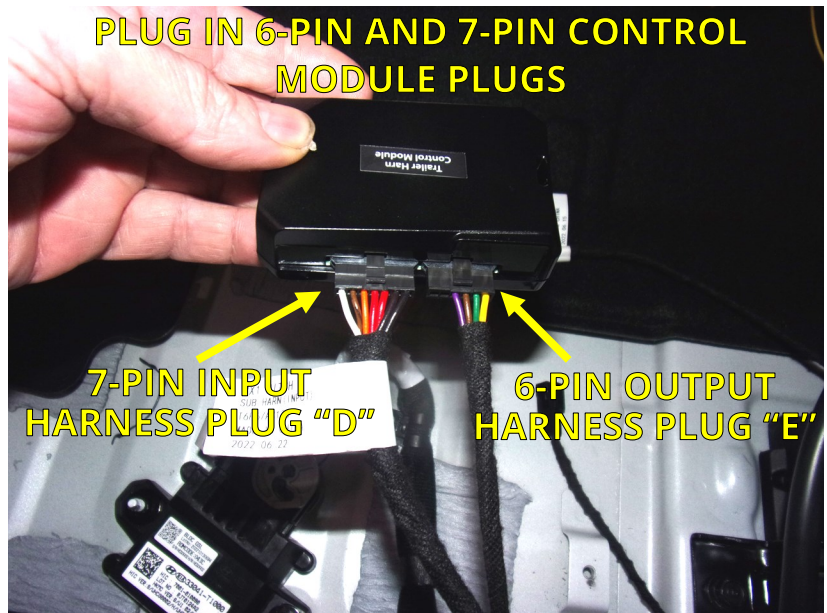


10mm  
SOCKET

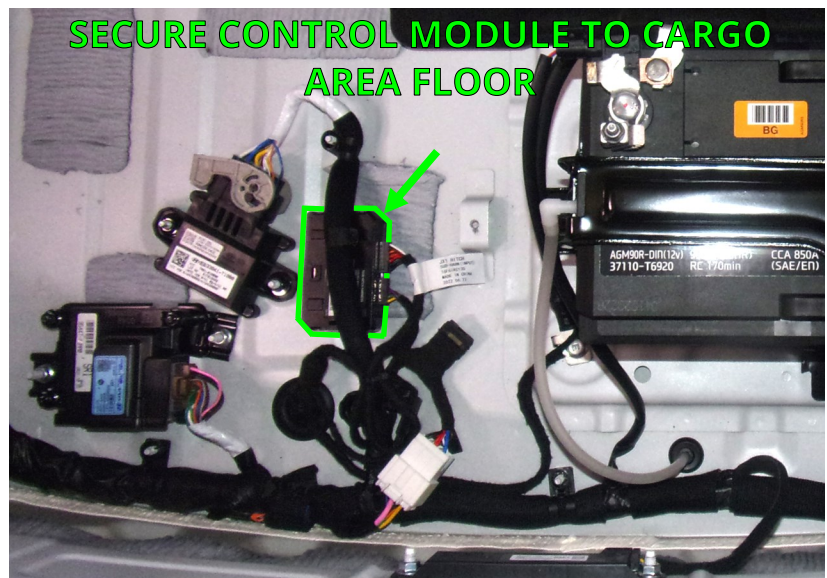
24. Retrieve the aux power harness from the wiring kit box. Use a socket to secure the power connector with the indicated 12v battery terminal.
25. Refer to the diagram on Page 7. Identify the plugs labeled "F" and "G" on the diagram. Locate the plug "F" inside the vehicle cargo area and connect it to plug "G" of the aux power harness.



26. Retrieve the control module from the wiring kit box. Plug in the input harness 7-pin connector "D" and 6-pin output harness connector "E" into the control module, as shown in the image.



27. Use the provided double sided tape to secure the control module to the bottom of the cargo area floor underneath the wiring bundle.

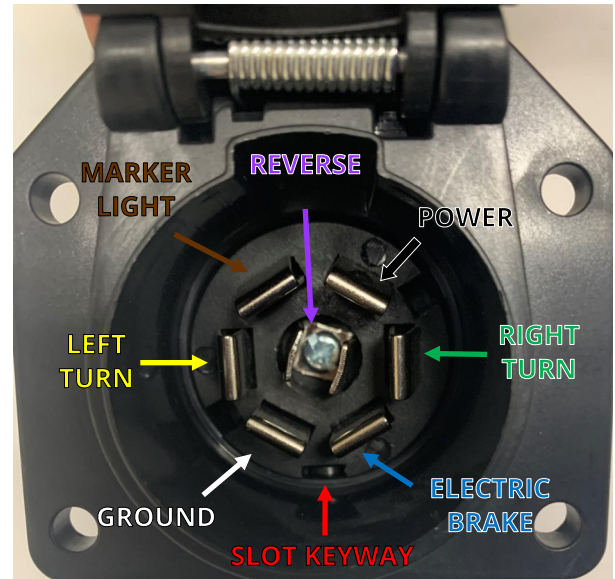


## TEST 7-WAY HARNESS WIRING



MULTIMETER

28. While everything is still accessible, you should test the wiring to make sure everything is connected properly and in working order.



- Start by connecting the multimeter negative probe to the ground blade on the 7-way receptacle.
- Next, connect the multimeter positive probe to the power blade on the 7-way receptacle and check for 12 volts.
- Once that is confirmed, move the positive probe to the left turn blade on the 7-way receptacle and check for 12 volts when the vehicle left turn blinker is active. You should see it pulse.
- Next, move the positive probe to the right turn blade and check for 12 volts when the right turn blinker is active. You should see it pulse.
- Next, move the positive probe to the marker/taillights. With the vehicle lights on you should see 12 volts constant.
- Lastly, with the brake depressed, move the positive probe to the left turn blade where you should see 12 volts constant. Move the probe to the right turn blade where you should also see 12 volts constant.

## SECURE TOW KIT

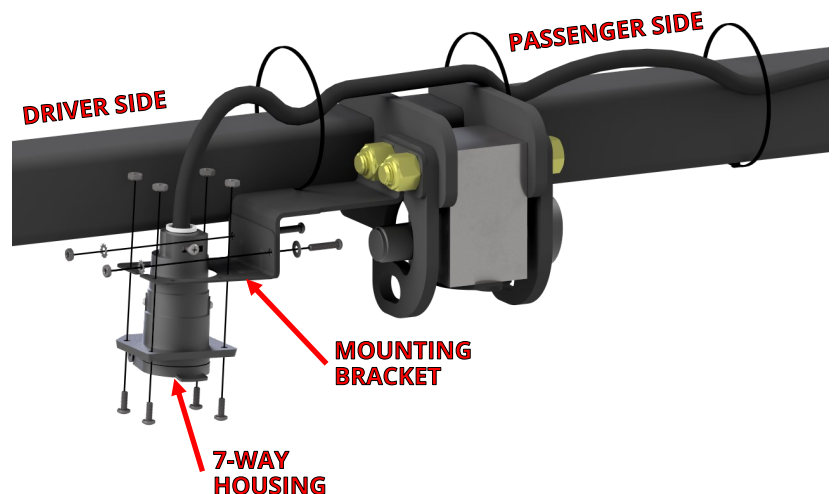


PHILLIPS HEAD  
SCREWDRIVER

29. Attach the mounting bracket and 7-way housing to the Stealth hitch frame as shown. Secure harness to Stealth hitch frame with cable ties.

30. Secure all wires and wiring components. 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.

31. Reattach and secure the cargo area floor components that were detached for wiring kit install. Refer to Steps 11-18.



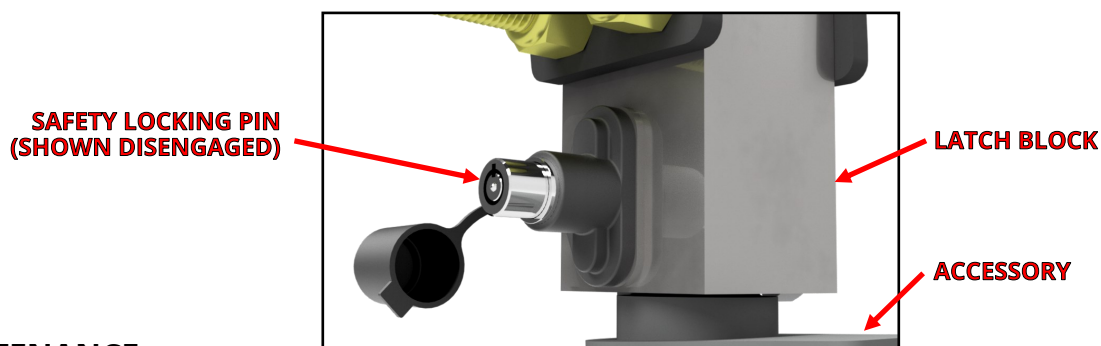
## REINSTALL VEHICLE COMPONENTS

32. Reattach and secure the (4) rubber hangers connecting the exhaust and muffler to the vehicle. Remove the ratchet strap. Reattach the exhaust bezels. Refer to Steps 4-6.



## FINAL VEHICLE EXAMINATION

33. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
34. 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.