



www.stealthhitches.com 833-694-4824

# HITCH INSTALLATION INSTRUCTIONS

<b>MAKE:</b> Mercedes	<b>YEARS:</b> 2016 - 2023 2016 - 2022 2016 - 2022 2018 - 2021 2016 - 2022	<b>MODEL/TRIM:</b> GLC 300 4-matic Coupe GLC 300 SUV including AMG line pkg GLC 300 4-matic SUV including AMG line pkg GLC SUV 350e 4-matic Hybrid GLC AMG 43 SUV
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RACK RECEIVER KIT#: **SHR32018**

COMPATIBLE WITH TOW KIT: **SHT25051**



**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, on some GLC SUV 300 models only**  
 GRAVEL GUARD TRIMMING: **NO**

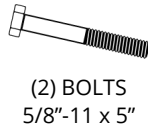
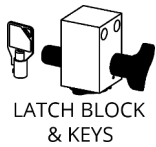


**READ ALL INSTRUCTION WARNINGS AND LABELS**



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

## PARTS SUPPLIED WITH RACK RECEIVER KIT:



## ADDITIONAL PARTS FOR TOW KIT:



## TOOLS REQUIRED:



## ADDITIONAL TOOLS FOR TOW KIT:



**RACK RECEIVER INSTALLATION:** USE STEPS 1-23 & 37-41  
**TOW KIT INSTALLATION:** USE STEPS 1-41

# <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

1. Open vehicle cargo area. Lift up and remove rear floor panel. If the floor panel can't easily be removed, prop the panel open.



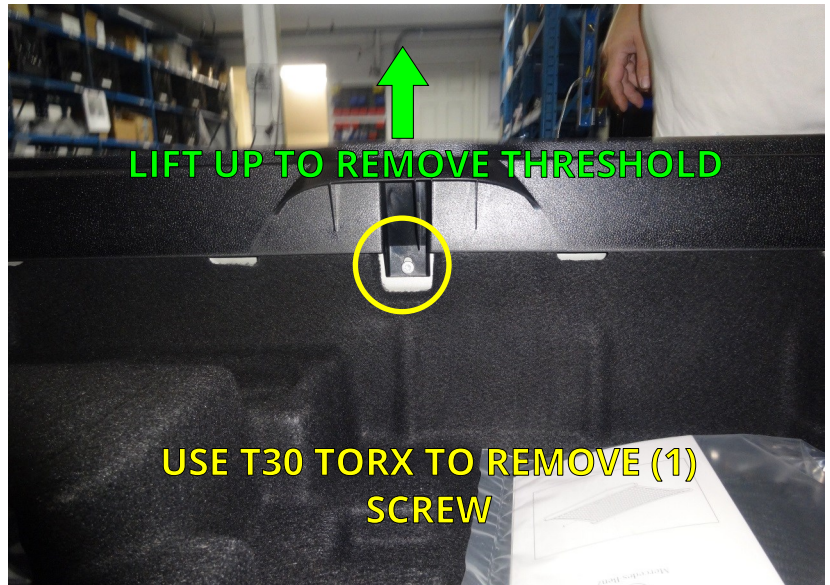
T30 TORX



PLASTIC  
PRY TOOLS

2. On the rear wall of the cargo area locate and remove (1) Torx screw from the threshold, see image. Use a plastic pry tool to dislodge the threshold, then lift up to remove.

**NOTE:** Replacement threshold clips are provided if clips are broken during threshold removal.

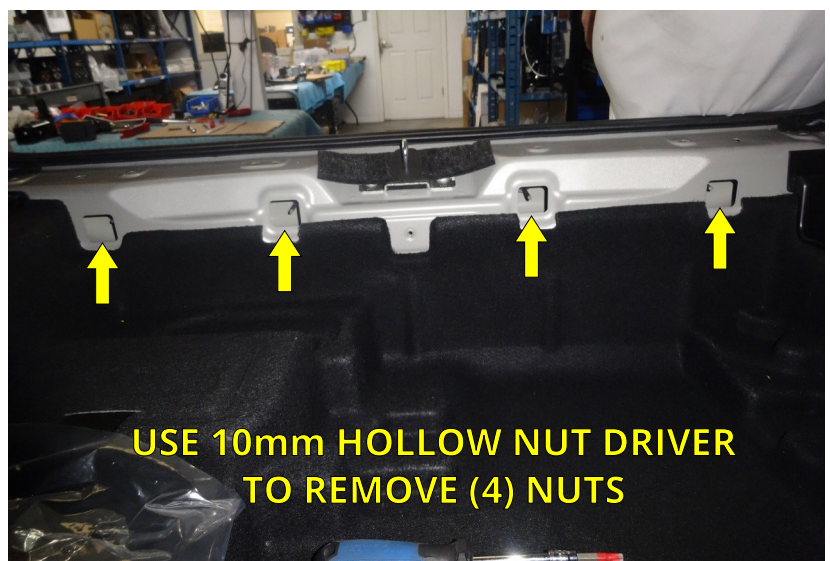


USE T30 TORX TO REMOVE (1)  
SCREW



10 mm  
HOLLOW NUT  
DRIVER

3. Locate the (4) nuts inside the rear wall of the cargo area. Remove each nut with a hollow nut driver.



USE 10mm HOLLOW NUT DRIVER  
TO REMOVE (4) NUTS

## GAIN ACCESS TO MOUNTING AREA CONTINUED



90 DEGREE PICK



T40 TORX

-or-



16mm Torx Socket

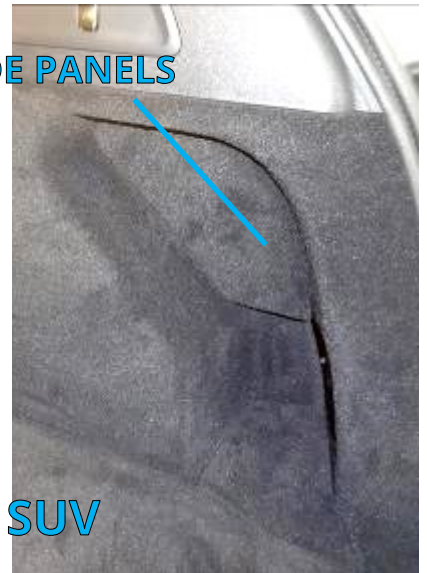
4. **GLC Coupe only** Remove the side floor panels from both sides of the cargo area and the net from the driver side.
5. **GLC Coupe only** Locate the (2) anchors attached to the rear wall of the cargo area. Use a 90 degree pick to remove the plastic cover from each anchor then remove them both with a T40 Torx.



REMOVE (2) REAR TRUNK ANCHORS

GLC COUPE

6. **GLC SUV only** Remove left and right side panels for access to rear of the taillights.



REMOVE SIDE PANELS

GLC SUV



8mm SOCKET

7. Locate and remove (3) nuts securing each of the rear taillights.
  - **GLC Coupe only** Uncover the nuts by pulling the lining away from the frame on the side of the cargo area.
  - **GLC SUV only** Squeeze the plug clip to disconnect the taillight harness.



GLC SUV ONLY  
UNCLIP THE TAILLIGHT HARNESS

USE 8mm SOCKET TO REMOVE (3) NUTS

## GAIN ACCESS TO MOUNTING AREA CONTINUED



90 DEGREE PICK

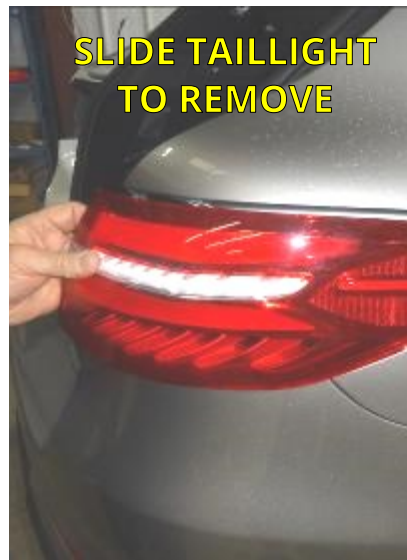


PLASTIC PRY TOOLS

8. **GLC Coupe only** Remove (2) rivets from each taillight trim piece and **save** for reinstallation.



9. Remove each taillight.
- **GLC SUV only** Slide the taillight rearward to remove.
  - **GLC Coupe only** Slide taillight outward to the side of the vehicle to remove. Squeeze the plug clip to disconnect the taillight harness.



90 DEGREE PICK



8mm SOCKET

10. Inside the rear wheel well locate (3) rivets (yellow arrows) which are holding the wheel well liner. Use a 90 degree pick to remove these (3) rivets and **save** for reinstallation.

11. Fold the flexible liner back toward the tire. Locate and remove (1) rivet (green arrow). Locate and remove (1) screw (red arrow). Repeat Steps 10-11 on other side of vehicle.



## GAIN ACCESS TO MOUNTING AREA CONTINUED



10mm  
SOCKET



90 DEGREE  
PICK

12. Underneath the rear of the vehicle, use a socket to remove (6) screws from the bottom of the fascia.

**NOTE:** Some vehicle models may have (1) plastic rivet behind the each rear tire on the bottom of the fascia. If present, use a 90 degree pick tool to remove.



13. Inside the rear cargo area, remove the floor pan to gain access to (2) electrical sensor plugs.



14. Check the against the rear trunk wall, on the passenger side for the indicated plugs. If plugs are not present, skip this step. If the plugs are present, unplug the electrical sensor plugs. Dislodge the grommet and push to the rear/outside of the vehicle. These harnesses are connected to the vehicle fascia.



## GAIN ACCESS TO MOUNTING AREA CONTINUED



PLASTIC  
PRY TOOLS



PAINTER'S TAPE

15. To allow partial removal of the rear wheel well trim, (3) clips will need to be disconnected. Apply outward pressure on wheel well trim. Start with the bottom clip and work up. Push down on clip to disconnect. Use plastic pry tools on hard to reach clips.

**NOTE:** To protect the trim from being scratched during the removal or replacement, cover it with painter's tape or something similar.



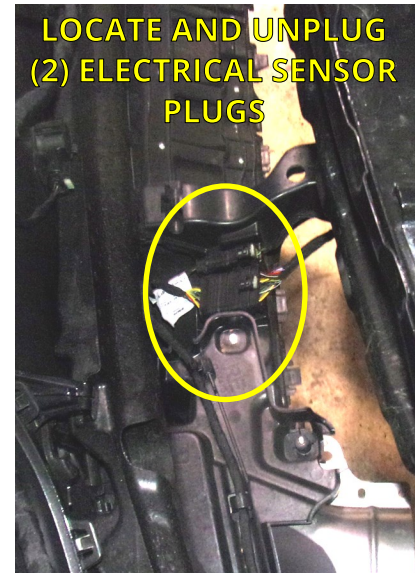
PLASTIC  
PRY TOOLS

16. Release (3) fascia clips with a plastic pry tool. Push on the clips exposed in the seam between the two panels to remove. Continue applying outward and rearward pressure until all clips are released.



17. This step requires a partner. Slide the fascia rearward, keeping the fascia close to the vehicle. If the plugs were disconnected in Step 14, remove the grommet and the electrical harness before removing the fascia completely. If Step 14 was skipped disconnect the electrical harness plug between the fascia and the vehicle.

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

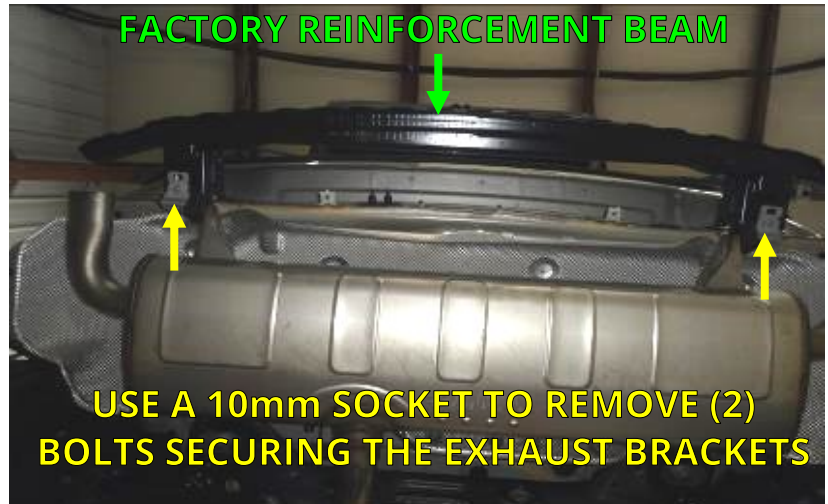


## GAIN ACCESS TO MOUNTING AREA CONTINUED



10mm  
SOCKET

18. Locate the two exhaust brackets attached to the factory reinforcement beam under the rear of the vehicle. Use a socket to remove (1) exhaust bracket bolt on each side of the vehicle.

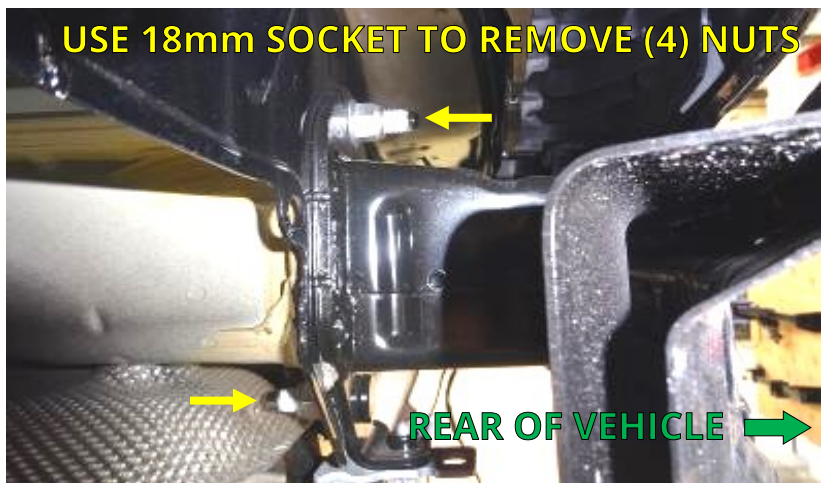


18mm  
DEEP WELL  
SOCKET



18mm  
OPEN END  
WRENCH

19. Remove (2) nuts from each side of the factory reinforcement beam with a socket and open end wrench. The top nut is facing to the rear of the vehicle, and the bottom nut to the front. **Save** (2) factory nuts for reinstallation, **discard** the factory reinforcement beam.



## INSTALL STEALTH HITCH FRAME



RATCHET



18mm  
SOCKET



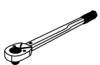
1/2" SOCKET



3/4"  
SOCKET



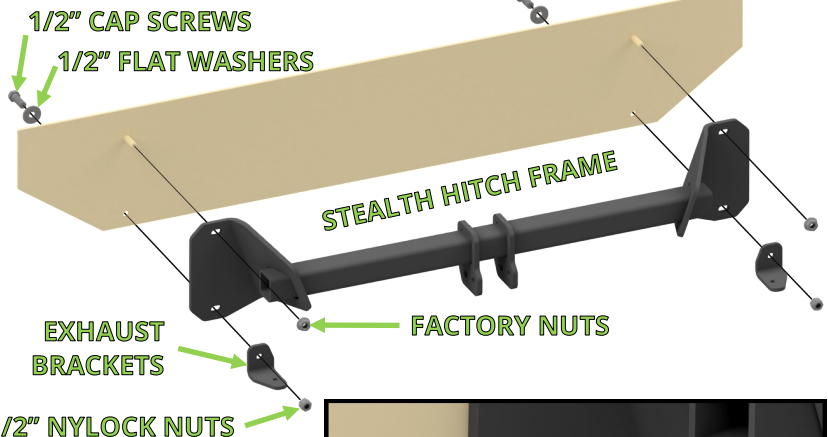
1/2" WRENCH



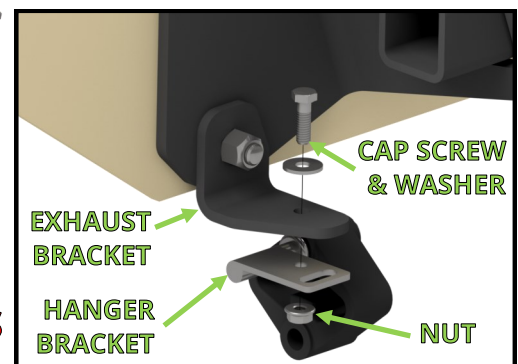
TORQUE  
WRENCH

20. Install Stealth hitch frame and exhaust brackets over the (2) studs used for the factory reinforcement beam. The exhaust brackets will install on the bottom of the hitch frame. Insert the 1/2" bolt and flat washer through the bottom hole, through the vehicle body, hitch and exhaust bracket. Center the hitch frame. Level the exhaust brackets. Use a torque wrench to tighten the (2) factory nuts to 85 ft.-lbs. and the (2) 1/2" bolts to 100 ft.-lbs.

### USE 18mm SOCKET TO TIGHTEN NUTS



### USE A 1/2" SOCKET AND WRENCH TO TIGHTEN BOLTS



21. Using the supplied 5/16" cap screws, flat washers, and flange nuts, reattach the exhaust hangers to the exhaust brackets as shown in the image. Repeat on both sides of the vehicle.



## MOUNT LATCH BLOCK



15/16"  
SOCKET



15/16" OPEN  
END WRENCH



TORQUE  
WRENCH

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

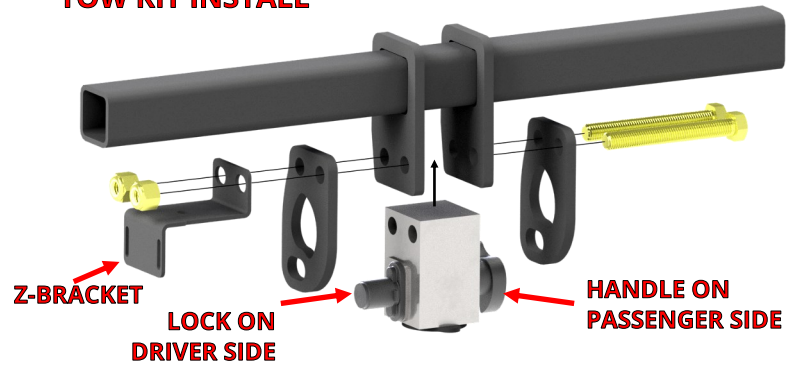
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
- **Tow Kit:** Retrieve Z-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and Z-bracket with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock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



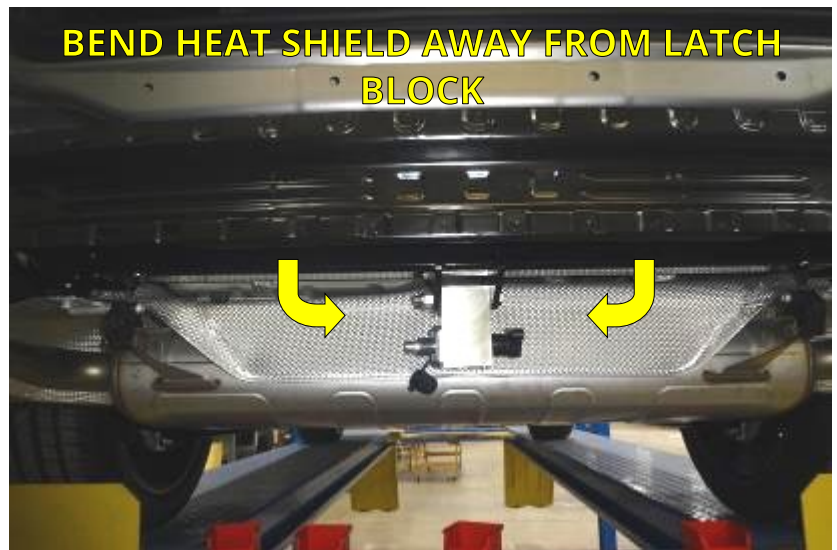
### TOW KIT INSTALL



10mm  
SOCKET

23. Bend the heat shield away from the latch block toward the exhaust, until there is no interference with the handle.

### BEND HEAT SHIELD AWAY FROM LATCH BLOCK



**IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 37.  
IF INSTALLING A TOW KIT, CONTINUE TO STEP 24.**

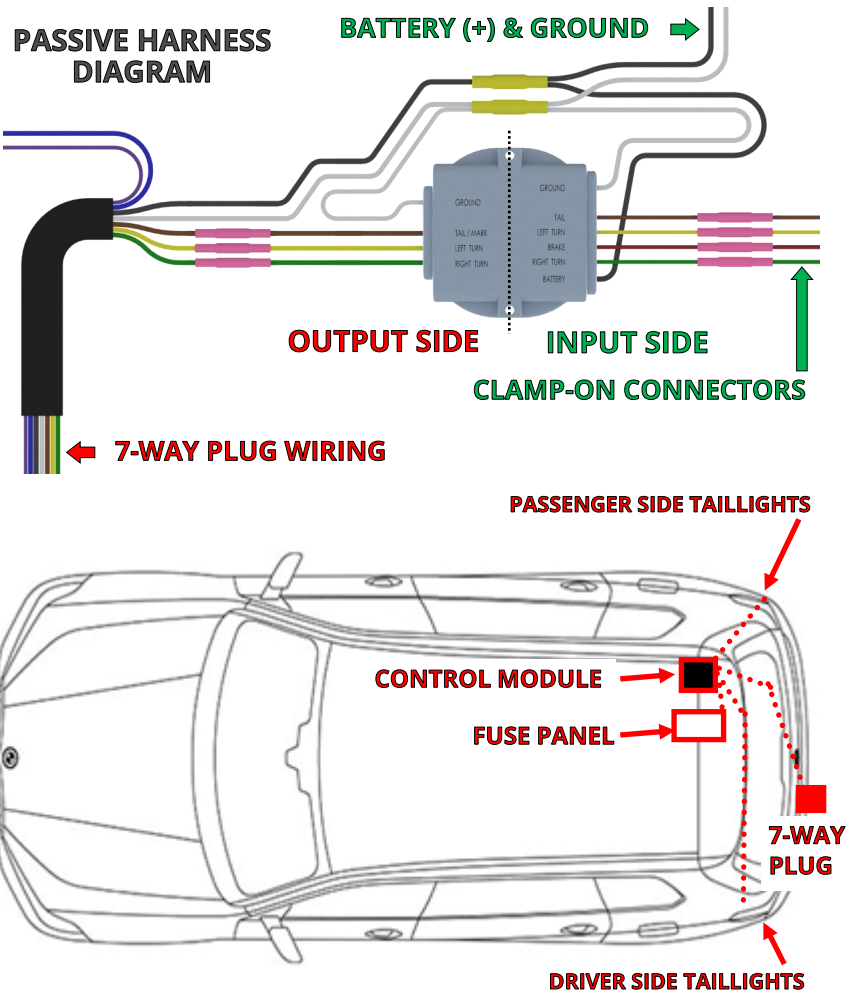
# INSTALL PASSIVE WIRING KIT

#	DESCRIPTION	QTY
1	7-WAY WIRING HARNESS • FUSE HOLDER & FUSE • CONTROL MODULE & WIRES	1
2	ADHESIVE FOAM STRIP	2
3	FORK TERMINAL	1
4	CLAMP-ON CONNECTORS	5
5	5/8" LONG PHILLIPS SCREWS	4
6	#10 LOCK NUT	4
7	CABLE TIE - 8"	4
8	CABLE TIE - 14"	3
9	Z-BRACKET	1
10	MOUNTING BRACKET	1
11	7-POLE HOUSING	1
12	7-POLE TO 4-POLE ADAPTER	1



24. 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 7-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



SIDE CUTTERS

25. Locate the grommet in the rear of the trunk wall. Use side cutters to cut the end from one of the fingers in the grommet. Route the output wires from inside to the outside of vehicle.

26. Use provided adhesive foam strips to secure the control module in the location shown.



PLIERS



MULTIMETER

27. The wires on the input side of the control module need to be attached to the vehicle wiring. Inside the passenger side compartment, use clamp-on connectors to connect the green and brown wires to indicated wires behind taillight. (See reference table on next page.)

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



PLIERS


















MULTIMETER

28. Using an existing wiring harness as a guide, route the yellow wire to the driver side behind taillight. Use clamp-on connector to connect the yellow wire to the left turn signal wire. (See reference table below.)



**CLAMP-ON CONNECTOR COLOR REFERENCE TABLE**

<b>SIGNAL INPUT WIRES</b>				<b>POWER &amp; GROUND WIRES</b>		
<u>FUNCTION</u>	<u>HARNESS</u>	<u>MODEL</u>	<u>VEHICLE</u>			
<u>LEFT TURN</u>	 YELLOW	ALL OTHER MODELS	 GRAY/BLACK	<u>12V+ (POWER)</u>	 BLACK	FUSE PANEL POWER STUD
		2023 4-MATIC COUPE	 BLACK/WHITE			
<u>RIGHT TURN</u>	 GREEN	ALL OTHER MODELS	 GREEN/BROWN <i>or</i> GRAY/BLACK	<u>GROUND</u>	 WHITE	GROUND STUD
		2023 4-MATIC COUPE	 BLACK/WHITE			
<u>MARKER</u>	 BROWN	ALL OTHER MODELS	 PURPLE/BLUE <i>or</i> BLACK/PURPLE			
		2023 4-MATIC COUPE	 BLACK/PURPLE			
<u>BRAKE</u>	 RED	ALL OTHER MODELS	<i>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</i>			
		2023 4-MATIC COUPE	 GREY/BLACK			
<u>REVERSE</u>	 PURPLE	For use with trailer reverse lights or to disable the trailer brakes when backing with surge brakes. To connect, isolate vehicle's reverse light circuit and connect the purple wire from the trailer wiring harness to vehicle reverse light circuit. <b>Trailers rarely have reverse lights or surge brakes.</b>				
<u>ELECTRIC BRAKE</u>	 BLUE	Only used when a hard wired brake controller is mounted inside the vehicle and your trailer has electric brakes. See brake controller instructions for this wire.				

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



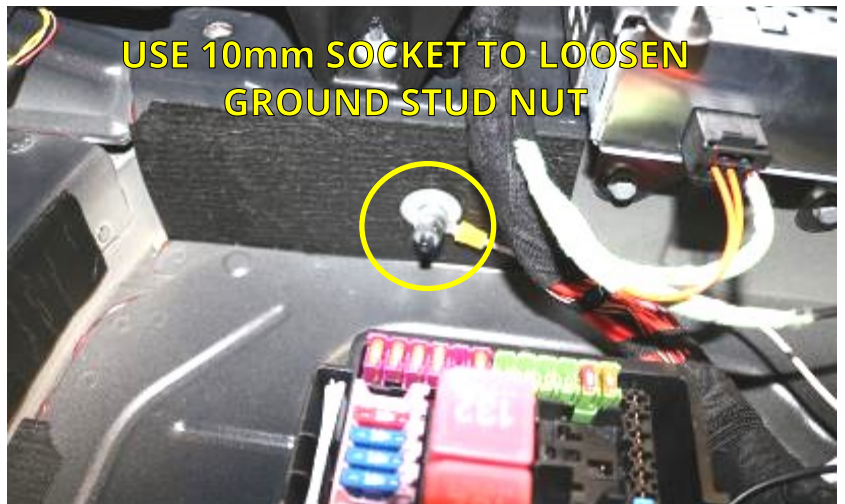
10mm SOCKET



STRIPPER/CRIMPING TOOL

29. Locate the ground stud in the rear passenger side cargo area. Trim white ground wire so it will reach stud without excess wire. Crimp supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the ground stud.

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

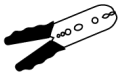


## INSTALL WIRING KIT CONTINUED

30. Unclip the release clip to loosen fuse panel (yellow arrow). Slide the fuse panel toward the front of the vehicle to dislodge. Turn the fuse panel over to find the power stud.

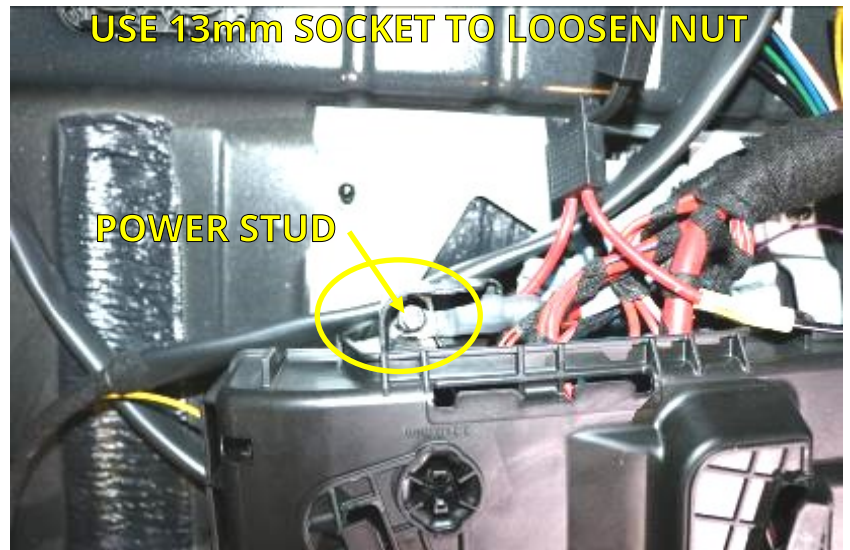


13mm  
SOCKET



STRIPPER/  
CRIMPING  
TOOL

31. Locate the fuse holder supplied in the wiring kit box. Remove the fuse from the fuse holder. Crimp fuse holder lead to black power wire and attach the ring terminal to the fuse panel power stud.

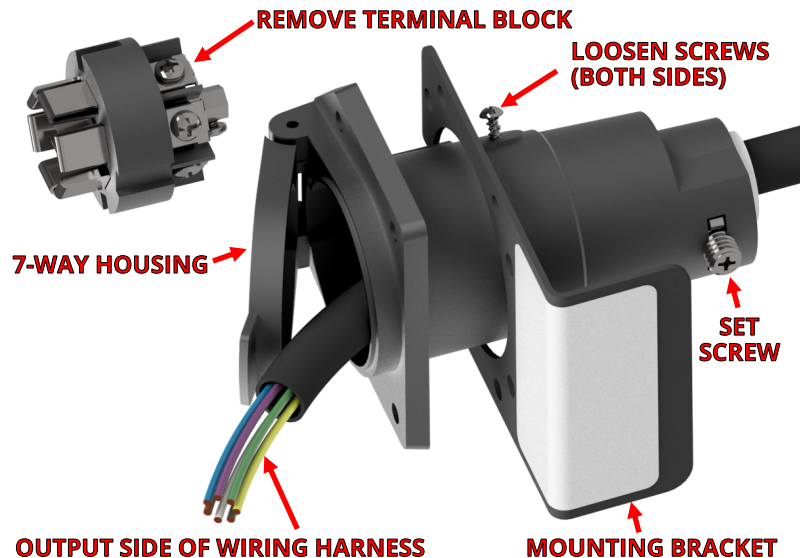


## WIRE 7-WAY PLUG



PHILLIPS HEAD  
SCREWDRIVER

32. Locate the 7-way housing. Use a screwdriver to loosen (2) screws. Remove 7-way round terminal block. Place the mounting bracket onto the 7-way housing as shown. Use a screwdriver to loosen the set screw at the bottom of the 7-way housing. Route output side wires of the wiring harness through the 7-way housing.



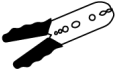
## WIRE 7-WAY PLUG CONTINUED

**Please follow instructions below very carefully.**

**Incorrect wiring of the 7-way receptacle causes the vast majority of wiring problems.**



PHILLIPS HEAD  
SCREWDRIVER

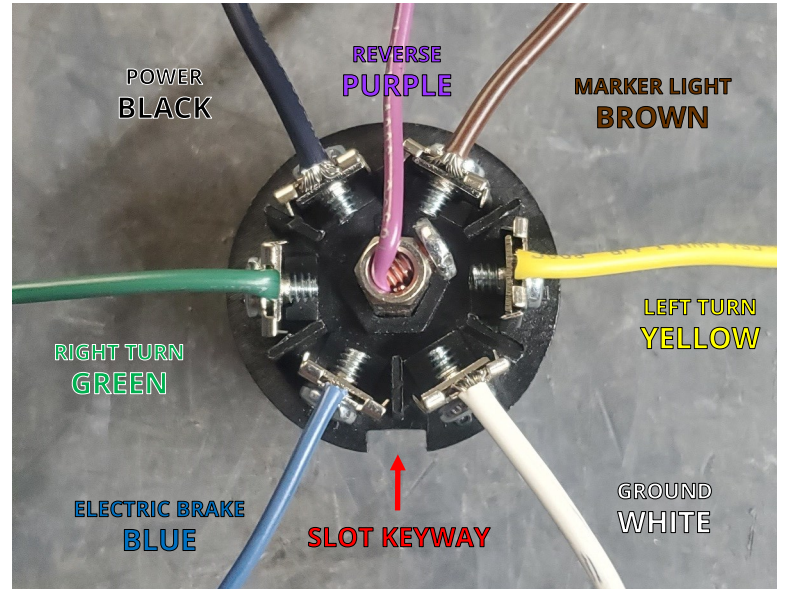


STRIPPER/  
CRIMPING  
TOOL

33. Locate the slot keyway.  
Starting from the keyway  
going **clockwise**, attach the  
wires as follows:

- Blue
- Green
- Black
- Brown
- Yellow
- White
- Purple (middle)

**NOTICE:** Markings on the  
receptacle may not match the  
correct wire configuration.  
**Please disregard and follow the  
instruction above.**



## TEST 7-WAY HARNESS WIRING



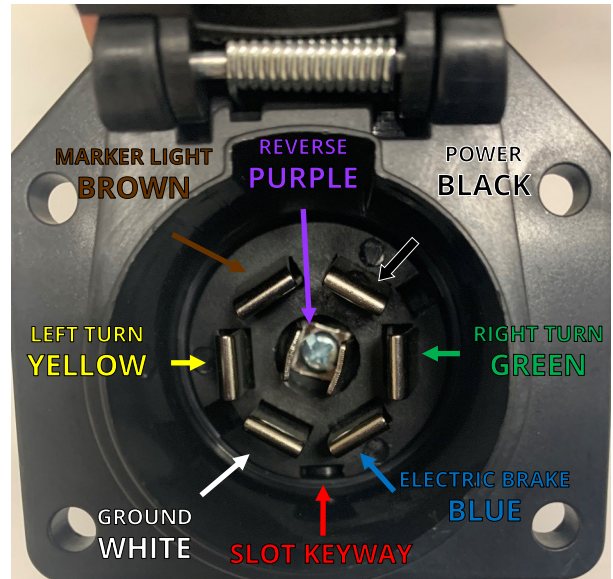
PHILLIPS HEAD  
SCREWDRIVER



MULTIMETER

34. Put the 7-way receptacle back  
together. While everything is  
still accessible, you should  
test the wiring to make sure  
everything is connected  
properly and in working  
order. **Replace the 20 Amp  
fuse into the fuse holder.**

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



- 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.

## INSTALL WIRING KIT CONTINUED

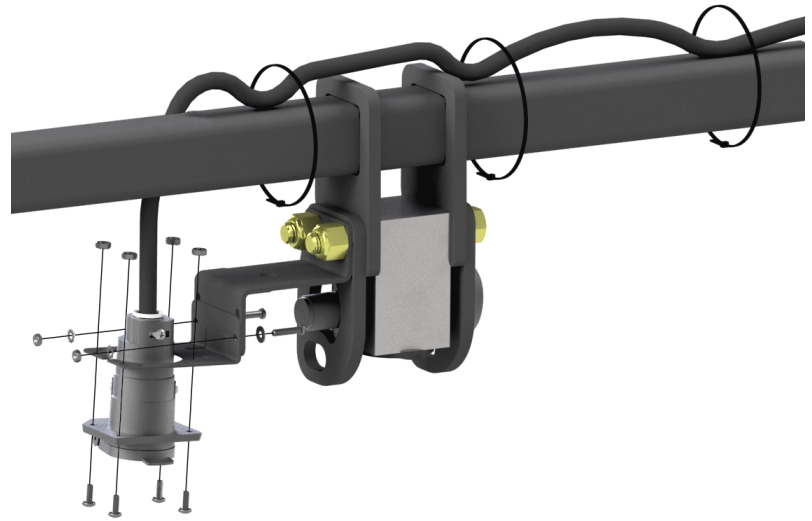


PHILLIPS HEAD  
SCREWDRIVER



SILICONE

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



36. 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. Use silicone to waterproof the grommet, see Step 25.

## REINSTALL VEHICLE COMPONENTS

37. Some **GLC SUV 300** models will need to have some of the plastic trim removed from the bottom of the fascia. Use the images to determine if fascia trimming is needed. Skip Step 37 and 38 if trimming is not required.

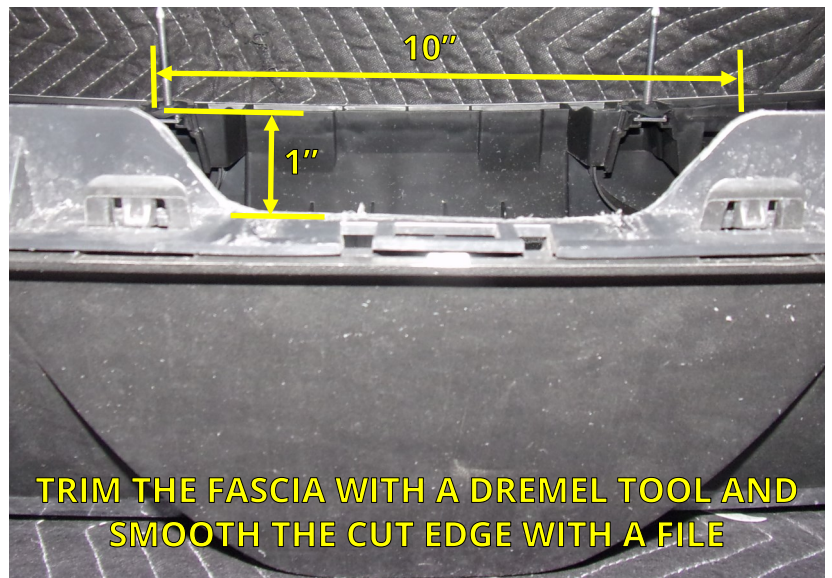


DREMEL TOOL



FILE

38. Cut out the fascia with a Dremel tool, as shown in the image. Smooth the cut edge with a file.



## REINSTALL VEHICLE COMPONENTS

39. Reattach and secure the fascia, taillights, and other vehicle components in reverse order. Refer to Steps 1-16.

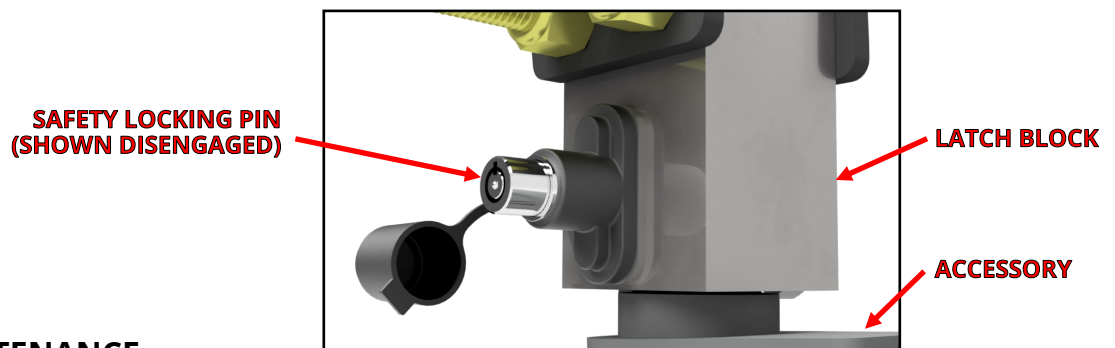
***NOTICE: Remember to route and reconnect the electrical sensor plugs unplugged in Step 14.***





## FINAL VEHICLE EXAMINATION

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