

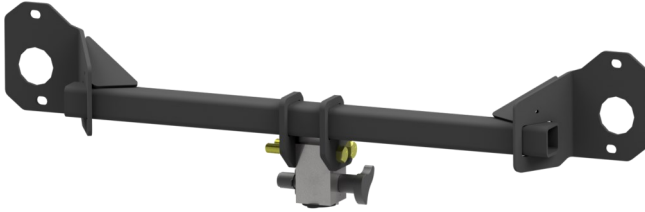
HITCH INSTALLATION INSTRUCTIONS

MAKE: Mercedes **YEARS:** 2016 - 2021 **MODEL/TRIM:** GLC SUV AMG 63 (X253 CHASSIS)

www.stealthhitches.com 833-694-4824

RACK RECEIVER KIT#: **SHR32020**

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: **NO**
 GRAVEL GUARD TRIMMING: **NO**

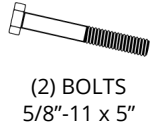
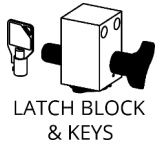


READ ALL INSTRUCTION WARNINGS AND LABELS

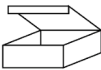
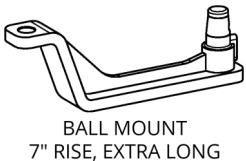


NO WELDING, METAL DRILLING OR VISIBLE TRIMMING REQUIRED

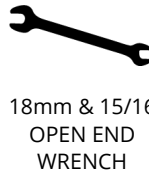
PARTS SUPPLIED WITH RACK RECEIVER KIT:



ADDITIONAL PARTS FOR TOW KIT:



TOOLS REQUIRED:



ADDITIONAL TOOLS FOR TOW KIT:



<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. If the floor panel can't easily be removed, prop the panel open.



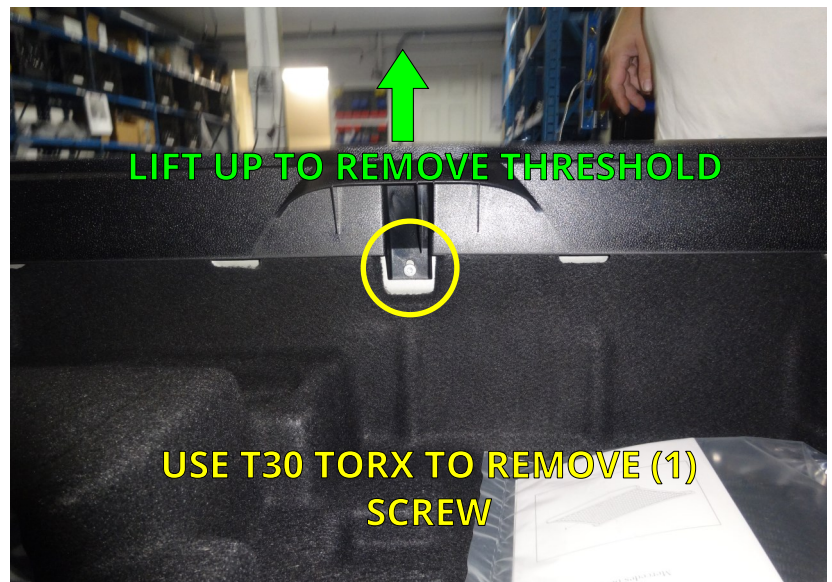
T30 TORX



PLASTIC PRY TOOLS

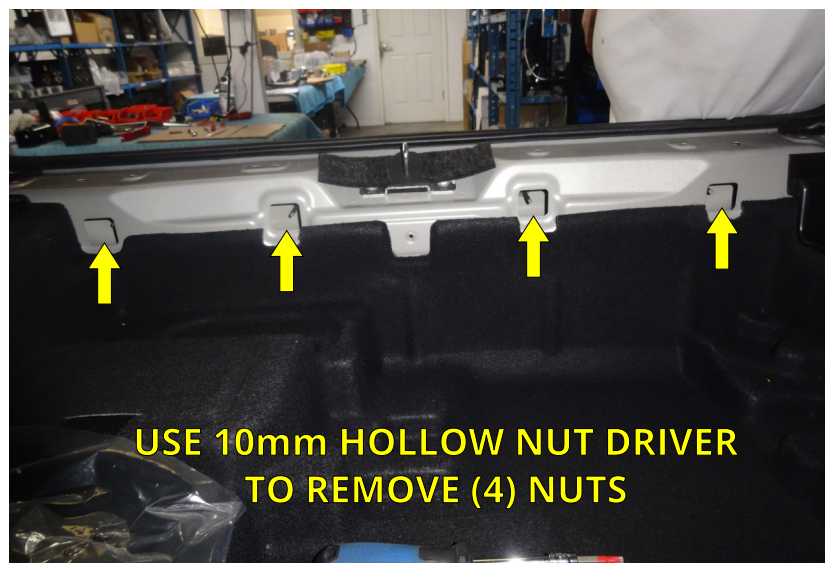
2. On the rear wall of the cargo area locate and remove (1) Torx screw from the threshold, see image. Use a plastic pry tool to dislodge the threshold, then lift up to remove.

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



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.



GAIN ACCESS TO MOUNTING AREA CONTINUED

4. Remove left and right side panels for access to rear of the taillights.



8mm
SOCKET

5. Locate and remove (3) nuts securing each of the rear taillights. Squeeze the plug clip to disconnect the taillight harness.



6. Remove each taillight. Slide the taillight rearward to remove.



GAIN ACCESS TO MOUNTING AREA CONTINUED



90 DEGREE PICK



8mm SOCKET

7. 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.
8. Fold the flexible liner back toward the tire. Locate and remove (1) rivet (green arrow). Locate and remove (1) screw (red arrow). Repeat Steps 7-8 on other side of vehicle.



10mm SOCKET

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



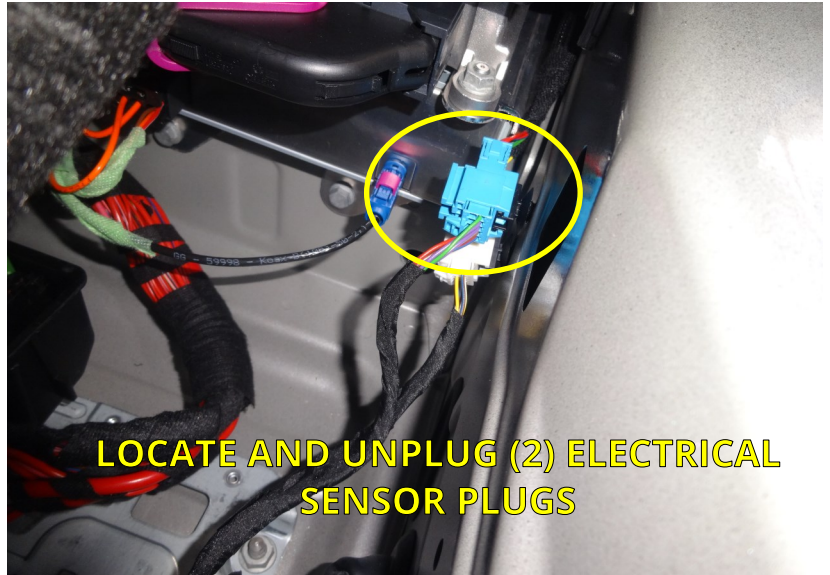
10. Inside the rear cargo area, remove the floor pan to gain access to (2) electrical sensor plugs.



GAIN ACCESS TO MOUNTING AREA CONTINUED

11. Locate (2) electrical sensor plugs against the rear trunk wall, on the passenger side. 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.

NOTE: Some vehicles only have one plug.



LOCATE AND UNPLUG (2) ELECTRICAL SENSOR PLUGS



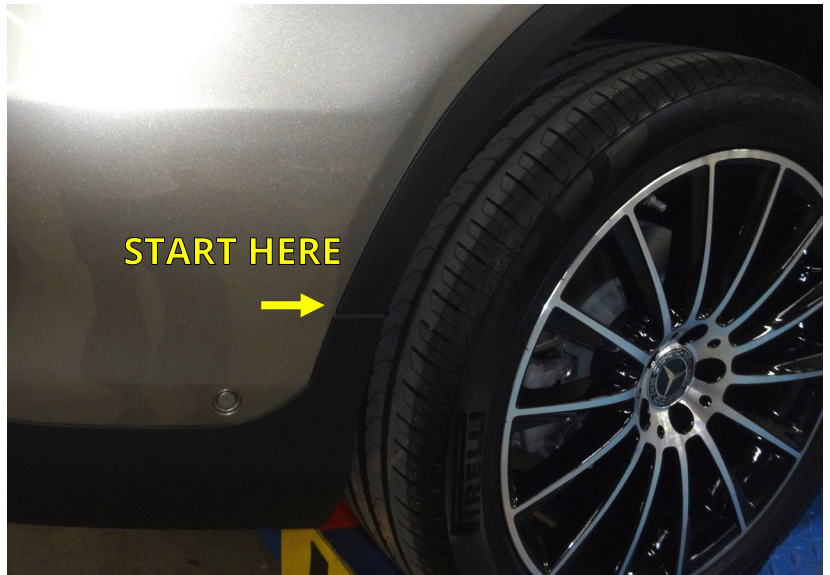
PLASTIC PRY TOOLS



PAINTER'S TAPE

12. 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.



START HERE



PLASTIC PRY TOOLS

13. 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.

14. This step requires a partner. Slide the fascia rearward, keeping the fascia close to the vehicle. Remove the grommet and the electrical harness, unplugged in Step 11 before removing the fascia completely.

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



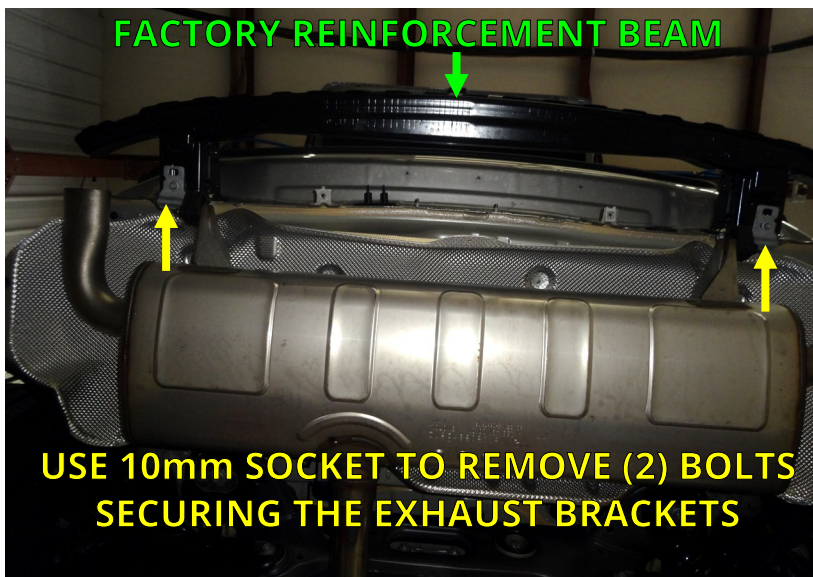
RELEASE (3) FASCIA CLIPS WITH PLASTIC PRY TOOL

GAIN ACCESS TO MOUNTING AREA CONTINUED



10mm
SOCKET

15. 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.

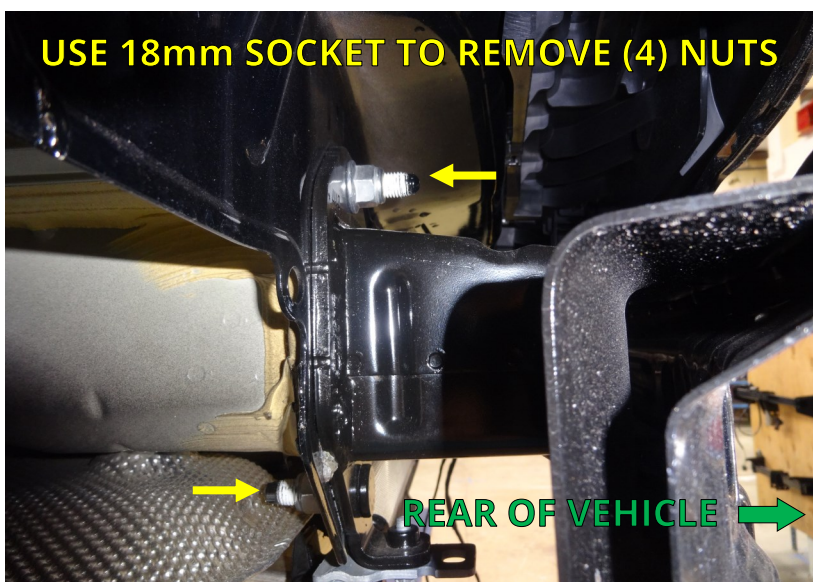


18mm
DEEP WELL
SOCKET



18mm
OPEN END
WRENCH

16. 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** the factory reinforcement beam and (4) factory nuts for reinstallation.



INSTALL STEALTH HITCH FRAME



18mm
DEEP WELL
SOCKET

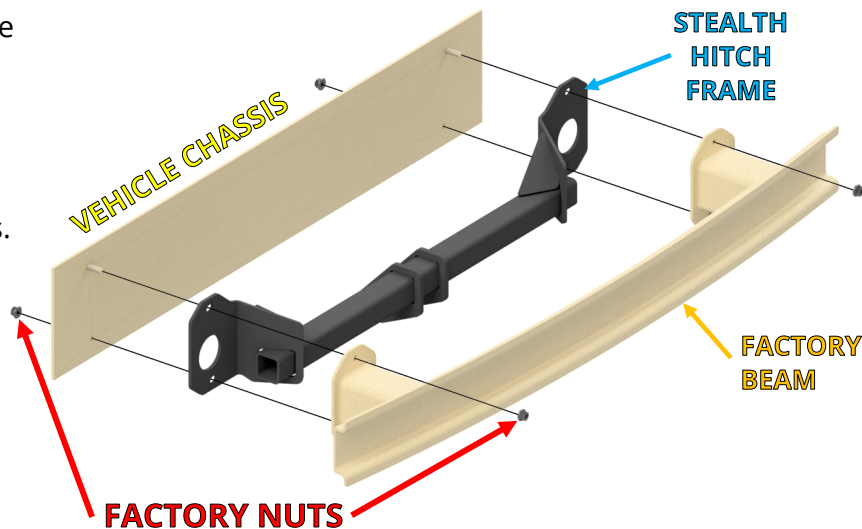


TORQUE
WRENCH



18mm
OPEN END
WRENCH

17. Mount the Stealth hitch frame onto the vehicle studs and place the factory reinforcement beam on top. Use the (4) nuts saved from the factory reinforcement beam and torque to 85 ft.-lbs.



MOUNT LATCH BLOCK



15/16"
SOCKET



15/16" OPEN
END WRENCH



TORQUE
WRENCH

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

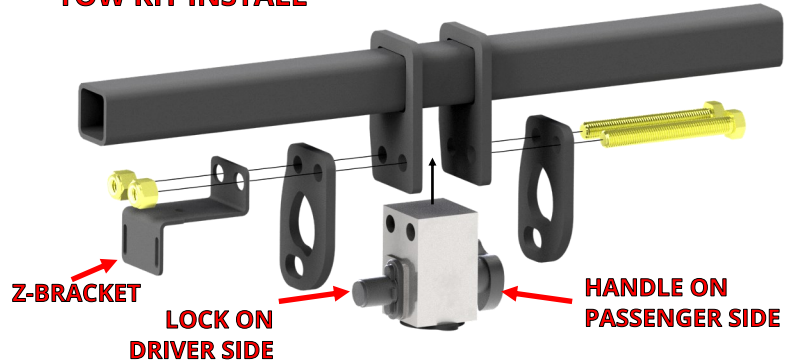
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
- **Tow Kit:** Retrieve Z-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and Z-bracket with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock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

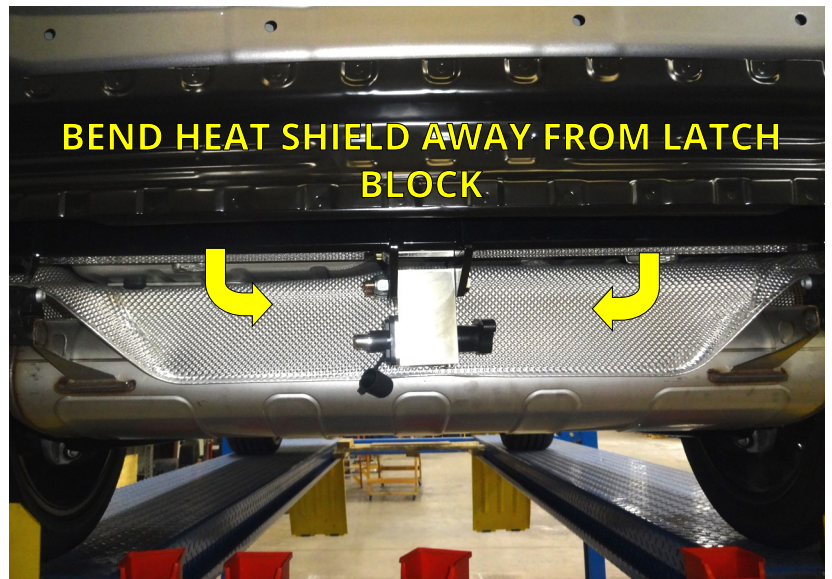


10mm
SOCKET

19. Reattach exhaust brackets removed in Step 15

20. 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 34.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 21.

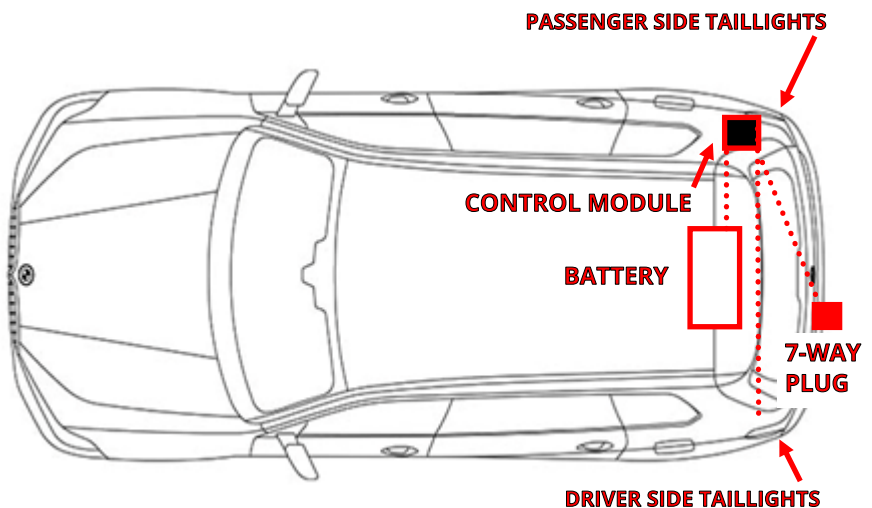
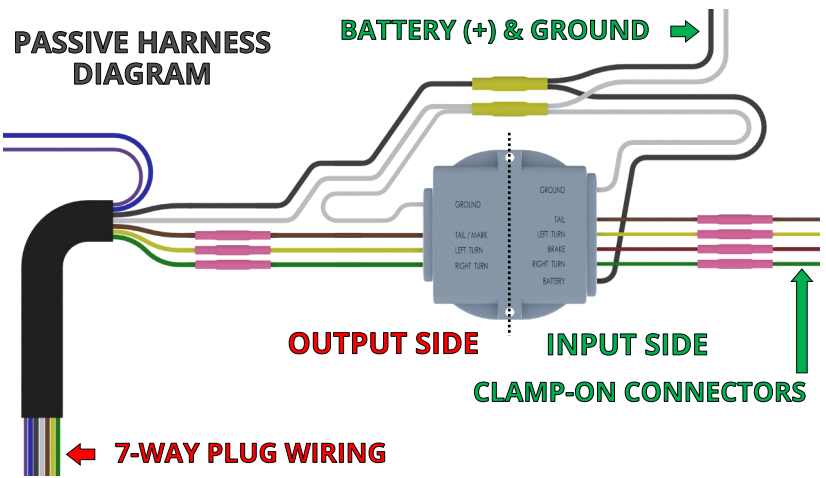
INSTALL PASSIVE WIRING KIT

#	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



21. 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

22. 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



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



PLIERS



MULTIMETER

24. 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.



INSTALL WIRING KIT CONTINUED

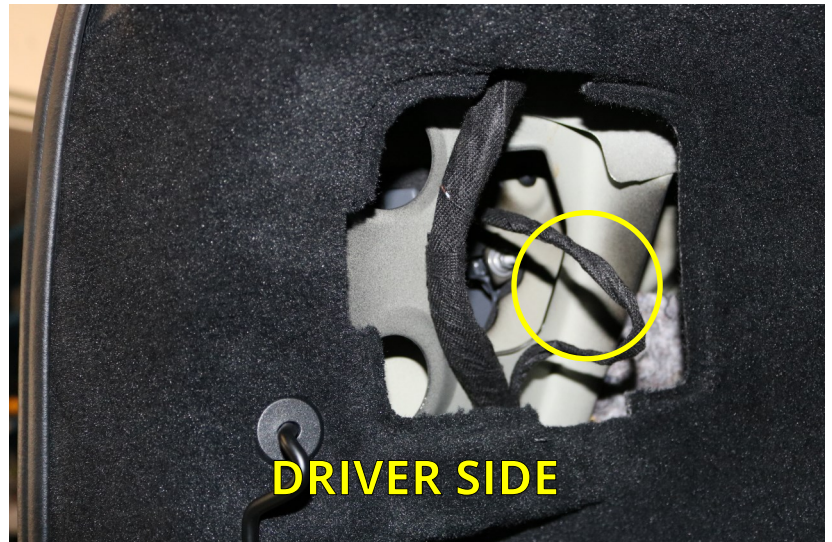


PLIERS



MULTIMETER

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



DRIVER SIDE

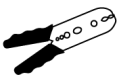
CLAMP-ON CONNECTOR COLOR REFERENCE TABLE

SIGNAL INPUT WIRES			POWER & GROUND WIRES		
FUNCTION	HARNESS	VEHICLE			
LEFT TURN	YELLOW	GRAY/BLACK	12V+ (POWER)	BLACK	FUSE PANEL POWER STUD
RIGHT TURN	GREEN	GREEN/BROWN <i>or</i> GRAY/BLACK	GROUND	WHITE	GROUND STUD
MARKER	BROWN	PURPLE/BLUE <i>or</i> BLACK/PURPLE			
BRAKE	RED	<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 simultaneously.</i>			
REVERSE	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. Trailers rarely have reverse lights or surge brakes.			
ELECTRIC BRAKE	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.



13mm SOCKET



STRIPPER/
CRIMPING
TOOL

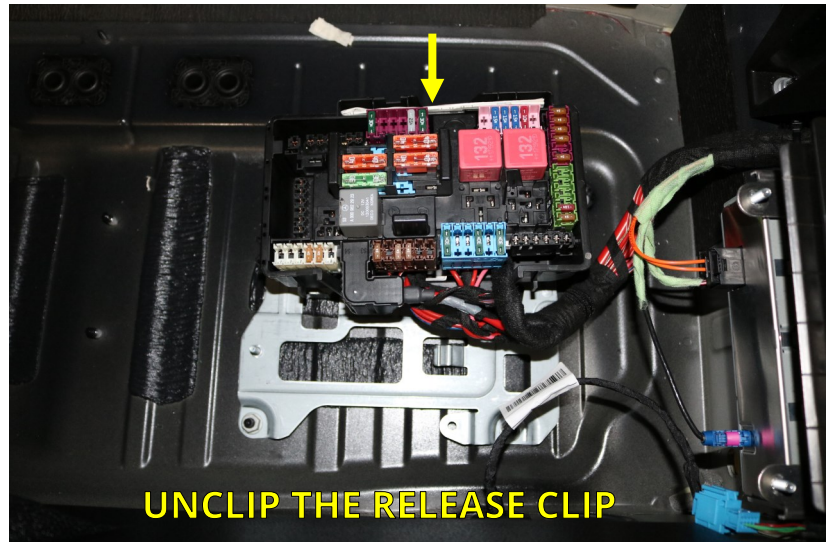
26. Locate the ground stud in the rear passenger side cargo area. Trim white ground wire so it will reach stud without excess wire. Crimp supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the ground stud.

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

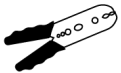


INSTALL WIRING KIT CONTINUED

27. Unclip the release clip to loosen fuse panel. Turn the fuse panel over.



13mm
SOCKET



STRIPPER/
CRIMPING
TOOL

28. 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.

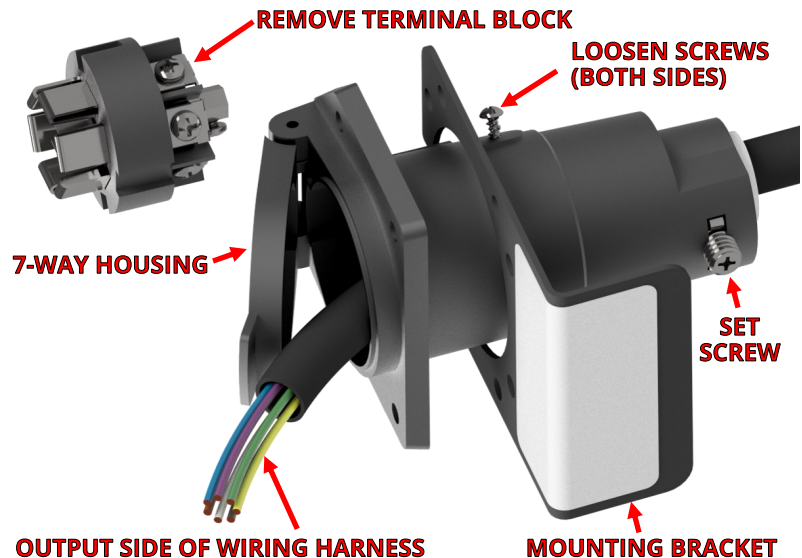


WIRE 7-WAY PLUG



PHILLIPS HEAD
SCREWDRIVER

29. 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

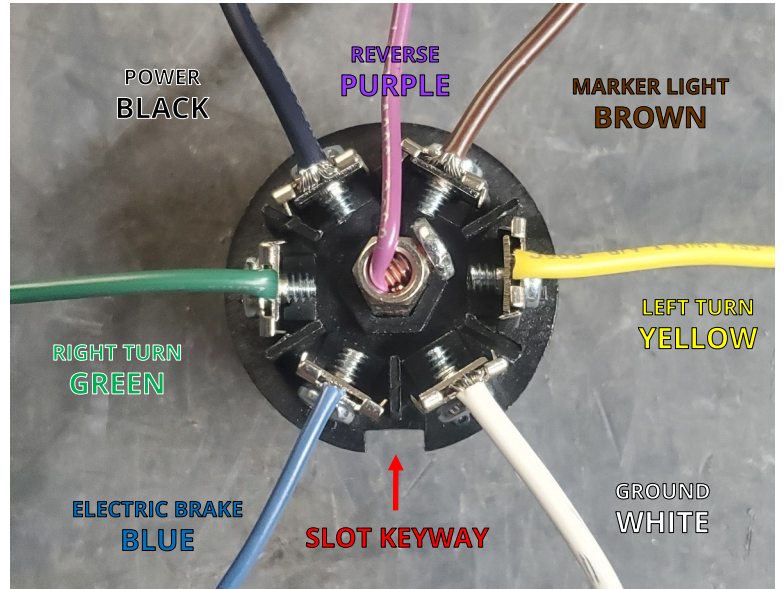


STRIPPER/
CRIMPING
TOOL

30. 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



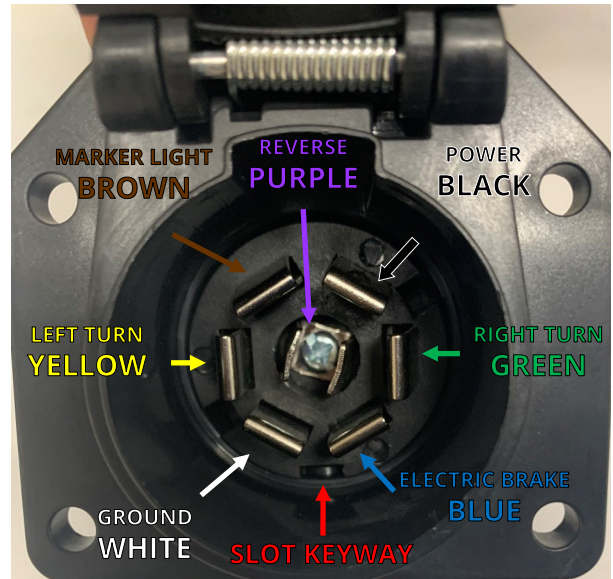
PHILLIPS HEAD
SCREWDRIVER



MULTIMETER

31. 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

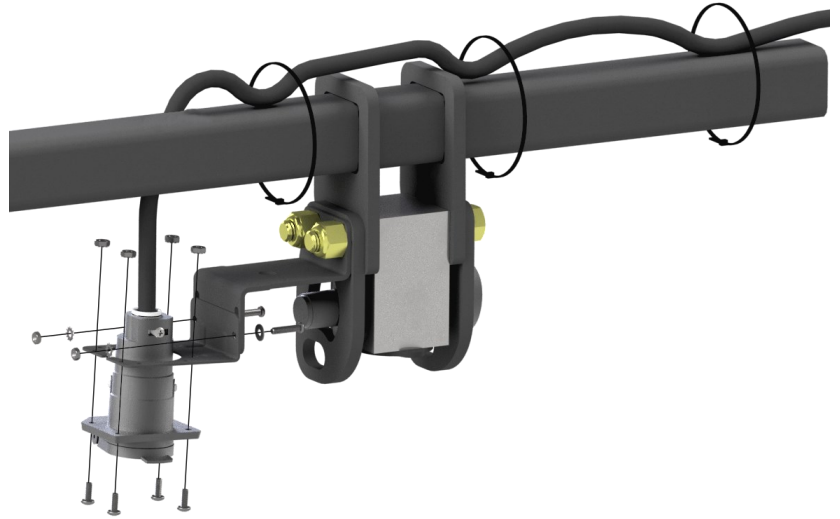


PHILLIPS HEAD
SCREWDRIVER



SILICONE

32. Attach the mounting bracket and 7-way housing to the Stealth hitch frame as shown. Secure harness to Stealth hitch frame with cable ties.
33. 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 22.



REINSTALL VEHICLE COMPONENTS

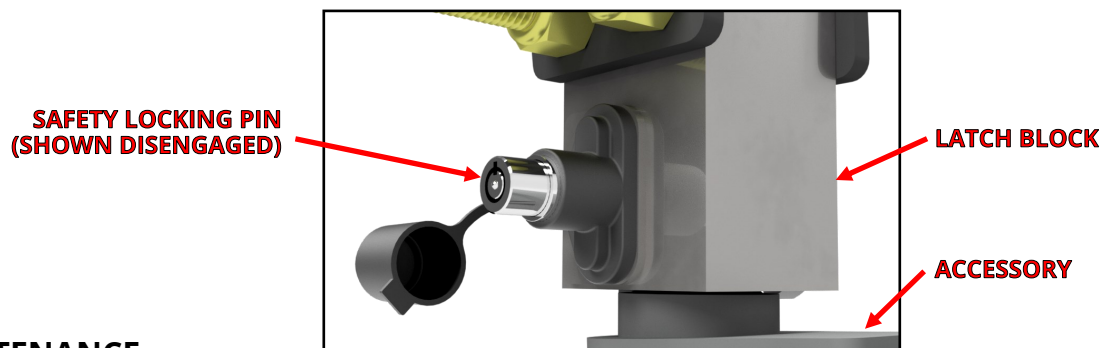
34. Reattach and secure the fascia, taillights, and other vehicle components in reverse order. Refer to Steps 1-14.

NOTICE: Remember to route and reconnect the electrical sensor plugs unplugged in Step 11.



FINAL VEHICLE EXAMINATION

35. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
36. 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.

SHR32020_(pn 2120-32020-2) 04 26 2023