

HITCH INSTALLATION INSTRUCTIONS

MAKE: YEARS:

MERCEDES 2015 - 2018 **GLE COUPE** 2015 - 2019 **COUPE AMG**

www.stealthhitches.com

833 • 694 • 4824

RACK RECEIVER KIT#: SHR32022

COMPATIBLE WITH TOW KIT: SHT25047

2" RACK RECEIVER MAXIMUM PAYLOAD: 600 LBS

MAXIMUM TOW RATING: 8000 LBS MAXIMUM TONGUE WEIGHT: 800 LBS



UNDER VEHICLE TRIMMING:

HEAT SHIELD: NO FASCIA: YES

TOOLS REQUIRED:

15/16" OPEN

END WRENCH

SAFETY GLASSES

GRAVEL GUARD TRIMMING: NO



READ ALL INSTRUCTION WARNINGS AND LABELS

MODEL/TRIM:



NO WELDING, METAL DRILLING OR VISIBLE TRIMMING REQUIRED

PARTS SUPPLIED WITH RACK RECEIVER KIT:



& KEYS



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



(2) 5/8"**NYLOCK NUTS**



(8) 7/16" - 14 x 1-1/2" BOLTS

2" RACK **RECEIVER**





(8) 7/16" FLAT (8) 7/16" SERRATED WASHERS FLANGE NUTS



PLASTIC PRY TOOLS



RATCHET

8mm, 10mm,

13mm, 5/8", 11/16"

16mm DEEP WELL, & 15/16" SOCKETS

90 DEGREE PICK



TORQUE

WRENCH



T30 & T40

SOCKET

EXTENSION

PRY BAR

PAINTER'S TAPE



DREMEL TOOL



FILE

ADDITIONAL PARTS FOR TOW KIT:



BALL MOUNT 5" RISE, LONG



CHAIN HOOKS



2" BALL



PASSIVE WIRING KIT BOX



(1) M8 NUT

ADDITIONAL TOOLS FOR TOW KIT:



MULTIMETER



STRIPPER/ CRIMPING TOOL



PHILLIPS HEAD **SCREWDRIVER**



DRILL & 3/8" BIT



PLIERS



SILICONE

<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 <u>Rack Receiver plus Tow Kit</u> 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.



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.



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.



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.



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.



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.



Some accessories, like the rack receiver, are not rated for towing. Do not use any accessories without proper knowledge of their use.



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.



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

 Open the vehicle cargo area. Lift up and remove floor panel.







T30 TORX



- 2. On the rear wall of the cargo area locate 2 plastic covers. Use a 90 degree pick to open the plastic covers to gain access to screws. Remove (3) screws with T30 Torx. Lift up on the threshold to remove.
- 3. Locate and remove (2) cargo anchors in the rear corners of the vehicle. Remove cargo anchor plastic covers with 90 degree pick. Remove cargo anchor with T40 Torx.





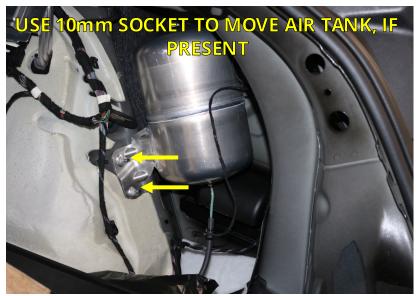
- Take the spare tire out. Remove the driver side cargo holder by removing (2) plastic caps in bottom of holder.
- 5. Locate (4) plastic rivets holding the floor liner. Use a 90 degree pick to remove the plastic rivets. Lift up to remove the liner.

NOTICE: Some models with air suspension the liner can't be removed, move liner to front of vehicle as needed to gain access to nuts.





10mm SOCKET 6. Dislodge and remove the rear passenger side panel to gain access to the taillight nuts. On some models an air tank may be present which blocks access to one of the taillight nuts. Remove (2) nuts attaching the air tank to the vehicle body. Carefully move the air tank out of the way until installation is complete.





7. The taillights are secured with (3) nuts. Locate and remove (2) taillight nuts inside holes in the rear column. Locate and remove the third nut inside the cargo compartment. Dislodge the taillight. Disconnect the light plug. Repeat on other side of vehicle.







8mm SOCKET 8. Inside the rear wheel well, behind the tire, locate the (4) plastic rivets which are holding the wheel well liner (yellow arrows). Use a 90 degree pick to remove these rivets. Move wheel well liner to gain access to (1) screw. Use a socket to remove screw.







9. To allow partial removal of the rear wheel well trim, clips (3) 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. Repeat Steps 8-9 on other side of vehicle.

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





10. Underneath the rear of the vehicle, remove (4) screws from the bottom of the fascia.





11. Under the rear of the vehicle, locate plastic support bracket. Remove (1) nut with a socket and discard plastic support.





12. Locate the exhaust cover. Use a Torx to remove (2) screws. Remove the exhaust cover. Repeat on other side of vehicle.





13. Locate the two exhaust brackets under the rear of the vehicle. Use a pry bar to remove the top rubber isolator.

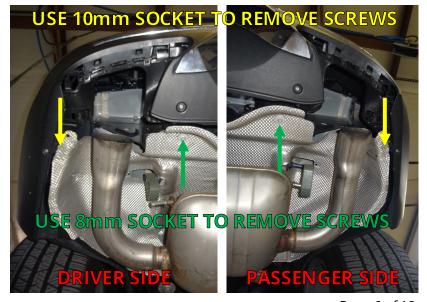
NOTE: Spray lubricant on the connection point to ease removal.







14. Locate and remove (4) screws to loosen the heat shield.



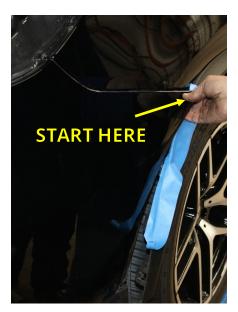


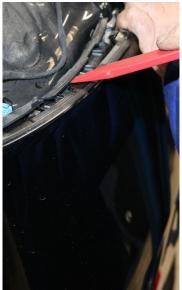
15. Bend the heat shield out of the way to gain access to (4) nuts holding the factory reinforcement beam nuts.





16. 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.





17. This step requires a partner. Pull the fascia rearward enough to access the sensor plug on the driver side. Press down on the clips to unplug the sensor plug. Remove the fascia completely.

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

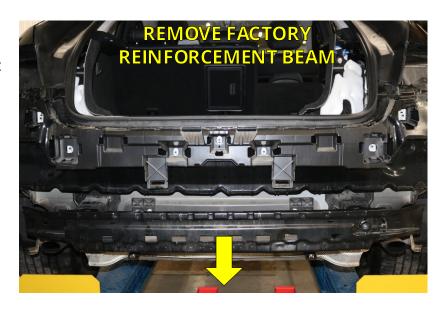




18. Inside the rear cargo area, locate and remove (4) nuts securing the reinforcement beam.



19. Pull rearward to remove factory reinforcement beam. Discard factory reinforcement beam.



INSTALL STEALTH HITCH FRAME



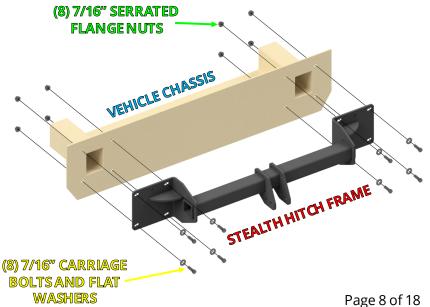
5/8" SOCKET



11/16" SOCKET



TORQUE WRENCH 20. Install the Stealth hitch frame using the supplied 7/16" bolts, flat washers, and flange nuts. Center the hitch frame on the vehicle. Torque the bolts to 65 ft.-lbs.



MOUNT LATCH BLOCK





15/16" OPEN END WRENCH



- 21. 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.
- from 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.







IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 37. IF INSTALLING A TOW KIT, CONTINUE TO STEP 22.

INSTALL PASSIVE WIRING KIT

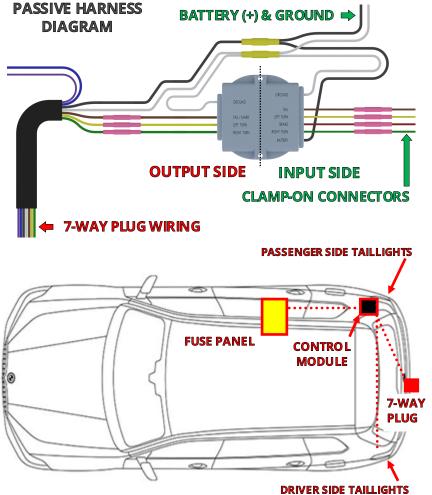
#	DESCRIPTION	QTY					
1	7-WAY WIRING HARNESS	1					
	 FUSE HOLDER & FUSE 						
	 CONTROL MODULE & WIRES 						
2	ADHESIVE FOAM STRIP	2					
3	FORK TERMINAL	1					
4	BUTT CONNECTOR	1					
5	5/8" LONG PHILLIPS SCREWS	4					
6	M6 FLANGE NUT	1					
7	#10 LOCK NUT	4					
8	CLAMP-ON CONNECTORS	4					
9	CABLE TIE – 8"	8					
10	CABLE TIE – 14"	2					
11	POWER WIRE	1					
12	Z-BRACKET	1					
13	MOUNTING BRACKET	1					
14	7-WAY HOUSING	1					
15	7-POLE TO 4-POLE ADAPTER	1					





22. 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

23. In the passenger side cargo area, locate and remove the rubber grommet shown in the image.





24. Drill a 3/8" hole in grommet. Place the control module in the passenger side cargo area. Pass the grommet over the control module output wires. Thread the ends of the wires to the outside of the vehicle through the grommet hole. Replace the grommet.

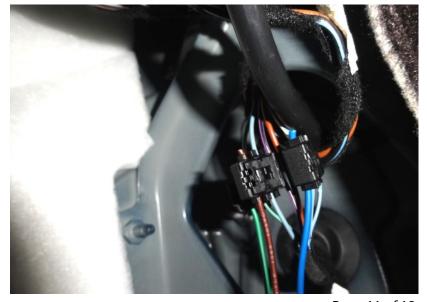






25. The wires on the input side of the module need to be attached to the vehicle wiring. Inside the passenger side cargo area locate the taillight wiring harness. Use clamp-on connectors to connect the brown, green, and purple wires to the taillight wiring harness. (As shown in reference table on next page.)

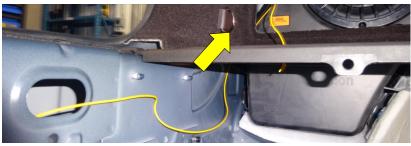
NOTE: Vehicles may have different wire colors than those shown. Verify circuits (wire colors) with multimeter.



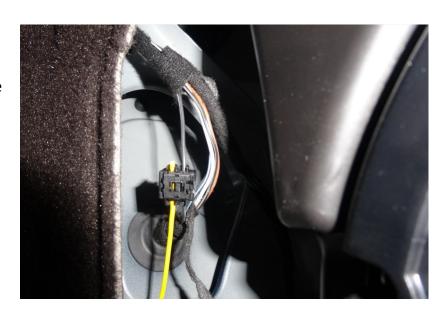
INSTALL WIRING KIT CONTINUED

26. Route the yellow left turn signal wire to the driver side of vehicle by threading the wire into the rear wall of the vehicle. On the driver side pass the wire under the trim and up to the taillight wiring harness.





27. Locate the indicated part of the taillight wiring harness.
Use a clamp-on connector to connect the yellow wire to the left turn signal wire. (As shown in reference table below.)



CLAMP-ON CONNECTOR COLOR REFERENCE TABLE								
SIG	NAL INPUT	<u>WIRES</u>	DOWED & CDOUND WIDES					
FUNCTION	<u>HARNESS</u>	VEHICLE	POWER & GROUND WIRES					
LEFT TURN	YELLOW	■ BLACK/WHITE	12V+ (POWER)	BLACK	FUSE PANEL			
RIGHT TURN	GREEN	GREEN/BLACK	GROUND	WHITE	GROUND STUD			
MARKER	BROWN	GRAY/BLUE						
BRAKE	RED	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.						
REVERSE	PURPLE	WHITE/BLUE						
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.

INSTALL WIRING KIT CONTINUED



10mm SOCKET

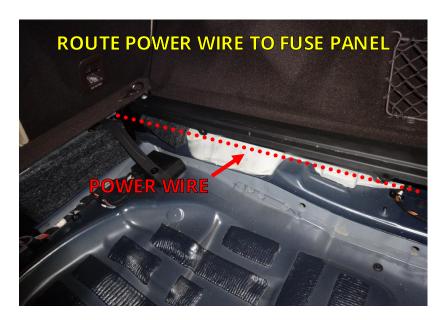


28. Locate the ground stud in the passenger side cargo area. Trim white ground wire so it will reach the stud without excess wire. Crimp supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the stud.

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



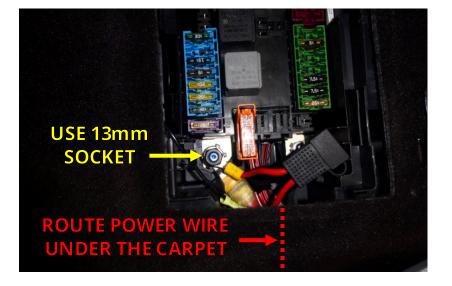
29. Lift the rear passenger seat to access fuse panel. Remove the fuse panel cover. Route the power wire along the passenger side of the cargo area to the fuse panel.







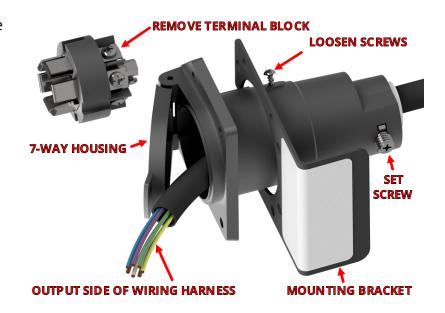
30. Locate the fuse holder and supplied M8 flange nut. Remove the fuse from the fuse holder. Crimp the fuse holder lead to the black power wire. Connect the ring terminal to the fuse panel power stud with the M8 nut.



WIRE 7-WAY PLUG



31. 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.



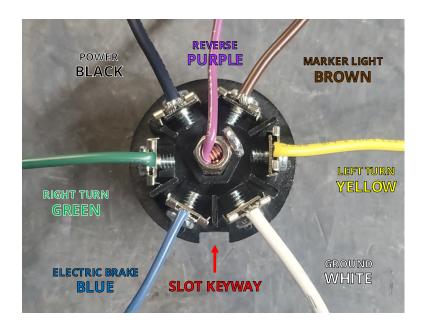
<u>Please follow instructions below very carefully.</u> <u>Incorrect wiring of the 7-way receptacle causes the vast majority of wiring problems.</u>





- 32. 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.



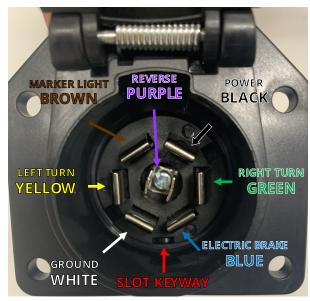
TEST 7-WAY HARNESS WIRING





33. 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 located near the power supply.

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.

SECURE TOW KIT



PHILLIPS HEAD SCREWDRIVER



SILICONE

- 34. Attach the mounting bracket and 7-way housing to the Stealth hitch frame as shown. Secure harness to Stealth hitch frame with cable ties.
- 35. 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.
- 36. Use the provided adhesive foam strips to secure the control module to an inside body panel. Use silicone to waterproof the grommet.



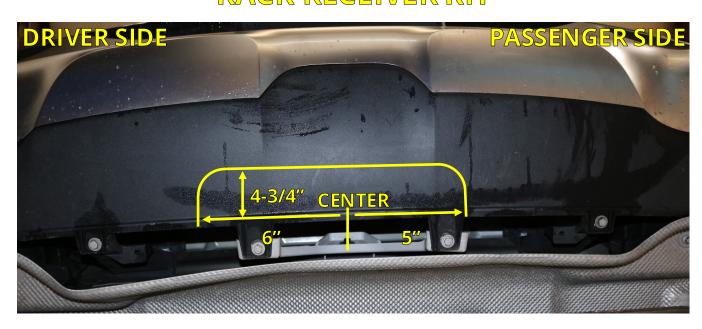
CUT ACCESS TO LATCH BLOCK



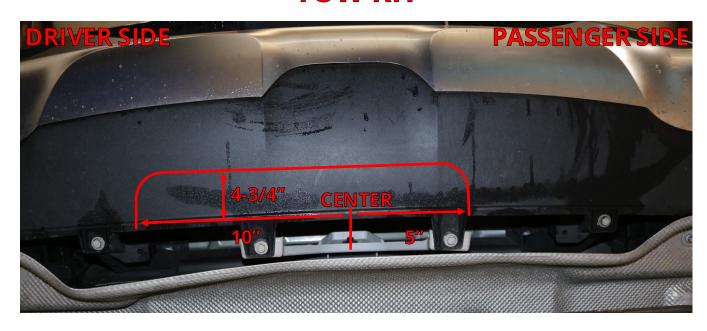
37. Use a Dremel tool to cut out fascia, as shown. The access hole necessary varies depending on which kit you are installing. Follow indicated template. Use a file to smooth out the cut.



RACK RECEIVER KIT



TOW KIT



REINSTALL VEHICLE COMPONENTS

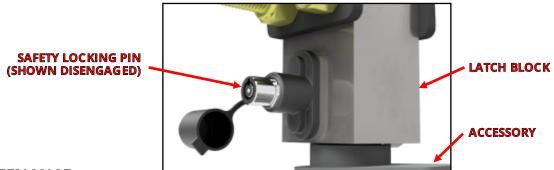
38. Reattach and secure the fascia, taillights, and other vehicle components in reverse order. Refer to Steps 1-17.

NOTICE: Remember to plug in the sensor plug in Step 17 before reinstalling the fascia.



FINAL VEHICLE EXAMINATION

- 39. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
- 40. 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. (<u>Rack Receiver</u> and <u>Ball Mount</u> 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 counterclockwise 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.