

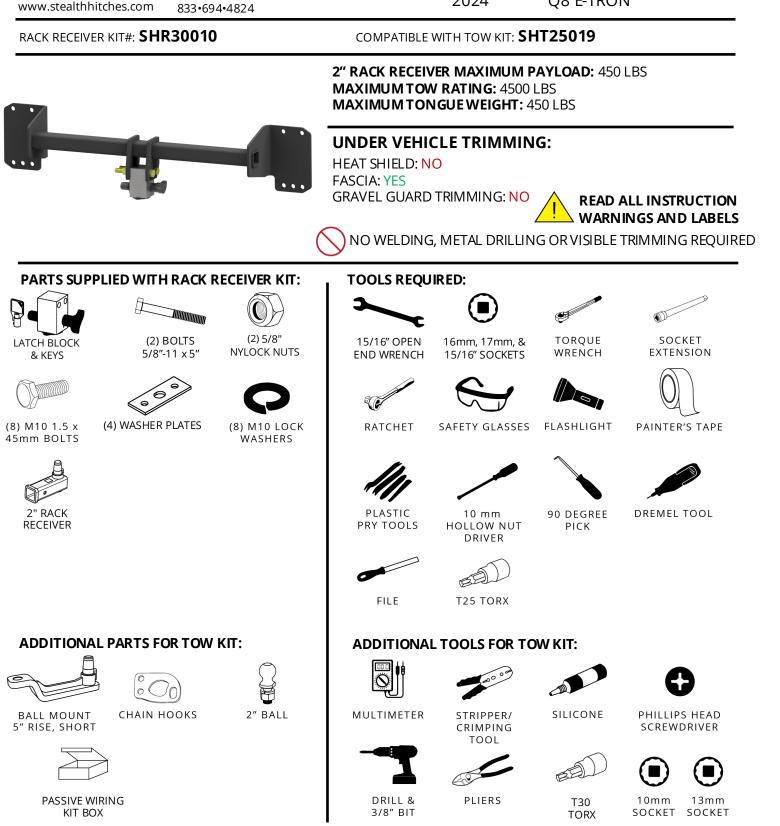
## **HITCH INSTALLATION INSTRUCTIONS**

MAKE: AUDI **YEARS:** 2019 - 2023 2020 - 2023

2024

**MODEL/TRIM:** 

E-TRON SUV E-TRON SPORTBACK Q8 E-TRON



# <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.

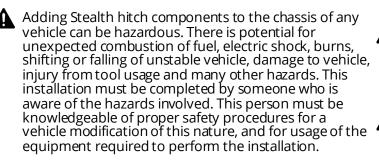
### IMPORTANT SAFETY NOTICE FOR STEALTH HITCH INSTALLERS AND CUSTOMERS.

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.

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# NG 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.



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



PLASTIC PRY TOOLS



 Remove taillight cover trim beside each taillight. Use one hand to push the cover pieces forward while using a pry tool to pry the covers inwards. Remove the cover pieces. Remove the (2) screws holding the taillight to the car once the covers have been taken off.





 Slide the taillight to the outside of the vehicle to remove. A plastic pry tool can be used to help if the light does not slide freely. Disconnect the light plug by pushing down on the clip and pulling the plug outward. Repeat Steps 1-2 on the other side of the vehicle.



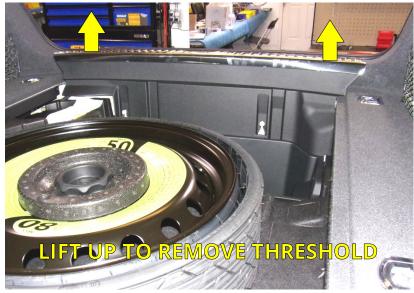
 In the rear cargo area, lift up and remove the floor panel. Place panel on blanket or safe area.



#### GAIN ACCESS TO MOUNTING AREA CONTINUED



4. In the rear cargo area, remove the threshold. Use a pry tool on the side of the threshold to lift up and remove.





5. Locate (4) nuts along the rear wall of the cargo area, as shown in the image. Use a hollow nut driver to remove the nuts.





6. Inside the rear wheel well, behind the tire, locate the (3) screws which are holding the fascia and wheel well liner. Remove these screws.



#### GAIN ACCESS TO MOUNTING AREA CONTINUED



T25 TORX

PAINTER'S TAPE

PLASTIC PRY TOOLS 7. To gain access to a screw in the fascia, the wheel well trim will need to be partially detached. Using a plastic pry tool, use outward pressure to expose Torx screw. Remove the Torx screw. Repeat Steps 6-7 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

T25 TORX TO REMOVE (1) SCREW

**PROTECT TRIM WITH** PAINTER'S TAPE







8. Under the rear of the vehicle, remove (12) screws from the bottom of the fascia.





Remove (1) screw from the 9. top of the fascia. A fascia pin was exposed on each side when the taillights were removed. This pin holds the fascia to the vehicle. Use a pry tool and lift up the pin. The rear fascia is clipped to the vehicle body 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 until they are all released. Repeat this step on the other side of the vehicle.

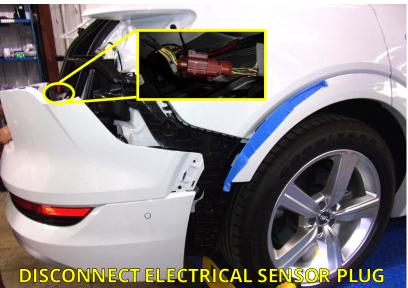


#### GAIN ACCESS TO MOUNTING AREA CONTINUED



10. This step requires a partner. Slide the fascia rearward enough to access and disconnect the electrical sensor plug. Remove the fascia completely.

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





PLASTIC PRY TOOLS



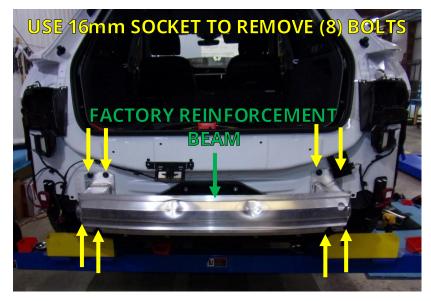
PICK

11. On the rear passenger side, use a pry tool or 90 degree pick to open and release plastic clips from the vehicle studs to release and unclip the module, from the vehicle body. Let the module hang free.





12. Remove (8) bolts using a socket. Remove and **save** the factory reinforcement beam for reinstallation. Discard the bolts.



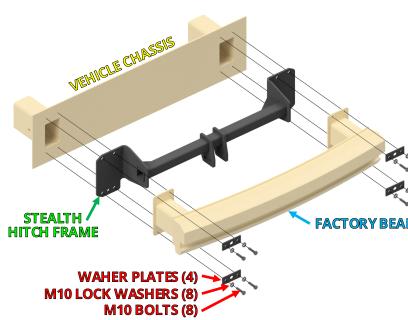
#### **INSTALL STEALTH HITCH FRAME**



 13. Install the factory reinforcement beam on top of the Stealth hitch frame. Use (8) supplied M10 bolts, (8) lock washers and (4) washer plates to fasten the hitch. Torque the (8) bolts to 45 ft.-lbs.







#### **MOUNT LATCH BLOCK**



- 14. Installation of the latch block varies depending on which kit you are installing.
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.



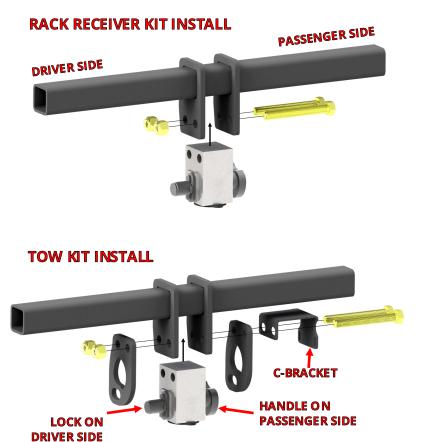
TORQUE

WRENCH

15/16" OPEN END WRENCH

> • **Tow Kit:** Retrieve C-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and C-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 38. IF INSTALLING A TOW KIT, CONTINUE TO STEP 15.

#### **INSTALL PASSIVE WIRING KIT**

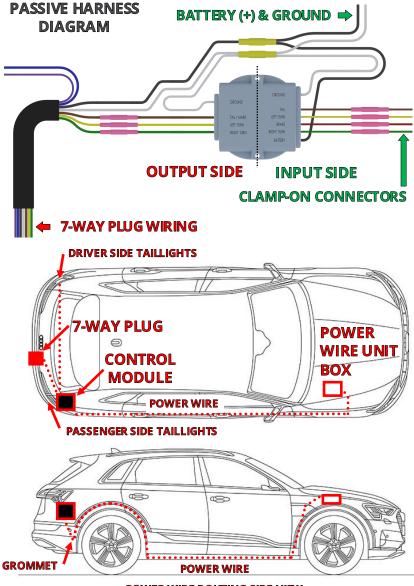
#	DESCRIPTION			
1	7-WAY WIRING HARNESS	1		
	<ul> <li>FUSE HOLDER &amp; FUSE</li> </ul>			
	<ul> <li>CONTROL MODULE &amp; WIRES</li> </ul>			
2	ADHESIVE FOAM STRIP	2		
3	FORK TERMINAL	1		
4	BUTT CONNECTOR	1		
5	5/8" LONG PHILLIPS SCREWS	4		
6	M8 FLANGE NUT	1		
7	#10 LOCK NUT	4		
8	CLAMP-ON CONNECTORS	4		
9	CABLE TIE – 8"	8		
10	CABLE TIE – 14"	2		
11	POWER WIRE	1		
12	C-BRACKET	1		
13	MOUNTING BRACKET	1		
14	7-WAY HOUSING	1		
15	7-POLE TO 4-POLE ADAPTER	1		





15. Locate the wiring kit box. Review the contents of the box against the list above to check for missing components. The passive wiring kit uses a control module to manage the functions of the trailer lighting. The module has an "input" side that receives power from the vehicle's battery and signals from the vehicle's taillights. The "output" side of the module delivers this information to the 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.





16. In the corners of the cargo area, locate and remove (4) cargo anchors. Each cargo anchor has (2) screws.





T25 TORX

17. In the rear corner of the vehicle, locate and lift the handle shown. Remove the screw securing the handle with a Torx. Repeat on other side of vehicle.





PLASTIC PRY TOOLS 18. Dislodge rear side panels on both sides of the vehicle to gain access to taillight harness. On the passenger side of the vehicle unplug the 12V outlet plug.





- Locate the indicated grommet on the passenger side of vehicle, behind the rear tire. Remove the grommet. Drill a 3/8" hole in the center of the grommet.
- 20. Retrieve the control module and place in the passenger side cargo compartment. Feed the output wires through the hole where the grommet was removed. Pass the wires from inside to outside of vehicle. Pass the grommet over the ends of the output wires and replace in vehicle body.

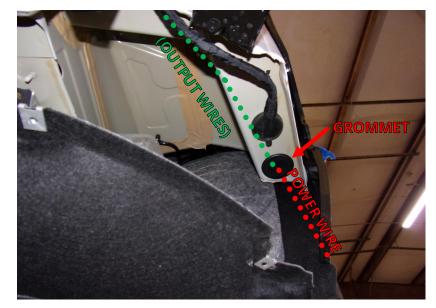




DRILL A 3/8" HOLE IN GROMMET

21. Feed the power wire through grommet from the inside to the outside of the vehicle through the grommet hole. Use the included butt connector to crimp the power wire to the control module power wire.

NOTICE (OPTIONAL): The butt splice connector is a heat shrink connector. Apply heat to waterproof the connector after crimping.





22. The power wire will need to be routed to the front of the vehicle where it will connect to power. It will run from the wiring grommet, over the rear wheel well, under the passenger side of the vehicle, over the front wheel well, and up under the hood, see diagram in Step 15.

23. Route the power wire inside the rear wheel well liner, from behind the tire to the front of the tire by going over it. Locate and remove a Torx screw under the vehicle holding the plastic fascia in front of the rear wheel liner and route the power wire through this area.

#### **USE T25 TORX SOCKET TO REMOVE (1) SCREW**



24. From this the area in front of the rear wheel well, route the power wire to the front of the vehicle. Pull down plastic under body trim on the passenger side and feed the wire into the channel.



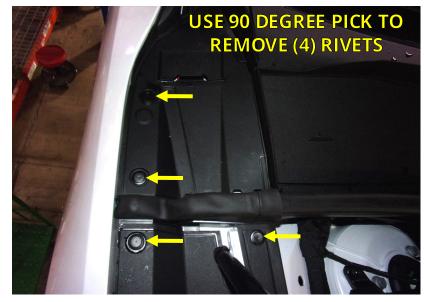


- T25 TORX
- 25. Locate and remove (2) screws behind the passenger side front wheel well. These screws hold the wheel well liner.

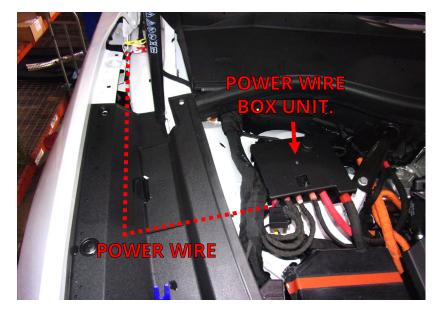




26. Under the hood of the vehicle, use a 90 degree pick to remove (4) plastic rivets from this passenger side cover panel and remove it.



27. Route the power wire from the passenger side wheel well up into the area under the hood. Use a fish tape or similar tool to pull the wire up. Run the wire so it can reach the power wire box unit.





STRIPPER/ CRIMPING TOOL

28. Open the lid to the power wire box unit. Locate the fuse holder supplied in the wiring kit box. Remove the fuse from the fuse holder. Crimp fuse lead to power wire. Use the supplied M8 nut to secure the fuse holder terminal as shown. Add the fuse holder terminal and M8 nut on top of the vehicle terminal and secure. Close the lid to the power wire unit box.









MULTIMETER

29. The wires on the input side of the module need to be attached to the vehicle wiring. Inside the passenger side cargo compartment use clamp-on connectors to connect the brown and green wires to wires behind taillight. (As shown in reference table on next page.)

NOTICE: Verify wire signals with multimeter. Manufacturer may use different colors. The trunk latch must be closed when probing and confirming wire signals.





PLIERS



MULTIMETER

30. Using an existing vehicle wire harness as a guide, route the yellow input wire to the driver side of the vehicle. Use clampon connector to clamp the yellow wire to left turn signal wire behind the taillight. (As shown in reference table on next page.)



CLAMP-ON CONNECTOR COLOR REFERENCE TABLE							
SI	GNAL INPU1	<u>WIRES</u>	<b>POWER &amp; GROUND WIRES</b>				
<u>FUNCTION</u>	<u>HARNESS</u>	VEHICLE					
<u>LEFT TURN</u>	YELLOW	PURPLE/GREEN	<u>12V+ (POWER</u> )	BLACK	BATTERY (+)		
RIGHT TURN	GREEN	PURPLE/GREEN	<u>GROUND</u>	WHITE	GROUND STUD		
MARKER	BROWN	PURPLE/WHITE					
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	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. <i>Trailers rarely have reverse lights or surge brakes.</i>					
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.





STRIPPER/ CRIMPING TOOL

31. Locate the ground stud in the 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 stud.

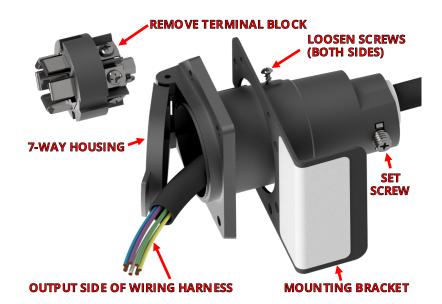
NOTICE: Loosen ground stud just enough to install fork terminal, so vehicle wiring does not lose ground.



#### 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 7way housing as shown. Use a screwdriver to loosen the set screw at the bottom of the 7way 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>



PHILLIPS HEAD

SCREWDRIVER

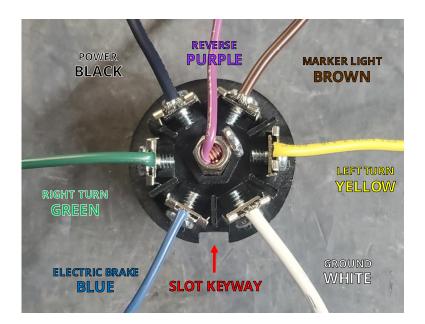
STRIPPER/ CRIMPING

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**



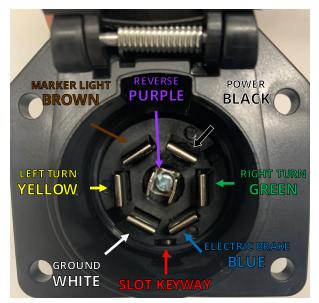
PHILLIPS HEAD SCREWDRIVER



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 located near the power wire unit box.** 

**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.

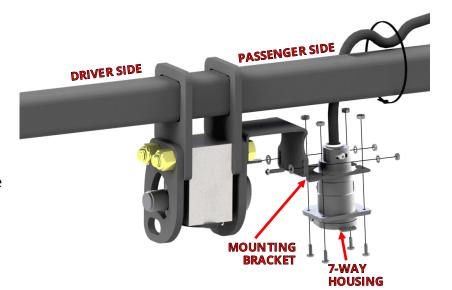


SCREWDRIVER

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.



37. Use the provided adhesive foam strips to secure the control module to an inside body panel. Use silicone to waterproof the grommet. Reattach and secure side panels, wheel well liners, and other vehicle components that were detached for wiring kit install. Refer to Steps 16-30.

#### **CUT AREA FOR LATCH BLOCK**



38. 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.

NOTICE: Make sure the hands-free trunk release cables are not damaged while cutting.





#### **REINSTALL VEHICLE COMPONENTS**

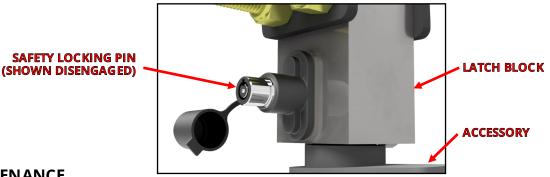
39. Reattach and secure the fascia, taillights, and other vehicle components in reverse order. Refer to Steps 1-11.

NOTICE: It's important to remember to plug in the electrical sensor plug before you completely install the fascia.



#### **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. (<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.