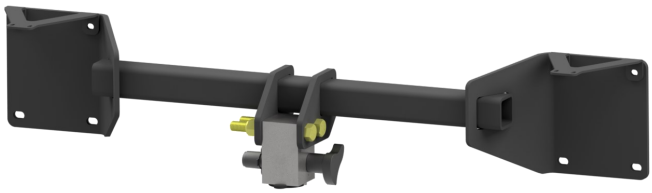
HITCH INSTALLATION INSTRUCTIONS

MAKE:	YEARS:	MODEL/TRIM:
AUDI	2022 - 2024	Q4 E-TRON

www.stealthhitches.com 833•694•4824

RACK RECEIVER KIT#: **SHR30020**

COMPATIBLE WITH TOW KIT: **SHT25004**



2" RACK RECEIVER MAXIMUM PAYLOAD: 350 LBS
MAXIMUM TOW RATING: 3500 LBS
MAXIMUM TONGUE WEIGHT: 350 LBS

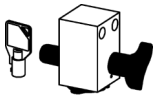
UNDER VEHICLE TRIMMING:

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:


LATCH BLOCK & KEYS

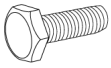

(2) BOLTS 5/8"-11 x 5"


(2) 5/8" NYLOCK NUTS


(2) SENSOR BRACKETS


(4) #10 x 5/8" PHILLIPS SCREWS


(4) #10 LOCK NUTS


(7) M8 1.25 X 40mm BOLTS


(7) M8 LOCK WASHERS

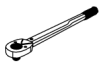

(7) M8 FLAT WASHERS

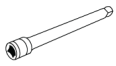

2" RACK RECEIVER

TOOLS REQUIRED:


15/16" OPEN END WRENCH


10mm, 13mm, & 15/16" SOCKETS


TORQUE WRENCH


SOCKET EXTENSION


RATCHET


SAFETY GLASSES


FLASHLIGHT


PAINTER'S TAPE


PLASTIC PRY TOOLS


90 DEGREE PICK


T15 & T25 TORX

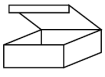

PHILLIPS HEAD SCREWDRIVER

ADDITIONAL PARTS FOR TOW KIT:


BALL MOUNT 5" RISE, SHORT

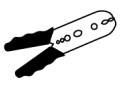

CHAIN HOOKS


2" BALL


PASSIVE WIRING KIT BOX

ADDITIONAL TOOLS FOR TOW KIT:


MULTIMETER


STRIPPER/ CRIMPING TOOL


SILICONE


T30 TORX


DRILL & 3/8" BIT


PLIERS

RACK RECEIVER INSTALLATION: USE STEPS 1-12 & 31-33
TOW KIT INSTALLATION: USE STEPS 1-33

<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

PLASTIC PRY TOOLS

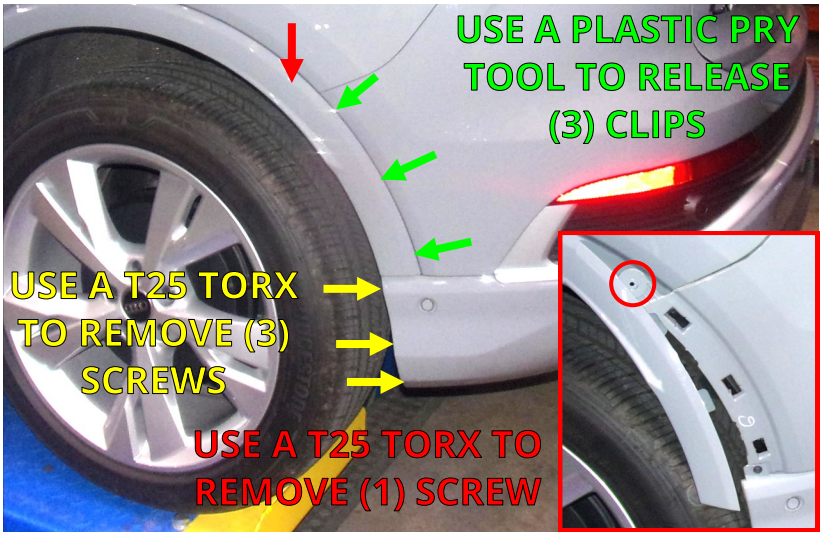
T25 TORX

1. Remove taillight cover trim beside each taillight. Use a pry tool to pry the covers inward to remove them. Use a Torx to remove the (2) screws holding the taillight to the vehicle.
2. Slide the taillight rearward to remove. Disconnect each taillight plug and place each taillight in a safe location.

PLASTIC PRY TOOLS

T25 TORX

3. Inside the rear wheel well behind the tire, locate and remove (3) screws securing the wheel well liner (yellow arrows). 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 unclip (3) plastic clips holding the trim piece (green arrows). Use a Torx to remove the screw (red arrow).



PLASTIC PRY TOOLS

T25 TORX

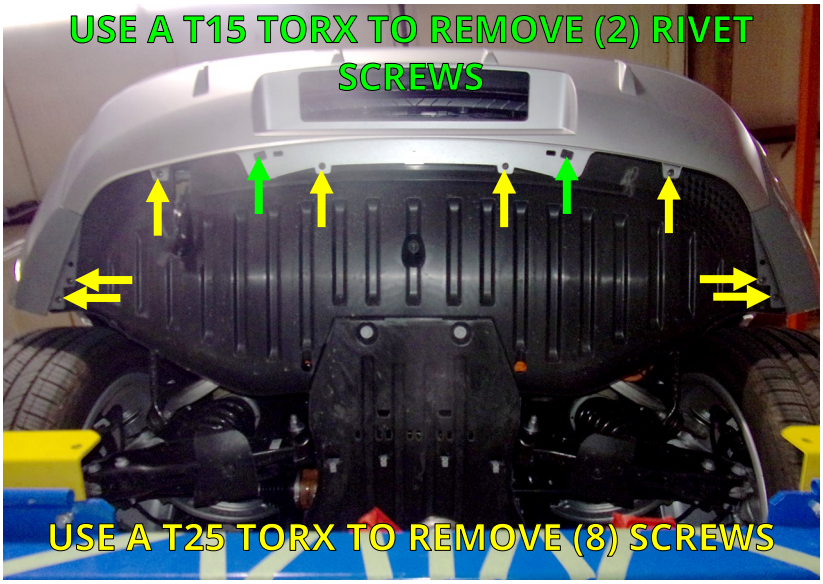
4. Behind the tire, pull the wheel well liner back. Use a Torx to remove (3) screws (yellow arrows). Use a plastic pry tool to release (3) clips holding the fascia (green arrows). Repeat Steps 3-4 on other side of vehicle.

GAIN ACCESS TO MOUNTING AREA CONTINUED

T15 TORX

T25 TORX

5. Under the rear of the vehicle, use a Torx to remove (2) rivet screws (green arrows). Use a Torx to remove (8) screws (yellow arrows).

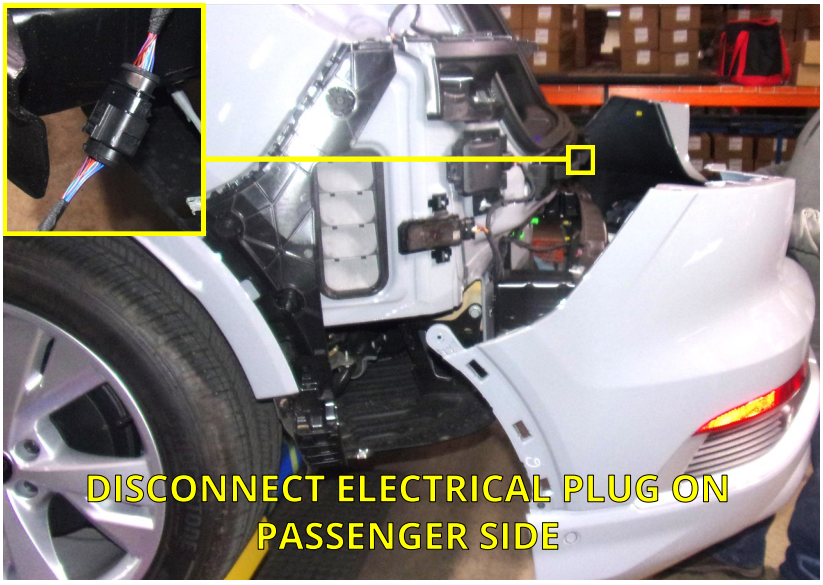


PLASTIC PRY TOOLS

6. 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.

7. This step requires a partner. Slide the fascia rearward enough to access and disconnect the electrical harness plug on the passenger side. Remove the fascia completely.

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

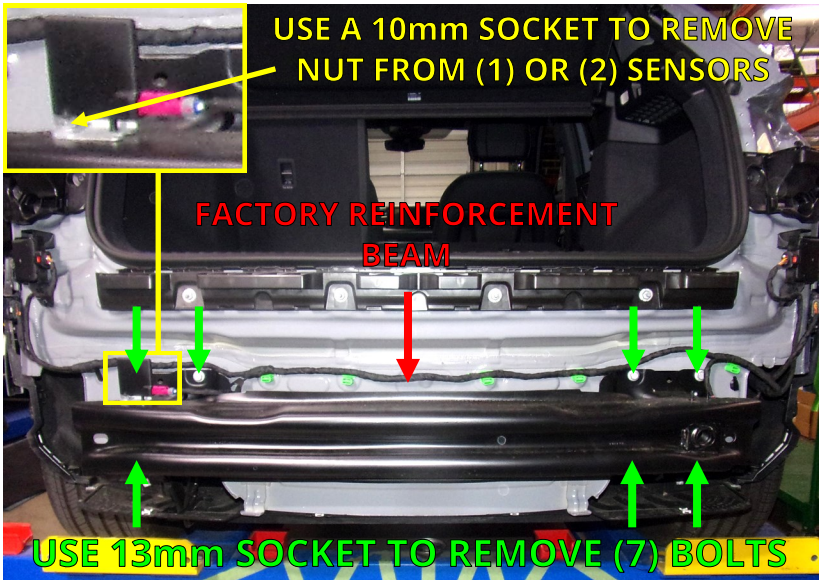


GAIN ACCESS TO MOUNTING AREA CONTINUED

10mm SOCKET

13mm SOCKET

8. Locate and remove the large sensor modules on top of the factory reinforcement beam. The vehicle may have one or two sensor modules. Use a socket to remove the sensor modules.
9. Use a socket to remove (7) bolts from the factory reinforcement beam. Discard the beam and bolts used to secure the beam to the vehicle.

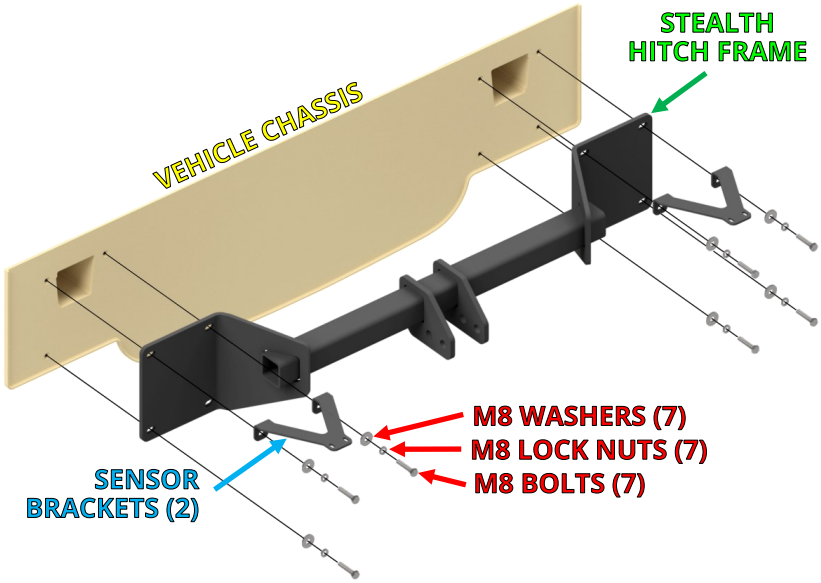


INSTALL STEALTH HITCH FRAME

13mm SOCKET

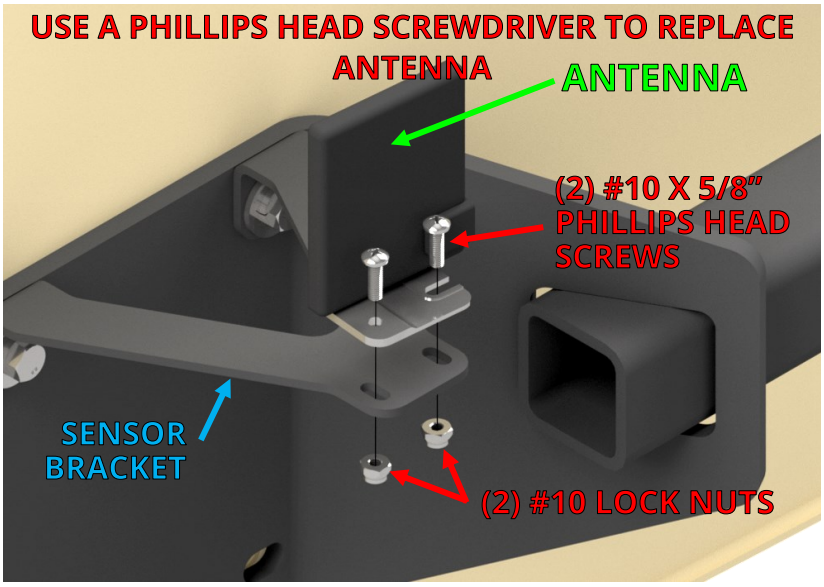
TORQUE WRENCH

10. Install the Stealth frame onto the vehicle chassis. Use the provided M8 bolts, washers and lock washers to install the hitch frame and the (2) sensor brackets over the holes which held the factory beam. Center the hitch frame. Torque the (7) bolts to 20 ft.-lbs.



PHILLIPS HEAD SCREWDRIVER

11. Use the supplied #10 screws and nuts to reattach the antenna to the sensor bracket, as shown. Repeat on other side of vehicle if two antennas were present.



MOUNT LATCH BLOCK

15/16" SOCKET

15/16" OPEN END WRENCH

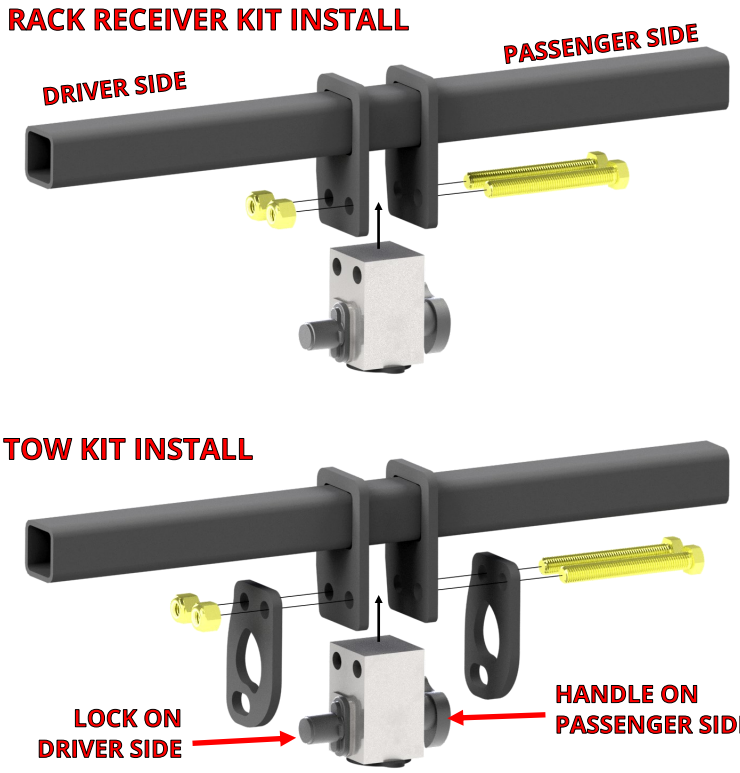
TORQUE WRENCH

12. 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 to150 ft.-lbs.

- ***Tow Kit:*** Install the latch block and (2) chain hooks with (2) 5/8”-11 x 5” bolts and (2) 5/8” nylock nuts. Tighten each bolt to 150 ft.-lbs.

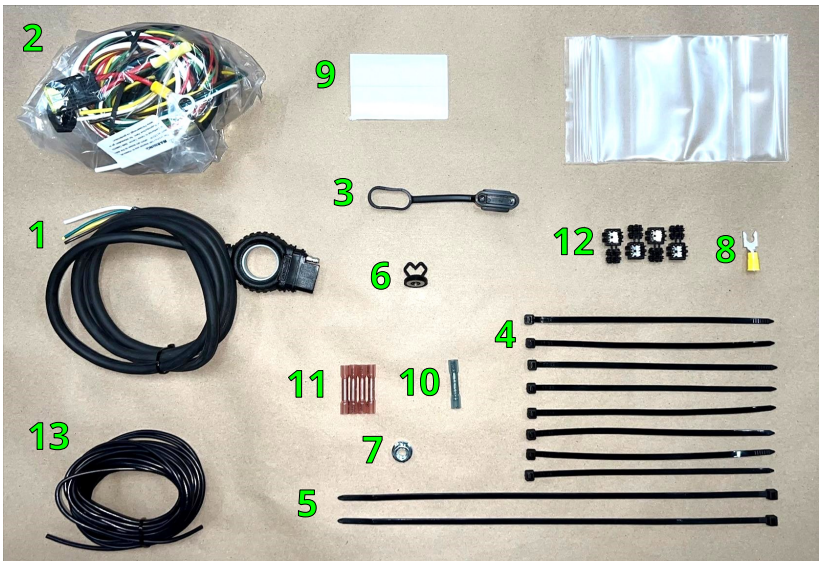
NOTICE: Keys are packaged within the latch block, remove keys and store in safe location.

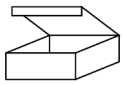


IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 31.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 13.

INSTALL PASSIVE WIRING KIT

#	DESCRIPTION	QTY
1	4-WAY CONNECTOR HARNESS	1
2	CONTROL MODULE	1
3	4-WAY CONNECTOR COVER	1
4	CABLE TIE – 8”	8
5	CABLE TIE – 14”	2
6	MAGNETIC CABLE HOLDER	1
7	M8 SERRATED FLANGE NUT	1
8	FORK TERMINAL	1
9	ADHESIVE FOAM STRIP	2
10	BUTT CONNECTOR (BLUE)	1
11	BUTT CONNECTOR (RED)	4
12	CLAMP-ON CONNECTORS	4
13	POWER WIRE	1

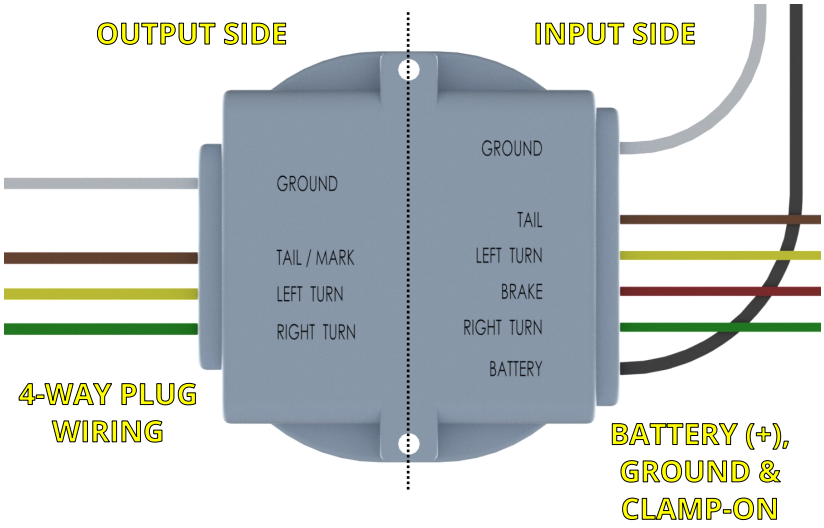


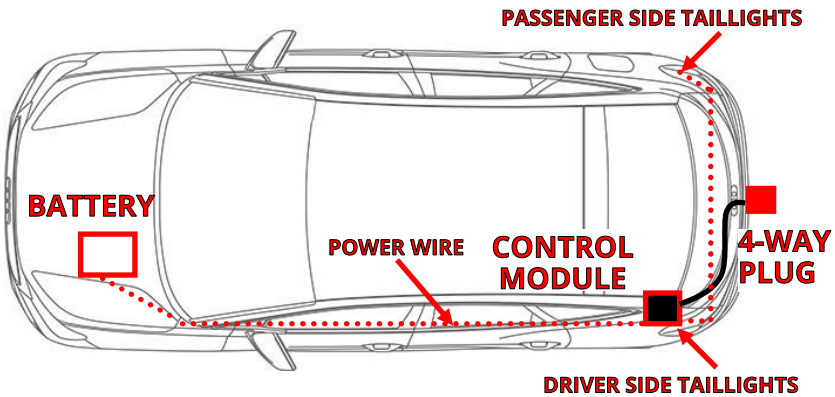


PASSIVE WIRING KIT BOX

13. 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 4-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.





14. Open the rear hatch. Inside the cargo compartment, lift the floor panel up and out to remove.

PLASTIC PRY TOOLS

15. Remove threshold in the rear cargo area. Use a pry tool then lift up.

T30 TORX

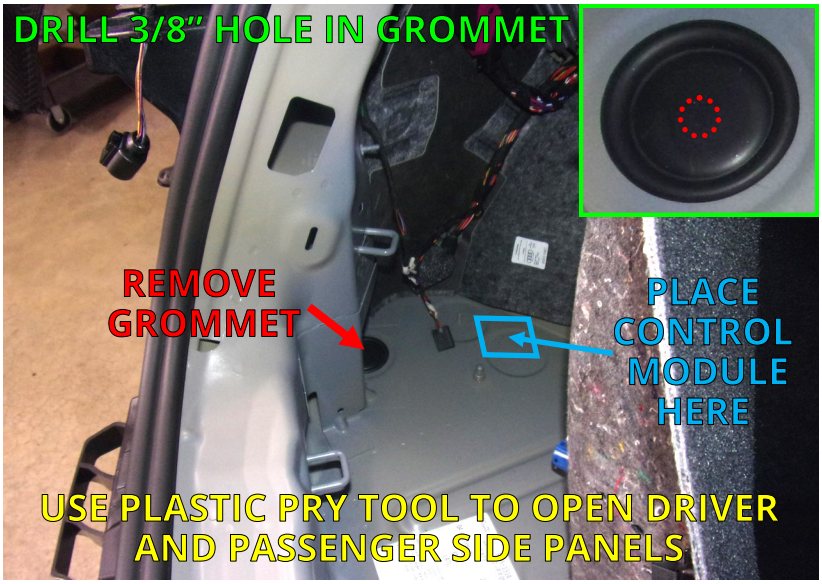
16. Locate the plastic side panels on each side of the cargo area. Use a Torx to remove (3) screws from the panels. To remove the panels, lift the front of the plastic panel and pull inward slightly. Then, slide the plastic panel forward to remove the two locating pins out of the vehicle wall.

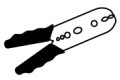
INSTALL WIRING KIT CONTINUED

DRILL & 3/8" BIT

PLASTIC PRY TOOLS

17. Use a plastic pry tool to open up the side wall panels on each side of the cargo compartment. Locate the control module in the wiring kit box. Place the control module behind the driver side panel.
18. Locate and remove the grommet on the floor behind driver side panel. Drill 3/8" hole in grommet. Route the wires of the 4-way connector housing through the grommet from outside of the vehicle to the inside of the vehicle. Replace the grommet.

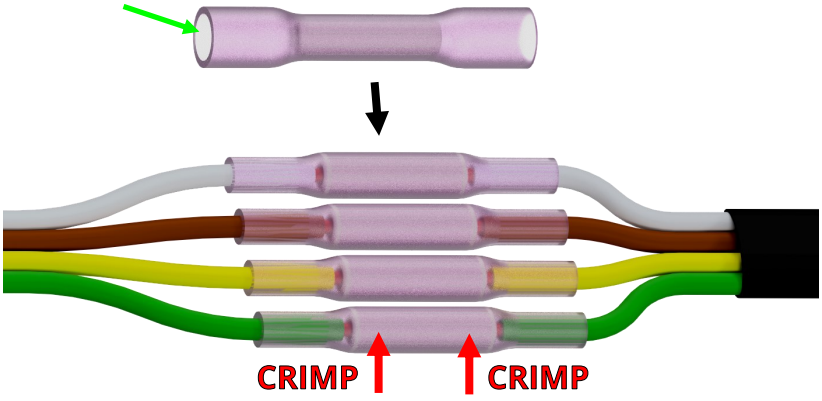




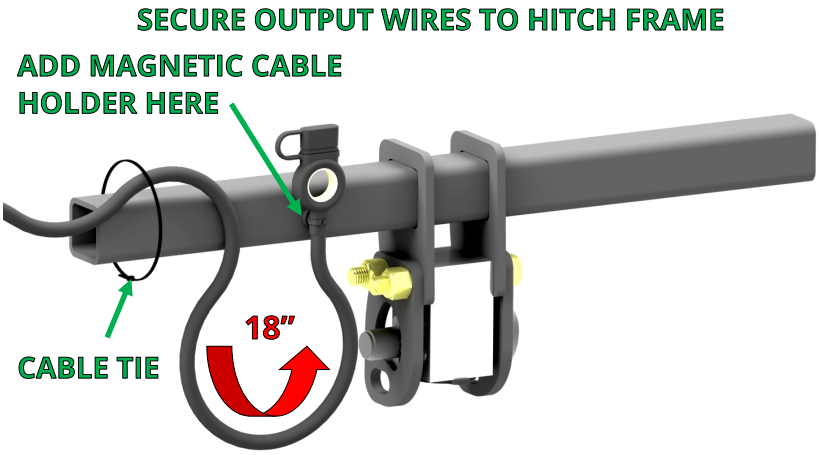
STRIPPER/ CRIMPING TOOL

19. Locate the tail of the 4-way connector wire and the output side wires of the control module. Attach each similar color wire to each other using a red butt connector and crimping tool.

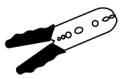
NOTICE (OPTIONAL): The butt connectors are heat shrink connectors. Apply heat to waterproof the connectors after crimping.



20. Secure harness to Stealth hitch frame with cable ties. Maintain an 18" loop from the cable tie to the 4-way plug. Add the magnetic cable holder and secure to the harness close to the 4-way plug, with a cable tie.



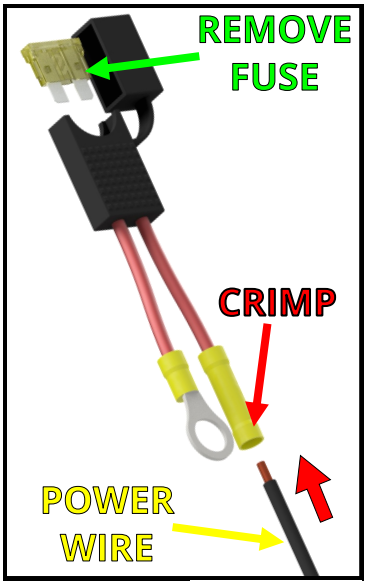
INSTALL WIRING KIT CONTINUED

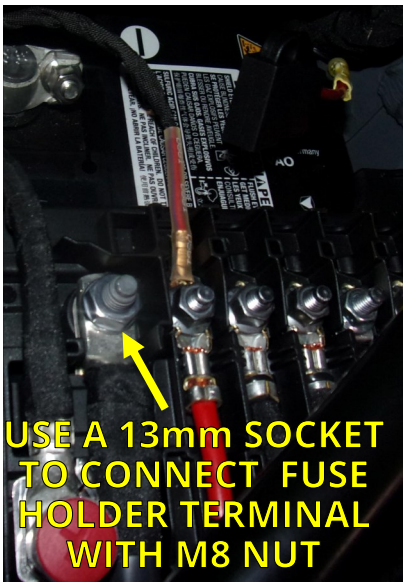


STRIPPER/ CRIMPING TOOL

13mm SOCKET

21. Locate the fuse holder in the wiring kit box and remove the fuse. Locate and open the battery terminal box under the hood. Locate the power wire and unroll it. Use a crimping tool to attach one end of the power wire to the fuse holder. Retrieve the M8 nut from the wiring kit box. Use a socket to connect the eyelet to the battery with the M8 nut, as shown.

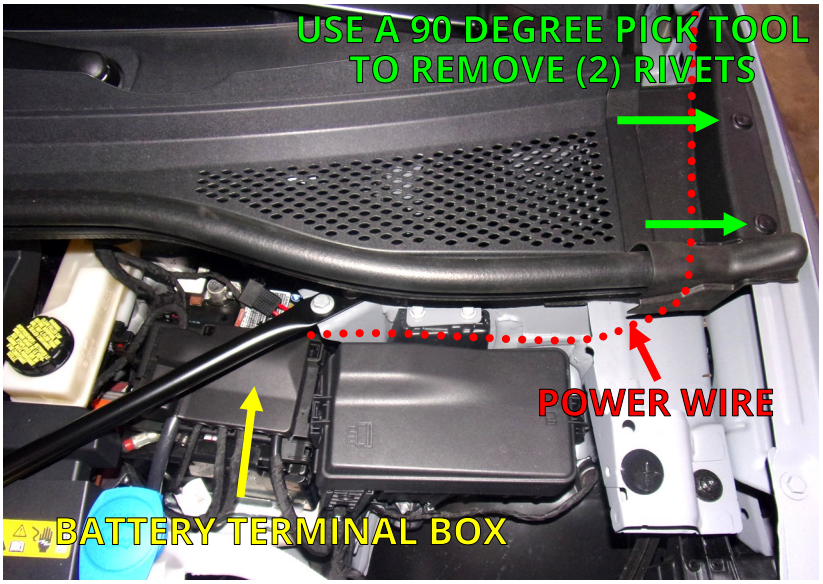




90 DEGREE PICK

22. On the driver side of the engine compartment locate the plastic panel shown in the image. Use a 90 degree pick tool to remove (2) plastic rivets. Lift up and dislodge the panel. Route the power wire from the battery terminal box over to the panel area. Pass the wire down to the area behind the driver side front tire. Replace the side panel.

NOTE: *Use a stiff wire to "fish" the power wire to the correct area if needed.*



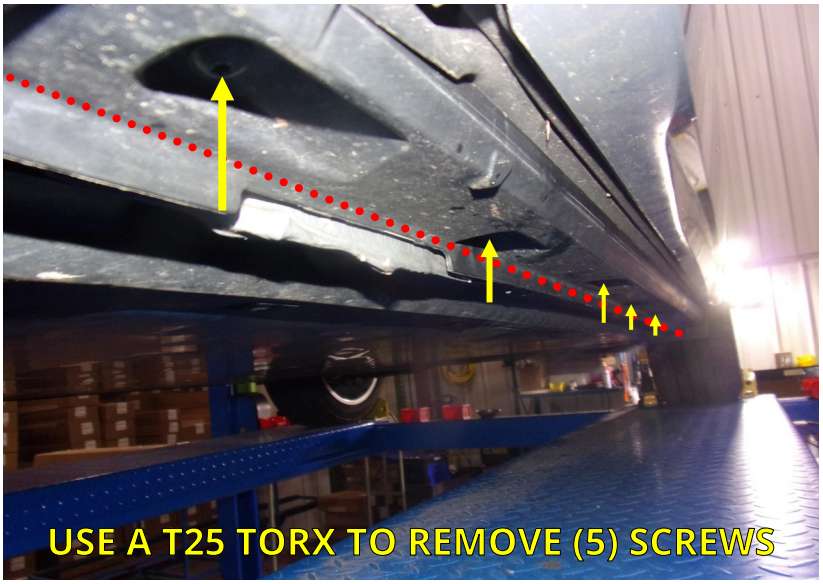
T25 TORX

23. Underneath the vehicle behind the driver side front tire, use a Torx to remove (3) screws. Open up the wheel well liner and find the power wire (and fish wire).

INSTALL WIRING KIT CONTINUED

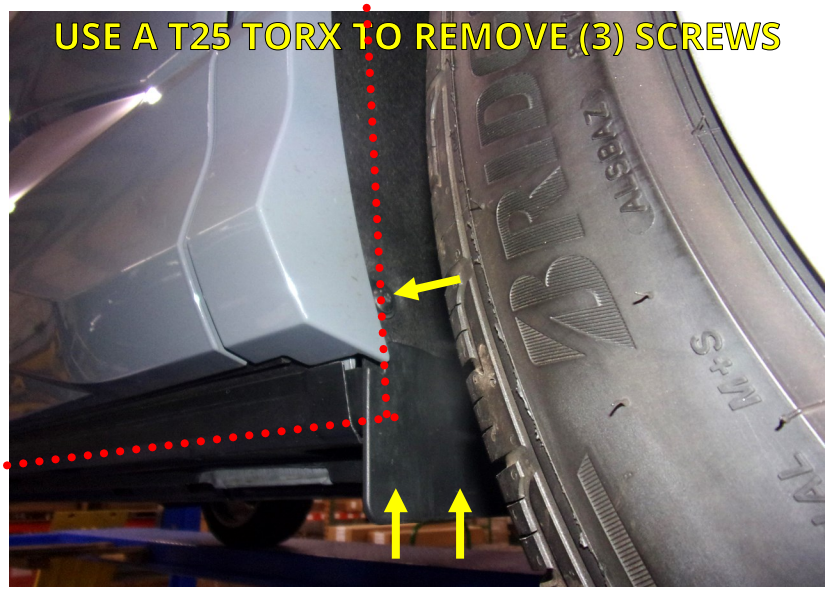
T25 TORX

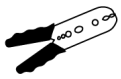
24. The power wire will be routed from behind the driver side front tire, underneath the vehicle, to the area in front of the rear tire. Use a Torx to remove (5) screws in the underbody trim. Use the trim to hold and hide the power wire as much as possible. Avoid areas where the power wire can be pinched or damaged.



T25 TORX

25. Use a Torx to remove (3) screws in front of the rear tire. Route the power wire from the underbody trim to the rear wheel well. Route the power wire around the rear tire behind the wheel well liner.

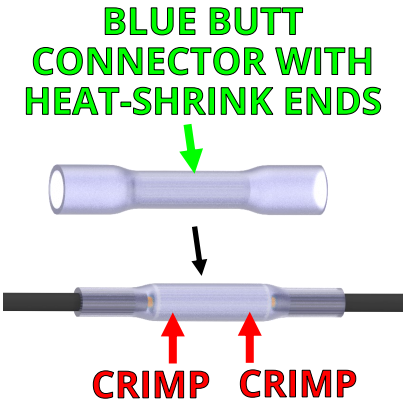




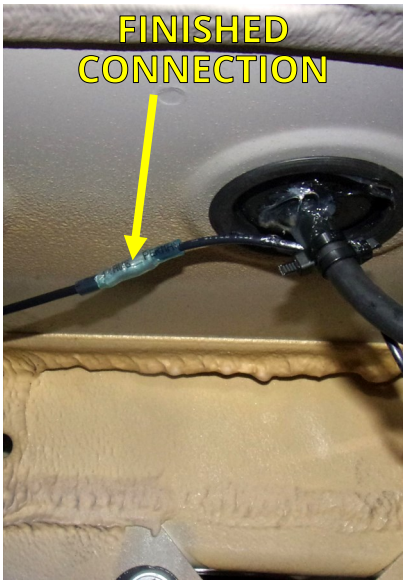
STRIPPER/ CRIMPING TOOL

26. Inside the driver side cargo compartment pass the control module power wire through the grommet from the inside of the vehicle to the outside. Use the blue butt connector and a crimping tool to join the power wire from the engine compartment to the power wire from the control module.

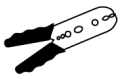
NOTICE (OPTIONAL): The butt connector is a heat shrink connector. Apply heat to waterproof the connector after crimping.



CRIMP EACH WIRE INTO THE SIDE OF EACH BUTT CONNECTOR. APPLY HEAT TO WATERPROOF AFTER CRIMPING



INSTALL WIRING KIT CONTINUED



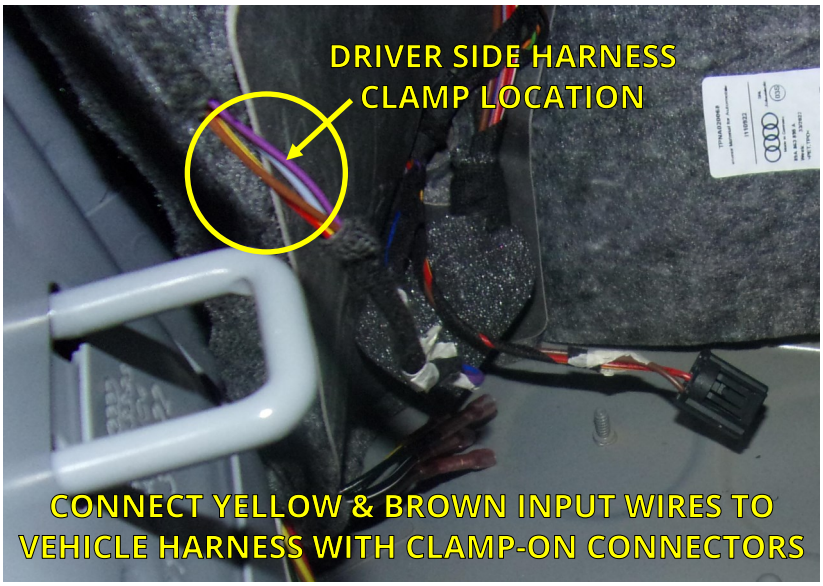
STRIPPER/ CRIMPING TOOL

MULTIMETER

PLIERS

27. The wires on the input side of the module need to be attached to the vehicle wiring. Behind the driver side cargo compartment panel locate the indicated part of the vehicle wiring harness. Use clamp-on connectors to connect the yellow and brown input wires to the vehicle harness. (As shown in reference table below.)

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



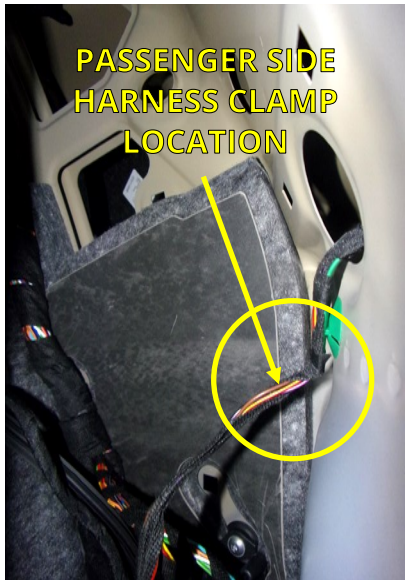
STRIPPER/ CRIMPING TOOL

MULTIMETER

PLIERS

28. Route the green input wire from the driver side to the area behind the passenger side panel. Route the wire along existing vehicle harness wires inside the cargo area. Behind the passenger side panel locate the indicated part of the vehicle wiring harness. Use a clamp-on connector to connect the green input wire to the vehicle harness. (As shown in reference table below.)

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



CLAMP-ON CONNECTOR COLOR REFERENCE TABLE

SIGNAL INPUT WIRES			POWER & GROUND WIRES		
FUNCTION	HARNESS	VEHICLE			
LEFT TURN	YELLOW	GREY/BLACK	12V+ (POWER)	BLACK	BATTERY (+)
RIGHT TURN	GREEN	BLACK/PURPLE	GROUND	WHITE	GROUND STUD
MARKER	BROWN	RED/YELLOW			
BRAKE	RED	NOT USED			

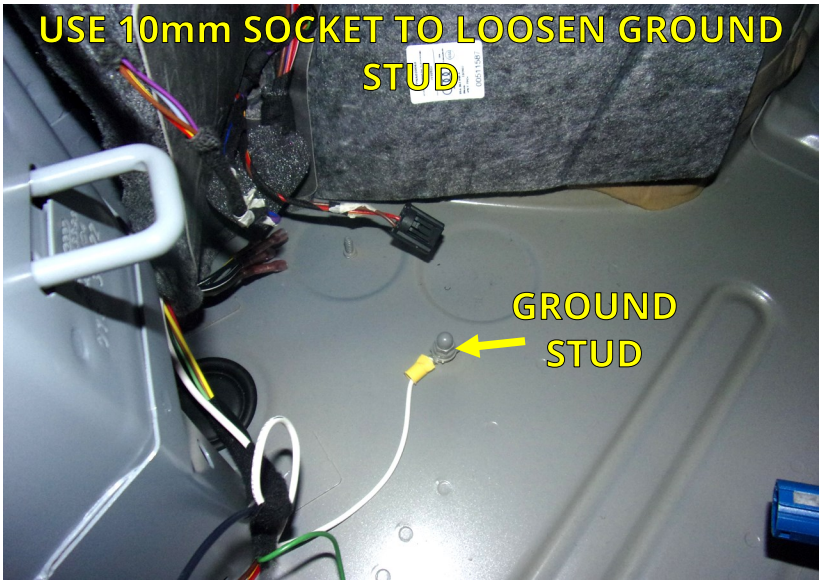
NOTICE: Do not connect the red brake wire. This vehicle does not utilize a separate brake circuit. The brake signal is sent down the left and right turn circuits simultaneously.

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

INSTALL WIRING KIT CONTINUED

10mm SOCKET

29. Locate the ground stud in the area behind the driver side panel. Trim white control module ground wire so it will reach stud without excess wire. Crimp the supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the terminal.



MULTIMETER

SILICONE

30. Complete wiring installation.

- Reinstall the 20 Amp fuse in the fuse holder located near the battery terminal box under the hood. Test the 4-way plug using a multimeter or connect the plug to a trailer and verify that the lights and brakes work correctly.

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

- Secure all wires and wiring components.
- Use silicone to waterproof the grommet.
- 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.
- Reattach and secure the cargo area side panels, body trim panels, and cargo area floor panel. Refer to Steps 14-25.

REINSTALL VEHICLE COMPONENTS

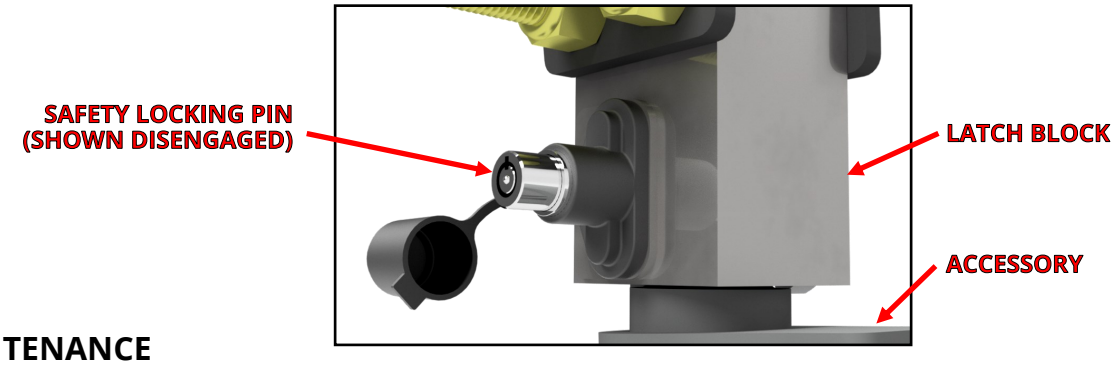
31. Reattach and secure the vehicle components in reverse order. Refer to Steps 1-9.

NOTICE: Remember to plug in the sensor plug in Step 7 before reinstalling the fascia.

FINAL VEHICLE EXAMINATION

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