STEALTH® HITCHES

www.stealthhitches.com 833•694•4824

HITCH INSTALLATION INSTRUCTIONS

MAKE:	YEARS:	MODEL/TRIM:	
PORSCHE	2019 - 2022	CAYENNE	(9Y0 CHASSIS)
	2019 - 2022	CAYENNE E-HYBRID	(9Y0 CHASSIS)

RACK RECEIVER KIT#: **SHR35002**

COMPATIBLE WITH TOW KIT: **SHT25025**

2" RACK RECEIVER MAXIMUM PAYLOAD: 600 LBS
MAXIMUM TOW RATING: 8000 LBS
MAXIMUM TONGUE WEIGHT: 800 LBS

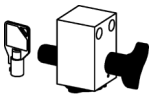
UNDER VEHICLE TRIMMING:

HEAT SHIELD: NO
FASCIA: YES
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"

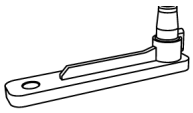

(2) 5/8" NYLOCK NUTS


(6) 8" CABLE TIES


(6) CABLE TIE MOUNT

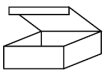

2" RACK RECEIVER

ADDITIONAL PARTS FOR TOW KIT:


BALL MOUNT 3" RISE, SHORT


CHAIN HOOKS

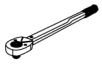

2" BALL

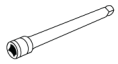

PASSIVE WIRING KIT BOX

TOOLS REQUIRED:


15/16" OPEN END WRENCH


10mm, 13mm, 18mm, & 15/16" SOCKETS


TORQUE WRENCH


SOCKET EXTENSION


SAFETY GLASSES


FLASHLIGHT


PAINTER'S TAPE


RATCHET


PLASTIC PRY TOOLS


90 DEGREE PICK

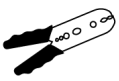

T25, T30, T40 TORX


SIDE CUTTERS


DREMEL TOOL


FILE

ADDITIONAL TOOLS FOR TOW KIT:


STRIPPER/ CRIMPING TOOL


MULTIMETER


PLIERS


13mm SOCKET


SILICONE


DRILL & 3/8" BIT


PHILLIPS HEAD SCREWDRIVER

RACK RECEIVER INSTALLATION: USE STEPS 1-21, & 36-42
TOW KIT INSTALLATION: USE STEPS 1-42

<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

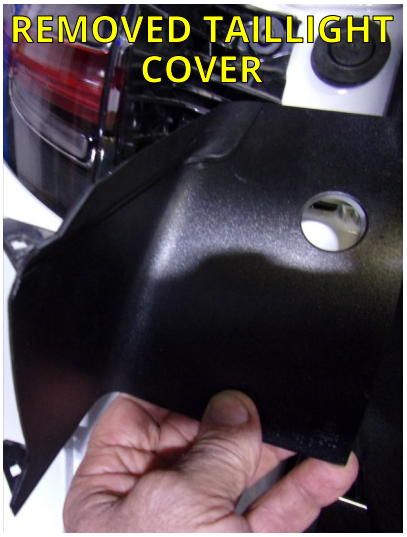
T25 TORX

1. **COUPE MODELS ONLY:** Remove the rear license plate. Use a Torx to remove (2) screws under the license plate area.

PLASTIC PRY TOOLS

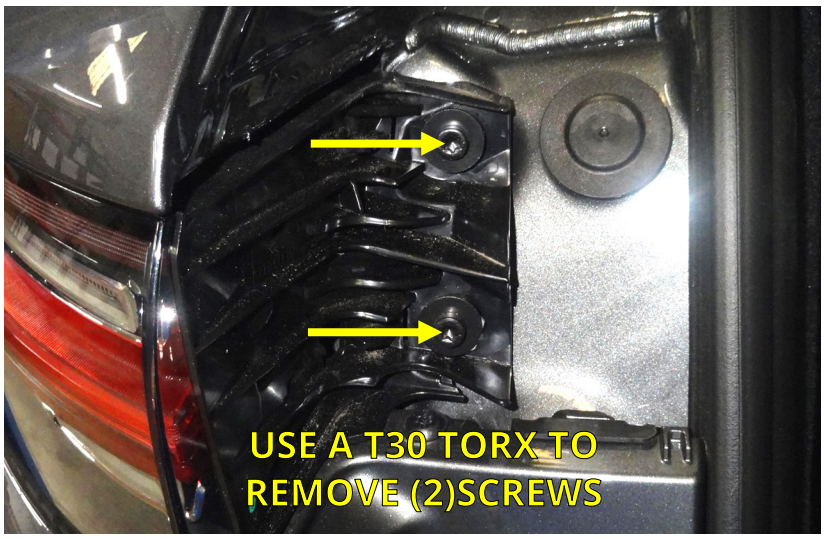
90 DEGREE PICK

2. Remove taillight cover. At the top of the cover, lift up on the rubber edge to expose a plastic clip. Push down on the exposed clip to release. Unclip plastic tab under the taillight. Use a plastic pry tool to pry inward between the light housing and the taillight cover to remove.



T30 TORX

3. Use a Torx to remove (2) screws that secure the taillight to the vehicle. Repeat Steps 1, 2, and 3 on other side of vehicle.

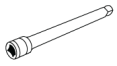


GAIN ACCESS TO MOUNTING AREA CONTINUED

PLASTIC PRY TOOLS

4. ***If installing the tow kit skip steps 4 and 5.*** Inside the rear cargo area, use a plastic pry tool to remove both of the plastic covers as shown.

10mm SOCKET



SOCKET EXTENSION

5. There is a third screw securing the taillight on some vehicle models. This screw can be accessed through the hole where the plastic covers were removed. If accessible, remove the third taillight screw on both sides with a socket and skip to Step 9. ***If not accessible, continue to Step 6.***

6. Lift up and remove cargo area floor panel.

NOTE: *The hybrid model has the battery unit and foam tray in this location instead of the spare tire. Remove the foam insert if needed.*

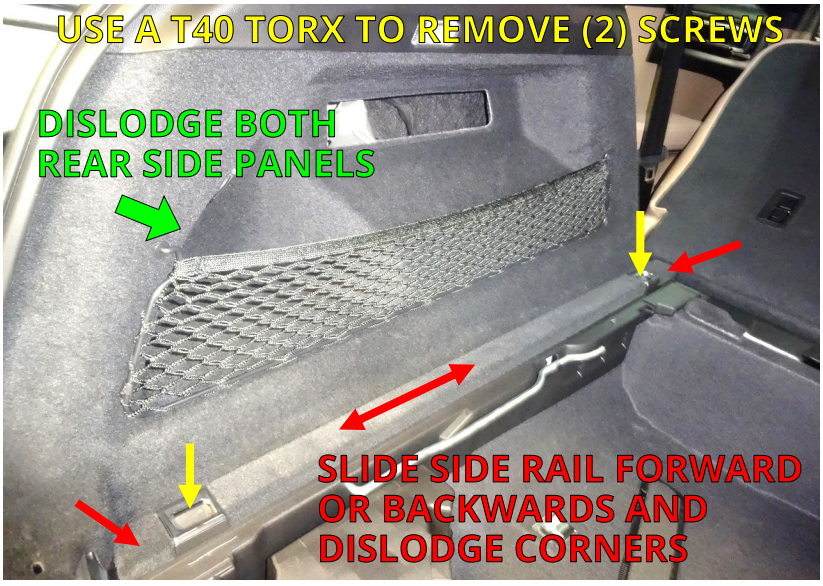
7. Remove the rear door threshold by lifting the threshold up.

90 DEGREE PICK

10mm SOCKET

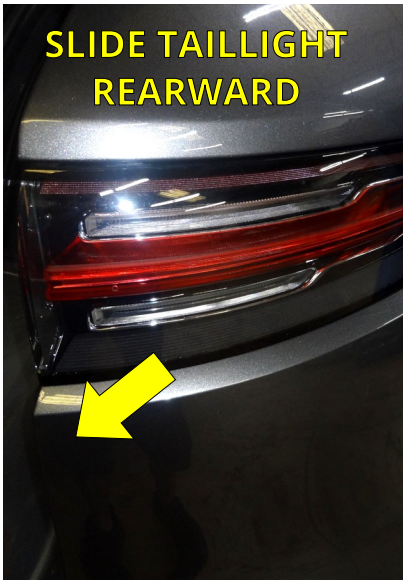
T40 TORX

8. Open (2) plastic anchor covers with a 90-degree pick tool. Use a Torx to remove (2) screws and (2) cargo anchors. Remove the side rails by sliding them forward or backwards and lifting up. Next, dislodge the side rail corner pieces. Dislodge and partially open up both side panels. Remove third taillight screw with a socket, see image on Step 5.



PLASTIC PRY TOOLS

9. Slide the taillights to the rear of the vehicle. A plastic pry tool can be used to help if the light does not slide freely. With the lights dislodged, disconnect the light plug.



GAIN ACCESS TO MOUNTING AREA CONTINUED

T25 TORX

T30 TORX

10. In the light housing area, remove (1) screw holding the top of the plastic fascia.
11. Remove (1) screw securing cargo door rubber stops. Repeat Steps 10-11 on other side of vehicle.

T25 TORX

PLASTIC PRY TOOLS

10mm SOCKET

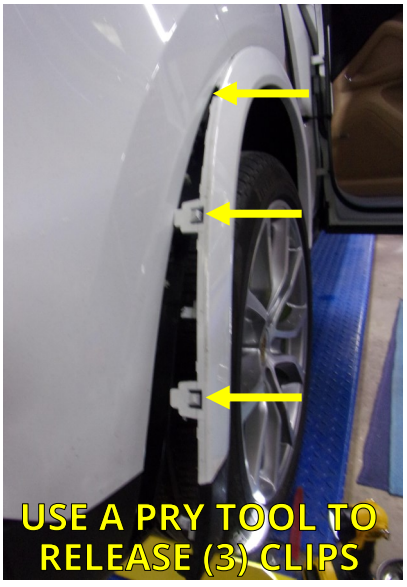
12. To allow partial removal of the rear wheel well trim, remove the (3) most rearward screws inside the rear wheel well. Behind the wheel well liner locate (1) plastic nut. Use a socket to remove the nut.

PLASTIC PRY TOOLS

PAINTER'S TAPE

13. Apply outward pressure to the wheel well trim and use a plastic pry tool to release (3) clips securing the trim to the vehicle. Start with the bottom clip and work up. Push down on each clip to disconnect.
14. Behind the rear wheel well trim are (2) screws holding the fascia. Pull the trim away from vehicle to expose the screws. Use a socket to remove screws.

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



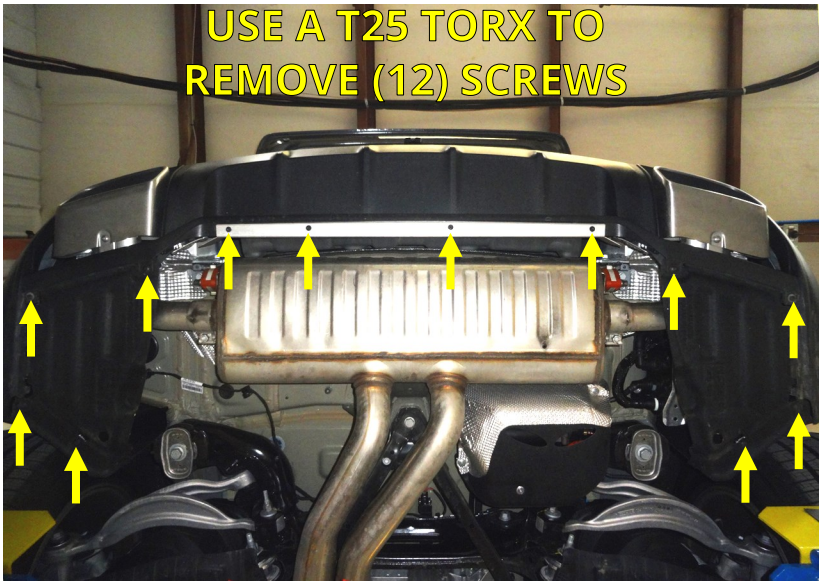
GAIN ACCESS TO MOUNTING AREA CONTINUED

T25 TORX

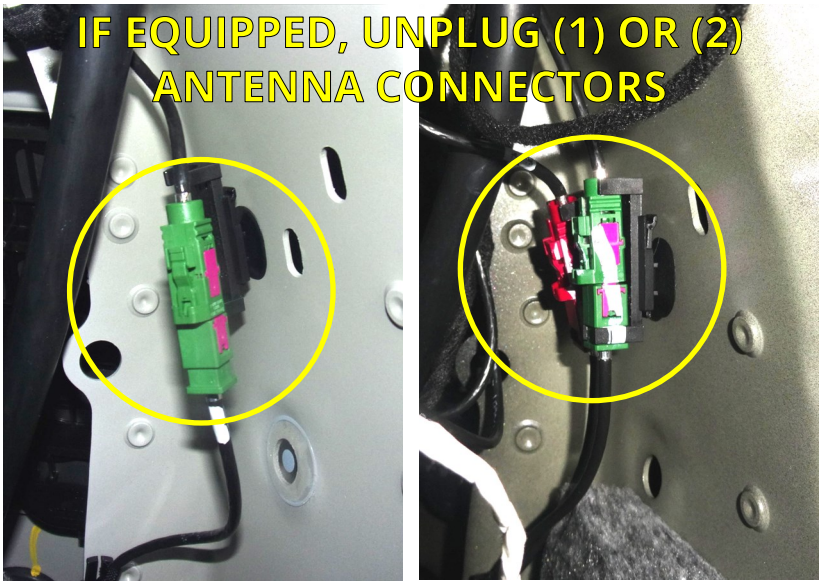
15. Remove (1) screw underneath the vehicle, behind the rear wheel. Repeat Steps 12-15 on other side of vehicle.

T25 TORX

16. From underneath the vehicle use a Torx to remove (12) screws from the bottom of the fascia.



17. If the vehicle is equipped with antenna connectors, unplug (1) or (2) quick connect antenna connectors in the rear passenger side cargo area. When the rear fascia is dislodged, remove the grommet on the passenger side of the vehicle and feed the antenna line to the outside of the vehicle, still connected to the fascia.



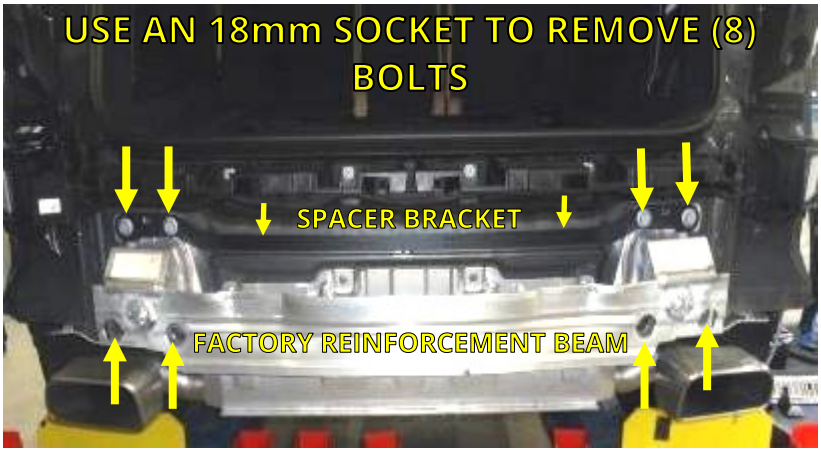
GAIN ACCESS TO MOUNTING AREA CONTINUED

18. The fascia will not be completely disconnected from the vehicle, a wiring harness attached to the fascia must remain attached. Before removing the rear fascia, set up a stand or place a pad down near the rear driver side of the vehicle. Carefully pull the fascia away from the vehicle. Move the fascia away from the vehicle and place on the stand or pad prepared earlier.

NOTICE: If the electrical harness becomes disconnected the vehicle will need reprogramming at a Porsche Dealership.

18mm SOCKET

19. With the fascia out of the way, locate and remove the (8) bolts securing the factory reinforcement beam to the vehicle. A spacer bracket will also be removed. Discard the factory reinforcement beam and spacer bracket. **Save** the factory bolts for the hitch installation.

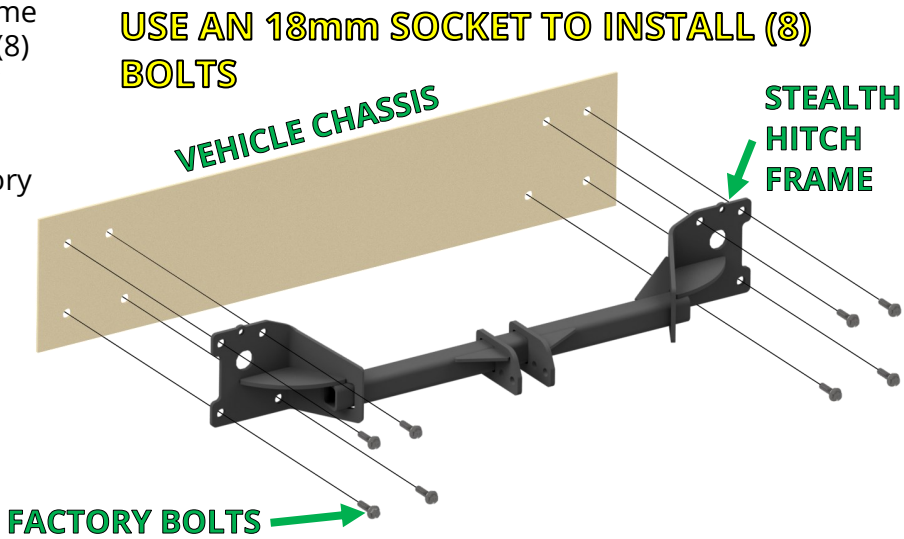


INSTALL STEALTH HITCH FRAME

18mm SOCKET

TORQUE WRENCH

20. Install the Stealth hitch frame onto the vehicle using the (8) saved factory bolts. Center the hitch frame before tightening. Use a torque wrench to tighten the factory bolts to 85 ft.-lbs.



MOUNT LATCH BLOCK

15/16" SOCKET

15/16" OPEN END WRENCH

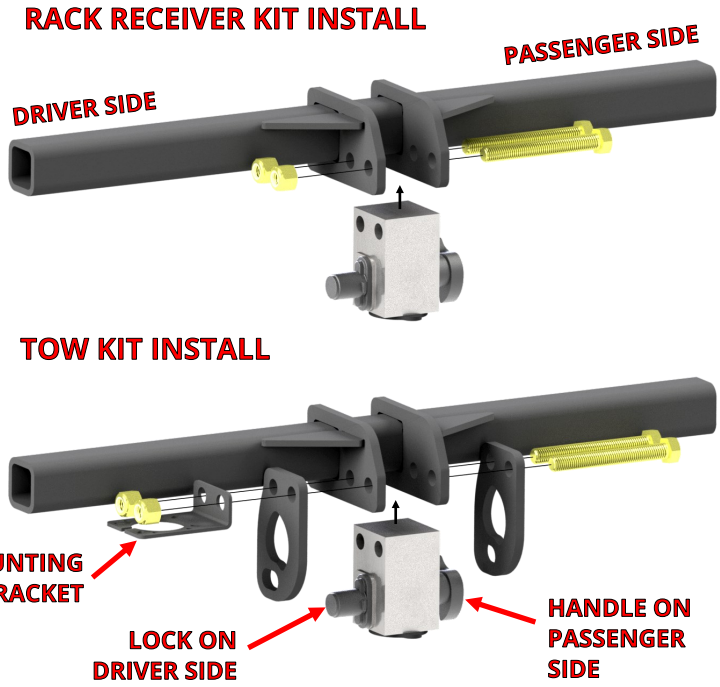
TORQUE WRENCH

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.

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

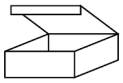
NOTICE: Keys are packaged within the latch block, remove keys and store in safe location.



IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 36.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 22.

INSTALL PASSIVE WIRING KIT

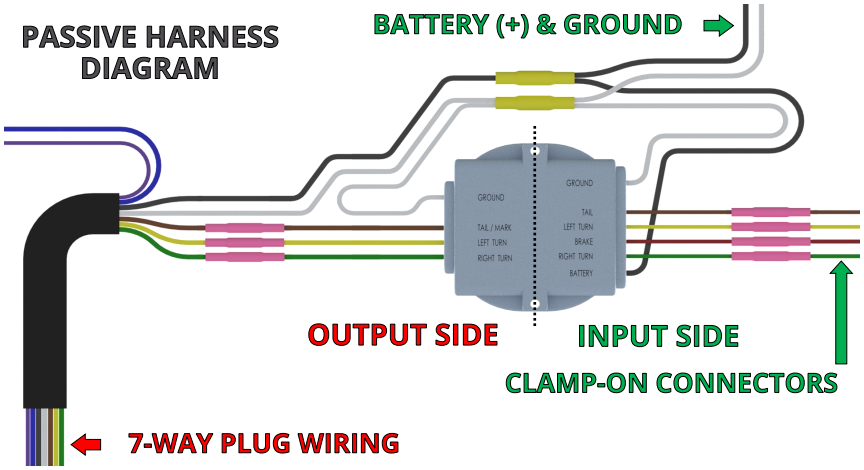
#	DESCRIPTION	QTY
1	7-WAY WIRING HARNESS • FUSE HOLDER & FUSE • CONTROL MODULE & WIRES	1
2	POWER WIRE	1
3	ADHESIVE FOAM STRIP	2
4	5/8" LONG PHILLIPS SCREWS	4
5	#10 LOCK NUT	4
6	BUTT CONNECTOR	1
7	M8 FLANGE NUT	1
8	FORK TERMINAL	1
9	CLAMP-ON CONNECTORS	5
10	CABLE TIE – 8"	8
11	CABLE TIE – 14"	3
12	MOUNTING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

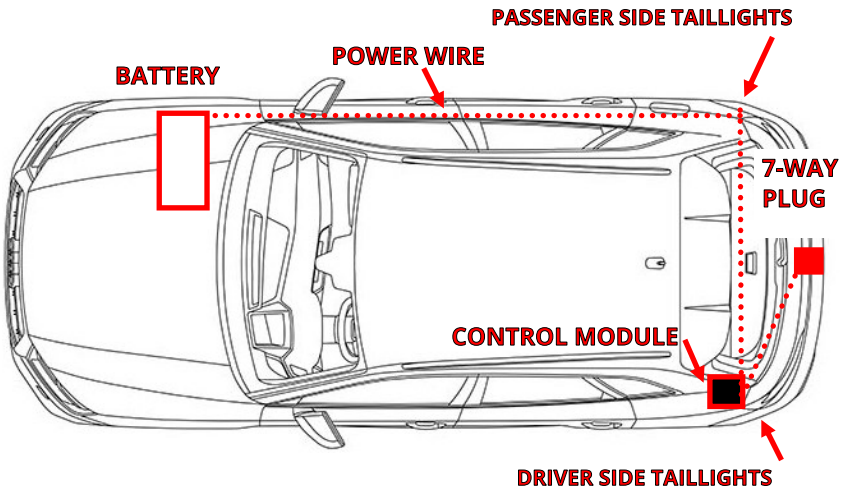


PASSIVE WIRING KIT BOX

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

DRILL & 3/8" BIT

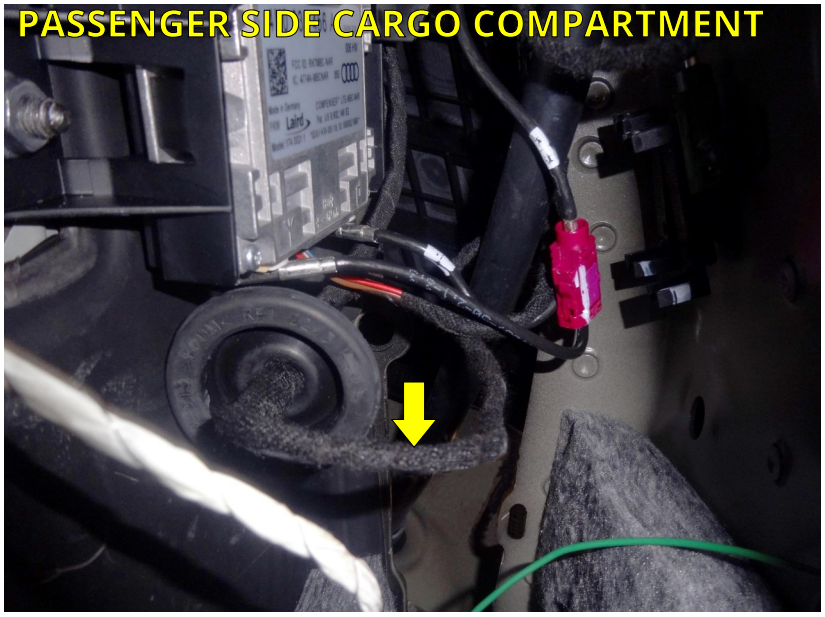
23. On the driver side of the vehicle locate and remove the indicated rubber grommet. Drill a 3/8" hole in the grommet. Place the wiring harness control module inside the driver side cargo compartment. Feed the output wires and control module power wire through grommet from inside of the vehicle to the outside. Replace the grommet.

MULTIMETER

PLIERS

24. The wires on the input side of the wiring module need to be attached to the vehicle wiring. Use an existing vehicle wire harness as a guide to route the green input wire to the passenger side of the vehicle. Locate the indicated part of the vehicle wiring harness and remove the sheathing. Use a clamp-on connector to connect the green wire to the right turn signal wire, behind taillight. (See reference table on next page.)

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



MULTIMETER

PLIERS

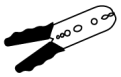
25. Inside the driver side cargo compartment locate the indicated part of the vehicle wiring harness. Use clamp-on connectors to connect the brown and yellow wires to wires behind taillight. (As shown in reference table on next page.)

CLAMP-ON CONNECTOR COLOR REFERENCE TABLE

SIGNAL INPUT WIRES			POWER & GROUND WIRES		
FUNCTION	HARNESS	VEHICLE			
LEFT TURN	YELLOW	GRAY/BLACK	12V+ (POWER)	BLACK	BATTERY (+)
RIGHT TURN	GREEN	GRAY/BLACK	GROUND	WHITE	GROUND STUD
MARKER	BROWN	GREEN/BLACK			
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. ***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.

10mm SOCKET



STRIPPER/ CRIMPING TOOL

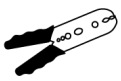
26. Locate the ground stud in the rear driver side cargo area. Trim white ground wire so it will reach stud without excess wire. Crimp supplied fork terminal to the ground wire with a crimping tool. Loosen the ground stud and secure the fork to the terminal.

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

10mm SOCKET

27. The power wire will need to be routed to the engine compartment where it will connect to the battery. Route the wire from the grommet to the gravel guard on the passenger side undercarriage. Loosen the (4) nuts holding the gravel guard to allow routing through it. Then pass the wire up into the engine compartment.

INSTALL WIRING KIT CONTINUED

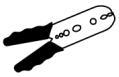


STRIPPER/ CRIMPING TOOL

13mm SOCKET

28. Locate the fuse holder supplied in the wiring kit box. Remove the fuse from the fuse holder. Crimp the fuse holder lead to the black power wire. Place the ring terminal on top of the positive battery stud (+). Use provided M8 nut to connect.

NOTE: *If possible, do not loosen the battery stud nut. Add M8 nut on top of ring terminal. if the stud is too short, remove the battery stud nut and add the ring terminal. Do not allow the existing wiring under the stud nut to become disconnected.*



STRIPPER/ CRIMPING TOOL

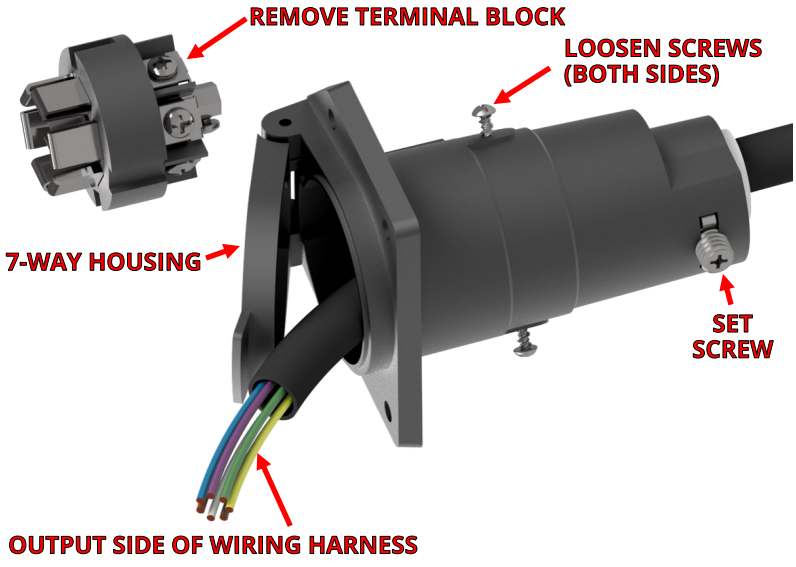
29. Determine the amount of power wire needed to reach the control module inside the vehicle. Trim the control module power wire to remove excess length. Use the included butt connector to crimp the power wire leading from the power supply to the control module power wire.

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

WIRE 7-WAY PLUG

PHILLIPS HEAD SCREWDRIVER

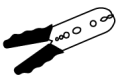
30. Locate the 7-way housing. Use a screwdriver to loosen (2) screws. Remove 7-way round terminal block. Use a screwdriver to loosen the set screw at the bottom of the 7-way housing. Route output side wires of the wiring harness through the 7-way housing.



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.

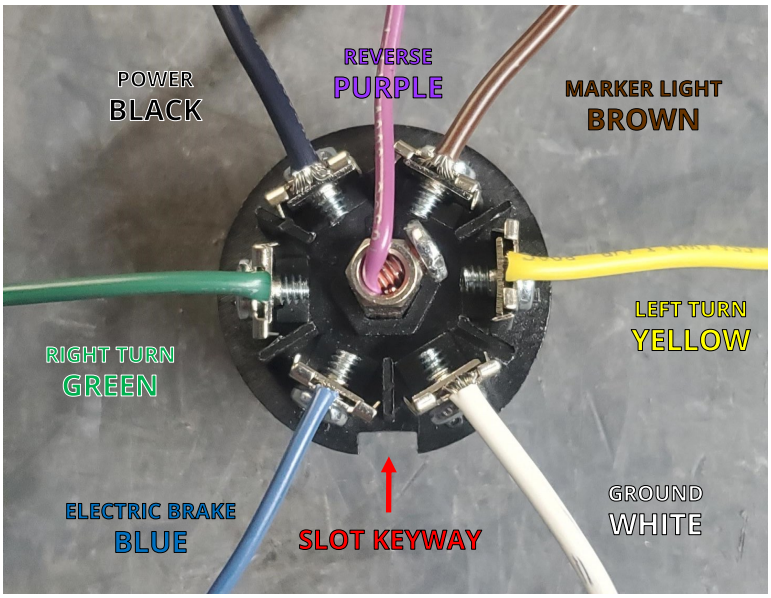
PHILLIPS HEAD SCREWDRIVER



STRIPPER/ CRIMPING TOOL

31. 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.



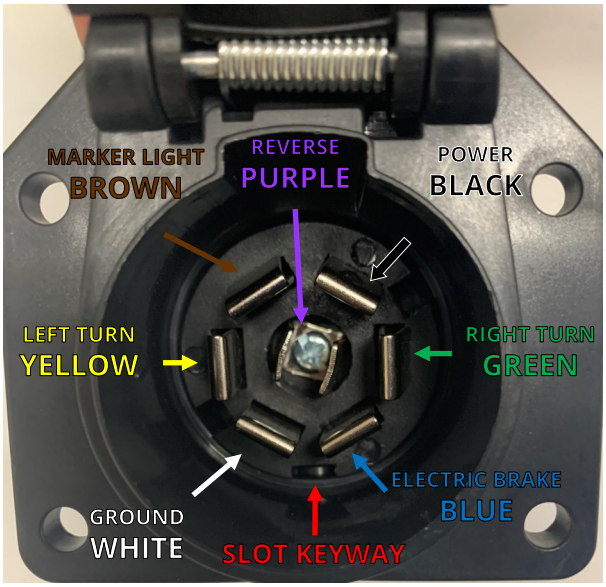
TEST 7-WAY HARNESS WIRING

PHILLIPS HEAD SCREWDRIVER

MULTIMETER

32. 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 battery.**

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



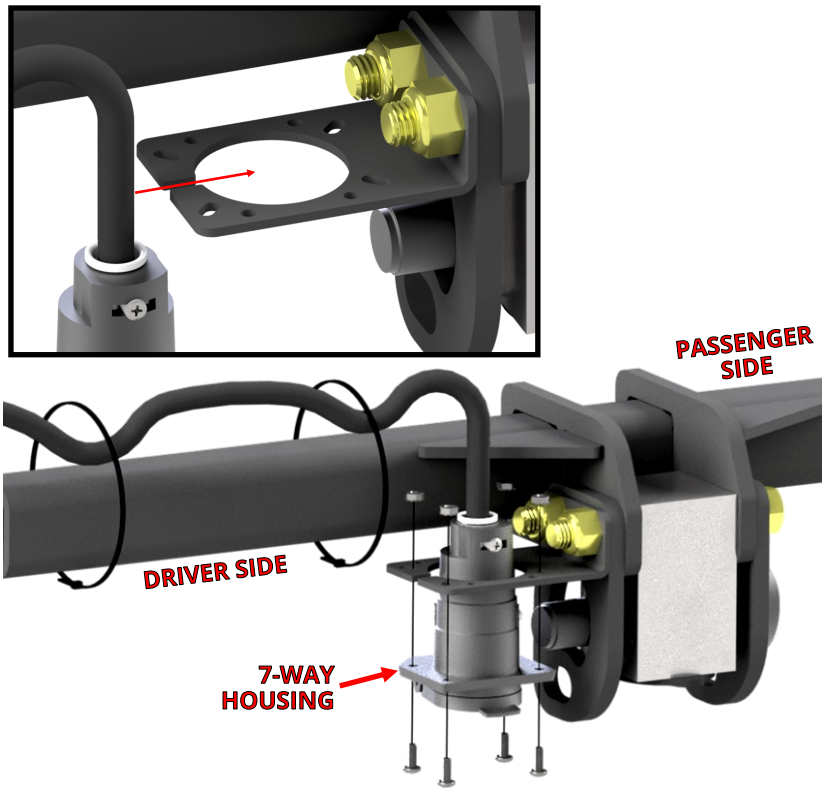
- Start by connecting the multimeter negative probe to the ground blade on the 7-way receptacle.
- Next, connect the multimeter positive probe to the power blade on the 7-way receptacle and check for 12 volts.
- Once that is confirmed, move the positive probe to the left turn blade on the 7-way receptacle 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

33. Carefully pass the wire of the 7-way housing through the mounting bracket. Attach the 7-way housing to the Stealth hitch frame as shown. Secure harness to Stealth hitch frame with cable ties provided in the wiring kit.
34. Secure all wires and wiring components. Use the remaining wiring kit 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.
35. Use the provided adhesive foam strips to secure the control module to an inside body panel. Use silicone to waterproof grommet.



CUT ACCESS TO LATCH BLOCK

36. Detach the hands-free trunk release cable, from rear fascia.

NOTE: *Make sure not to damage the cable during the removal of the cable and the fascia cut.*

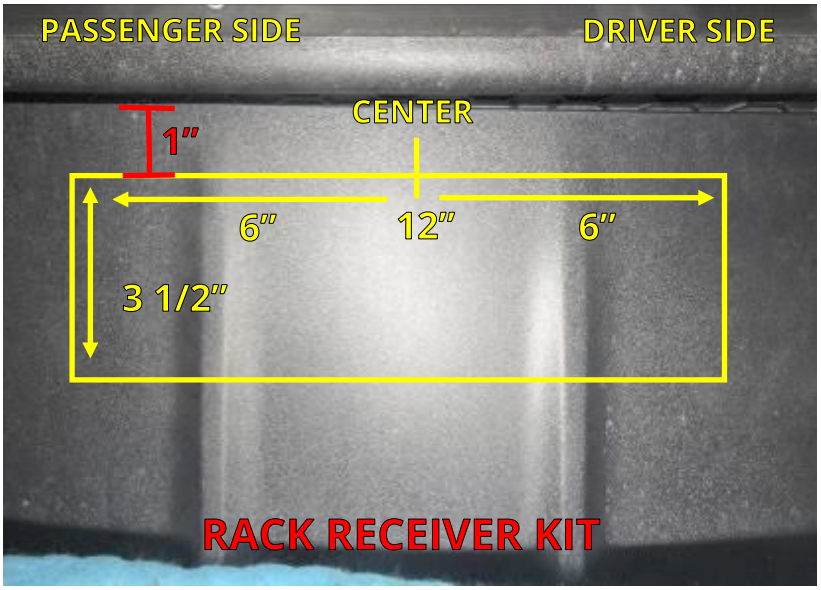
CUT ACCESS TO LATCH BLOCK CONTINUED

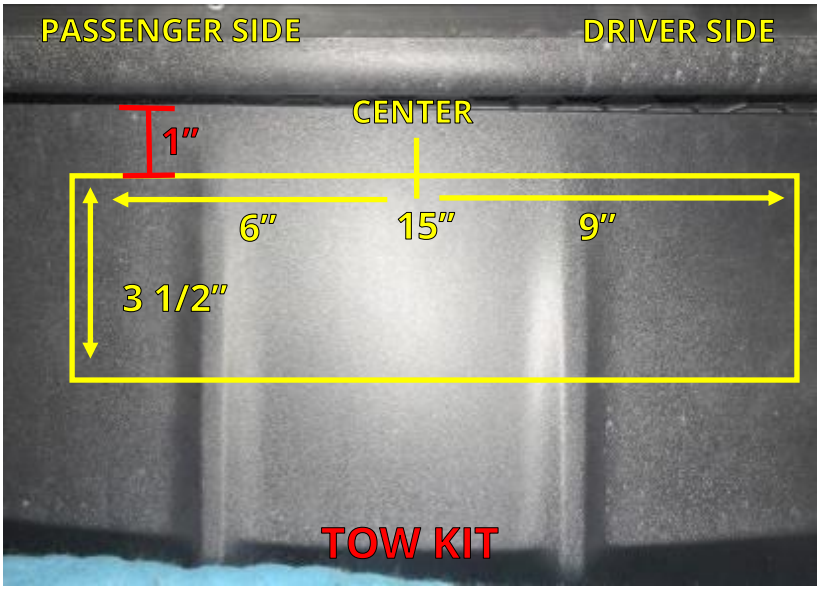
DREMEL TOOL

FILE

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

NOTE: *Make sure the hands-free trunk release cable is removed before cutting.*



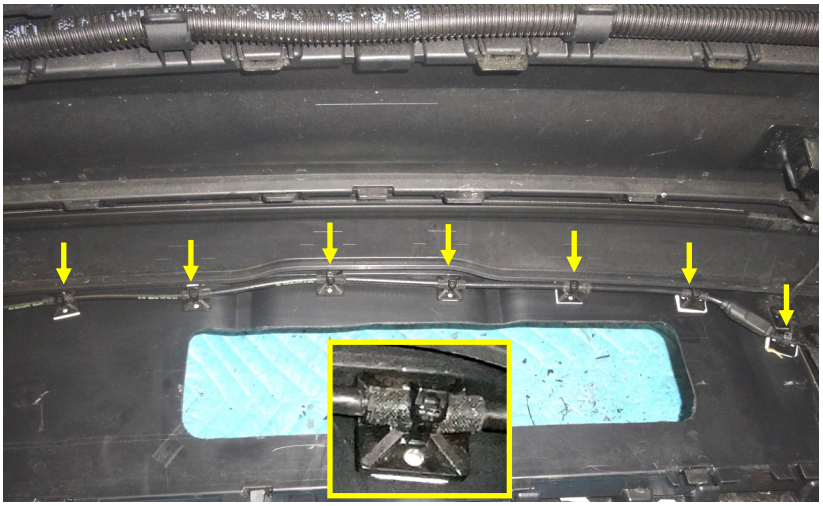


(6) CABLE TIE MOUNT

(6) 8" CABLE TIES

SIDE CUTTERS

38. Reattach the hands-free trunk release cable using the (6) supplied cable tie mounts and 8" cable ties. Secure the cable to the rear fascia as shown. Trim the cable ties when finished.



REINSTALL VEHICLE COMPONENTS

39. Reattach and secure the fascia and other vehicle components in reverse order. Refer to Steps 1-18.

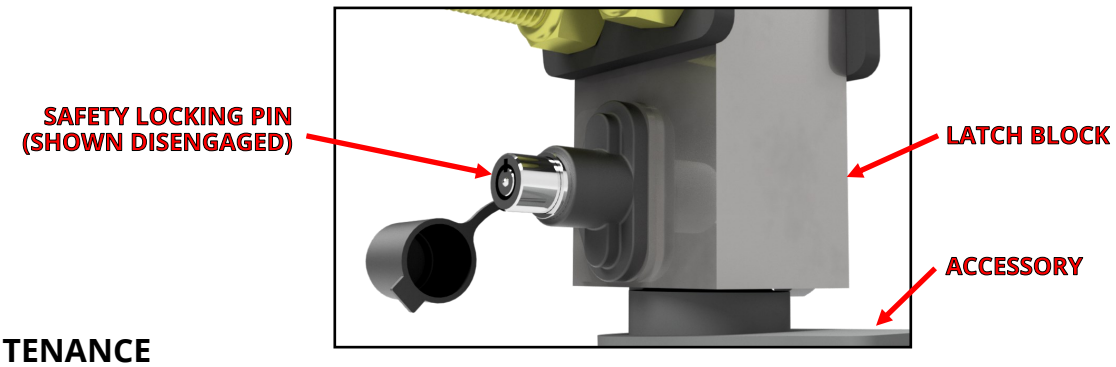
NOTE: *If your vehicle is equipped with antenna, carefully route the antenna wires unplugged in Step 17 back into the vehicle before completely re-installing the fascia.*

40. The finished, under vehicle view.

FINAL VEHICLE EXAMINATION

41. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
42. 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.