



www.stealthhitches.com 833•694•4824

HITCH INSTALLATION INSTRUCTIONS

MAKE:	YEARS:	MODEL/TRIM:	YEARS:	MODEL/TRIM
BMW	2019-2020	X5 - 50i xDrive & M-Sport	2019-2024	X6 - 40i xDrive & M-Sport
	2019-2024	X5 - 40i s/x Drive & M-Sport	2020-2023	X6 - M50i
	2019-2023	X5 - 45e xDrive & M-Sport	2024	X6 - M60i
	2020-2022	X5 - M50i		
	2024	X5 - M60i		

RACK RECEIVER KIT BOX#: **SHR31028**

COMPATIBLE WITH TOW KIT: **SHT25015, SHT25015A, & SHT25066**

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



UNDER VEHICLE TRIMMING:

HEAT SHIELD: **NO**
 FASCIA: **NO**
 GRAVEL GUARD TRIMMING: **YES**



READ ALL INSTRUCTION WARNINGS AND LABELS

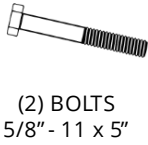


NO WELDING, METAL DRILLING OR VISIBLE TRIMMING REQUIRED

PARTS SUPPLIED WITH RACK RECEIVER KIT:



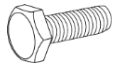
LATCH BLOCK & KEYS



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



(2) 5/8"
NYLOCK NUTS



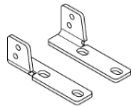
(2) 5/16" X 1"
BOLTS



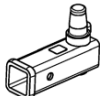
(2) 5/16" SERRATED
FLANGE NUTS



(2) 5/16" FLAT
WASHERS

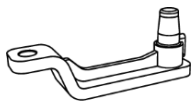


EXHAUST
BRACKETS



2"
RACK RECEIVER

ADDITIONAL PARTS FOR TOW KIT:



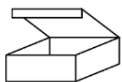
BALL MOUNT
5" RISE, SHORT



CHAIN HOOKS



2" BALL



PASSIVE OR **ACTIVE**
WIRING HARNESS KIT
BOX

TOOLS REQUIRED:



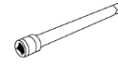
15/16" OPEN
END WRENCH



18mm DEEP WELL,
8mm, 10mm,
12mm, 13mm, 1/2"
& 15/16" SOCKETS



RATCHET



SOCKET
EXTENSION



TORQUE
WRENCH



T20, T25 &
T30 TORX



FLASHLIGHT SAFETY GLASSES



PLASTIC
PRY TOOLS



FLATHEAD
SCREWDRIVER



DREMEL TOOL



FILE



90 DEGREE
PICK



PAINTER'S
TAPE



5/16"
ALLEN WRENCH
(X5 only)

ADDITIONAL TOOLS FOR TOW KIT:



PHILLIPS HEAD
SCREWDRIVER



STRIPPER/
CRIMPING
TOOL



SILICONE



PLIERS



DRILL &
3/8" BIT



MULTIMETER

RACK RECEIVER INSTALLATION: USE STEPS 1-38 & 67-73

2019 - 2022 PASSIVE TOW KIT INSTALLATION: USE STEPS 1-44, 55-56, 59-60, & 63-73 (SHT25015)

2024+ PASSIVE TOW KIT INSTALLATION: USE STEPS 1-41, 45-56, 59-60, & 63-73 (SHT25066)

2019 - 2022 ACTIVE TOW KIT INSTALLATION: USE STEPS 1-41 & 57-73 (SHT25015A)

NOTICE: If installing an ACTIVE tow kit, the vehicle must be programmed before trailer lights will function, see notice on Page 3.

<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 a wiring harness that is compatible with the vehicle's wiring. Depending on the vehicle, the harness will be one of two types, "Active" or "Passive." The wiring section of the instructions will indicate which wiring harness style is being used and how to install it.
- The **Active Harness** plugs into the vehicle's wiring so that the vehicle's computer can communicate with the trailer wiring. This allows certain functions such as cameras or backup alarms to continue to operate as designed. Some active harnesses require reprogramming of the vehicle's computer before the trailer wiring is functional. For BMW vehicles that need programming, Stealth provides this service remotely. Refer to the Active Harness section of the instructions to determine if programming is required for this install. ***This programming must be taken into account when planning the timing of the Stealth product install. The remote BMW programming needs to be scheduled approximately 1 week in advance.***
- The **Passive Harness** is independent of the vehicle's computer and communication system. The module of the harness is powered directly from the battery rather than the vehicle's wiring harness. The module monitors the output signals from the vehicle's lights. It then powers and activates the trailer lighting accordingly.

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.

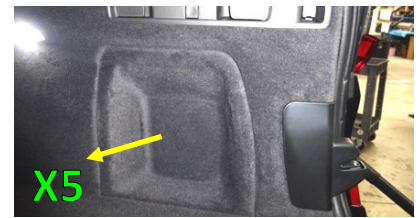
- ⚠ Do not modify this product in any manner. Doing so could alter its integrity and lead to a loss of attachment between the trailer and the tow vehicle.
- ⚠ Adding Stealth hitch components to the chassis of any vehicle can be hazardous. There is potential for unexpected combustion of fuel, electric 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.

NOTICE: If installing an active wiring harness, your vehicle must be programmed. Arrangements can be made with Code My Car (585-496-4648). Please allow at least a week to make programming arrangements. Programming will require your vehicle to be connected to a computer and an internet connection. **Note:** A programming code is affixed to the control module and the programming cord which will be needed when contacting Code My Car. Additional programming changes may be available at time of programming. Arrangements can be made when contacting Code My Car.

GAIN ACCESS TO MOUNTING AREA

1. Inside the vehicle cargo area, remove the driver and passenger side access panels as shown.

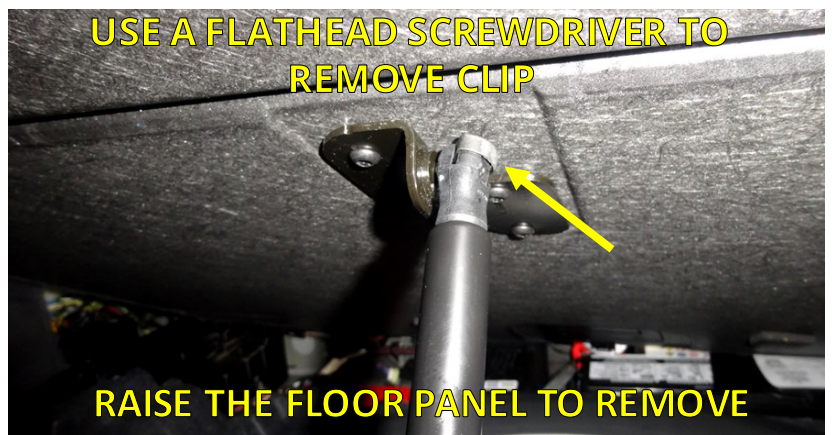


90 DEGREE PICK



T30 TORX

2. Remove the rear floor panel. Start by locating the (2) plastic cover caps in front of the rear floor panel. Use a 90 degree pick to open the plastic cover caps to gain access to the screws. Use a Torx socket to remove (2) screws.



FLATHEAD SCREWDRIVER

3. Raise rear floor panel to gain access to the lift support strut shock. Use a flathead screwdriver to pry the metal clip outward and remove the clip. Remove the rear floor panel by lifting up and out. Place the panel on a blanket or safe area.

NOTE: Spare tire removal is optional.

GAIN ACCESS TO MOUNTING AREA CONTINUED



8mm
SOCKET



90 DEGREE
PICK

4. Remove (7) plastic rivets from the battery cover to gain access to the battery compartment. On some models (2) screws may also need to be removed.



T20 TORX

5. **X5 ONLY.** Remove the threshold in the rear cargo area. Use a Torx socket to remove (4) screws. Lift up to remove threshold.



T20 TORX

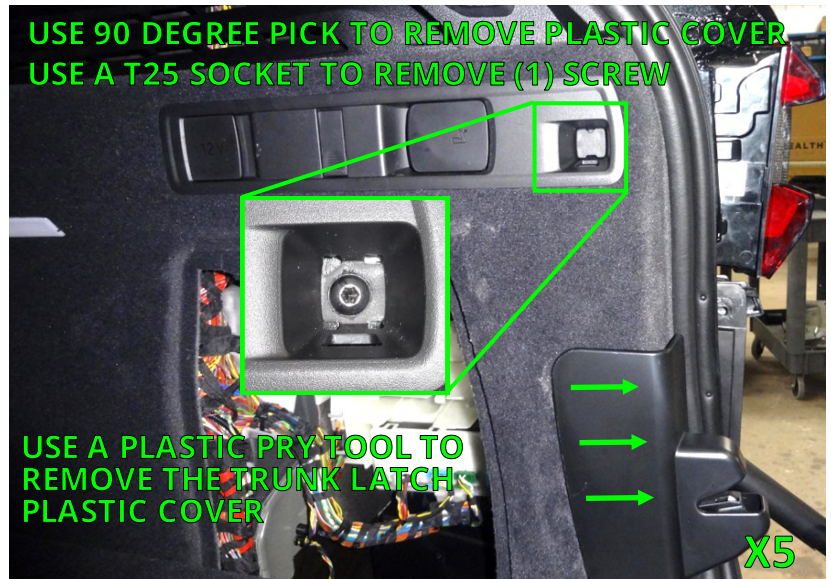
6. **X6 ONLY.** Remove the threshold in the rear cargo area. Use a T20 socket to remove (3) screws. Lift up to remove threshold.



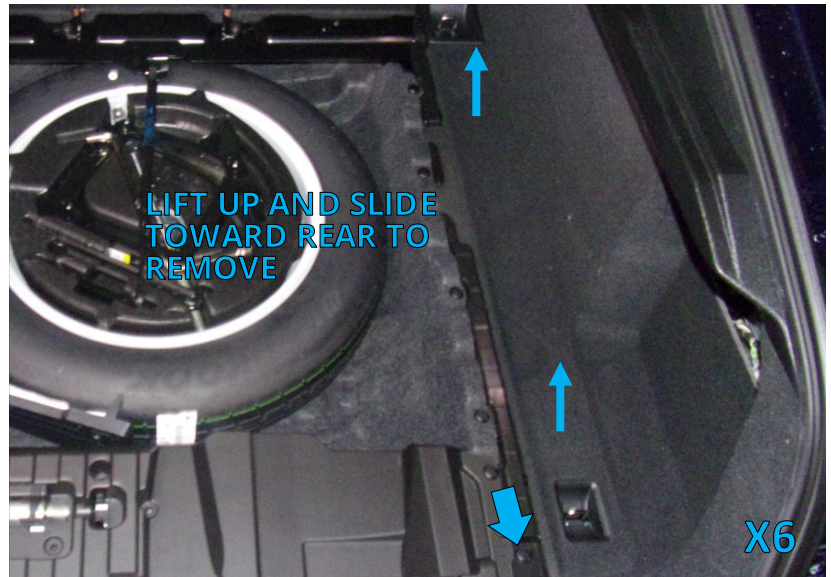
GAIN ACCESS TO MOUNTING AREA CONTINUED



- 7. X5 ONLY.** To gain access to the passenger side taillight, remove the rear side panel on the passenger side. Start by dislodging the plastic cover to the rear trunk latch with a plastic pry tool. Slide to the rear to remove.
- 8. X5 ONLY.** Locate the square plastic cover on the rear side panel above the trunk latch. With a 90 degree pick, dislodge the plastic cover to gain access to (1) Torx screw. Use a Torx socket to remove (1) screw.



- 9. X6 ONLY.** Inside the rear cargo compartment, locate the passenger side rail. Lift up and slide the rail toward the rear to remove.



- 10. X5 ONLY.** Locate the plastic cap on the front of the passenger side panel, behind the rear seats. Use a plastic pry tool to remove the plastic cap and gain access to (1) screw. Use a socket to remove (1) screw.



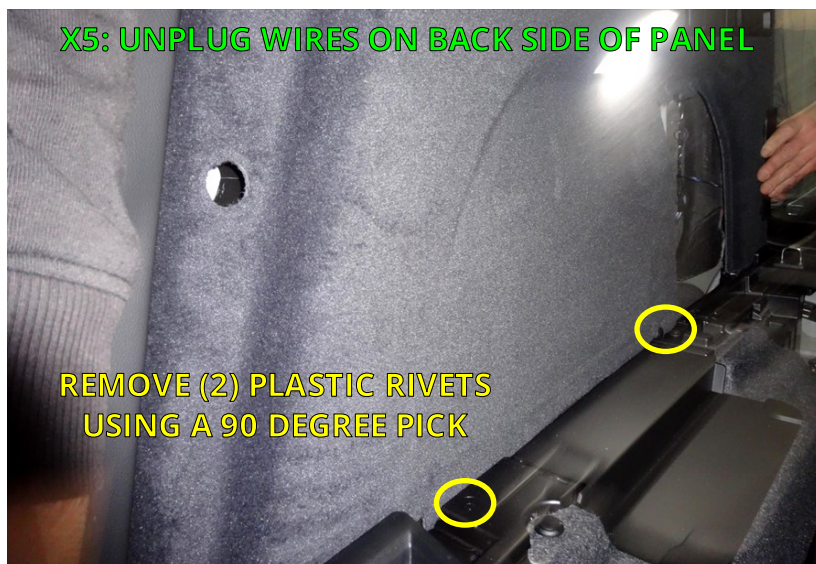
GAIN ACCESS TO MOUNTING AREA CONTINUED



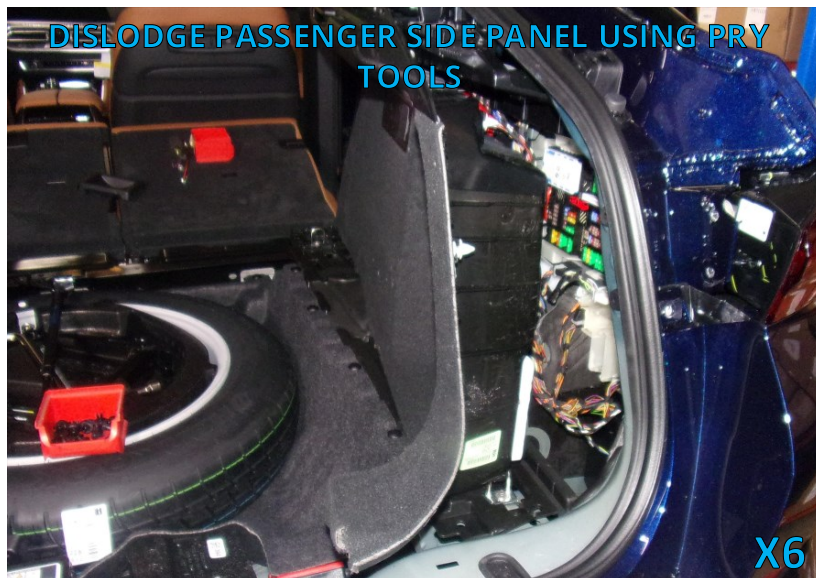
11. **X5 ONLY.** Remove the indicated trim piece. Pull the top toward the front of the vehicle until all the clips are released.
12. **X5 ONLY.** After removing the trim piece, use a 90 degree pick to remove (1) plastic rivet.



13. **X5 & X6** Along the bottom of the passenger side panel, remove (2) plastic rivets using a 90 degree pick.
14. **X5 ONLY.** Remove the passenger side panel by pulling the panel inward and dislodging it. Carefully unplug any wires attached on the back side of panel.



15. **X6 ONLY.** To gain access to the passenger side taillight, partially open the rear side panel on the passenger side by pulling the panel inward and dislodging it.



GAIN ACCESS TO MOUNTING AREA CONTINUED



10mm
SOCKET

- OR -



12mm
SOCKET

16. **X5 ONLY.** On the passenger side of the cargo area, locate and remove the taillight nut.



10mm
SOCKET

- OR -



12mm
SOCKET

17. **X5 ONLY.** Inside the driver side access panel, move the sound proofing liner to find the taillight nut. Remove nut with a socket.



10mm
SOCKET

- OR -



12mm
SOCKET

18. **X6 ONLY.** Inside the driver and passenger side access panels, locate each taillight nut. Remove each nut with a socket.



GAIN ACCESS TO MOUNTING AREA CONTINUED



PLASTIC
PRY TOOLS

19. With a pry tool, remove the light cover trim on each side of the vehicle.



PLASTIC
PRY TOOLS



T30 TORX

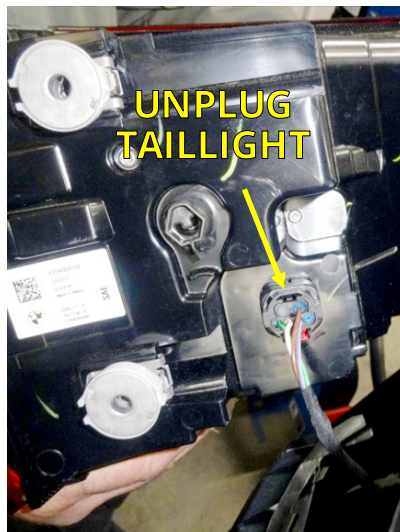


8mm
SOCKET

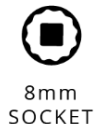
20. While holding the taillight in place, remove the screws securing the taillight to the vehicle.



21. With the taillight dislodged, disconnect the light plug by pushing down on the clip and pulling the plug outward. Remove the light. Repeat Steps 20-21 on other side of vehicle.



GAIN ACCESS TO MOUNTING AREA CONTINUED

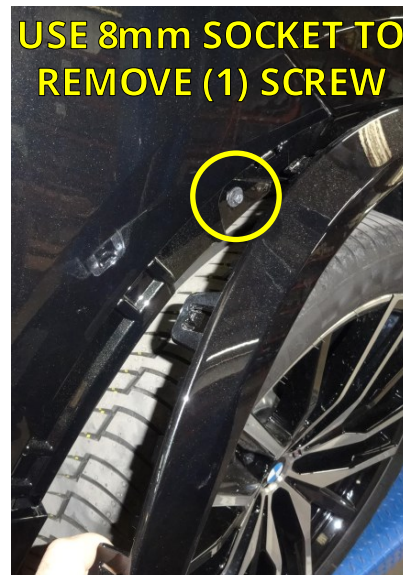


22. To allow partial removal of the rear wheel well trim, (3) clips will need to be disconnected. Apply outward pressure on wheel well trim. Start with the bottom clip and work up. Push down on clip to disconnect. Use plastic pry tools on hard to reach clips.

23. Behind the rear wheel well trim is a screw holding the fascia. Pull the trim away from vehicle to expose screw. Use a socket to remove screw. Repeat Steps 22-23 on other side of vehicle.



USE 8mm SOCKET TO
REMOVE (1) SCREW



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

NOTICE: On some vehicles there is a clip holding the fascia near where the 8mm screw was removed. Locate the clip on the top most forward part of the fascia behind the wheel well. If present, use a plastic pry tool to open the clip on each side of the vehicle.



24. Starting on the side closest to the center the vehicle, use a plastic pry tool to remove each reflector.



25. A screw, which is holding the fascia, will be exposed when the reflector is removed. Use a socket to remove the screw.



GAIN ACCESS TO MOUNTING AREA CONTINUED



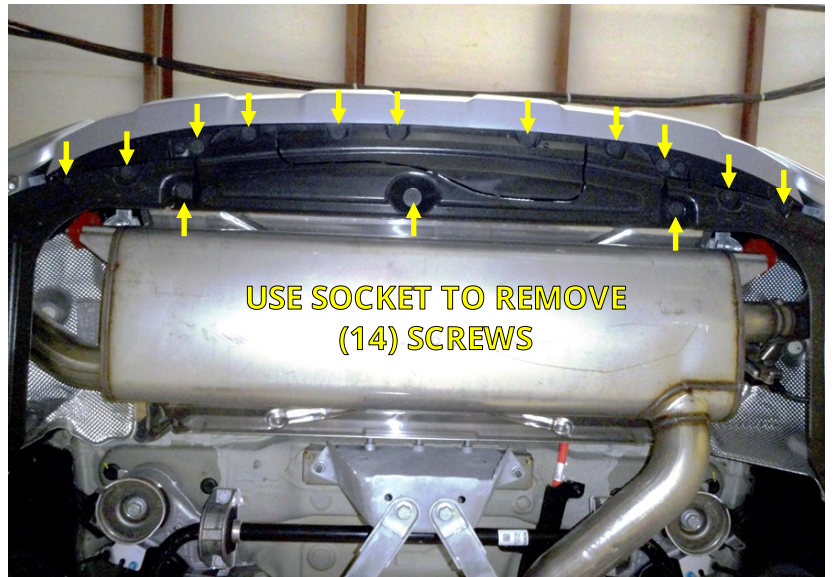
8mm
SOCKET

- OR -



10mm
SOCKET

26. From underneath the vehicle, use a socket to remove (14) screws from the rear bottom of the fascia and bottom cover plate.



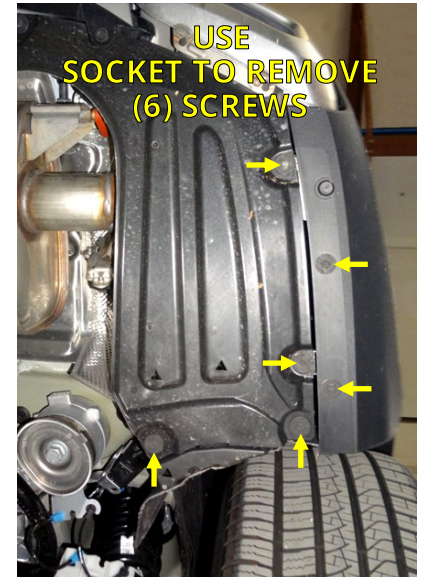
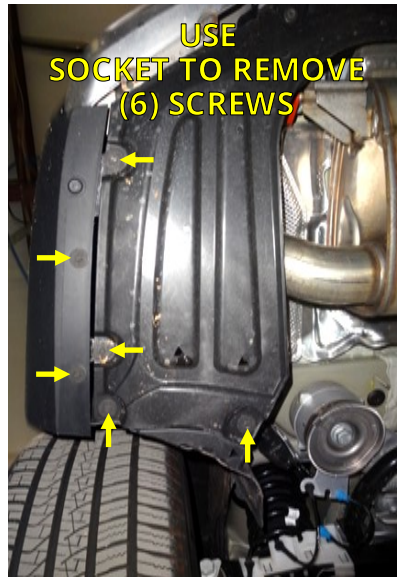
8mm
SOCKET

- OR -



10mm
SOCKET

27. Use a socket to remove (12) screws from the bottom side panels of the fascia.



GAIN ACCESS TO MOUNTING AREA CONTINUED



28. The fascia is clipped to the vehicle body directly behind the wheel wells. Pull outward on the fascia to expose the first 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 (yellow arrows).

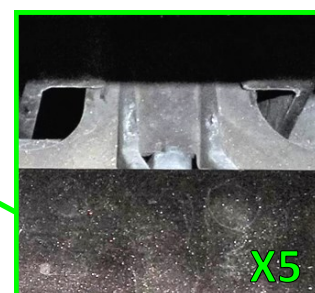


Continue applying outward and rearward pressure until all the clips except the six rear center clips are released. Repeat on other side of vehicle.

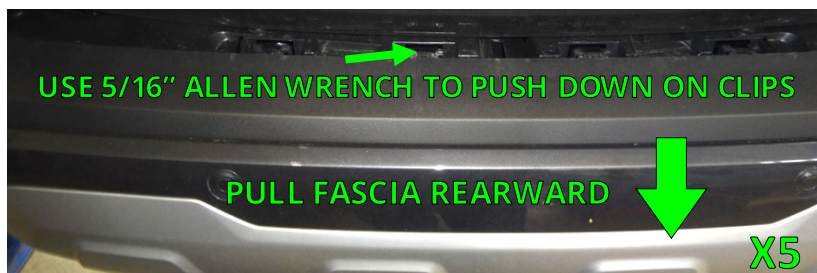
NOTICE: On some newer vehicles, there is another clip holding the fascia behind each tire. See images for a view of the clip and the approximate location (Blue Circles).



29. **X5 ONLY.** While positioned behind the center of the vehicle, locate the (4) remaining clips holding the fascia. Before disconnecting each clip, put rearward pressure on the fascia. Starting from one side, use an Allen wrench to push down and disconnect each clip.



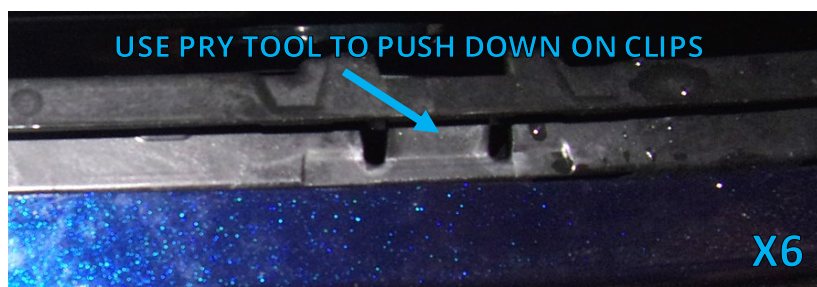
NOTE: Use caution when pulling the fascia rearward. The fascia is still connected to the vehicle by a wire harness.



30. **X6 ONLY.** While positioned behind the center of the vehicle, locate the clips holding the fascia. Before disconnecting each clip, put rearward pressure on the fascia. Starting from one side, use pry tool to push down and disconnect each clip.



NOTE: Use caution when pulling the fascia rearward. The fascia is still connected to the vehicle by a wire harness.



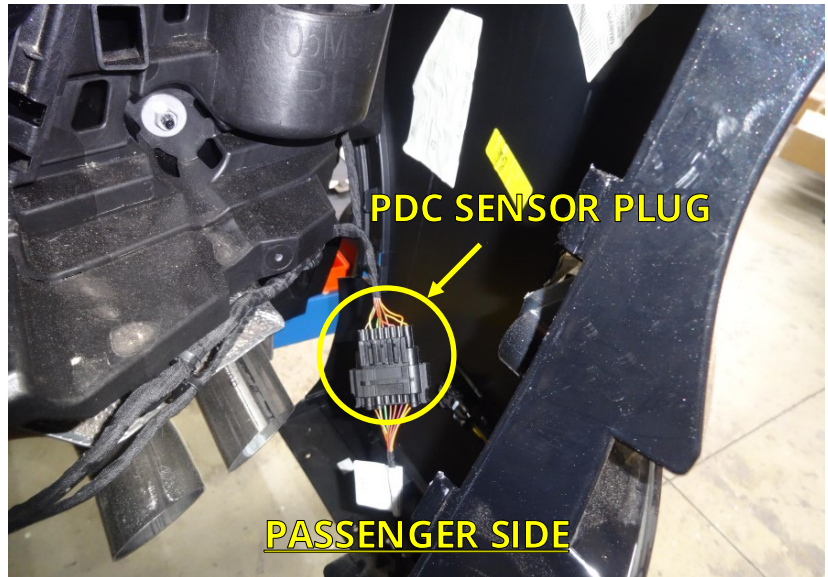
GAIN ACCESS TO MOUNTING AREA CONTINUED



90 DEGREE
PICK

31. This step requires a partner. Pull the fascia rearward enough to access the PDC sensor plug on the passenger side. Press down on the clips to unplug the PDC sensor. In some cases a 90 degree pick tool will be needed to disconnect the sensor plug. Remove the fascia completely.

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



13mm
SOCKET



90 DEGREE
PICK

32. Locate the two exhaust brackets under the rear of the vehicle, above the muffler. Use a socket to remove (1) exhaust bracket nut on each side of the vehicle. On the passenger side remove (1) plastic rivet from factory reinforcement beam, as shown.



GAIN ACCESS TO MOUNTING AREA CONTINUED



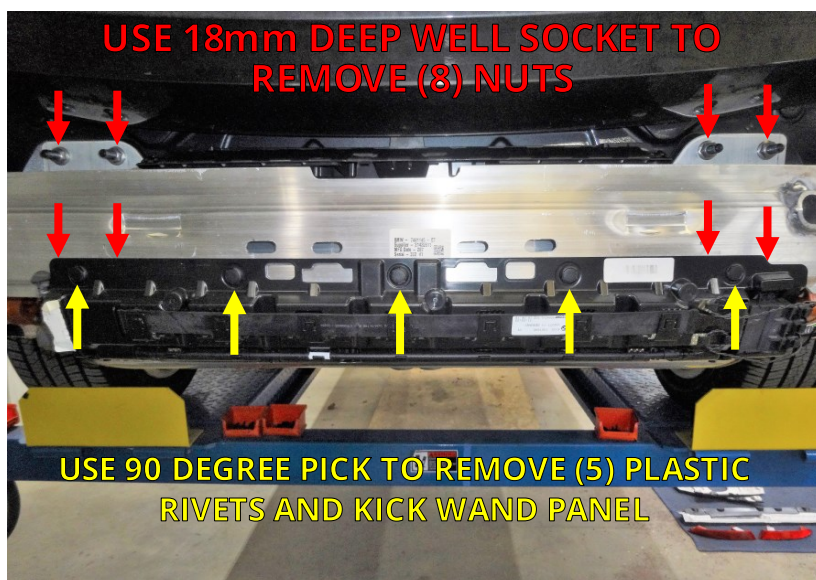
33. **X5 ONLY.** Remove two plastic panels that are part of the plastic fascia support on each side. Removing the panels will allow access to the factory nuts securing the factory reinforcement beam. Use a 90 degree pick to remove (2) plastic rivets, and unclip the two clips.



VIEW LOOKING AT REAR OF VEHICLE



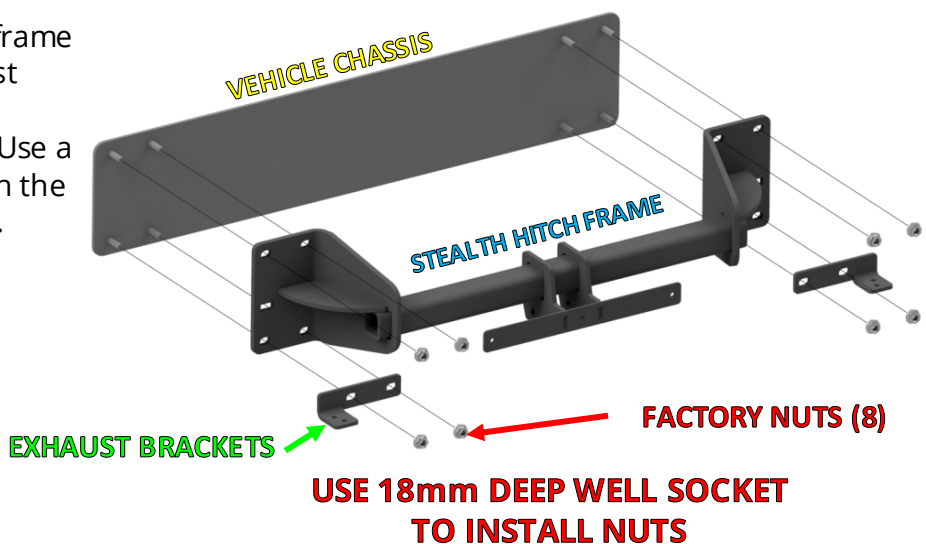
34. Remove the (5) plastic kick wand plastic rivets with a 90 degree pick. Save (3) plastic rivets for reinstallation. Unplug the wire harness connected to the panel and put aside. Remove the (8) nuts holding the factory reinforcement beam with a socket and save for later reinstallation. Remove and discard the factory reinforcement beam.



INSTALL STEALTH HITCH FRAME



35. Install the Stealth hitch frame and the supplied exhaust brackets. (See Diagram) Center the hitch frame. Use a torque wrench to tighten the factory nuts to 85 ft.-lbs.



INSTALL STEALTH HITCH FRAME CONTINUED

36. **X5 ONLY.** Reinstall plastic fascia support panels removed in Step 33.



1/2"
SOCKET

37. Reinstall exhaust brackets removed in Step 32. Use (2) supplied bolts, washers and nuts.



MOUNT LATCH BLOCK



15/16"
SOCKET



15/16" OPEN
END WRENCH



TORQUE
WRENCH

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

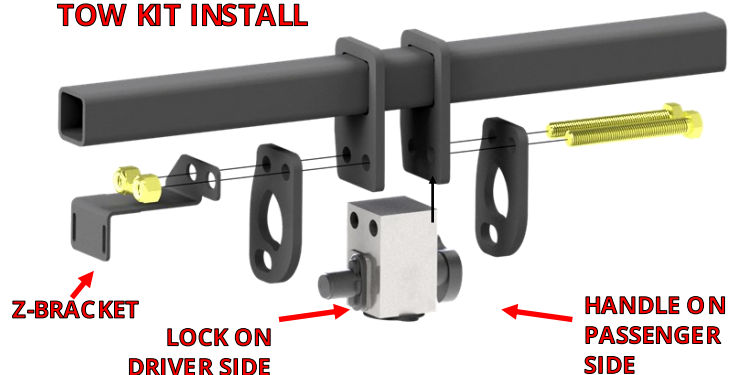
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
- **Tow Kit:** Retrieve Z-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and Z-bracket with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock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

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

RACK RECEIVER KIT INSTALL



TOW KIT INSTALL



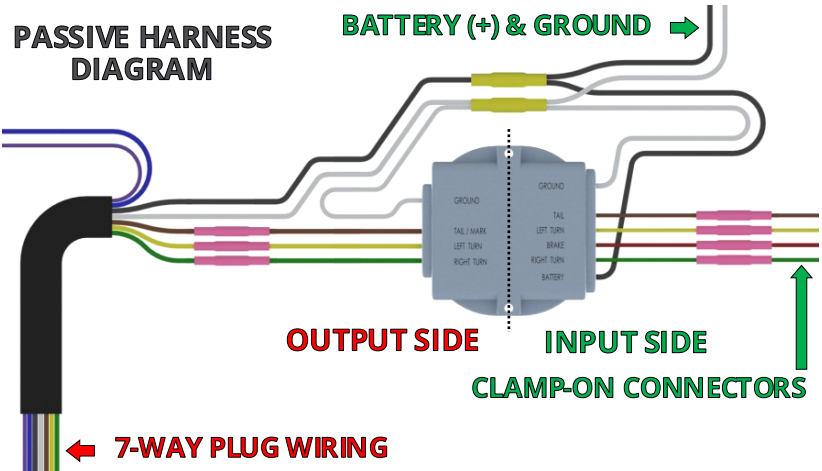
**IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 67.
IF INSTALLING A TOW KIT, CONTINUE TO STEP 39.**

INSTALL WIRING KIT



39. Locate the wiring kit box. Review the contents of the box against the list below 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, see *passive harness diagram*. The control module is connected to the vehicle’s battery and taillight wiring as outlined in the next steps.
 - **The active wiring kit** uses a BMW computer control module to manage the functions of the trailer lighting. The module must be “programmed” before it will be functional. The module will connect to the vehicle through an included wire harness. The harness has an “input” side that receives power and signals from the vehicle’s electronic systems. The “output” side of the harness delivers this information to the 7-way plug. The harness and computer module installation are outlined in the next steps.

NOTICE: Do not allow electrical system to become disconnected from power or ground. Doing so may interrupt electrical systems.



2019-2022 PASSIVE WIRING KIT BOX

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

2019-2022 ACTIVE WIRING KIT BOX

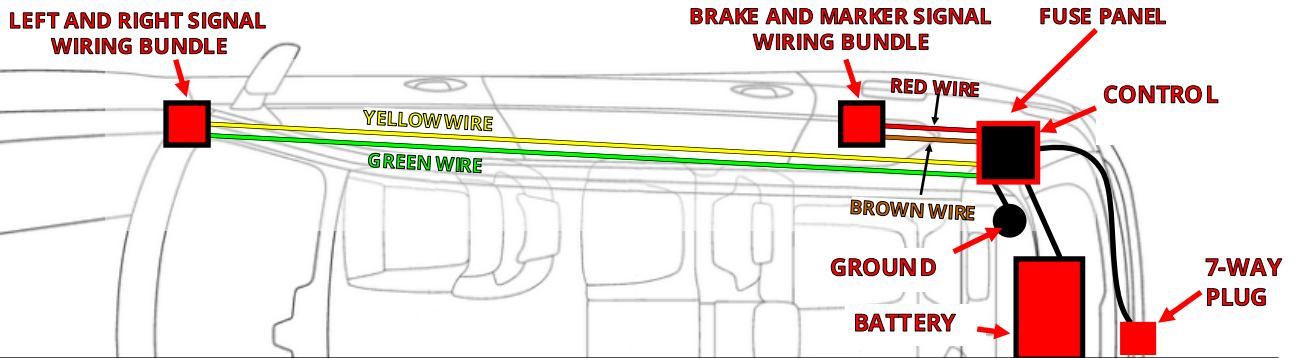


#	DESCRIPTION	QTY
1	ACTIVE WIRING HARNESS	1
2	BMW CONTROL MODULE	1
3	5/8" LONG PHILLIPS SCREWS	4
4	#10 LOCK NUT	4
5	CABLE TIE - 8"	4
6	CABLE TIE - 14"	2
7	Z-BRACKET	1
8	MOUNTING BRACKET	1
9	7-POLE HOUSING	1
10	7-POLE TO 4-POLE ADAPTER	1
11	VEHICLE PROGRAMMING CABLE	1



2023+ PASSIVE WIRING KIT BOX

#	DESCRIPTION	QTY
1	7-WAY WIRING HARNESS <ul style="list-style-type: none"> FUSE HOLDER & FUSE CONTROL MODULE & WIRES 	1
2	ADHESIVE FOAM STRIP	2
3	FORK TERMINAL	1
4	CLAMP-ON CONNECTORS	5
5	5/8" LONG PHILLIPS SCREWS	4
6	#10 LOCK NUT	4
7	BUTT CONNECTOR RED	2
8	CABLE TIE - 8"	6
9	CABLE TIE - 14"	3
10	MOUNTING BRACKET	1
11	Z-BRACKET	1
12	7-POLE HOUSING	1
13	7-POLE TO 4-POLE ADAPTER	1
14	GREEN WIRE BUNDLE - 15'	1
15	YELLOW WIRE BUNDLE - 15'	1



INSTALL WIRING KIT (ALL VEHICLES)

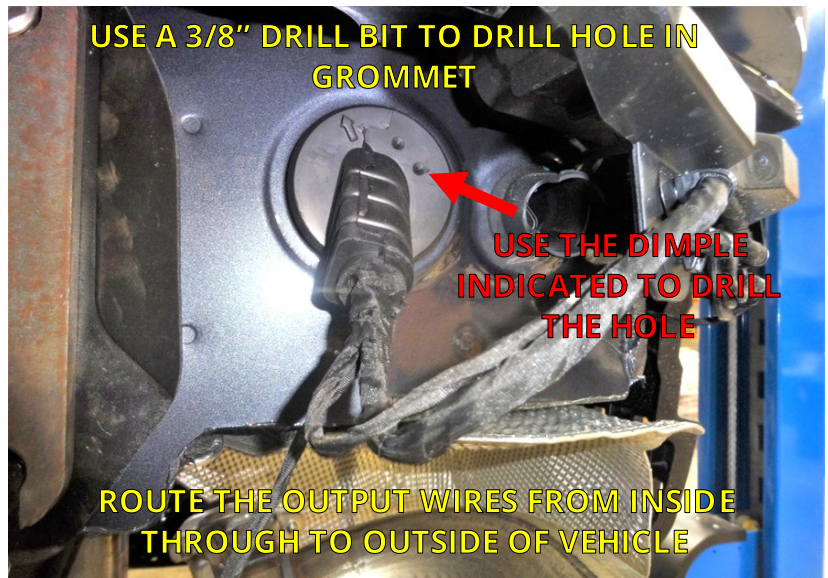


DRILL & 3/8" BIT

40. On the passenger side of the vehicle locate the factory grommet to the right of Stealth hitch frame. Drill a 3/8" hole in the grommet where indicated.

NOTICE: Check for obstructions on other side of grommet before drilling. Use caution when drilling.

41. Place the wiring harness inside the passenger side compartment. Feed output wires and black sheathing through grommet from inside vehicle to outside of vehicle.



IF INSTALLING A PASSIVE TOW KIT ON A 2019-2023 VEHICLE, CONTINUE TO STEP 42.
 IF INSTALLING A PASSIVE TOW KIT ON A 2024+ VEHICLE SKIP TO STEP 45.
 IF INSTALLING AN ACTIVE TOW KIT ON A 2019-2022 VEHICLE, SKIP TO STEP 57.

INSTALL PASSIVE WIRING KIT 2019-2023 VEHICLES CONTINUED

42. From the passenger side of the vehicle, route the yellow input wire to the driver side of the vehicle through the battery compartment using an existing wire harness as a guide.



43. The wires on the input side of the wiring module need to be attached to the vehicle wiring. On the driver side use a clamp-on connector to clamp the yellow wire to the left turn signal wire, behind taillight. (See reference table below.)

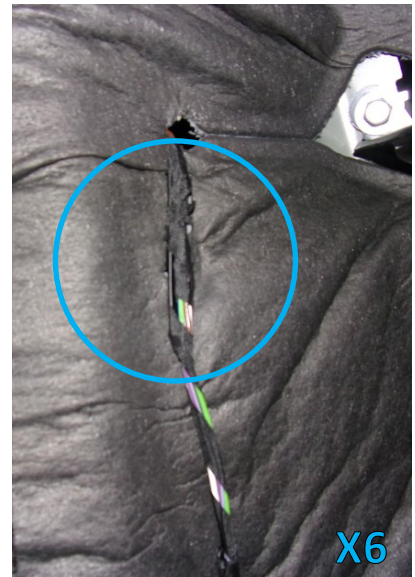
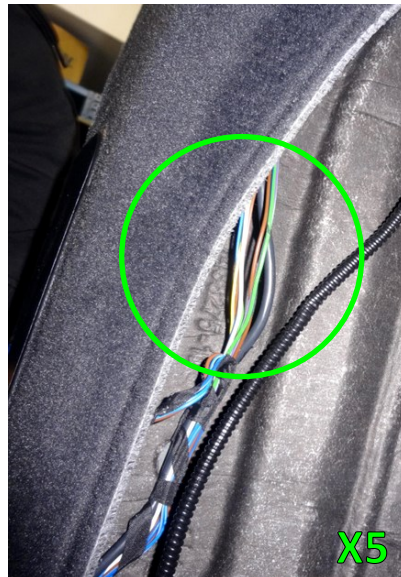


PLIERS



MULTIMETER

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	GREEN/BLUE	12V+ (POWER)	BLACK	BATTERY (+)
RIGHT TURN	GREEN	GREEN/BLUE	GROUND	WHITE	GROUND STUD
MARKER	BROWN	GREY/PURPLE			
BRAKE	RED	<i>Do not connect the red brake wire. This vehicle does not utilize a separate brake circuit. The brake signal is sent down the left and right turn circuits simultaneously.</i>			
REVERSE	PURPLE	WHITE	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.

INSTALL PASSIVE WIRING KIT 2019-2023 VEHICLES CONTINUED



PLIERS

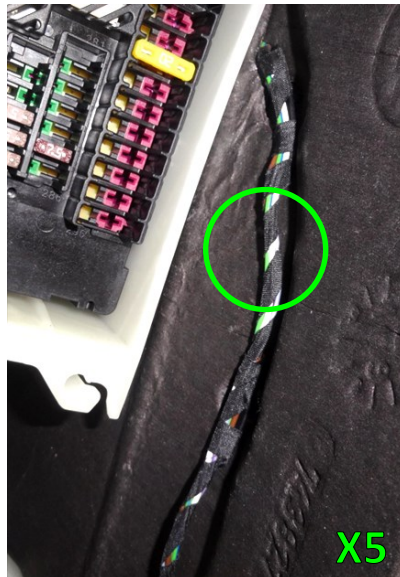


MULTIMETER



44. Inside the passenger side compartment, use clamp-on connectors to connect the green and brown wires to wires behind taillight. (See reference table on the previous page.)

Skip to Step 55 to continue installation.



X5



X6

INSTALL PASSIVE WIRING KIT 2024+ VEHICLES

45. The signal wires for the left and right turn signals are located in the front passenger side area of the cabin. Open the passenger side front door. In the area above the foot well, locate and turn two knobs to release the plastic panel shown in the image. Pull the plastic panel down and unplug the light from the panel. Remove the panel from the vehicle.

TURN TWO KNOBS TO RELEASE PLASTIC PANEL



UNCLIP AND DETACH LIGHT FROM PLASTIC PANEL

VIEW LOOKING ABOVE FRONT PASSENGER SIDE FOOT WELL



PLASTIC PRY TOOLS

46. Use a plastic pry tool to remove the plastic door frame cover next to the passenger side seat. Put upward pressure on the cover to disconnect (4) plastic rivets. Lift the cover up and unplug the accent light connector. Remove the plastic panel.

UNPLUG LIGHT CONNECTOR



USE A PLASTIC PRY TOOL TO REMOVE COVER

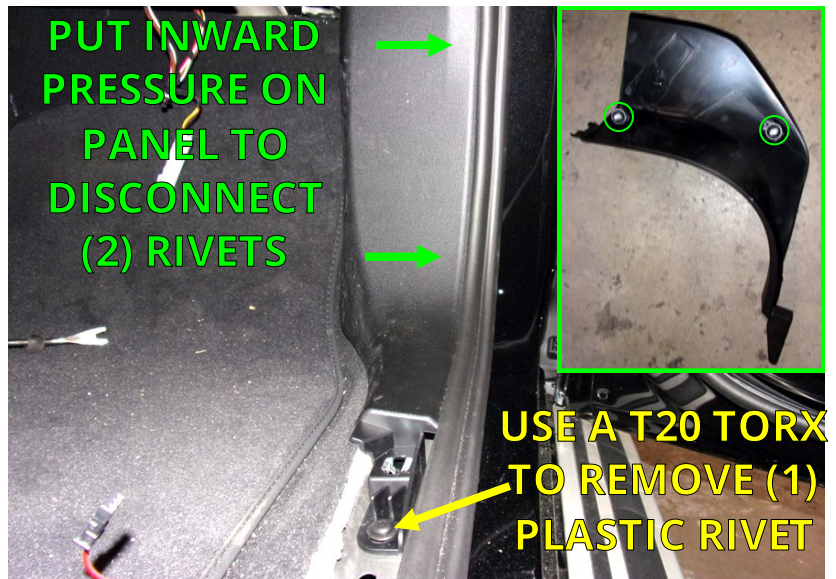
INSTALL PASSIVE WIRING KIT 2024+ VEHICLES CONTINUED



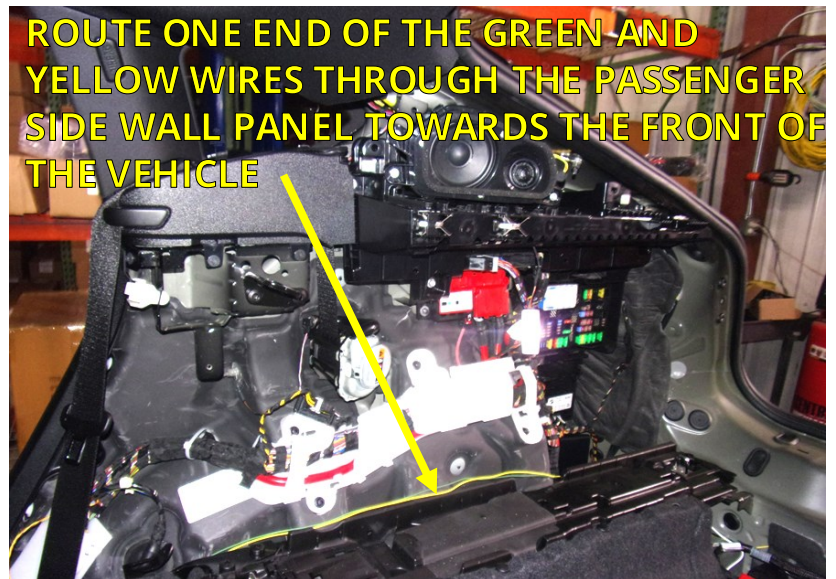
T20 TORX

47. Inside the passenger side foot well, use a Torx to remove a plastic screw-rievet securing the passenger side door frame panel. Put inward pressure on the top portion of the panel to disconnect two rivets. Remove the panel.

NOTE: The wire bundle referenced in Step 50 with the left and right turn signal wires is located under this panel.



48. Locate the green and yellow wires inside the wiring kit box. Uncoil the wires. Place the loose wires into the cargo compartment. Route one end of the wires through the passenger side wall panel towards the front of the vehicle.



49. Use a fish wire to route the green and yellow wires forward under the trim panel, as shown, to the area where the passenger side door panel was removed in Step 47.



INSTALL PASSIVE WIRING KIT 2024+ VEHICLES CONTINUED



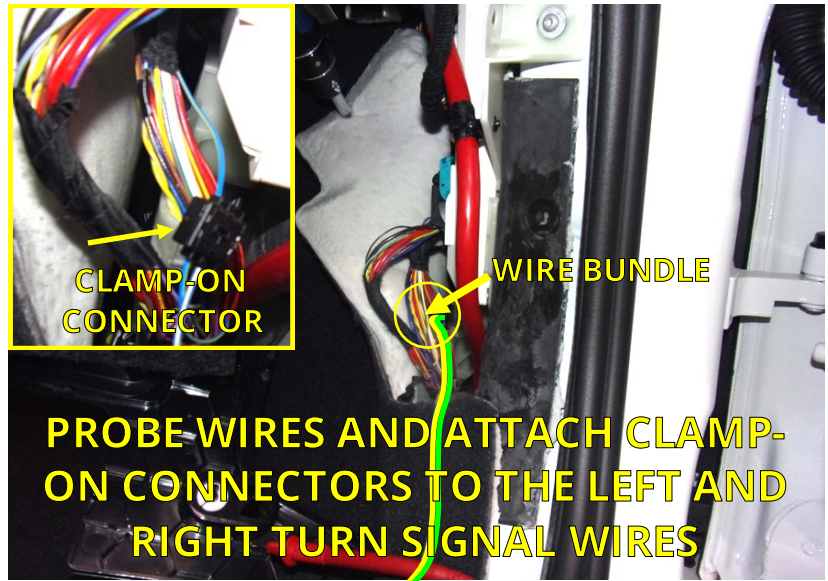
PLIERS



MULTIMETER

50. Locate the indicated wire bundle. Use clamp-on connectors to connect the yellow and green wires to the left and right turn signal wires (see reference table below).

NOTE: Vehicles may have multiple wires with the same color or 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	BLUE	12V+ (POWER)	BLACK	FUSE TERMINAL (+)
RIGHT TURN	GREEN	BLUE/YELLOW	GROUND	WHITE	GROUND NUT
MARKER	BROWN	GREY/BROWN			
BRAKE	RED	BLACK			
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.

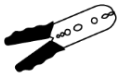


PLASTIC PRY TOOLS

51. With the yellow and green wires connected, tuck the length of green and yellow wire that is visible in the front passenger and rear passenger areas under the trim where possible. No wire should be visible when the removed plastic trim pieces are replaced in a later step.



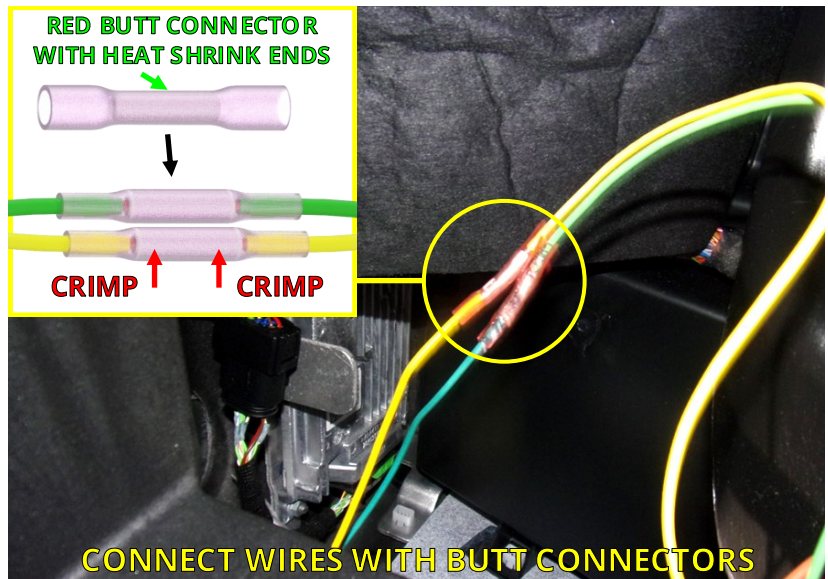
INSTALL PASSIVE WIRING KIT 2024+ VEHICLES CONTINUED



STRIPPER/
CRIMPING
TOOL

52. Inside the wall of the passenger side cargo compartment, locate the loose ends of the green and yellow wires and the green and yellow input wires of the control module. Trim the wires to length. 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.



PLASTIC
PRY TOOLS

53. To connect the red and brown wires, the passenger side rear top panel needs to be removed. Use a plastic pry tool and inward pressure to remove the panel.



PLIERS



MULTIMETER

54. Locate the indicated wire bundle. Route the red and brown wires to the wire bundle location. Trim the red and brown wires to length and use clamp-on connectors to connect the red and brown wires to the brake and marker signal wires (see reference table on the previous page).

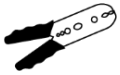
NOTE: Vehicles may have multiple wires with the same color or different wire colors than those shown. Verify circuits (wire colors) with multimeter.



INSTALL PASSIVE WIRING KIT ALL VEHICLES



10mm
SOCKET



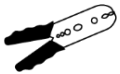
STRIPPER/
CRIMPING
TOOL

55. Locate the ground stud in the passenger side of the battery compartment. 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.

X5 ONLY. NOTICE: Loosen ground stud just enough to install fork terminal, so vehicle wiring does not lose ground.



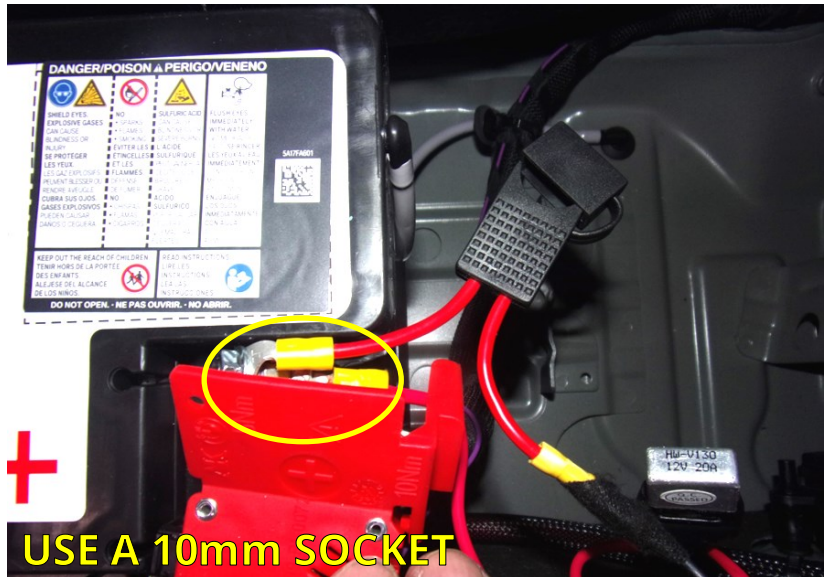
10mm
SOCKET



STRIPPER/
CRIMPING
TOOL

56. Locate the fuse holder supplied in the wiring kit box. Remove the fuse from fuse holder. Trim excess wire length. Crimp fuse lead to power wire. Connect fuse ring terminal to the positive battery terminal (+).

Skip to Step 59 to continue installation.



INSTALL ACTIVE WIRING KIT



10mm
SOCKET

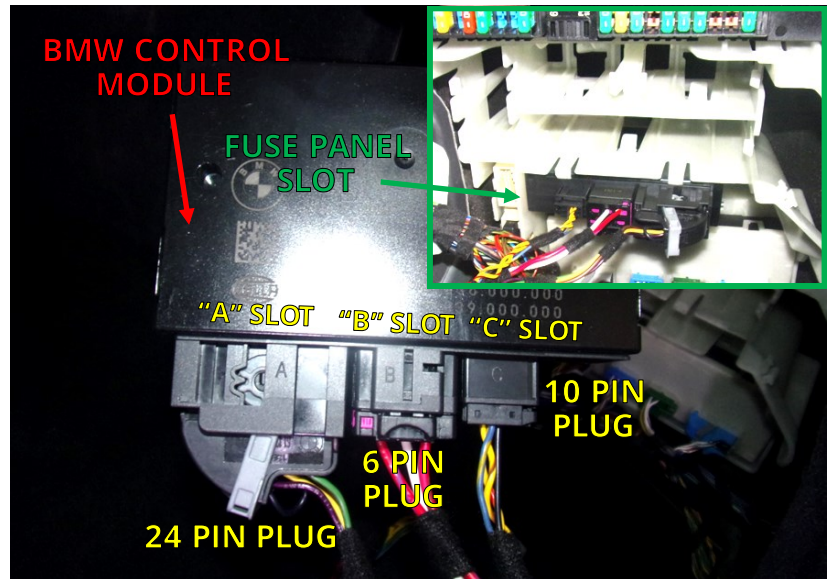
57. Locate the ground stud on the rear wall of the cargo area. Use a socket to remove the ground stud nut. Route the active wiring harness ground ring from the passenger side compartment, behind the plastic, to the ground stud as shown in image. Secure the ground ring with the ground stud nut.

NOTICE: Do not allow components already attached to ground stud to become disconnected and lose ground.



INSTALL **ACTIVE** WIRING KIT CONTINUED

58. In the active wiring kit box locate the BMW control module. Attach the active wiring harness to the control module. Plug the (24) pin connector into the "A" slot and lock it with the lock clip. Plug the (6) pin connector into the "B" slot, and the (10) pin connector into the "C" slot. Place the control module into the slot shown in the fuse panel.

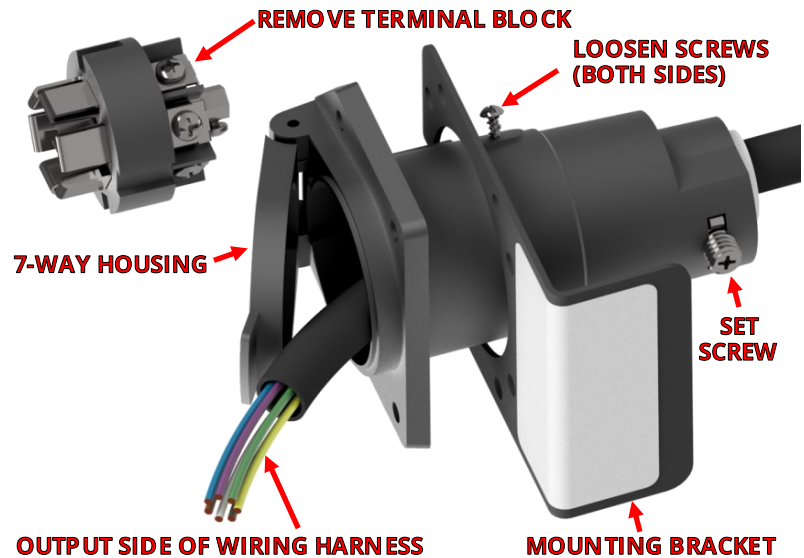


WIRE 7-WAY PLUG (ACTIVE AND PASSIVE INSTALLATIONS)



PHILLIPS HEAD
SCREWDRIVER

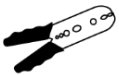
59. Locate the 7-way housing. Use a screwdriver to loosen (2) screws. Remove 7-way round terminal block. Place the mounting bracket onto the 7-way housing as shown. Use a screwdriver to loosen the set screw at the bottom of the 7-way housing. Route output side wires of the wiring harness through the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



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



PHILLIPS HEAD
SCREWDRIVER

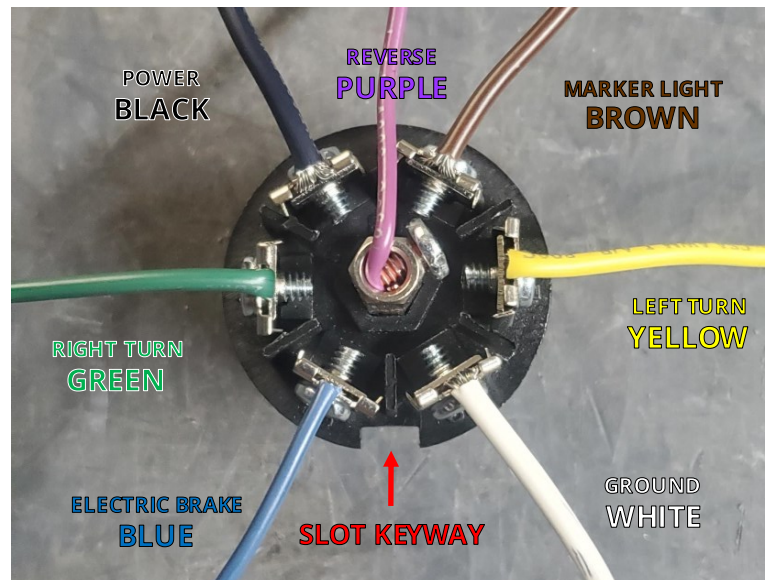


STRIPPER/
CRIMPING
TOOL

60. Locate the slot keyway. Starting from the keyway going **clockwise**, attach the wires as follows:

- Blue
 - Green
 - Black
 - Brown
 - Yellow
 - White
 - Purple (middle)
- Put the 7-way receptacle back together.

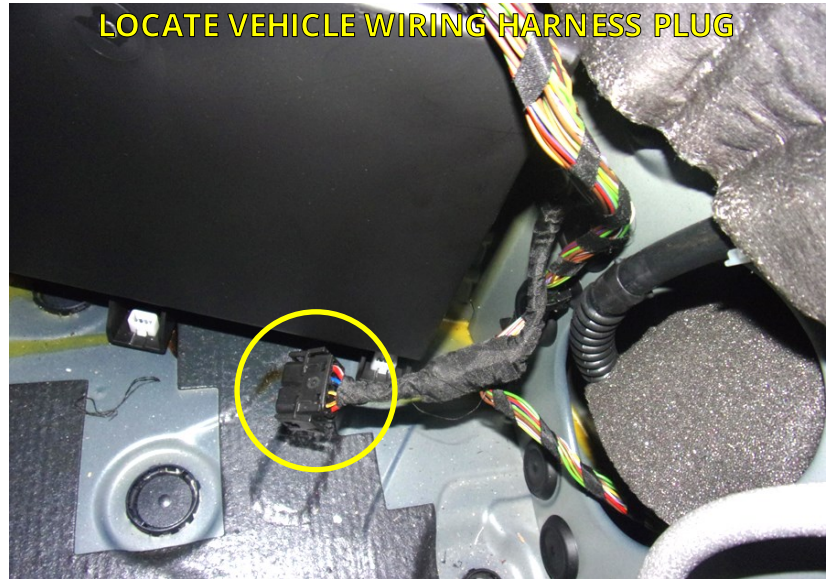
NOTICE: Markings on the receptacle may not match the correct wire configuration. Please disregard and follow the instruction above.





IF INSTALLING A PASSIVE TOW KIT, SKIP TO STEP 63.
IF INSTALLING AN ACTIVE TOW KIT, CONTINUE TO STEP 61.

61. Inside the rear passenger side panel in the cargo area, locate the vehicle wiring harness plug.



62. Locate the large female 8-pin connector on the active wiring harness. Plug the connector into the connector located in Step 61.

NOTICE: Plugging in the 8-pin connector will supply power to the active harness and 7-way plug.



TEST 7-WAY HARNESS WIRING



PHILLIPS HEAD
SCREWDRIVER



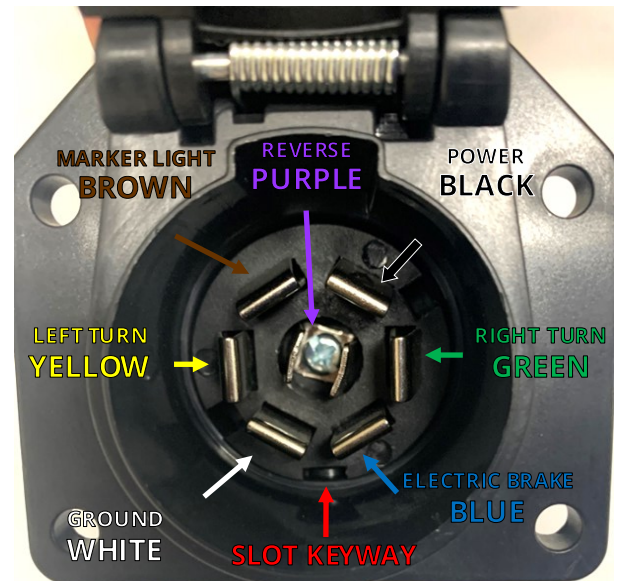
MULTIMETER

63. While everything is still accessible, you should test the wiring to make sure everything is connected properly and in working order. **If installing the passive wiring harness, replace the 20 Amp fuse into the fuse holder located near the battery.**

NOTICE: Most Active harness installations will require programming before testing can be completed. Testing Active wiring harness installations with a multimeter or LED tester may not work. Some vehicles may need to "sense" the current being used by the plug to function. After programming is complete, use an incandescent light testing device or trailer to test in these specific cases.

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.



PHILLIPS HEAD
SCREWDRIVER

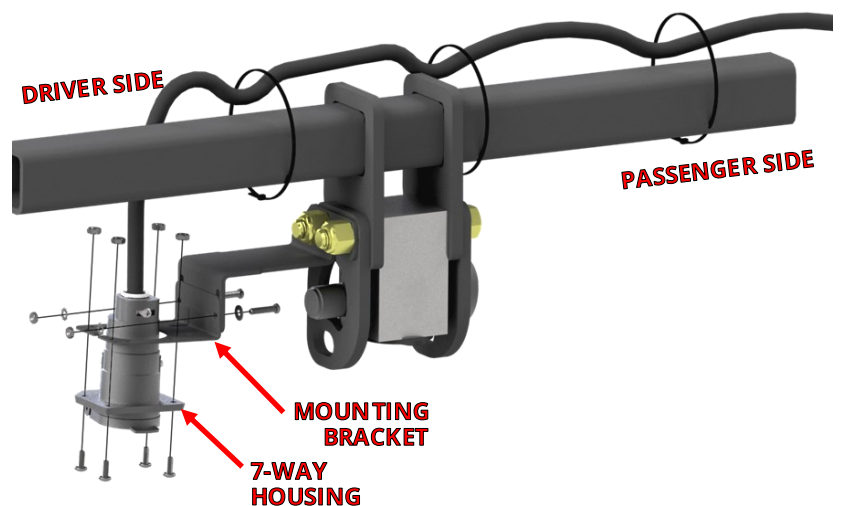


SILICONE

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

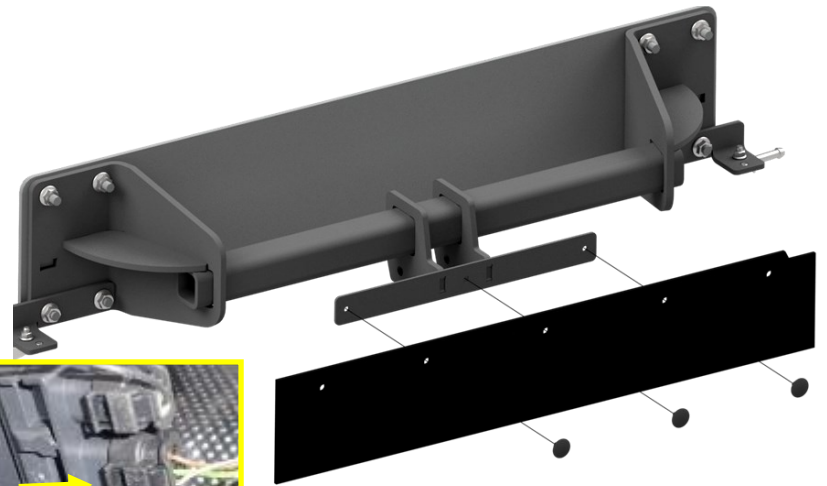
65. Secure all wires and wiring components. Use the remaining cable ties to secure wiring so that it is not loose and will not interfere with replacement of the fascia. Wiring should not be visible once the vehicle is reassembled.

66. Use the provided adhesive foam strips to secure the control module to an inside body panel. Use silicone to waterproof the grommet.



REINSTALL VEHICLE COMPONENTS

67. Reattach the plastic kick wand panel with (3) rivets to the Stealth hitch frame. Reattach the wiring harness, unplugged in Step 34 to the plastic kick wand panel.



PLUG WIRE CONNECTOR INTO PLASTIC KICK WAND PANEL



DREMEL TOOL



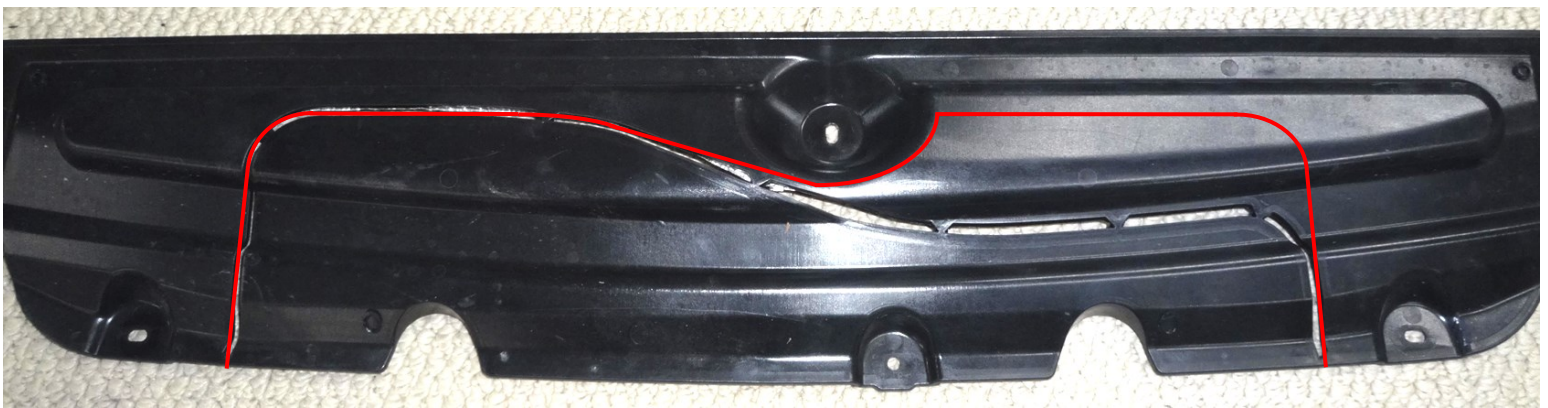
FILE

68. Cut out the gravel guard with Dremel tool. Use a file to smooth edges of the cut, as shown below.

PASSENGER SIDE

CENTER

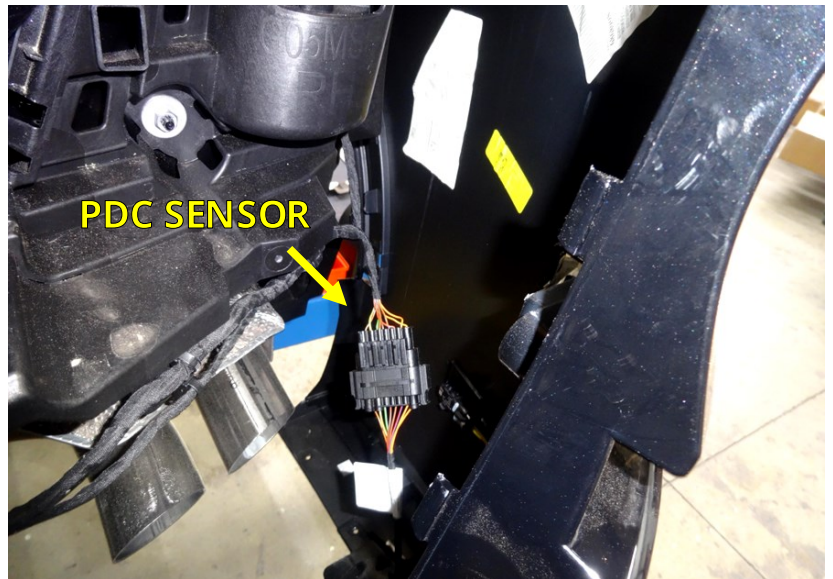
DRIVER SIDE



REINSTALL VEHICLE COMPONENTS CONTINUED

69. While holding the fascia close to the vehicle, plug in the PDC sensor plug, before replacing the fascia onto the vehicle.

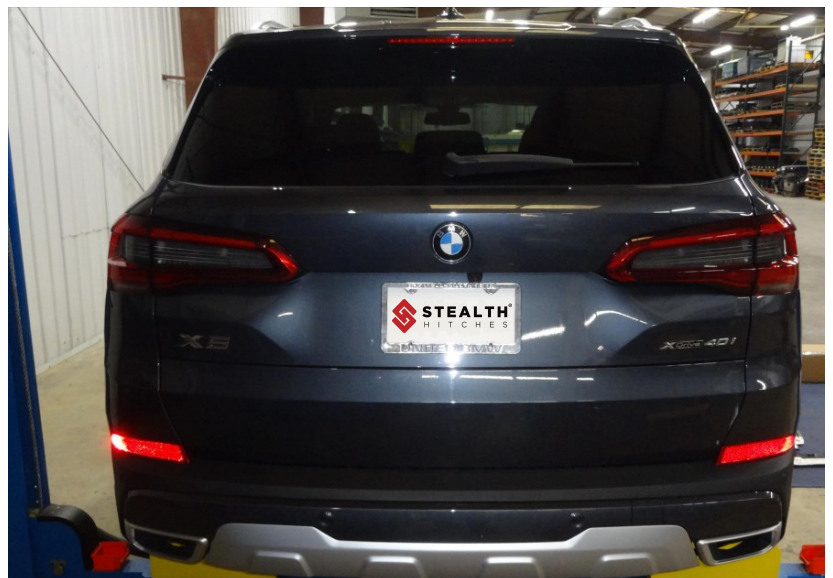
NOTICE: *It's important to remember to plug in the PDC sensor before you completely install the fascia.*



70. Make sure to have all (4) or (6) clips aligned with the clip holders before you push to replace the fascia.

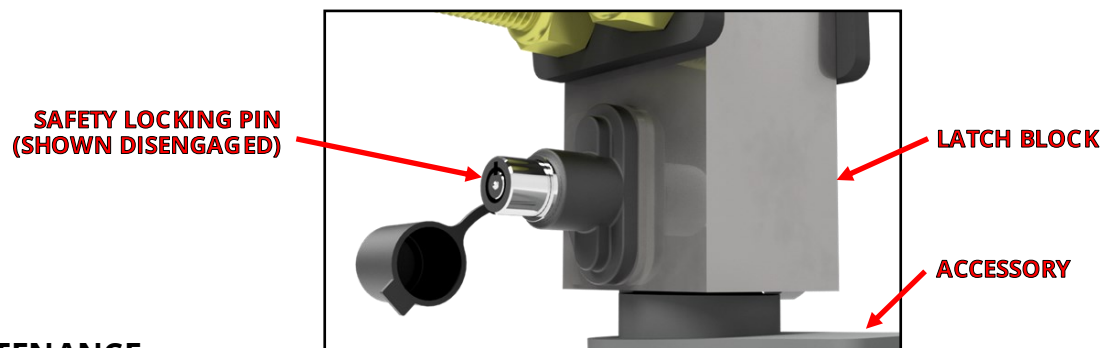


71. Reattach and secure the fascia, taillights, and other vehicle components in reverse order. Refer to Steps 1-32.



FINAL VEHICLE EXAMINATION

72. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
73. 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.