

## HITCH INSTALLATION INSTRUCTIONS

MAKE: YEARS:

**POLESTAR** 

2021-2022

MODEL/TRIM:

Polestar 2

www.stealthhitches.com

833•694•4824

RACK RECEIVER KIT#: SHR43001

COMPATIBLE WITH TOW KIT: **N/A** 

2" RACK RECEIVER MAXIMUM PAYLOAD: 350 LBS

MAXIMUM TOW RATING: 3500 LBS MAXIMUM TONGUE WEIGHT: 350 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



2" RACK RECEIVER



(2) M10 1.5 x 40mm BOLTS



(2) M10 LOCK WASHERS



(2) M10 FLAT WASHERS



(2) M10 NYLOCK NUTS

#### **TOOLS REQUIRED:**



15/16" OPEN END WRENCH



8mm, 17mm, 15mm deep well socket, & 15/16" SOCKETS



TORQUE WRENCH



SOCKET EXTENSION



SAFETY GLASSES



PLASTIC PRY TOOLS



FLASHLIGHT



RATCHET



DREMEL TOOL



FILE



RAZOR KNIFE



90 DEGREE PICK



T25 TORX

## <THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER>

**INSTALLATION NOTE:** In most instances, these instructions will only outline disassembly of vehicle components. Re-installation of components will require the installer to retain vehicle hardware and work through disassembly instructions in reverse order. When installation is complete, double check that all vehicle components have been replaced and are secured.

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

Read all installation and operating instructions along with all labels before installing or using this product. Do not perform any installation or towing procedures without fully understanding the correct tools and actions for all steps. Call for support if needed.



# Failure to comply with the safety information in these instructions could result in serious injury or death.



Do not modify this product in any manner. Doing so could alter its integrity and lead to a loss of attachment between the trailer and the tow vehicle.



Mhile installation is being performed, check for signs of damage or excessive corrosion. Do not install hitch components over vehicle parts that are broken or have compromised structural integrity.



Adding Stealth hitch components to the chassis of any vehicle can be hazardous. There is potential for unexpected combustion of fuel, electric shock, burns, shifting or falling of unstable vehicle, damage to vehicle, injury from tool usage and many other hazards. This installation must be completed by someone who is aware of the hazards involved. This person must be knowledgeable of proper safety procedures for a vehicle modification of this nature, and for usage of the equipment required to perform the installation.



This product was designed to fit vehicles in their original, "as manufactured" condition. Compatibility with vehicles having replacement parts, or other modifications is not guaranteed. Inspect vehicle for modifications before installation of this product.



Without proper knowledge, towing can be a dangerous activity. Understand all the risks involved with towing before proceeding. For information on towing safety, see "The Trailer Handbook: A Guide to **Understanding Trailer and Towing Safety"** from the National Association of Trailer Manufacturers, www.NATM.com and your trailer and tow vehicle manufacturer's owner's manual.

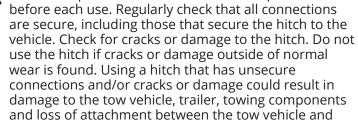


for towing. Do not use any accessories without proper knowledge of their use. A visual inspection of the hitch should be performed

Some accessories, like the rack receiver, are not rated



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.



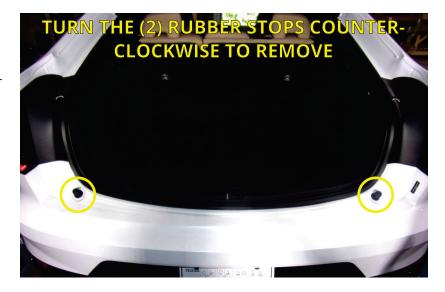


Stealth hitches are not compatible with any weight distribution or sway control products. Adding additional products to the trailer or chassis which modifies the function of the Stealth hitch may cause hitch failure.

**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

1. With the rear hatch open, locate the (2) rubber stops on both sides of the hatch frame. Turn the rubber stops counter -clockwise to remove.





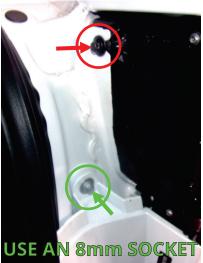
2. Locate the plastic covers on both sides of the cargo area. Use a pry tool to dislodge (1) plastic rivet securing the front part of the cover. Next, pry up on the rear part of the cover to dislodge it. Remove both plastic covers.







- 3. With the plastic covers out of the way, remove (1) screw securing the fascia to the rear of the vehicle (green arrow).
- 4. Locate the (2) screws securing the taillight to the vehicle body (red arrows). These screws will need to be loosened (not removed) to allow the taillights to slide to the rear of the vehicle when the fascia is removed in a later step. Repeat Steps 3-4 on other side of vehicle





#### **GAIN ACCESS TO MOUNTING AREA CONTINUED**



5. Inside the rear wheel well, behind the tire, locate the (6) screws which are holding the wheel well liner and remove them.









6. To gain access to a screw in the fascia, the wheel well trim will need to be partially detached. Put outward pressure on the wheel well trim piece to unclip (6) clips and (1) rivet. Use a torx to remove the uncovered screw. Repeat Steps 5-6 on other side of vehicle.









7. Underneath the vehicle, use a torx to remove (6) screws (yellow arrows) connecting the fascia to the vehicle. Use a 90 degree pick tool to remove (2) plastic rivets (green arrows).



#### **GAIN ACCESS TO MOUNTING AREA**



8. To remove the rear fascia, the front edge will need to be unclipped. Starting at the top of the fascia, use a plastic pry tool to release the clips securing the fascia to the vehicle.

**NOTE:** The taillights should remain attached to the fascia when it is moved.



9. This step requires a partner. Slide the fascia rearwards until there is a large enough gap to reach behind the taillights. While one person holds up the loose fascia, unplug the taillights by pressing down on the clip (yellow arrows). Next, while increasing the gap between the fascia and the vehicle, unplug the (3) fascia harness plugs (green arrows). There is (1) plug on the driver side and (2) plugs on the passenger side, see images.



 Carefully remove the fascia with the taillights attached. Place the fascia on a blanket or pad.

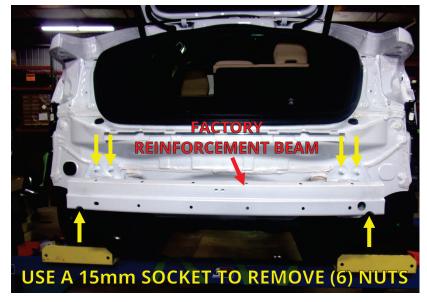


#### **GAIN ACCESS TO MOUNTING AREA CONTINUED**



SOCKET

11. Locate the (6) nuts attaching the factory reinforcement beam to the vehicle. Use a socket to remove the nuts. Save the factory nuts for reinstallation. Discard the factory reinforcement beam.



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



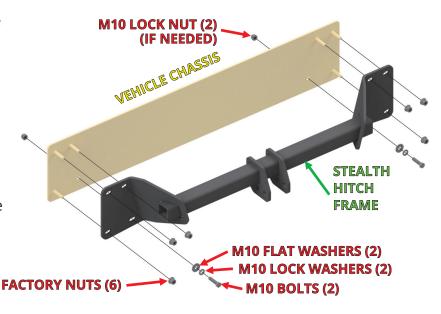
15mm DEEP WELL SOCKET



17mm SOCKET



TORQUE WRENCH 12. Mount the Stealth hitch frame onto the vehicle studs and attach the frame to the vehicle with the (6) saved factory nuts. Use the (2) supplied M10 bolts, washers, lock washers, and lock nuts in the remaining hole on each side of the hitch frame. On some models the holes are threaded and the M10 lock nuts can be discarded. Torque each bolt and nut to 45 ft.-lbs.



#### MOUNT LATCH BLOCK



SOCKET



15/16" OPEN **END WRENCH** 



13. 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.

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



#### **CUT ACCESS TO LATCH BLOCK**



14. An access hole must be cut into the fascia and kick wand holder. Start by unplugging the center plug shown in the image. Next, remove the kick wand holder from the bottom of the fascia. Use (2) 90 degree pick tools to lift the (2) clips simultaneously. Slide the holder to the passenger side to remove it from the fascia.

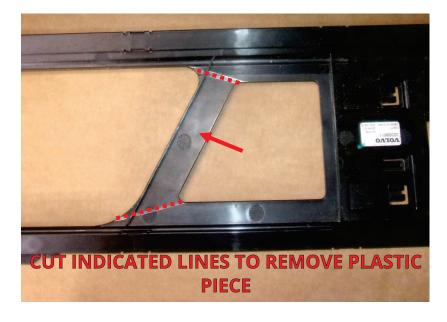




RAZOR KNIFE

15. With the kick wand holder removed, make two cuts as shown in image. Remove and discard the plastic piece between the cuts.

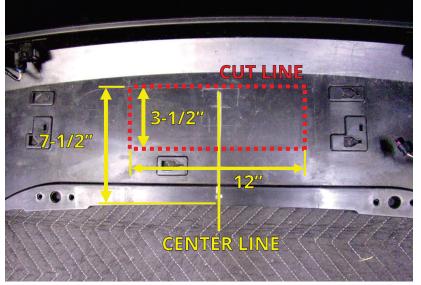
**NOTE:** Make sure not to damage any cables during the removal of the plug and the cuts.





FILE

16. Use a Dremel tool to cut out fascia, as shown. Use a file to smooth out the cut. Re-attach the kick wand holder to the fascia and plug in the removed plug.



## **REINSTALL VEHICLE COMPONENTS**

17. Reattach and secure the fascia and other vehicle components in reverse order. Refer to Steps 1-16

NOTICE: It's important to remember to connect the sensor plugs before you completely install the fascia, refer to Step 9.



#### FINAL VEHICLE EXAMINATION

- 18. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
- 19. Ensure that hitch components work properly.
- *Verify that the lock works correctly.* Push in the safety lock on the latch block then unlock with key. The lock should slide back out with the key when unlocked.
- **Verify that each accessory can be installed correctly.** Use the following steps to install and remove each accessory that will be used with the hitch. (<u>Rack Receiver</u> and <u>Ball Mount</u> if purchased.)
  - 1. Prepare latching mechanism. Turn handle clockwise if needed.
  - Firmly insert "post" of accessory into latch block until handle releases indicating that the accessory is latched.
  - 3. Push in the safety locking pin until it fully engages. The locking pin prevents the handle from turning when pushed in, and confirms that the block is securely latched onto the accessory. The safety locking pin will not depress if the accessory is not fully latched.
  - 4. Use key to release safety locking pin.
  - 5. While holding on to the accessory, rotate handle clockwise to release and remove the accessory.
- Verify that no part of the accessories come into contact with the body of the vehicle.



#### PRODUCT USE AND MAINTENANCE

NOTICE: If the hitch is being installed by a professional, the installer is responsible for training the end user in the use and maintenance of the product.

- Accessory installation procedure:
  - 1. Prepare latching mechanism. Turn handle clockwise if needed.
  - 2. Firmly insert "post" of accessory into latch block until handle spins counterclockwise indicating that the accessory is latched.
  - 3. Always depress the safety locking pin and check that it has fully engaged.
- **Never use any accessory with the safety lock disengaged.** Until the safety locking pin is engaged, the handle is able to turn. A fully engaged safety locking pin is confirmation that the accessory is properly latched into the latch block.
- **Never use the rack receiver for towing.** The rack receiver accessory is only to be used with payload carrying products, such as bike racks or luggage racks.
- Before each use, give the post of the accessory a light coating of lithium based grease.
- Before each use, inspect the hitch to ensure that all bolted connections are secure and that no cracks or damage are present. Do not tow with the hitch if cracks or damage outside of normal wear is found.
- Remove the Stealth accessories from the latch block after each use. Do not leave accessories plugged in for extended periods of time.