



# HITCH INSTALLATION INSTRUCTIONS

MAKE:

YEARS:

MODEL/TRIM:

JEEP

2014 - 2021

GRAND CHEROKEE

www.stealthhitches.com

833•694•4824

RACK RECEIVER KIT#: **SHR05001**

COMPATIBLE WITH TOW KIT: **SHT25017**



**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: **NO**

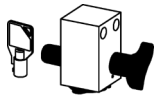


**READ ALL INSTRUCTION WARNINGS AND LABELS**



**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

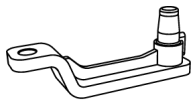


(4) 1/2" FLAT  
WASHERS



(4) M14 LOCK  
WASHERS

### ADDITIONAL PARTS FOR TOW KIT:



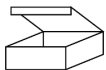
BALL MOUNT  
5" RISE, SHORT



CHAIN HOOKS



2" BALL



WIRING KIT BOX

### TOOLS REQUIRED:



15/16" OPEN  
END WRENCH



21mm  
& 15/16" SOCKETS



TORQUE  
WRENCH



FLASHLIGHT



SAFETY GLASSES



RATCHET

### ADDITIONAL TOOLS FOR TOW KIT:



PHILLIPS HEAD  
SCREWDRIVER

**RACK RECEIVER INSTALLATION:** USE STEPS 1-3 & 7-8

**TOW KIT INSTALLATION:** USE STEPS 1-8

**NOTICE: If installing a tow kit, the vehicle must be programmed at a Jeep dealership before trailer lights will function.**

# <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. 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. Vehicles that require reprogramming need to be programmed at a dealership. 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 programming needs to be scheduled with a dealer in advance.***

**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](http://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.

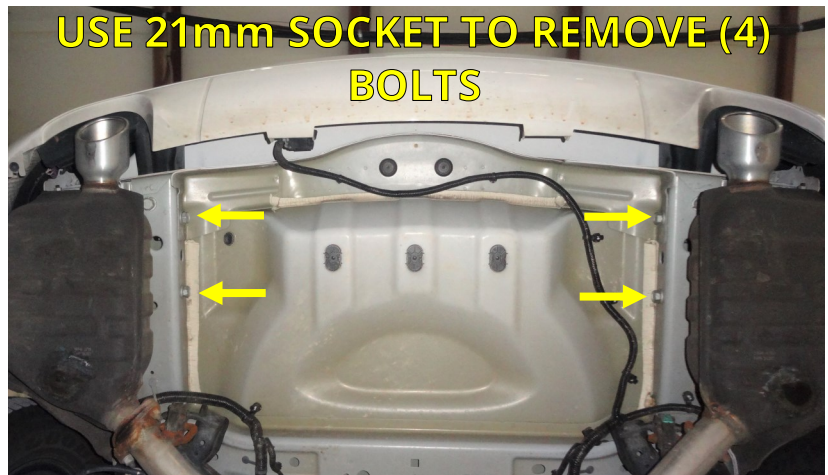
**NOTICE:** If installing an active wiring harness, the vehicle must be programmed at a Jeep dealer after the hitch has been installed. Programming arrangement should be made in advance of installation. The 7-way plug will not function until programming is complete.

## GAIN ACCESS TO MOUNTING AREA



21mm  
SOCKET

1. Under the rear of the vehicle, remove (4) bolts from the chassis frame. Save bolts for hitch installation.



## INSTALL STEALTH HITCH FRAME



21mm  
SOCKET



TORQUE  
WRENCH

2. Lift the Stealth hitch frame up between the two chassis beams. Align the holes with the holes in the vehicle chassis. Use supplied 1/2" washers, M14 lock washers, and factory bolts to secure hitch. Tighten and torque the (4) bolts to 125 ft.-lbs.



## MOUNT LATCH BLOCK



15/16"  
SOCKET



15/16" OPEN  
END WRENCH



TORQUE  
WRENCH

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

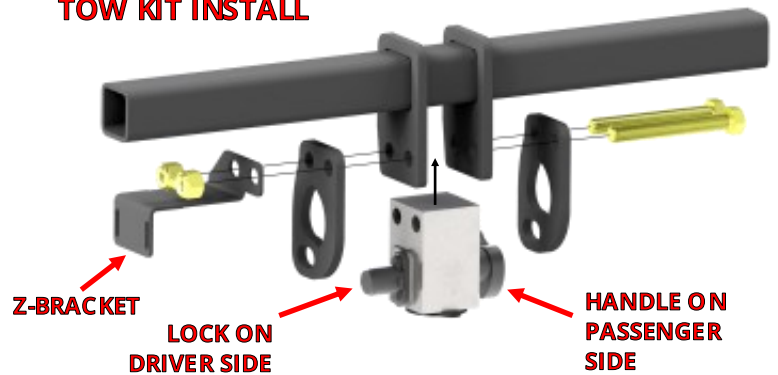
- **Rack Receiver Kit:** Install the latch block with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock nuts. Tighten each bolt to 150 ft.-lbs.
- **Tow Kit:** Retrieve Z-bracket from wiring harness kit box. Install the latch block, (2) chain hooks, and Z-bracket with (2) 5/8"-11 x 5" bolts and (2) 5/8" nylock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



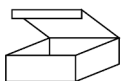
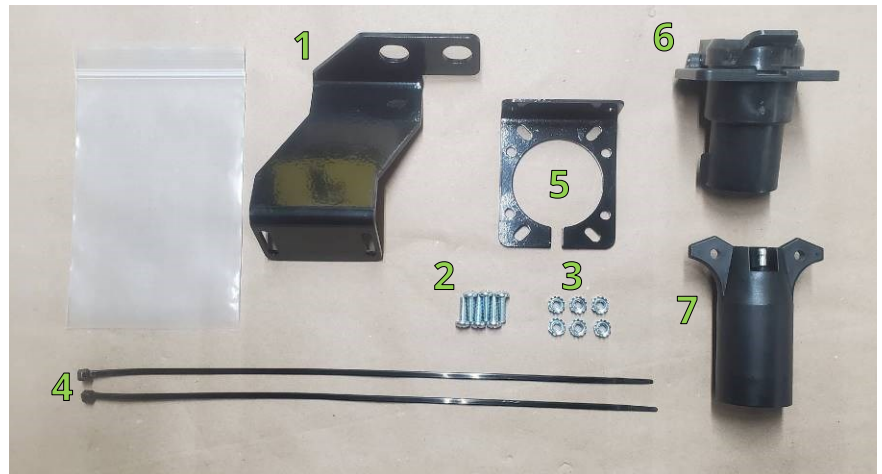
### TOW KIT INSTALL



**IF INSTALLING A RACK RECEIVER KIT, SKIP TO STEP 7.  
IF INSTALLING A TOW KIT, CONTINUE TO STEP 4.**

## INSTALL ACTIVE WIRING KIT

#	DESCRIPTION	QTY
1	Z-BRACKET	1
2	5/8" LONG PHILLIPS SCREWS	6
3	#10 LOCK NUT	6
4	14" CABLE TIE	2
5	MOUNTING BRACKET	1
6	7-POLE HOUSING	1
7	7-POLE TO 4-POLE ADAPTER	1



WIRING KIT BOX

4. Locate the wiring kit box. Review the contents of the box against the list above to check for missing components.

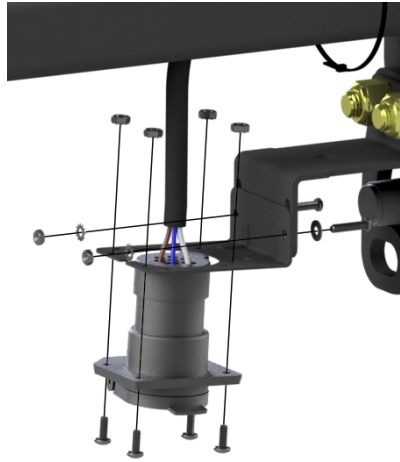
## INSTALL WIRING KIT

5. Locate the factory wiring plug on the driver side of the vehicle. Dislodge a rivet from factory wiring plug. Insert the supplied 7-way plug into the factory harness plug.



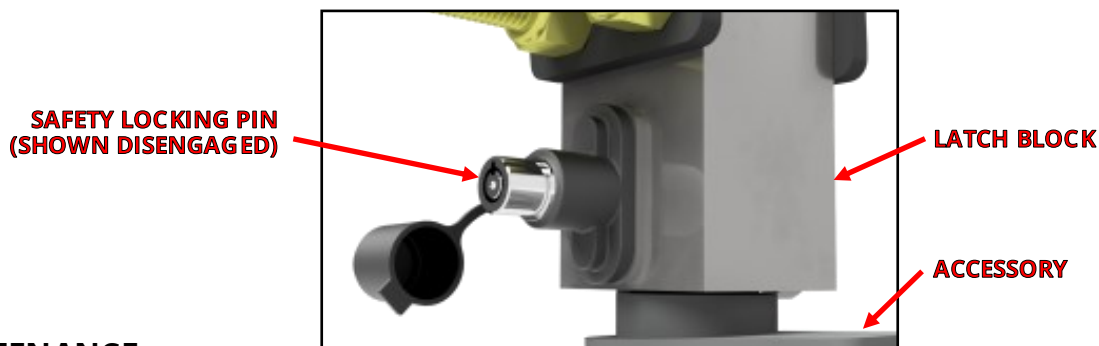
PHILLIPS HEAD  
SCREWDRIVER

6. Attach the mounting bracket to the "Z" bracket as shown. Attach the 7-way plug to the mounting bracket. Secure wire with cable ties so that it is not loose. Wiring should not be visible.



## FINAL VEHICLE EXAMINATION

7. Examine the body panels to ensure that they are in a pre-installation condition. Test the electronic functions of the vehicle. Correct any inconsistencies.
8. 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.