

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



**B&W Trailer Hitches**  
 1216 Hawaii Rd / PO Box 186  
 Humboldt, KS 66748  
 P:800.248.6564  
 F:620.869.9031

Call or Email us for  
 Installation Support  
 hitches@turnoverball.com  
 bwtrailerhitches.com

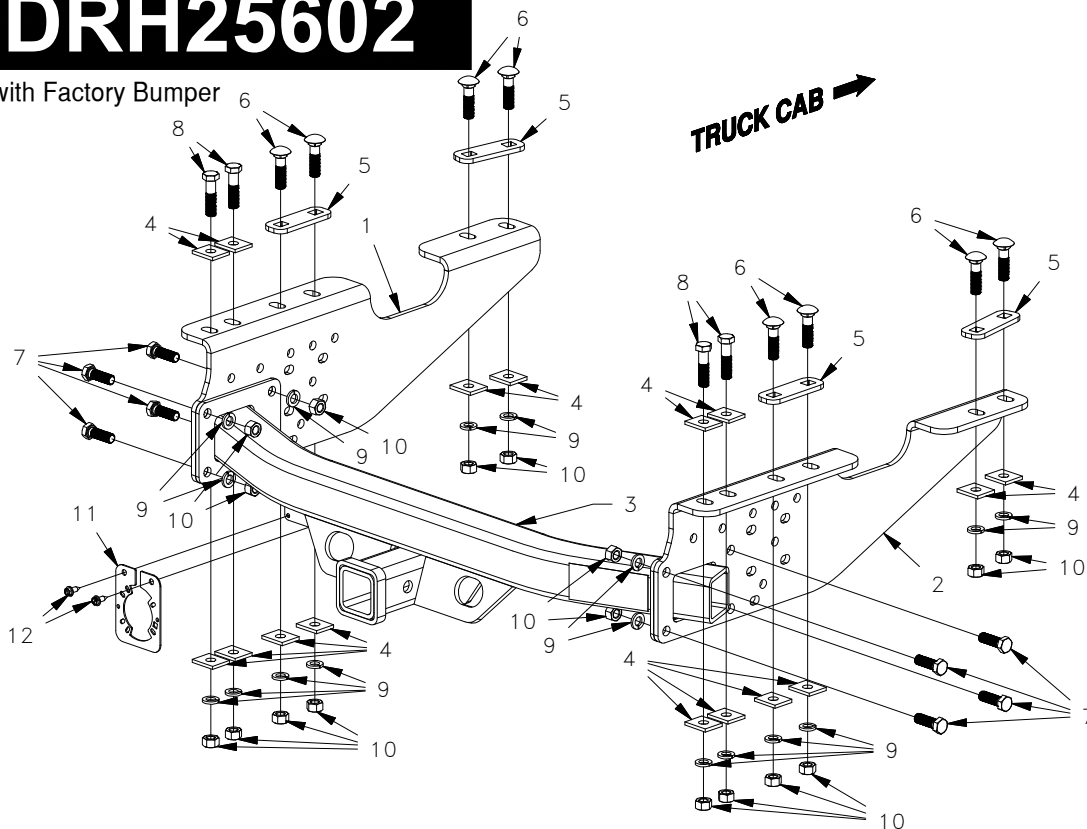
See Limited Lifetime Warranty at  
[bwtrailerhitches.com/warranty](http://bwtrailerhitches.com/warranty)

## 16K Heavy Duty Receiver Hitch Installation Instructions

# MODEL HDRH25602

2017 - 2021 Ford F250 & F350 Trucks with Factory Bumper

PARTS LIST		
ITEM	DESCRIPTION	QTY
1	Side Plate Driver	1
2	Side Plate Passenger	1
3	Hitch Center Section	1
4	Spacer 3/16" X 1-1/4" X 1-1/2"	16
5	Locking Strap	4
6	1/2" X 2" Carriage Bolt	8
7	1/2" X 1-1/2" Cap Screw	8
8	1/2" X 2" Cap Screw	4
9	1/2" Lock Washer	20
10	1/2" Finish Nut	20
11	Trailer Plug Bracket	1
12	#14 X 3/4" Sheet Metal Screw	2



### ⚠️ WARNING

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

- ⚠️ Read all installation and operating instructions along with all labels before using this product.
- ⚠️ Adding 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 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 truck 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 truck.
- ⚠️ Additional caution must be used when towing a wedge car trailer. Towing stability greatly depends on keeping the center of gravity as low as possible. Load heavy cars over the axles. Never tow with a single car on the front of the trailer. When towing a wedge car trailer, never exceed speeds that are reasonable for the roadway conditions (e.g. turns, going around a curve, etc.). Failure to account for proper trailer center of gravity and speeds that are reasonable for the roadway conditions may cause damage to the truck, trailer, towing components, and loss of attachment between the truck and trailer.
- ⚠️ 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.
- ⚠️ Always use safety chains while towing. Crossing the safety chains under the tongue of trailer may prevent some damage to the trailer if detachment occurs.
- ⚠️ 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.
- ⚠️ Periodically inspect hitch, making sure that all fasteners are tightly secured.

# PREPARING TO INSTALL

**NOTE:** Remove all parts from the packaging and familiarize yourself with all the parts and tools required. Use the parts list on the front page to verify that all parts and hardware are present.

1. Installation requires several common tools and a few specialized tools. Below is a listing of equipment used during a typical installation.

## TOOLS REQUIRED

- Impact wrench or ratchet with 3/4" sockets.
  - 3/4" Box end wrench
  - Flat head screwdriver (optional)
  - Eye & Ear protection
  - Torque wrench
2. Remove spare tire to provide easier access to the frame, some truck models will require the removal of the spare tire for installation.
  3. This receiver hitch may require slight modification to, or relocation of, vehicle systems or components so that the hitch may be installed in the proper location. It is very important to make sure that you have the correct hitch for your application before any modifications to the vehicle are made.
  4. The Side plates of this hitch must mount against the bottom of the frame. Any brackets or accessories not critical to the structure of the vehicle that are mounted to the bottom of the frame in the installation area may need to be removed. See the steps on positioning and mounting the hitch for the hitch location to see if there will be any interference.
  5. The side plates of this hitch have holes for attachment of wire harness components. If possible, familiarize yourself with the location of wiring components and routing before beginning installation.

# ASSEMBLE HITCH

1. Attach the two side plates to the center section using eight 1/2" X 1-1/2" cap screws, lock washers and nuts. Attach the side plates so that the "ears" of the side plates are toward the outside as shown in figure A1. Do not fully tighten the hardware at this time..

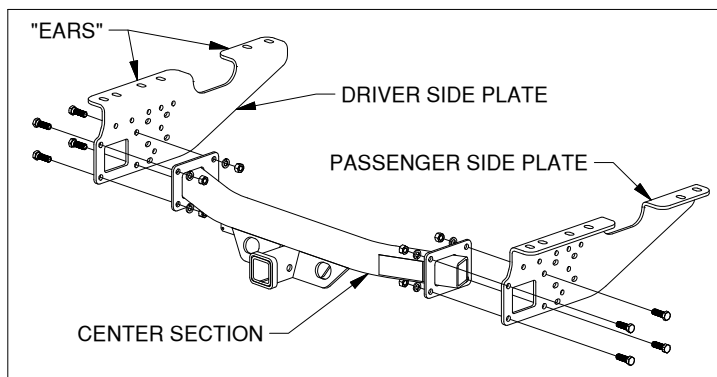


Figure A1: Center Section & Side plates.

# INSTALL FRAME HARDWARE

1. Locate the six hardware mounting locations on each side of the frame towards the rear of the truck, see figure B1. Each hole will need a locking strap or square washer. The four holes in the rear bumper brackets, will each receive a square washer and a 1/2" x 2" cap screw, see figure B2. The eight holes in frame will receive four locking straps and eight 1/2" X 2" carriage bolts. The locking straps can be inserted from the end of the frame and a cut out in the inside of the frame, see figures B3 & B4.

**NOTE:** The rear bumper brackets may not be available for mounting if there is no factory bumper.

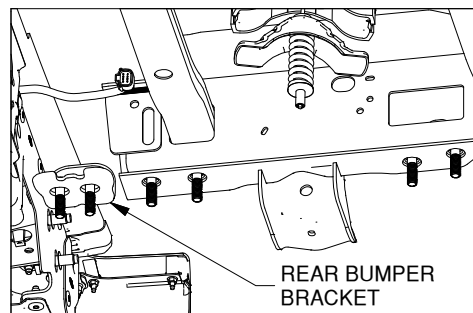


Figure B1: Under Driver side of frame.

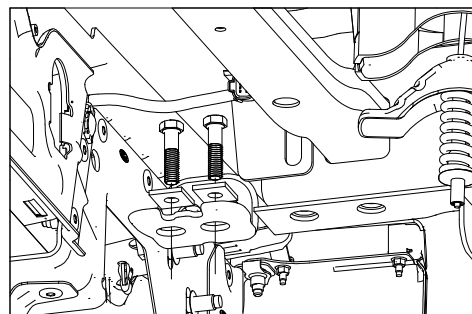


Figure B2: Detail of end of frame.

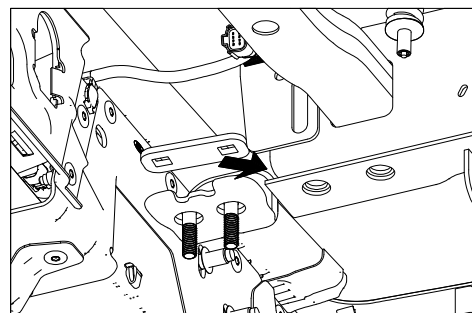
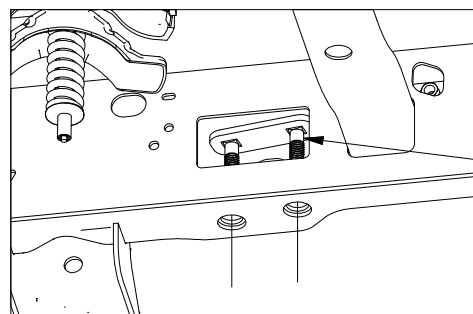


Figure B3: Detail of end of frame.



Tip, it may be easier to install this strap with the Carriage Bolts in place.

Figure B4: Detail of cutout in frame.

# MOUNT THE HITCH

1. Position the hitch, by placing the holes in the ears of the side plates over the bolts installed in the frame. Secure these connections with spacers, lock washers, and nuts as shown in figure C1. Hand tighten the hardware at this time.

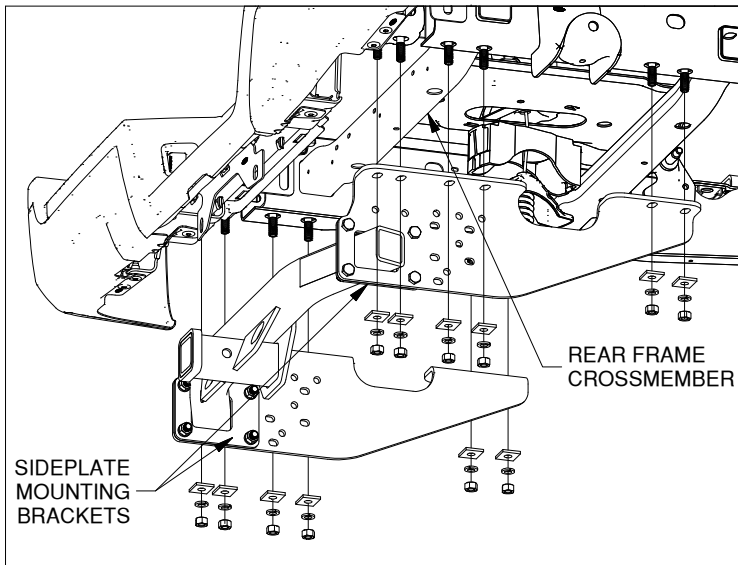


Figure C1: View looking up at rear of truck.

# TIGHTEN HARDWARE

1. Tighten the hardware on the connections between the frame and the side plates to 80 foot pounds. Next make sure that the edges of the side plate mounting brackets on the center section match up with the rearward edges of the side plates and tighten these connections. Torque these bolts to 80 foot pounds as well.

# SECURE WIRING

1. Replace the wiring modules using the holes in the receiver hitch sideplates. Secure all wiring so that it will not be damaged while using the vehicle. Routing some wiring above the rear frame crossmember may be useful. Secure any loose wiring with wire ties or similar tie down devices.

Notes:

---

---

---

---