

# Assembly, Installation, Operation and Maintenance Instructions Base Rail Bracket Kit

P/N: 31408

Dealer / Installer: Provide a copy of these Instructions to the end user of this product. These Instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.

End User:

Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product.

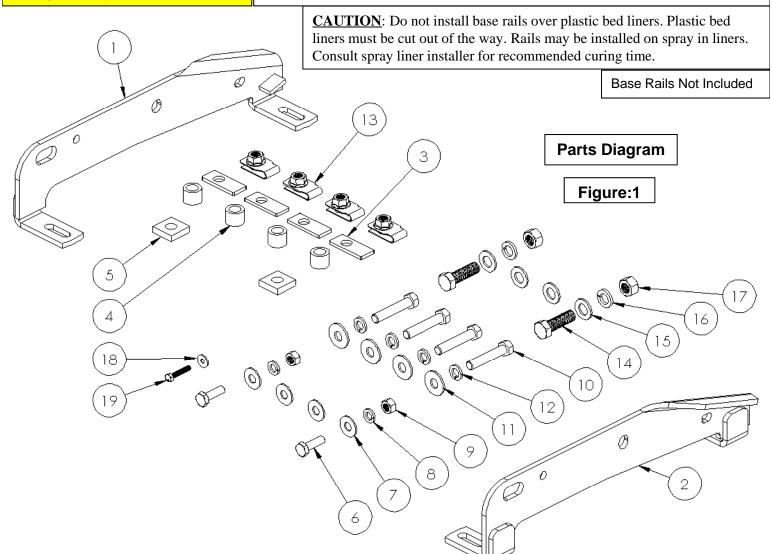
APPLICATION: 2008-2016 Ford F250, F350 & F450 Super-Duty Pick-Ups.

**Note:** On 2011 models and newer only, if truck comes with a Ford OEM 5th Wheel/Gooseneck Trailer Tow Prep Package, the factory hitch & brackets must be removed prior to proceeding with this installation.

#### Use with 4 bolt 31323 or 10 bolt 30686 base rails. Base Rails are not included with this kit.

**WARNING!** Never exceed the towing capacity of the tow vehicle.

Center Bolt Kit 32059 (sold separately) must be used when towing with a 26K hitch, Goose Neck, or Maneuvering System.



Tools Required		
3/4" Socket/Wrench	1/4" Drill Bit	
13/16" Socket/Wrench	9/16" Drill Bit	
15/16" Socket/Wrench	5/8" Drill Bit	
13mm Socket	Drill	
150 lb. ft Torque Wrench		

- The following instructions should be used to mount the fifth wheel. Care and attention to detail will ensure a quick quality installation. Check parts against parts list to become familiar with parts in kit.
- Raise rear of truck high enough to allow jack stands to be placed under rear spring hanger bracket of truck.
   This will provide maximum room to install the fifth wheel brackets.

#### WARNING:

If the truck is raised, be sure that the truck is properly blocked and restrained to prevent the truck from falling. Failure to do so may result in the truck suddenly falling, causing death or serious injury.

- 3. Do NOT install mounting rails over plastic bed liners. Plastic bed liners must be cut out of the way. Base rails may be installed on dry/cured spray in liner. Note: Consult installer for recommended curing time.
- 4. Use only the supplied bolts, nuts, and washers to install this kit. All nuts and bolts are Grade 5 unless specified otherwise.

Complete Parts List		
Item No.	Description	Qty.
1	Passenger Side Bracket	1
2	Driver Side Bracket	1
3	1/4" Thick Bed Spacer	4
4	1" Tube Spacer	4
5	1/2" Thick Spacer Frame	2
6	9/16" -12 X 1-3/4" Hex Head Bolt	2
7	9/16" Flat Washer	4
8	9/16" Lock Washer	2
9	9/16" -12 Hex Nut	2
10	5/8" -11 X 3.25" Hex Head Bolt	4
11	5/8" Flat Washer	4
12	5/8" Lock Washer	4
13	5/8" -11 Clip Nut	4
14	3/4" -10 X 2-1/2" Hex Head Bolt	2
15	3/4" Flat Washer	4
16	3/4" Lock Washer	2
17	3/4" – 10 Hex Nut	2
18	8MM Flat Washer	1
19	M8 x 1.25 x 45MM Hex Head Bolt	1

#### **CAUTION:**

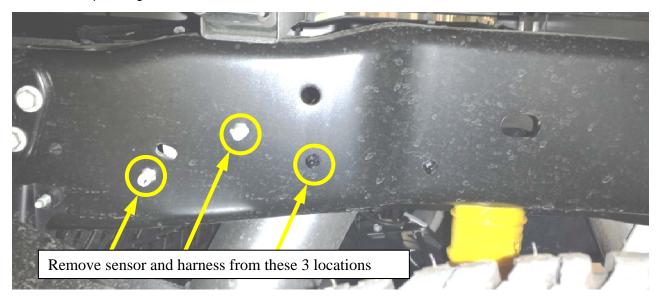
These instructions are guidelines only. Actual installation is the responsibility of the installer and the owner. Always measure truck and trailer before installing hitch to be sure that there is clearance at the cab and at the bumper to allow for turns.

- 5. The wheel well liners will need to be removed to access the frame for bracket installation.
- 6. Measurements are given from rear edge of truck bed to rear edge of the base rail closest to the rear edge of truck for most vehicle applications.
- 7. Place the two bed rails across the truck bed between the wheel wells. Position the 5th wheel uprights between the bed rails so that the tabs in the base of each upright will fit into the slots in the ends of the bed rails. Secure the uprights in place with the rail hitch pins and hair pins supplied with the 5<sup>th</sup> wheel installation kit. Securely attach 5th wheel cross member to uprights.
- 8. On most applications, the 5th wheel assembly should be positioned so that it is approximately centered over the truck axle and between the wheel wells on the bed floor. See Figure 2 on page 4.

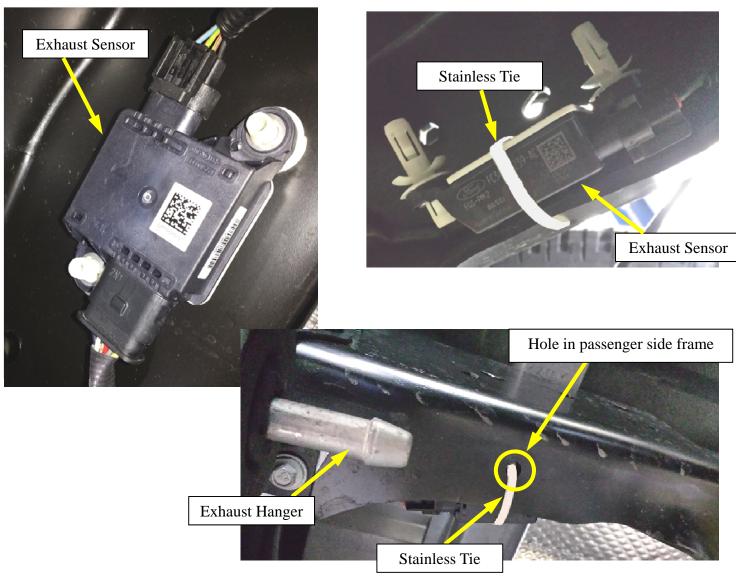
#### CAUTION:

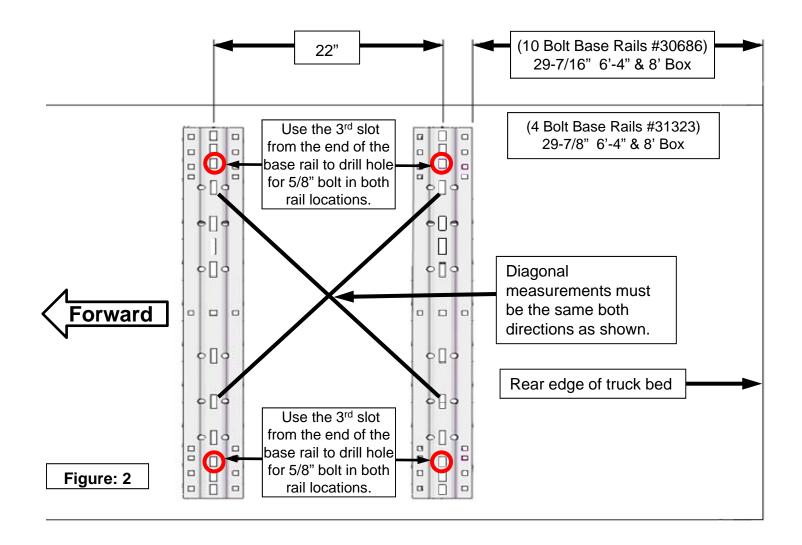
Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. HUSKY TOWING PRODUCTS does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.

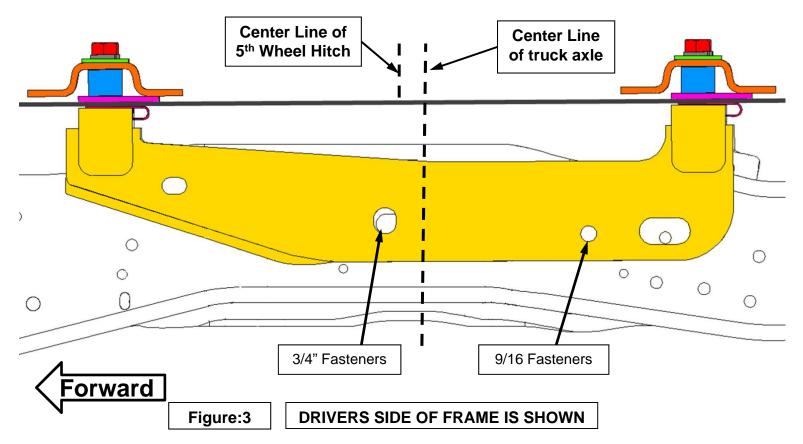
If installing this product on a 2014 or newer F250/F350 diesel powered truck, you may have to relocate the exhaust sensor and harness located on the passenger side frame.



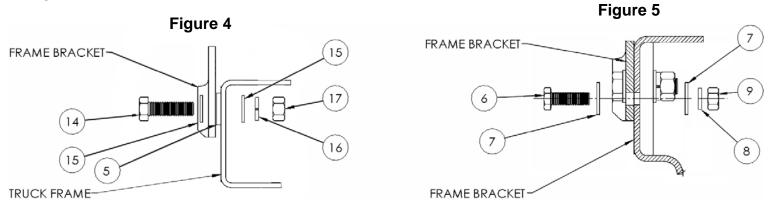
Use a stainless tie wrap (not provided) to secure the exhaust sensor to the frame through the hole located in the bottom of the passenger side frame.



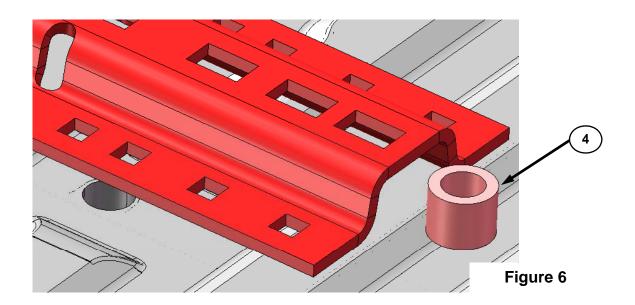




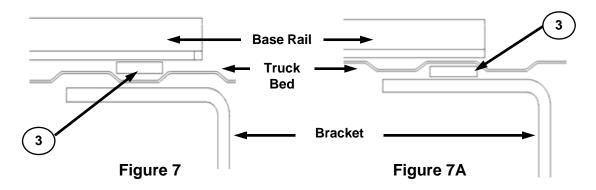
- 9. Position the right and left frame brackets #1 and #2 against their appropriate side of truck frame as shown on Figure 3.
- 10. Place a 3/4" Hex bolt (#14) and 3/4" washer (#15) through the truck frame slot at the center attachment point in frame bracket. Place a 1/2" thick spacer plate (#5) on bolt between the truck frame and the frame bracket, as shown on Illustration 3. Bolt in place with a 3/4" flat washer (#15), 3/4" Lock washer (#16), and 3/4" hex nut (#17) and only finger tighten at this time



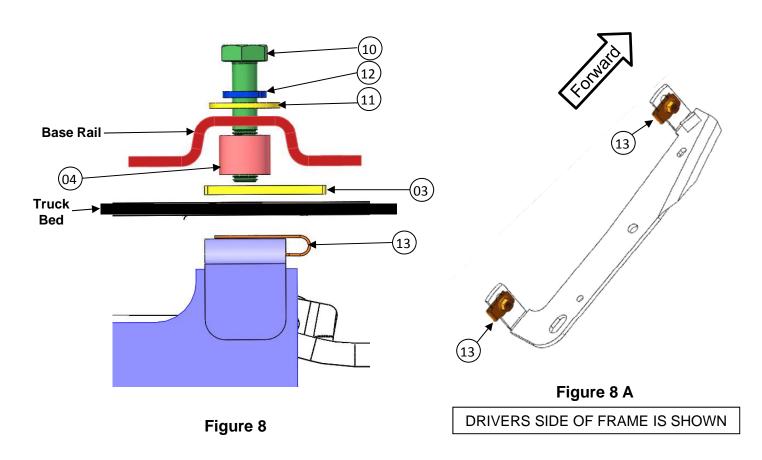
- 11. Place the two bed rails across the truck bed between the wheel wells. Position the 5<sup>th</sup> wheel uprights between the bed rails so that the tabs in the base of each upright will fit into the slots in the ends of the bed rails. Secure the uprights n place with the rail hitch pins and hair pins supplied with the 5<sup>th</sup> wheel installment kit. Securely attach 5<sup>th</sup> wheel cross member to uprights.
- 12. Position the bed rail assembly in truck bed as shown on the layout illustration on the page 2 of this instruction sheet. When hitch is correctly positioned in the bed and the bed rails are parallel, mark four attachment points on the truck bed using the 5/8" square holes indicated on the layout Illustration on Page 2 of this document.
- 13. Check below the bed before drilling holes to see that all wiring, brake lines or other obstructions are moved out of the way and will not be contacted by the drill. Drill 1/4" pilot hole through bed floor at each previously marked location. Check to see that these holes line up with installed frame bracket mounting tabs. Adjust hole location as needed. Move the hitch assembly out of the way and drill four 5/8" diameter attachment holes down through the bed at the previously marked points.
- 14. Reposition the bed rails in the bed so that the square 5/8" hole in the end of each rail is lined up over the drilled holes. Place a 1" spacer tube (#4) under ends of each bed rail, in line with the drilled holes. See Figure 6.



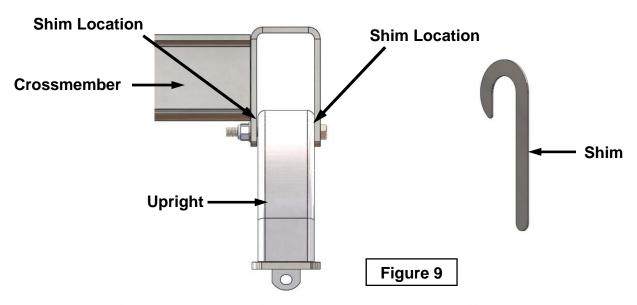
15. If the bed corrugation above the frame bracket is UP, leaving a space above the frame bracket, place a spacer plate (#3) in this location as shown on Figure 7. If the corrugation is DOWN, at this location, place a spacer plate (#3) in the bed, under the base rail as shown on Figure 7A. Bolt parts loosely in place as shown on Figures below.



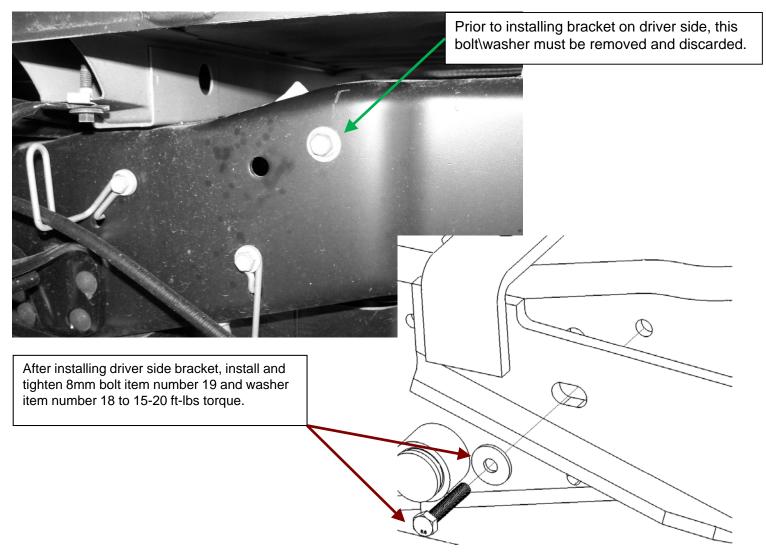
- 16. Use remaining 9/16" hole in bracket #1 and #2 as guide and drill 9/16" hole into the truck frame. Bolt frame brackets to frame with 9/16" fasteners as shown on Figure 5.
- 17. Tighten all 9/16" attachment bolts to 110 ft-lbs. torque, and all 3/4" bolts to 260 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure. See Figure 8.
- 18. Place 5/8"x3.5" hex bolt (13), 5/8" lock washer (8),5/8" flat washer (9) through the correct slot in the base rail and through the 5/8" hole in the bed. & slot in bracket flange. Secure it with clip nut (#13) as shown in fig. 8 and 8a.
- 19. Tighten each 5/8" bed rail attachment bolt to 150 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure. **DO NOT** apply torque to the nut portion of the clip nuts. You will DAMAGE it.



20. Check each rail hitch pin for freedom of movement in the bed rail connection. Adjust uprights, if necessary, by placing shim 31582 or 30243 between the upright and the cross member to obtain free pin movement. See Figure 9. Shims 31582 & 30243 sold separately.



On some models there is a bolt and washer shown in the picture below that will need to be replaced by a bolt (item 19) and washer (item 18) in the kit.



#31408 CUS

CUSTOM BRACKET KIT FORD SUPER DUTY



## ENSEMBLE DE SUPPORTS SUR MESURE- FORD SUPER DUTY

WWW.HUSKYTOW.COM

Designed & tested in the USA & Made in China for / Conçu et testé aux É.-U. et fabriqué en Chine pour DTS Manufacturing, Wilsonville, OR 97070

88805 31408

P.O. #:

The date code for this product is located on the UPC label

Please retain this info for your records.

### **Warranty Terms:**

#### **5 Year Limited Warranty:**

This warranty applies solely to Husky 5<sup>th</sup> Wheel Installation Kit manufactured by DTS Mfg. for Husky Towing Products.

Husky Towing Products and DTS Mfg. make no guarantees or warranties for products not manufactured by DTS Mfg. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and guarantee instructions provided by the manufacturer are followed.

DTS Mfg. warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of Husky Towing Products and DTS Mfg. with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of DTS Mfg.

The Warranty applies to DTS Mfg. products used for individual and recreational purposes. Commercial usage of the DTS Mfg. products limits the warranty to 90-days from date of purchase.

The Warranty applies only to DTS Mfg. products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of the finished placed on DTS Mfg. products.

Husky Towing Products and DTS Mfg. are not responsible for any labor costs incurred for removal or replacement of the defective product.

Husky Towing Products and DTS Mfg. are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused or damaged as a result of an accident, including any use of the product not in accordance with all product operating and safety instructions.

Without limiting the generality of the foregoing, Husky Towing Products and DTS Mfg. shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.