



# Installation Instructions

## Kit, Base Rail Bracket      Part # 31408

<b>Dealer / Installer:</b>	<b>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.</b>
<b>End User:</b>	<b>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.</b>

*APPLICATION: 2008-2011 Ford F250, F350 & F450 Super-Duty Pick-Ups.*

*Note: On 2011 models 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.*

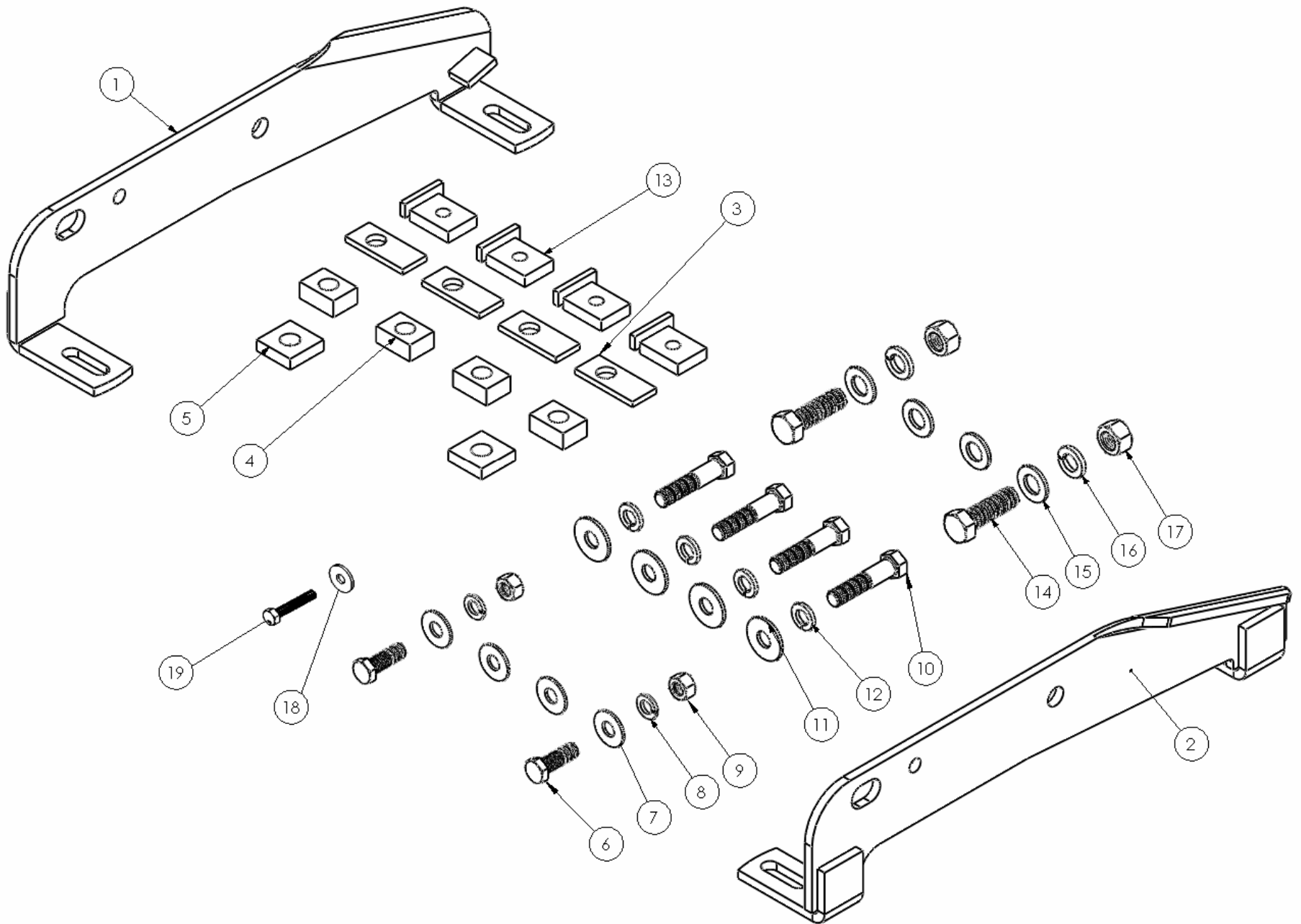
**NOTE:** This bracket kit is to be used with the 31323 Bed Rail Kit.

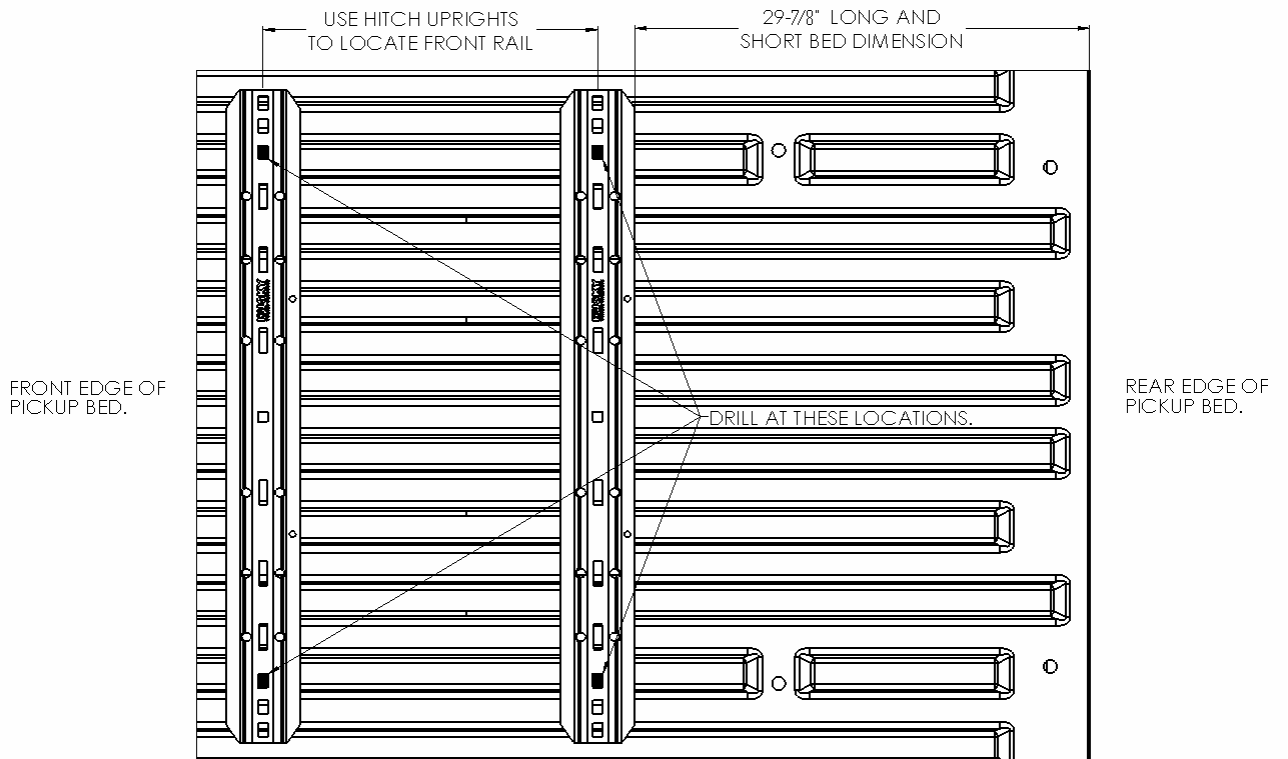
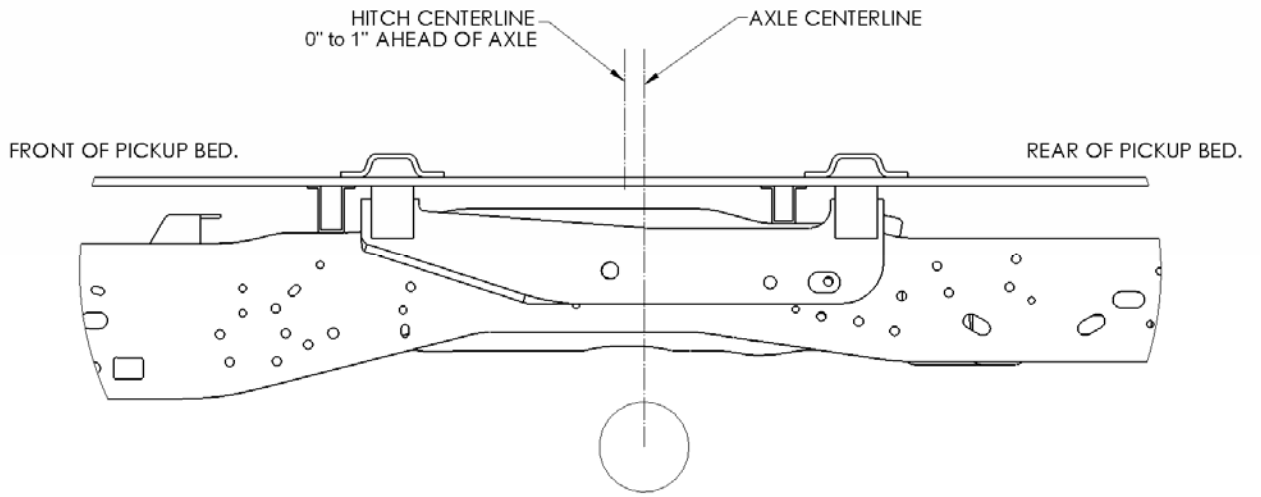
Complete Parts List			
Item No.	Part No.	Description	Quantity
1	ERD10400	Bracket, Right Frame - Weldment	1
2	ERD10401	Bracket, Left Frame - Weldment	1
3	ERD10383	Spacer Bed 1/4" Thick	4
4	ERD10031	Spacer Bed 3/4" Thick	4
5	ERD10385	Spacer Frame 1/2" Thick	2
6	ERD10386	Bolt, Hex Head 9/16 -12 X 1-3/4"	2
7	ERD10392	Flat Washer (9/16)	4
8	ERD10388	Lock Washer (9/16)	2
9	ERD10389	Hex Nut (9/16 -12)	2
10	ERD10390	Bolt, Hex Head 5/8" -11 X 3"	4
11	ERD12188	Flat Washer (5/8)	4
12	ERD12187	Lock Washer (5/8)	4
13	ERD10393	Plate, Tapped (5/8 -11)	4
14	ERD10394	Bolt, Hex Head 3/4" -10 X 2-1/2"	2
15	ERD10392	Flat Washer (3/4)	4
16	ERD10396	Lock Washer (3/4)	2
17	ERD10397	Hex Nut (3/4 -10)	2
18	ERD13554	Washer, 8.51MM ID X 23.72MM OD X 2.03MM (see sheet 6)	1
19	ERD13553	Bolt, Hex Head, M8 x 1.25 x 45MM (see sheet 6)	1

**Caution:** Do not install mounting rails over plastic bed liners. Plastic bed liners must be cut out of the way. Rails may be installed on spray in liners.

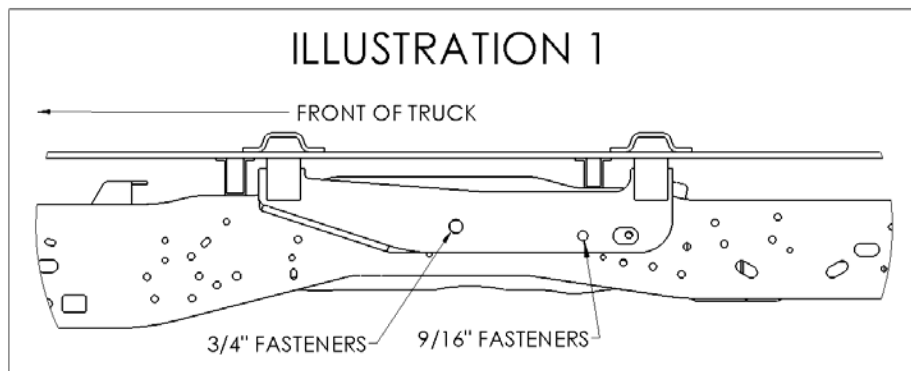
**Note:** Consult spray liner installer for recommended curing time.

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
Torque Wrench	

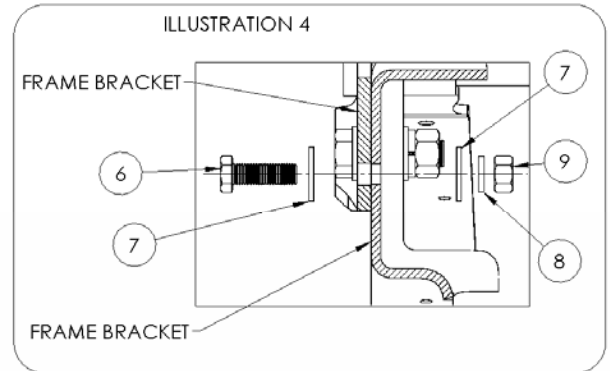
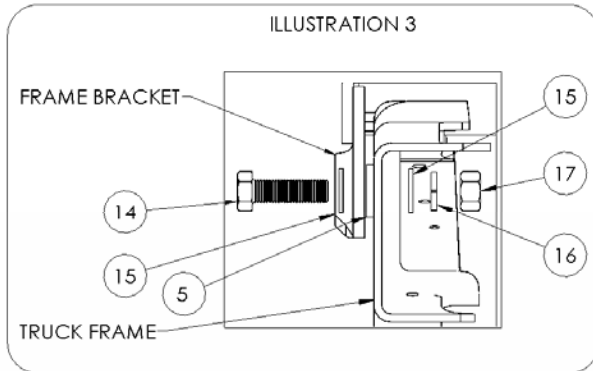




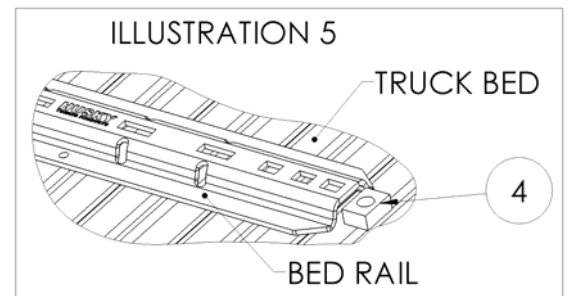
1. Position the right and left frame brackets #1 and #2 against their appropriate side of truck frame as shown on Illustration 1.



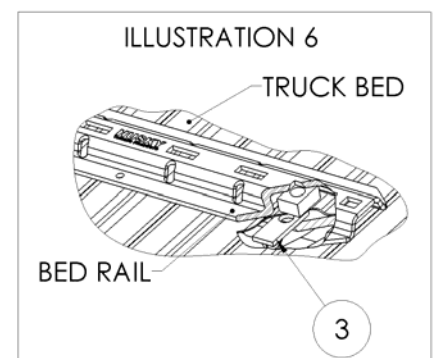
- Place a 3/4" Hex bolt (#14) and 3/4" washer (#15) through the truck frame slot at the center attachment point in frame bracket. Place a 1/2" thick spacer plate (#5) on bolt between the truck frame and the frame bracket, as shown on Illustration 3. Bolt in place with a 3/4" flat washer (#15), 3/4" Lock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



- 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 in 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.
- 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.
- 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.
- 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 3/4" thick spacer block (#4) under ends of each bed rail, in line with the drilled holes. See Illustration 5.

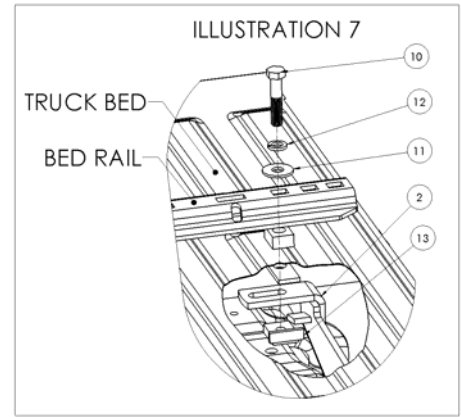
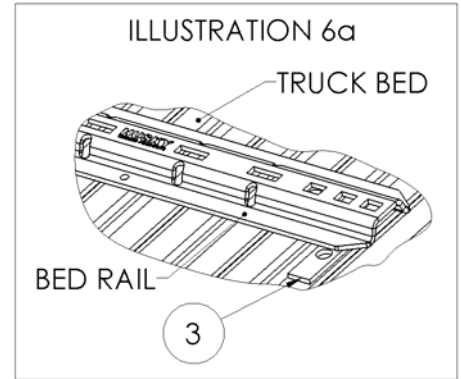


- If the bed corrugation above the frame bracket is UP, leaving a space above the frame bracket, place a spacer plate (#3) in this location as shown on Illustration 6. If the corrugation is DOWN, at this location, place a spacer plate (#3) in the bed, under the base rail as shown on Illustration 6a. Bolt parts loosely in place as shown on Illustration 7.

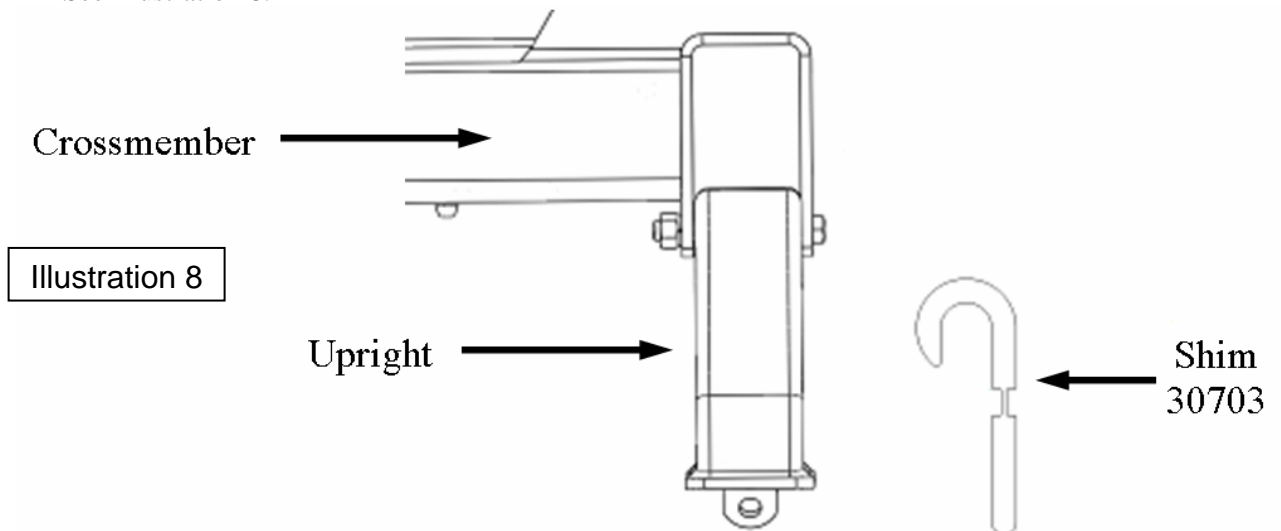


8. Use remaining 9/16" hole in bracket #1 and #2 as guide and drill 9/16" hole into the truck frame. Bolt frame brackets to frame with 9/16" fasteners as shown on Illustration 4.
9. Tighten all 9/16" attachment bolts to 110 ft-lbs. torque, and all 3/4" bolts to 260 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure.
10. 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.

TORQUE VALUE CHART	
Bolt Size	Torque Range (ft.-lbs.)
8mm	15-20
1/2"	65-85
9/16"	100-120
5/8"	125-160
3/4"	240-280

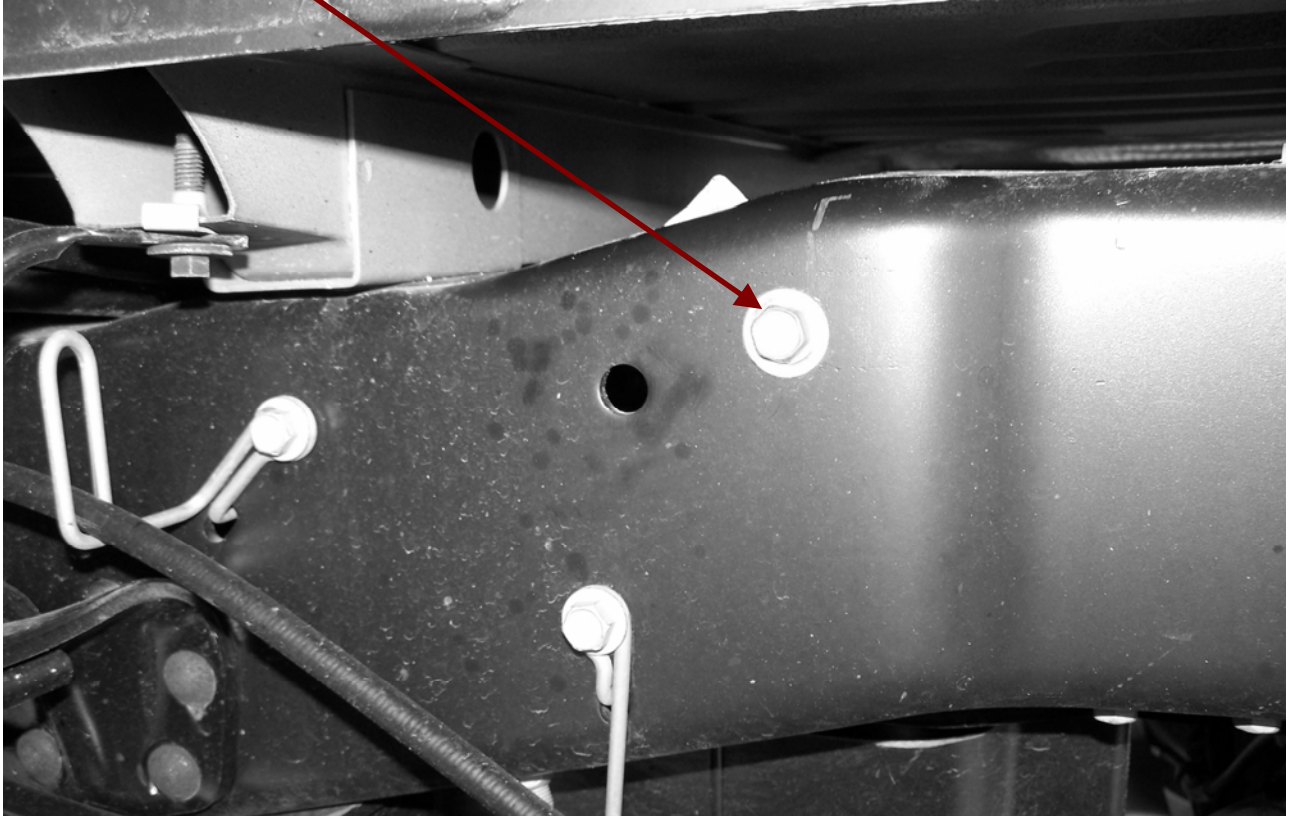


11. Check each rail hitch pin for freedom of movement in the bed rail connection. Adjust uprights, if necessary, by placing a shim between the upright and the cross member to obtain free pin movement. See Illustration 8.



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.

Prior to installing bracket on driver side, this bolt/washer must be removed and discarded.



After installing driver side bracket, install and tighten 8mm bolt item number 19 and washer item number 18 to 15-20 ft-lbs torque.

