



Installation Instructions

Kit, Base Rail Bracket Part # 31566

For updates see **PRODUCT SUPPORT** tab at www.huskytow.com

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: 2009-2016 Dodge Ram 1500 only (5-1/2', 6-1/2' and 8' beds) including ECO-Diesel. Will not work with 2013 to 2016 factory installed air bag Suspension.

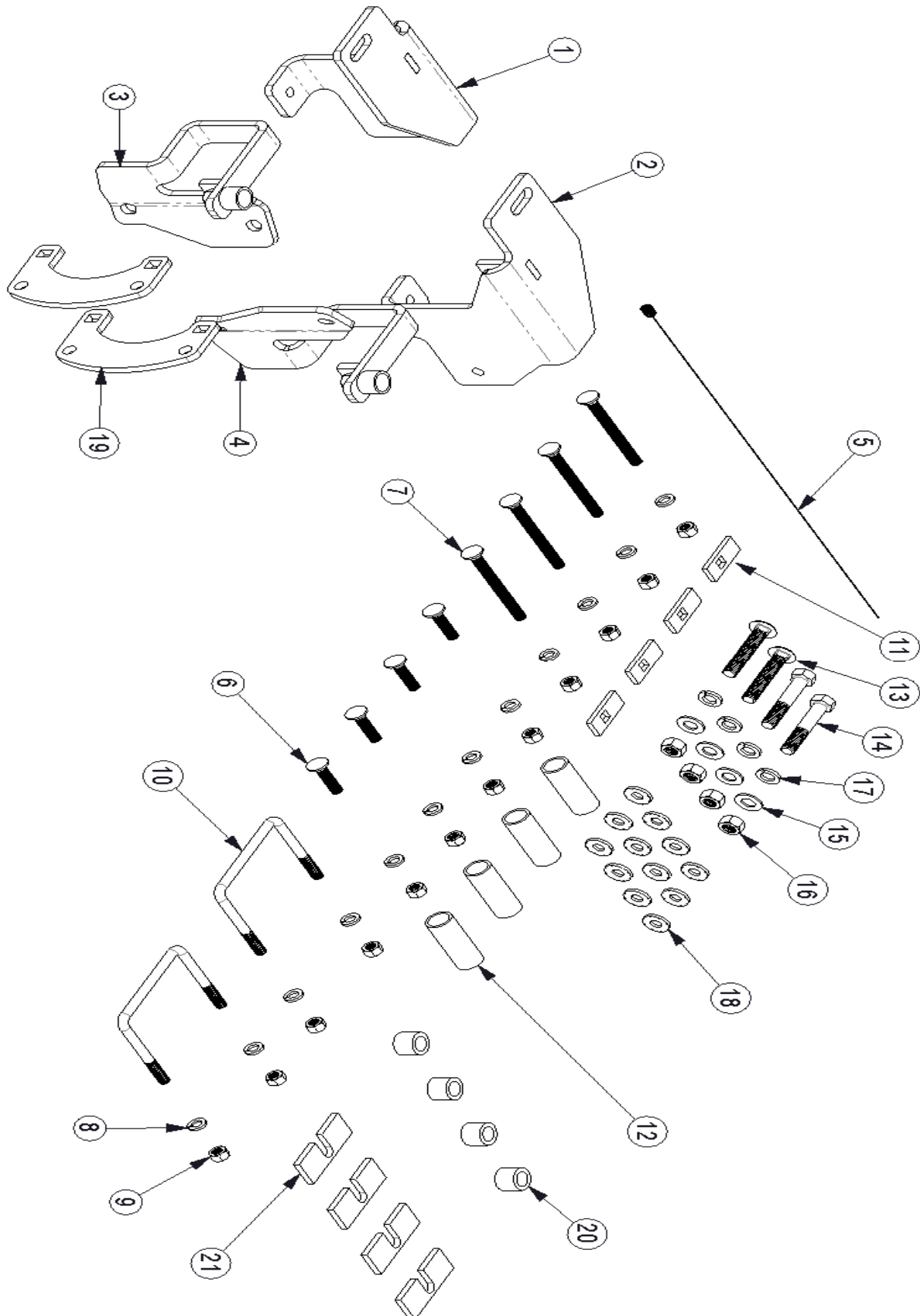
Required Accessory : Husky Roller (32220) or Husky Glider (31196 or 32042) is required to use 5th wheel hitch with 5-1/2' long bed truck.

ITEM NO.	Description	QTY.
1	PASSENGER SIDE REAR BRACKET	1
2	DRIVERS SIDE REAR BRACKET	1
3	PASSENGER SIDE FRONT BRACKET	1
4	DRIVERS SIDE FRONT BRACKET	1
5	PULL WIRE	1
6	BOLT, CARRIAGE 1/2-13 X 5", GR5, CZ	4
7	BOLT, CARRIAGE 1/2-13 X 2", GR5, CZ	4
8	LOCKWASHER, 1/2", (.512ID x .869OD x .125THK)	12
9	NUT, HEX 1/2-13 UNC, GR5, CZ	12
10	U-BOLT, 1/2 -13, GR5, CZ	2
11	SPACER, 1/2" CARRIAGE BOLT	4
12	SPACER, TUBE	4
13	5/8-11 UNC X 3.50 CARRIAGE HEAD BOLT, GR. 5, BO	2
14	BOLT, HEX HEAD 5/8 -11 X 3-3/4", GR. 5, BO	2
15	WASHER, 5/8" Ø.656 ID X Ø1.25 OD X .094" THK, GR5, CZ	4
16	NUT, HEX 5/8 -11 GR5, CZ	4
17	LOCKWASHER 5/8, Ø.647 ID X Ø1.079 OD X .156 THK, GR 5, BO	2
18	SERRATED WASHER, .531 ID X 1.250 OD X .144 THK, GR5,CZ	12
19	INNER SUPPORT PLATE	2
20	1" SPACER TUBE	4
21	PLATE, SPACER	4

Tools Required	
3/4" Socket & Wrench	8MM Socket or Wrench
15/16" Socket & Wrench	1/4" Drill Bit
Drill	5/8" Drill Bit
Torque Wrench	3/4" Drill Bit
Safety Glasses	

(Can be used with 4 Bolt Rails #31323 or 10 Bolt Rails #30686)

- This hitch is designed to tow 5th Wheel Trailers with a total Gross Vehicle Weight Rating up to 10,500 lbs. Do Not Exceed the Rated Capacity.



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.

DO NOT mark rear bed rail points at this time. 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 drill. Drill 1/4" diameter pilot holes down through the bed and into the hat section at the previously marked points. Be certain that the holes are drilled in correct location. The front holes should looking into the hat section of the truck

1. Place the two bed rails across the truck bed between the wheel wells. See Figure 1. Position the 5th wheel uprights on to 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 5th wheel installation kit. Securely attach 5th wheel cross member to uprights.
2. Position the bed rail assembly in truck bed as shown on Figure 1. Be sure bed rails are parallel by measuring diagonally as shown in Figure 2. Measurements should be less than 1/4" different.

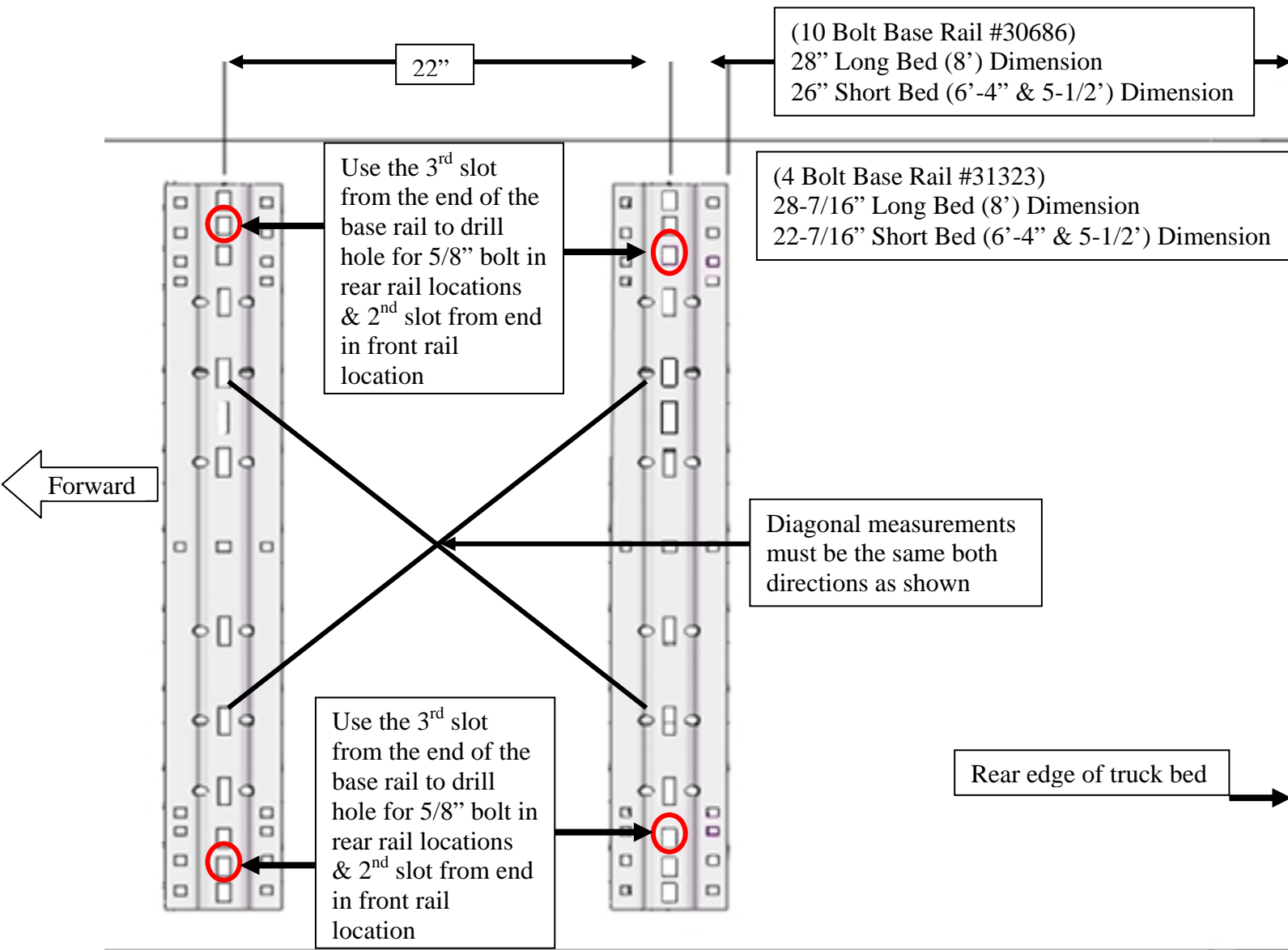


Figure 1

NOTE: Mark to the inner edge of the forward slots.

3. Position the bed rails in the bed so that the inner square 5/8" hole in the **front** rail is lined up over the previously drilled pilot holes. Double check that the pilot holes line up with holes in bed rail. Move bed rails away from pilot holes and drill a 3/4" hole down through truck bed at each of the previously drill pilot holes for the **front** base rail only. The 3/4" hole will give some tolerance to get bolt down into the bracket hole. **Use caution when drilling so that drill does not make contact with the fuel tank or lines under the truck bed.**
4. Place a 1" spacer tube (#20) under ends of each bed rail, in line with the drilled holes, as shown in Figure 3A. If the bed corrugation above the mounting bracket at the drilled hole is UP, leaving a space above the bracket, place a spacer plate (#10) in this location as shown in Figure 4A. If the corrugation is DOWN, at this location, place a spacer plate (#21) in the bed, under the base rail as shown in Figure 4B.

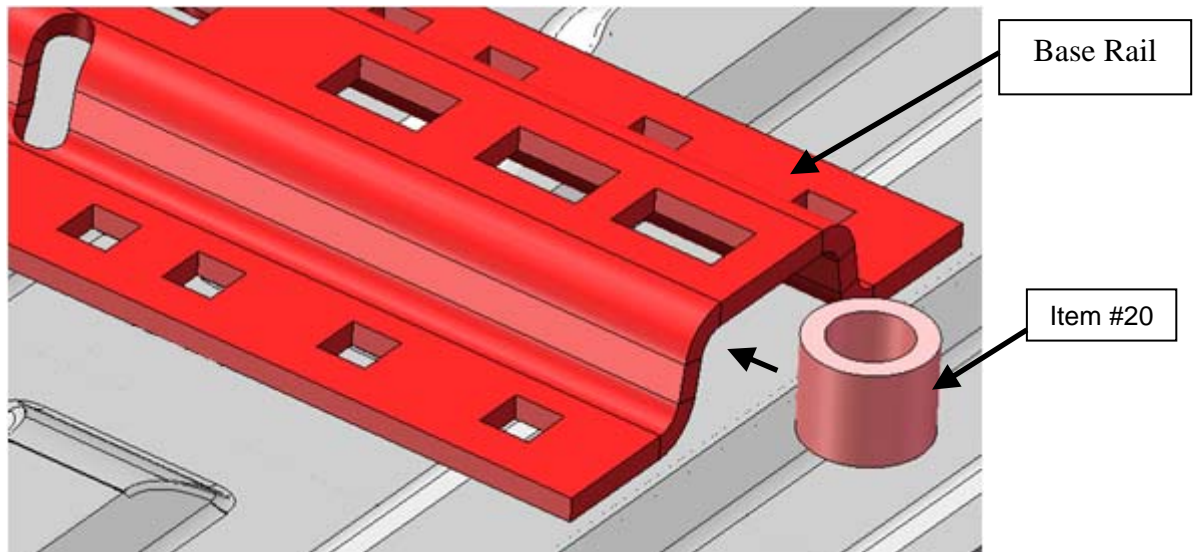


Figure 3

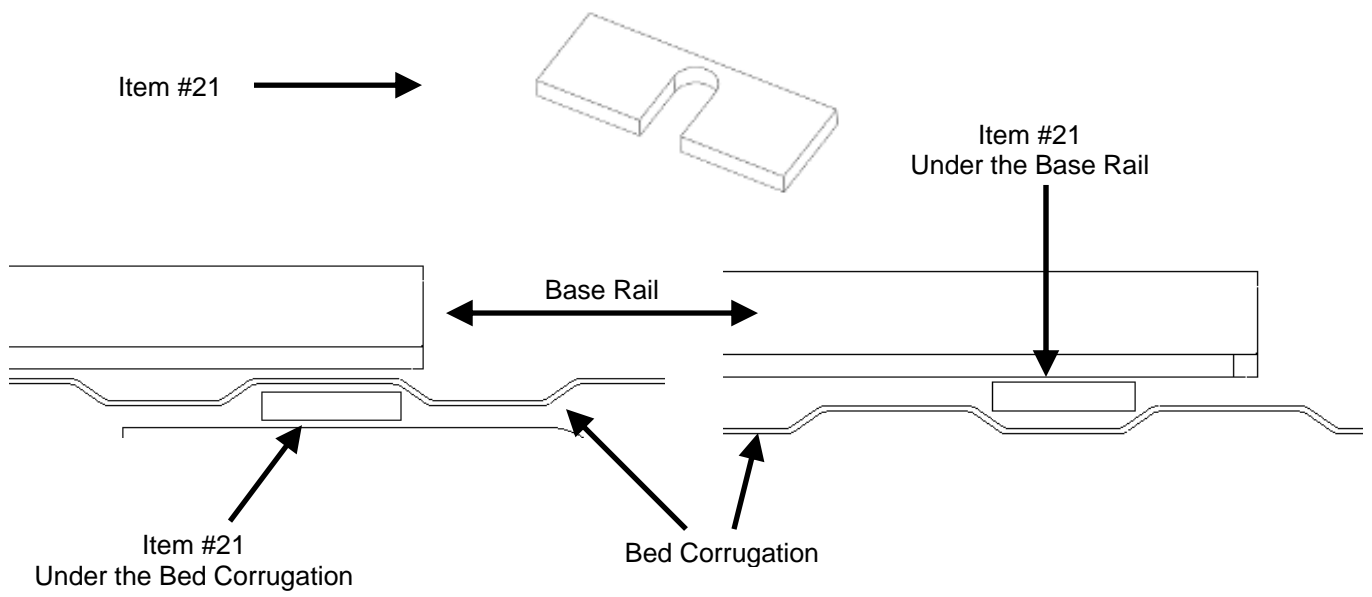
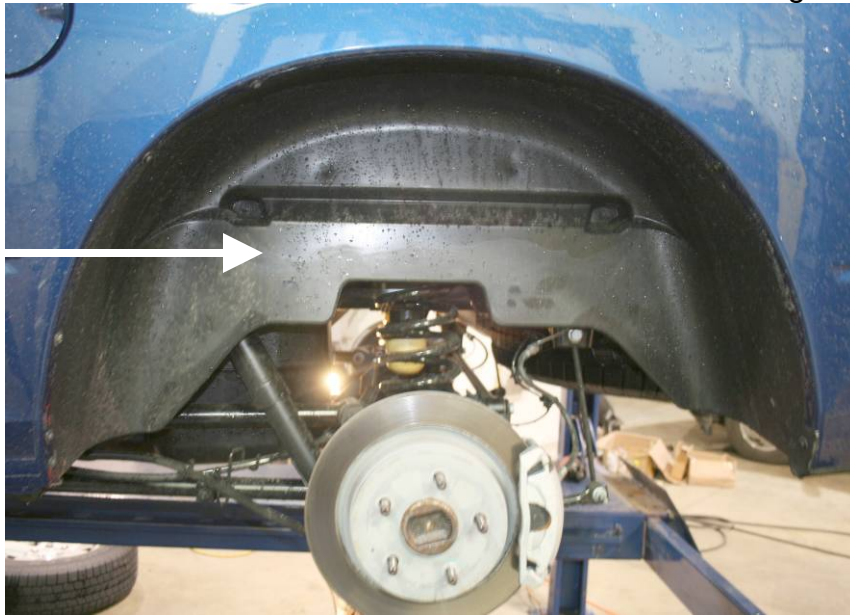


Figure 4A

Figure 4B

8. Before installing the bracket kit, you **MUST** remove the plastic wheel well liner on each of the rear wheels. It will be easier if the rear of the truck is raised up and the wheels removed. **NOT** required, but **MUCH** easier. Remove the 11 screws and save for reuse later. See Figure 5.

Plastic Wheel Well liner installed



Plastic Wheel Well liner Removed



Figure 5

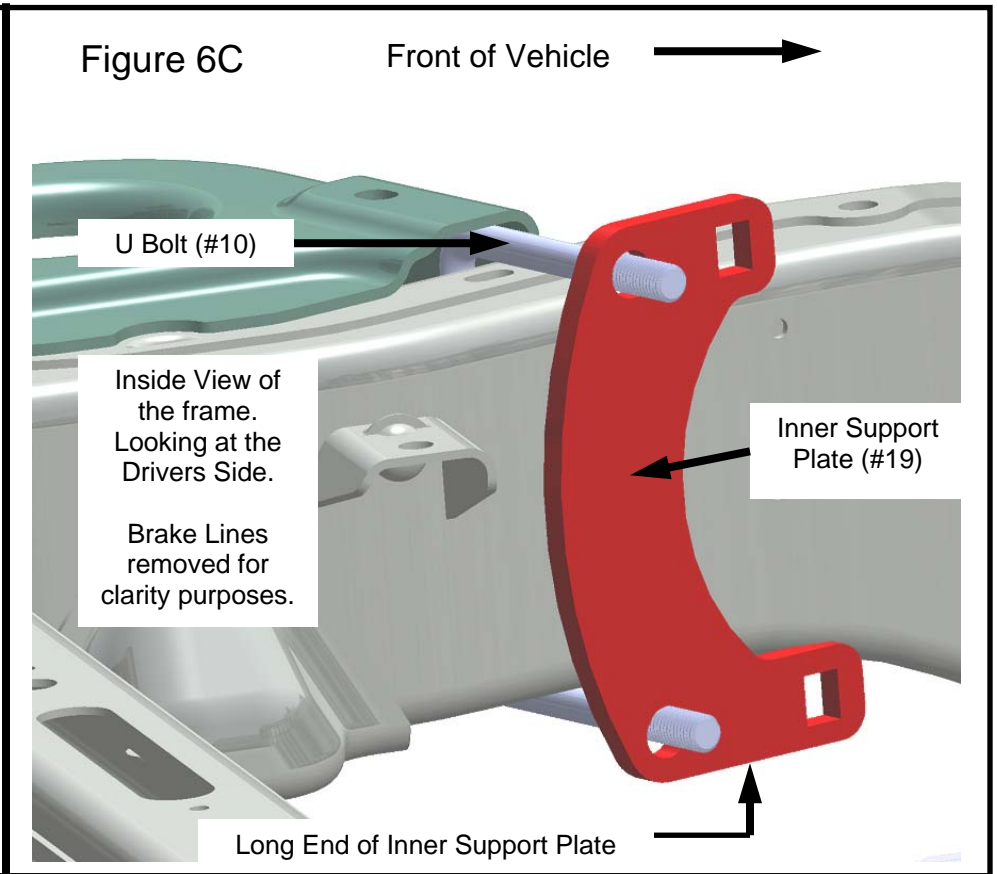
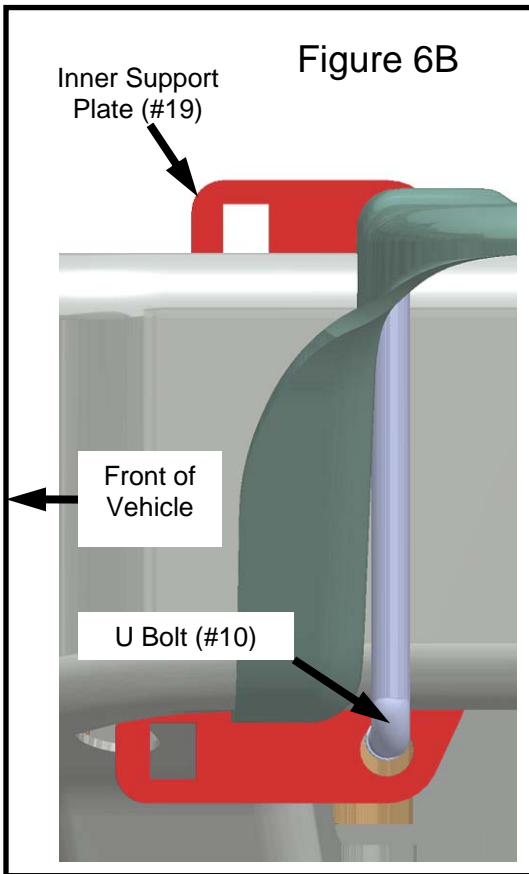
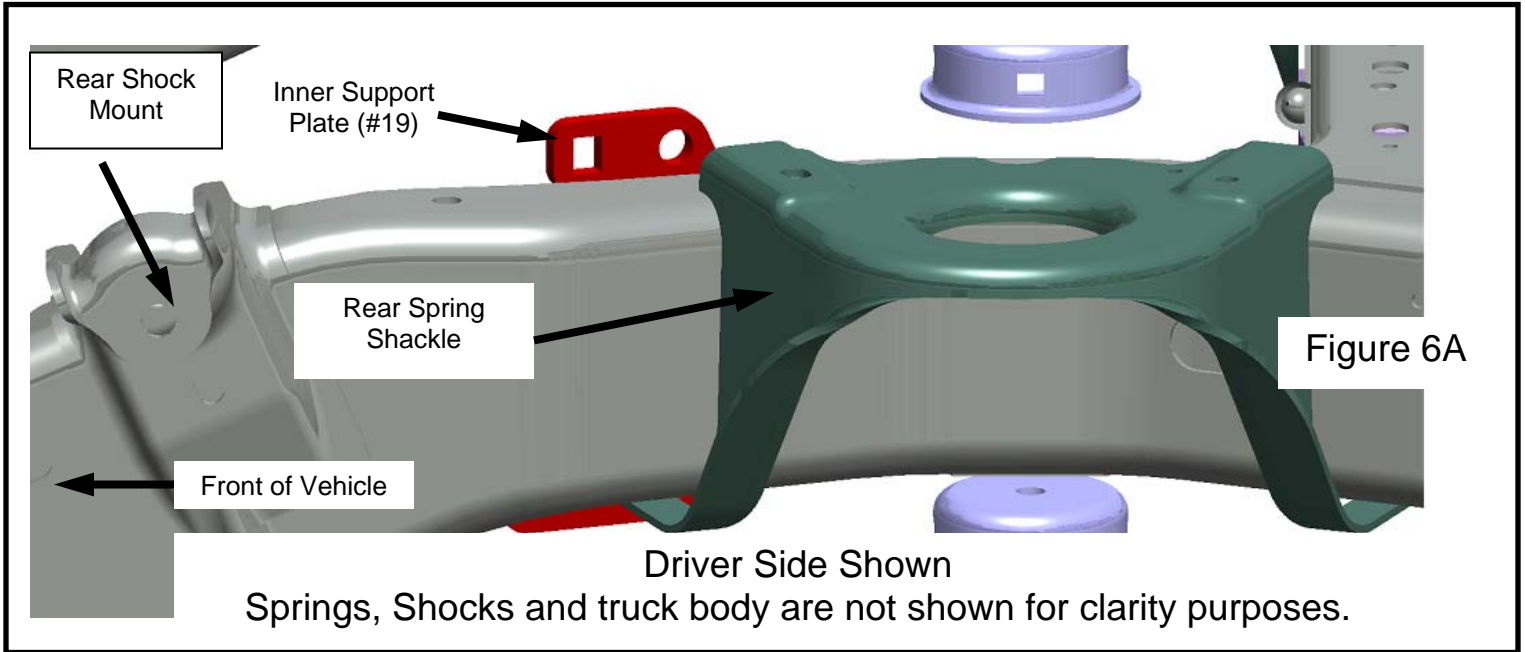
Plastic Wheel Well liner



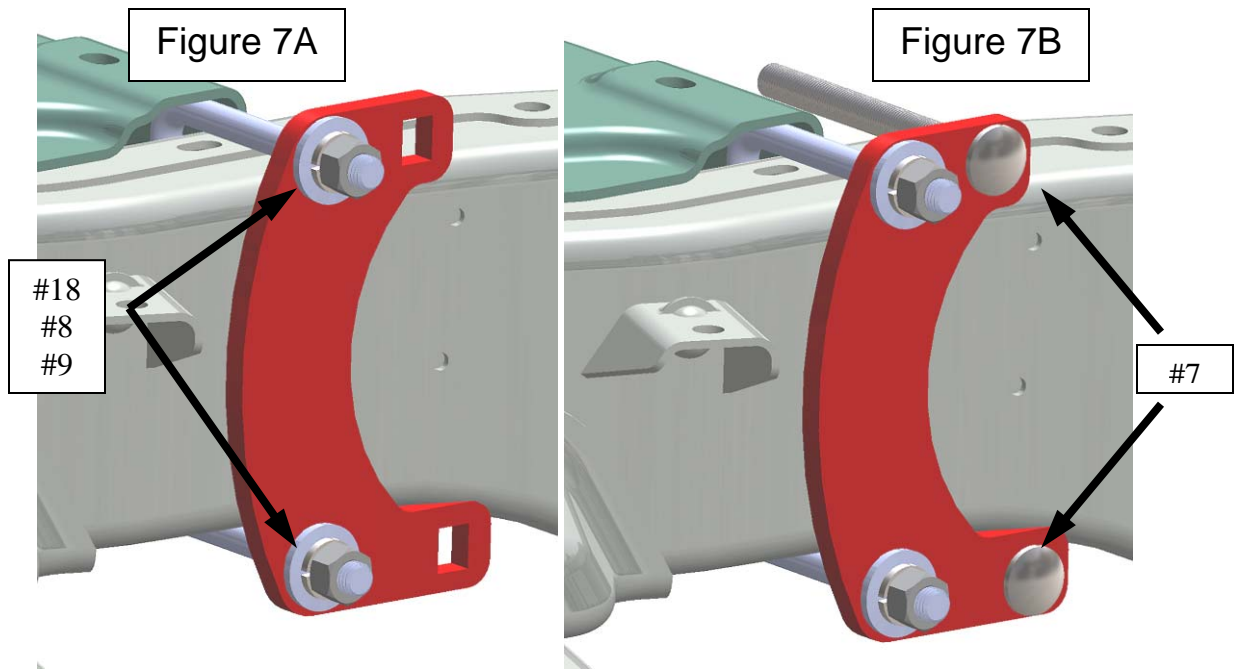
Warning:

On the inside of the driver's side vehicle frame is a wiring harness that is held in place with plastic clips. This section of wiring harness must be moved aside by removing plastic clips from frame. This will allow the hitch parts to be positioned correctly on frame.

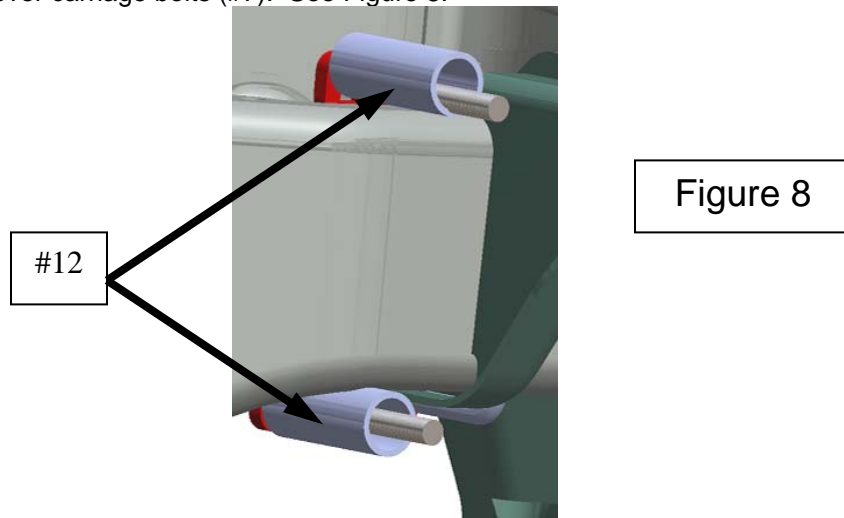
- Slide the inner support plate (#19) up the inside of the truck frame just in front of the rear spring shackle. On the driver side, you must slide the bracket between the brake lines and the frame. BE CAREFUL not to damage the brake lines. Install the U bolts (#10) between the shackles and the springs into the inner support plate as shown in Figure 6B. The square holes face toward the front of vehicle & the long end is on the bottom of the inner support bracket. See Figure 6C.



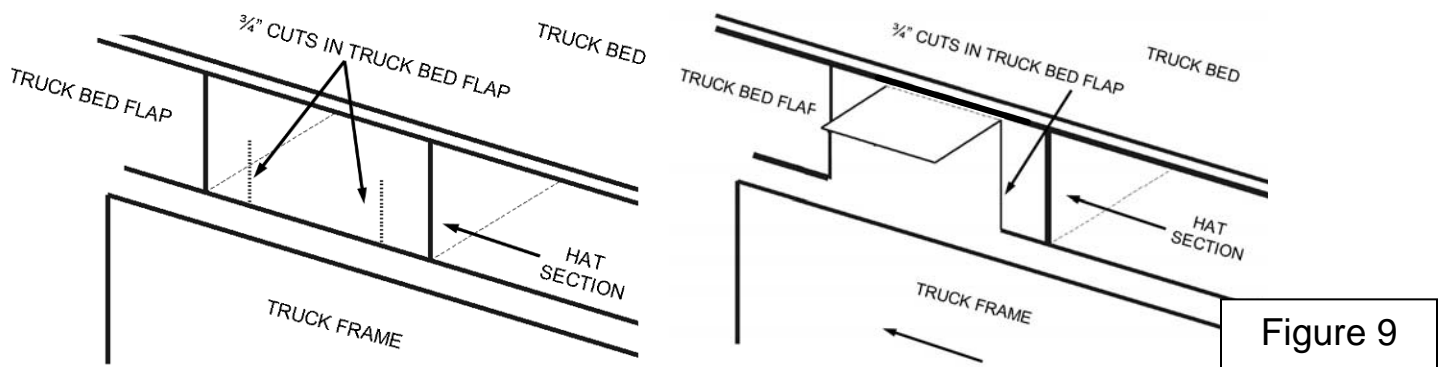
10. Loosely attach 1/2" serrated washer (#18), 1/2" Lock washer (#8) & 1/2" nut (#9) to inner support plate. See Figure 7A. Then, attach 1/2" carriage bolts (#7) as shown. See Figure 7B.



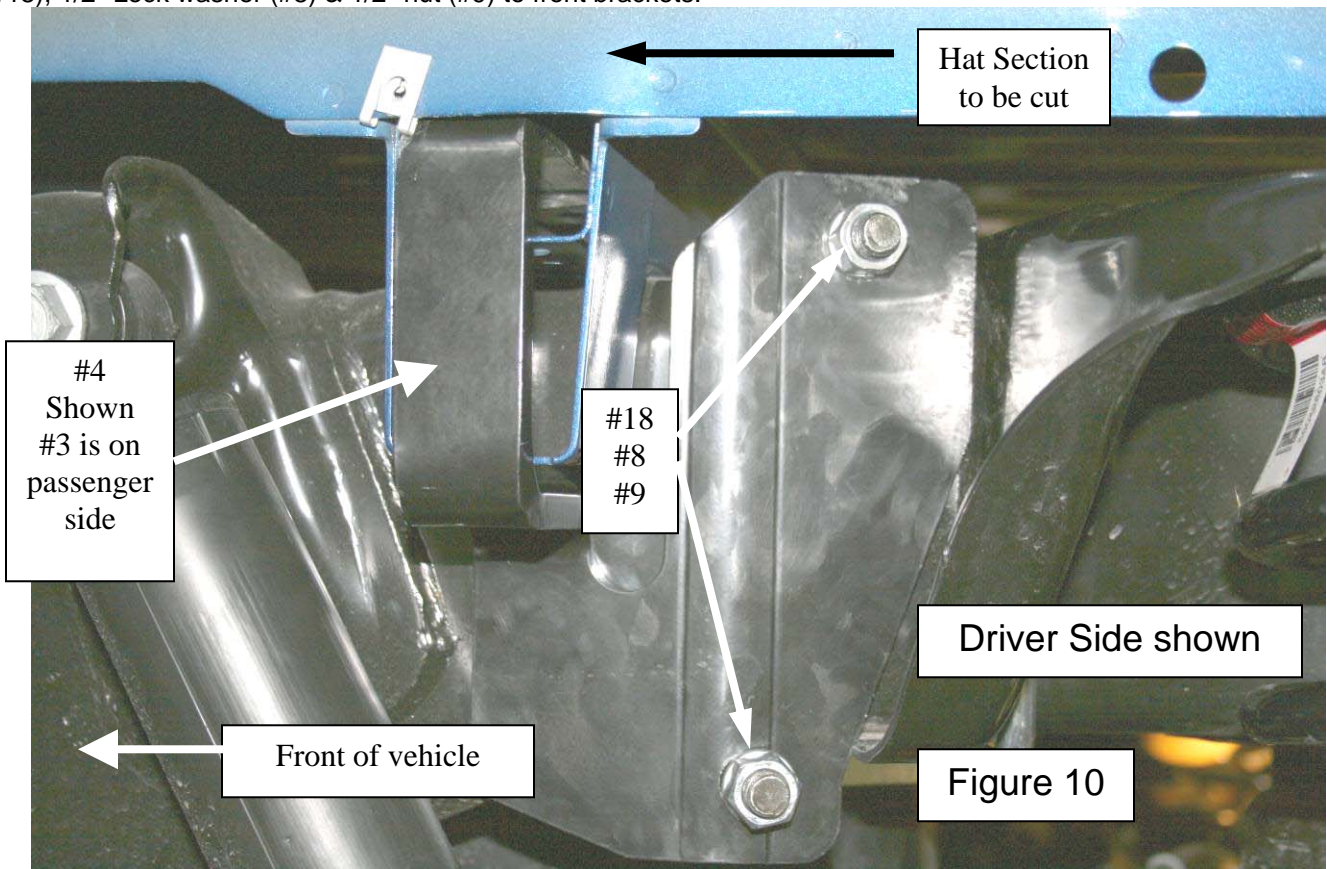
11. Slide spacer tubes (#12) over carriage bolts (#7). See Figure 8.



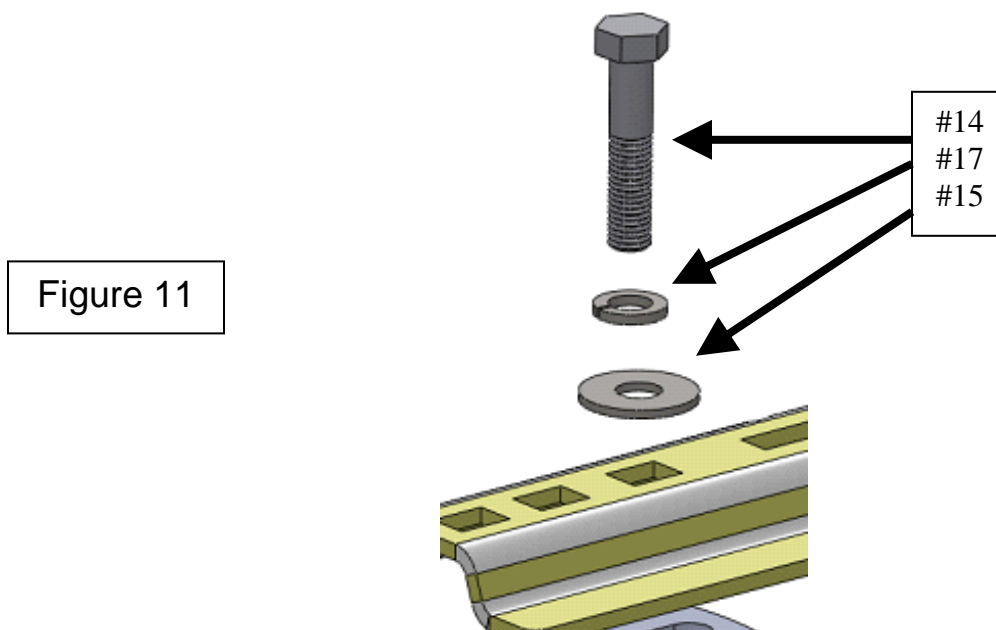
12. On this application a small sheet metal flange will obstruct placement of the bracket. This flange must be modified to gain access to the hat section. Make (2) 3/4" cuts in the truck bed flange near the hat section. Bend the cut section outward. See Figure 9.



13. Slide front brackets (#3 & #4) into the forward bed support hat section from the open end in each wheel well. Then insert the 1/2" carriage bolts (#7) into the rear holes of the front brackets. See Figure 10. Loosely attach 1/2" serrated washer (#18), 1/2" Lock washer (#8) & 1/2" nut (#9) to front brackets.



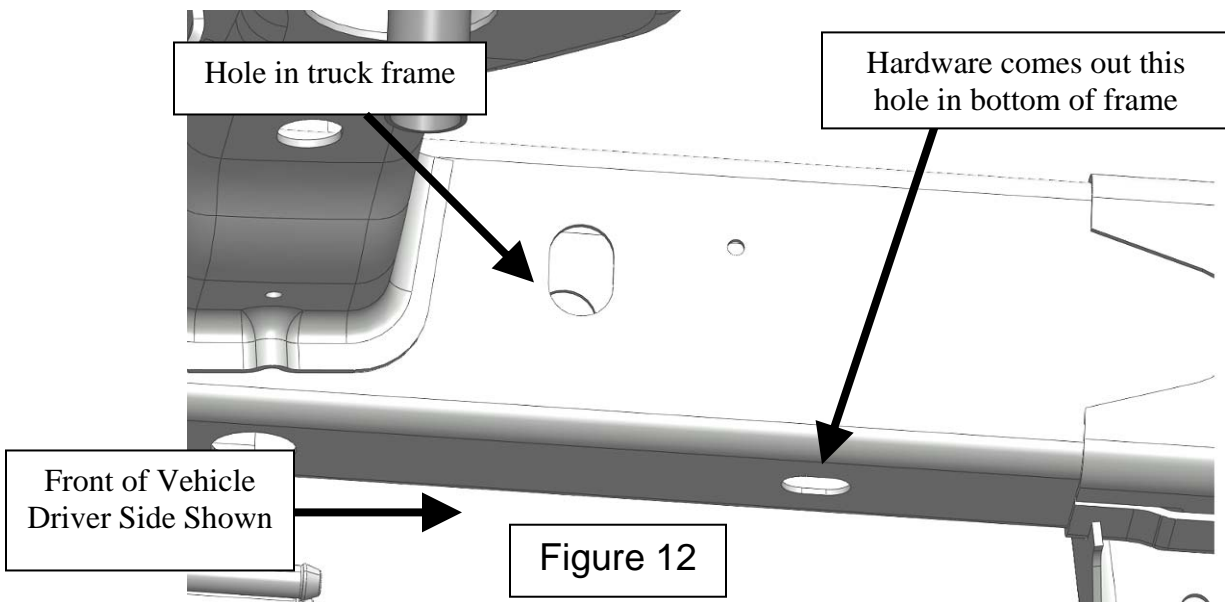
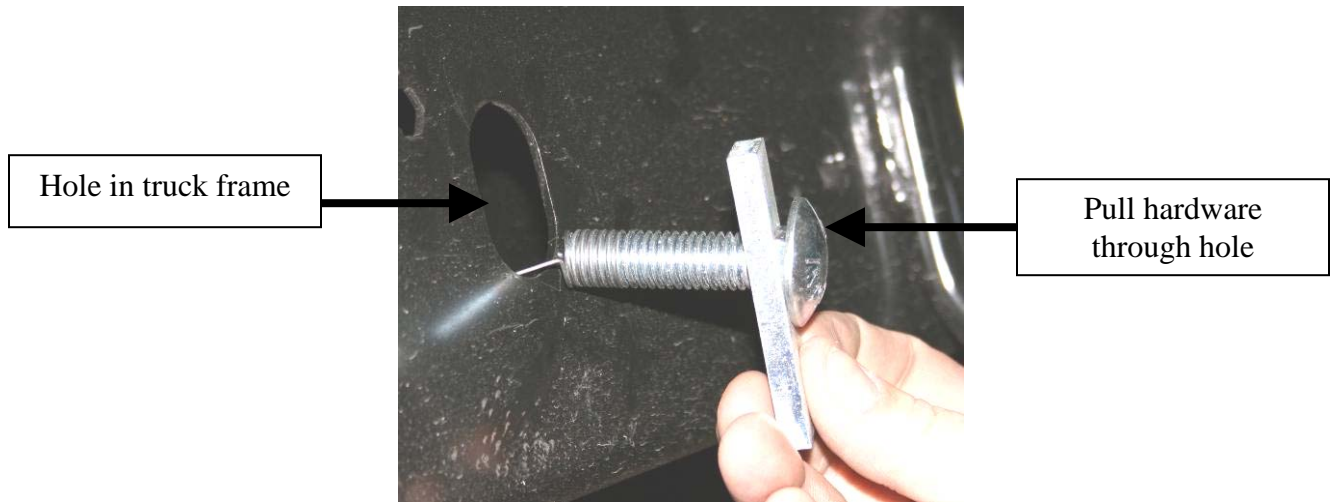
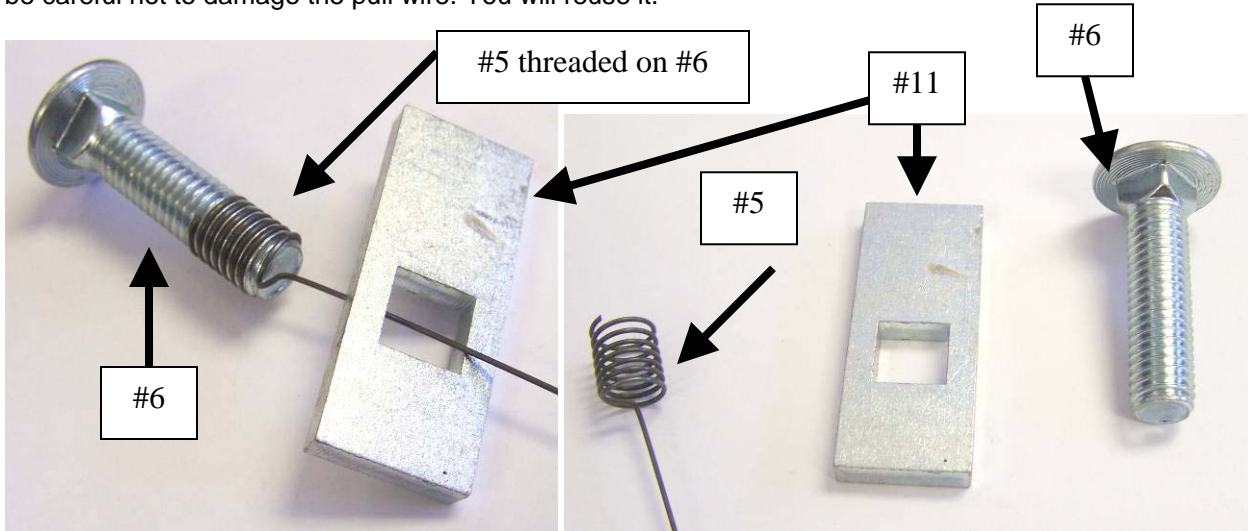
14. Once all the 1/2" hardware is attached on both sides the passenger and driver sides; check to be sure the inner support bracket is still NOT in contact with the brake lines on the driver side. Then, torque all eight 1/2" bolts to 75 ft. lbs.
15. Go back up to the truck bed; align the front base rail with the holes drilled in steps 3 & 4. Use the 5/8" Hex Head bolts #14, 5/8" lock washers #17, 5/8" flat washer #15 for the front base rail and attach it to the front brackets #3 & #4. See Figure 11. Be sure front base rail is parallel with truck.



16. Be sure the base rails are square to each other from step 2. Use the rear base rail as a guide to drill the 5/8"

hole in the truck bed in the locations stated in step 1. **Be certain that the holes are drilled in correct location. Use caution when drilling so the drill does not make contact with the fuel tank or lines under the truck bed.**

17. To install the rear brackets, you must first fish the 1/2" -13X 2" long carriage bolt (#6) & spacer (#11) through a hole on the truck frame through the bottom hole located on the truck frame. This is done by threading the bolt onto the pull wire (#5) and pulling it through the truck frame. See Figure 12. This will need to be done on both the passenger and driver side so be careful not to damage the pull wire. You will reuse it.



18. Install rear brackets (#1 & #2). Place bracket over 1/2" bolt (#6) from step 17. Loosely attach 1/2" serrated washer

(#18), 1/2" Lock washer (#8) & 1/2" nut (#9). Line up slot in bracket to the 5/8" rear hole drilled in the truck bed from steps 3 & 4. See Figure 13A. Pull another 1/2" -13X 2" long carriage bolt (#6) & spacer (#11) through a hole on the truck frame through the side hole located on the truck frame. See Figure 13B. Loosely attach 1/2" serrated washer (#18), 1/2" Lock washer (#8) & 1/2" nut (#9).

Figure 13A

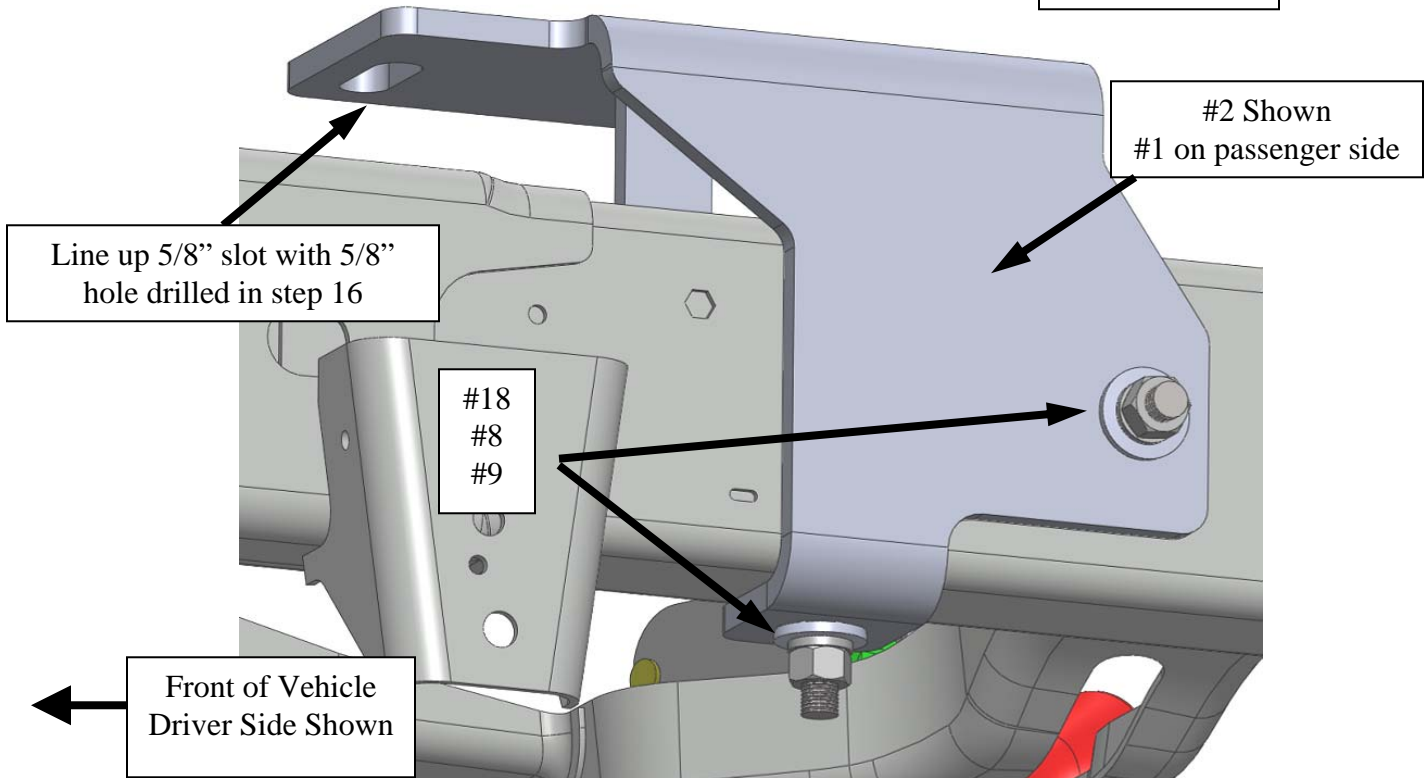
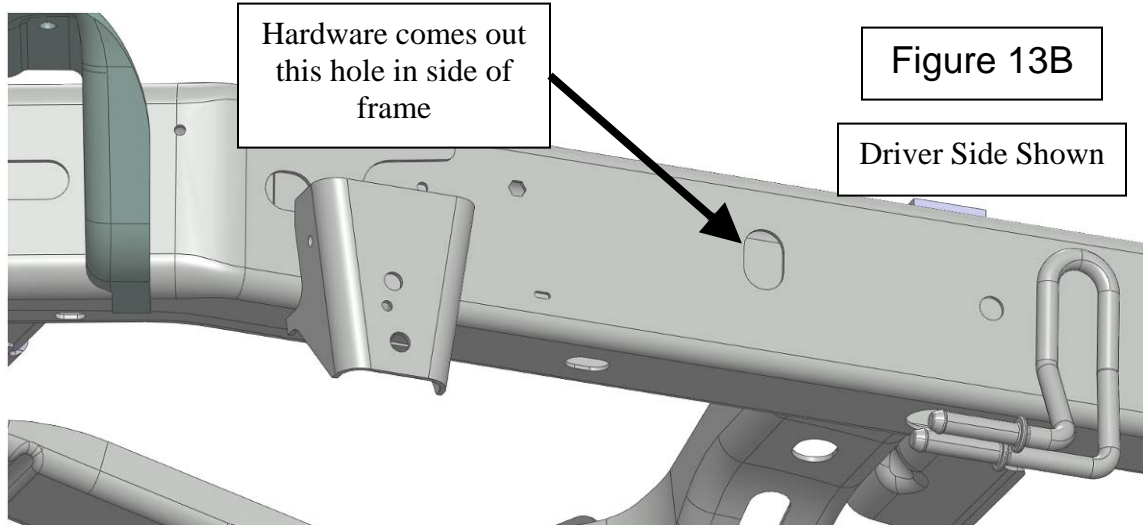
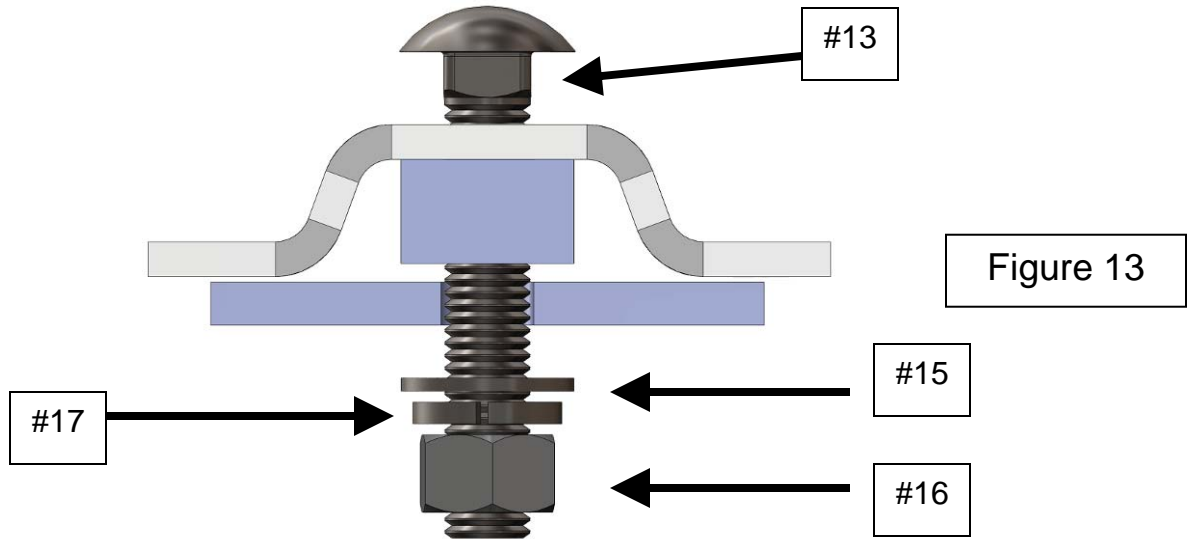


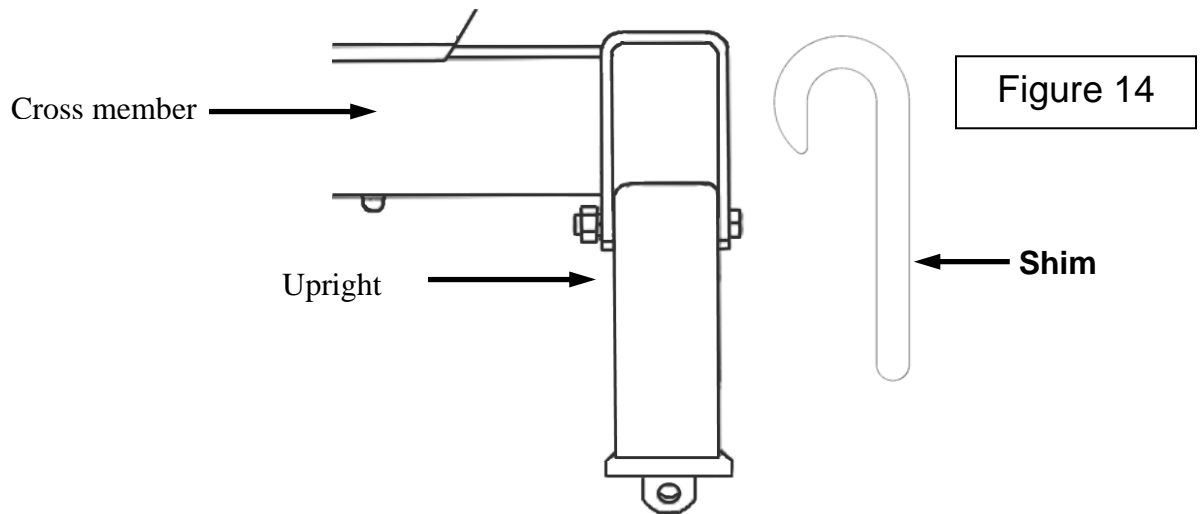
Figure 13B



19. Align the rear base rail with the holes drilled in steps 16. Use the 5/8" Hex carriage bolts #13 to attach the rear base rail to the rear brackets installed in step 16. Loosely attach 5/8" flat washer (#15), 5/8" Lock washer (#17) & 5/8" nut (#16). Re-measure your base rails as in Step 2. Once you are sure everything is square; hand tighten the 5/8" hardware first. Then tighten and torque the 1/2" hardware on the rear brackets to 75 ft. lbs.



20. Check each rail hitch pin for freedom of movement in the bed rail connection before tightening the 5/8" carriage bolts. Adjust uprights, if necessary, by placing shim 31582 or 30243 between the upright and the cross member to obtain free pin movement. See Figure 14. Shims 31582 & 30243 sold separately. See Figure 14. Finally, torque all the 5/8" hardware to 150 ft. lbs.



21. Fold the sheet metal back down on the hat section cut in step 12. Reinstall wheel well liner using the original fasteners from the truck. Reinstall tire, if removed. Lower truck off of jack or jack stands. ALL DONE.

#31566

**CUSTOM BRACKET KIT,
09 DODGE RAM 1500**



HUSKY
TOWING PRODUCTS

WWW.HUSKYTOW.COM

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



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 5th Wheel Installation Kit manufactured by Keystone Automotive Operations Inc. for Husky Towing Products.

Husky Towing Products and Keystone Automotive Operations Inc. make no guarantees or warranties for products not manufactured by Keystone Automotive Operations Inc. 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.

Keystone Automotive Operations Inc. 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 Keystone Automotive Operations Inc. 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 Keystone Automotive Operations Inc.

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

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

Husky Towing Products and Keystone Automotive Operations Inc. are not responsible for any labor costs incurred for removal or replacement of the defective product.

Husky Towing Products and Keystone Automotive Operations Inc. 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 Keystone Automotive Operations Inc. 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.