

## Assembly, Installation, Operation and Maintenance Instructions

P/N: 33073

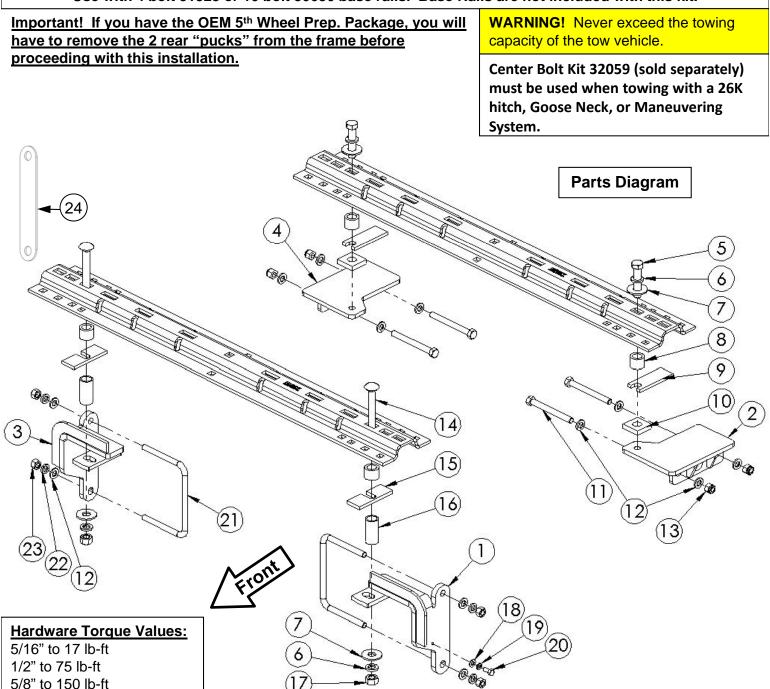
# 2013 - 2017 Up Dodge 3500 4 Bolt Custom Installation Bracket Kit.

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.

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



#### **TOOLS**

3/16", 17/32", 11/16" drill bits.

5/8" Transfer Center Punch.

1-1/4" hole saw.

3/4" & 15/16" Socket & Open End Wrench.

Torque Wrench capable of 150 lb-ft.

- 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.

PARTS LIST		
ITEM	DECCRIPTION	OT/
NO.	DESCRIPTION	QTY
1	DRIVER SIDE FRONT BRACKET	1
2	DRIVER SIDE REAR BRACKET	1
3	PASSENGER SIDE FRONT BRACKET	1
4	PASSENGER SIDE REAR BRACKET	1
5	5/8"-11 X 3" HEX HEAD BOLT	2
6	5/8" LOCK WASHER	4
7	5/8" FLAT WASHER	4
8	SPACER TUBE 1"	4
9	SLOT AT END SPACER PLATE	2
10	SPAER PLATE 7/16"	2
11	HEX HEAD BOLT,1/2-13X4-3/4	4
12	1/2" FLAT WASHER	12
13	1/2"-13 NYLOCK NUT,	4
14	5/8-11X6" CARRIAGE HEAD BOLT	2
15	1/4" SPACER PLATE	2
16	2-5/16" LONG TUBE SPACER	2
17	5/8 -11 HEX NUT	2
18	5/16" FLAT WASHER	1
19	5/16" LOCK WASHER	1
20	5/16"-18 X 3/4" HEX HEAD BOLT	1
21	U-BOLT	2
22	1/2" LOCK WASHER	4
23	1/2" HEX NUT	4
24	SHORT BED SPACER PLATE	1

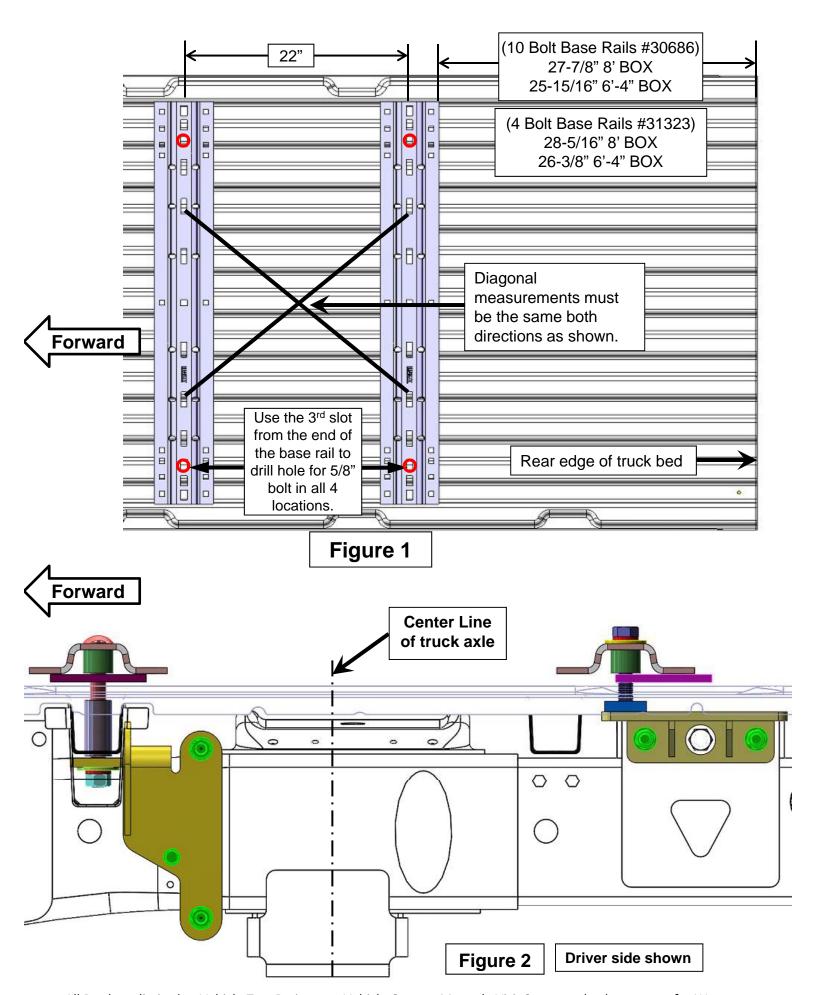
#### **CAUTION:**

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. 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.
- 6. Center hitch between fender wells and make sure rails are square. Adjust position of rails until both diagonal measurements are the same. This should allow installation of a gooseneck or other fifth wheels to these rails.

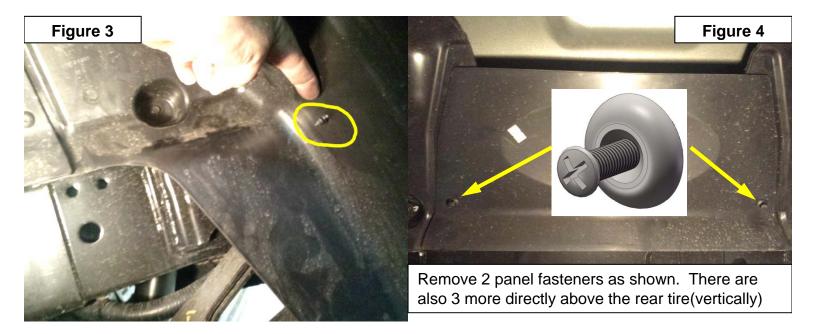
#### **CAUTION:**

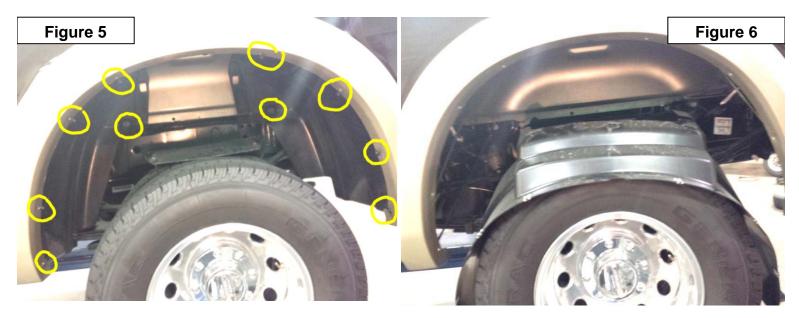
Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. HUSKY TOWING PRODUCTS does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.



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- 7. The wheel well liners will need to be removed to access the frame for bracket installation.
- 8. There are 2 Christmas tree's in each wheel well liner (see Figure 3). 1 will be on the left side and the other the right side. Carefully push these in so they are not attached to the liner or damage to the wires on the other side of the liner could occur.
- 9. Remove the access panel from the wheel well liner by removing the panel pins carefully to be replaced once the installation is complete. (see Figure 4)
- 10. Lift the access panel up then out and set aside.
- 11. There are 8 screws along the inner edge of the wheel well fender flange and 1 screw in a recessed pocket on either side of the removable panel. Remove these 10 screws and carefully remove the wheel well liner and set aside with the screws to be re-installed later. (see Figure 5 & 6)
- 12. Repeat steps 9 thru 11 for the passenger side.





- 13. 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.
- 14. 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.

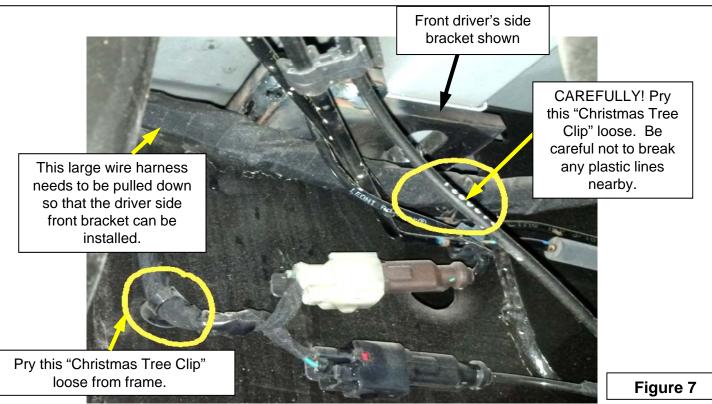
**NOTE:** To keep the trailer from hitting the cab on tight turns there must be at least 52" between the hitch and the cab. On long bed pickups the hitch center line can be up to 3" ahead of the axle. On short bed pickups this position is not possible. A 5th wheel hitch that can move the trailer rearward away from the truck cab should be used with a pickup truck bed length less than 8 ft, consult the Husky Towing Products catalog to select the product that best matches your needs.

15. When hitch is correctly positioned in the bed and the bed rails are parallel. See Figure 1 for measurements. Mark four attachment points on the truck bed using the 5/8" rectangular slots at the ends of each bed rail as a guide. The use of a 5/8" transfer center punch will ensure that the marks are correctly marked on the bed floor. 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 bit.

## Use EXTREME care when drilling the forward driver's side holes. Brake lines and wiring are very close to this location.

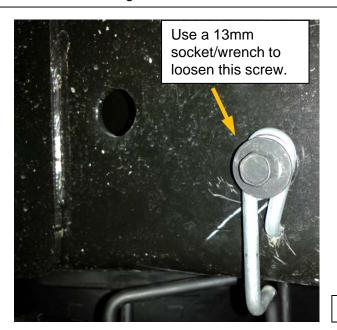
16. Move the hitch assembly out of the way and drill four (4) 3/16" diameter pilot holes down through the bed at the previously marked points. Drill the 2 forward holes and be sure to drill through the bottom of the bed support channel. Check under the bed where the (4) 3/16" pilot holes are and ensure that when the brackets are placed up against the frame and line up with the mounting holes. See Parts Diagram for bracket locations and Figure 8 for detail work for driver's side front bracket

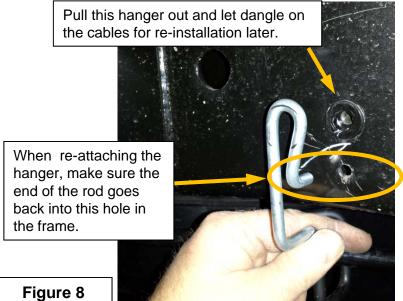
On the driver side front bracket, there are some preparations to be done before installation can proceed. See Figure 7.



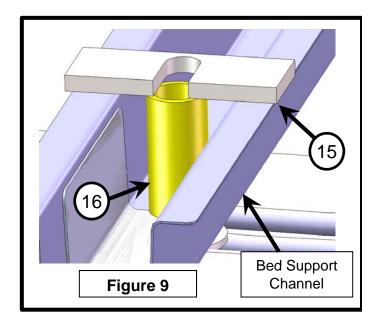
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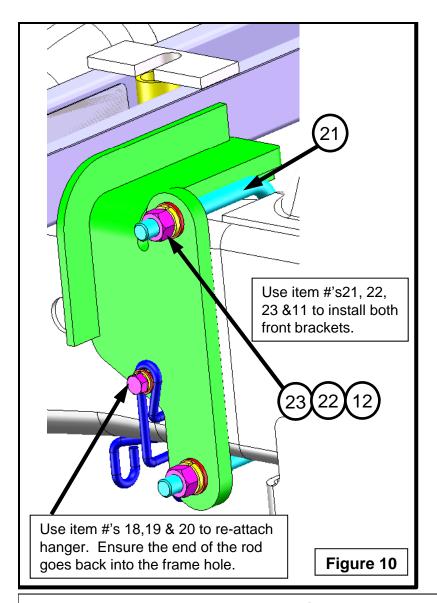
17. Detach the emergency brake cable hanger that is attached to the drivers side frame with a self-tapping 13mm screw. This hanger will be re-attached to the driver side forward bracket once installed using a 5/16" hex bolt item 20. See Figure 8.

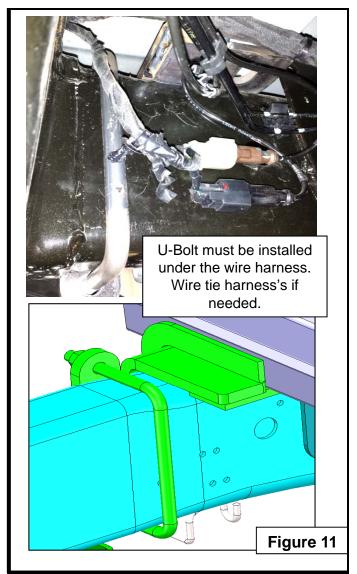




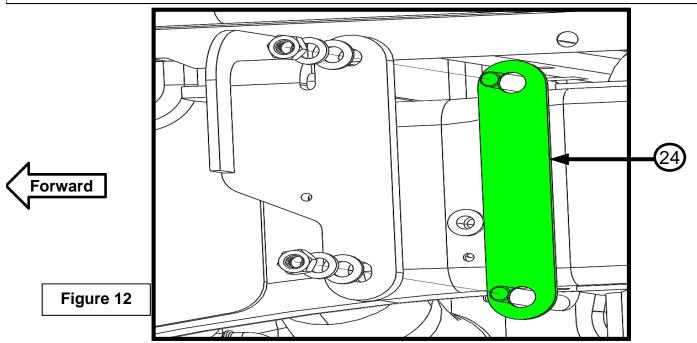
- 18. Using the 1-1/4" hole saw, cut the forward 2 holes out through the truck bed only. Then, switch to the 11/16" drill bit and drill the 3/16" hole in the bottom of the bed channel out using the 3/16" holes as a guide. Finally, drill the rear 2 holes out to 11/16".
- 19. Insert the long tube spacer (item #16) into the forward holes. Then slide spacer plate (item #15) under the bed corrugation but above the bed support channel. Figure 2 shows the proper components assembly. See Figure 9. Truck bed not shown for clarity reasons.
- 20. Install front driver's side bracket (item #1) using the ½" hardware shown (#21,22,23 &12). See Figure 10. Ubolt (item #20) must install flat against the frame and UNDER the truck wiring and brakes. See Figure 11. Reinstall "Christmas tree" fasteners to wiring and brake lines. Repeat for passenger side front bracket.
- 21. Reinstall emergency brake cable assembly from step 17 using hardware 18,19 & 20. See Figure 10.



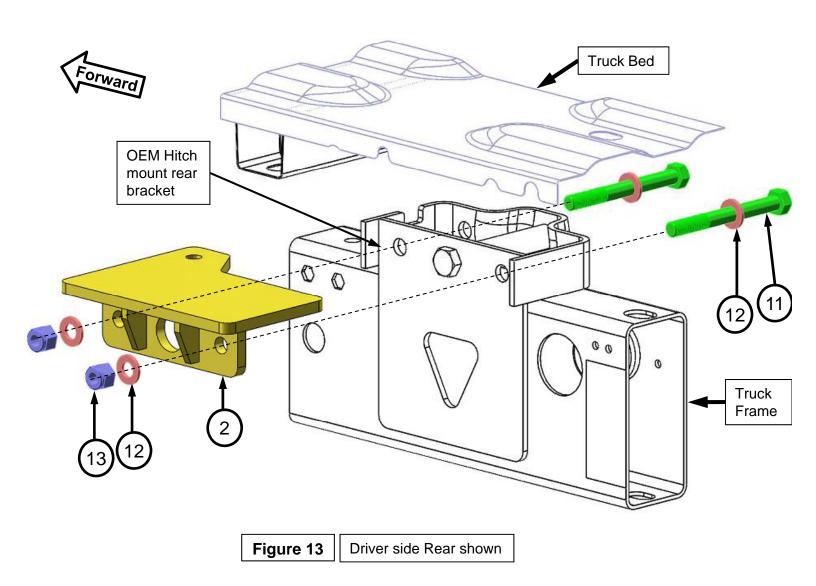




On short bed trucks only, spacer item 24 needs to be assembled before driver side front bracket as shown. See Figure 12.

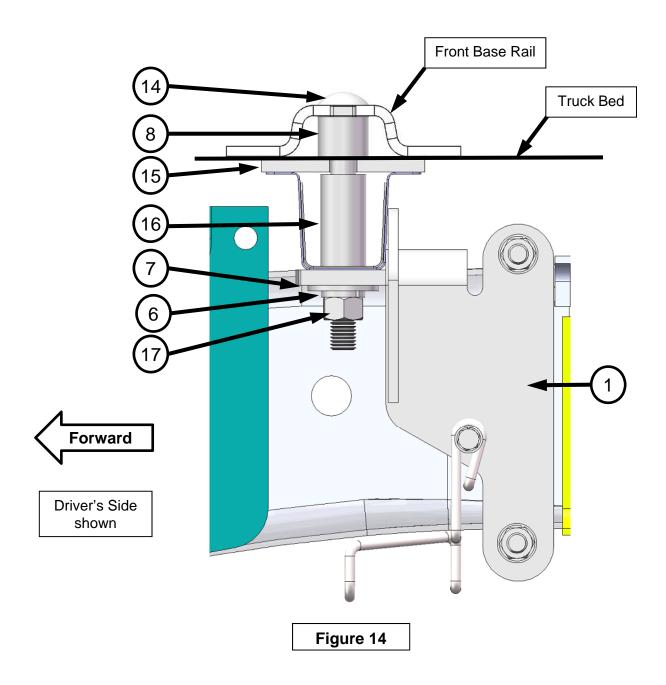


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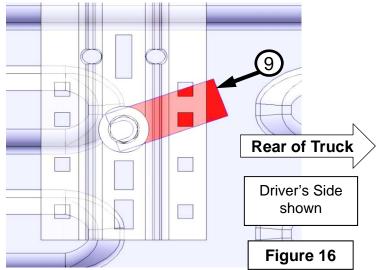
- 22. OEM Hitch preparation kit **MUST** be removed (If installed) from rear two locations to mount driver and passenger side rear bracket. Once it removed, place Driver side rear bracket(#2) on side of frame and align bracket hole with existing hole in OEM hitch mount bracket. Fasten bracket with ½" hex bolt(#11), ½" flat washer(#12) and ½" Nylock nut(#13).
- 23.Repeat steps 22 to install the passenger side rear bracket (item #4) as shown in Figure 13.
- 24. Tighten all ½" **rear** bracket attachment bolt 45 ft.-lbs. torque. **Don't tight more than 45 ft.-lbs**, it can result in squeeze or deformation of OEM hitch mount bracket. Failure to tighten bolts as described may result in fastener loss or failure.

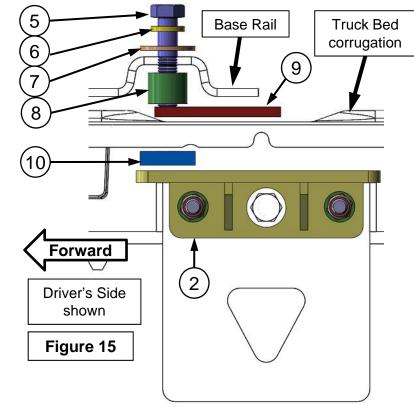
25. Place the two bed rails and 5<sup>th</sup> wheel assembly from steps 13-16 over the holes drilled in step 16. Secure the front base rail to the front driver's side bracket (item 1) using the 5/8" hardware (items 14,7,6 &17). Install the base rail spacer (item# 8) as shown. Install the ½" spacer (item #15) as shown between the truck bed and the front driver side bracket. See Figure 14.



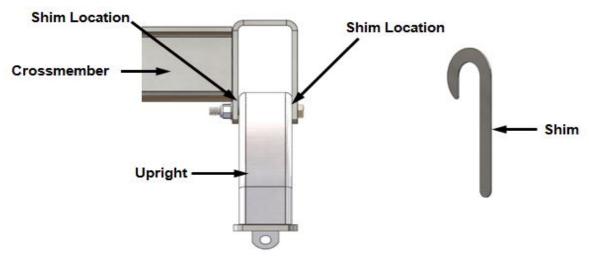
26. Repeat Step 25 for the passenger side front bracket (item #3)

- 27. Secure the rear base rail to the rear driver's side bracket (item 2) using the 5/8" hardware (items 5,6 & 7) Install the base rail spacer (item#8) as shown. Install the slotted end spacer (item #9) as shown between the truck bed and rear base rail and spacer plate 7/16 (item#10) as shown between the bottom of truck bed and top of rear bracket and align with bolt (item#5). See Figure 15. The slotted end spacer will be on the rear side of the base rail. See Figure 16.
- 28. Repeat Step 18 for the passenger side rear bracket (item 4) .
- 29. Once all 4 brackets are secure to the truck and base rails; re-check the base rails to be sure the are square with each other. See Figure 1. If not, adjust as needed.





- 30. Torque all 5/8" hardware to 150 ft.-lbs.
- 31. Torque all **front** bracket ½" hardware to 75 ft.-lbs. Torque all **rear** bracket ½" hardware to 45 ft.-lbs.
- 32. Torque the brake cable hanger bracket screw (see Figure 8) to 19 ft.-lbs.
- 33. Re-install wheel well liners & access panels from steps 7-12.
- 34. Finally, Install cross member and ensure it is centered and straight by shimming (if necessary) and then torque bolts to the required value. See 5<sup>th</sup> wheel manufacturer for specifications. Note: Multiple Shims can be stacked together if gap width is large. Use shim kit 31582 or 32043.



### #33073 2013/2017 CUSTOM BRACKET KIT **RAM 3500**

KIT DE SUPPORT SUR, MESURE, 2013/2017, RAM 3500



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

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.