



# Assembly, Installation, Operation and Maintenance Instructions

## Universal Bracket Kit Part # 31563

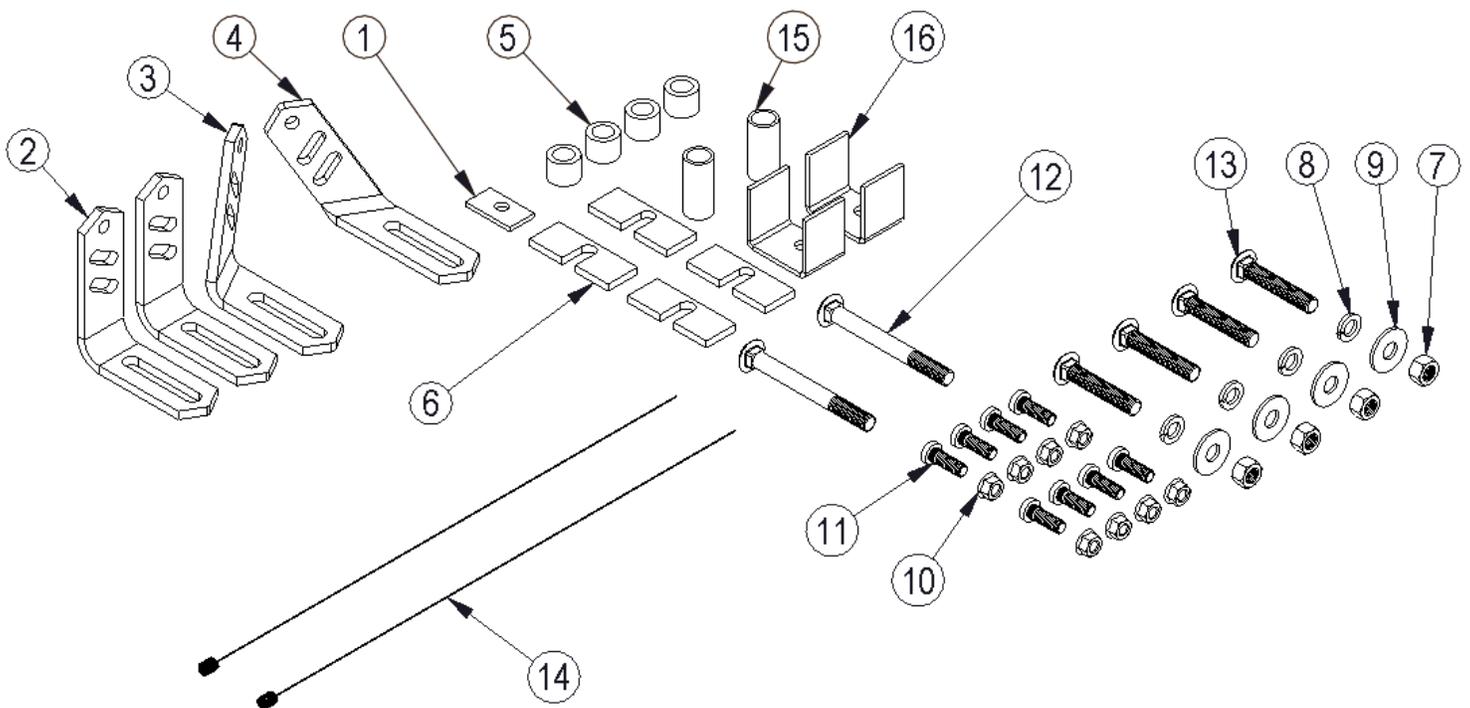
Use with Base Rail Kit 31323 (4 Bolt) or 30686 (10 Bolt)

<b>Dealer / Installer:</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. Please refer to the husky weight demonstrator at: <a href="http://www.huskytow.com/product-support/?dir=Literature/">http://www.huskytow.com/product-support/?dir=Literature/</a> . (requires Microsoft excel)
<b>End User:</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.

**NOTE:**  
Center Bolt Kit and Base Rails not included.

Tools Required
3/4" Wrench & Socket
15/16" Wrench & Socket
1-1/4" Hole Saw
5/8" Drill Bit
17/32" Drill Bit
3/16" Drill Bit
Drill
Ratchet
Torque Wrench (150 ft-lbs)
Safety Glasses

ITEM NO.	DESCRIPTION	QTY
1	3/16" SPACER PLATE	1
2	LONG "L" BRACKET	2
3	RIGHT ANGLE BRACKET	1
4	LEFT ANGLE BRACKET	1
5	1" SPACER TUBE	4
6	SPACER PLATE	4
7	5/8 -11 HEX NUT	4
8	5/8 LOCK WASHER	4
9	5/8 FLAT WASHER	4
10	1/2 -13 SERRATED FLANGE NUT	8
11	1/2-13 UNC X 1.5 WHEEL BOLT	8
12	5/8-11 UNC X 6.00 CARRIAGE HEAD BOLT	2
13	5/8-11 UNC X 3.50 CARRIAGE HEAD BOLT	4
14	PULL WIRE, 1/2"	2
15	1-1/8" OD X 2.44" SPACER TUBE	2
16	U-SHAPED BRACKET	2



**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:**

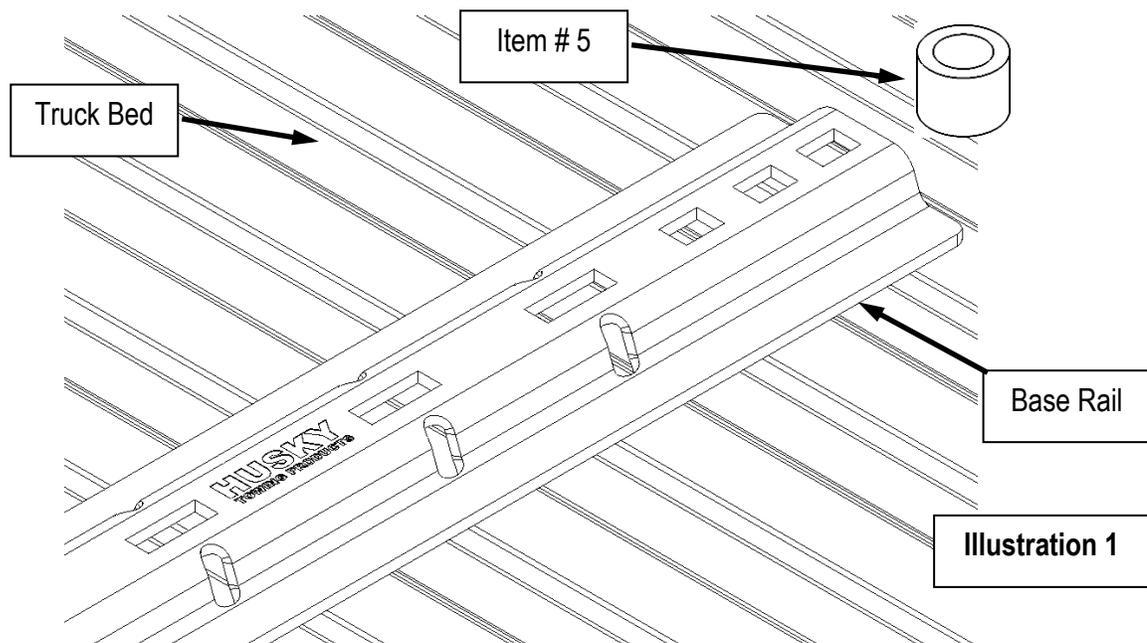
**Consult spray liner installer for recommended curing time.**

1. 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.
2. 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.

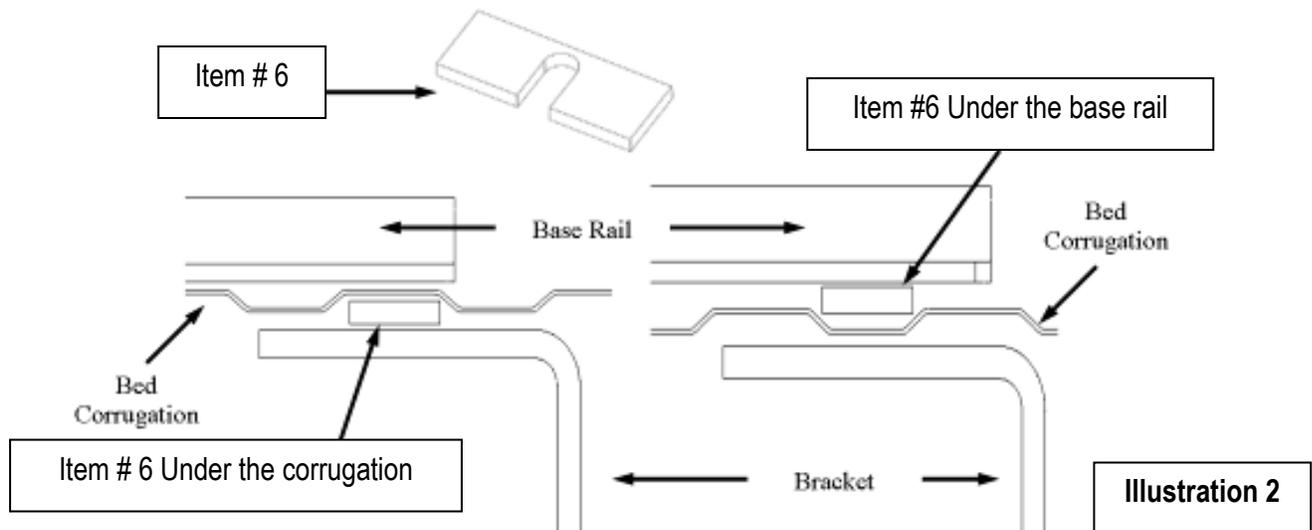
**NOTE:**

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.

3. When hitch is correctly positioned in the bed and the bed rails are parallel, mark four attachment points on the truck bed using whichever one of the three (3) 5/8" rectangular slots at the ends of each bed rail line up best with the truck frame. 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. 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. Check under the bed where the (4) 3/16" pilot holes and ensure that when the brackets are placed up against the frame they will line up. Then drill these holes to 5/8" diameter.
4. Reposition the bed rails in the bed so that the rectangular 5/8" slots in the end of each rail are lined up over the drilled holes. Place a 1" thick spacer tube #5 under ends of each bed rail, in line with the drilled holes as shown on Illustration 1.



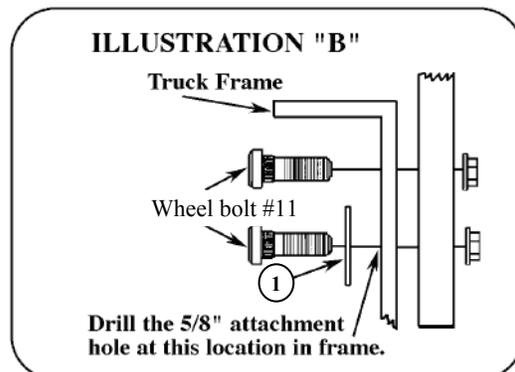
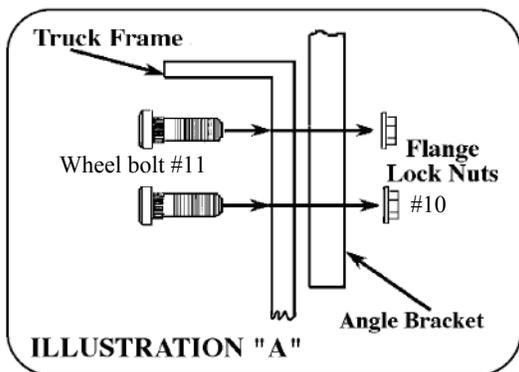
5. If the bed corrugation above the angle bracket is UP, leaving a space above the angle bracket, place a spacer plate #6 in this location as shown on Illustration 2. If the corrugation is DOWN, at this location, place a spacer plate #6 in the bed, under the base rail as shown on Illustration 2. Bolt parts loosely in place as illustrated.



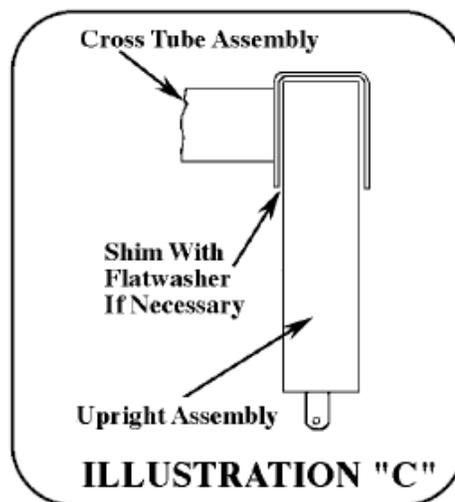
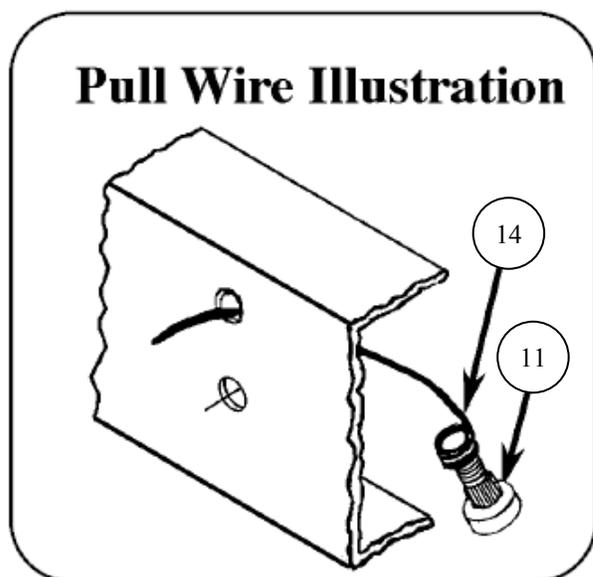
6. Position one of the angle brackets under the bed and align with the 5/8" carriage bolts #13, protruding down through the bed. Use the left and right angle brackets at locations where frame obstructions will not allow the straight "L" brackets to be positioned. If frame is clear of obstructions, the angle brackets may be placed at any location.
7. Move the installed straight "L" or angle brackets so that they rest tightly against the flat side of the truck frame and underneath surface of truck bed. Drop the 5/8" bolts down through bed rails and bracket.
- NOTE:** There are two lengths of 5/8" carriage bolts #12(long) or #13(short). Use the shorter bolts on applications where vehicle frame clearance may be close to attachment point. Bolts can be used in any attachment location. Securely bolt brackets in place. Be sure they are tight against the side of truck frame. Tighten the 5/8" bolts to 150 ft. lbs. torque.
8. Before drilling any holes, check inside the frame to be sure that there are no wires, brake lines or other obstructions in the frame which may be contacted by the drill. Each of the brackets must be attached to the side frame of the truck with two (2) special 1/2" wheel bolts #11. Drill two 3/16" pilot holes through the side of the truck frame using two of the holes in each angle bracket as guides then enlarge to 17/32" diameter. If possible use the bottom hole and the top angled slot for attaching the brackets to the frame with the serrated bolt.

**CAUTION:** Holes MUST be drilled 17/32" diameter, so that the special wheel bolts will seat properly. If holes are too small, the bolt may break. If hole is too large it will not grip properly. See Illustration "A". You can apply some grease to the splines only of the wheel bolts to ease the installation into the holes in the frame.

**SPECIAL NOTE:** On 1999 & newer Chevrolet Silverado and GMC Sierra applications, it will be necessary to modify the bolt installation procedure on the forward driver side bracket attachment. Drill a 5/8" diameter frame attachment hole at the lower bracket attachment point. Place one of the 1/2" wheel bolts #11 in the 3/16" spacer plate #1. Place this bolt assembly into frame so that the threaded end of bolt protrudes out through frame. Bolt bracket in place at this location. See Illustration "B". The remaining bracket bolts will install as shown on Illustration "A".



9. Place the special bolts into the frame first and then out through the brackets. See Illustration "A". Some applications will require the use of a pull wire to align the bolts into the drilled holes in the frame. Thread the pull wire coil #14 over the end of the wheel bolt #11 and pull through frame and bracket. See Pull Wire Illustration. Secure each bracket to the truck frame. The knurled portion of the bolts will lock into the frame holes as the nuts are tightened. Use of an air wrench will make installation much better.
10. Tighten all 1/2" attachment bolts to 75 ft. lbs. torque, and 5/8" bolts to 150 ft. lbs. torque.
11. Check each rail hitch pin for freedom of movement in the bed rail connection. Remove the (4) base rail pins and lift the hitch uprights up out of the bed rail slots. If tabs are tight in bed rail slots check to be sure the bedrails are parallel to one another and square. If not, loosen 5/8" bolts and adjust the bed rails. Also, check that the uprights are sitting straight vertically. It may be necessary to shim the uprights by placing a washer between it and the crossmember channel. See Illustration "C".
12. Re-tighten the 5/8" bolts to 150 ft. lbs. torque.



## 5TH WHEEL INSTALLATION TIPS BY VEHICLE

Due to variations in vehicle assembly through the years listed, the under bed hat section location on your truck may not be the same as listed below. The following information is to be used as a suggestion for placement of the bed rail system. Slight adjustments to these positions may be required.

### CHEVROLET/GMC P/U Applications

#### **1987 - older CHEVROLET & GMC C/K long bed: (Approx. 3-1/2" ahead of axle.)**

With Fifth wheel assembly in the bed of the truck. Position the rear rail 33-5/8" for 4 Bolt Base Rail or 33-3/16" for 10 Bolt Base Rail from rear edge of truck bed. Left, right angle and frame brackets maybe place where ever brackets fits best. **Note:** The left and right angle bracket can be mounted on either side of the truck if needed.

#### **1987 - older CHEVROLET & GMC C/K short bed: (Over the axle.)**

With Fifth wheel assembly in the bed of the truck. Position the rear rail 23-5/8" for 4 Bolt Base Rail or 23-3/16" for 10 Bolt Base Rail from rear edge of truck bed. Left, right angle and frame brackets maybe place where ever brackets fits best. **Note:** The left and right angle bracket can be mounted on either side of the truck if needed.

#### **1988 - 2000 CHEVROLET/GMC C/K LONG BED P/U (over axle installation)**

Position the assembled 5th wheel hitch so that its center line is over the truck axle center line. Rear base rail should be located 29-7/8" for 4 Bolt Base Rail or 29-7/16" for 10 Bolt Base Rail from rear edge of bed on long bed trucks. The left and right angle brackets may be placed at whatever location will give the best attachment points on the truck side frame. Use angle brackets opposite of opposing shock absorbers.

#### **1988 - 1999 CHEVROLET/GMC C/K SHORT BED P/U (over axle installation)**

Position the assembled 5th wheel hitch so that it is located directly over the truck axle. Rear base rail should be located 24-3/8" for 4 Bolt Base Rail or 23-15/16" for 10 Bolt Base Rail from rear edge of bed on short bed trucks. Check clearance between front of trailer and back of truck cab. If there is not enough clearance at this location, install the Husky 10-26K Glider(32042), which will allow rearward movement of the fifth wheel during maneuvering operations.

#### **1999 - 2010 CHEVROLET/GMC SILVERADO/SIERRA LONG BED P/U (ahead of axle installation)**

Position the assembled 5th wheel hitch so that its centerline is approximately 1" forward of truck axle centerline. Rear base rail should be located 31-1/2" for 4 Bolt Base Rail or 31-1/16" for 10 Bolt Base Rail from rear edge of bed on long bed trucks. The left and right angle brackets will be placed at the rear attachment points and the straight brackets will be at the forward attachment points. The front frame to bracket attachment bolts will need to be fish wired into the forward box frame section. The left and right angle brackets may be placed at whatever location will give the best attachment points on the truck side frame. Use angle brackets opposite of opposing shock absorbers. See special note on Page 3 Step 8.

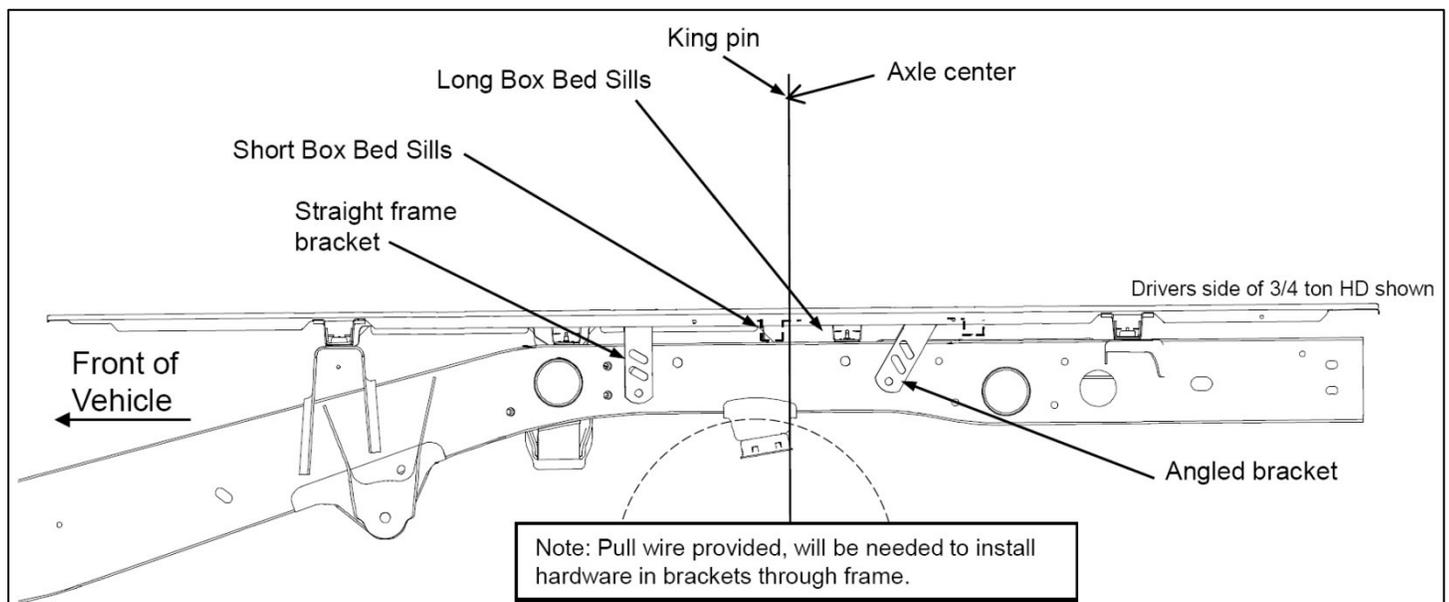
### 1999 - 2010 CHEVROLET/GMC SILVERADO/SIERRA SHORT BED P/U (behind axle installation)

Position the assembled 5th wheel hitch so that its centerline is approximately 1" behind the truck axle centerline. Rear base rail should be located 24" for 4 Bolt Base Rails or 23-9/16" for 10 Bolt Base Rail from rear edge of bed on short bed trucks. The left and right angle brackets will be placed at the forward attachment points and the straight brackets will be at the rear attachment points. The front frame bracket attachment bolts will need to be fish wired into the forward box frame section. Use the 5/8" x 3-1/2" bolts at the forward base rail attachment points and the 5/8" x 3-1/2" bolts at the rear base rail attachment points. See special note on Page 3 Step 8.

### 2011 - 2012 CHEVROLET/GMC 2500 HD AND 3500 HD SILVERADO AND SIERRA

For **short bed pickups**, assemble the 5th wheel hitch on the bed and position the system so that the base rails are centered between the wheel wells and so that the rear edge of the rear base rail is 25-5/8" from the rear edge of the bed. Install the straight "L" brackets at the front position and the angled "L" brackets at the rear as shown below.

For **long bed pickups**, assemble the 5th wheel hitch on the bed and position the system so that the base rails are centered between the wheel wells and so that the rear edge of the rear base rail is 30-1/8" for 4 Bolt Base Rails or 29-11/16" for 10 Bolt Base Rails from the rear edge of the bed. Install the straight "L" brackets at the front position and the angled "L" brackets at the rear as shown below.



## DODGE P/U Applications

### 1993-EARLIER DODGE P/U FULL SIZE (ahead of axle installation)

Position the assembled 5th wheel hitch so that its center line is approximately 2" ahead of the truck axle center line. Rear base rail should be located 32-1/2" for 4 Bolt Base Rails or 32-1/16" for 10 Bolt Base Rails from rear edge of bed on all trucks. The left and right angle brackets can be positioned at any location that will allow them to clear obstructions on the truck frame.

### 1994-2001 1500 / 1994-2002 2500 & 3500 DODGE FULL SIZE long bed: (Approx. over axle)

With Fifth wheel assembly in the bed of the truck. Position the rear rail 28-7/8" for 4 Bolt Base Rails or 28-7/16" for 10 Bolt Base Rails from rear edge of truck bed. Use the frame brackets to attach the rear rail to the frame. Fasten down with 5/8" x 6" carriage bolts, serrated washers and nut. When pulling in the 1/2" serrated bolts, use the access hole in the top or bottom of the frame if needed.

**1994-2001 1500 / 1994-2002 2500 & 3500 DODGE FULL SIZE short bed: (Approx. over of axle)**  
With Fifth wheel assembly in the bed of the truck. Position the rear rail 24 3/4" for 4 Bolt Base Rails or 24-5/16" for 10 Bolt Base Rails from rear edge of truck bed. Use the frame brackets to attach the rear rail to the frame. For the front rail you will have to drill a 1-1/4" hole through the bed sill using a hole saw. Let the pilot bit of the hole saw make a dimple in the top of the frame rail. Drill a 21/32" hole down through the top frame rail using the dimple from the hole saw as a guide. Fasten down with 5/8" x 6" carriage bolts, flat washer, lock washer and nut. When pulling in the 1/2" serrated bolts, use the access hole in the top of the frame if needed.

**2002 - 2013 DODGE 2500 / 2002-2012 DODGE 3500  
LONG & SHORT BEDS – Requires ADAPTER KIT 30607(Install Instructions in Kit).**

**2002 - 2008 DODGE 1500 –Requires ADAPTER KIT 30640 or 30607 (Install Instructions in Kit).**

**2009 - 2014 DODGE 1500 –Requires ADAPTER KIT 30665 (Install Instructions in Kit).**

## **FOR NEWER DODGE P/U APPLICATIONS:**

Use the "Custom Bracket Kits" listed in the Husky Catalog.

## **FORD P/U Applications**

### **1973 - 1991 FORD F-SERIES SHORT BED AND LONG BED P/U (over axle installation)**

Position the assembled 5th wheel so that it is centered over the truck axle. Rear base rail should be located 28-5/8" for 4 Bolt Base Rails or 28-3/16" for 10 Bolt Base Rails from rear edge of bed on long bed trucks and 29-3/4" for 4 Bolt Base Rails or 29-5/16" for 10 Bolt Base Rails from rear edge of bed on short bed trucks. Use the left and right angle brackets to clear the shock mount brackets on the side of the truck frame, at the rear attachments. On some Ford short bed applications or other trucks with frame obstructions, the use of four angle brackets can ease installation. Reference either the Coast or Husky Towing catalog to order the kit which includes the left and right angle brackets.

### **1992 - 1996 FORD F-150 & F-250 P/U — 1997 - 1998 F-250 HD (over axle installation)**

Position the assembled 5th wheel hitch so that it is centered over the truck axle. Rear base rail should be located 28-5/8" for 4 Bolt Base Rails or 28-3/16" for 10 Bolt Base Rails from rear edge of bed on long bed trucks and 29-3/4" from rear edge of bed on short bed trucks. This will place both of the hitch bed rail attachment points to the rear of both truck under bed cross members. Use the left and right angle brackets to clear the shock mount brackets when attaching to the side of the truck frame.

### **1997 - 1998 FORD F-350 P/U (behind axle installation)**

Due to some heavy duty suspension components on various models of this truck, the assembled 5th wheel must be positioned to the rear of the axle centerline. Rear base rail should be located 26-3/4" for 4 Bolt Base Rails or 26-5/16" for 10 Bolt Base Rails from rear edge of bed on long bed trucks and 27-3/4" for 4 Bolt Base Rails or 27-5/16" for 10 Bolt Base Rails from rear edge of bed on short bed trucks. Check the angle bracket to frame attachment points to find the best location as close to the axle centerline as possible.

### **1997 - 2004 FORD F-150 & F-250 P/U (except HD F-250 & 2004 F150 new body) (over axle installation)**

Some installations may position the base rails so that the attachment holes are drilled down through the front under bed reinforcement channel and the truck frame. Use the (2) 2-7/16" long tube spacers for the forward base rail mounting and use the angled brackets from this kit for the rear locations. Rear base rail should be located 26-3/4" for 4 Bolt Base Rails or 26-5/16" for 10 Bolt Base Rails from rear edge of bed on long and short bed trucks.

### 1999 - 2002 FORD F 250 & F 350 SUPER DUTY (over axle installation)

Position the assembled 5th wheel hitch so that its centerline is centered over the truck axle. Rear base rail should be located 28-1/4" for 4 Bolt Base Rails or 27-13/16" for 10 Bolt Base Rails from rear edge of bed on all trucks. If the truck is equipped with overload springs, the spring bracket, on the side of the frame, will have to be temporarily removed. Holes in the frame and spring brackets must be enlarged to accept 1/2" bolts. Use the straight brackets on the front base rail and the angled brackets at the rear base rail. The rear angle brackets will line up with the previously removed overload spring brackets. Reinstall the spring brackets on top of the angle brackets. The rear spring bracket attachment points will require 3/8" thick spacers and longer 1/2" bolts, not supplied, to install.

### 1997 - 2003 FORD F-150 (and '04 Heritage Model) & F-250 LD: (over the axle)

With Fifth wheel assembly in the bed of the truck. Position the rear rail 26-3/4" for 4 Bolt Base Rails or 26-5/16" for 10 Bolt Base Rails from rear edge of truck bed. Attach the left and right angled frame brackets to the rear Fifth wheel rail. **Note:** The left and right angle bracket can be mounted on either side of the truck if needed. Then attach the frame bracket to the front Fifth wheel rail.

### 1992 - 2004 Ford F-250 & F-350 Short & Long Bed

Position the assembled 5<sup>th</sup> wheel hitch so that its centerline is approx. 1/2" rearward of Axle Center. Rear base rail edge should be located 30-5/8" for 4 Bolt Base Rails or 30-3/16" for 10 Bolt Base Rails from rear edge of bed. Place straight brackets under the forward base rail and the angled brackets under the rear rail with the angle going rearward.

### 2004 - 2014 Ford F150 (except '04 Heritage Model), 6', & 8' BEDS

With Fifth wheel assembly in the bed of the truck. Position the rear rail 29-5/16" for 4 Bolt Base Rails or 28-7/8" for 10 Bolt Base Rails from the rear edge of the truck bed. Attach the left and right angled bracket to the rear base rail and the straight brackets to the front base rail.

### 2004 - 2014 Ford F150 (except '04 Heritage Model), 6', & 8' BEDS - REQUIRES ADAPTER KIT 30619

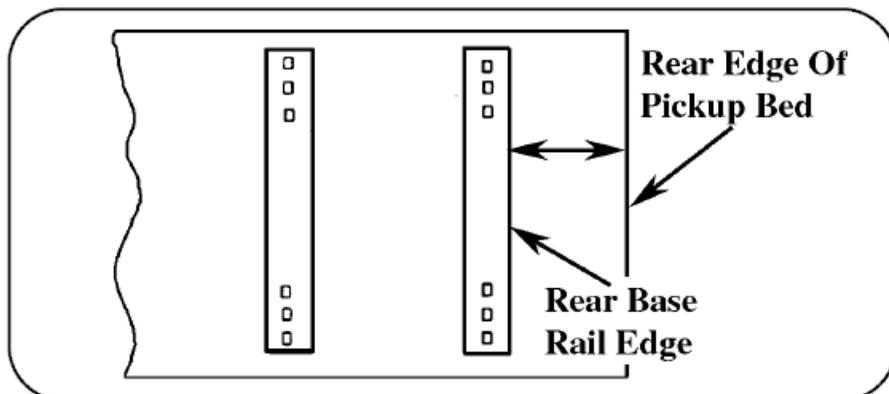
With the Fifth wheel assembly in the bed of the truck. Position the rear rail 27-3/8" for 4 bolt Base Rails or 26-15/16" for 10 bolt base rails from the rear edge of the bed. When installing the 5/8" base rail bolts use the middle slots on the forward rail and the inside slots on the rear rail. Ensure the base rails are spaced 22" apart center to center and that they are parallel before marking your hole to drill through the rails. Use a 9/16" drill for bolts that go through frame and a 5/8" drill for the base rail bolts to go through the truck bed. **Caution:** Make sure that the area below the bed being drilled is clear before drilling holes.

### 2005 - 2015, Ford F-250, F-350 & F-450 SUPERDUTY PICKUP (NOT CAB CHASSIS) - REQUIRES ADAPTER KIT 30607 (Install Instructions in Kit).

## TOYOTA P/U Applications

### 1999 - 2006 TOYOTA TUNDRA LONG & SHORT BED P/U (over axle installation)

Position the assembled 5th wheel hitch so that its centerline is over the truck axle. Rear base rail should be located 30-7/8" for 4 Bolt Base Rails or 30-7/16" for 10 Bolt Base Rails from rear edge of bed on all trucks. The left and right angle brackets will be placed at the forward attachment points and the straight brackets will be at the rear attachment points.



All Products limited to Vehicle Tow Rating; see Vehicle Owners Manual. July 9, 2014-Rev8

See [www.huskytow.com](http://www.huskytow.com) for Warranty Information / Tech Support. © (2014) Husky Towing Products.

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# Warranty Terms:

## 5-Year Limited Warranty:

This warranty applies solely to 5th Wheel Hitch Mounting Kits manufactured by DTS Manufacturing for Husky Towing Products.

DTS Manufacturing, Husky Towing Products and Coast Distribution make no guarantees or warranties for products not manufactured by DTS Manufacturing. 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 Manufacturing 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 DTS Manufacturing, Husky Towing Products and Coast Distribution 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 Manufacturing.

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

The Warranty applies only to DTS manufactured 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 DTS manufactured products.

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

DTS Manufacturing, Husky Towing Products and Coast Distribution 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. Any implied warranty of merchantability or fitness for a particular purpose on any DTS Manufactured product shall be limited to one (1) year from the date of purchase at retail to the original purchaser. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Without limiting the generality of the foregoing, DTS Manufacturing, Husky Towing Products and Coast Distribution 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.