

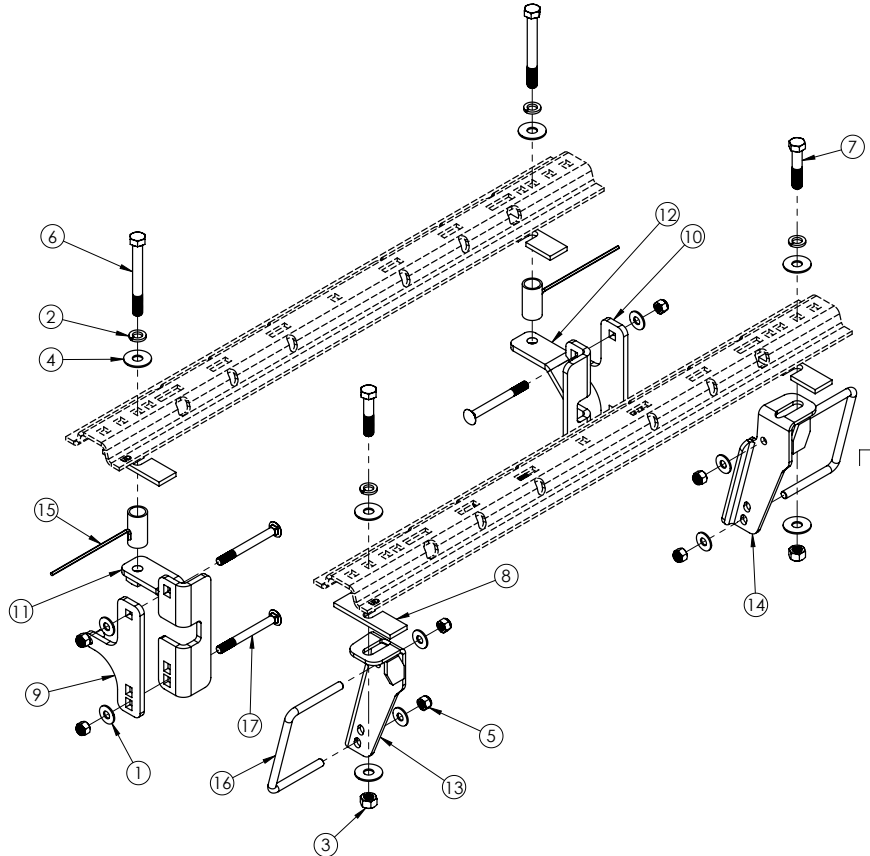


Doing Our Best to Provide You the Best

HJ32016, Rev 6  
01/19

## FRAME BRACKET 8552016

Dodge Ram 1500 4x2 & 4x4, Ram 2500 4x2 & 4x4 & Ram 3500 4x4 (Includes MegaCab)



ITEM	PART #	QTY	DESCRIPTION
1	00085	8	WASHER, .50 FLAT
2	00248	4	WASHER, .625 LOCK
3	00291	2	NUT, .625 HEX
4	00477	6	WASHER, .625 FLAT
5	02178	8	NUT, .50 NYLON LOCK
6	00943	2	BOLT, .625NC X 5-1/2" HEX GR.5
7	04215	2	BOLT, .625NC X 3" HEX GR.5
8	14156-95	4	SHIM
9	14296-76	1	FRONT FRAME BRACKET DRIVER SIDE
10	14297-76	1	FRONT FRAME BRACKET PASSENGER SIDE
11	14304-76	1	FRONT CLAMP BRACKET DRIVER SIDE
12	14305-76	1	FRONT CLAMP BRACKET PASSENGER SIDE

Please order replacement parts by PART NO. and DESCRIPTION.

ITEM	PART #	QTY	DESCRIPTION
13	14306-76	1	REAR MOUNTING BRACKET DRIVER SIDE
14	14307-76	1	REAR MOUNTING BRACKET PASSENGER SIDE
15	14367-76	2	SPACER TUBE
16	14375	2	U-BOLT, .50NC X 6-1/2" X 4-1/4"
17	14376	4	BOLT, .50NC X 5" CARRIAGE
18	14357	1	U-BOLT, .50NC X 5-1/2" X 4" (NOT SHOWN)
19	14291-76	1	SPACER U-BRACKET (NOT SHOWN)
20	14577	4	SPACER PLATE (NOT SHOWN)

Please order replacement parts by PART NO. and DESCRIPTION.

# OPERATOR MANUAL

Installation

8552016 General Assembly & Installation Instructions

WARRANTY POLICY, OPERATOR MANUALS & REGISTRATION

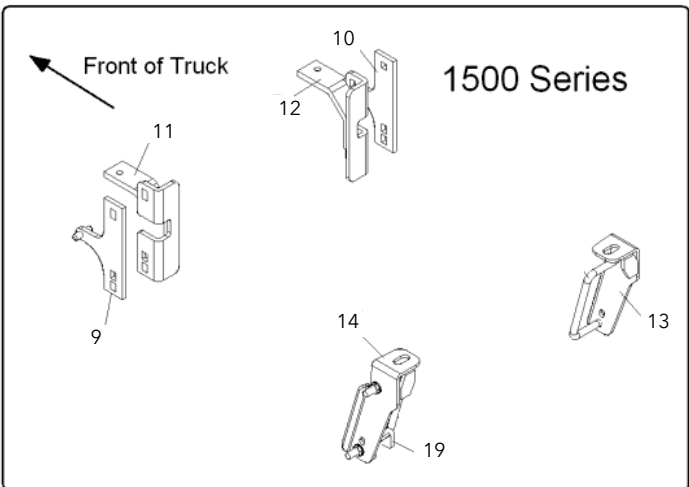
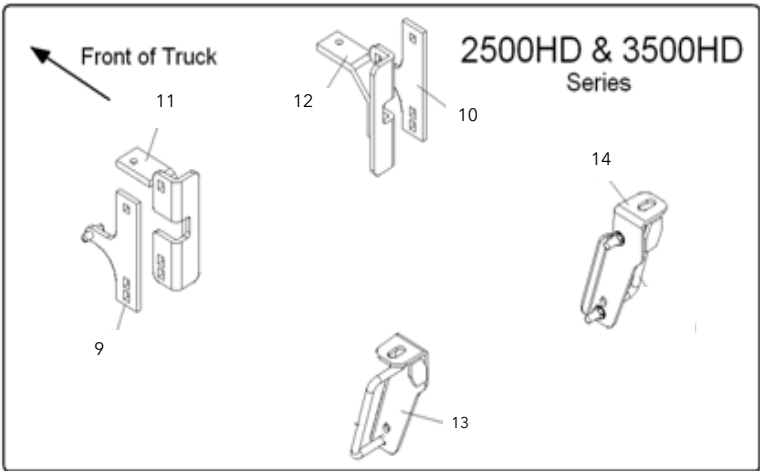
Go online to [www.demco-products.com](http://www.demco-products.com) to review Demco warranty policies, operator manuals and register your Demco product.

BOLT TORQUE SPECIFICATIONS					
STANDARD BOLTS			METRIC BOLTS		
Size	Grade	Torque	Size	Grade	Torque
5/16"	5	18 ft/lbs.	8mm	8.8	23 ft/lbs.
3/8"	5	30 ft/lbs.	10mm	8.8	45 ft/lbs.
7/16"	5	50 ft/lbs.	12mm	8.8	78 ft/lbs.
1/2"	5	75 ft/lbs.	14mm	8.8	125 ft/lbs.
5/8"	5	150 ft/lbs.	16mm	8.8	160 ft/lbs.
3/4"	5	290 ft/lbs.			

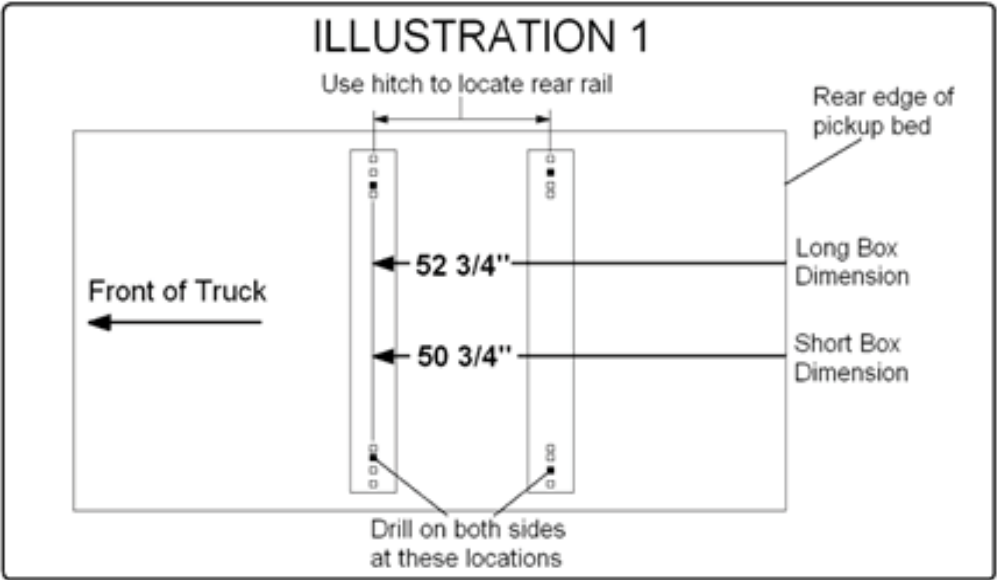
**CAUTION:** Do not install base rails over plastic bed liners. Plastic bed liners must be cut out of the way. Rails may be installed on spray in liners.

**NOTE:** All metal surfaces that come in contact with the aluminum body need to have vinyl placed in between to prevent corrosion.

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



- 1. On the inside of the left 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.
- 2. Fully assemble the 5<sup>th</sup> wheel hitch on a flat, level surface and pin into the base rails (assembly instructions come with the hitch components). Place assembled hitch in truck bed between the wheel wells.



3. Position the base rails in truck bed as shown in **Illustration 1**. Be sure the base rails are parallel by measuring diagonally as shown in **Illustration 1a**.

4. Make two attachment points on the truck bed using the square holes in the front base rail as shown in **Illustration 1**.

**NOTE: Mark center of square bolt hole.**

DO NOT mark the rear base rails 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 the drill. Drill 1/4" diameter pilot holes down through the bed and hat section at the previously marked points. Be certain that the holes are drilled in the correct location. They must be drilled through the under bed hat section.

5. Position the left and right front outer brackets and against their respective truck frames so that the pin in each bracket aligns with the existing hole in the side of the vehicle frame.

**NOTE:** On some 1500 series truck there are no existing holes in the frame so you will be required to drill the hole in the side of each truck frame. See **Illustration 2** for the location information. Be sure hole is placed exactly as shown and drilled to the correct diameter.

**NOTE:** On 2500HD and 3500HD series trucks there may be a wire hanger bracket bolted to the frame at the location which will not allow the front frame bracket to be installed. This wire bracket will have to be removed from the frame so that the frame bracket can be installed.

6. Bolt the left and right front outer brackets and to the frame with the inner brackets and. Take care when positioning the left inner bracket so that the slot in bracket fits over the steel brake line.

ILLUSTRATION 1a

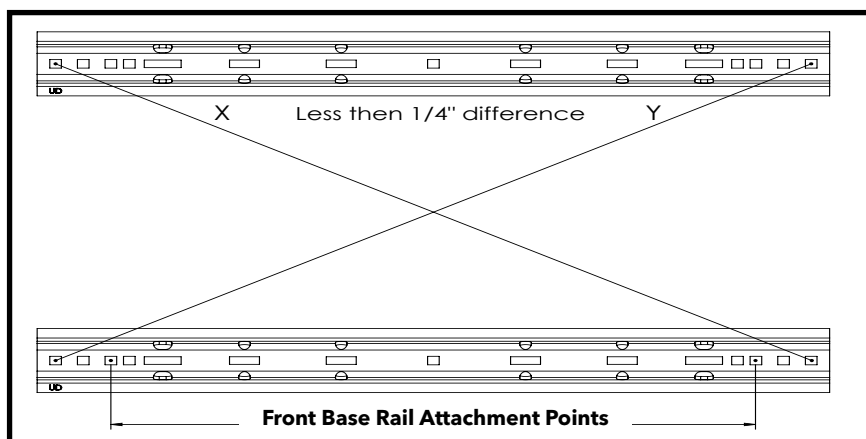


ILLUSTRATION 2

Dodge 1500 Series

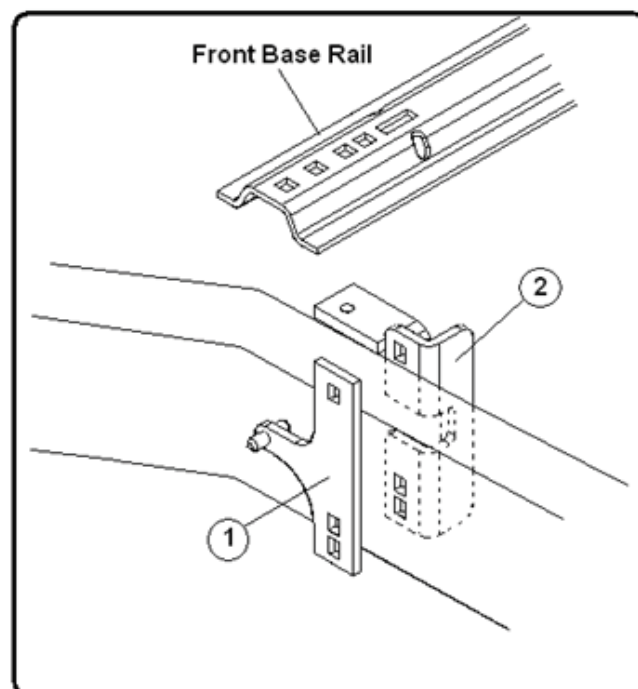
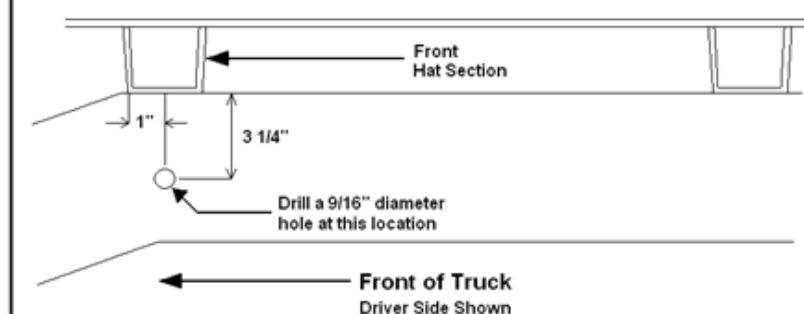
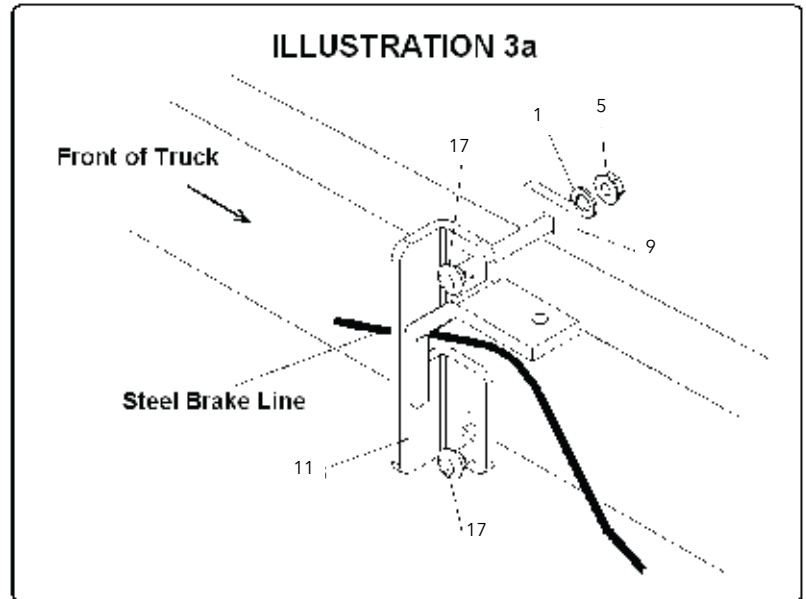


ILLUSTRATION 3

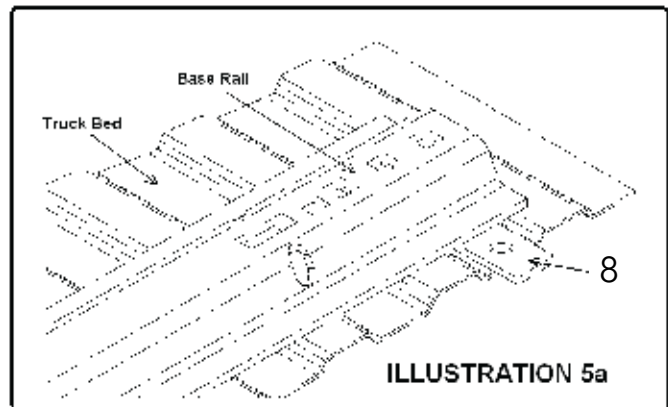
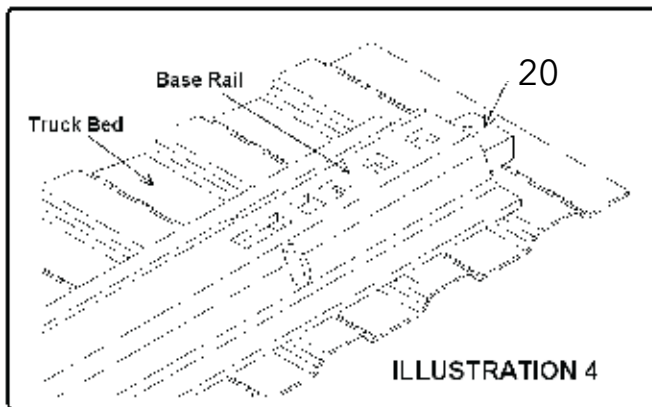
## Installation

See **Illustration 3 and 3a**. Use the carriage bolts at both bracket attachments. Slide bracket rearward away from the gas tank so long bolt can be installed. Then slide bracket forward into position. Use the lower hole in each bracket for the 2500HD and 3500HD trucks and the upper hole in each bracket for the 1500 trucks. Bolts must be as close to bottom of truck frame as possible. The tab on the inner bracket should be against the bottom of the bed support hat section. The hole in the tab should be aligned with the previously drilled 1/4" pilot hole.

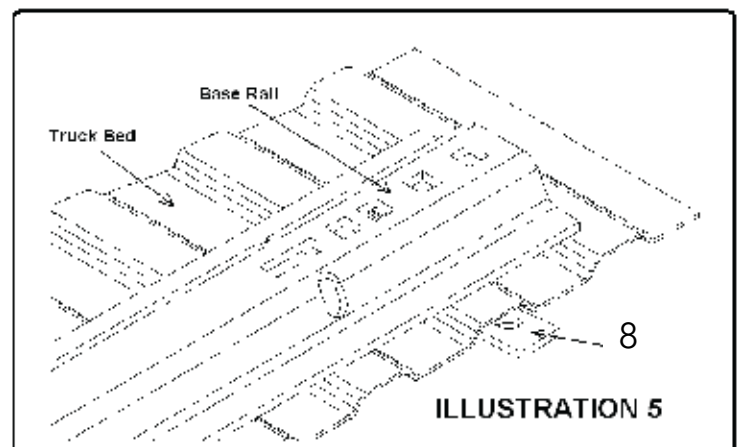


7. Position the base rails in the bed so that the third square 5/8" hole in from the end on the front rail is lined up over the previously drilled pilot holes. Double check that the pilot holes line up with holes in base rail and the tab on frame brackets under the bed. Move base rails away from pilot holes and drill a 3/4" hole down through truck bed at each previously drilled pilot holes. The 3/4" hole will give some tolerance to get the bolt down into the tapped bracket hole. **Use caution when drilling so that the drill does not make contact with the installed brackets or fuel tank under bed.**

**NOTE:** For alternative installation procedures refer to **ALTERNATIVE INSTALLATION PROCEDURE**.



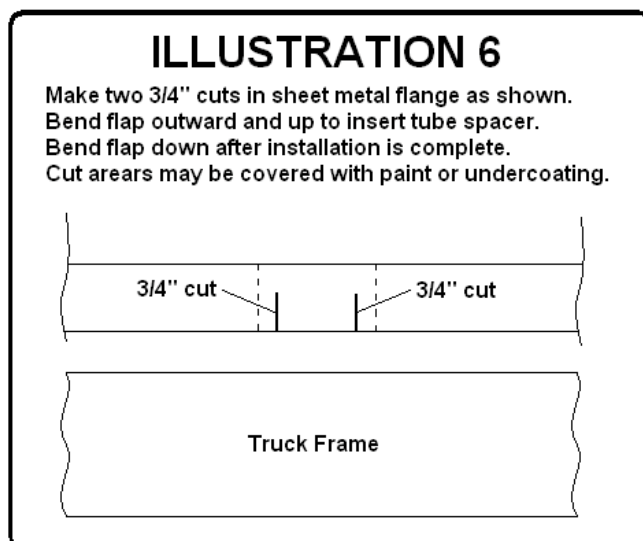
8. Place a 3/4" thick spacer plate under ends of each base rail, in line with drilled holes, as shown in **Illustration 4**. If the bed corrugation above the mounting bracket at the drilled hole is UP, leaving a space above the bracket, place space plate in this location as shown in **Illustration 5**. If the corrugation is DOWN, at this location, place a spacer plate in the bed, under the base rail as shown in **Illustration 5a**.



9. Slide tube spacers into the forward bed support hat section from the open end in each wheel well.

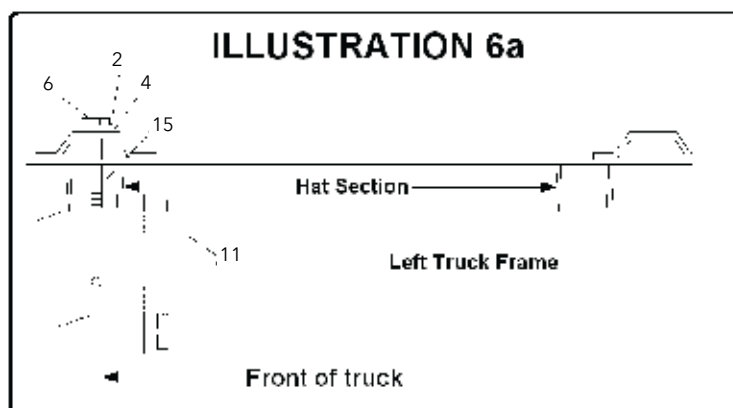
**NOTE:** On some applications a small sheet metal flange may appear to obstruct placement of the spacer tube. This flange can be modified to gain access to the hat section. See detail for this procedure in **Illustration 6**.

10. On left side of truck align the tube spacer with drilled hole and insert 5/8" x 5 1/2" bolt with 5/8" flat washer and 5/8" lock washer down through all parts and mounting brackets. See **Illustration 6a**. Thread bolt into tapped plate on left front inner bracket. Repeat procedure on right side of truck base rail using 5/8" flat washer and 5/8" lock washer as shown in **Illustration 6b**. Tighten the 5/8" bolts to **BOLT TORQUE SPECIFICATIONS**.



11. Mark the rear hole locations using the rear base rails as shown in **Illustration 1**. Drill a 5/8" hole down through bed using the second hole in from each end of rear base rail as a guide as shown in **Illustration 1**.

12. Place spacer plates under base rails as described in step 8. Place 5/8" x 3" bolts with 5/8 flat washer down through base rail, spacer plates and truck bed at drilled holes.



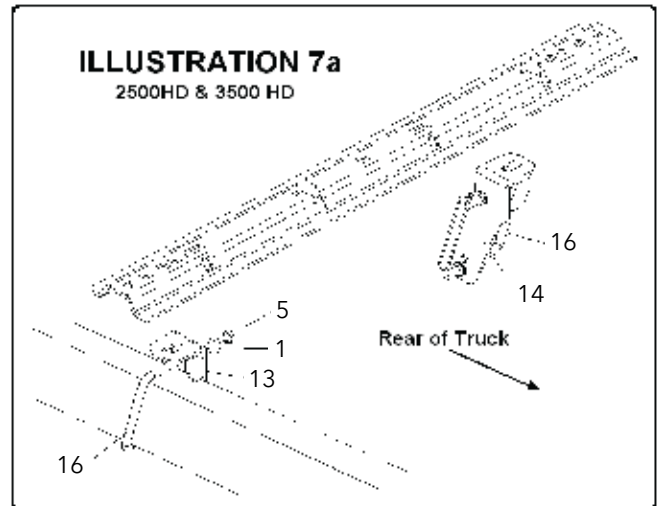
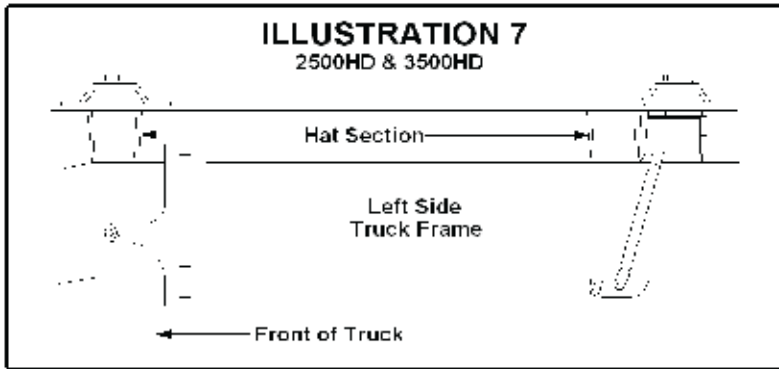
## **2500HD & 3500HD Applications:**

13. Place the left and right inner mounting bracket up in place against the inside surface of the truck frame, just behind the under bed hat section reinforcement. See **Illustrations 7 and 7a**. The previously installed 5/8" bolts should go through the upper tab in each bracket. **NOTE:** The rubber tailpipe hanger may need to be moved away from the frame slightly so that the right bracket can be positioned correctly. Bolt the brackets loosely in place at these bolts with 5/8" flat washer, 5/8" lock washer and 5/8" hex nuts.

## Installation

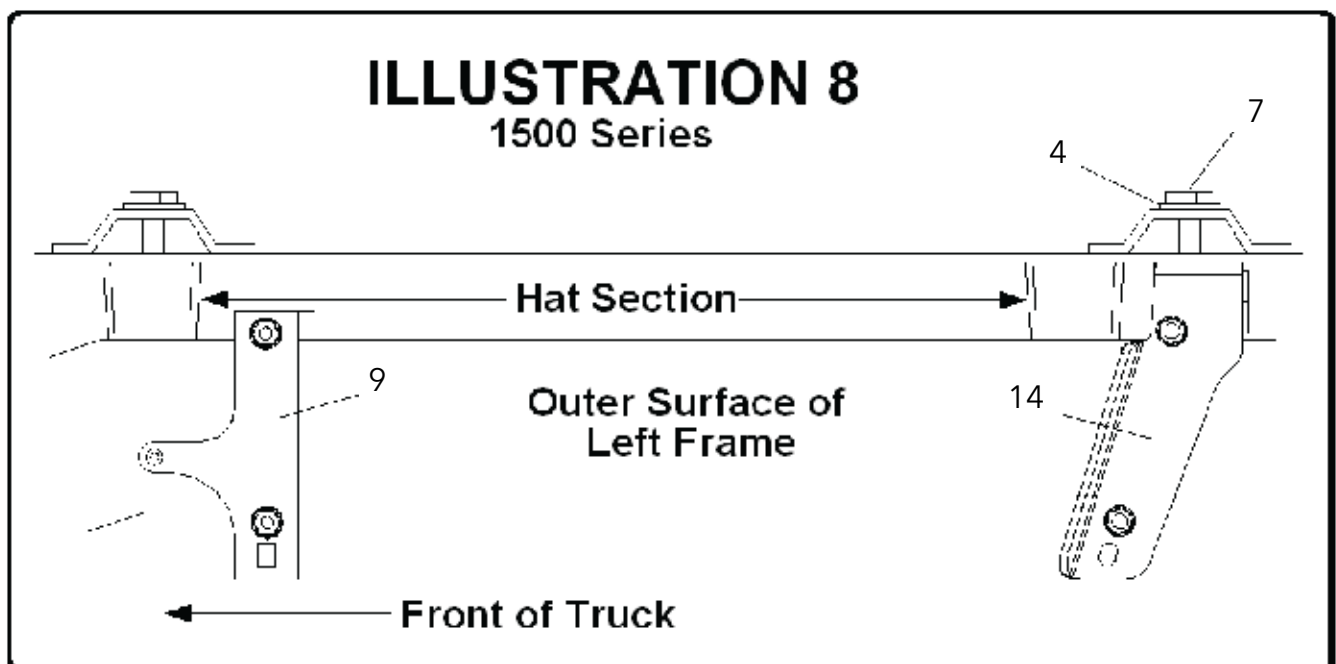
13a. Secure the left and right inner mounting brackets in place with the longer U-Bolts placed around truck frame as shown in **Illustration 7** and **7a**. Use the lower hole in each bracket for the 2500HD and 3500HD trucks. Bolts must be as close to bottom of truck frame as possible.

13b. Tighten all bolt to **BOLT TORQUE SPECIFICATIONS**.

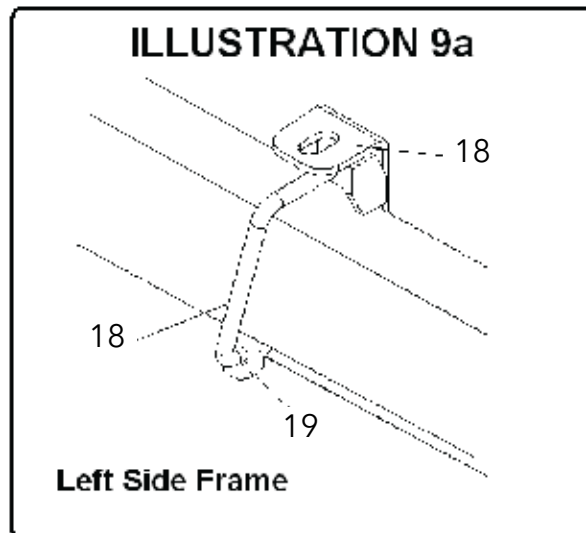
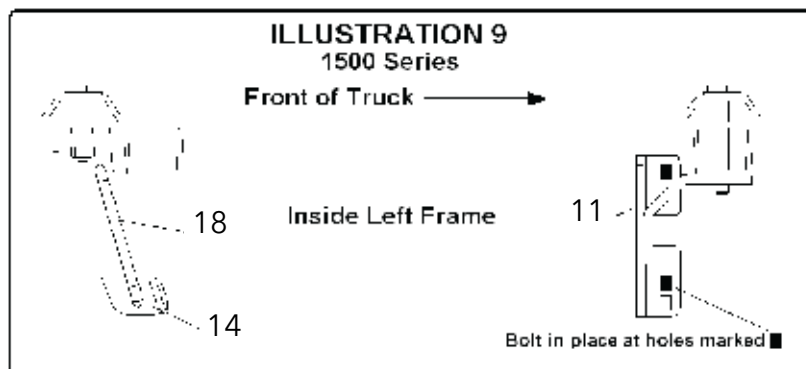


## 1500 Applications:

14. Place the left rear mounting bracket against the outside surface of the right frame and the right rear mounting bracket against the outside surface of the left frame with the mounting tabs positioned over the truck frame rails in line with the previously installed 5/8" bolts. See **Illustration 8** which shows the left frame. Bolt the brackets loosely in place at these bolts with 5/8" flat washers, 5/8" lock washers and 5/8" hex nuts.

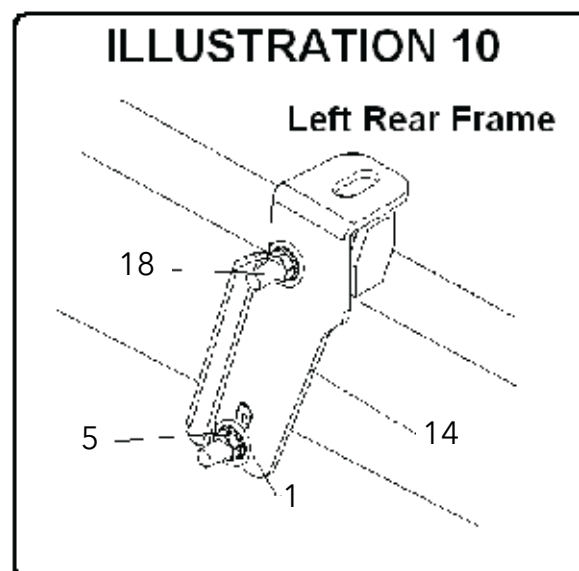


14a. Secure the rear mounting bracket to the left truck frame with one of the long U-Bolts and spacer bracket as shown in **Illustration 9 and 9a**.



14b. Secure the rear mounting bracket to the right truck frame with the short U-Bolt as shown in **Illustration 10**.

**NOTE:** After the U-Bolts are installed and torque to the specifications in the chart on the front page, the lower leg of the U-Bolts may need to be trimmed off to clear leaf springs or suspension parts.

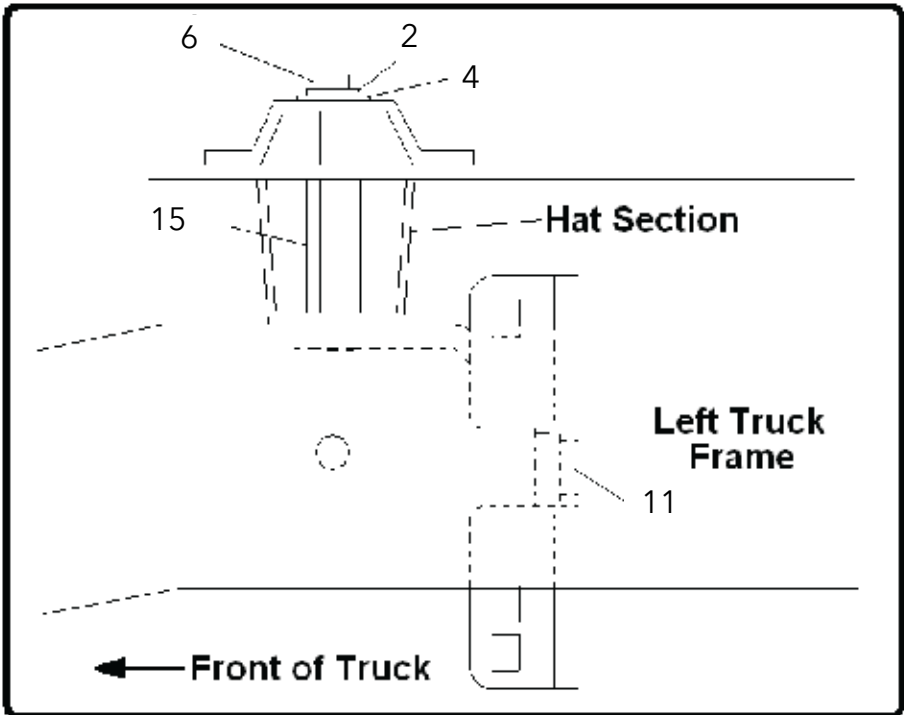
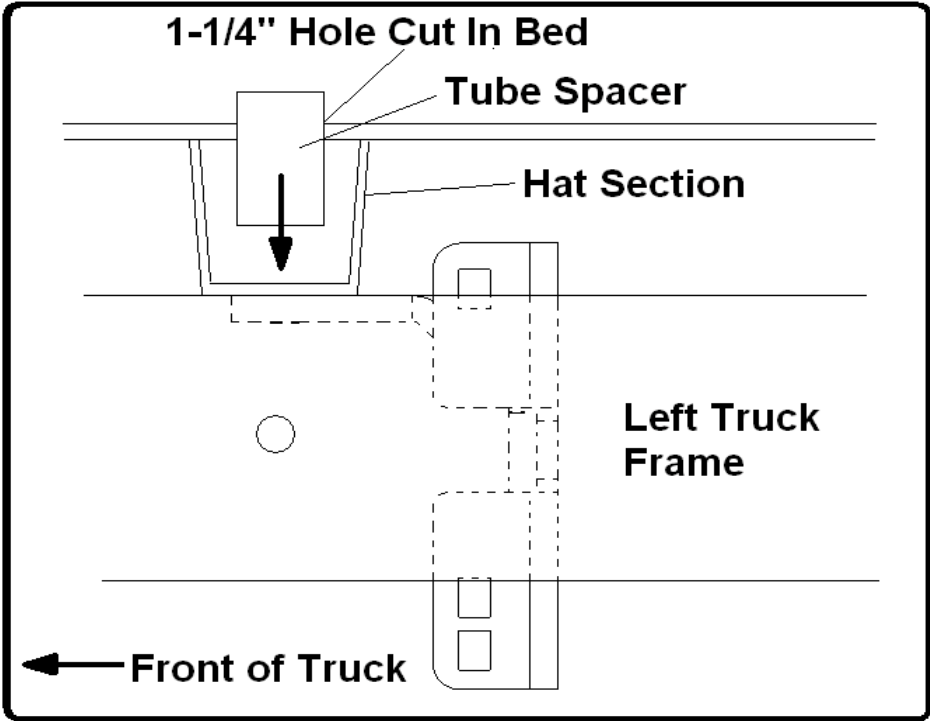


15. Tighten all bolts to **BOLT TORQUE SPECIFICATIONS**.

## Alternative Installation Procedure

**BE SURE TO ADVISE CUSTOMER ABOUT THE LARGE HOLES THAT WILL BE CUT INTO BED BEFORE BEGINNING THIS INSTALLATION.**

1. Cut a 1-1/4" hole down through the bed at pilot hole location. This hole must only be cut through bed of truck, not through bottom of the hat section under the bed.
2. Drill a 5/8" hole through bottom of the hat section under the bed at the previously drilled pilot hole.
3. Remove the wire handle from the spacer tube. Insert the spacer tube down through the hole in the bed so that it will rest on the under bed hat section in line with the previously drilled 5/8" hole.
4. With the front base rail in place, insert a 5/8" x 5-1/2" hex bolt down through the base rail, tube spacer and frame bracket tab. Bolt securely in place at this location.
5. Repeat procedure on the other end of front base rail.
6. Continue with step 8 of main instructions.



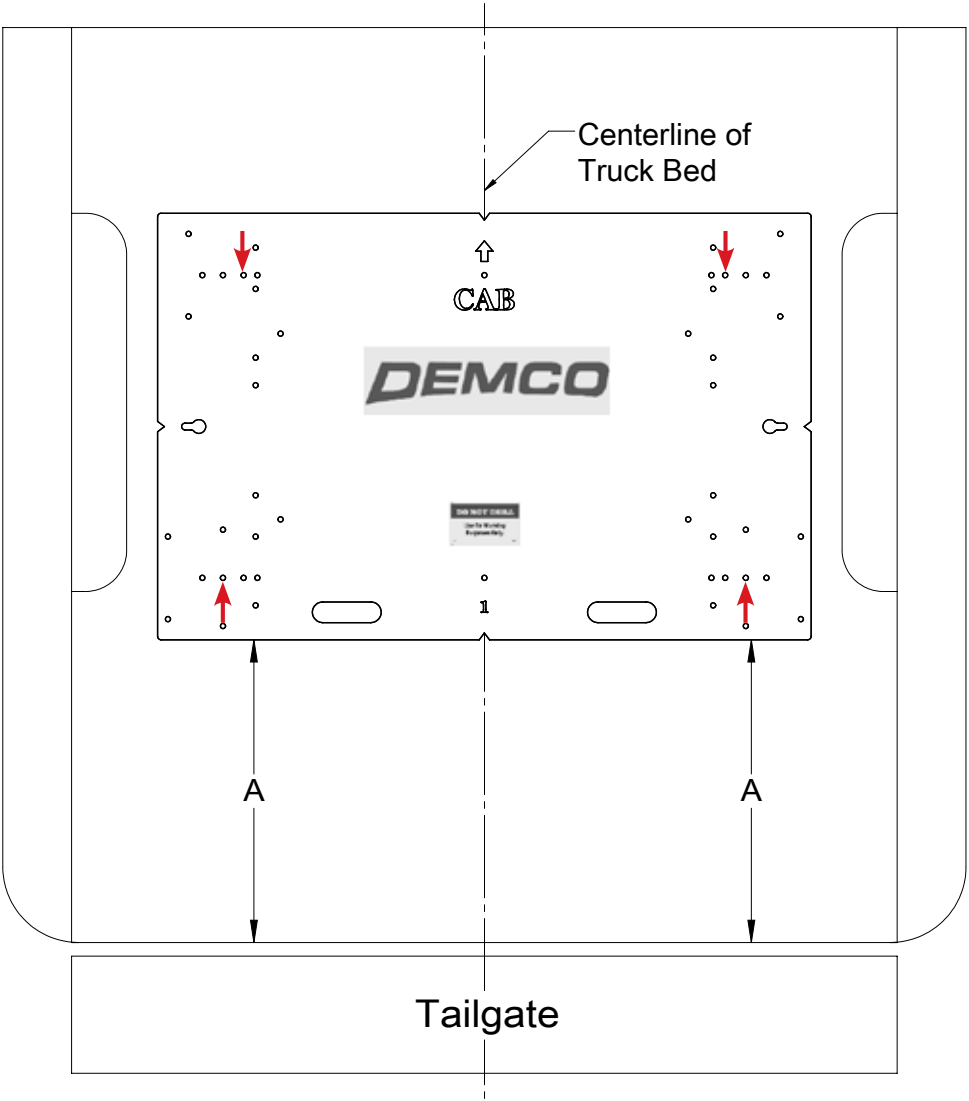


**Truck Bed Drilling Instructions with Template**

1. Place the template in the box and center the template between the wheel wells.
2. **IF NEEDED, TAPE THE TEMPLATE DOWN.**
3. Measure from the back of the box to the template on the passengers side and drivers side to insure that the template is square. See **DRAWING #2** and table for measurements.
4. Locate which holes you will be drilling, by the ones marked with a red arrow.
5. Take a 3/8" locating punch and mark the holes to be drilled.
6. **BEFORE YOU DRILL, MAKE SURE THAT THE TEMPLATE DID NOT MOVE, AND THAT THERE ARE NO OBSTRUCTIONS IN THE WAY.**
7. Remove the template and drill the four marked holes with a 5/8" drill bit.  
**NOTE:** A pilot hole may need to be drilled.
8. Deburr each hole.
9. Touch up the bare metal with some paint that matches the box of the truck.

Installation

Truck Bed Drilling Instructions with Template



Drawing #2

BOX LENGTH	DIMENSIONS	MEASUREMENT
DODGE RAM 1500 4X2 & 4X4 INCLUDES MEGA CAB		
5-1/2'	A	*24-1/4"
6-1/2'	A	*26-1/4"
8'	A	*26-1/4"
DODGE RAM 2500 4X2 & 4X4 INCLUDES MEGA CAB		
6-1/2'	A	*26-1/4"
8'	A	*26-1/4"
DODGE RAM 3500 4X4 INCLUDES MEGA CAB		
6-1/2'	A	*26-1/4"
8'	A	*26-1/4"
*ALL MEASUREMENTS ARE FROM THE BACK OF THE BOX		





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