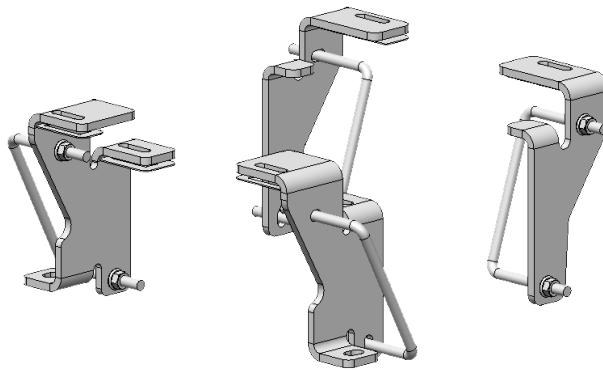




# DODGE

## 20K Industry Standard Rail Custom Mounting Kit

# #2736



Gross Trailer Weight (Maximum).....20,000 lbs.  
Vertical Load Weight (Max. Pin Weight).....5,000 lbs.

### SYSTEM TOW CAPACITY

Please note, in order to determine the **total tow capacity** of a system, you must consider the weight ratings of each component in that system. This includes, but may not be limited to, the capacity/rating of the **tow vehicle**, the **fifth wheel hitch**, and the hitch's **mounting system**. Actual tow capacity of the system will be equal to the lowest rated component.

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# Installation Instructions

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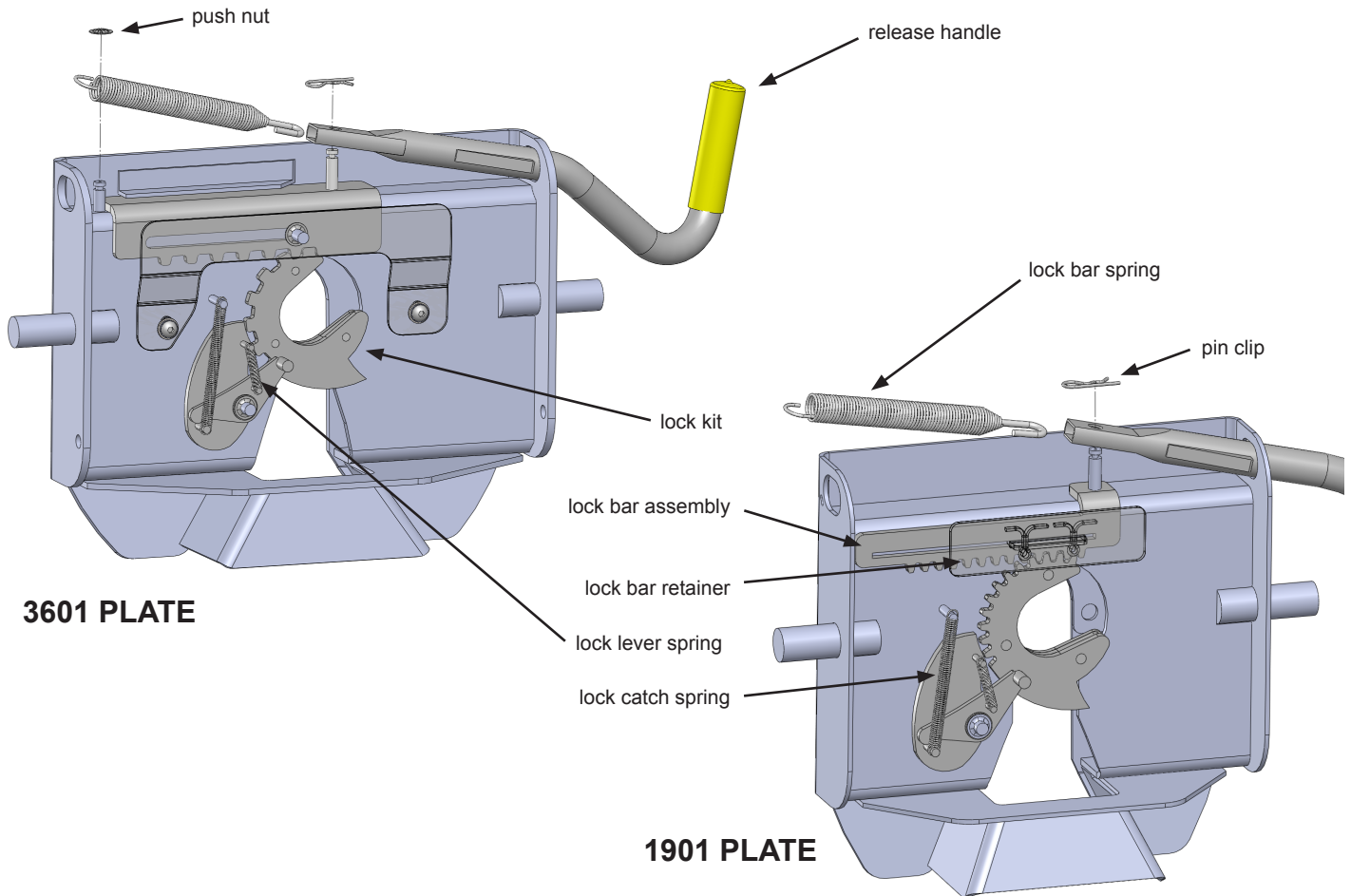
## SPECIFICATIONS

- Fits 2003-2012 Dodge 2500 & 3500
- Hitch is located center of the axle
- Custom Mounting Bracket Kit (*Bracket & Hardware*) #2737

# TABLE OF CONTENTS

PLATE ASSEMBLY.....	3
MOUNTING KIT EXPLODED VIEW.....	4
MOUNTING KIT PARTS LIST .....	5
TRUCK PREPARATION.....	6
MARKING THE TRUCK BED FOR DRILLING.....	6
LAYOUT METHOD .....	6
TEMPLATE METHOD .....	7
INSTALLATION .....	8
PART 1 — BRACKET PLACEMENT & BED HOLE LOCATIONS.....	8
REAR MOUNTING BRACKET INSTALLATION .....	8
PART 2 — BRACKET INSTALLATION.....	10
FRONT MOUNTING BRACKET INSTALLATION.....	10
PART 4 — FINAL INSTALLATION PROCEDURES .....	10

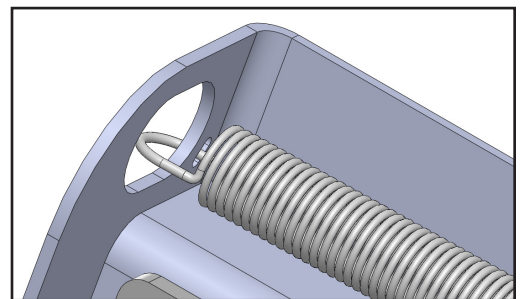
## PLATE ASSEMBLY



1. Remove the Fifth Wheel Plate from the Rocker Arm and place it upside down on a smooth, clean surface.
2. Insert the Release Handle into the obround hole of the plate as seen above.
3. The Lock Bar Spring must be placed inside the handle prior to placing the handle down over the pin of the Lock Bar Assembly, "catching" the hook inside the handle around the pin.
4. Push the handle and spring assembly down past the groove in the pin of the Lock Bar Assembly, and place one of the Pin Clips in the groove of the pin to fasten.
5. Grip the body of the spring and stretch it far enough over the opposite pin (welded to the plate) and push it down past the groove.
6. Install the Push Nut to secure the Lock Bar Spring onto the welded pin.

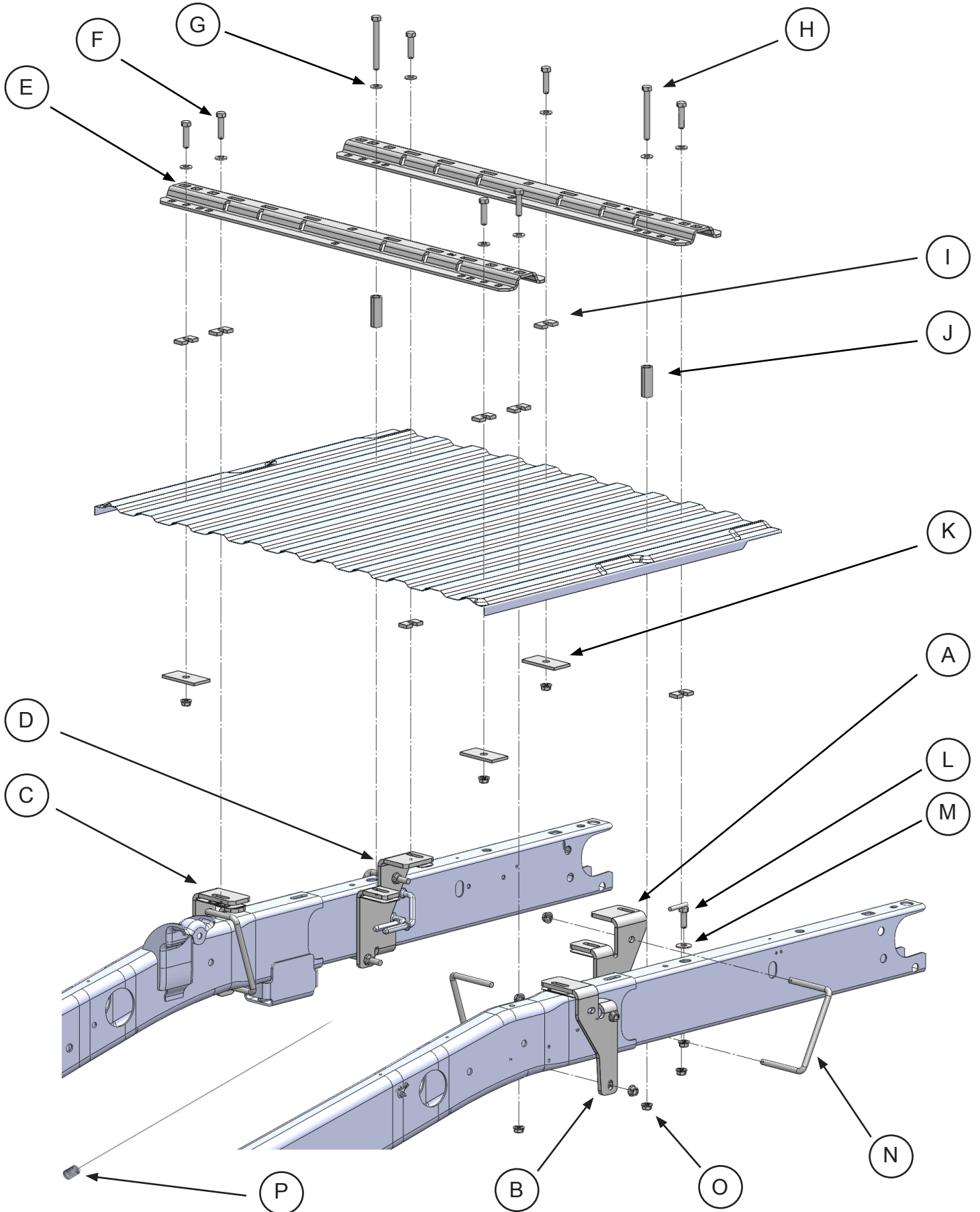
**NOTE:** The 1901 plate for the #1900 Super 5<sup>th</sup> does not use a push nut to attach the end of the spring, but rather a slot in the side of the fifth wheel plate located above the obround hole. See illustration to the right.

As a PullRite fifth wheel hitch owner, it is important for you to study and manually operate the Fifth Wheel Plate and Release Handle to better understand the locking action. A better working knowledge of the plate will help prevent accidental dropping of your trailer due to incorrect hitching.



Also, it is imperative that you study and adhere to the Maintenance procedures provided in the Owners Manual. If you did not receive one upon purchase, please contact PullRite or visit us on the web at [www.pullrite.com](http://www.pullrite.com).

# MOUNTING KIT EXPLODED VIEW



# MOUNTING KIT PARTS LIST

## #2736 DODGE CUSTOM ISR BRACKET KIT

description	part no.	qty	material
MOUNTING BRACKET KIT	2737	1	(See kit contents listed below)
BASE RAIL KIT	2719	1	(See kit contents listed below)

## #2737 — MOUNTING BRACKET KIT

item	description	part no.	qty.	material
A	DRIVER SIDE REAR MOUNTING BRACKET	273703	1	
B	DRIVER SIDE FRONT MOUNTING BRACKET	273701	1	
C	PASSENGER SIDE FRONT MOUNTING BRACKET	273702	1	
D	PASSENGER SIDE REAR MOUNTING BRACKET	273704	1	
	MOUNTING BRACKET HARDWARE KIT	273705	1	(See kit contents listed below)

## #273705 — MOUNTING BRACKET HARDWARE KIT

item	description	part no.	qty.	material
F	1/2" BASE RAIL BOLT	98010175	7	1/2"-13 X 2" HHCS GRD 5
G	1/2" FLAT WASHER	98250147	9	1/2" FLAT WASHER
H	4-1/2" BASE RAIL BOLT	98010195	2	1/2"-13 X 4-1/2" HHCS GRD 5
I	SINGLE SLOT BED SHIM	08070201	7	5/16" SINGLE SLOT BED SHIM
J	REAR FRAME SPACER	33180701	2	
K	CENTER HOLE SHIM	27210203	3	
L	ANTI-ROTATION BOLT	442504	2	1/2"-13 X 1-1/2" GRD 5 ANTI-ROTATION BOLT
M	LARGE FLAT WASHER	98250144	2	1/2" USS HARDENED STEEL FLAT WASHER
N	U-BOLT	98050183	4	1/2"-13 U-BOLT
O	1/2" SERRATED FLANGE NUT	98150201	19	1/2"-13 SERRATED FLANGE NUT
P	BOLT LEADER	98340197	1	1/2"-13 BOLT LEADER

## #2719 — BASE RAIL KIT

item	description	part no.	qty.	material
E	BASE RAILS	271901	2	

## LAYOUT TEMPLATE

description	part no.	qty.	material
LAYOUT BED TEMPLATE	27200000	1	ITEM SOLD SEPARATELY

# TRUCK PREPARATION

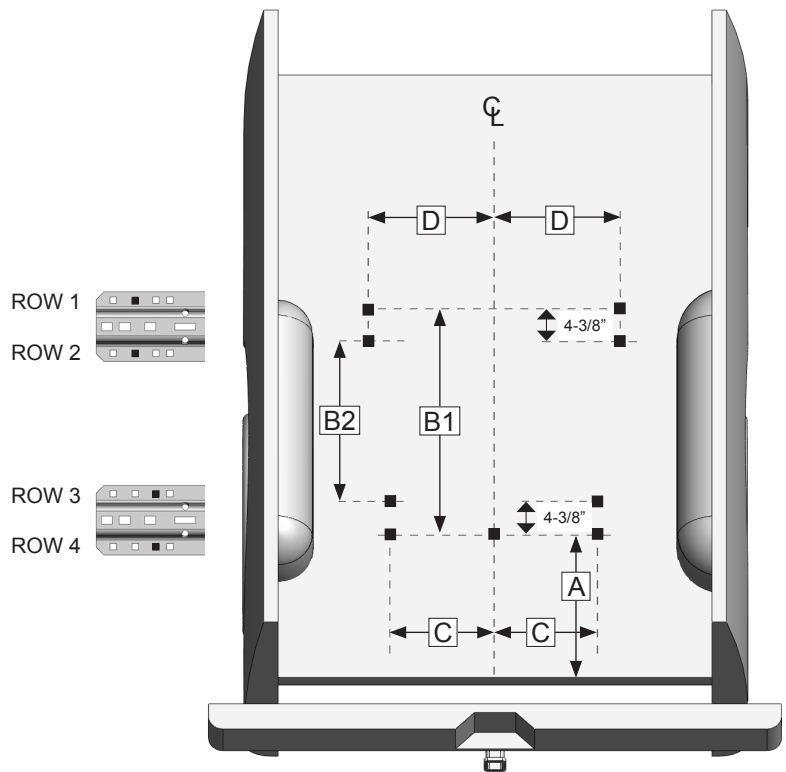
1. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck to install the mounting brackets on the truck frame.
2. Remove the inner fender insert from both rear fender wells (not applicable to every model).
3. If additional clearance is required for bracket installation, the driver side shock absorber may be removed. It may not be necessary to remove *both* shock bolts, removing the top bolt may gain the most clearance; however, removing the bottom shock bolt will make reinstalling the bolt easier.
4. If necessary, the spare tire may be removed to gain additional clearance while working.

## MARKING THE TRUCK BED FOR DRILLING

### LAYOUT METHOD

If you purchased an installation template, please proceed to "TEMPLATE METHOD". *Templates are sold separately.*

1. Referencing "Truck Bed Dimension Table" below, measure and mark from the back of the bed forward, the values for "A." Do this at any point on both sides of the bed and draw a line across the bed from mark to mark.
2. Find the centerline of the bed.
3. Draw a line down the middle of the bed from front-to-rear.
4. Starting at "A," measure from the end of the bed back to the first bolt hole on the base rail (row 4) and mark the bed.
5. Measure the distance of "C" from the centerline of the bed in both directions. The center of the bolt location will be at the intersection of A & C
6. Continue working toward the cab, marking the center holes of each remaining bolt locations. Note that one of the bolt locations are located at the intersection of "A" and the centerline of the bed on the rear base rail and another at the intersection of "B1" and the centerline of the bed on the front base rail.

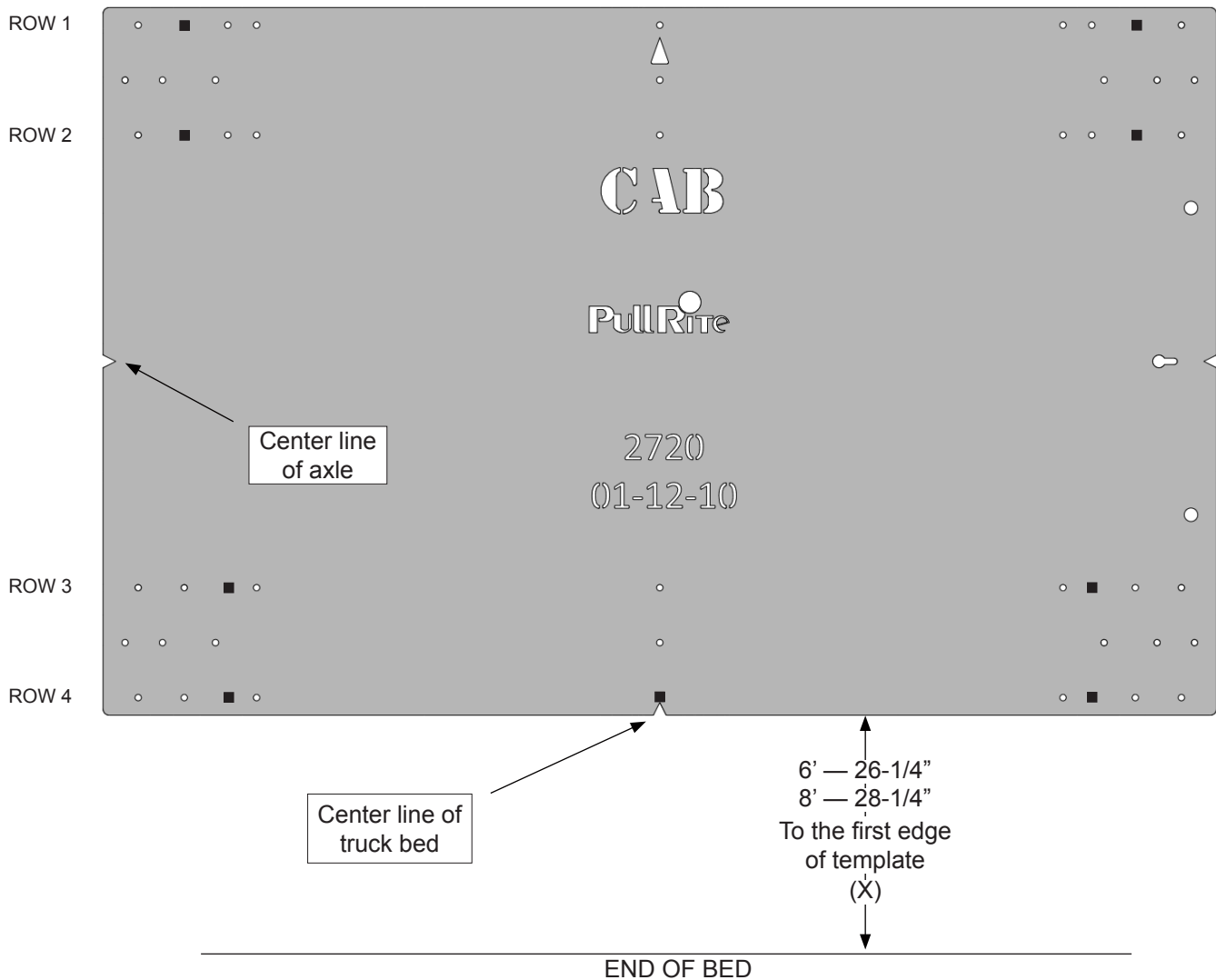


TRUCK BED DIMENSION TABLE							
		LAYOUT METHOD				TEMPLATE METHOD	
BED LENGTH	"A"	"B1"	"B2"	"C"	"D"	"X"	Template part#
6 ft.	27"	26-3/8"	17-3/4"	16-7/8"	18-5/8"	26-1/4"	27200000
8 ft.	29"	26-3/8"	17-3/4"	16-7/8"	18-5/8"	28-1/4"	27200000

## TEMPLATE METHOD

1. Lay the template in the truck bed, centering it from side-to-side, and parallel to the end of the truck bed using the dimension "X" listed in "Truck Bed Dimension Table."
2. Mark the 9 holes, while making sure the template does not move.

**INSTALLATION TIPS:** The *TEMPLATE* should be orientated as shown in the drawing below. To avoid drilling holes in error from out of tolerance bed-to-frame dimensions, mark the hole locations as lightly as possible if a center or transfer punch is used. Then use a very small diameter drill bit to drill one location on either side of bed. Place the *Mounting Brackets* against the frame to determine the correctness of the bed hole locations relative to the pre-punched holes in the *Mounting Bracket* and existing frame holes. Adjust the template pattern relative to the end of the bed, as necessary, to move the bed holes nearer the center of the mounting bracket holes. Note also, the information etched into the template — the direction of the cab, the template number and the revision date. As one last measure, the template has a tendency to move when placed on the slick paint of new truck beds, and it may be helpful to place a small piece of *NON-SKID* matting, such as "SCOOT-GARD"™ or simply use duct tape on each corner to help keep the template from moving.



# INSTALLATION

## PART 1 — BRACKET PLACEMENT & BED HOLE LOCATIONS

Since most truck beds are not installed square to the frame or are the same distance from the back of the cab, the installer will need to make sure the bed holes line up properly with the obround hole in the top of the mounting bracket.

The basic steps in this section are as follows:

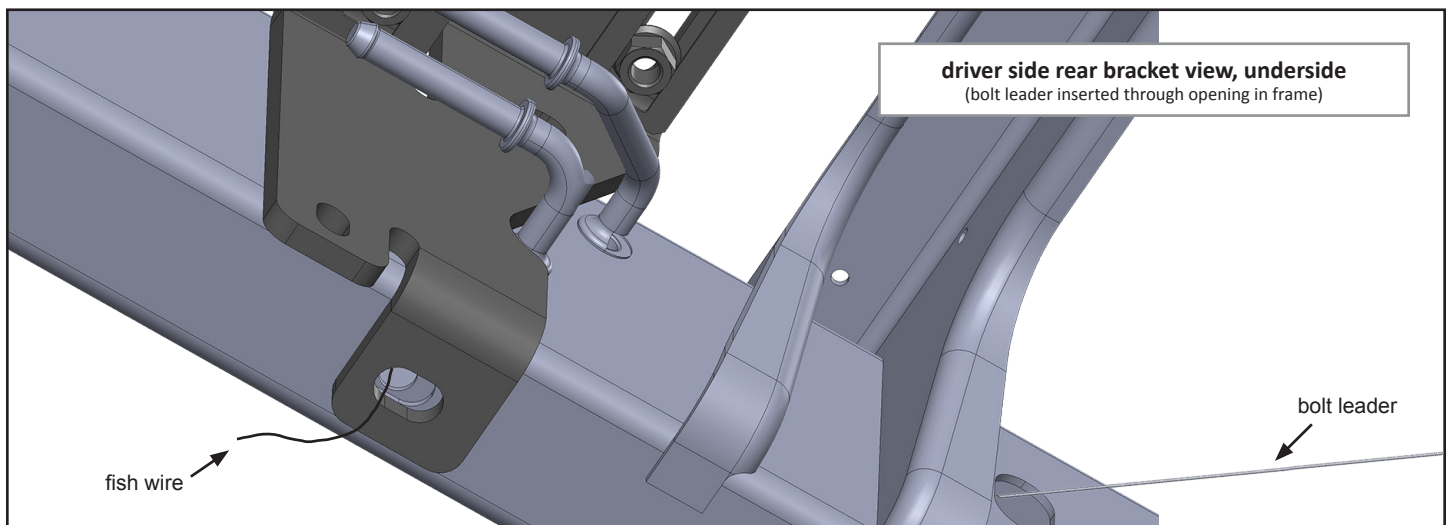
- Layout the bed holes
- Drill the first pilot hole in the bed
- Check centering
- Adjust the bed hole layout if necessary
- Drill the second pilot hole and check centering to ensure bed hole locations are square to the frame; adjust as needed
- Drill remaining pilot holes in the bed; check centering

### REAR MOUNTING BRACKET INSTALLATION

1. This is a no-drill installation, the brackets are fastened around the truck's frame, with the exception of two anti-rotation bolts that are fished through the enclosed section of the truck's frame. We suggest you read completely through these installation procedures, paying close attention to the fastening methods and illustrations provided before you drill any holes.
2. It is critical that the *Driver Side Rear Bracket {A}* is installed properly *before* drilling bed holes for the other brackets. **Positioning of the rear brackets is based off the vertical hole on the underside of the frame that attaches to the rear mounting brackets.** The rear brackets are installed on the *inside* surface of the frame.

**NOTE:** Wiring located on the frame in the driver side rear shock area will have to be adjusted slightly to avoid contact with the frame bracket.

3. Thread an Anti-rotation Bolt {L} and corresponding washer {M} onto the supplied Bolt Leader (right). Prior to installing the bolt and washer through the frame, thread the nut on and off the bolt to ensure the nut will fit easily once the bolt is in place.
4. With the bracket clamped in place, thread a long fish wire (not provided) through the exit hole located in the bottom of the frame in the bracket area (below).
5. Once the fish wire reaches the rear frame opening, bend the end of the provided Bolt Leader to make an eyelet, and attach the fish wire to the Bolt Leader.





# INSTALLATION

- Once the Driver Side Rear Mounting Bracket is positioned properly, attach the 1/2" Flange Nut {O} to the Anti-rotation Bolt and tighten by hand.
- Temporarily install the U-bolt {N} around the frame and through the rear bracket holes. Install and hand-tighten the two 1/2" Flange Nuts to the U-bolt.

**WARNING:** Prior to drilling any holes, be sure to check the inside of the frame to guard against drilling into the fuel tank, wiring, brake lines or fuel module.

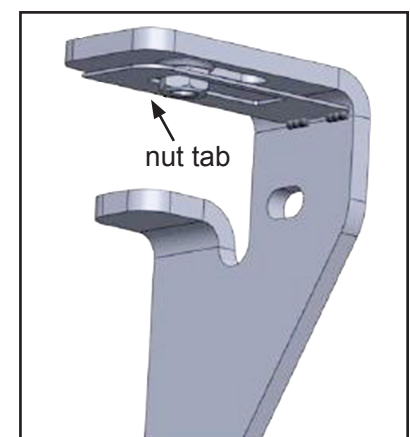
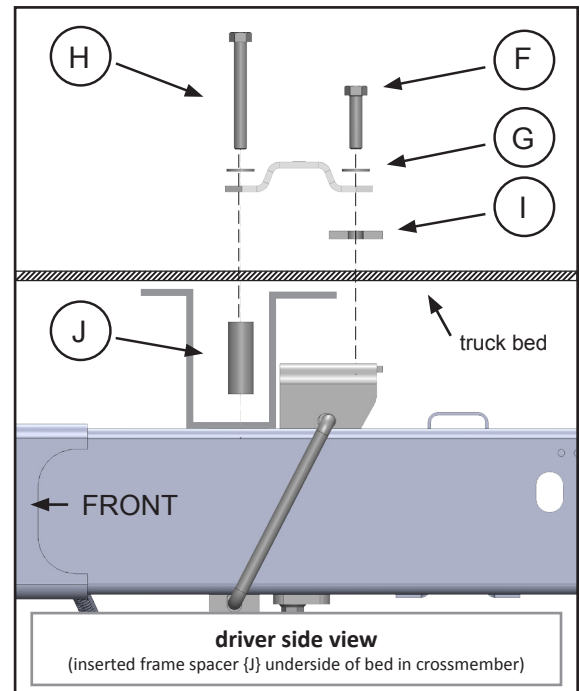
- Drill the first 1/16" pilot hole through the truck bed over the obround hole in the top of the rear mounting bracket. The bit should come down center to the walls of the obround hole (fore-to-aft).
- Repeat Step 3-8 for the Passenger Side Rear Mounting Bracket.

**NOTE:** Some truck beds are not installed square on their frame by the manufacturer. To ensure your pilot holes are aligned properly, it is important that you use the measurements provided only as a starting point and make adjustments as needed. Once you have the rear driver side pilot holes centered, you will use these holes as a point of reference for all remaining pilot hole adjustments.

- Remove the Rear Mounting Brackets and drill out the five rear mounting bracket pilot holes with 9/16" drill bit.

**NOTE:** The two rear base rail holes closest to the cab will need to be drilled through the bed reinforcement with the 9/16" drill bit, and then re-drilled again to 1". *DO NOT* drill through the bottom of the bed reinforcement with the 1" drill bit since the Rear Frame Spacer {J} will be installed through the top of the bed and will sit on the bed reinforcement.

- Examine the Mounting Brackets and note that there is a 1/8" thick tab located just below the slotted bolt hole in the top plate of the Mounting Bracket (bottom right). The purpose of this tab is to assist you in holding the Flange Nut {O} in place. To install, pry the "tab" down far enough so that a Flange Nut can be inserted, then push the "tab" back up into position. The Flange Nut should be able to slide in and out while the "tab" holds the nut in place. When fastening the Base Rails to the Mounting Brackets, the Flange Nut can easily be positioned under the square hole in the Base Rail using a pen or other small tool. When tightening the Base Rail Bolts with an impact gun, start slowly as the "tab" may otherwise "strip out."
- To prevent "crushing" of the corrugated truck bed, we provide Shims {I} to be installed above and/or below the truck bed where necessary. Not all truck beds are installed exactly the same when manufactured, so it is necessary for you to determine where to place your shims, relative to the bolt locations (see Layout Method).
- Install the rear base rail and hardware as seen above and on the "Mounting Kit Exploded View" drawing. A Center Hole Shim {K} must be installed below the bed for the rear center bolt.
- Hand-tighten *only*, all rear Mounting Bracket installation hardware.

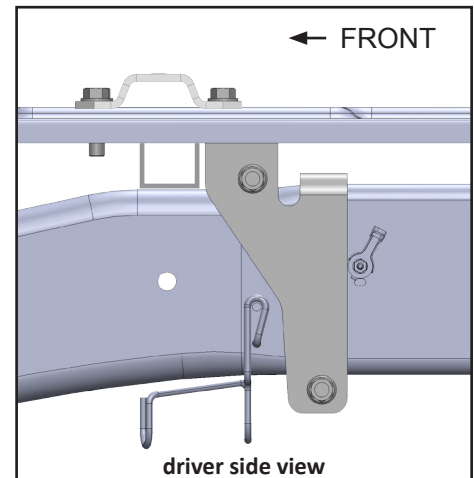


# INSTALLATION

## PART 2 — BRACKET INSTALLATION

### FRONT MOUNTING BRACKET INSTALLATION

1. Verify the rail spacing dimensions for the front base rails and marks made during “Marking the Bed for Drilling,” referencing the measurements based on the rear bed rails installed in the previous section.
2. Drill the front base rail pilot holes. If the rear base rail hole positions were adjusted, remember to adjust the front holes accordingly.
3. The Front Mounting Brackets are installed on the *outside* surface of the truck’s frame.
4. Loosely attached the brackets to the frame using the supplied U-bolts {N} and Flange Nuts {O}, while verifying there are no interferences with wiring or parking brake cables (right).
5. Check that the pilot holes can be centered front-to-rear in the frame bracket slot.
6. Remove the front brackets and re-drill the bed holes to 9/16”.
7. Reinstall the frame brackets and front base rail with hardware as shown. One slotted spacer needs to be installed above or below the bed in each bolt position. One center hole shim must be used below the bed for the two bolts closest to the cab



## PART 4 — FINAL INSTALLATION PROCEDURES

1. Set the Industry Standard hitch on the base rails and align the hitch assembly with the mounting holes.
2. Install the hitch pins and clips, to secure the hitch assembly to the base rails.
3. Make certain the hitch comes on and off without binding prior to completing final torques.
4. Tighten all bolts, including the base rail bolts, according to the Torque Table or until the Bracket begins to bend.

### **TORQUE TABLE**

3/8” bolt	—	31 ft. lbs.
1/2” bolt	—	75 ft. lbs.
5/8” bolt	—	151 ft. lbs.
3/4” bolt	—	266 ft. lbs.





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