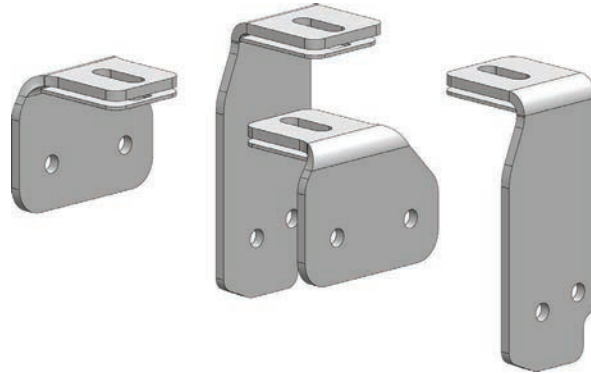




# NISSAN

## 16K Industry Standard Rail Custom Mounting Kit

### #2744



Gross Trailer Weight (Maximum)..... 16,000 lbs.  
Vertical Load Weight (Max. Pin Weight) ..... 4,000 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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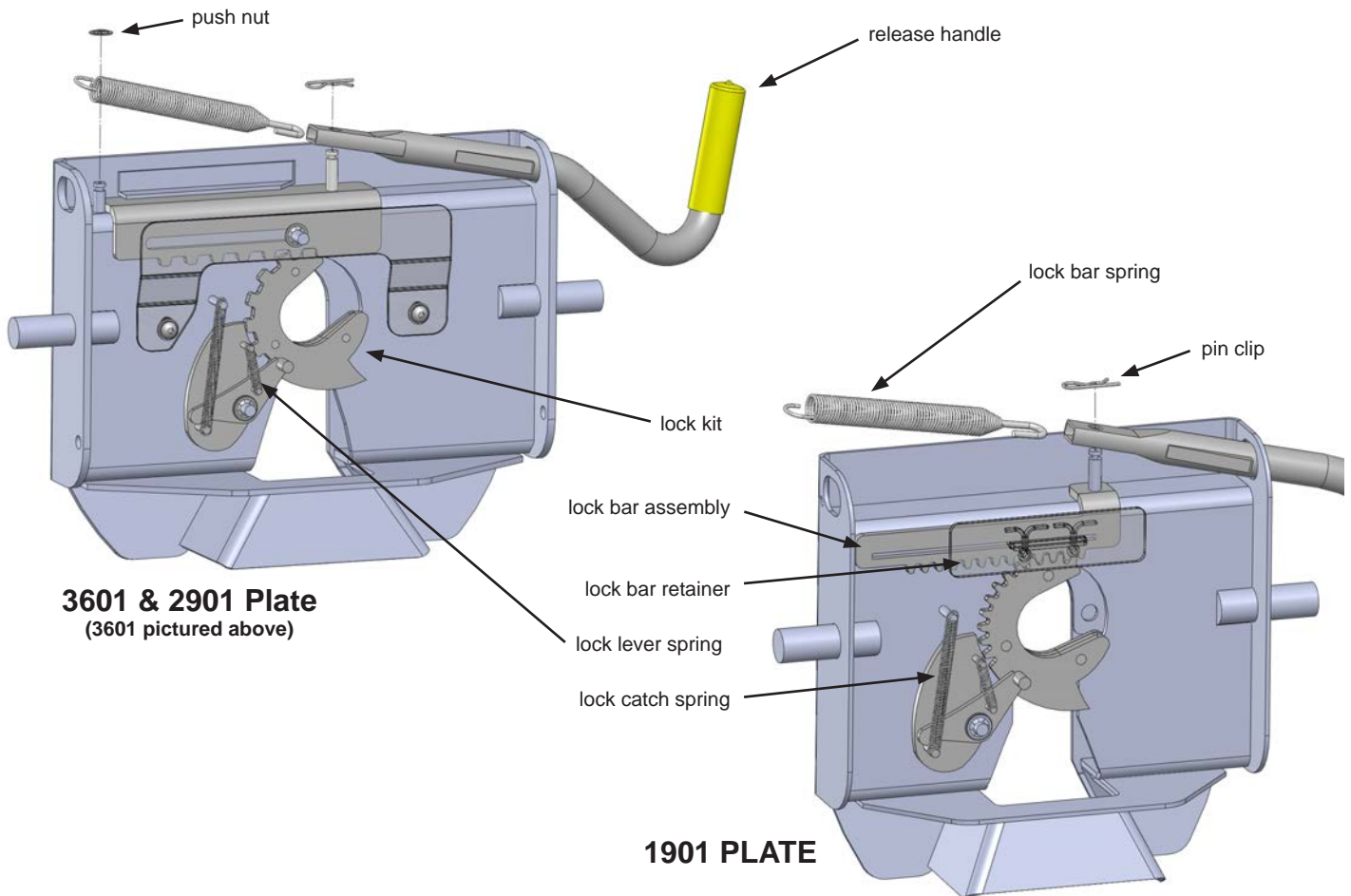
## SPECIFICATIONS

- Fits 2004-2012 Nissan Titan
- Hitch is located 3" ahead of axle
- Custom Mounting Bracket Kit (*Bracket & Hardware*) #2745

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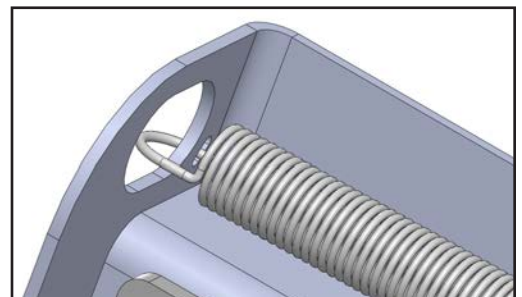
# PLATE ASSEMBLY



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.

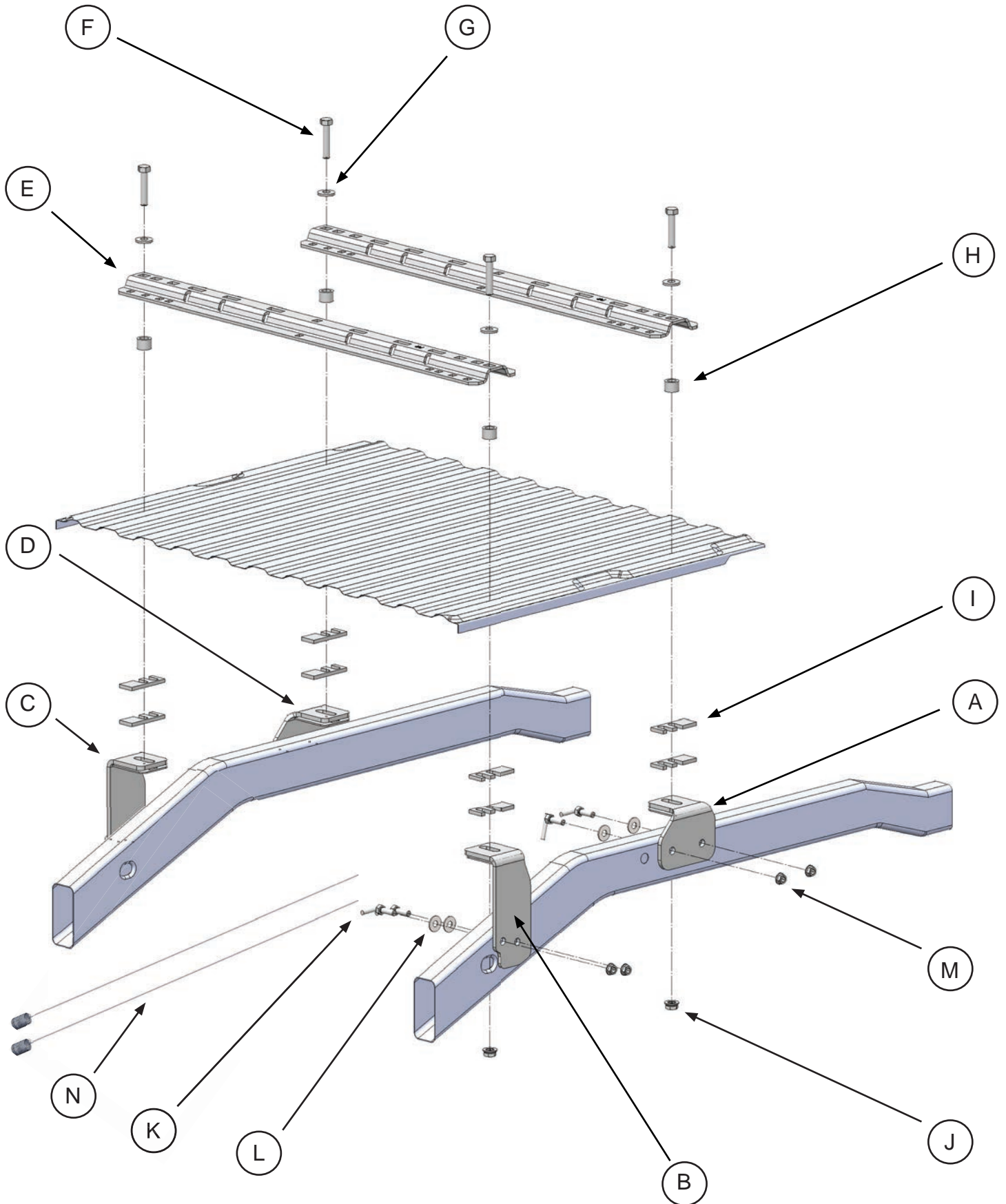
**NOTE:** The 1901 plate for the #1900 Super 5<sup>th</sup> does not use a push nut to attach the end of the spring, but rather a slot in the side of the fifth wheel plate located above the obround hole. See illustration to the right.

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

## #2744 NISSAN CUSTOM ISR BRACKET KIT

description	part no.	qty	material
MOUNTING BRACKET KIT	2745	1	(See kit contents listed below)
BASE RAIL KIT	2719	1	(See kit contents listed below)

### #2745 — MOUNTING BRACKET KIT

item	description	part no.	qty.	material
A	REAR DRIVER SIDE MOUNTING BRACKET	274503	1	
B	FRONT DRIVER SIDE MOUNTING BRACKET	274501	1	
C	FRONT PASSENGER SIDE MOUNTING BRACKET	274502	1	
D	REAR PASSENGER SIDE MOUNTING BRACKET	274504	1	
	MOUNTING BRACKET HARDWARE KIT	274505	1	(See kit contents listed below)

### #274505 — MOUNTING BRACKET HARDWARE KIT

item	description	part no.	qty.	material
F	5/8" BASE RAIL BOLT	98010217	4	5/8"-11 X 3" HHCS GRD 5
G	BASE RAIL WASHER	98200171	4	5/8" EXT TOOTH CONICAL WASHER
H	BED CHANNEL SPACER TUBE	27210204	4	
I	DOUBLE SLOTTED SHIM	27210202	8	
J	5/8" FLANGE NUT	98150200	4	5/8"-11 SERRATED FLANGE NUT
K	1/2" ANTI-ROTATION BOLT	442504	8	
L	1/2" FLAT WASHER	98250145	8	1/2" FLAT WASHER
M	1/2" FLANGE NUT	98150201	8	1/2"-13 SERRATED FLANGE NUT
N	BOLT LEADER	98340197	2	1/2"-13 BOLT LEADER

### #2719 — BASE RAIL KIT

item	description	part no.	qty.	material
E	BASE RAILS	27190001	2	

### LAYOUT TEMPLATE

description	part no.	qty.	material
LAYOUT BED TEMPLATE	27200000	1	<i>ITEM SOLD SEPARATELY</i>

# TRUCK PREPARATION

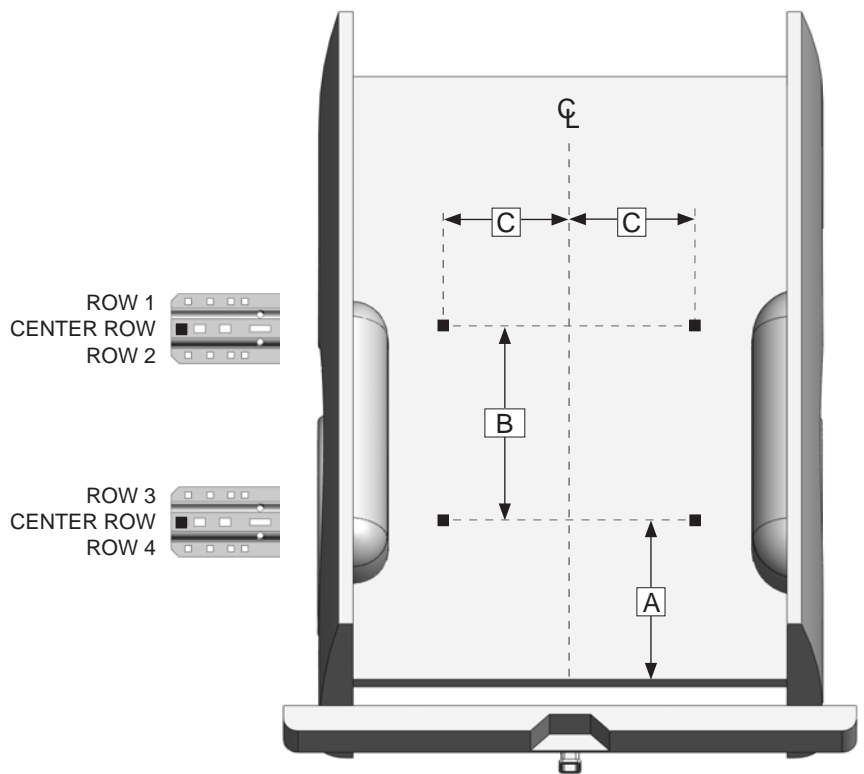
1. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck to install the mounting brackets on the truck frame.
2. You may wish to remove the wheels to give yourself greater working room.
3. Carefully remove the plastic inner wheel well guards on both sides of the vehicle (*not applicable to some models*).
4. Remove the spare tire. This will allow easy access to the inside of the truck frame. The fender support at the front of the wheel well may also need to be removed in order to drill front hole locations.

## 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" and the illustration to the right, measure and mark from the back of the bed forward, the value 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. The intersection of "A" and the centerline of the bed is the center hole location of bolts on the center row of the base rail. Starting at this intersection, measure the distance of "C" in both directions to find the remaining bolt hole locations.
5. Continue working toward the cab, marking the distance "B" as the distance between both center rows of the base rails.

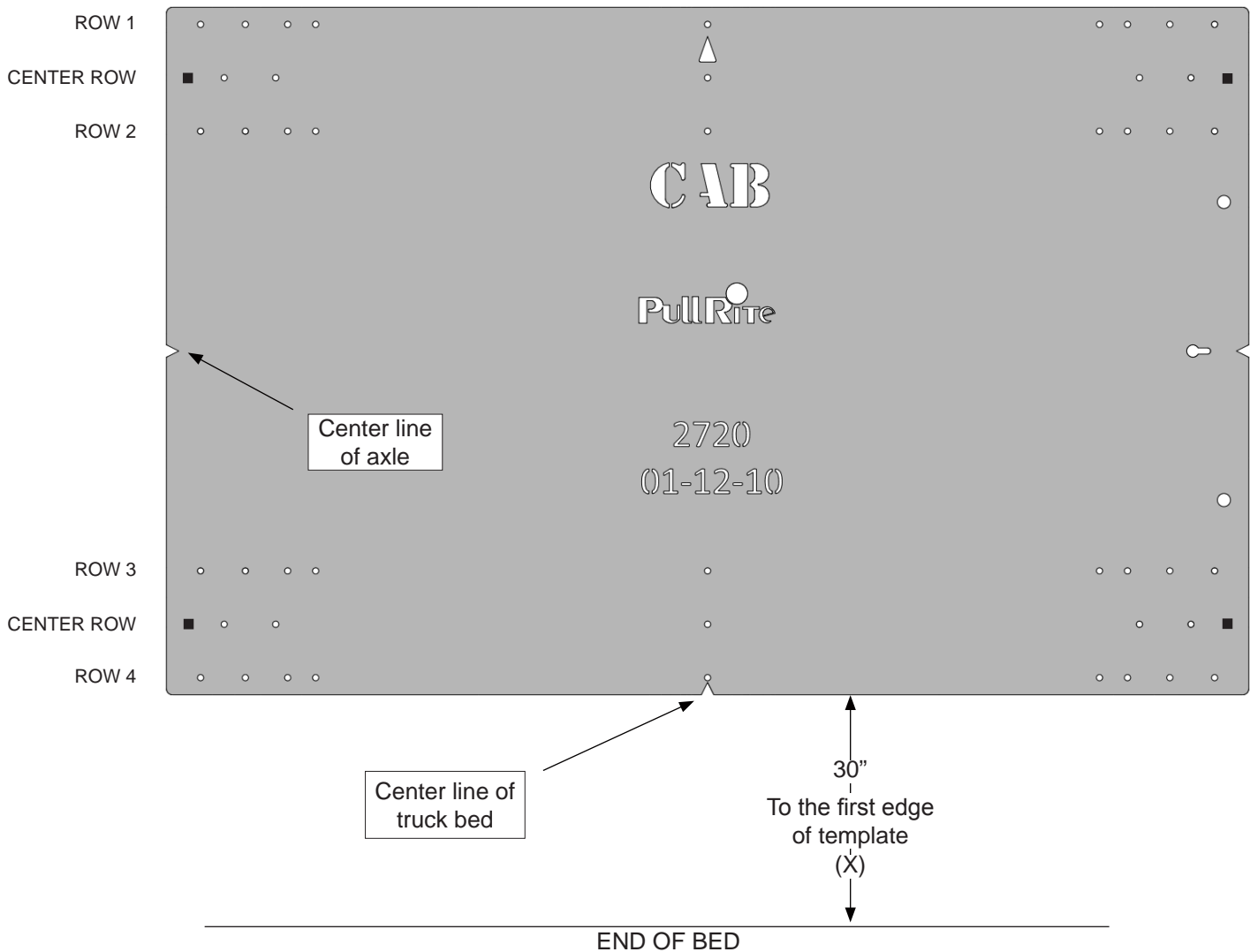


TRUCK BED DIMENSION TABLE				
LAYOUT METHOD			TEMPLATE METHOD	
"A"	"B"	"C"	"X"	Template part#
32-27/32"	22"	20-7/8"	30"	27200000

## 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 4 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 center of each mounting bolt hole.

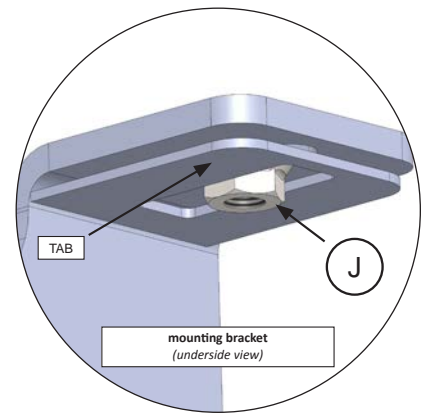
The basic steps in this section are as follows:

- 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

### Detailed Installation Instructions

#### MOUNTING BRACKET TABS

1. 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 (*see right*). The purpose of this tab is to assist you in holding the Flange Nut {J} 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."



#### MOUNTING BRACKET INSTALLATION

1. Take an Anti-rotation Bolt {K} and Flat Washer {L} and thread them onto a Bolt Leader {N} (*bottom right*).
2. Locate the large extruded hole on the truck's frame, just forward of the rear axle. The locator hole is just rearward of that (*see illustration on next page*).
3. Position the Driver Side Front Mounting Bracket {B} against the truck frame and flush to the underside of the bed, and align the second hole in the bracket with the locator hole on the frame and clamp into place.
4. Take the threaded Anti-rotation Bolt and Bolt Leader and put a slight "U" bend in leader so you can fish the end of the Bolt Leader out through the large extruded hole, locator hole and aligned bracket hole.
5. With the Bolt and Washer assembly pulled through the hole in the bracket, carefully un-thread the leader from the bolt and hold in place with your fingers or pliers.
6. Carefully thread a 1/2" Flange Nut {M} onto the Anti-rotation bolt. Hand tighten only.





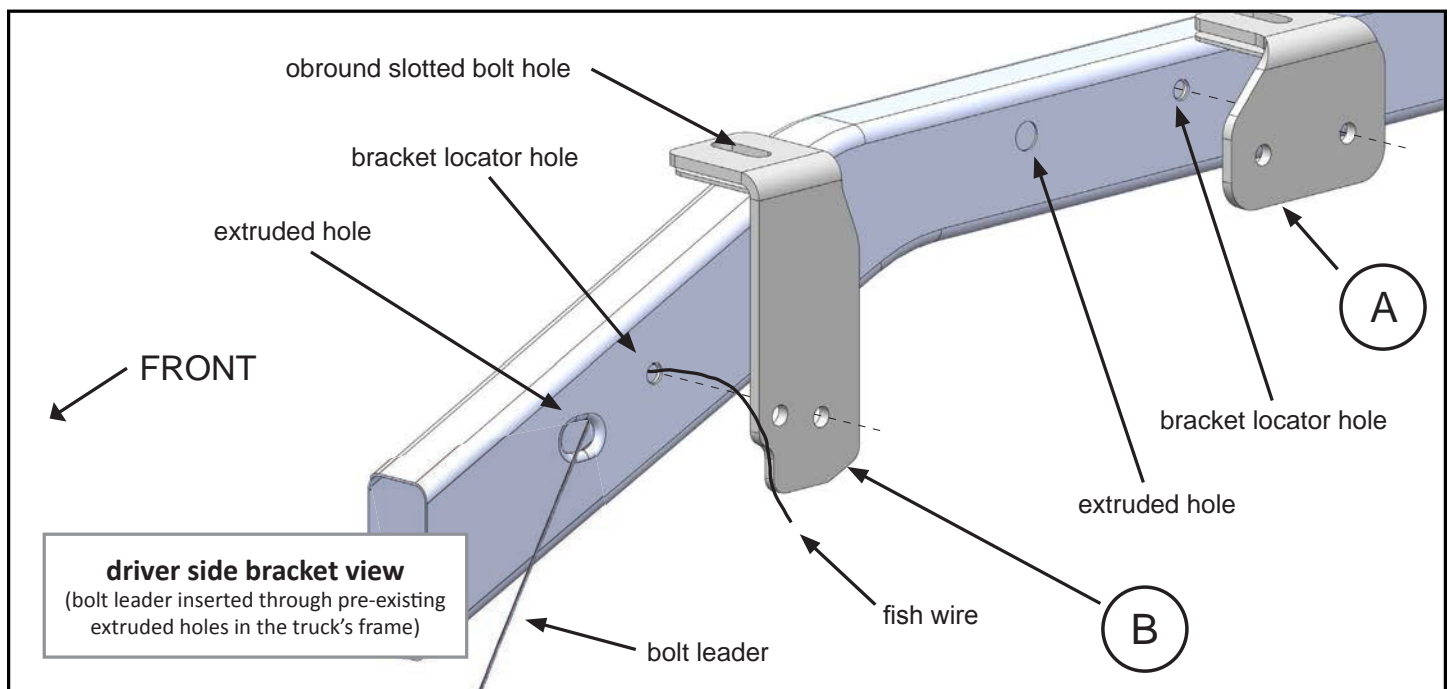
# INSTALLATION

**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.

- Repeat steps 1-6 for the Driver Side Rear Mounting Bracket {A}.

**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 the rear driver side pilot hole is centered, you will use this hole as a point of reference for all remaining pilot hole adjustments. If you are using the Template Method, simply use the properly drilled hole as a pivot point to square the remaining holes to the frame. If you are using the Layout Method, you may accomplish the same thing by using a framing square and straight edge.

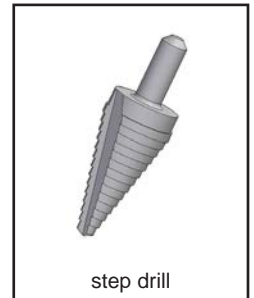
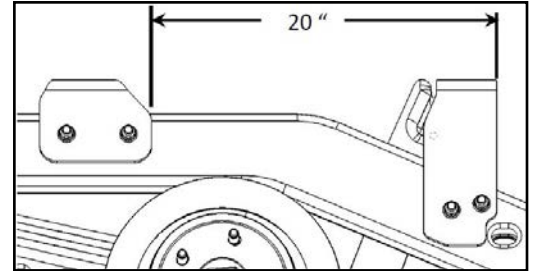
- Drill the first 1/16" pilot hole through the truck bed over the slotted bolt hole of {B} where you made the mark during "Marking Bed for Drilling." Keep the drill bit in the pilot hole to aid you in checking for centering front-to-back in the slotted bolt hole of the bracket. Proceed to the next step when proper centering has been achieved.
- Drill the remaining hole for both Driver Side Mounting Brackets {B} and {A}, using the holes in the bracket as a guide, through the frame of the truck, being careful to only drill through the outside wall of the truck frame.
- Once the Driver Side Mounting Brackets have been properly centered and installed, repeat the previous steps for the Passenger Side Front Mounting Bracket {C} only.



# INSTALLATION

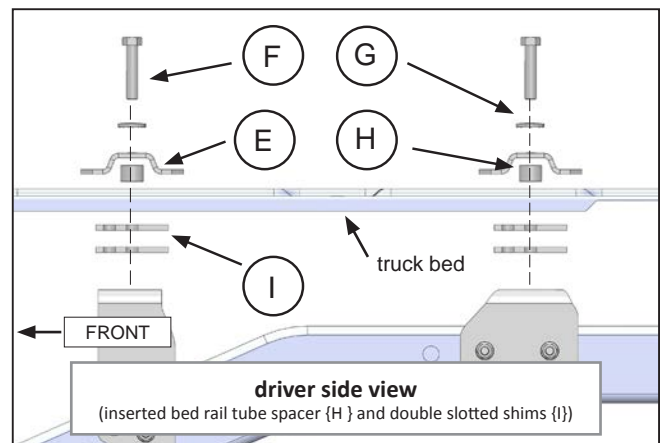
## PASSENGER SIDE REAR MOUNTING BRACKET INSTALLATION

1. Note that the Passenger Side Rear Bracket {D} does *not* have a locator hole in the frame, so to proceed, place your hitch with the installed Industry Standard Rails {E}, in the bed of the truck and centered over the three holes you made for the other three Mounting Brackets. Once you are centered and square, you can drill a pilot hole for Bracket {D} as in Step 8 under section, "Mounting Bracket Installation." Leave the drill and bit in place to help check for centering below the bed.
2. Position the Passenger Side Rear Mounting Bracket {D} against the frame and flush to the underside of the bed, with the drill bit inserted into the obround hole in the top of the Bracket. Check for centering and clamp into place. The bracket should be 20" rearward of the forward face of the Passenger Side Front Mounting Bracket {C} (right).
3. Once properly centered, using the holes in the Mounting Bracket as a guide, drill the two holes, through the frame of the truck, being careful to only drill through the outside wall of the truck frame.
4. Take an Anti-rotation Bolt {K} and Flat Washer {L} and thread them onto a Bolt Leader {N}.
5. Using a large extruded hole on the truck's outer frame, take the threaded Anti-rotation Bolt and Bolt Leader and fish the end of the Bolt Leader out through both holes of the Mounting Bracket {D}.
6. With the Bolt and Washer assembly pulled through the hole in the bracket, carefully un-thread the leader from the bolt and hold in place with your fingers or pliers of some kind.
7. Thread a 1/2" Flange Nut {M} onto the Anti-rotation bolt. Hand tighten only.
8. Remove the drill from the pilot hole and move the hitch and rail assembly out of your way.
9. Drill out all pilot holes in the bed with a step drill to a 3/4" diameter (a step drill is a cone shaped bit that has a variety of gradually larger diameter sizes the deeper the drill is used – see right), being careful not to drill into the top of the Mounting Brackets below.
10. Remove all drill shavings from the bed and treat the holes with a suitable rust inhibitor.



## PART 2 — SHIMMING THE BED

1. Place the hitch and rail assembly back into position in the bed.
2. To prevent "crushing" of the corrugated truck bed, we provide Double Slotted Bed Shims {I} and Bed Rails Spacer Tubes {H} to be installed above and/or below the truck bed where necessary. We have provided you with the most accurate information and have recommended the best placement of these shims for this specific mounting kit, but not all truck beds are installed exactly the same when manufactured, so it is necessary for you to determine where to place the shims, and their orientation, relative to the bolt locations (see "Layout Method").
3. If you find that a bolt hole location is located over a bed channel, you will need to use a slotted bed shim to fill the space so it is even with the top of the bed. Conversely, do the same if the channel is located on the underside of the bed if necessary.
4. In the next few steps of the installation, you will be securing the rails down into place. Refer to the illustration below, so you can shim below the bed if necessary.



# INSTALLATION

## PART 3 — INSTALLING THE RAILS AND FINAL INSTALLATION PROCEDURES

1. Install a 5/8" Base Rail Bolt {F} through the Conical Washer {G}, Base Rail {E} and required shims {H} and {I}, in position over each Mounting Bracket, threading each bolt into the tab-secured Flange Nut {J} in the Mounting Bracket below. Finger tighten only.
2. Make certain the hitch comes on and off without binding prior to completing final torques.
3. Tighten all bolts, including the base rail bolts, according to the Torque Table below.

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.



*MANUFACTURED BY:*  
PULLIAM ENTERPRISES, INC.  
13790 East Jefferson Blvd.  
Mishawaka, IN 46545  
(574) 259-1520 • (800) 443-2307  
info@pullrite.com • www.pullrite.com