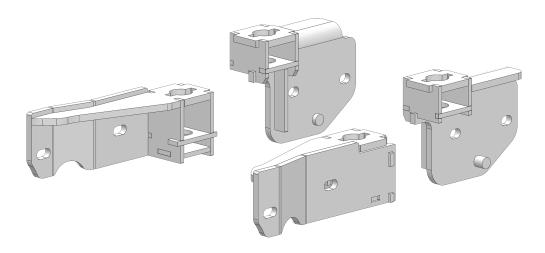


# **DODGE RAM 2500**

# 20K Industry Standard SuperRail Custom Mounting Kit #2336



## 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.

# **Installation Instructions**

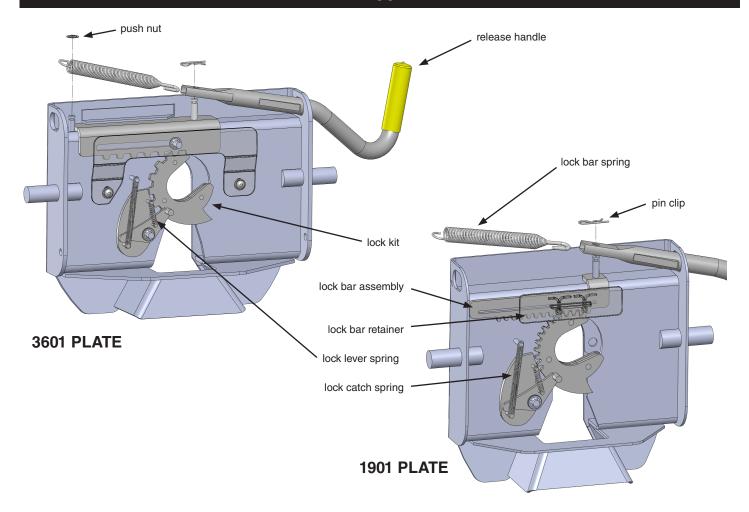
# **SPECIFICATIONS**

- Fits 2014-2023 Ram 2500
- · Hitch is located center of the rear axle
- Custom Mounting Bracket Kit (Bracket & Hardware) #2337
  - U.S. Pat. No. 6,065,766

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# **PLATE ASSEMBLY**

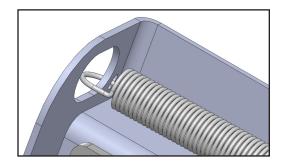


- 1. Remove the Fifth Wheel Plate from the Rocker Arm and place it upside down on a smooth, clean surface.
- 2. Insert the Release Handle into the obround hole of the plate as seen above.
- 3. The Lock Bar Spring must be placed inside the handle prior to placing the handle down over the pin of the Lock 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:

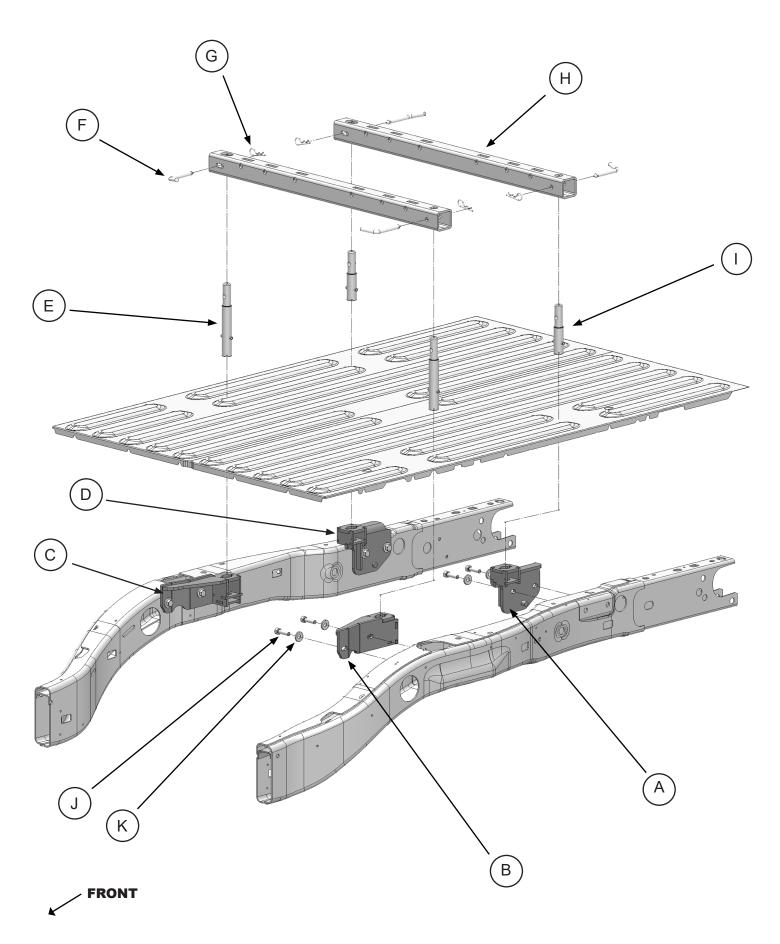
The 1901 plate for the #1900 Super 5<sup>th</sup> does not use a push nut to attach the end of the spring, but rather a slot in the side of the fifth wheel plate located above the obround hole. See illustration to the right.

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.

# MOUNTING KIT EXPLODED VIEW



# MOUNTING KIT PARTS LIST

# #2336 DODGE RAM ISR SUPERRAIL CUSTOM MOUNTING KIT

item description		part no.	qty	material
MOUNTING BRACKET KIT 2337 1		(See kit contents listed below)		
Н	BASE RAILS	23230111	2	2014 DODGE RAM 2500 SUPERRAIL RAILS

## #2337 — MOUNTING BRACKET KIT

item	description	part no.	qty.	material
Α	DRIVER SIDE REAR MOUNTING BRACKET	233703	1	
В	DRIVER SIDE FRONT MOUNTING BRACKET	233701	1	
C PASSENGERSIDEFRONTMOUNTINGBRACKET		233702	1	
D	PASSENGERSIDEREARMOUNTINGBRACKET	233704	1	
	MOUNTING BRACKET HARDWARE KIT	233705	1	(See kit contents listed below)

## #233705 — MOUNTING BRACKET HARDWARE KIT

item	description	part no.	qty.	material
E MOUNTING POST (LONG)		232204	2	
F	F BASE RAIL RELEASE PIN 08060001 4			
G	HITCH PIN CLIP	98410143	4	
I	MOUNTING POST (SHORT)	232201	2	
J	MOUNTING BRACKET BOLT	98010111	8	M12 – 1.5 X 45mm CLASS 10.9 HEX HEAD TAP BOLT
K	CONICAL SERRATED WASHER	98200172	8	

# LAYOUT TEMPLATE

description	part no.	qty.	material
LAYOUT BED TEMPLATE	23360000	1	ITEM SOLD SEPARATELY

# TRUCK PREPARATION

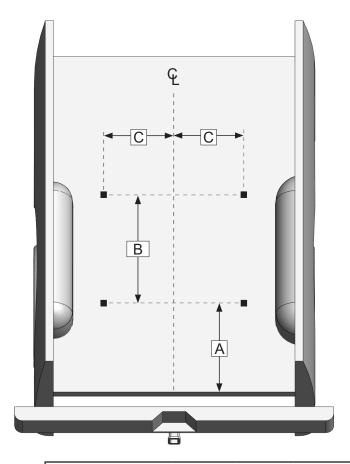
- 1. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck to install the mounting brackets on the truck frame.
- 2. You may wish to remove the wheels to give yourself greater working room.
- 3. Carefully remove the plastic inner wheel well guards on both sides of the vehicle (not applicable to some models).
- 4. Removal of the spare tire may be required on some models. 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 access the front hole location.

# MARKING THE TRUCK BED FOR DRILLING

# LAYOUT METHOD

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

- 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 base rail. Starting at this intersection, measure the distance of "C" in both directions to find the remaining bolt hole locations.
- Continue working toward the cab, marking the distance "B" as the distance between both center rows of the base rails.

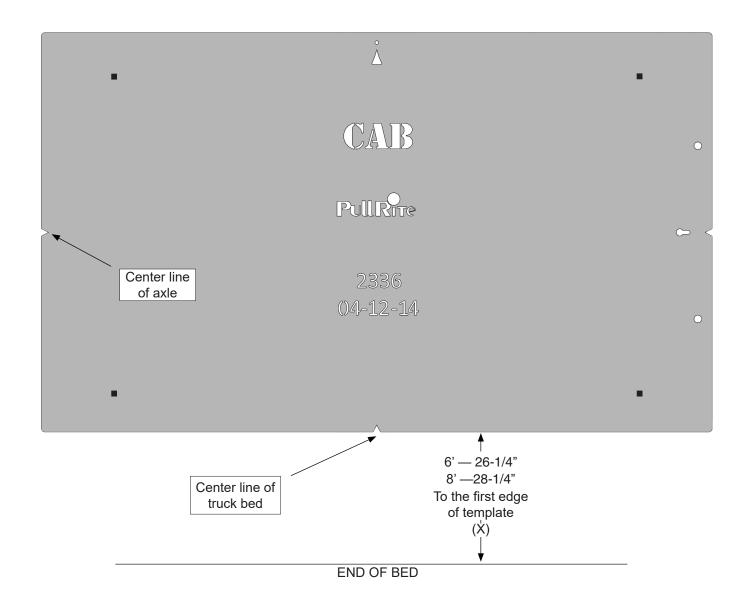


	TRUCK BED DIMENSION TABLE				
	LAYOUT METHOD			TEMP	LATE METHOD
BED LENGTH	"A"	"B"	"C"	"X"	Template part#
6 ft.	28-15/16"	22"	18-1/4"	26-1/4"	23360000
8 ft.	30-15/16"	22"	18-1/4"	28-1/4"	23360000

#### **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 prepunched 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.



# 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**

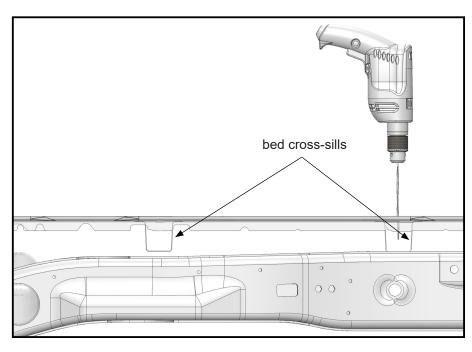
- 1. Use transparent tape to cover the mounting post hole on the top of each mounting bracket (when the pilot hole is drilled through the bed, the tape will be pierced by the small drill; it should be positioned in the center of the mounting post hole).
- 2. Position the Driver Side Mounting Bracket on the frame and clamp or fasten in place to determine if your bed layout marks are square to the frame, making sure the bracket is tight against the frame (some mounting brackets may have a slight warp due to the metal characteristics during the welding process).

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 modules.

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 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. 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.

- Drill the first 1/8" pilot hole through the truck bed over the forward row where you made the mark during the "Marking Bed for Drilling."
- 4. Keep the drill bit in the pilot hole and check that the drilled hole is centered in the cross-sill of the truck frame. If you are using a hand drill, we recommend using a drill guide jig or a block to assure the drill bit is perpendicular to the bed.
- 5. Repeat Steps 3 and 4 for the remaining mounting post hole pilot holes.



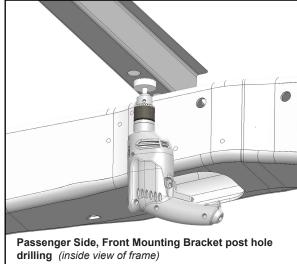
# PART 2 — FRONT MOUNTING BRACKETS INSTALLATION

- Locate the pre-existing holes found on the front driver side (nearest cab), inside truck frame between the bed cross-sill and frame crossmember.
- 2. Lift bracket up into position and center the post holder opening with the cross-sill and pilot hole.
- 3. Install the Mounting Bracket Bolt {J} and Conical Washer {K} into the slot in the Driver's Side Mounting Bracket near the center of the bracket, and install into the threaded hole on the truck frame. Tighten loosely.
- 4. Repeat Step 3 for the forward-most slotted hole of the Mounting Bracket.
- Check alignment of the drilled hole and the post holder location. If the pilot hole is not centered in the cross-sill and bracket then the pilot hole needs to be relocated. (To check bracket, keep the drill bit in the pilot hole and check for centering (front-to-back and left-to-right) in the Mounting Post Receiver.

NOTE:

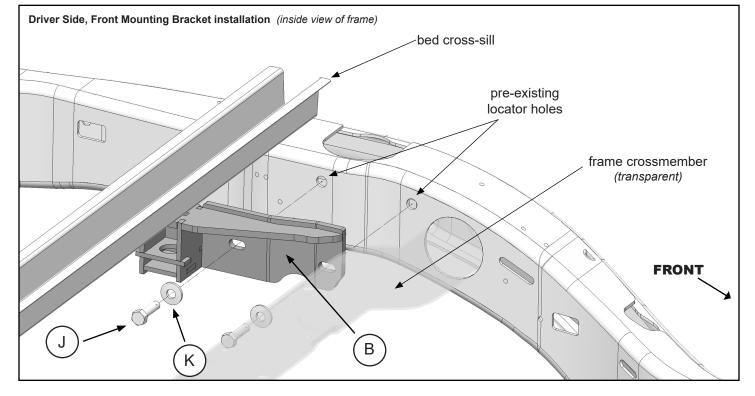
If you need to relocate the pilot hole, you must relocate the other holes that were marked during the "MARKING THE TRUCK BED FOR DRILLING" too, if drill bit is not centered. (At this time if the bracket was taped you can remove bracket to see where the drill bit pierced the tape on the side bracket while drilling the bed holes.)

- 6. Once proper alignment has been checked and repositioned (if needed), remove the Mounting Bracket from the frame.
- 7. Using a hole saw or step drill, increase the truck bed pilot hole to a minimum of 1-7/8" diameter; **both the top of bed and cross-sill need to be increased** (cross-sill drilling shown right).
- 8. Reinstall the Driver Side Front Mounting Bracket. Hand tighten only.
- 9. Repeat the above steps for the Front Passenger Side Mounting Bracket.



drilling (inside view of frame)

ket.

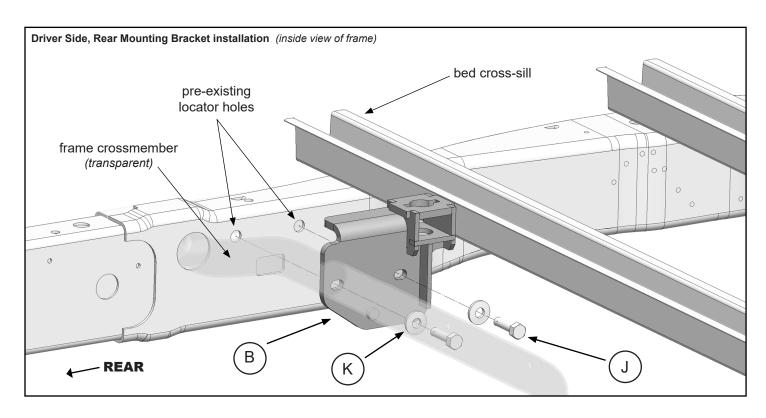


## PART 3 — REAR MOUNTING BRACKETS INSTALLATION

- Locate the pre-existing holes found on the rear driver side, inside truck frame between the rear bed cross-sill and rear frame crossmember.
- 2. Lift bracket up into position and center the post holder opening with the cross-sill and pilot hole.
- 3. Install the Mounting Bracket Bolt {J} and Conical Washer {K} into the slot in the Driver's Side Mounting Bracket near the center of the bracket, and install into the threaded hole on the truck frame. Tighten loosely.
- 4. Repeat Step 3 for the rearward-most slotted hole of the Mounting Bracket.
- 5. Check alignment of the drilled hole and the post holder location. If the pilot hole is not centered in the cross-sill and bracket then the pilot hole needs to be relocated. (To check bracket, keep the drill bit in the pilot hole and check for centering (front-to-back and left-to-right) in the Mounting Post Receiver. It is important to verify that the distance between the front post and rear post are 22" on center.

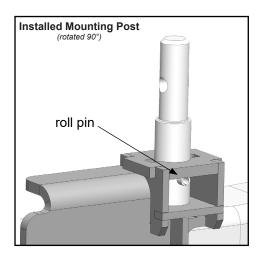
NOTE: If you need to relocate the pilot hole, you must relocate the other holes that were marked during the "MARKING THE TRUCK BED FOR DRILLING" too, if drill bit is not centered. (At this time if the bracket was taped you can remove bracket to see where the drill bit pierced the tape on the side bracket while drilling the bed holes.)

- 6. Once proper alignment has been checked and repositioned (if needed), remove the Mounting Bracket from the frame.
- 7. Using a hole saw or step drill, increase the truck bed pilot hole to a minimum of 1-7/8" diameter.
- 8. Reinstall the Driver Side Rear Mounting Bracket. Hand tighten only.
- 9. Repeat the above steps for the Rear Passenger Side Mounting Bracket.



# PART 4 — MOUNTING POST INSTALLATION

- 1. Install mounting posts into their respective positions, being certain to install the *longer* Mounting Posts {E} into the Front Mounting Brackets and the *shorter* Mounting Posts {I} in the Rear Mounting Brackets.
- 2. Align the roll pin with the notches in the Mounting Post Holder.
- 3. Rotate the post 90° to lock into place (right).



#### PART 5 — FINAL INSTALLATION PROCEDURES

- 1. Place the Base Rails over the mounting posts.
- 2. Secure each base rail in place with the supplied Base Rail Release Pins {F} and Hitch Pin Clips {G} (the pins must pass through both the Base Rail and Mounting Post and captured with the Hitch Pin Clips.
- 3. Remove the Hitch Pins and Pin Clips that are pre-installed on your hitch, and set the hitch on the Base Rails by centering the tabs on the bottom of the hitch into the slots on the Base Rails
- 4. Install the Hitch Pins through the side of the base rails to secure the hitch assembly to the base rails using the supplied Pin Clips.
- 5. Make certain the hitch comes on and off without binding prior to completing final torques.
- 6. Tighten all bolts, including the base rail bolts according to the Torque Table specs 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.

M12 bolt — 94 ft. lbs.

(tolerance ±3 ft. lbs.)



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