

# **DODGE**

## 12K Custom SuperRail Mounting Kit

#3125



Gross Trailer Weight (Maximum)......12,000 lbs. Vertical Load Weight (Max. Pin Weight) ......3,000 lbs.

# **Installation Instructions**

## **SPECIFICATIONS**

Fits 2019 to Present Dodge 1500 ton trucks w/ the new body style
Hitch is located center of the axle.

U.S. Pat. Pending

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PLEASE VISIT OUR YOUTUBE CHANNEL FOR PRODUCT AND INSTRUCTIONAL VIDEOS.



https://www.youtube.com/user/PullRiteVideo

## **IMPORTANT**

#### DO NOT OPERATE HITCH UNTIL YOU READ THIS SECTION

- 1. The SuperGlide hitch was designed to allow the Turntable Cam Arm Assembly to "glide" along two metal tubes, called the Way Tubes. Since it's release in 1998, we have made several advancements in the design, strength, and durability of these components. The Lubrication section of your Owners Manual spans several product releases and design changes. It is imperative that you read each section and determine which SuperGlide hitch you purchased, and how to care for it. There have been three major lubrication changes to the SuperGlide hitch:
  - Prior to April 2008, Way Tubes were assembled with either a conventional, quality grade grease or none at all
  - In April 2008, we started coating the Way Tubes with a graphite-based spray lubricant called SlipPlate™
  - November 2009 brings a new innovation from PullRite Towing Systems with the use of plastics. The Turntable Cam Arm Assembly is now equipped with Plastic Wear Plates; see Owners Manual for details (not available for #3600 models)

Depending on when your hitch was manufactured, the Way Tubes of your new SuperGlide hitch will meet one of the above criteria. Each application listed requires some level of maintenance, so it is important that you read the following instructions carefully for the correct lubrication instructions.

Failure to properly lubricate the Way Tubes, as directed in this section, will eventually cause galling between the metals of the Way Tubes and Cam Arm Assembly, which will result in hitch failure.

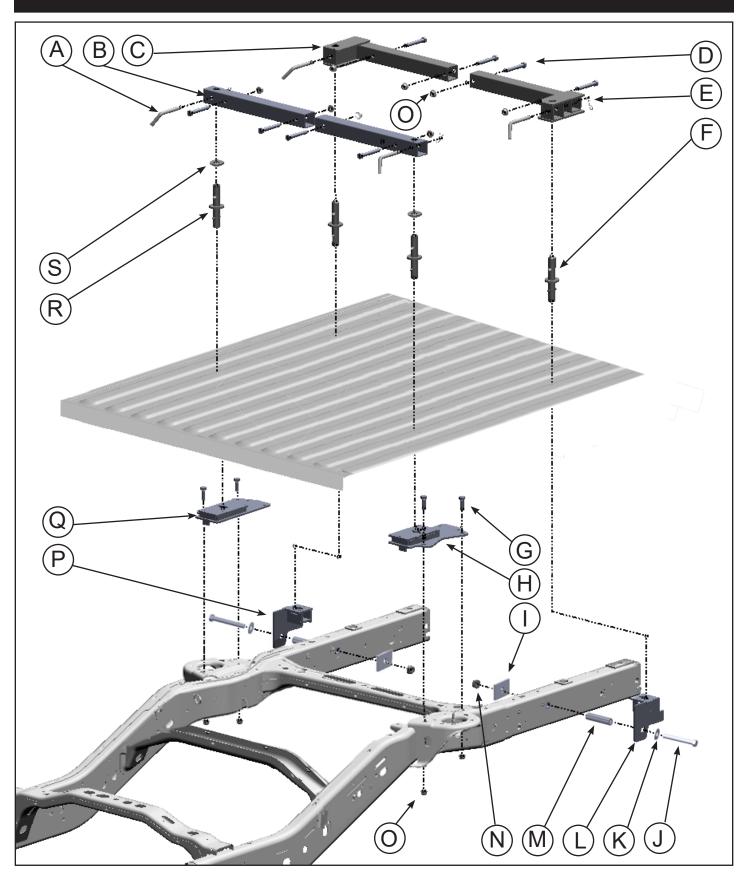
Destruction of various hitch parts is also likely, as well as truck and/or trailer damage, and will not be covered under the Manufacturer's Warranty.

- 2. THE TRAILER'S KING PIN BOX MUST BE EQUIPPED WITH A CAPTURE PLATE (UNIVERSAL OR QUICK CONNECT) TO ALLOW THE HITCH TO FUNCTION (MUST BE PURCHASED SEPARATELY). NOTE: IF YOU HAVE PURCHASED A QUICK CONNECT CAPTURE PLATE AND DID NOT RECEIVE INSTRUCTIONS, THEY ARE AVAILABLE ONLINE, OR YOU CAN CONTACT PULLRITE CUSTOMER SERVICE AT (800) 443-2307.
- 3. Failure to modify the length of the brake away cable that activates the emergency braking of your trailer, may cause the cable to catch on protruding parts of the hitch. Resulting damage will not be covered by the manufacturers warranty.
- 4. There should be a minimum of 6" between the truck bed rails and the under side of the trailer for side tilt clearance. It is the customers responsibility to adjust the trailer king pin box for the appropriate amount of clearance.
  - NOTE: Some truck models are being manufactured with higher bed sides, making it necessary to adjust the height of your trailer's king pin box. If you don't have enough height adjustment available, PullRite produces a 3" Lift Kit that attaches to the rails of your #3100 (ask for part #3108) or #4100, #3300 and #4400 (ask for part #4408; rated only for 18K when used with model #4400) SuperGlide models.
- 5. Some truck beds have contoured bed sides, making the inside bed measurement narrower. Make certain the trailer's king pin box does not contact the inside edge of the bed.
- 6. Trucks with bed liners may need a tall Mounting Post. See "NOTE" under "Drilling the Bed" for further details.
- 7. It is the installers and customers responsibility to ensure there is proper clearance between the truck and trailer. There should be a minimum of 2" of clearance as the trailer passes the cab. Call PullRite technical support with trailer width, make and year of truck and distance the king pin is from leading edge of the trailer (See "Caution" section, in the SuperGlide Owners Manual, for measuring procedure) at (800) 443-2307.
- 8. Read these instructions completely and follow them accurately. Should you have any questions, please call Customer Service at (800) 443-2307 prior to installation for assistance. If you did not receive your Owners Manual, visit us online at www.pullrite.com or call the number above.
- 9. The SuperGlide was designed for short bed pickup trucks. The hitch may function in a longer bed truck, but no mounting brackets exist to make the transfer. Some #4100 and #4400 mounting kits may transfer with modifi cation.

#3100 SuperGlide Applications

The #3100 SuperGlide was designed for specifi c short bed pickup trucks. The hitch may function in a longer bed truck, but no mounting brackets exist to easily make the transfer.

## **MOUNTING HARDWARE PARTS IDENTIFICATION**



# **PARTS LIST**

#3125 SUPER RAIL MOUNTING KIT						
ITEM	DESCRIPTON	PART NO.	QTY.			
А	BASE RAIL RELEASE PIN	08060001	4			
В	FRONT BASE RAIL	31200601	2			
С	REAR BASE RAIL TUBE	31200805 2				
D	1/2"-13 X 4" HEX BOLT	98010191 8				
Е	#3 PIN CLIP	98410127 4				
F	REAR MOUNTING POST	REAR MOUNTING POST 33070101				
G	1/2"-13 X 1 1/2" HEX BOLT 98010167		4			
Н	FRONT *DS MOUNTING BRACKET	312501	1			
I	REAR BACKUP PLATES	08160307	2			
J	5/8"-11 X 4 HEX BOLT	98010228	2			
К	*5/8 CONICAL TOOTH WASHER	98200171	2			
L	REAR *DS MOUNTING BRACKET	312504 1				
М	REAR FRAME SPACER	33180701	2			
N	5/8"-11 SERRATED FLANGE NUT	98150200	2			
0	1/2"-13 SERRATED FLANGE NUT	98150201	12			
Р	REAR **PS MOUNTING BRACKET	312503	1			
Q	FRONT **PS MOUNTING BRACKET	312502	1			
R	FRONT (TITAN) MOUNTING POST	311507	2			
S	MOUNTING POST FLANGE WASHER	33070102	2			
*DS = driver side **PS = passenger side						

\*When installing conical washers, with or without teeth, be sure that the bottom (tooth or concave side) is being in stalled against the bracket or base rail, NOT the bolt head.



## TRUCK PREPARATION

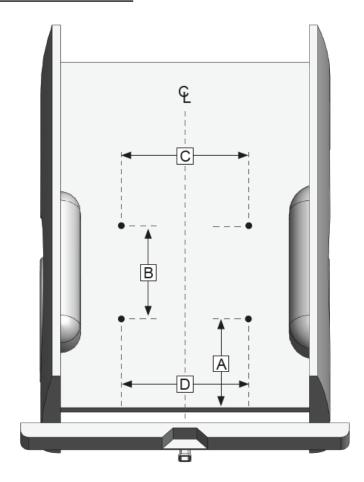
- 1. Check part quantities using the Parts List.
- 2. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck in order to make it easier to drill for installing the mounting brackets on the truck frame.
- 3. You may wish to remove the wheels to give yourself greater working room.
- 4. If you have purchased a template, proceed to the "Template Method" below; otherwise, begin with the "Layout Method."

## MARKING THE BED FOR DRILLING

### LAYOUT METHOD

If you purchased an installation template, please proceed "Template Method." Templates are sold separately.

- Referencing "Truck Bed Dimension Table" below, measure and mark from the back of the bed forward, the values for "A" and "B".
   Do this at any point on both sides of the bed.
- Draw a line across the bed from mark to mark.
- 3. Find the centerline of the bed.
- 4. Draw a line down the middle of the bed from front-to-rear.
- 5. Center the measurement of "C" across the centerline at the front-most line you made in step 2 and mark the measurement on each side (parallel to the centerline).
- Center the measurement of "D" for the rear most line made in step 2, and again mark the measurement on each side (parallel to the centerline). This will locate the 4 drill holes.

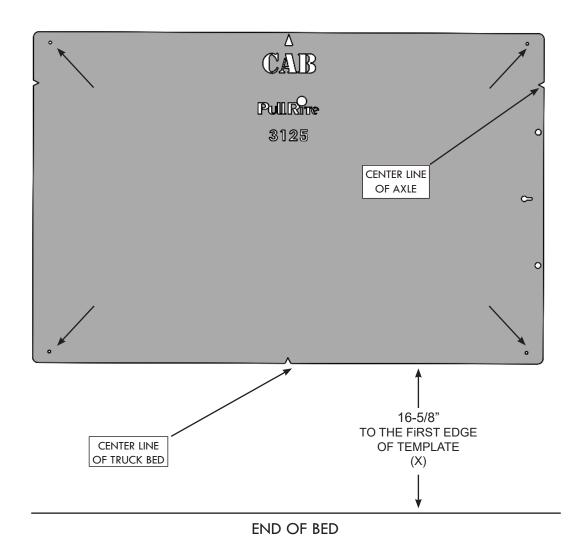


TRUCK BED DIMENSION TABLE								
LAYOUT METHOD			TEMPLATE METHOD					
"A"	"B"	"C"	"D"	"X"	TEMPLATE PART#			
17 %"	25 1/8"	35-¾"	39-1/4"	16-5/8"	31250000			

## **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 as indicated below, making sure the template does not move (see Installation Tip).

INSTALLATION TIP: 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.



#### **Mounting Bracket Installation**

#### Part 1: Bracket Placement & Bed Hole Locations

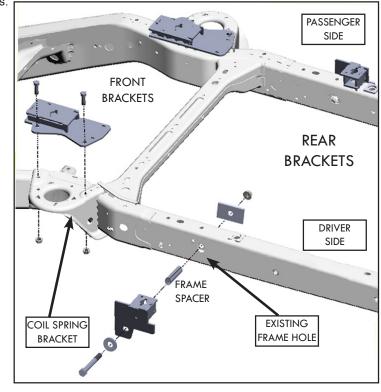
Since most truck beds are not installed square to the frame or are the same distance from the back of the cab, the installer will need to make sure the bed holes line up properly with the center of each mounting bracket hole.

The basic steps in this section are as follows:

- · Layout the bed holes.
- · Drill the first pilot hole in the bed.
- · Check centering using the tape method.
- 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 1" mounting post hole).
- 2. Insert the Frame Spacer into the existing hole on the frame. Place the Rear Driver Side Mounting Bracket against the side of the truck frame, matching up hole with existing frame hole and with post hole cutout angled on top of the frame (See illustration below).
- 3. Fasten the mounting bracket flush to the sides of the frame using the 5/8" X 4" Bracket Bolt, Conical Tooth Washers (teeth toward frame) Rear Backing Plate and 5/8" Serrated Nuts. Do not over tighten. Repeat all for passenger side.
- 4. Locate the coil spring brackets and place Front Mounting Brackets on each side and tighten down with (2) 1/2-13" X 1 1/2" bolts & 1/2" serrated nuts.



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- 4. Drill the first 1/16" pilot hole through the truck bed over the rear hole on the driver side where you made the mark during the "Marking Bed for Drilling." The bit should come down through the 1" mounting post hole, piercing the transparent tape, aiding the centering of the bracket front-to-rear and side-to-side.
- 5. If the pilot hole is off center to the 1" mounting post hole, remember to adjust all the pilot hole locations accordingly.
  - 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 hole 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.
- 6. Repeat Steps 2-5 for the rear passenger side mounting bracket, checking carefully for proper centering.
- 7. Repeat Steps 3-5 for both front brackets, making sure both brackets sit flush on top of the frame.
  - *NOTE*: Final bracket placement is dependent on the fixed position of the rear brackets, due to the locator that is inserted into the frame. The front brackets can be moved forward and back to achieve the 27-7/8", "B" measurement.
- **WARNING**: Before proceeding to "Part 2, "Drilling the Bed...," you must verify that each pilot hole is centered over the 1" mounting post hole on each bracket before the 2" mounting post holes are drilled through the bed.

#### Part 2: Drilling the Bed & Bracket Installation

- 1. Remove the mounting brackets and use a 2" hole saw centered over the 1/16" pilot hole and cut the bed for the mounting posts.
- 2. De-bur inside the holes and use a paint stick to touch up the edges.

#### **Rear Bracket Installation**

- 1. Reinstall the rear mounting brackets to the frame by inserting the locator on the bracket to the existing slot in the frame.
- 2. Clamp the rear mounting brackets flush to the side of the frame using a "C" clamp.
- 3. Using the locator on the rear mounting brackets as a guide, fasten bracket with 1/2 bracket bolt and serrated nut.

NOTE: Use a hand wrench to tighten the flange nut onto the bolts. DO NOT use an impact wrench.

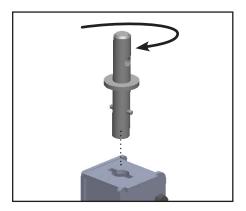
#### **Front Bracket Installation**

- 1. Reinstall the front mounting brackets to the frame.
- 2. Secure each bracket in place.

#### **Mounting Posts**

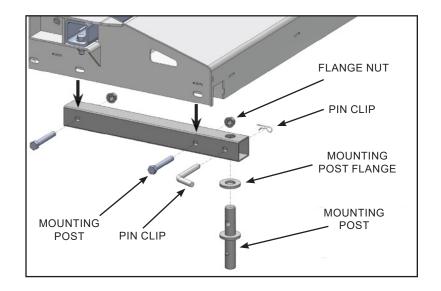
Install the mounting posts through the bed into the mounting bracket post holders. Rotate the posts a quarter turn (see the illustration at the right). Four posts are required for installation.

**NOTE:** Vehicles using plastic bed liners may require taller mounting posts (part# 330705) to seat properly into the post holders.



#### Part 3: Hitch Alignment

- Remove the SuperGlide hitch from the shipping carton.
- 2. Install base rails onto the base of the hitch (long base rails at the rear, short rails at the front... obround hole facing downward on all rails), using the supplied bolts (see illustration below).
- 3. Loosely tighten the base rail bolts to the base allowing lateral movement as you place the rail assembly over the mounting posts.
- Install the hitch pins and clips to secure the hitch assembly to the base rails. Use a drift pin to aid your hole alignment.
- 5. Place the hitch on the mounting posts and center on the baserails.



#### Part 4: Final Installation Procedures

- 1. Tighten mounting bracket bolts first, then base rail bolts.
- 2. Remove the hitch and base rail assembly and verify that the mounting posts can be inserted and turned freely without binding. You may need to loosen the bolts on the mounting brackets below if binding occurs. Adjust as needed and retighten the bolts.
- 3. Reinstall the mounting posts, the mounting post flanges on front post, base rails, and the SuperGlide hitch, until the assembly can be removed freely without binding.



## MANUFACTURED BY:

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