

# CHEVY/GMC SuperRail Mounting Kit #3521



# **Installation Instructions**

## **SPECIFICATIONS**

- Fits 2011-2015 Chevy/GMC 2500 & 3500 Hitch is located 3-3/4" ahead of the axle

## **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.

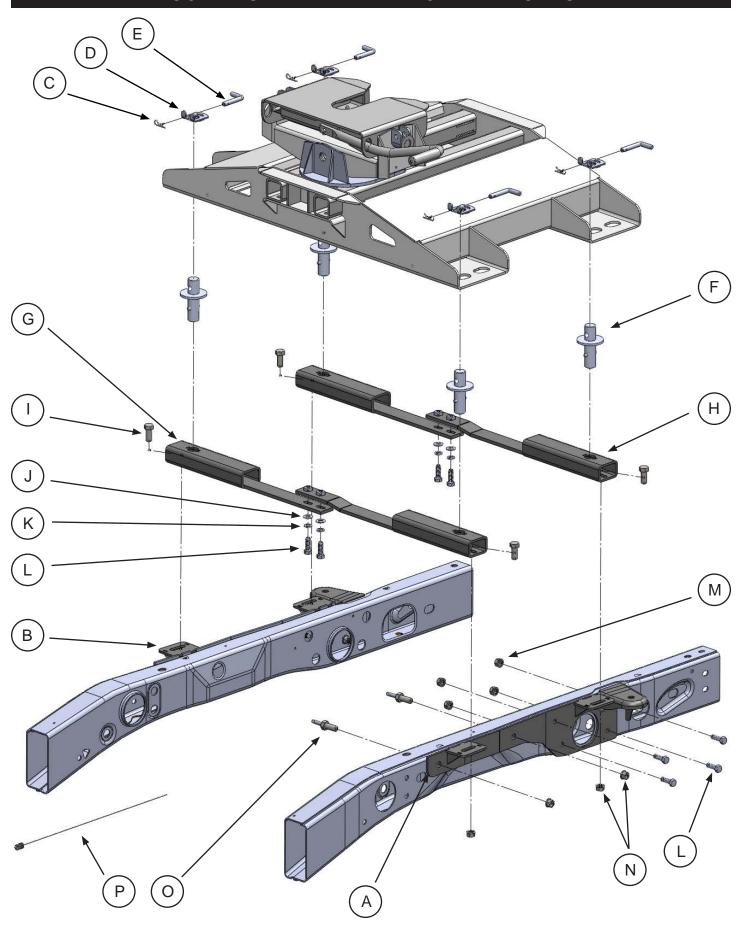
Destruction of various hitch parts is also likely, as well as truck and/or trailer damage, and will not be covered under the Manufacturer's Warranty.

- 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) 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.
- 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.
- 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 recieve 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 modification.

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# MOUNTING HARDWARE PARTS IDENTIFICATION



# PARTS LIST

#3521					
SUPER RAIL MOUNTING KIT					

	description	part no.	qty	material
Α	DRIVER SIDE BRACKET	352101	1	
В	PASSENGER SIDE BRACKET	352102	352102 1	
С	PIN CLIP	98410127	3410127 4 #3 PIN CLIP	
D	MOUNTING POST KEEPER	351001	351001 4	
Е	KEEPER HITCH PIN	35100003	4	1/2" ROUND
F	MOUNTING POSTS	351505	4	
G	POST HOLDER	351503	2	
Н	OFFSET POST HOLDER	351504	2	
I	5/8" BRACKET POST HOLDER BOLTS	98010231	4	5/8"-11 X 1-1/2" HHCS GRD 5
J	1/2" FLAT WASHER	98250145	4	
K	1/2" LOCK WASHER	98200142	4	
L	1/2" BOLTS	98010167	12	1/2"-13 X 1-1/2" HHCS GRD 5
М	1/2" FLANGE NUT	98150201	8	1/2"-13 SERRATED FLANGE NUT
N	5/8" FLANGE NUT	98150200	8	5/8"-11 SERRATED FLANGE NUT
0	ANTI-ROTATION BOLT	442704	4	5/8" BOLT W/ ARM
Р	5/8" BOLT LEADER	98340198	1	5/8"-11 BOLT LEADER

## LAYOUT TEMPLATE

description	part no.	qty.	material	
LAYOUT BED TEMPLATE	35000000	1	ITEM SOLD SEPARATELY	

## TRUCK PREPARATION

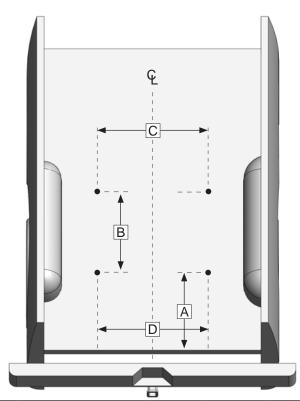
- 1. Check part quantities using the Parts List on page 5.
- 2. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck in order to make it easier to drill for installing the mounting brackets on the truck frame.
- 3. Remove the spare tire and set aside.
- 4. Slide *each* post holder into their respective positions (see below) over the truck frame and join with the provided 1/2" bolts {L}, flat washers {J} and lock washers {K} and finger tighten only (refer to the illustrations on page 9). After you have connected the Post Holders together, push them toward the axle to clear the way for drilling from the top of the bed.
  - Front Driver Side Offset Post Holder over the frame behind the gas tank
  - Front Passenger Side Post Holder between the bottom of the bed and heat shield
  - Rear Driver Side Offset Post Holder to the cab side of the rivet located near the back bed sill
  - Rear Passenger Side Post Holder to match driver side location
- 5. Remove top bolt of the shock absorber on the drivers side, compress the shock and move rearward behind the frame (see illustration above).



#### 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.
- 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.



shock absorber bracket

frame tube

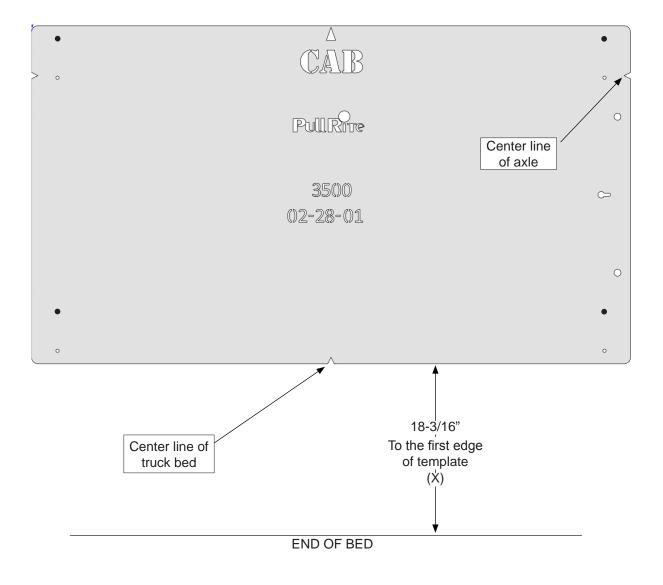
TRUCK BED DIMENSION TABLE					
LAYOUT METHOD			TEMPI	TEMPLATE METHOD	
"A"	"B"	"C"	"D"	"X"	Template part#
22-3/16"	21"	42"	42"	18-3/16"	35000000

#### **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 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"  $^{TM}$  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 post hole.

The basic steps in this section are as follows:

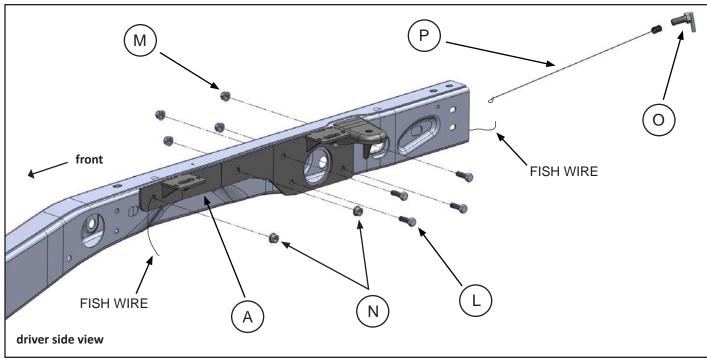
- Layout the bed holes
- Drill the first pilot hole in the bed
- Check centering
- Adjust the bed hole layout if necessary
- Drill the second pilot hole and check centering to ensure bed hole locations are square to the frame; adjust as needed
- Drill remaining pilot holes in the bed; check centering

#### **Detailed Installation Instructions**

- 1. Place the driver side mounting bracket against the frame and insert the four 1/2" bolts {L} to hold in place. Clamp the front of the bracket in place where the forward-most anti-rotation bolt {O} will be installed, making sure it is flush with the side of the frame.
- 2. The mounting brackets require Anti-rotation Bolts {O} to be "fished" through the frame. With the bracket clamped in place, thread a long fish wire through the forward 5/8" hole in the bracket and frame, threading the wire rearward to the end of the frame.
- Once the wire reaches the rear frame opening, bend the end of the provided Bolt Leader {P} to make an eyelet, and attach the fish wire to the leader.

INSTALLATION TIP: Prior to threading the anti-rotation bolt into the leader, thread the 5/8" Flange Nut {N} on and off the bolt to assure that the nut will fit easily once the bolt is in place.

- 4. Thread an anti-rotation bolt into the provided bolt leader and pull it through the frame toward the Front Mounting Bracket and insert it through the existing hole in the frame.
- Once the anti-rotation bolt is seated in place, fasten using a 5/8" flange nut.
- Install the remaining anti-rotation bolts in the same manner and repeat the above steps for the passenger side mounting bracket.



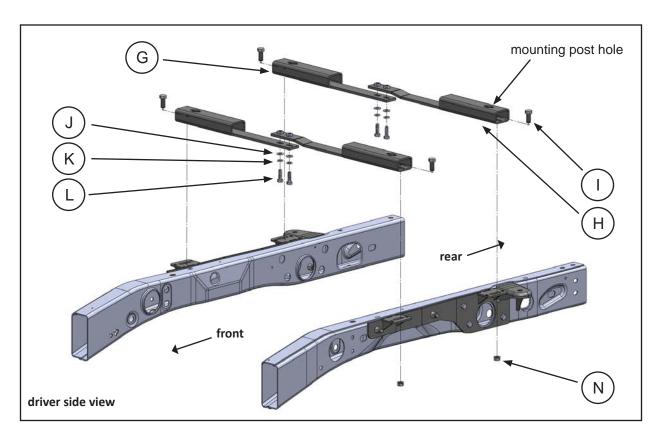
## **INSTALLATION**

NOTE: When running the "fish" wire through the passenger side frame be careful to avoid running the wire over the top of the muffler brackets. The muffler brackets are rods that run through the frame rail and are welded in place. If the "fish" wire is run over the top of these rods the anti-rotation bolts will not pass over them. Remove axle jounce bumpers (two wheel drive trucks only).

- 7. 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."
- 8. Push the *rear* Post Holders you joined together in the "Truck Preparation" section, rearward under the pilot hole you just drilled.
- Put the drill bit back through the pilot hole and position the Post Holder beneath, centered front-to-back. Don't worry about centering from side-to-side since the Post Holders can move in and out.
- 10. Repeat Steps 8-11 for the front Post Holders.

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 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.

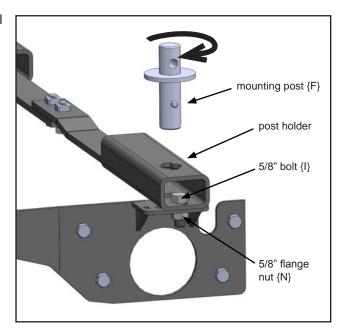
WARNING: Before proceeding to "Part 2, "Drilling the Bed...," you must verify that each pilot hole is centered over the 1-1/4" mounting post hole on each Post Holder before the 2-1/8" mounting post holes are drilled through the bed.



#### PART 2: DRILLING THE BED & BRACKET INSTALLATION

- 1. Slide the Post Holders toward the axle to clear the way for final drilling.
- 2. Use a 2-1/8" hole saw centered over the 1/16" pilot hole and cut the bed for the mounting posts.
- 3. De-bur inside the holes and use a paint stick to touch up the edges.
- 4. Position the Post Holders above the slotted hole on the Mounting Bracket flange.
- 5. Install the 5/8" bolt {I} through Post Holder and Mounting Bracket Flange, and secure with a 5/8" Flange Nut {N} (see illustration to the right).
- 6. Repeat Steps 4 & 5 for both Post Holders, passenger and driver side.
- 7. Install the mounting posts through the bed into the mounting bracket post holders. Rotate the posts a quarter turn. Four posts are required for installation.

NOTE: Vehicles using plastic bed liners may require taller mounting posts (part# 351509) to seat properly into the post holders.

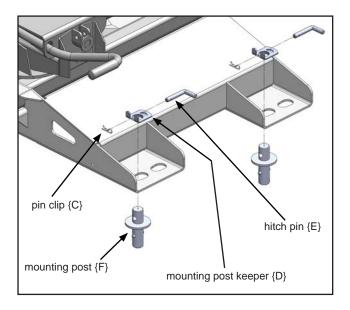


#### PART 3: HITCH ALIGNMENT

- 1. Remove the SuperGlide hitch from the shipping carton.
- Set the SuperGlide hitch on the mounting posts and install the mounting post keepers {D}, hitch pins {E} and pin clips {C}. You may need to slide the hitch base to the rear of the vehicle to seat the keepers in place.

#### PART 4: FINAL INSTALLATION PROCEDURES

1. Tighten all mounting bracket bolts, post holder bolts last, 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.



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