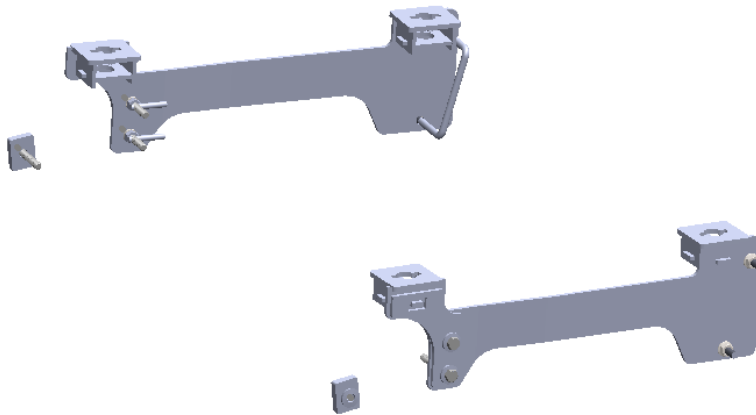




GM 2500-3500

24K Super Rail Custom Mounting Kit

#2338



Gross Trailer Weight (Maximum).....24,000 lbs.
Vertical Load Weight (Max. Pin Weight)6,000 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.

Installation Instructions

SPECIFICATIONS

- Fits 2020-23 GM 2500-3500 pickup with and without overload brackets.
- King pin is located three inches ahead of the axle.

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

PREPARATION



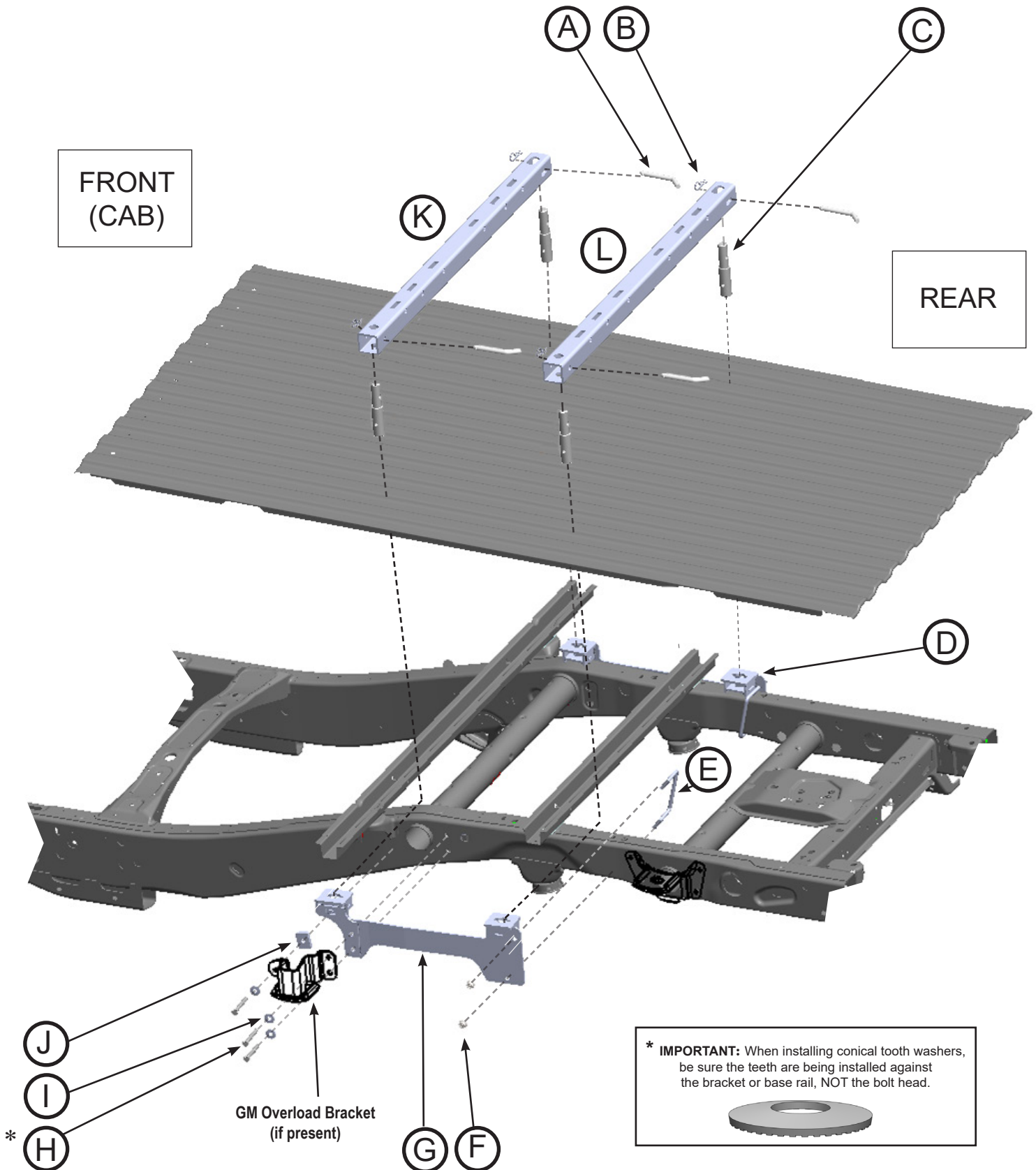
1. Remove the hitch from the shipping carton and check the part quantities using the Parts List on page 5.
2. Block vehicle wheels. Some vehicles may require you to raise the rear of the truck in order to make it easier to drill for installing the mounting brackets on the truck frame.
3. You may wish to remove the wheels to give yourself greater working room.
4. Read all instructions.

Note: Your tow package is only as strong as its weakest link, therefore If you have a 24K hitch in your truck on a 20K rail system, you can only safely tow a 20K trailer.

Clean Bed Technology

This PullRite mounting kit is designed to be used with PullRite Super Rails. A fully removable system that stores away when not towing to maximize truck bed use (Clean Bed Technology or CBT).

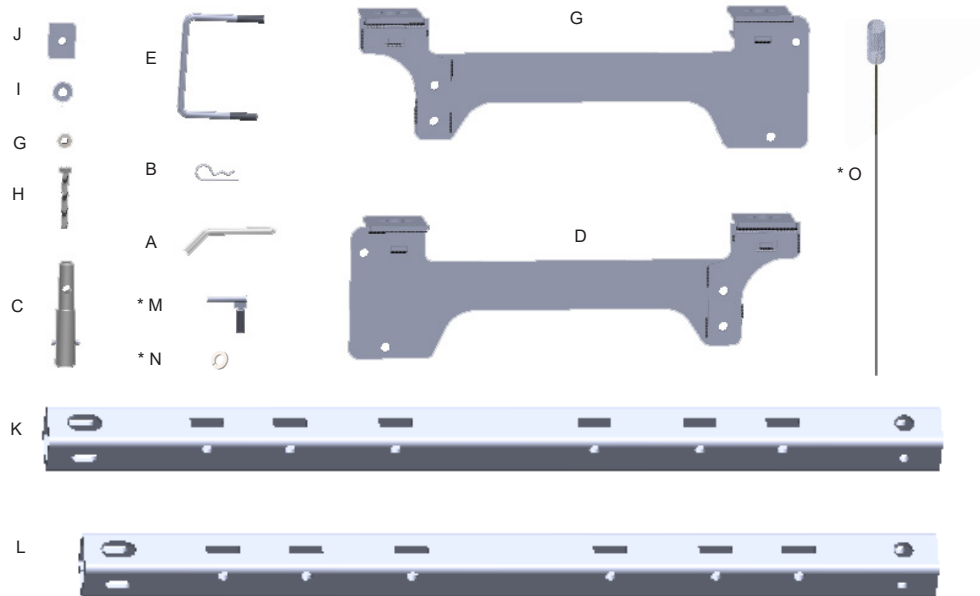
MOUNTING KIT EXPLODED VIEW



PARTS LIST

#2338 SUPER RAIL MOUNTING KIT

Item	Description	Part No.	Qty.	Material
A	BASE RAIL RELEASE PIN	08060001	4	45 DEGREE ANGLE PIN
B	PIN CLIP	98410143	4	# 9 PIN CLIP
C	MOUNTING POST	232201	4	MOUNTING POST
D	PASSENGER'S SIDE BRACKET	233902	1	
E	1/2" U-BOLT	98050181	2	1/2" X 5 3/8" X 4.41 U-Bolt
F	1/2"-13 SERRATED FLANGE NUT	98150201	8	1/2"-13 SERRATED FLANGE NUT ZINC
G	DRIVER'S SIDE BRACKET	233901	1	
H	M12 HEX BOLT	98010113	6	.M12 - 1.75 X 90MM
I	CONICAL SERRATED WASHER	98200172	6	.531 ID X 1.25 OD X .144 THK GR5 ZN
J	OVERLOAD SPACER	23390002	2	.53 ID X 2.13 L. X 1.63 W. X.38 THK
K	FRONT MOUNTING RAIL	23230102	1	
L	REAR MOUNTING RAIL	23230103	1	
*M	ANTI-ROTATION ARM BOLT	442504	4	MODIFIED 1/2"-13 X 1 1/2" HEX BOLT
*N	1/2" LOCK WASHER	98200142	4	1/2" SPLIT LOCK WASHER ZINC
*O	BOLT LEADER	98340197	1	



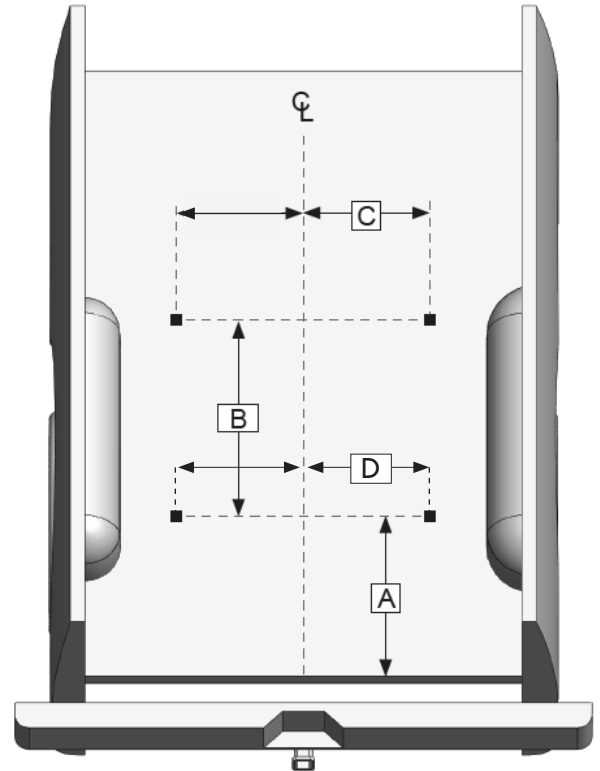
*These are for use only if truck is missing the GM overload bracket and corresponding threaded inserts welded into the frame.

MARKING THE BED FOR DRILLING

LAYOUT METHOD

If you purchased an installation template, please proceed "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" and "B". Do this at any point on both sides of the bed.
2. 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" and "D" across the center line at the front-most line you made in step 2 and mark the measurement on each side (parallel to the center line). This will locate the 4 drill holes.



TRUCK BED DIMENSION TABLE						
BED LENGTH	LAYOUT METHOD				TEMPLATE METHOD	
	"A"	"B"	"C"	"D"	"X"	TEMPLATE PART#
6'6"	34 3/4"	22"	20 5/8"	19 3/4"	31-7/8"	23380000
8' *	37 3/4"	22"	20 5/8"	19 3/4"	34-7/8"	23380000

* Before drilling bed holes - validate measurements with chassis mounted bracket (see steps 1- 5 on page 8).

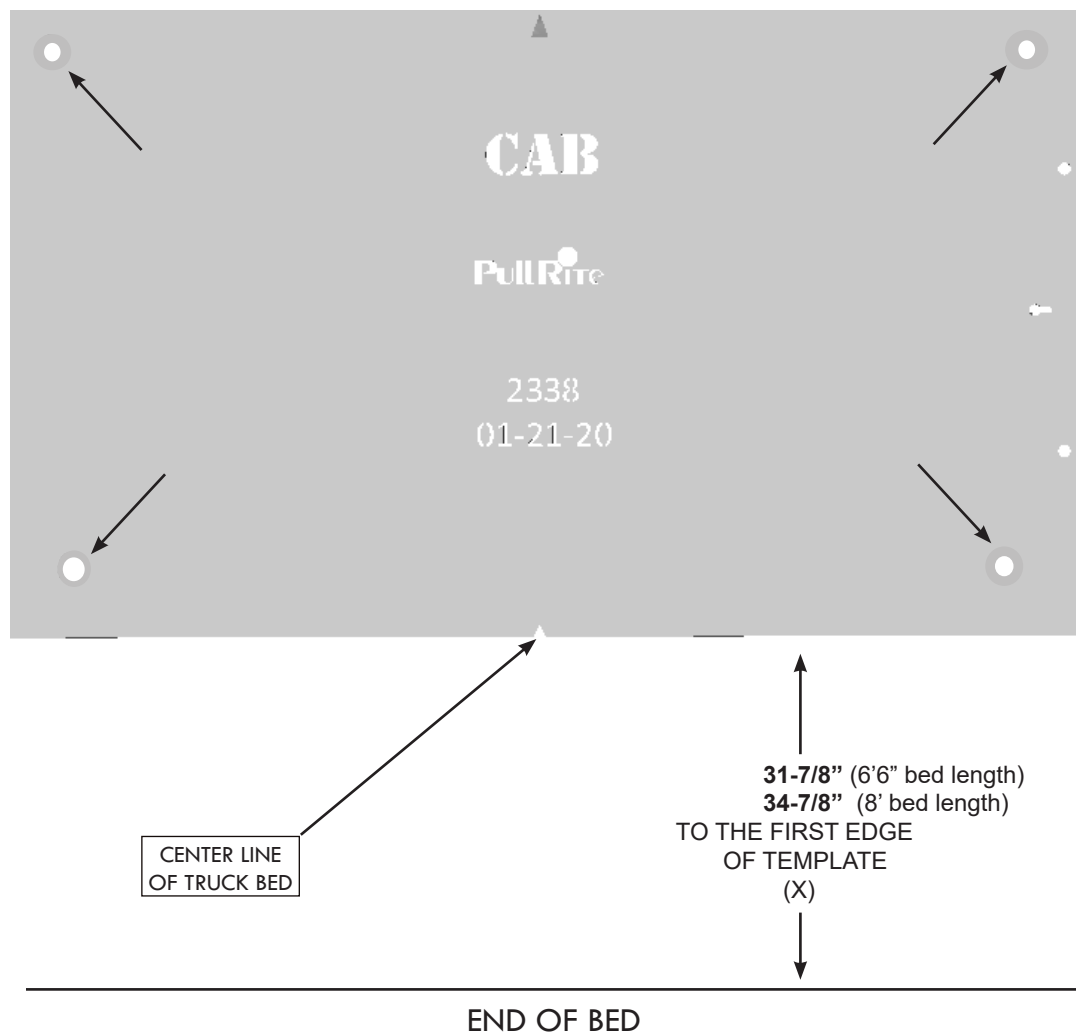
TEMPLATE METHOD

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 below (Fig.5).
2. Mark the 4 holes as indicated below, making sure the template does not move (see Installation Tip).

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 a location on one side of the 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. Use transparent tape to cover the mounting 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; which should be positioned in the center of the mounting bracket hole).

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.

FIG. 5



NOTE: To insure accuracy of bed holes, follow all steps on pages 8-9 before drilling into the truck bed.

INSTALLATION

Mounting Bracket Installation

Part 1: Bracket Placement & Bed Hole Locations

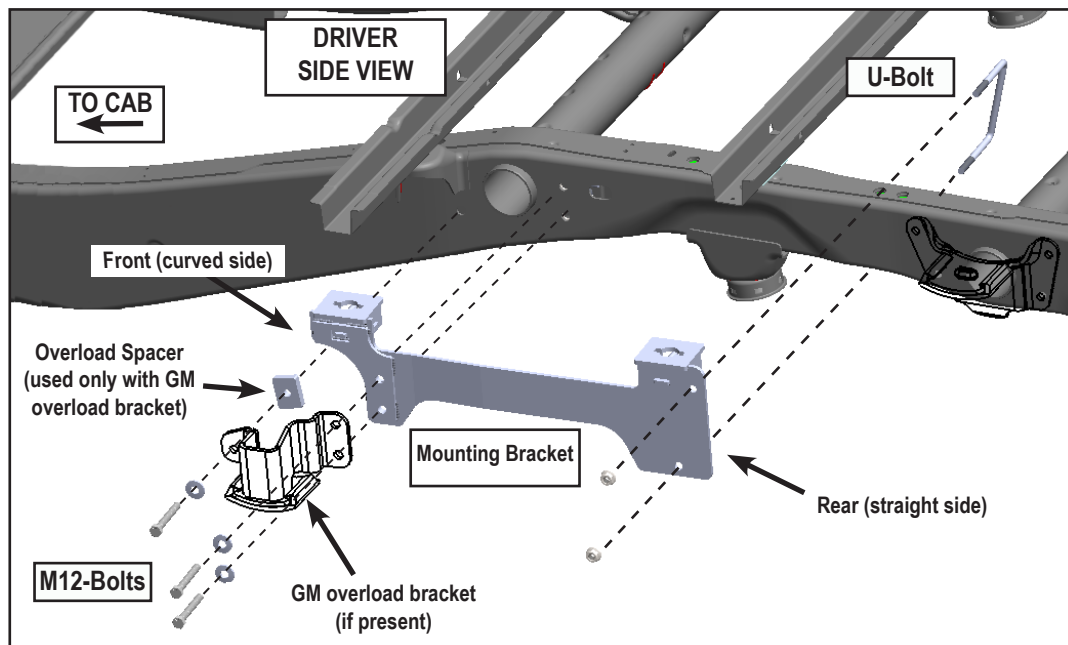
Since most truck beds are not installed square to the frame or are the same distance from the back of the cab, the installer will need to make sure the bed holes line up properly with the center of each frame bracket mounting hole by following the instructions below.

Detailed Installation Instructions

NOTE: There are two possible installation variations, one with the GM overload bracket present, and one without. Use the Overload Spacer only if GM overload bracket is present (the outlined bracket on fig. 6).

1. Use transparent tape to cover the mounting 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; which should be positioned in the center of the mounting bracket hole).
2. Use the threaded holes on the truck frame to hand tighten the cab side of the Mounting Bracket to the truck frame with the provided M12 bolts (FIG.6). If a GM overload bracket is present, pull out the bolts holding the GM overload bracket and place Mounting Bracket flush to the truck frame. Insert the M12 bolts and hand tighten.
Set aside GM overload bracket until after "Drilling the Bed" procedures (page 9) when the Mounting Bracket is ready to torque down permanently.
3. Drill the first 1/16" pilot hole through the truck bed over the rear mark on the driver side where you made the mark during the "Marking Bed for Drilling." The bit should come down through the bracket hole, piercing the transparent tape, aiding the centering of the bracket front-to-rear and side-to-side.
4. If the pilot hole is off-center to the bracket hole, remember to adjust **all** the pilot hole locations accordingly. Repeat procedure on both sides.

FIG.6



INSTALLATION

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 one 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.

5. Repeat steps for the passenger side mounting bracket, checking carefully for proper centering.

NOTE: Final bed hole placement is dependent on the fixed position of the brackets, due to the fixed location of the front bracket holes in the frame.

WARNING: Before proceeding to "Part 2, "Drilling the Bed..." you must verify that each pilot hole is centered left to right over the hole on each mounting bracket before the Mounting Post holes are drilled through the bed.

Part 2: Drilling the Bed & Bracket Installation

1. Remove the mounting brackets and use at least a 1 7/8" hole saw centered over the 1/16" pilot hole and drill through the truck bed.

2. De-bur the inside of the drilled bed holes.

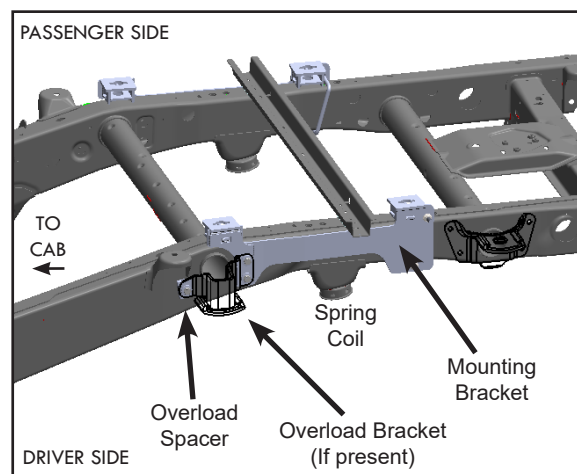
Bracket Installation

1. Replace and fasten the mounting brackets to the frame with the M12 Bolts. If GM overload brackets are present, place the Overload Spacer flush to frame and place GM overload bracket over the Overload Spacer & Mounting Bracket and insert M12 bolts and hand tighten (See FIG.7).

2. Fasten the 1/2" U-Bolt around truck frame so that the threads go outward through the holes in the rear (straight side) of the Mounting Bracket (see FIG. 6). Fasten with 1/2" serrated nuts. Tighten all bracket fasteners using the torque table on page 10. Repeat operation for both Mounting Brackets.

NOTE: Use a hand wrench to tighten the flange nut onto the bolts. DO NOT use an impact wrench, as this can easily strip the connection.

FIG.7



Anti-Rotation Bolts

Some truck frames that do not have the GM overload bracket are also missing the corresponding threaded inserts inside the truck frame.

In this instance, use the included Anti-Rotation Bolts {M} and Lock Washers {N} to attach the bracket to the truck. It can be tricky to install these because they must be placed inside the truck frame with threads protruding through the bracket holes. Also included in this kit is a Bolt Leader {O} to aid in directing the bolts through the truck frame. (FIG. A)

To install, it may be helpful to use a separate piece of wire fashioned into a hook to fish through the bracket holes to exit the obround hole. Use tape to attach the wire to the Bolt Leader. Insert the bolt threads into the coiled end of the leader and pull wire and leader through the obround hole. Pull into the bracket hole until the bolt threads are protruding (FIG B). Repeat with lower bolt. Position the bracket and slide the bracket over the bolt leaders and bolt threads until bracket is flush to the frame. Remove coiled end of leader from the bolt threads being careful not to push threads back into the frame. Hold tension on the bolt while tightening the flange nut. Tighten according to the Torque Table on page 10.

FIG. A

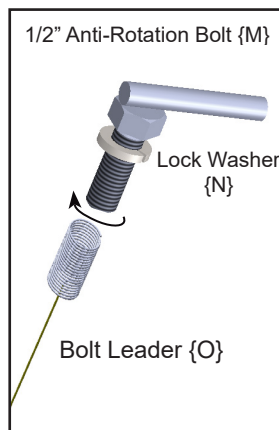
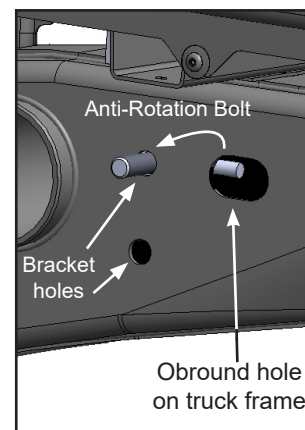


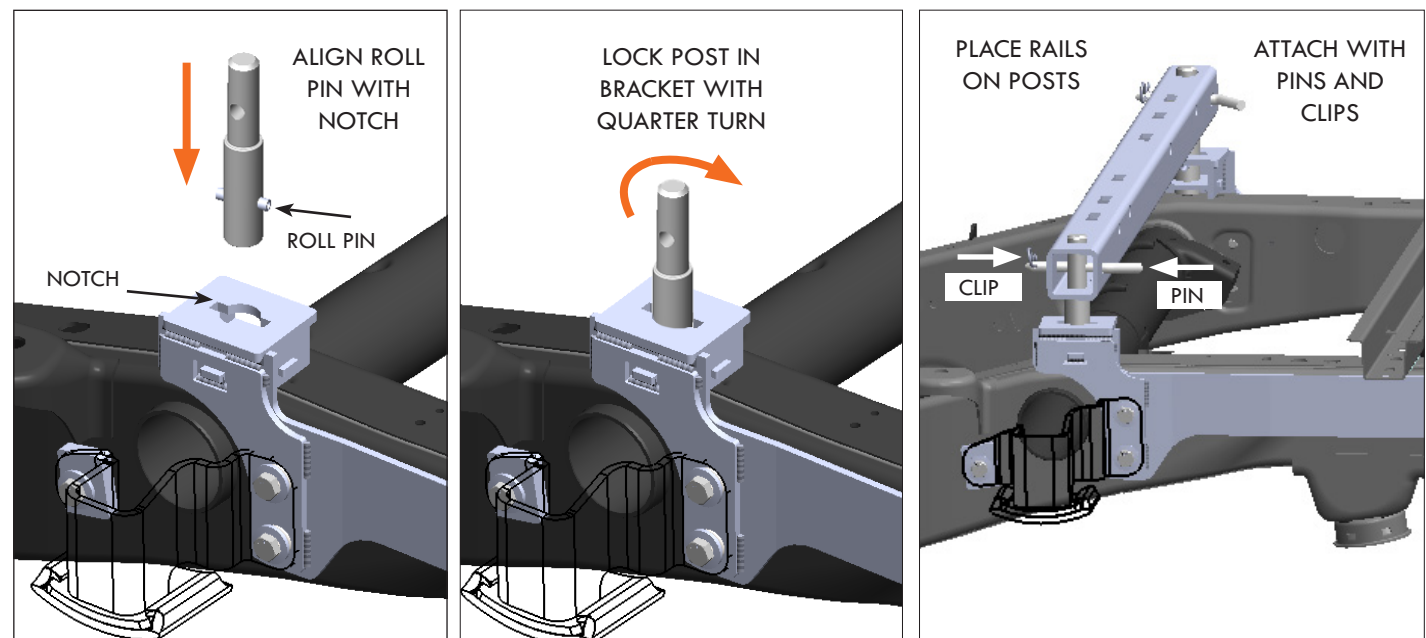
FIG. B



INSTALLATION

Part 3: Final Installation Procedure

- 1. Install the Mounting Posts into the Mounting Bracket by inserting the bottom of the Mounting Post against the frame while the Roll Pins are aligned with the notches in the top of the Mounting Bracket. Lock the Mounting Post in place by rotating them 1/4 turn in either direction.
- 2. Install Super Rails over the mounting posts. (Locate the perfect round 1" hole on the rail to the driver's side and the obround hole to the passenger's side.) Lock rails into place with pins and clips. Pins must go through both the rail and the Mounting Post and Pins must be captured with clip.
- 3. Set the hitch on the rails by centering the tabs on the bottom of the hitch into the slots on the rails. 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.
- 4. Tighten all side bracket bolts. Tighten according to the Torque Table below.



TORQUE TABLE	
1/2" Bolt	75 ft. lbs.
M12 Bolt	100 ft. lbs
5/8" Bolt	151 ft. lbs.
3/4" Bolt	266 ft. lbs.



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