



# 24K Industry Standard Rail Heavy Duty Custom Mounting Kit

# #2234



### 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 mounting system. Actual tow capacity of the system will be equal to the lowest rated component.

# **Installation Instructions**

# **SPECIFICATIONS**

- Fits 2016 to 2019 Chevy/GMC 2500 & 3500 HD
  - Hitch is located center of the axle
    - NO DRILL application
- Custom Mounting Bracket Kit (Bracket & Hardware) #2235

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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

#### #2234 CHEVY/GMC CUSTOM ISR BRACKET KII

	CHEVY/GMC	C03101113				
	description	part no.	qty	material		
MOUNTING BRACKET KIT		2235	1	(See kit contents listed below)		
HD BASE RAIL KIT		2219	1	(See kit contents listed below)		
	#2763 —	MOUNTING BI		KIT		
item description		description part no. qty.		material		
А	DRIVER SIDE REAR MOUNTING BRACKET	276303	1			
В	DRIVER SIDE FRONT MOUNTING BRACKET	276301	1			
С	PASSENGERSIDEFRONTMOUNTINGBRACKET	276302	1			
D	PASSENGER SIDE REAR MOUNTING BRACKET	276304	1			
	MOUNTING BRACKET HARDWARE KIT	276305	1	(See kit contents listed below)		
	#276305 — MOU	INTING BRACK		WARE KIT		
tem	description	part no.	qty.	material		
F	BASE RAIL MOUNTING BOLTS	98010228	4	5/8"-11 X 4" HHCS GRD 5		
G	*5/8" CONICAL WASHER	98200171	12	5/8" EXT. TOOTH CONICAL WASHER		
Н	1/2" CENTER BASE RAIL BOLT	98010175	2	1/2"-13 X 2" HHCS GRD 5		
I	*1/2" CONICAL WASHER	98200172	2	1/2" CONICAL SERRATED WASHER GRD		
J	SINGLE SLOTTED BED SHIM	08070201	2	5/16" SLOTTED SHIM		
К	BASE RAIL SPACER TUBE	27210204	4	1" ROUND TUBING		
L	DOUBLE SLOTTED BED SHIM	27210202	4	1/4" THICK STEEL		
М	OFFSET HOLE BACKUP PLATE	05070303	2	1/4" THICK STEEL		
Ν	1/2" FLANGE NUT	98150201	2	1/2"-13 SERRATED FLANGE NUT		
0	MOUNTING BRACKET BOLT	98010112	8	M16-2 X 40MM HEX CAP SCREW 10.9		
Ρ	5/8" FLANGE NUT	98150200	4	5/8"-11 SERRATED FLANGE NUT		
	#27	719 — BASE R/	AIL KIT			
tem	description	part no.	qty.	material		
Е	BASE RAILS	22190001	2			
	L	AYOUT TEMPI	ATE			
	description	part no.	qty.	material		

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

## **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.

## 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 CENTERROW 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.

ROW 1 **CENTER ROW** ROW 2

> ROW 3 ROW 4



	TRUCK BED DIMENSION TABLE				
		LAYOUT METHOD	D TEMPLATE METHOD		
BED LENGTH	"A"	"B"	"C"	"X"	Template part#
6 ft.	27-1/2"	22"	19-7/16"	24-9/16"	27200000
8 ft.	32-7/16"	22"	19-7/16"	29-9/16"	27200000

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#### 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 6 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.



### 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**

- 1. This is a no-drill installation, all brackets will use existing holes and weld nuts inside the frame (below).
- 2. Drill the first 1/16" pilot hole through the truck bed over the Front Driver Side Mounting Bracket where you made the mark during "Marking Bed for Drilling."
- 3. Position the Front Driver Side Mounting Bracket on the frame using Mounting Bracket Bolt {O} to temporarily bolt the bracket to the frame (below) to determine if your bed layout marks are square to the frame. Make 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).
- 4. Check the pilot hole for centering front-to-back in the slotted bolt holes of the bracket (see note below).
- 5. Repeat the above steps for the remaining Mounting Brackets and adjust as necessary.
  - *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 front 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.
- 6. Remove all mounting brackets from the frame and drill out all pilot holes with a step drill to 3/4".
- 7. Remove any burrs from the drilled holes and apply touch up paint.



## INSTALLATION

#### PART 2 — BRACKET INSTALLATION

- 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 {P} 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."
- 2. Reinstall the Mounting Brackets onto the frame using the Mounting Bracket Bolts {O} and 5/8" Conical Washers {G}. Be certain the Mounting Brackets sit flush with the side of the frame and hand tighten only.
- 3. Install both Base Rails {E} referencing "Part 3 -- Shimming the Bed" on the following page. Hand tighten only.



# INSTALLATION

#### PART 3 — SHIMMING THE BED

- 1. To prevent "crushing" of the corrugated truck bed, we provide shims and backup plates to be installed above and/or below the truck bed where necessary. Not all truck beds are installed exactly the same when manufactured, so it is necessary for you to determine where to place your shims, relative to the bolt locations (see Layout Method).
- If you find that a center row bolt hole is located over a bed channel, you may need to use a Double Slotted Bed Shim {L} 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.
- 3. The flange row bolt assemblies are installed on the flange of each base rail (rows 2 & 4; refer to "Layout Method") to achieve the 20K rating. As in Step 2, use the Single Slot Shim {J} where necessary, according to bed channel locations, and install the Offset Hole Backup Plate {M} under the truck bed followed by 1/2" Flange Nut {N}.



#### PART 4 — FINAL INSTALLATION PROCEDURES

- 1. Set the hitch on the Industry Standard Rails by centering the tabs on the bottom of the hitch into the slots on the rails.
- 2. 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.
- 3. Make certain the hitch comes on and off without binding prior to completing final torques.
- 4. Tighten all hardware according to the Torque Table.
- 5. Repeat Step 3.
  - TIP: Sometimes biniding can occur after tightening up all the hardware. Try tightening the Base Rail Bolts first, and the frame bolts last.

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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