Manufacturing CURT INCORPORATED

09/28/06

# 16100 & 16200 MOUNTING RAIL INSTALLATION KIT

CUSTOM MOUNTING BRACKETS REQUIRED ON SOME INSTALLATIONS

**DEALER/INSTALLER:**

1) Provide this manual to end user.
2) Physically demonstrate procedure in this manual to end user.
3) Have end user demonstrate that he/she understands procedures.

**END USER:**

1) Read and follow this manual every time you use hitch.
2) Save this manual for future reference.
3) Pass on copies of manual to any other user or owner of hitch.

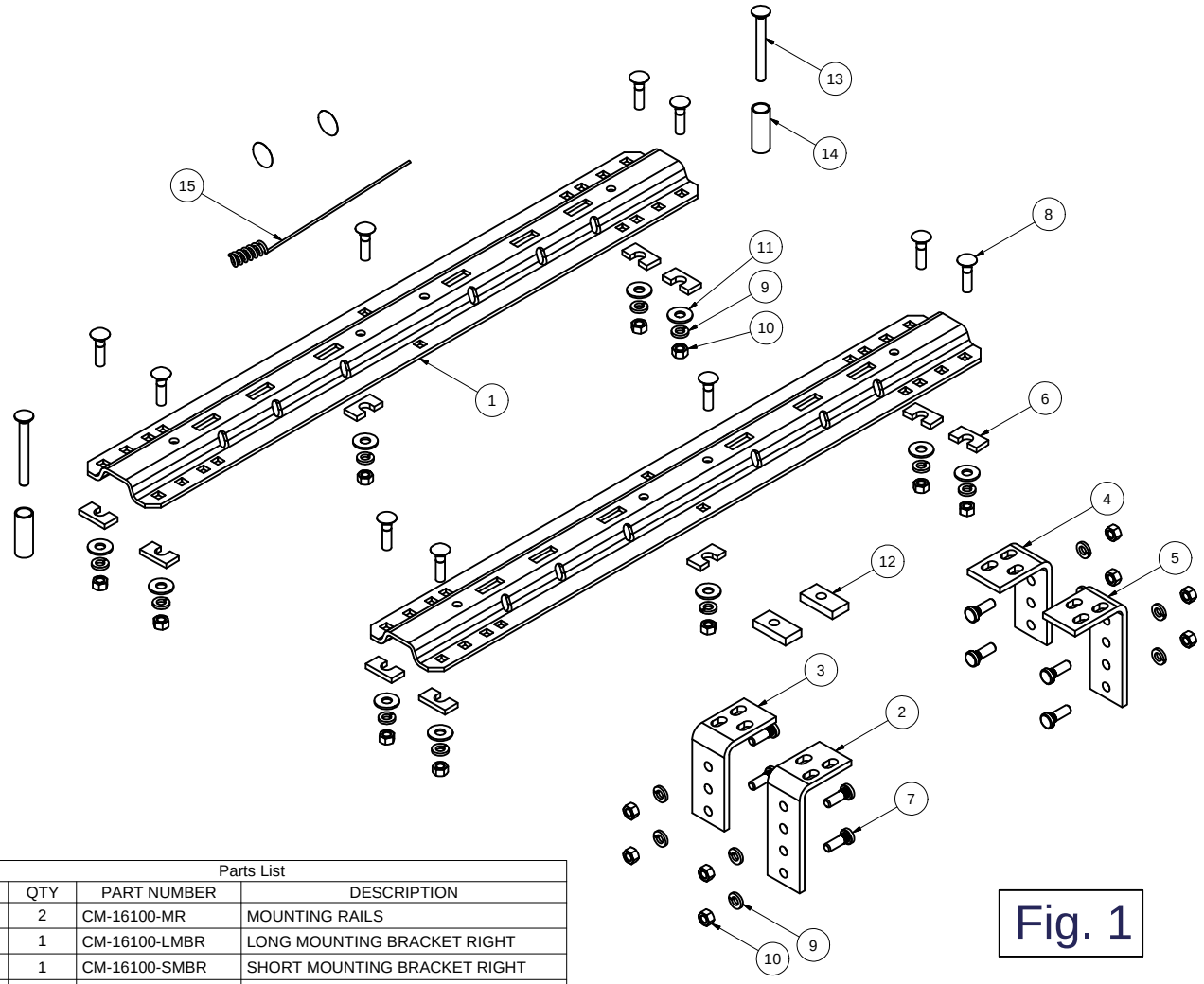



Fig. 1

| Parts List | | | |
|---|---|---|---|
| ITEM | QTY | PART NUMBER | DESCRIPTION |
| 1 | 2 | CM-16100-MR | MOUNTING RAILS |
| 2 | 1 | CM-16100-LMBR | LONG MOUNTING BRACKET RIGHT |
| 3 | 1 | CM-16100-SMBR | SHORT MOUNTING BRACKET RIGHT |
| 4 | 1 | CM-16100-SMBL | SHORT MOUNTING BRACKET LEFT |
| 5 | 1 | CM-16100-LMBL | LONG MOUNTING BRACKET LEFT |
| 6 | 10 | CM-SP136 | .313" x 1.00 x 2.00" U-SHAPE SPACER |
| 7 | 8 | 1/2 - 13 x 1 1/2 WB | 1/2 - 13 x 1 1/2 WHEEL BOLT |
| 8 | 10 | 1/2 - 13 x 2" | CARRIAGE BOLT |
| 9 | 18 | 1/2" | LOCK WASHER |
| 10 | 18 | 1/2-13 | HEX NUT |
| 11 | 10 | 1/2" | WASHER |
| 12 | 2 | CM-SP52 | .500 x 1.25 x 2.50" ROUND HOLE SPACER |
| 13 | 2 | 1/2-13 x 4 1/2 | CARRIAGE BOLT |
| 14 | 2 | CM-16100-TS | ROUND TUBE 1.00 OD x 14GA A-513 |
| 15 | 1 | 1/2" | FISHWIRE TOOL |

*CUSTOM MOUNTING BRACKETS REQUIRED ON SOME INSTALLATIONS*

# GENERAL INSTRUCTIONS FOR MOUNTING RAIL INSTALLATION

**TOOLS**

3/16" drill
17/32" drill
1" drill (Some Dodge application only)
3/4" Socket & Open End Wrench
150 lb-ft Torque Wrench
"C" Clamps

1. The following instructions should be used to mount the 5th wheel. Care and attention to detail will ensure a quality installation. Check parts against parts list to become familiar with parts in kit. (See Fig. 1)

2. Raise rear of truck high enough to allow jack stands to be placed under rear spring hanger bracket of truck. This will provide maximum room to install the 5th wheel brackets.

**WARNING:**

**If the truck is raised, be sure that the truck is properly blocked and restrained to prevent the truck from falling. Failure to do so may result in the truck suddenly falling, causing death or serious injury.**

3. Do not install mounting rails over plastic bed liners. Plastic bed liners must be cut out of the way. Mounting rails may be installed on spray in liner. **Note**: Consult installer for recommended curing time.

4. Use only the supplied bolts, nuts, and washers to install this kit. All installation hardware is grade 5 unless otherwise specified.

5. Specific instructions for most commonly used vehicles are included. If these instructions do not apply to your vehicle, be sure that each end of each base rail is connected to the vehicle frame. Each frame bracket must be bolted to the vehicle frame with two bolts, unless optional weld is used.

**CAUTION:**

**These instructions are guidelines only. Actual installation is the responsibility of the installer and the owner. Always measure truck and trailer before installing hitch to be sure that there is clearance at the cab and at the bumper to allow for turns.**

To prevent the trailer from hitting the cab with the trailer turned 90°, the center of the hitch should be at least 52" from the back of the cab when using a long bed truck. (Actual distance required will depend on trailer width and king pin location.) Short bed (Minimum 38" from back cab to axle center line) trucks require a minimum of a 13" extended pin box for regular maneuvers and do not apply.

6. Measurements are given from Rear Edge of truck bed to rear edge of the mounting rail closest to the Rear Edge of truck for most vehicle applications (See Fig. 2).

**7. Center hitch between fender wells and make sure rails are square. Adjust position of rails until both diagonal measurements are the same. This should allow installation of a gooseneck or other 5th wheels to these rails (See Fig. 2).**

**CAUTION:**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

8. Drill 10 holes identified in Fig. 2. (Hole location will vary for individual vehicle applications.) Drill all holes with 3/16" drill and enlarge them with a 17/32" drill. Always use sharp drill bits. A 3/16" pilot hole will greatly speed drilling larger holes. Install 1/2" carriage bolts into holes. Install 5/16" thick slotted spacer above or below bed to fill corrugations in bed floor. **NOTE: For Toyota Tundra application, part #16302 spacer kit is required. Stack (1) 3/16" and (1) 5/16" thick slotted spacer to avoid crushing of truck bed.**

9. Install mounting brackets onto carriage bolts with the long brackets on forward bolts and short brackets on rearward (long and short brackets can be interchanged as needed). Secure bolts through mounting brackets with serrated washers, lock washers, and hex nuts. Secure the other four bolts through the bed with flat washers, lock washers, and nuts.

10. Drill two holes in frame for each bracket. Select the holes which will give the greatest spread between bolts. Install eight 1/2”-13x1-3/8” ribbed neck bolts, (thread pointing out), lock washers, and hex nuts. Tighten nuts until bolt heads seat. Lubrication of knurls of all rib neck bolts is recommended.

**Note:** On vehicles with heavy duty suspensions, check for interference with bolts where brackets are mounted to frame. If interference with suspension spring results, cut bolt flush to nut outboard of frame or use weld option.

**WARNING:**
**DO NOT lubricate threads. It may cause bolt failure.**

**CAUTION:**
**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

**CAUTION:**
**It is important that 17/32” drill be used for holes in chassis frame as rib neck bolts may break if too small a hole is used and neck may not grip if too large a hole is used.**

11. Torque all nuts to 85 lb-ft

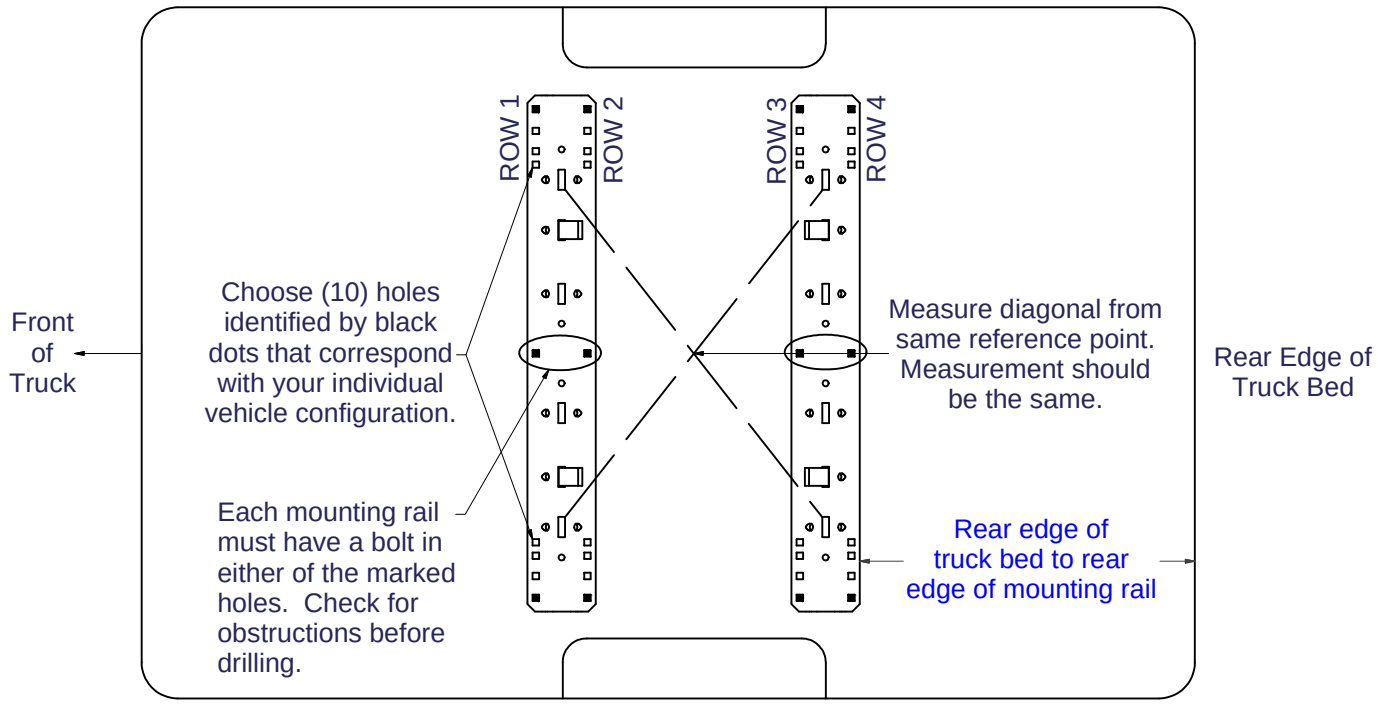
12. Pull wire provided to pull rib neck bolts through frame as needed per application

**Drill locations will vary. See individual installation for location**

Use mounting channel/cross member assembly to position rails (not included).

**Fig. 2**

**** Diagonal Measurements must be the same for smooth Operation of 16500 rolling units ****



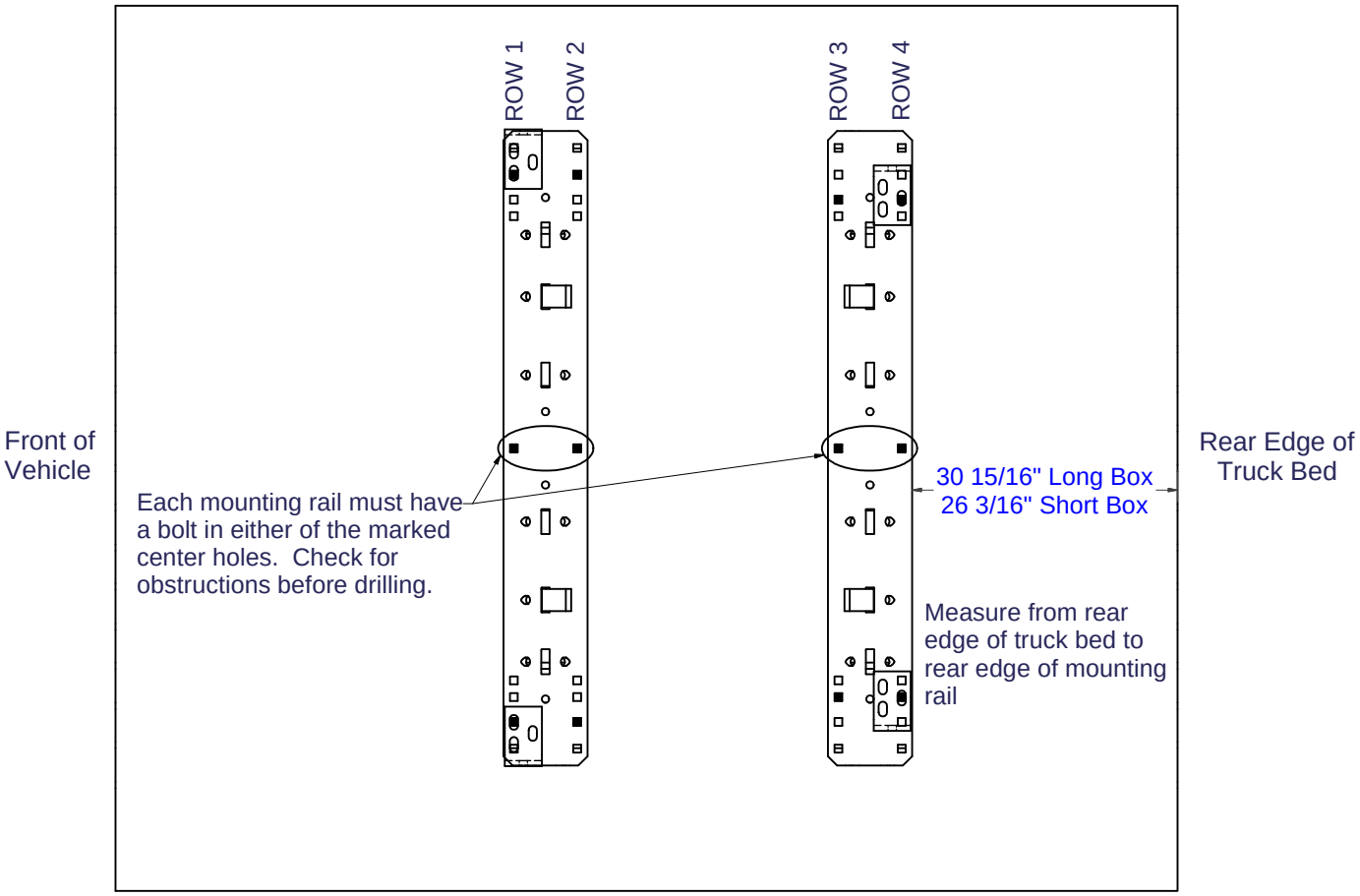
**CHEVROLET/GMC 88-98, 92-98 4-DOOR, '99 SILVERADO**
**SIERRA CLASSIC (WITH TAPERED FRAME) (RED TURN SIGNALS)**

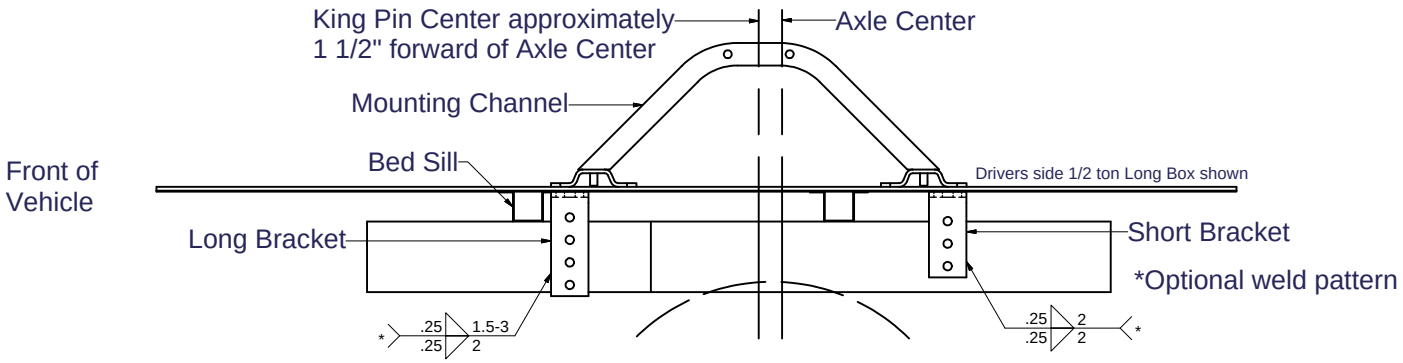
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Find parallel rows of bed sill spot welds in bed of truck. No drilling should be done in the ~4" between parallel rows of spot welds where the bed sill sits.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

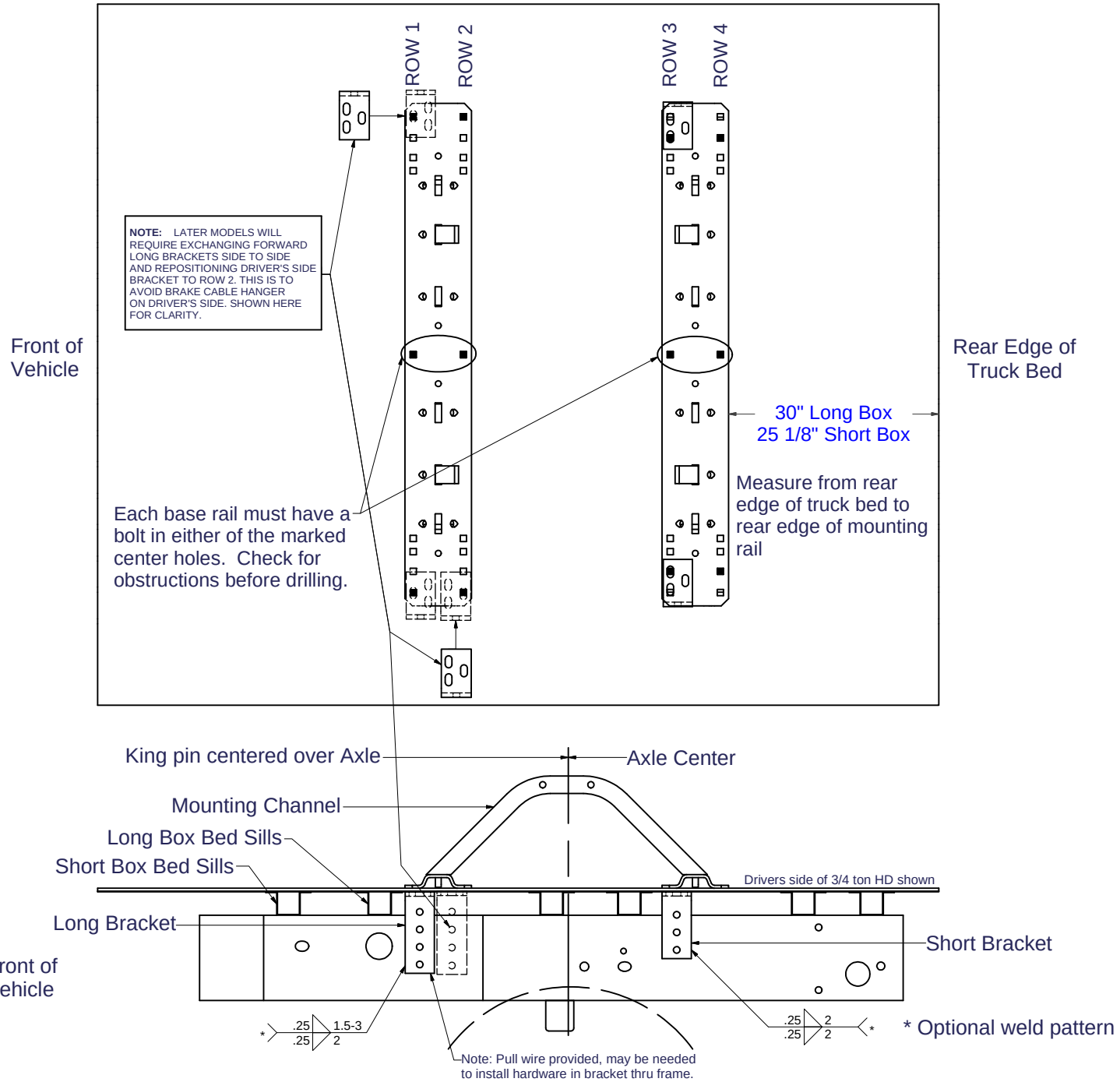
**GM '99 Silverado, Sierra (not Sierra Classic) models, GM '00 to '10 Silverado, Sierra models including HD models**

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Find parallel rows of bed sill spot welds in bed of truck. No drilling should be done in the ~4" between parallel rows of spot welds where the bed sill sits.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

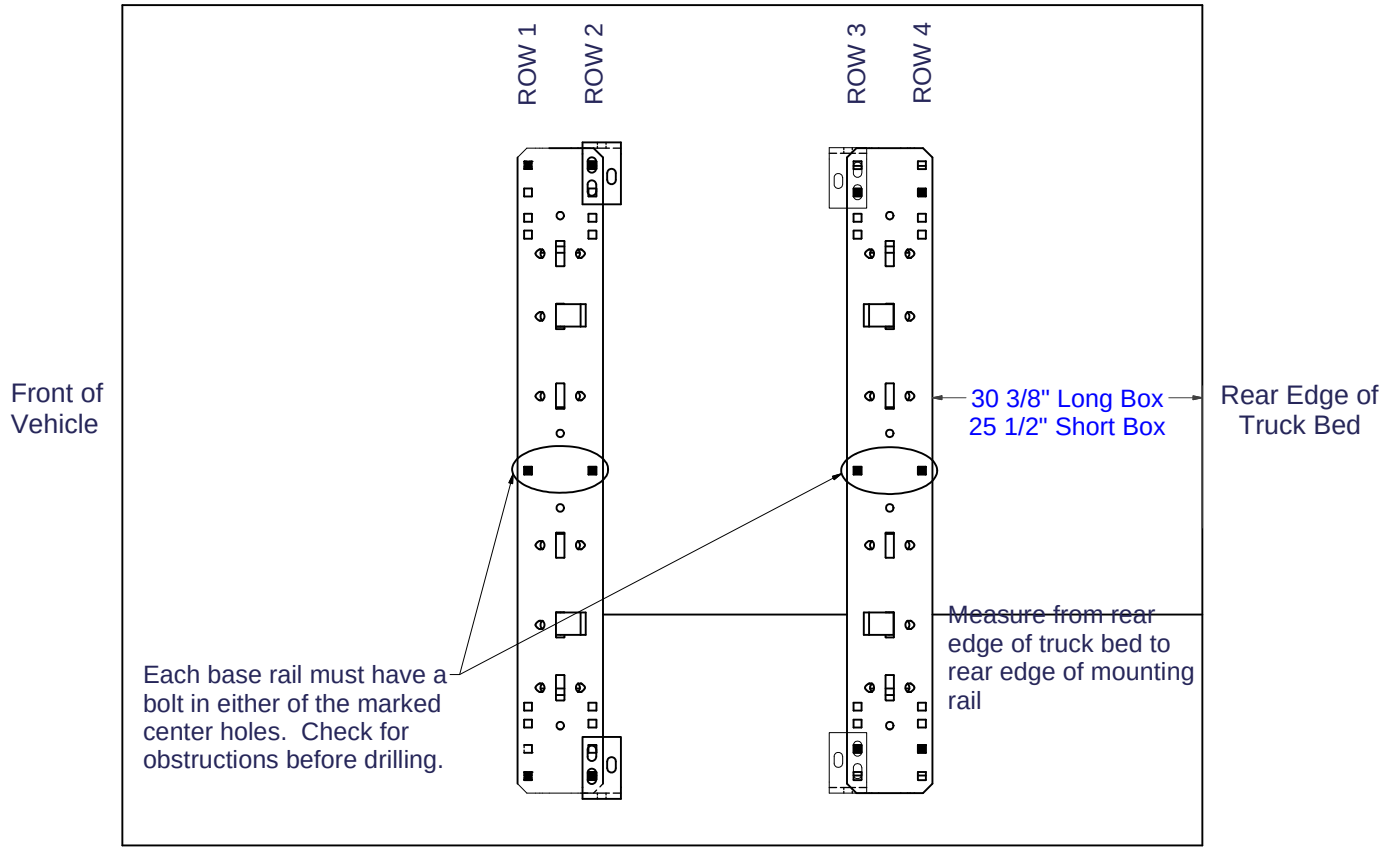
# GM '11 AND NEWER SILVERADO
## 1500, 2500 AND 3500

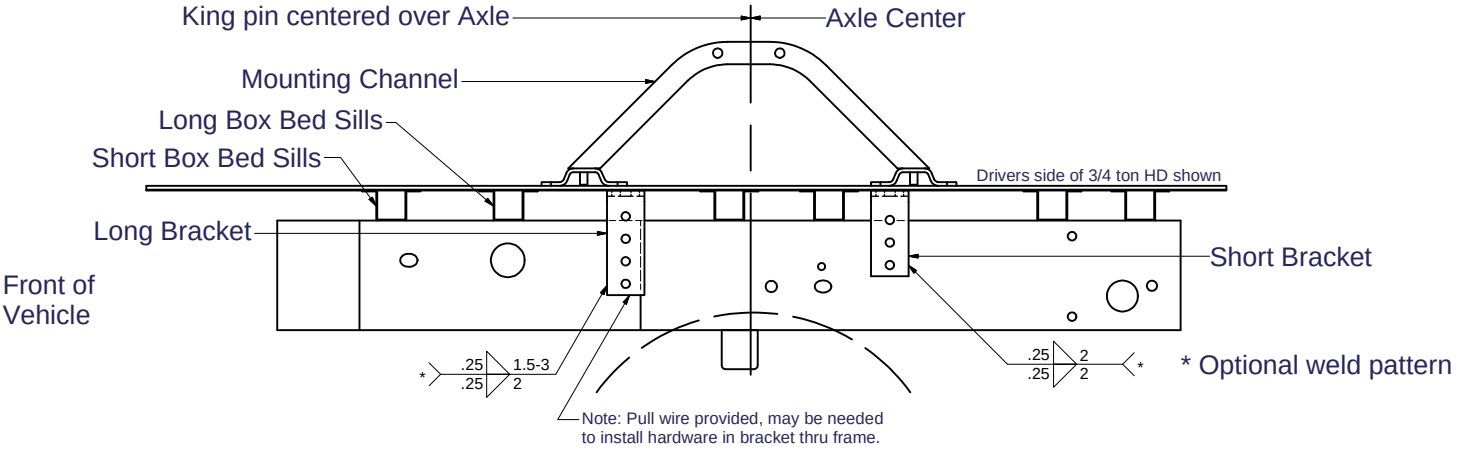
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Find parallel rows of bed sill spot welds in bed of truck. No drilling should be done in the ~4" between parallel rows of spot welds where the bed sill sits.



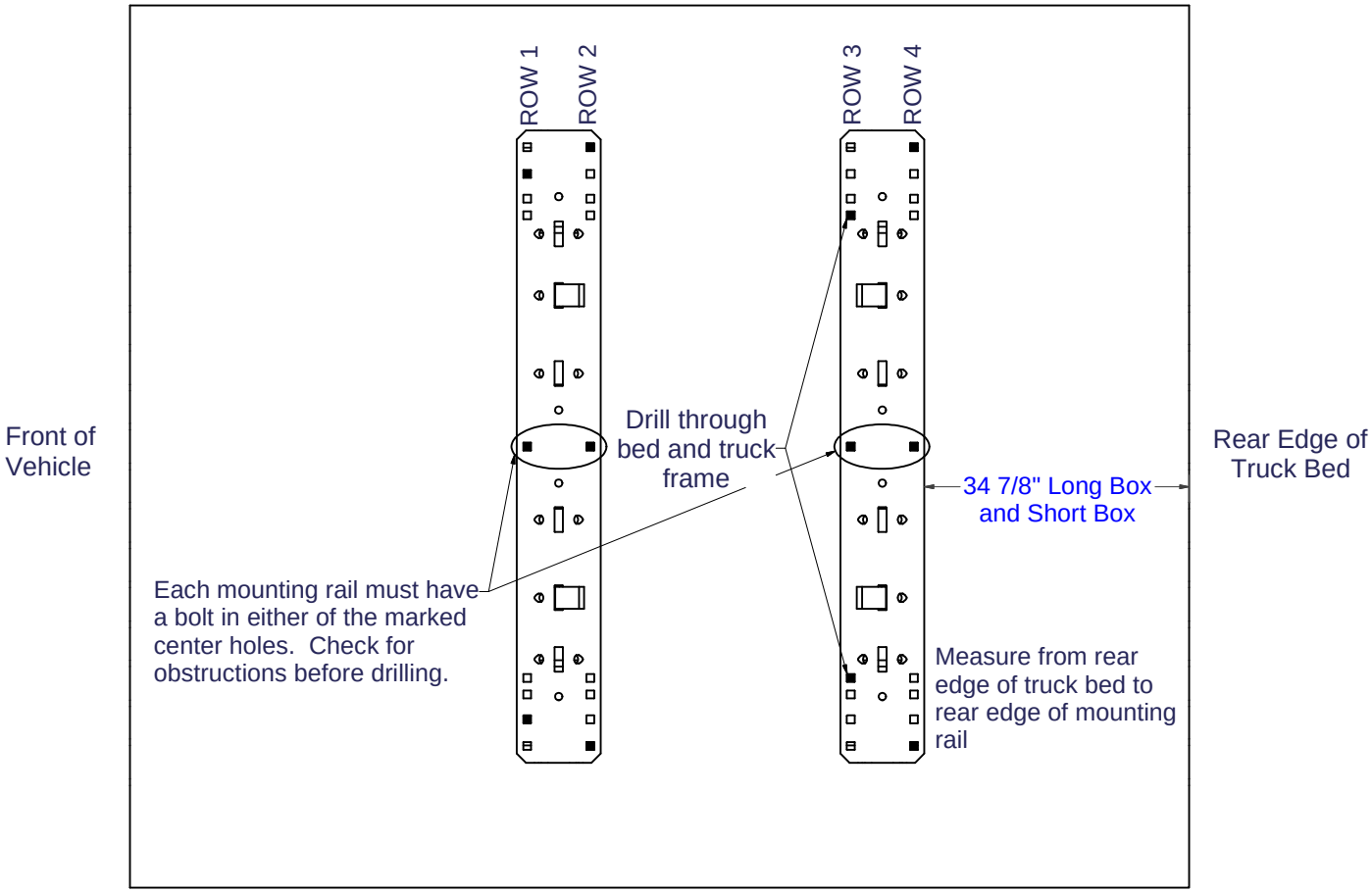

**CAUTION!**

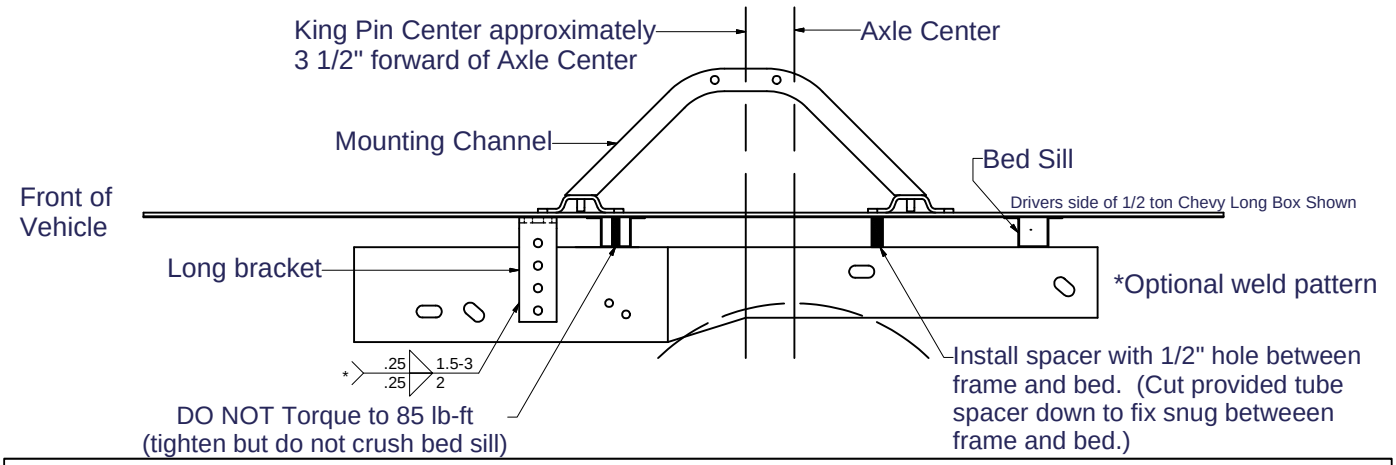
**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

## Chevrolet 73 to 87, 73 to 92 4-door (GMC) (34" Straight, with Outside Shock Absorbers)

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!



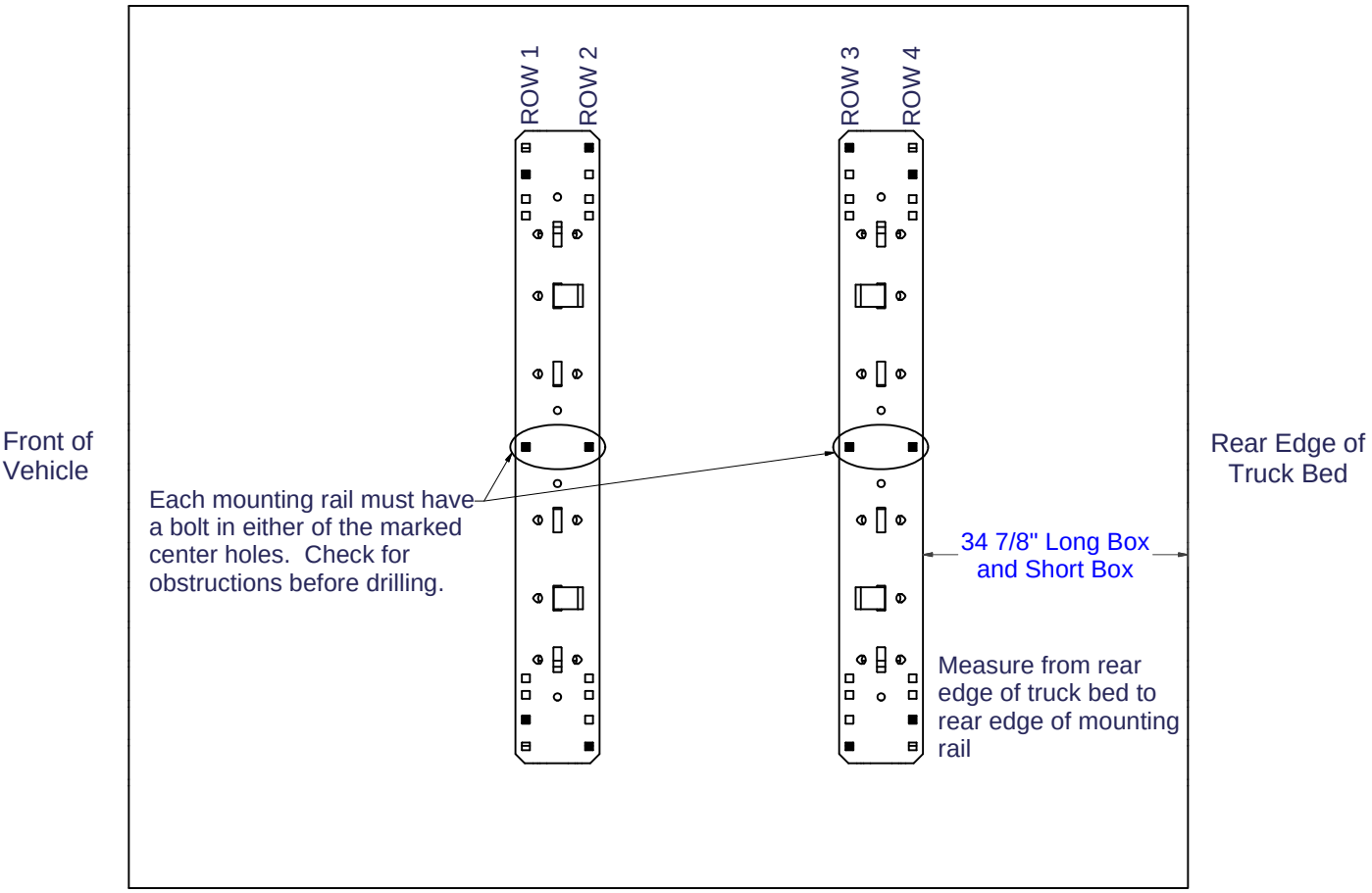

**CAUTION!**

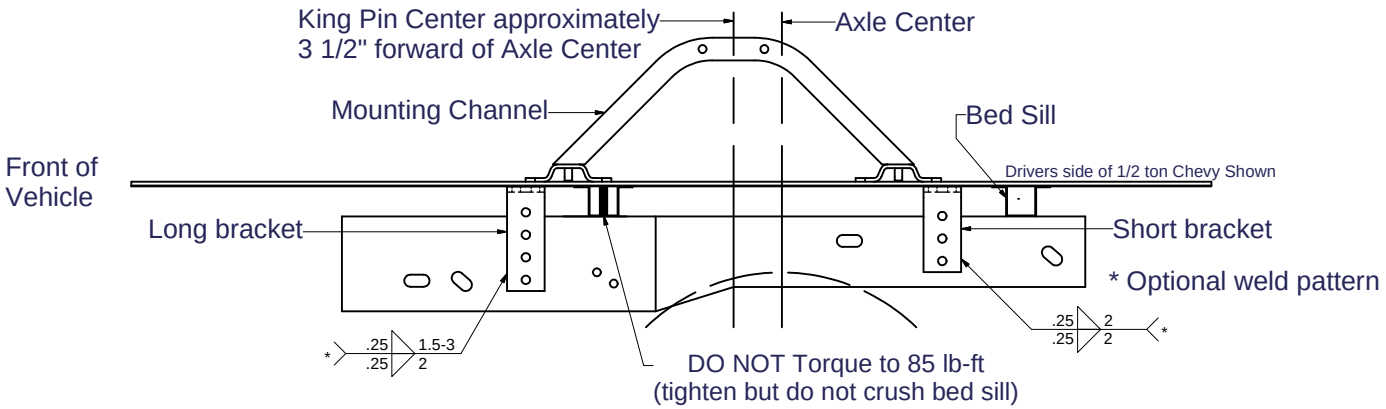
**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

## Chevrolet 73 to 87, 73 to 92 4-door (GMC) (34" Straight, with Inside Shock Absorbers)

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

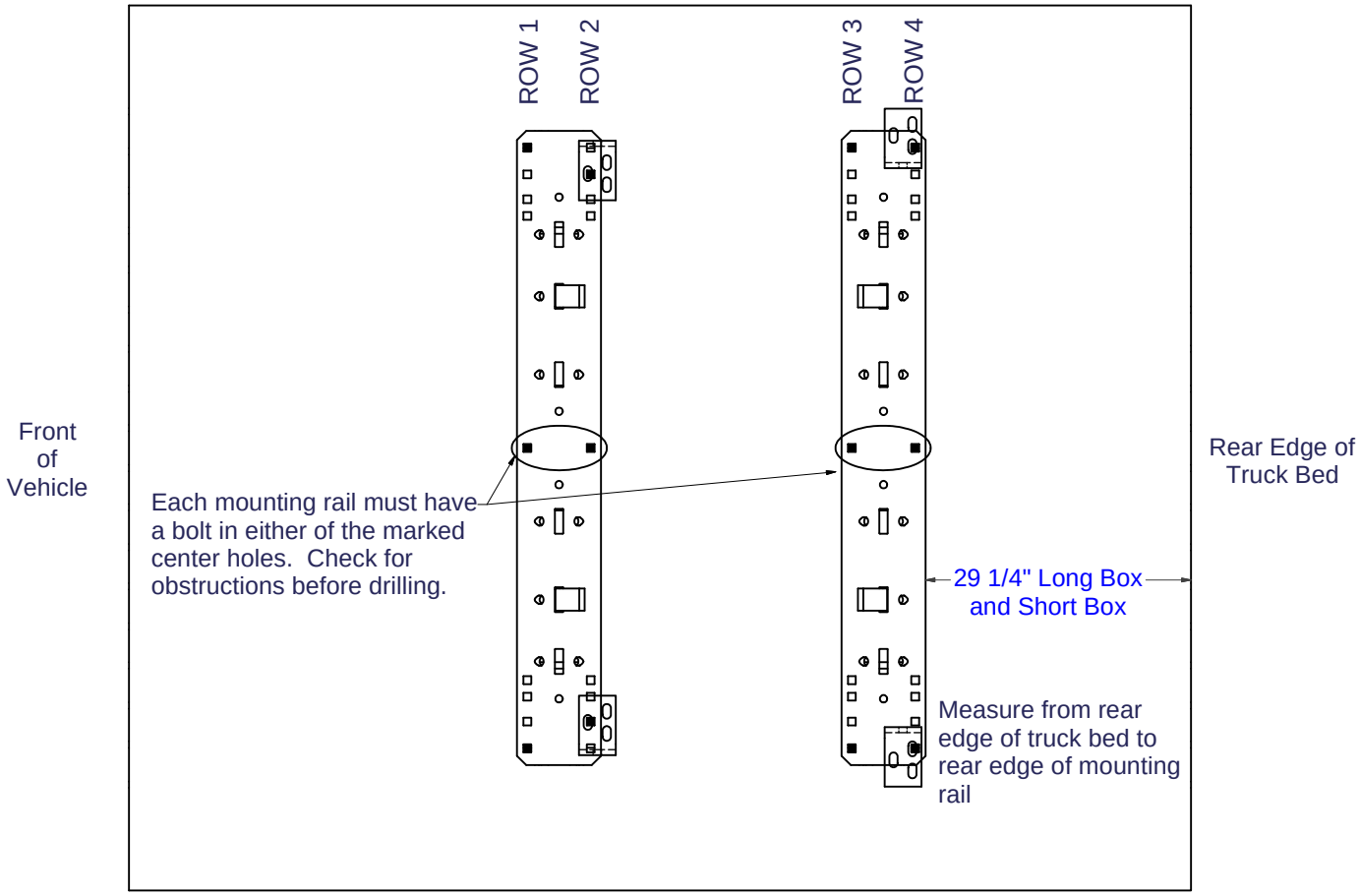
## Ford '97 to '03 F-150 & F-250 8500 GVW AND UNDER and '04 Heritage Series Body Style

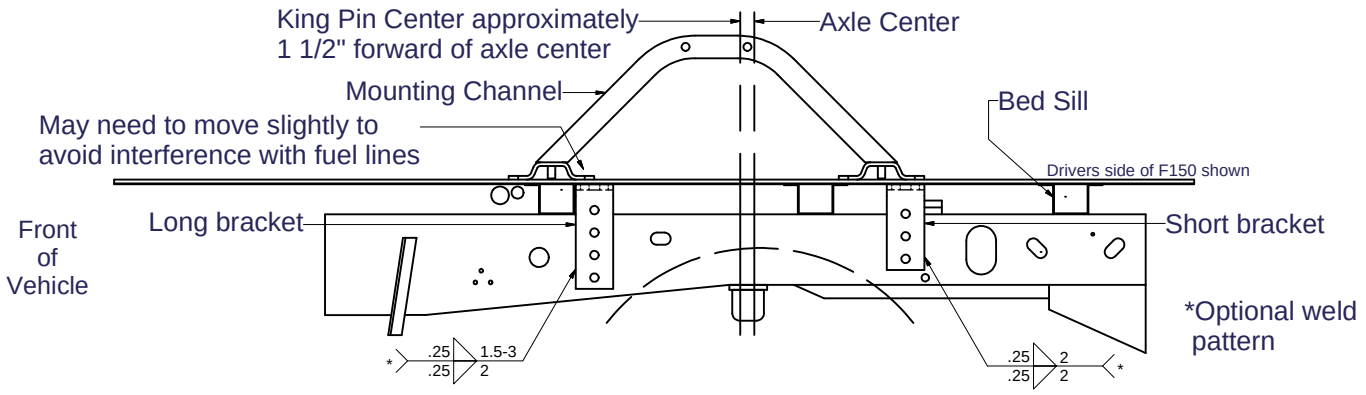
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Long and Short Brackets on Driver's Side may need to be switched to avoid interference with exhaust hanger.
2. You may need to move mounting rail location +/- ½" to ensure frame brackets do not interfere with bed sills.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Do not drill through both walls of frame. Drill only through wall of frame to which bracket is mounted.

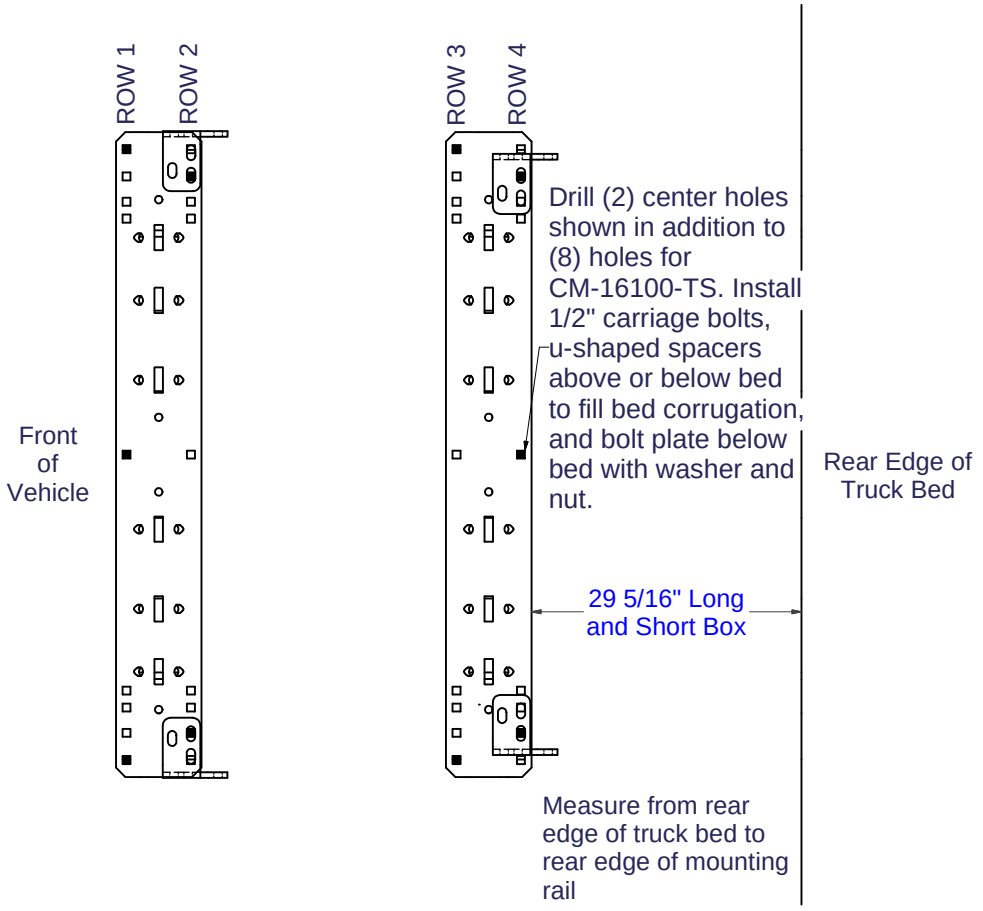
2. Find parallel rows of bed sill spot welds in bed of truck. No drilling should be done in the ~4" between parallel rows of spot welds where the bed sill sits.

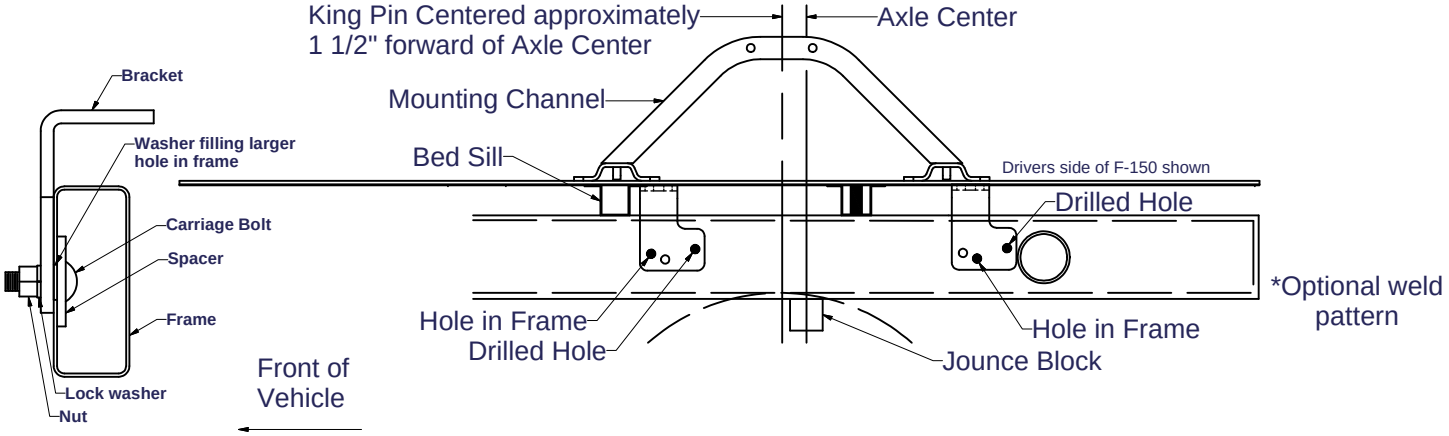
3. Remove jounce block from Bottom of frame on both sides.

4. When brackets are in place one of the front 2 holes should line up with a hole in the frame. A hole will need to be drilled in the frame at the rearward bracket hole.

5. Pull carriage bolts with bolt plates (using supplied pull wire) through the hole in the bottom of frame (where the jounce block was removed) and through the rear hole in each bracket. On the forward brackets a carriage bolt, spacer, and a 1" washer should be pulled through the forward hole. On the rearward brackets a carriage bolt, spacer, and 13/16" washer.

**6.** Replace the jounce block.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

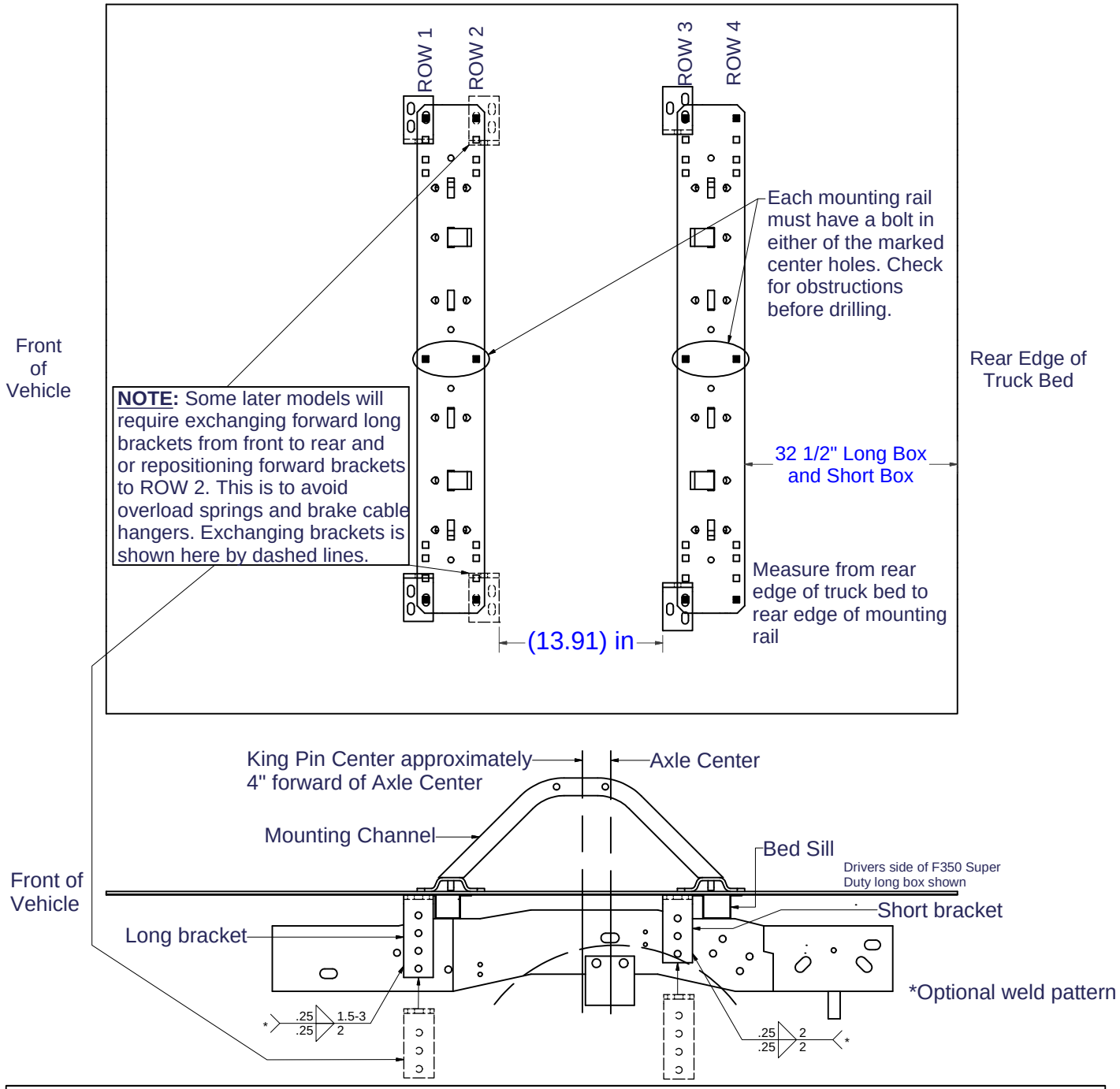
**FORD F-150 & F-250 THROUGH '96, '97 F-250 OVER 8500 GVW, F350 THROUGH '97**
**1999 & NEWER F-250 / F-350 & f-450 SUPERDUTY (Not cab and chassis)**

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. On short bed vehicles, attach Driver's Side forward bracket on Row 2 to avoid interference with fuel lines.
2. On vehicles with overload springs, switch position of long and short brackets.
3. You may need to move the mounting rail location +/- ½" to ensure frame brackets do not interfere with bed sills.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

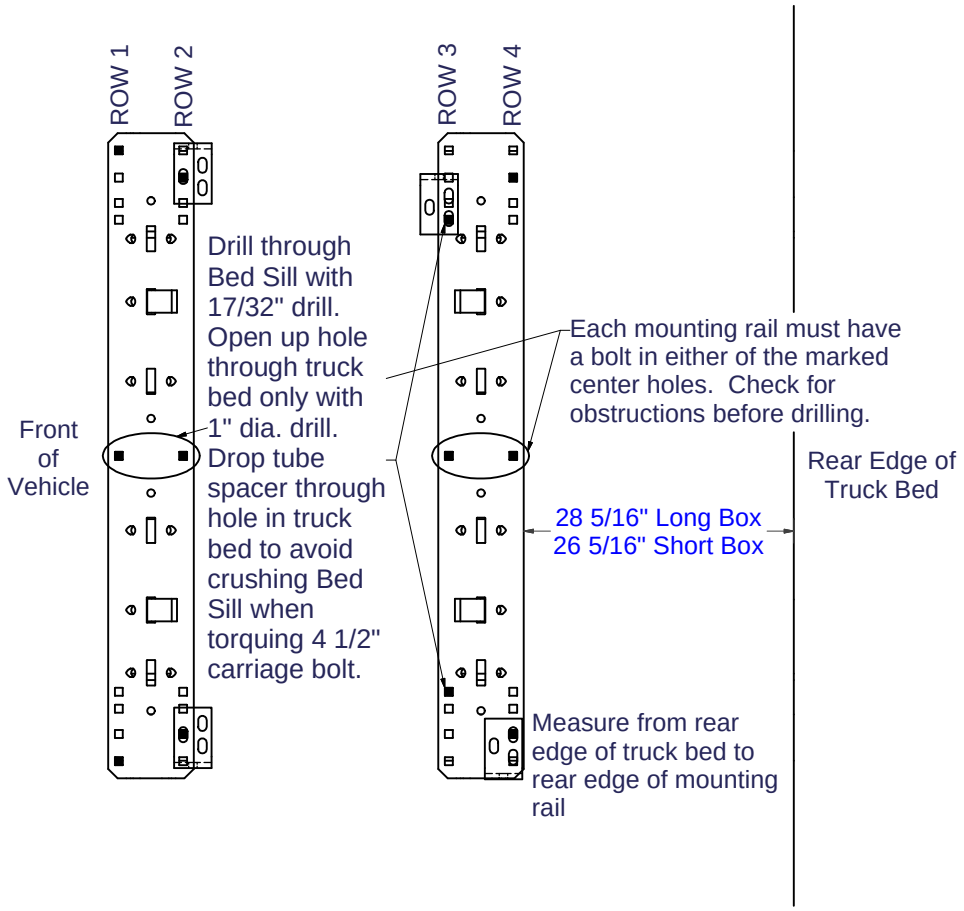
## DODGE '02 TO '08 1500, '03 AND NEWER 2500 WITHOUT OVERLOAD BRACKETS

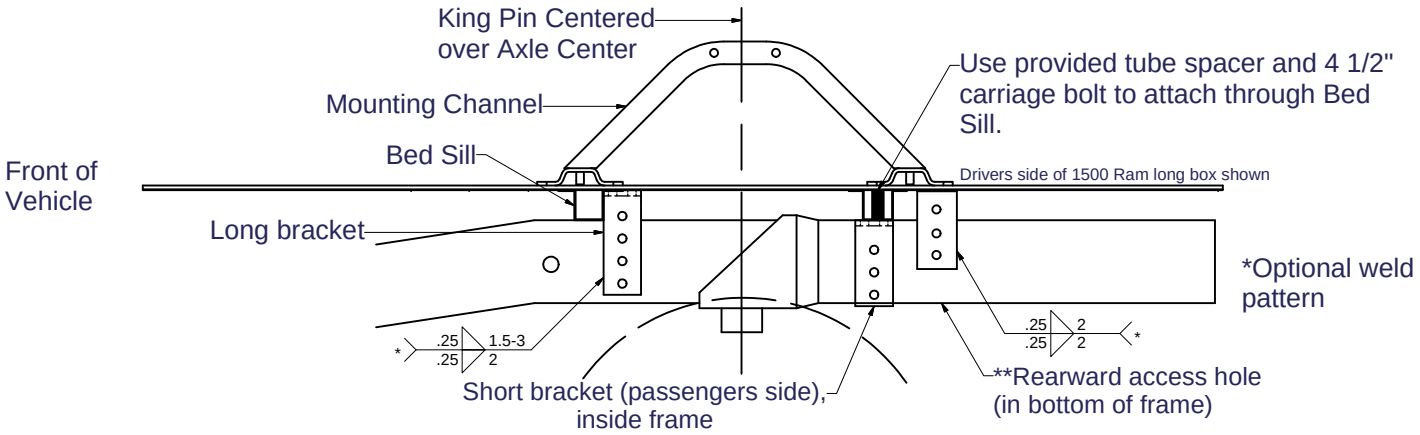
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Tube spacer and 4 1/2" carriage bolt used to attach through rearward Bed Sill (Row 3).
2. **Rib neck bolts will need to be pulled through access holes in frame with supplied pull wire (see below).
3. Do not drill thru both walls of frame. Drill only thru wall of frame to which bracket is mounted.
4. It is very important that brackets in Row 2 are against rear side of Bed Sill as shown. Due to dimensional instability in Bed Sill placement with the Dodge truck, interference could result when drilling in Row 3. Observe caution note below and double check all areas prior to drilling.
5. To avoid drilling inside of frame, (Passenger Side Row 3) Optional Custom Bracket (16303) can be purchased from your dealer. The use of this bracket allows for drilling outside the frame and avoids exhaust hanger.
6. *Due to tubular frames having thinner walls than previous C channel frames, extra caution needs to be used when mounting with the optional welding.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

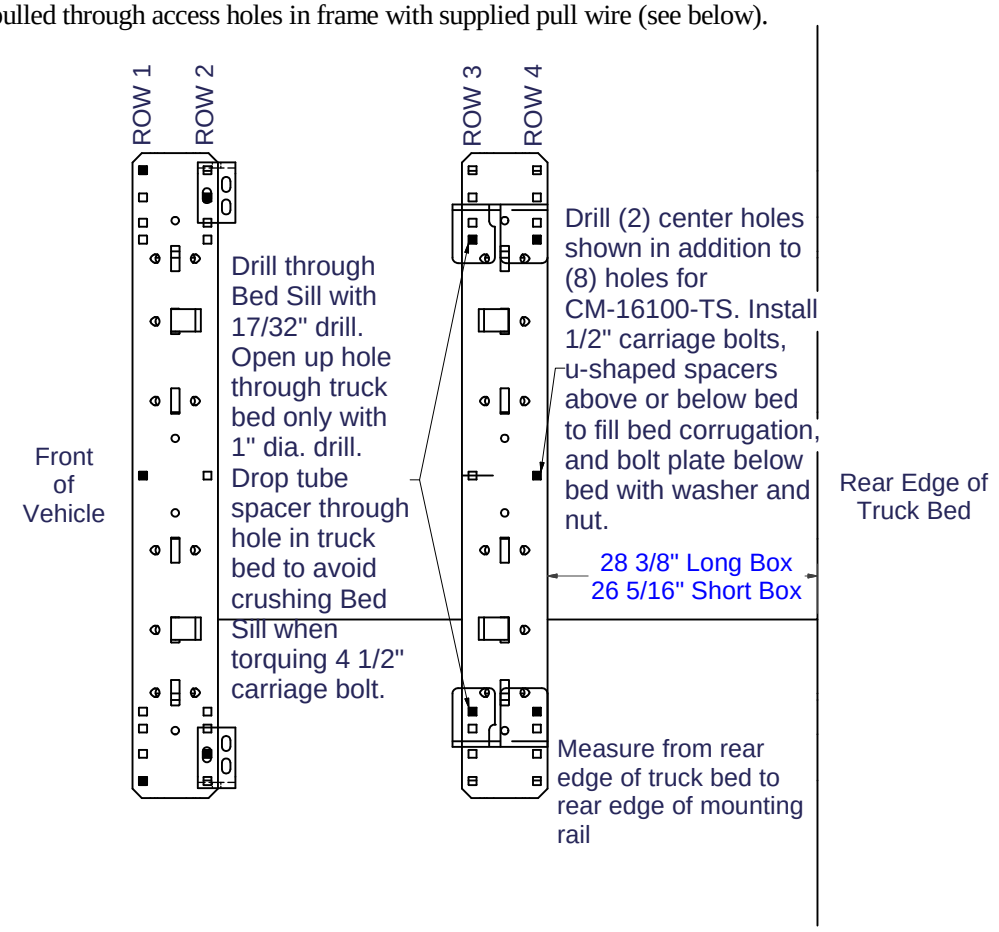
## DODGE '03 TO '12 2500 WITH OVERLOAD SPRINGS
## 3500 (REQUIRES 16301 BRACKET KIT)

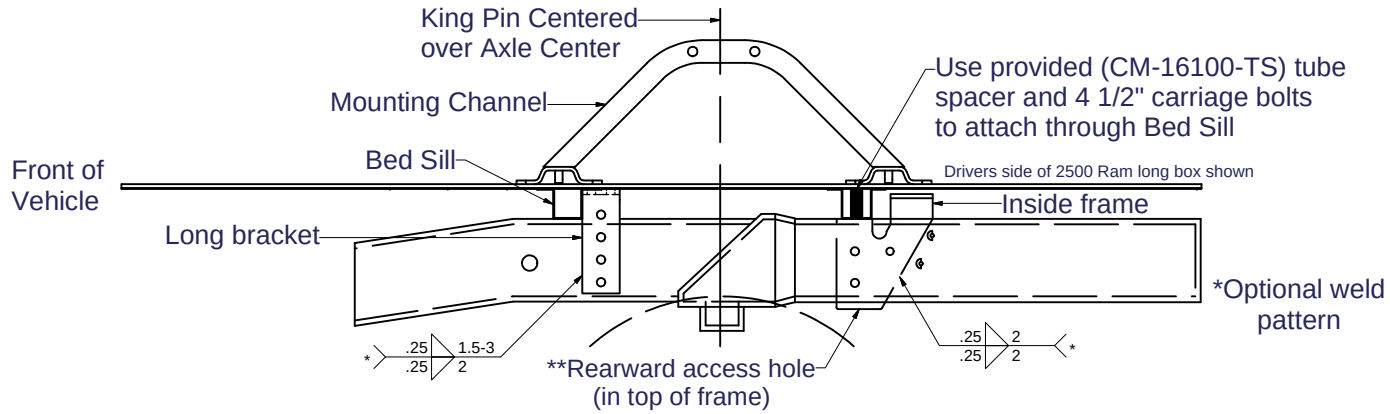
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Tube spacer and 4 ½" carriage bolt used to attach through rearward Bed Sill (Row 3).
2. **Rib neck bolts will need to be pulled through access holes in frame with supplied pull wire (see below).
3. Do not drill thru both wall of frame. Drill only thru wall of frame to which bracket is mounted.
4. It is very important that brackets in Row 2 are against rear side of Bed Sill as shown. Due to dimensional instability in Bed Sill placement with the Dodge truck, interference could result when drilling in Row 3. Observe caution note below and double check all areas prior to drilling.
5. Rear brackets can be mounted to frame with (2) bolts in any combination of the three bracket holes.
6. *Due to tubular frames having thinner walls than previous C channel frames, extra caution needs to be used when mounting with the optional welding.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

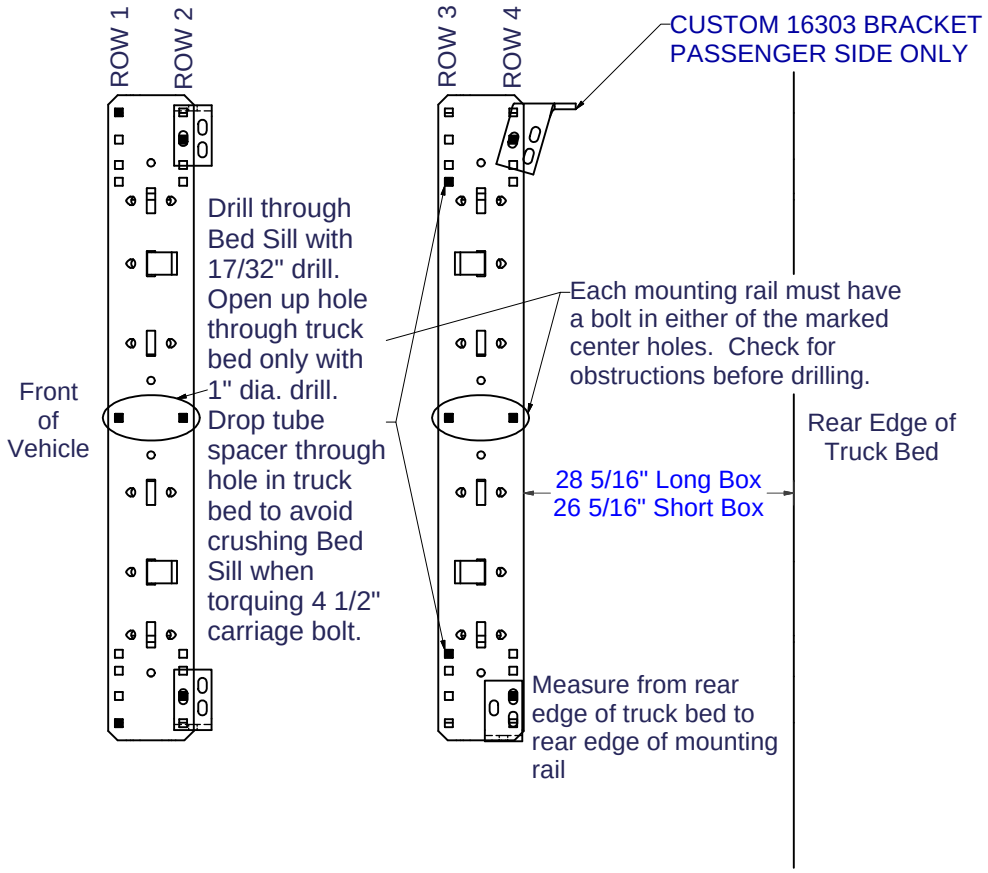
## DODGE '02 THRU '08 1500 (16303 CUSTOM BRACKET KIT)
## 2500 WITHOUT OVERLOAD SPRINGS

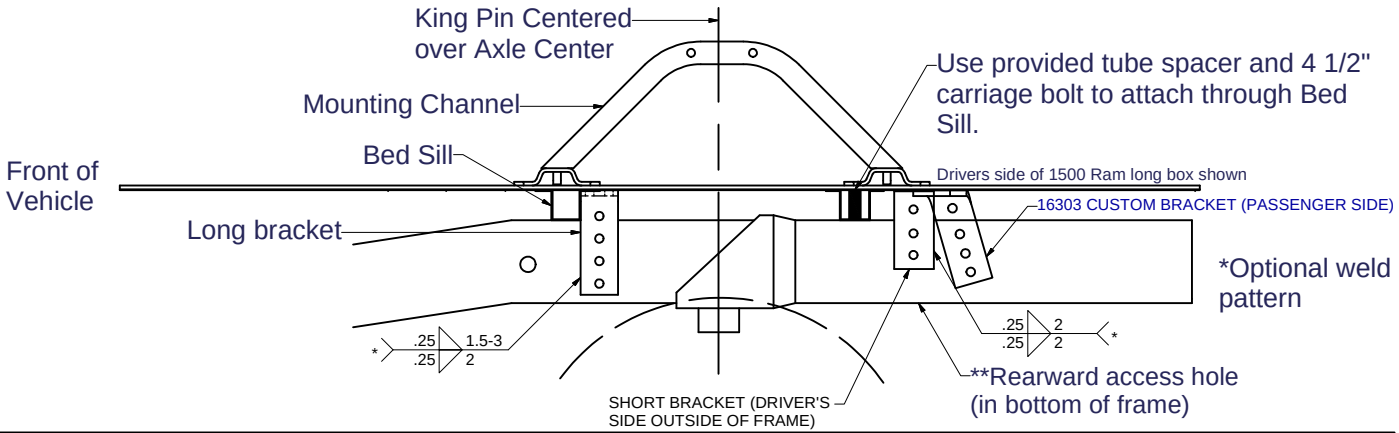
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Tube spacer and 4 1/2" carriage bolt used to attach through rearward Bed Sill (Row 3).
2. **Rib neck bolts will need to be pulled through access holes in frame with supplied pull wire (see below).
3. Do not drill thru both walls of frame. Drill only thru wall of frame to which bracket is mounted.
4. It is very important that brackets in Row 2 are against rear side of Bed Sill as shown. Due to dimensional instability in Bed Sill placement with the Dodge truck, interference could result when drilling in Row 3. Observe caution note below and double check all areas prior to drilling.
5. *Due to tubular frames having thinner walls than previous C channel frames, extra caution needs to be used when mounting with the optional welding.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

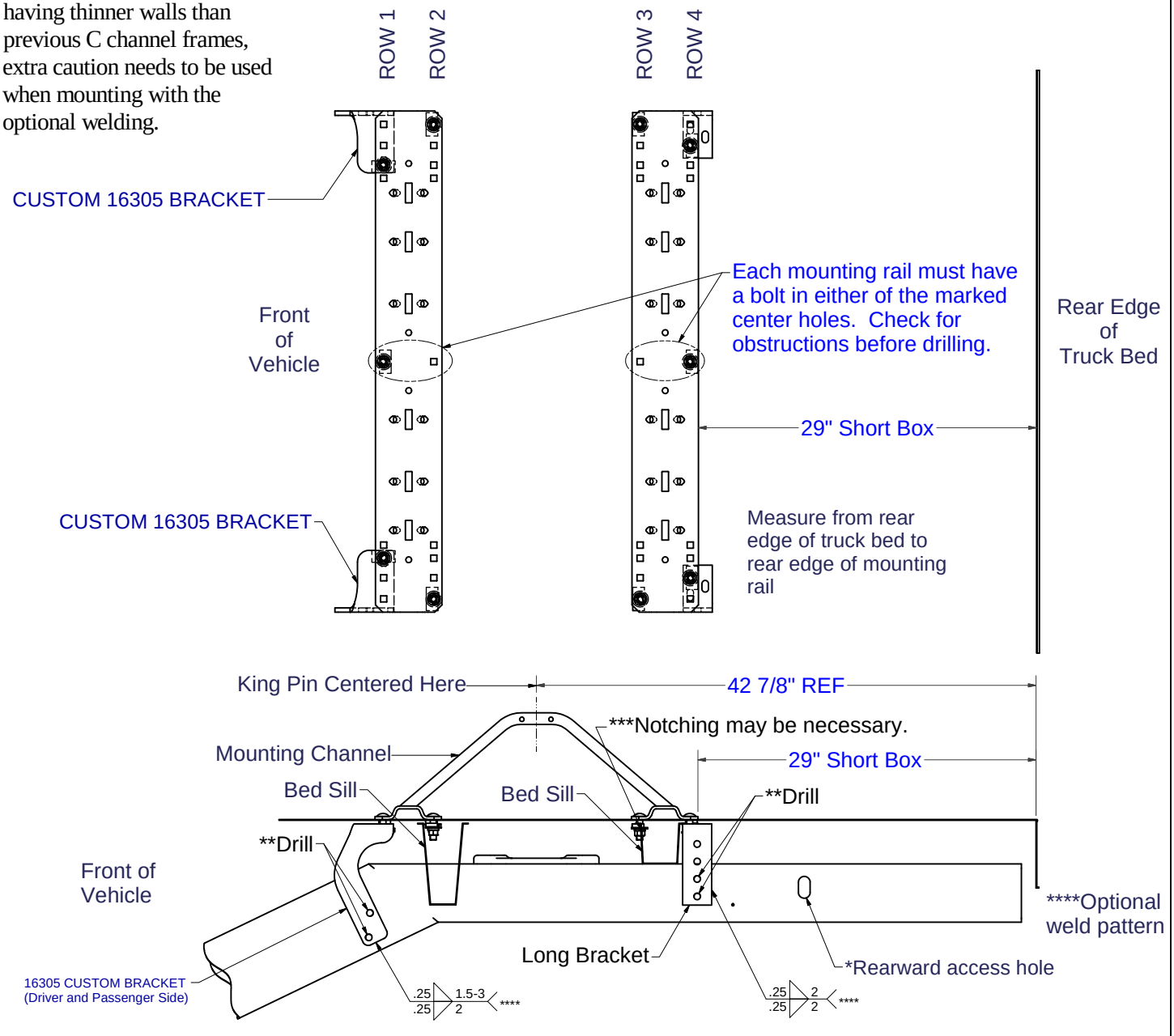
## DODGE '09 AND NEWER 1500 (WITHOUT FACTORY AIR SUSPENSION) (16305 CUSTOM BRACKET KIT)

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. *Rib neck bolts will need to be pulled through access holes in frame with supplied pull wire (see below).
2. Observe caution note below and double check all areas prior to drilling.
3. **Do not drill thru both walls of frame. Drill only thru wall of frame to which bracket is mounted.
4. ***It may be necessary to notch ends of bed sill in Row 3 to allow access to and the bolting down of mounting rail hardware.
5. ****Due to tubular frames having thinner walls than previous C channel frames, extra caution needs to be used when mounting with the optional welding.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc.**

CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.

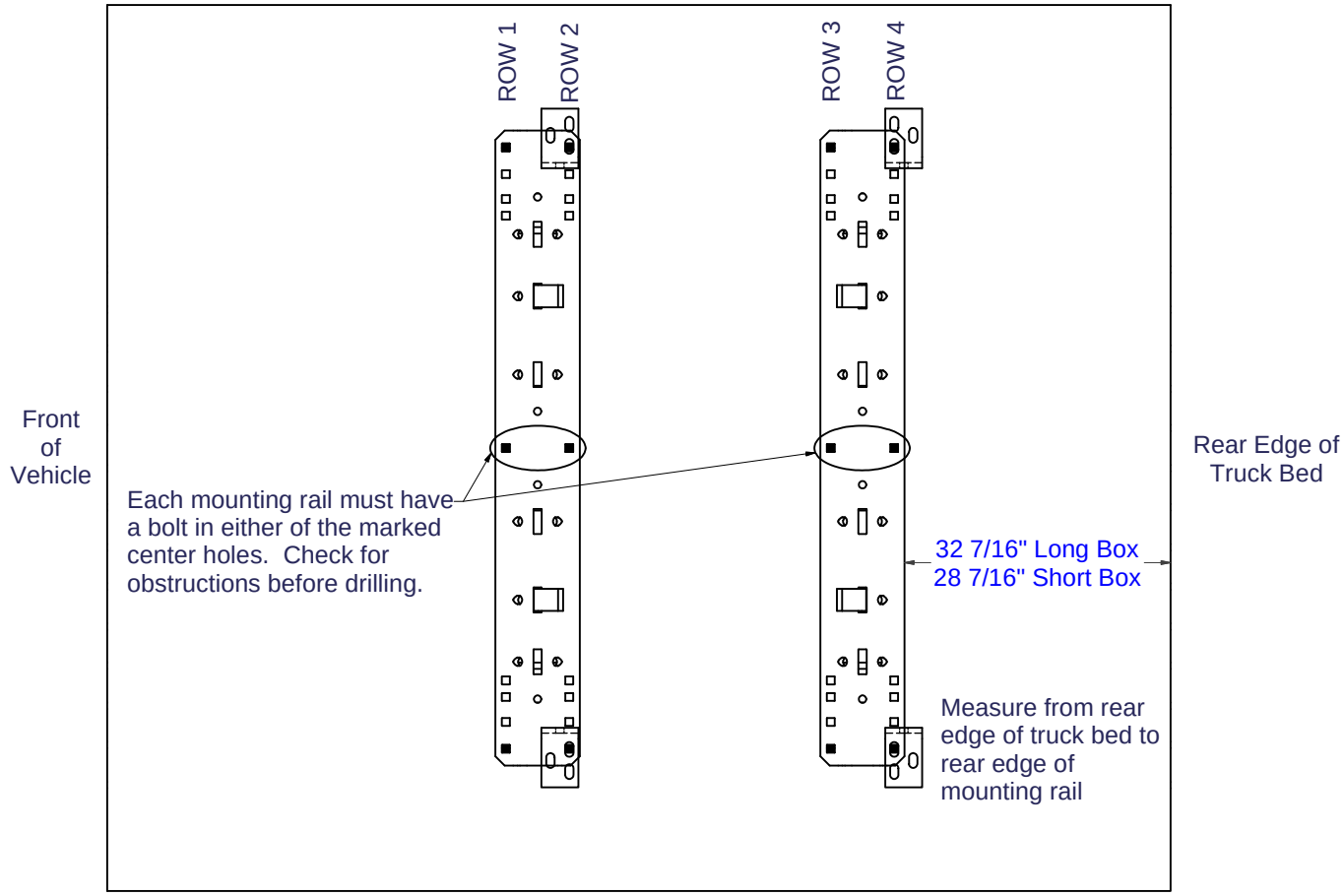
## DODGE '94 TO '01 1500, '94 TO '02 2500/3500 (FULL SIZE, SHORT AND LONG BOX)

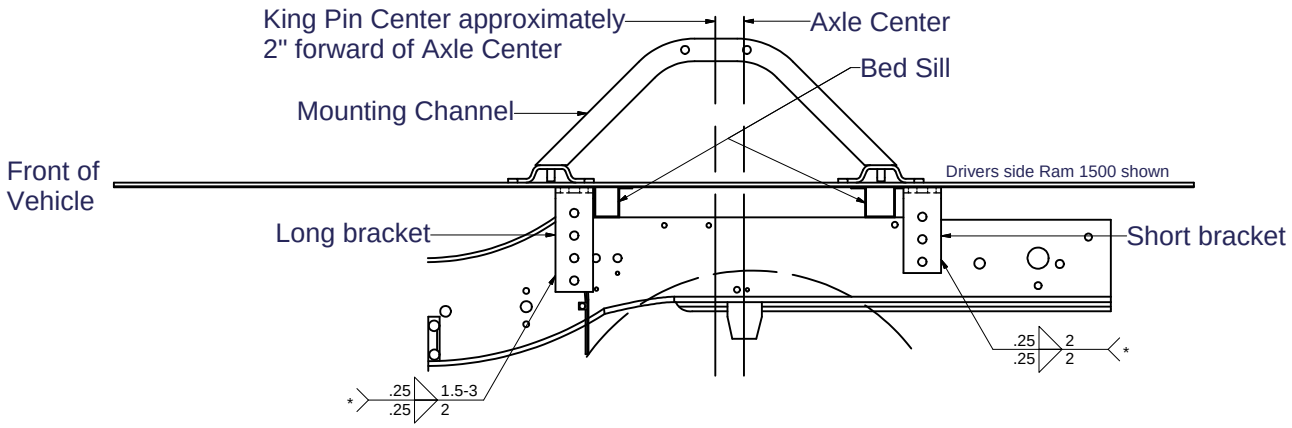
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. It is very important that brackets in Row 2 are against forward side of bed sill as shown below. Due to dimensional instability in bed sill placement with the Dodge truck, interference could result when drilling in Rows 3 or 4. You may need to move the mounting rail location +/- ½" to ensure frame brackets do not interfere with bed sills.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

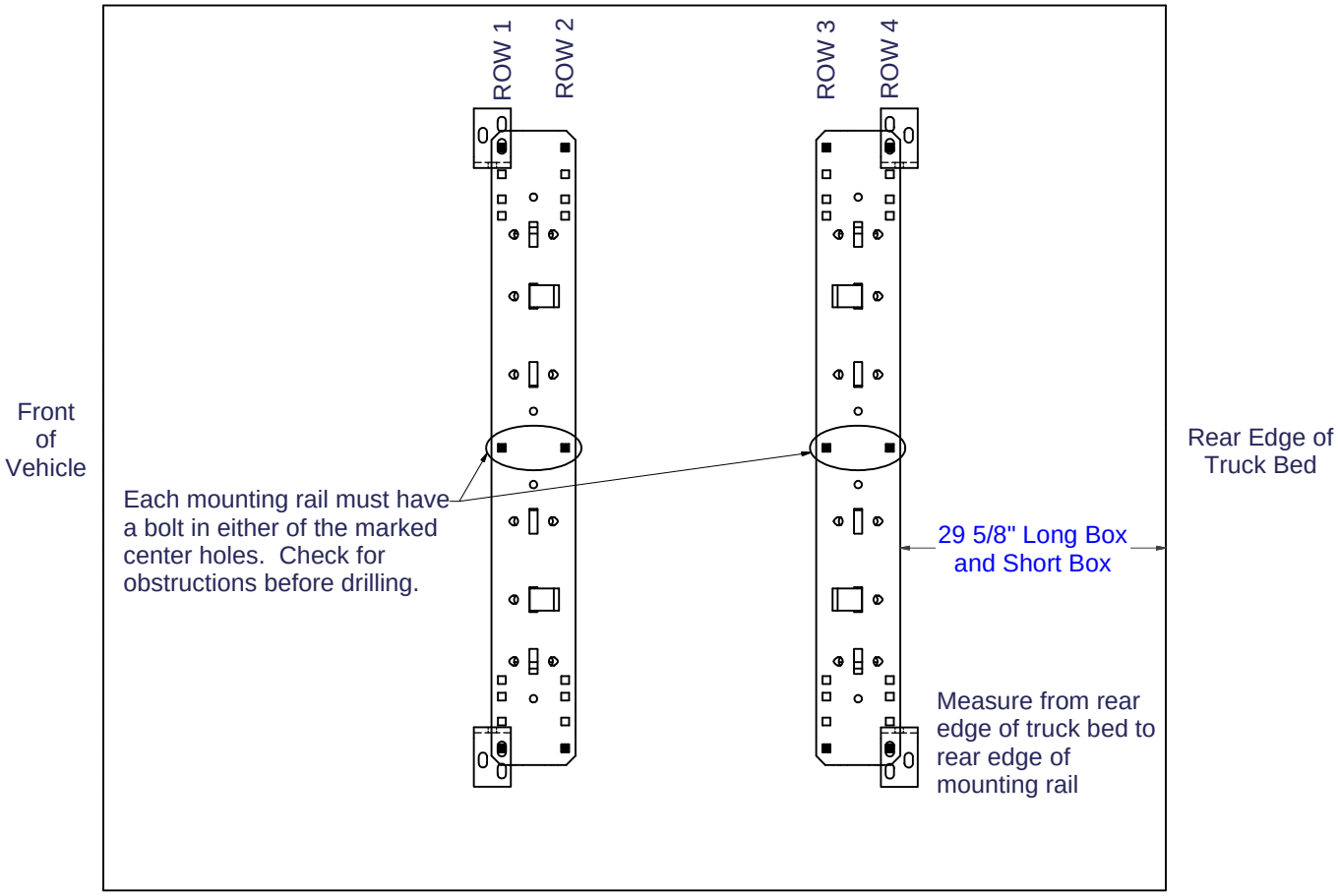
## DODGE THROUGH 93 (FULL SIZE)

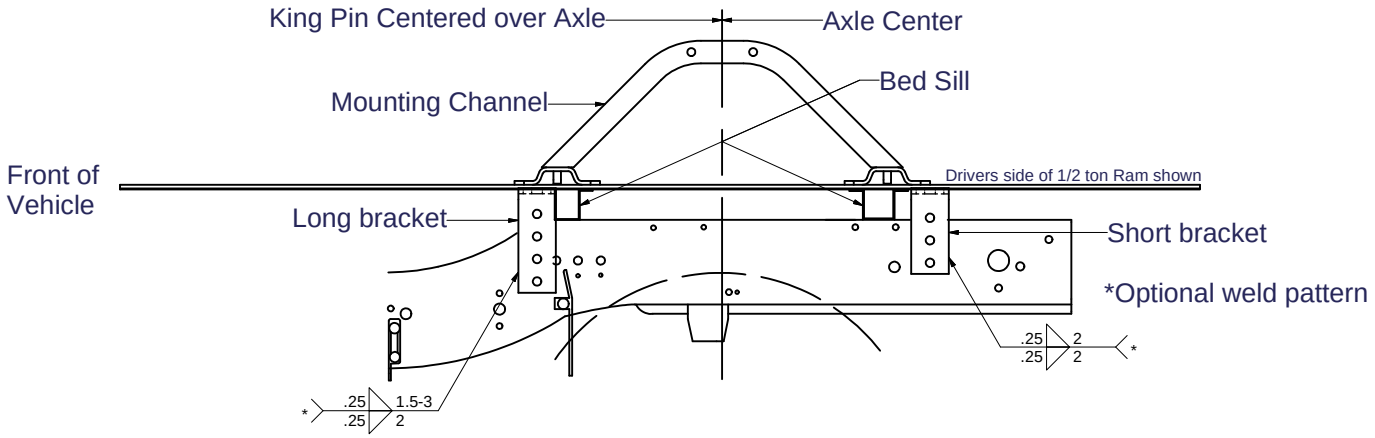
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. You may need to move mounting rail location +/- ½" to ensure frame brackets do not interfere with bed sills.




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

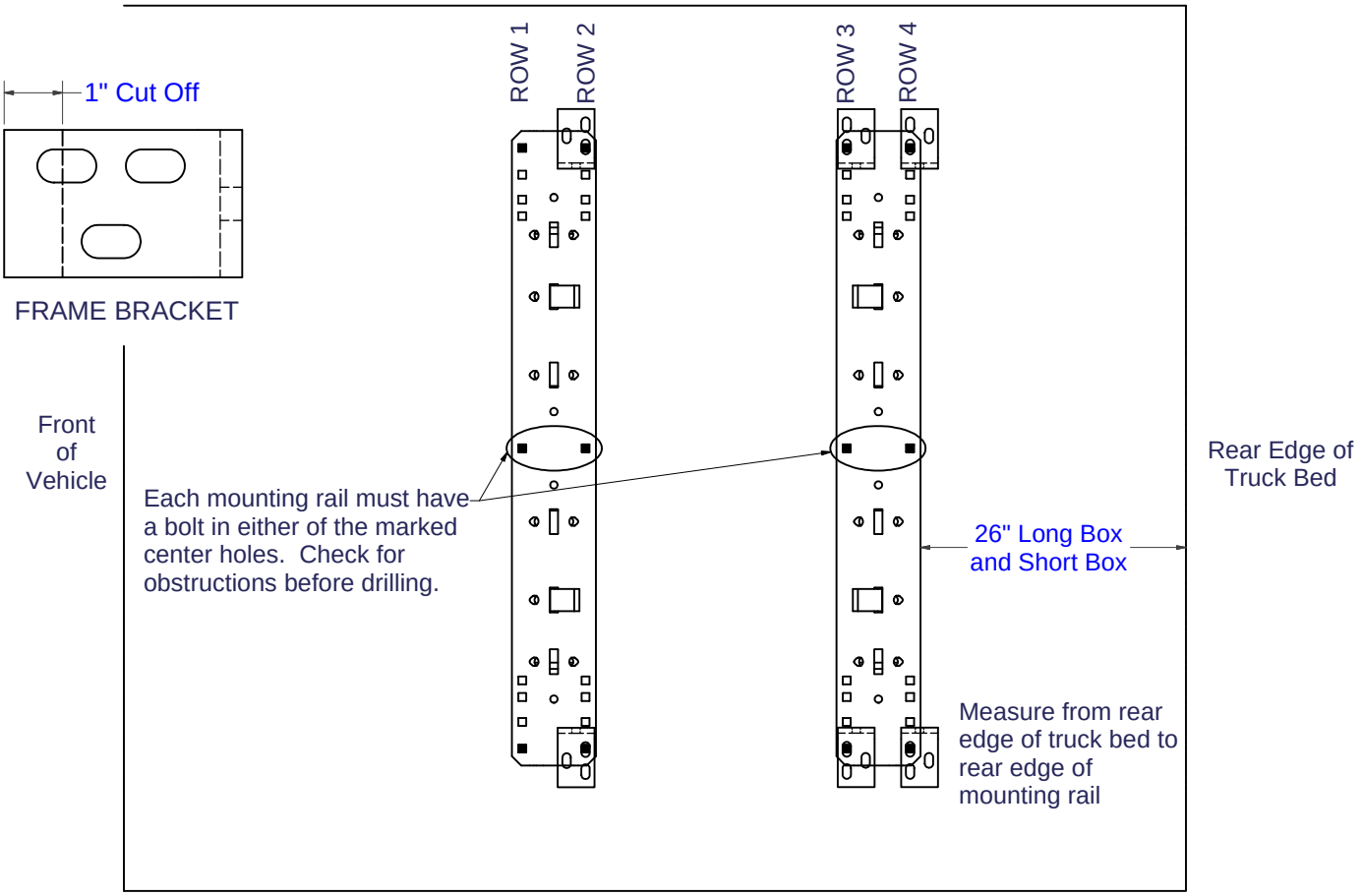
## DODGE '94 TO 2004 DAKOTA

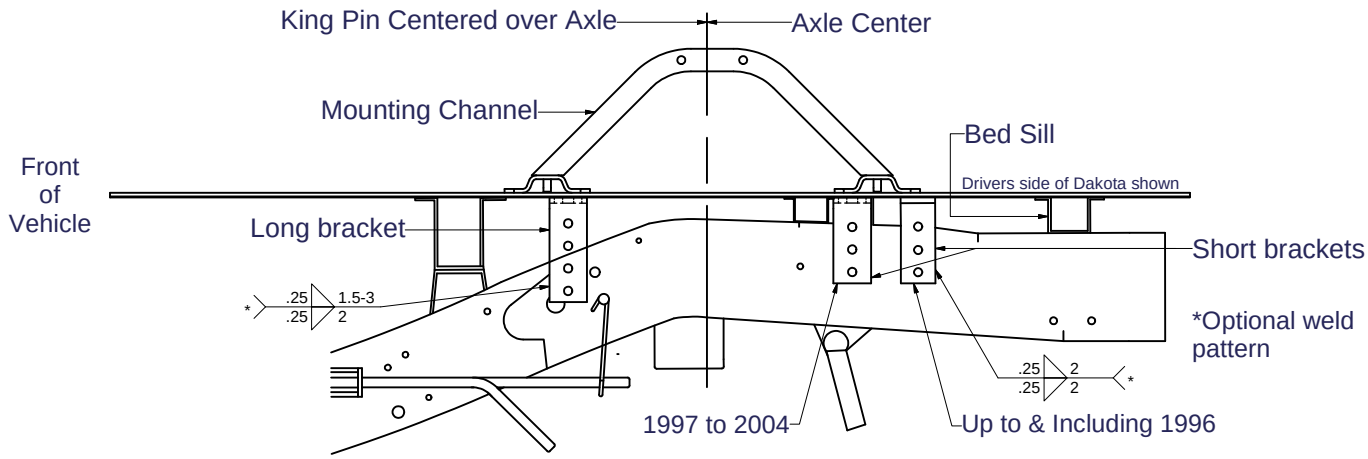
**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**IMPORTANT NOTES FOR THIS INSTALLATION:**

1. Find parallel rows of bed sill spot welds in bed of truck. No drilling should be done in the ~4" between parallel rows of spot welds where the bed sill sits.
2. Cut 1" from top flange of brackets. Under bed, mount brackets with flanges facing out.
3. Put rear brackets on Row 3 for '97 to Present models. Put brackets on Row 4 for '96 and Earlier models.




**CAUTION!**

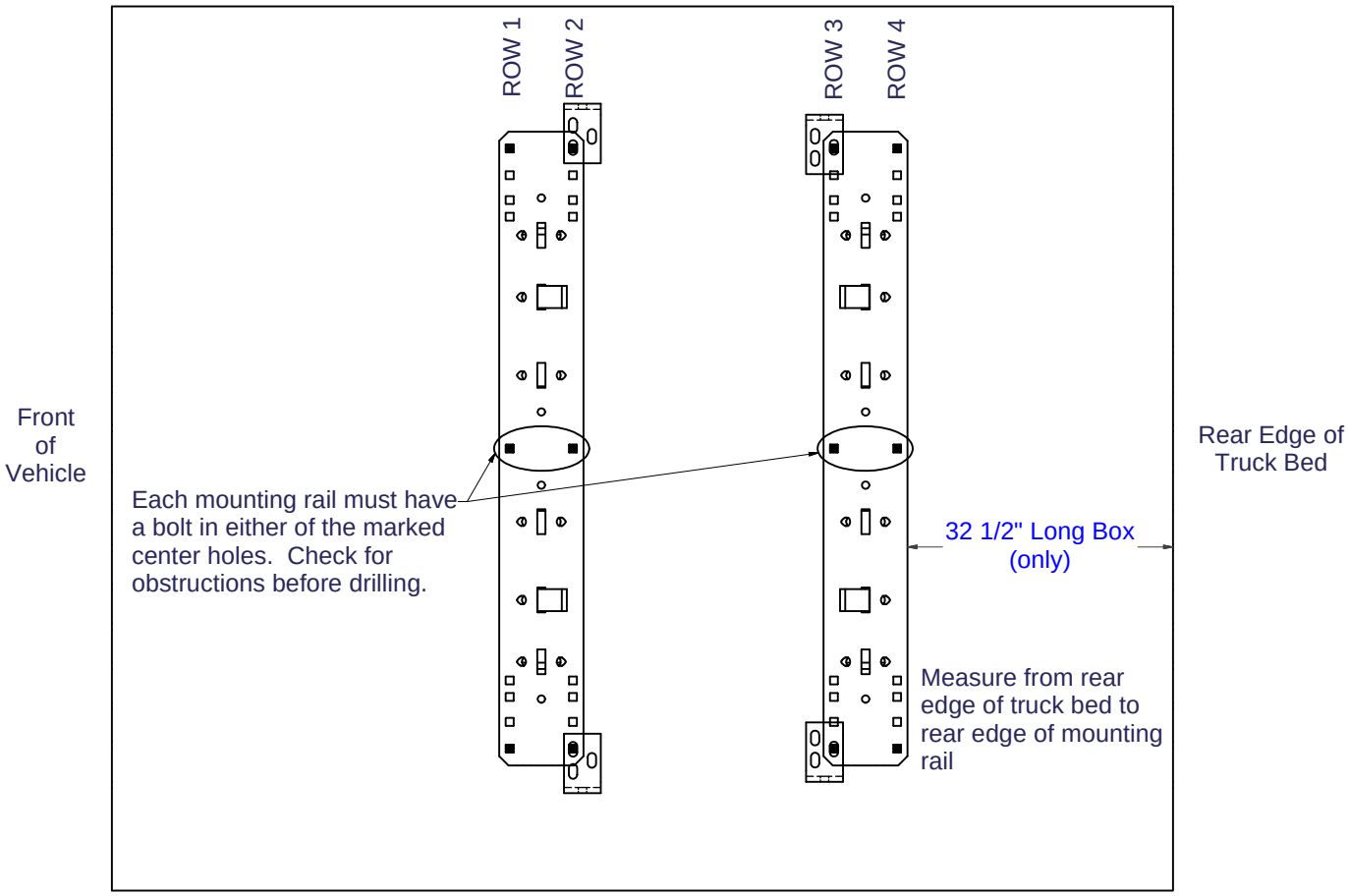
**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

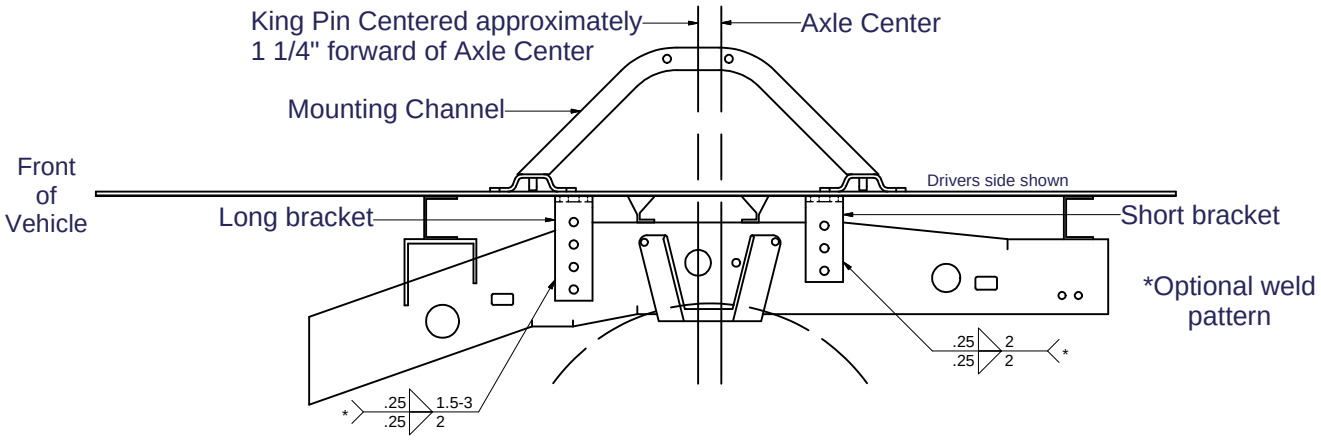
## TOYOTA TUNDRA 2000 TO 2006 (STANDARD CAB LONG BOX ONLY)

**CAUTION!**

Read pages 2-3 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

**NOTE: For Toyota Tundra application, part #16302 spacer kit is required. Stack (1) 3/16" and (1) 5/16" thick slotted spacers as required to avoid crushing of truck bed.**




**CAUTION!**

**Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.**

## TOYOTA 2007 TO 2008 TUNDRA, 6.5' & 8' BEDS, DOES NOT FIT CREWMAX

**CAUTION!**

**Read pages 2-3 of 16100 instructions before starting installation. Failure to do so could reult in significant vehicle damage!**

IMPORTANT NOTES FOR THIS INSTALLATION:

1) Use the 16304 add-on kit with the 16100 universal kit. Read pages 1-3 of the 16100 instruction for general information.

2) The mounting holes for row 3 go through the inside of the bed sill. Make sure it lines up correctly. Drill through the bed and the top of the frame on both sides. For the Row 4 passenger side attachment, drill through the bed and top of the frame as well.

3) The rear rail on the passenger side is secured directly to the frame with 3" carriage bolts provided in the 16304 kit. For the row 3 attachment, a tube spacer should be placed inside the bed sill on top of the frame and under the bottom of the bed. Line up the spacer with the drilled hole before inserting the carriage bolt. Repeat for both sides. See FIG. 1 below.

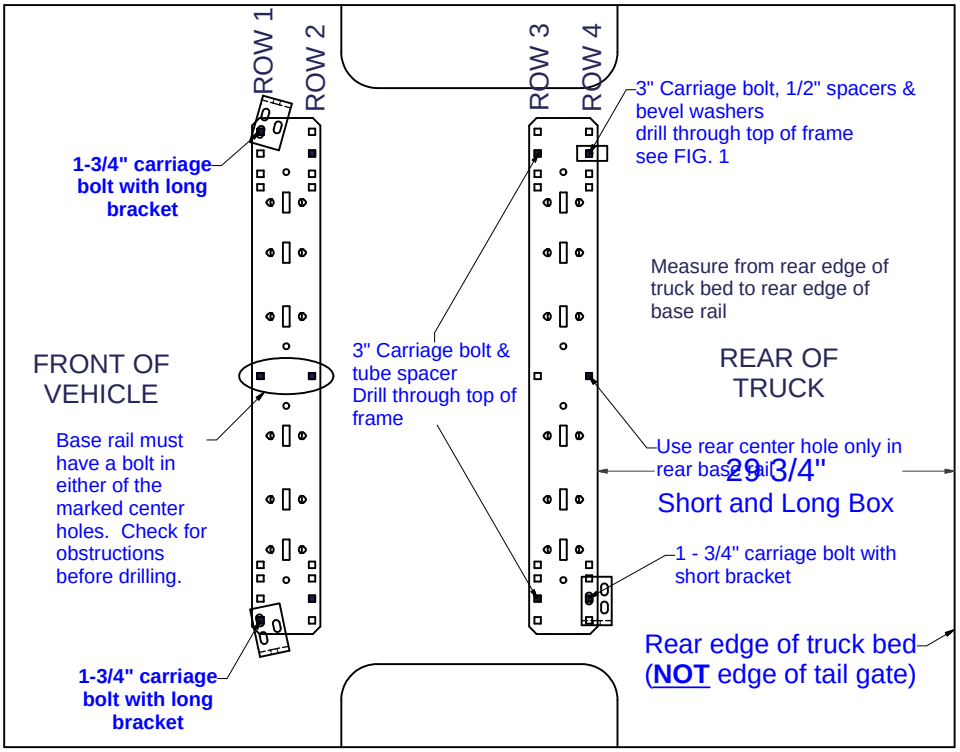
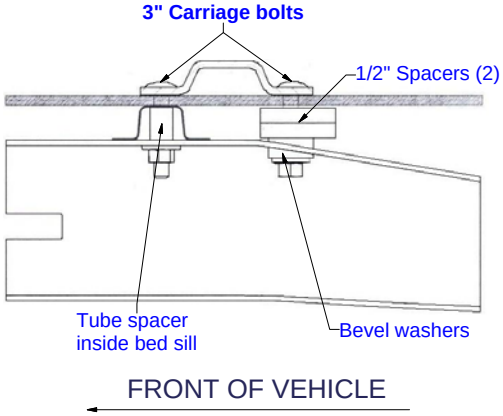


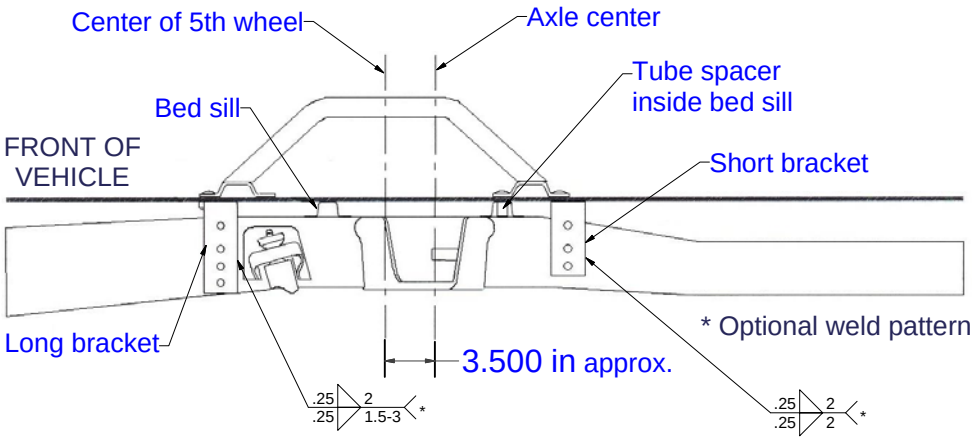

FIG. 1

(REAR PASSENGER SIDE)




4) For the Row 4 passenger side attachment, stack two 1/2" spacers and a bevel washer, provided in the 16304 kit, to fill the gap between the bed and the frame. Use another bevel washer, conical toothed washer, and hex nut to fasten the 3" carriage bolt in place. See FIG. 1.

5) Install the long brackets on the front rail and the short bracket on the rear driver side rail using the 1 - 3/4" carriage bolts provided in the 16304 kit. All other attachments to the bed use 2" carriage bolts from the 16100 kit.




**CAUTION!**

Check for obstructions before drilling. Failure to do so could reult in damaged fuel or brake lines, structural members, etc. CURT MANUFACTURING does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsiblity of the installer to prevent damage due to installation.

# NOTES

## FIVE YEAR LIMITED WARRANTY

CURT MANUFACTURING warrants its 5th Wheel Hitch Mounting Kits from date of purchase against defects in material and workmanship under normal use and service, for 5 years of ownership to the original purchaser when a CURT MANUFACTURING mounting kit is used.

CURT MANUFACTURING will replace FREE OF CHARGE any part, which proves defective in material or workmanship when presented to any CURT MANUFACTURING dealer, CURT MANUFACTURING Warehouse or returned to the factory. TRANSPORTATION CHARGES PREPAID, at the address below. THIS WARRANTY IS LIMITED TO DEFECTIVE PARTS REPLACEMENT ONLY. LABOR CHARGES AND/OR DAMAGE INCURRED IN INSTALLATION OR REPLACEMENT AS WELL AS INCIDENTAL AND CONSEQUENTIAL DAMAGES CONNECTED THEREWITH ARE EXCLUDED.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Any damage to the 5th Wheel Hitch as a result of misuse, abuse, neglect, accident, improper installation, or any use that violates the instructions furnished by us, WILL VOID THE WARRANTY.

Curt Manufacturing, Inc.
6208 Industrial Drive
Eau Claire, WI 54701

CURT™ The FIRST Name in Towing Products™

# INSTALLATION INSTRUCTIONS

**WARNING: NEVER EXCEED YOUR VEHICLE MANUFACTURER'S RECOMMENDED TOWING CAPACITY**

## R16 5TH WHEEL ROLLER

## WARNINGS

Read and understand instructions before using this product. Fully instruct and demonstrate the operation of this 5th wheel hitch to the end user. Include the importance of observing all warnings contained herein, including warning labels on 5th wheel hitch mid section. Provide this manual in its entirety to the end-user.

To avoid serious injury, do not expose hands, body parts or clothing between the truck and trailer or the truck's bed sides and trailer. Extreme care should be observed to avoid serious injury to self, property and observers.

Never position yourself or others under the trailer's kingpin area during coupling and uncoupling. Serious injury or death may result if the warning above is not observed.

This product complies with V-5 regulations and safety requirements for connecting devices and towing systems of the State of Wisconsin.

# UNPACKING THE ROLLER

Inspect all parts for damage and verify that all items listed are present. **NOTE:** The mounting rail kit (#15) is sold separately.

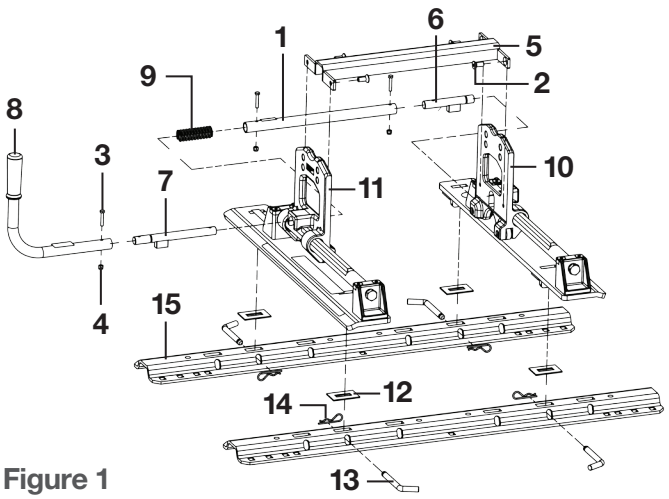



Figure 1

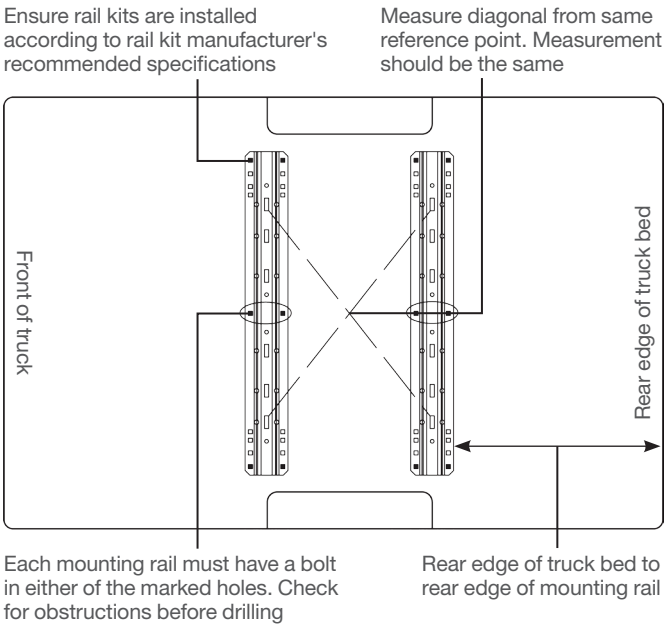



Figure 2

# PARTS LIST

| Item# | Qty | Description |
|---|---|---|
| 1 | 1 | Outer tube |
| 2 | 4 | Flat head socket head cap screw |
| 3 | 3 | Hex head cap screw |
| 4 | 3 | Nylock nut |
| 5 | 1 | Cross member weldment |
| 6 | 1 | Lock rod weldment, passenger side (PS) |
| 7 | 1 | Lock rod weldment, driver side (DS) |
| 8 | 1 | Handle |
| 9 | 1 | Compression spring |
| 10 | 1 | Roller assembly, passenger side (PS) |
| 11 | 1 | Roller assembly, driver side (DS) |
| 12 | 4 | Spacer, neoprene |
| 13 | 4 | Rail pin |
| 14 | 4 | Rail clip |
| 15 | 1 | Set of mounting rails, ordered separately |

# ASSEMBLY INSTRUCTIONS

The R16 roller is to be used with 5th wheel trailers weighing up to 16,000 lbs. Never use on trailers exceeding 16,000 lbs. **CAUTION:** The R16 roller will reposition your 5th wheel hitch 12" rearward. However, this will not guarantee complete truck cab/trailer clearance when towing.

**Step 1**
Before beginning assembly of the R16 roller, check the base rails in your truck to be sure they are properly installed and are parallel with each other. The diagonal dimensions should be the same, see Figure 2. With the base rails correctly positioned, the assembled R16 roller will drop into the slots on the top surface of the base rails.

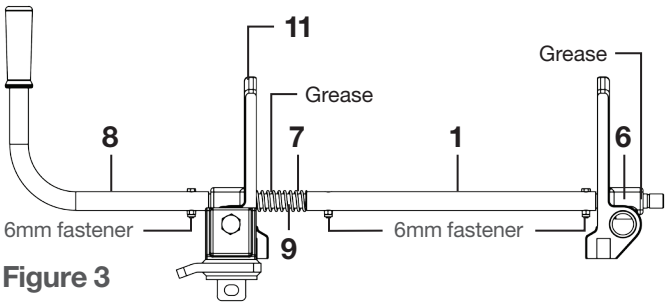



Figure 3

**Step 2**
Grease the ends of the lock rod weldments (#6) and (#7) as shown in Figure 3.

**Step 3**
Slide lock rod weldment (#7) into the driver side (DS) roller assembly (#11) and slide lock rod weldment (#6) into the passenger (PS) roller assembly (#10).

**Step 4**
Slide the outer tube (#1) over lock rod weldment (#6) until holes line up. Secure with 6mm fastener. Tighten until nylock nuts are fully engaged.

**Step 5**
Slide compression spring (#9) over lock rod weldment (#7).

**Step 6**
Slide lock rod weldment (#7) with compression spring (6) into outer tube (#1) until the holes line up. Secure with 6mm fastener. Tighten until nylock nuts are fully engaged.

**Step 7**
Slide handle (#8) over lock rod weldment (#7) until the holes line up. Secure with 6mm fastener. Tighten until nylock nuts are fully engaged.

**Step 8**
Slide cross member weldment (#5) between the DS roller assembly (#11), PS roller assembly (#10) and over the lock rod assembly as shown in Figure 1. Secure with 10mm flat head bolts and torque to 35 foot lbs.

**Step 9**
Place the assembled R16 roller into the base rails (#15) and pin in place with the supplied hitch pins & clips (#13, #14).

**CAUTION:** Be sure that all base rail hitch pins are positioned as shown in Figure 4 below and that all clips are secured before towing.

## Base rail hitch pin illustration

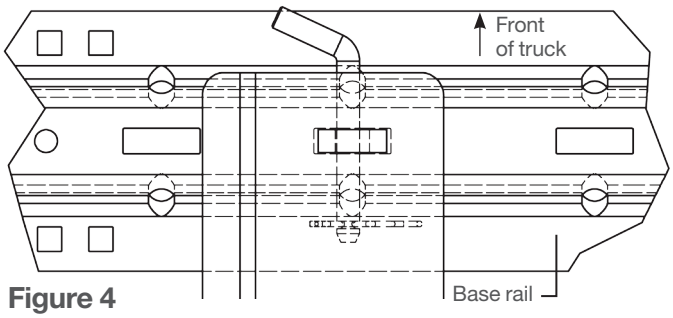



Figure 4

**Step 10**
Pull handle out and rotate as shown on the operation decal on the roller. Roller should move smoothly fore and aft on the rails. **NOTE:** When the R16 roller is locked in its fore and aft positions the lock bar handle should be vertical. The red indicator will not be showing and the green indicator will be showing. See Figure 5 below.

**Step 11**
If the unit binds, make sure all bolts are torqued to proper specifications. Make sure base rails are square and parallel.

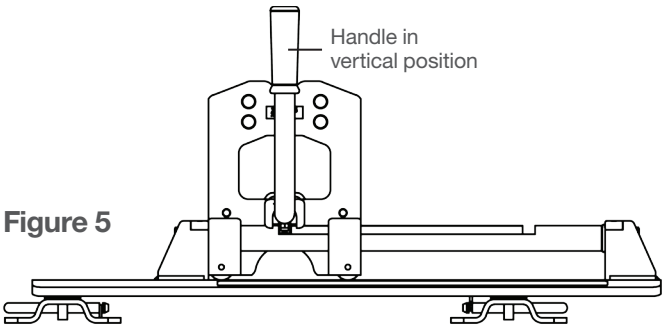
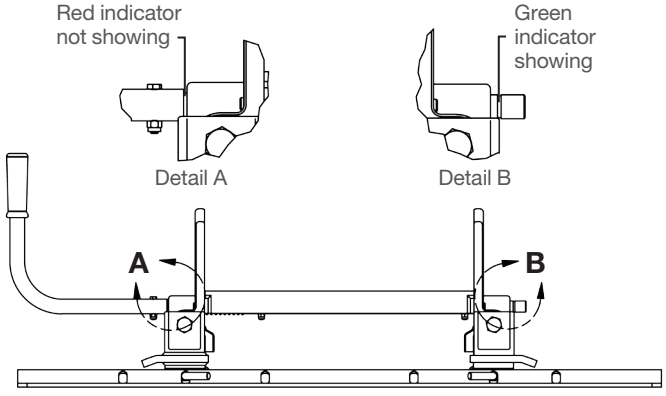



Figure 5




# 5TH WHEEL HEAD INSTALLATION

To install the 16515 5th wheel head (Figure 6), slide the 16515 cross member weldment into the R16 roller as shown. Select desired height using the adjustment holes in the cross member weldment. From the inside, insert four supplied 1/2" x 1 3/4" bolts into the four holes of the cross member weldment into the R16 roller. Place 1/2" nylock nuts on each bolt. Torque to 75 ft/lbs. Place the 16515 5th wheel head into the cross member weldment saddle, insert supplied 3/8" hitch head pins and secure with hitch pin clips. The R16 is now ready for operation. See 'Operation Instructions'.

To install the 16520 5th wheel head (Figure 7), select desired height using the adjustment holes in the cross member weldment. Place the four supplied 14mm bolts through the holes and secure them with the nylock nuts. Torque all four bolts to 100 ft-lbs. The Q16 is now ready for operation. See 'Operation Instructions'.

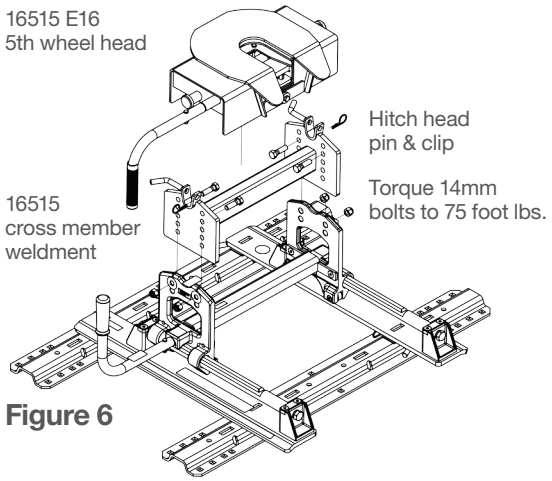



Figure 6

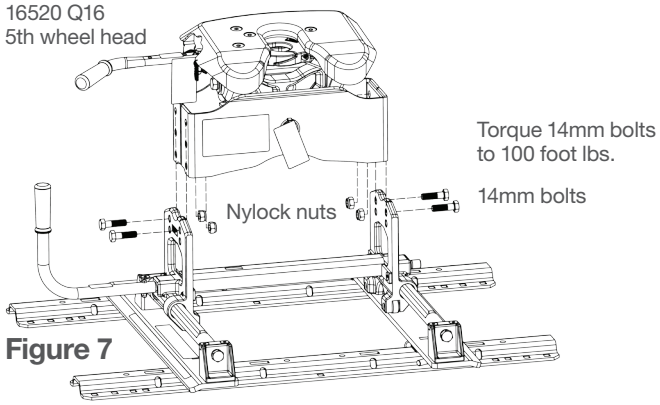



Figure 7

# REMOVAL OF THE 5TH WHEEL HEAD & 16560 ROLLER

For removal of the 5th wheel head from the R16 roller, reverse the steps found under the '5th Wheel Head Installation' for your model.

For removal of the 16560 R16 roller, remove pins & clips from Step 9 found under the 'Assembly Instructions' on the previous page. See Figure 4.

# OPERATING INSTRUCTIONS

## To maneuver

Align trailer and tow vehicle in a straight line, on a level surface.

Pull handle out and rotate counter-clockwise to place lock bar in the ready-to-lock position.

Set trailer brakes and slowly drive the tow vehicle forward until R16 roller stops. Locking bars will automatically engage in the rear locking groove. **NOTE:** Visually check that lock bar handle is vertical, both lock bars are fully engaged and that the green indicator is visible.

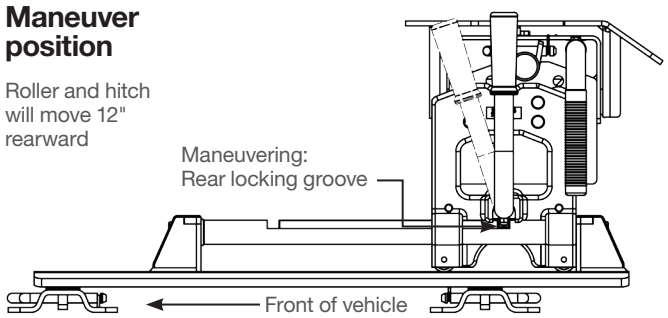



**Figure 8**

## To tow

Align trailer and tow vehicle in a straight line, on a level surface.

Pull handle out and rotate clockwise to place lock bar in the ready-to-lock position.

Set trailer brakes and slowly back up the tow vehicle until R16 roller stops. Lock bars will automatically engage in the forward locking groove. **NOTE:** Visually check that lock bar handle is vertical, both lock bars are fully engaged and that the green indicator is visible. Set trailer brakes and move the tow vehicle forward slightly to be sure both lock bars are fully engaged. You are now ready to tow.

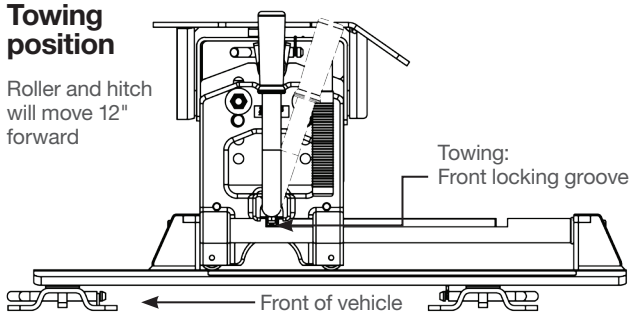



**Figure 9**

# WARRANTY

## Five year limited

CURT Manufacturing, LLC (CURT) warrants to the original purchaser (Purchaser), its products to be free from defect under normal use and service, ordinary wear and tear excepted, for the warranty period stated below, from the date of the original retail purchase, but subject to the limitations as set forth below.

## Limitation on warranty

CURT's obligation under the above warranty is limited to repair or replacement of the CURT Product (Product), at its option due to a manufacturing defect of the Product. CURT shall not be liable for the loss of or use of vehicles, loss of or damage to personal property, expenses such as telephone, lodging, gasoline, towing, tire damage or any other incidental or consequential damages incurred by the Purchaser, or any other person or entity.

CURT will examine the returned Product. If CURT, in its exclusive discretion, determines that the defect or damaged Product is covered under this limited warranty, CURT will repair the Product or replace it at that time.

Alterations to or misuse of the Product will void the warranty. For example, overloading or exceeding an automobile or trailer manufacturers' weight ratings, or maneuvering motor vehicles equipped with Products at improper rate of speed, shall void the warranty on any of the Products. Failure to properly maintain and regularly inspect the Product according to the specific instruction sheet accompanying each Product shall also void the warranty.

Some states do not allow the exclusion or limitation of incidental or consequential damages. If such exclusions or limitations are prohibited under the applicable law, the above limitation or exclusion may not apply.

This Warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

The Purchaser, when returning a CURT Product, must observe the following steps:

1. The Purchaser must have proof of purchase of any damaged Product and supply the same to the headquarters of CURT. The Purchaser must obtain from CURT (toll free number is 877-CURTMFG (877.287.8634)) a Returned Goods Authorization (RGA) number in order to return any damaged Product to CURT for inspection and evaluation under this Limited Warranty.

2. The Purchaser must pay all handling charges and shipping costs to deliver Products to CURT and must send the damaged Product along with the RGA number and proof of purchase to CURT at 6208 Industrial Drive, Eau Claire, Wisconsin 54701.

3. Upon receipt of damaged Product, CURT will determine whether the damaged Product is covered under the Limited Warranty. If it is, CURT will repair or replace the Product. If the Product is replaced, the Product that is originally returned by the Purchaser shall become the exclusive property of CURT. If the returned Product is not covered under the Limited Warranty, CURT will notify the Purchaser before taking any further action with regard to repair or replacement, which would be at the Purchaser's cost.