

16K

Signature Series

INSTALLATION INSTRUCTIONS MOUNTING KIT GENERAL MOTORS '88 - '98; '99 – 2000 Classic; 1500/2500/3500 (6' and 8' BEDS)

18K

Signature Series

DEALER/INSTALLER:

- (1) Provide this Manual to end user.

END USER:

- (1) Save this Manual for future reference.
- (2) Pass on copies of Manual to any other user or owner of Hitch.

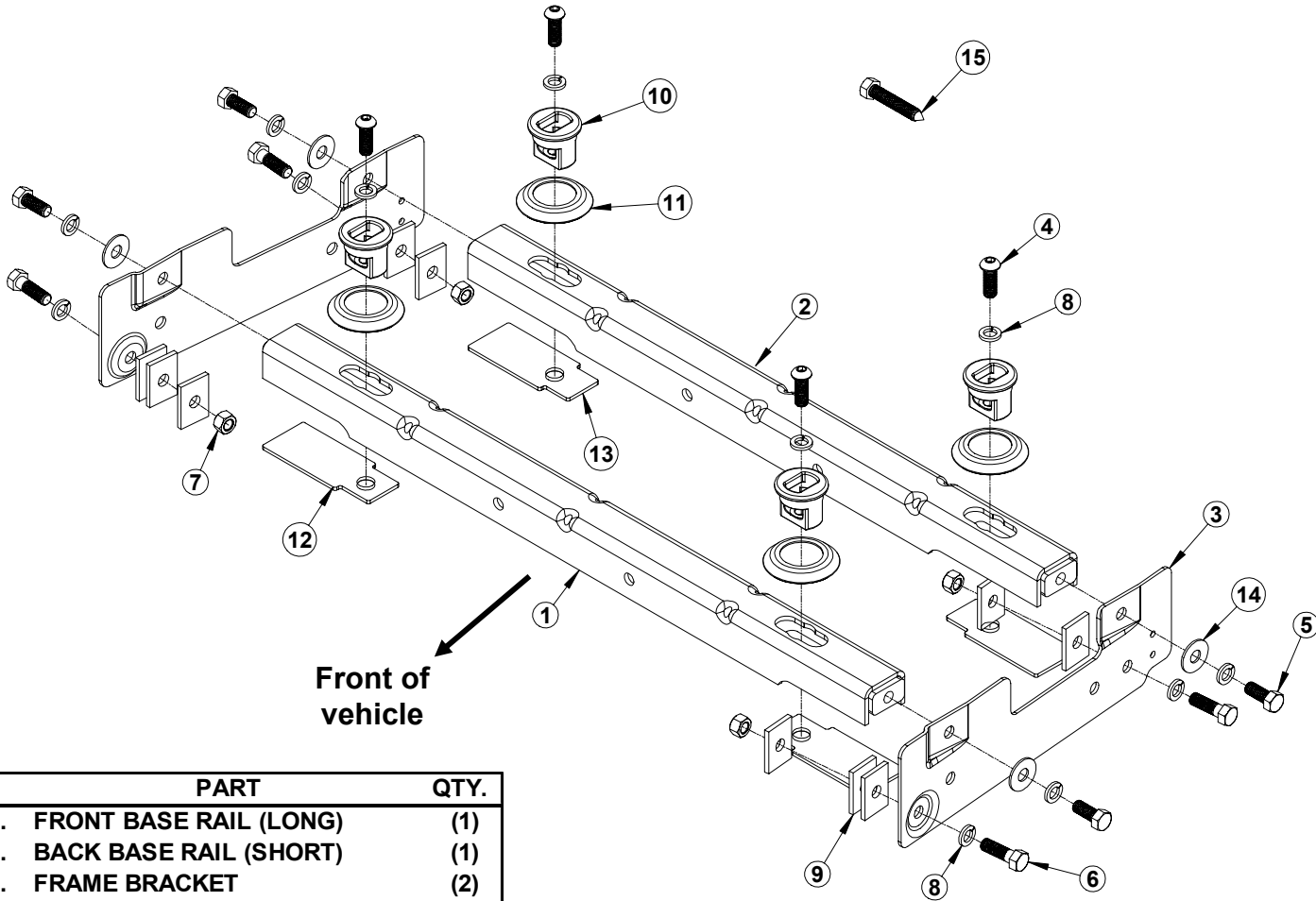


Figure 1

PART	QTY.
1. FRONT BASE RAIL (LONG)	(1)
2. BACK BASE RAIL (SHORT)	(1)
3. FRAME BRACKET	(2)
4. 5/8-11 BUTTON HEAD SCREW	(4)
5. 5/8-11 GR8 BOLT 1 1/2" LONG	(4)
6. 5/8-11 GR8 2" LONG	(4)
7. 5/8-11 GR8 NUT	(4)
8. 5/8 LOCK WASHER	(12)
9. SPACER	(10)
10. PUCK	(4)
11. TRIM RING	(4)
12. LONG SPACER	(2)
13. SHORT SPACER	(2)
14. 5/8 FLAT WASHER	(4)
15. 5/8-11 X 3 1/2" WITH POINT	(1)

For Installation Assistance or Technical Help, Call 1-800-758-0869

⚠ WARNING:

Failure to follow all of these instructions may result in death or serious injury!

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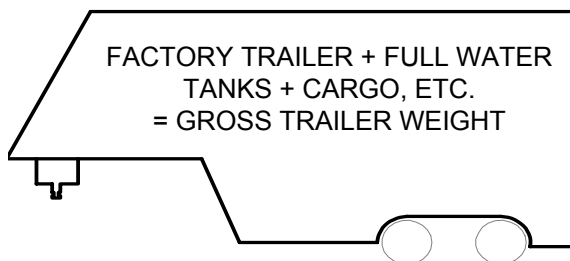
GUIDELINES FOR MATCHING HITCH TRUCK AND TRAILER

⚠ WARNING:

Failure to check and follow tow ratings could result in tow vehicle damage or truck and trailer separation while towing.

- Trailer and its contents together must not exceed truck, hitch and/or trailer tow ratings.
- Towing vehicle must have a manufacturer’s rated towing capacity equal to or greater than the gross trailer weight (dry weight of the trailer plus payload of the trailer). **(Figure 2)**
- Gross weight of trailer must not exceed fifth wheel hitch rating.
- King pin weight must not exceed fifth wheel rating **(Figure 3)**. If in doubt have king pin weight measured by a qualified technician.

Figure 2

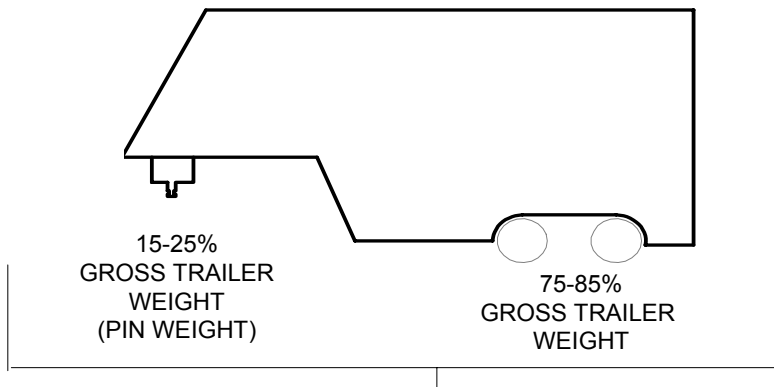


1. Check Tow Ratings:
 Vehicle Tow Rating: _____
Signature Series Hitch Rating: _____
 Gross Trailer Weight (**Figure 2**): _____

***Trailer weight should be the lowest of these recorded ratings for safe towing conditions.**

2. **Cequent Towing Products** hitches are designed for use with recreational fifth wheel trailers only. Hitch applications other than recreational fifth wheel trailers must be approved in writing by **Cequent Towing Products'** Engineering Department.
3. Use only a SAE 2-inch kingpin with your *Signature Series* Fifth Wheel Hitch.
4. Approximately 15%-25% of trailer weight should be on hitch (Pin Weight)(**Figure 3**).

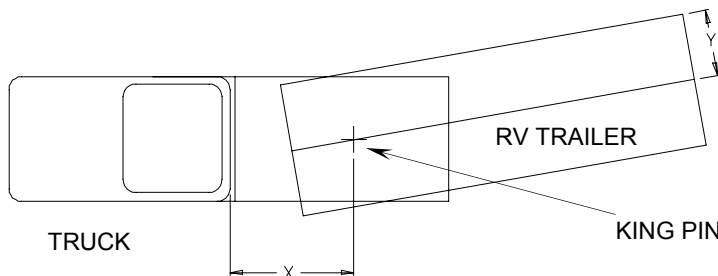
Figure 3



5. Trucks come in many different configurations. Cequent Towing Products' hitches are designed for use in light trucks such as the Ford F-Series, the Chevy Silverado and the Dodge Ram. Cequent Towing Products recommends the use of long bed (8ft) light trucks for the best combination in truck - trailer turning clearance.

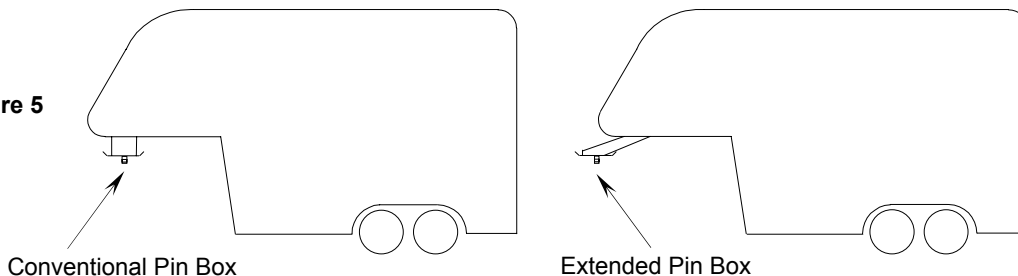
Rule of thumb: The distance from the back of the truck cab to the center of the rear truck axle ("X" in **Figure 4**), should be approximately 4 inches greater than one-half the trailer width ("Y" in **Figure 4**)

Figure 4



6. If a short bed pickup (less than 8 ft. but longer than 6 ft.) is to be used for towing, Cequent Towing Products recommends the trailer be equipped with an extended pin box to help gain additional truck - trailer turning clearance (See trailer manufacturer for options) (**Figure 5**). It also may be helpful to add a *Signature Series* Slider (**Part # 30070**) for increased turning clearance for low speed, non-highway maneuvering.

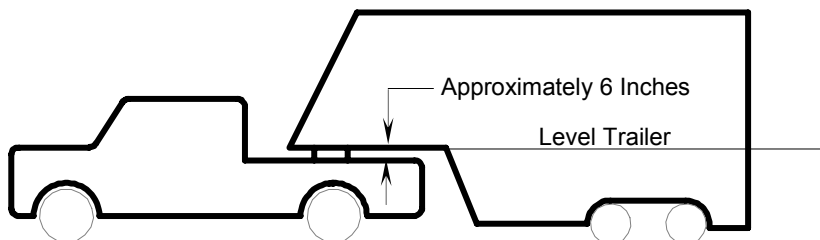
Figure 5



⚠ WARNING:
Do Not install this fifth wheel hitch on or attempt to tow with a short bed pickup truck that has a bed shorter than 6 ft.!

7. The height of the hitch and the pin box should be adjusted so the trailer is approximately level as it is towed. Allow approximately 6 inches clearance between the top of the pickup walls and the underside of the front of the trailer for pitch and roll of the trailer. (**Figure 6**). Allow more clearance between pickup walls and trailer for off road use.

Figure 6



CAUTION:

The measurements above are guidelines. If your measurements are close to these numbers re-check clearances. If vehicle and/or trailer has any added bed vicinity accessories (i.e. fairings, air dams, ground effects, bed rails, etc.). Additional dimensioning and clearance checks have to be made.

8. Hitch height determination:

With trailer leveled and on level ground measure from the ground to the king pin box ("A" in **Figure 7**). Secondly measure from the height of the inside of the truck bed ("B" in **Figure 7**). Determine the amount of clearance over the side rails ("C" and "D" in **Figure 7**), as mentioned in **Note 7**.

$$\text{Hitch Height} = A - B + 2''$$

The 2" value is an estimate of suspension compression due to king pin weight of the trailer. This compression could range between 1"-5" depending on the truck being used and the trailer being towed.

$$D - C + 2'' > 6'' \text{ as in Note 7.}$$

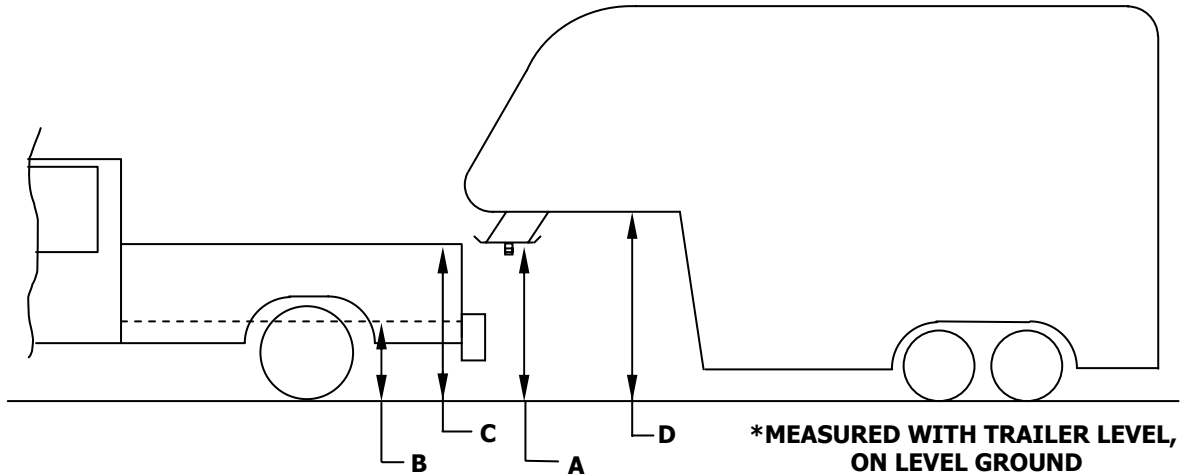


Figure 7

9. If a lube plate is to be used with a *Signature Series* 5th wheel hitch the plate must be at least 12" in diameter. **Cequent Towing Products** offers this optional lube plate as part # 83001 / 40001.

⚠ WARNING:

- Connection for trailer wiring must be located at the side of the truck bed between the driver's seat and the rear wheel to prevent operators from working between the truck and trailer.
- Avoid putting any part of your body under the trailer or between the truck and trailer. Unexpected or accidental movement of the truck or the trailer can cause serious injury or death
- If you must place any part of your body under the trailer or between the truck and trailer you **MUST** perform **ALL** of the following steps:
 - Check that the truck transmission is in park
 - Check that the emergency brake is on
 - Block in front of and behind all trailer tires
 - Check that the trailer landing gear are resting on firm ground

GENERAL INSTRUCTIONS FOR FIFTH WHEEL INSTALLATION

TOOLS

- | | |
|----------------------|---|
| 3/16" Drill | 15/16" Socket & Open End Wrench |
| 21/32" Drill | 200 lb-ft Torque Wrench |
| 3/8" Hex socket | 2-1/2" Hole Saw OR 2 1/2" Greenlee Knockout Punch |
| 5/8-11 x 3.5 w/point | |

CAUTION!

Read pages 2 through 4 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

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.

1. The following instructions should be used to mount the 5th wheel. Care and attention to detail will ensure a quick quality installation. Check parts against parts list to become familiar with parts in kit. (Figure 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. Plastic drop-in bed liners must be cut out of the way. **Remove plastic bed liner if applicable.** Spray-in bed liners and bed mats less than 1/4" thick will work with normal installation instructions. **Note:** Consult installer for recommended curing time on spray-in liner before cutting holes through bed.
4. Use only **CEQUENT TOWING PRODUCTS** supplied bolts, nuts, and washers to install this kit. All bolts and nuts are grade 8 unless specified otherwise.
5. These instructions are intended for a specific group of trucks. If these instructions do not apply to your vehicle, contact Technical Services to get proper instructions. Each frame bracket must be bolted to the vehicle frame with two bolts.
6. Remove brake line bracket from inside of driver side frame (Figure 8).

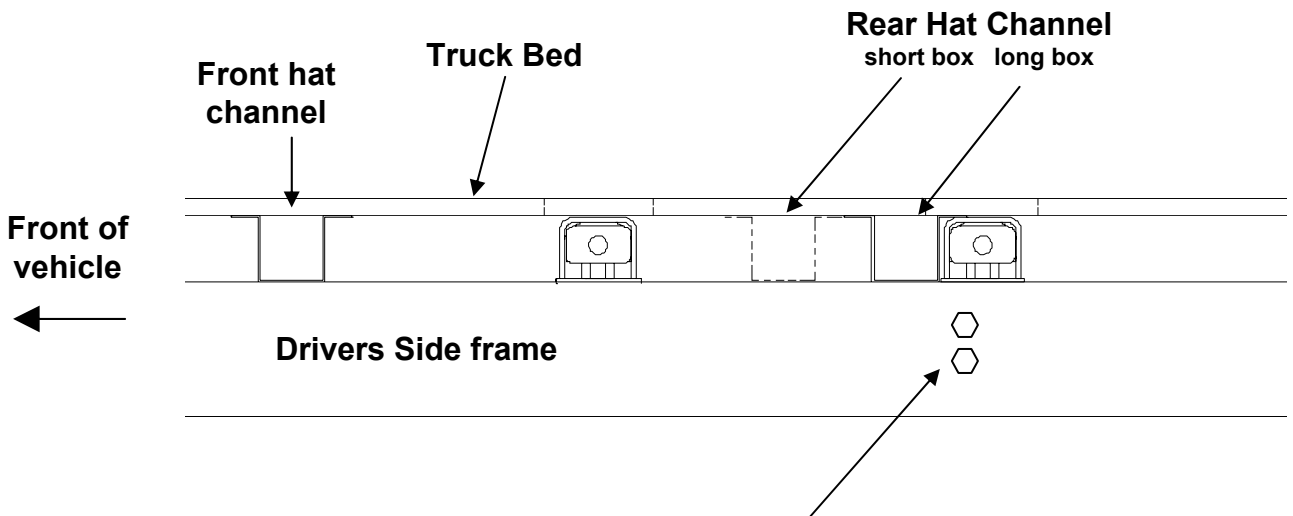


Figure 8

Remove brake line bracket from inside of frame channel before inserting rails

6. Insert rails as shown in **the following steps (Figures 9 through 12)**. Front base rail (longer rail) should be inserted first, followed by rear base rail (shorter rail). Both rails should be inserted with the flat face of the channel up. Rail installation will be difficult or impossible if the truck bed is indented. If the truck bed is indented push out the dent before installing the mounting kit.

Step 1 : Front base rail should be inserted at an angle over the axle and over the exhaust on to the passenger side frame rail. (Figure 9)

↑
Forward

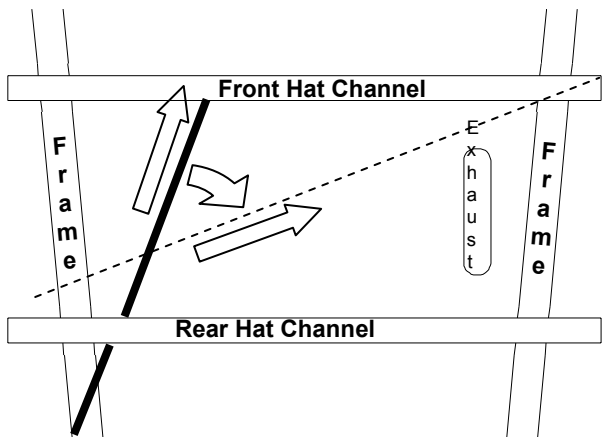
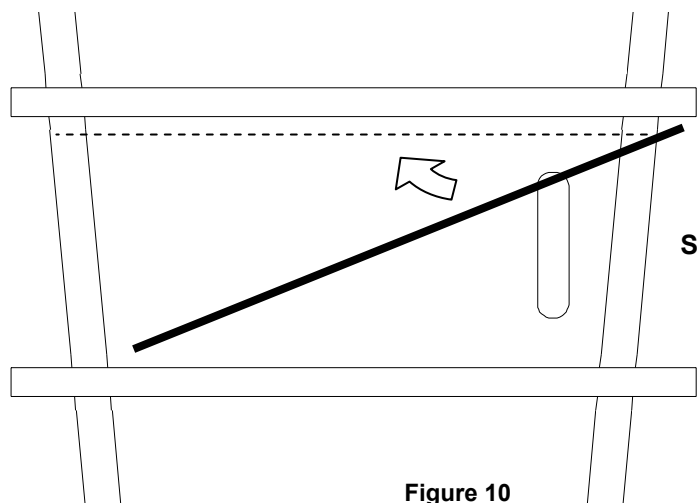


Figure 9



Step 2 : Rotate the front base rail to bring the rail to rest on the chassis rails. (Figure 10)

Figure 10

Step 3 : Insert rear base rail (shorter rail) up from the front and on to the passenger side frame. (Figure 11)

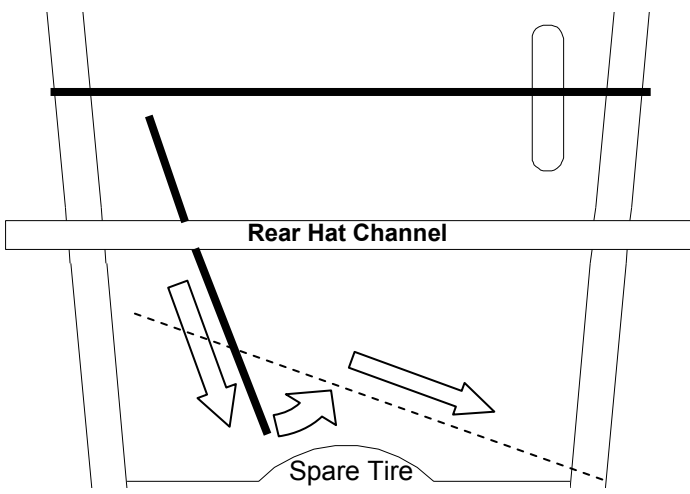


Figure 11

↑
Forward

Step 4 : Rotate the rear base rail to bring the rail to rest on the chassis rails. (Figure 12)

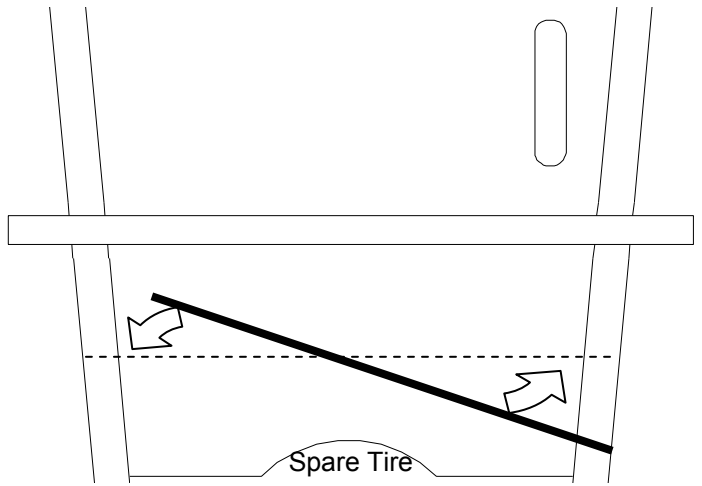


Figure 12

Step 5 : From beneath the truck or from the wheel wells, slide the longer rail spacers beneath the front rail and the shorter rail spacers under the rear rail (Figure 13). Should the rail spacers fall out of place before they are permanently attached to the frame rails be sure to slide the spacers back into place. On long box models, reattach the brake line bracket with the bolts pointed inboard. For short box models, reattach brake line bracket after frame bracket is in place.

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

7. Attach frame brackets to base rails using 5/8" X 1-1/2" bolts, lock washers, and nuts. Torque bolts until hand tight. (Figure 13)

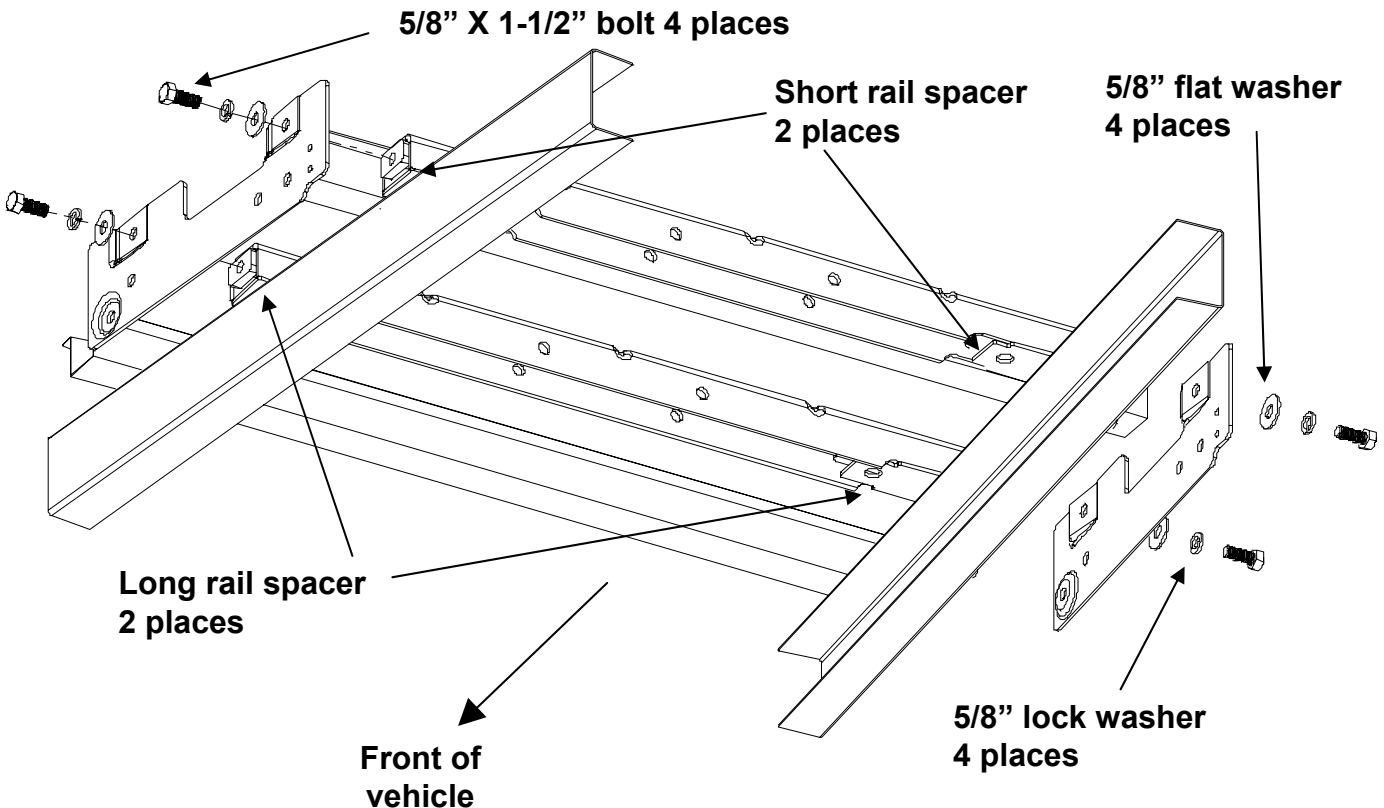
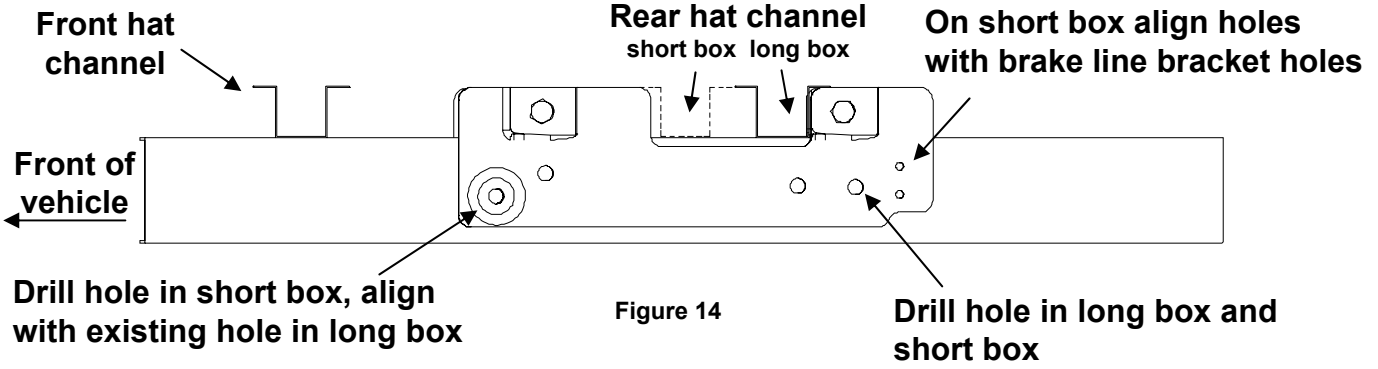


Figure 13

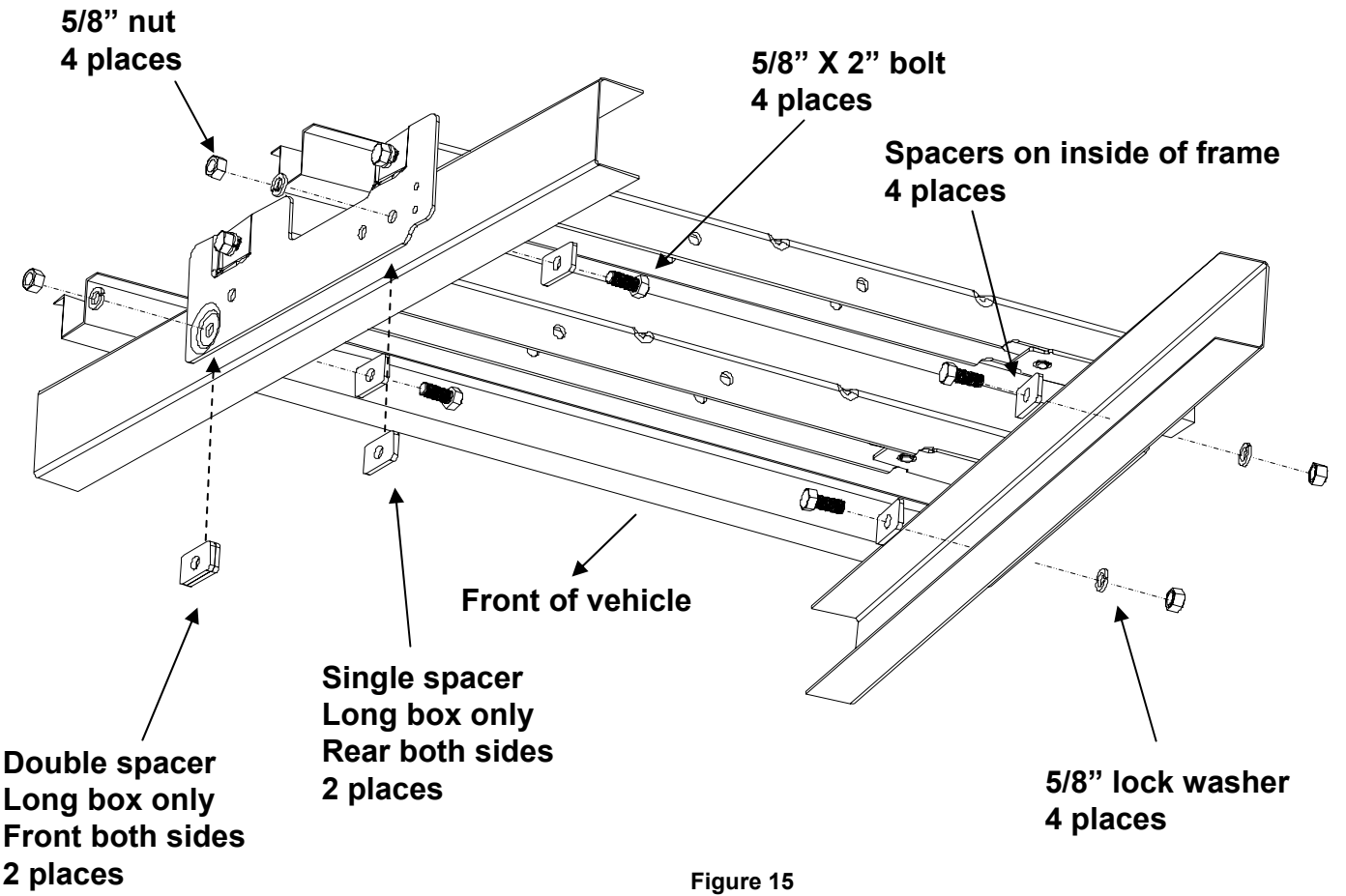
CAUTION:

Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. **CEQUENT TOWING PRODUCTS** 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. Align bracket with appropriate hole in chassis frame (Figure 14). Re-attach the brake line on the long box trucks with the bolts pointing inboard. Using frame bracket as template, and after checking to ensure that rails are square with each other, drill pilot holes in frame. (Figure 14) Enlarge pilot holes to 21/32" diameter holes. **Optional:** Spray undercoating around drilled holes to prevent rusting.



9. Attach frame brackets to vehicle frame using 5/8" X 2" bolts, lock washers, spacers, and nuts. For long box only insert spacers between the outside frame and bracket in addition to the spacers on the inside of the frame. Torque bolts until hand tight. (Figure 15)



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

10. The brake line bracket can now be re-attached through the frame and bracket on the short box. (**Figure 16**)

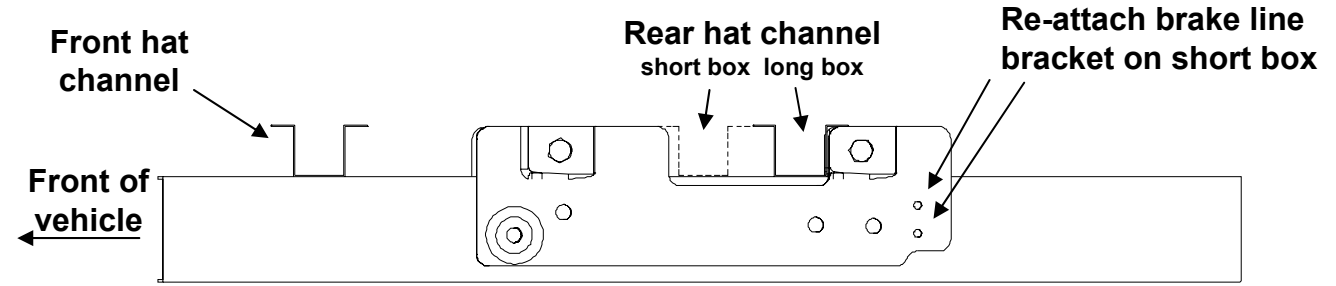


Figure 16

11. Remove plastic drop-in bed liners. Spray-in bed liners and bed mats less than 1/4" thick will work with normal installation instructions and do not need to be removed.
12. Thread the 5/8" X 3-1/2" pointed bolt through the welded nuts on the base rails (**Figure 17**) until prick marks are clearly visible in truck bed (**Figure 18**) in four places. If access to a welded nut on rail is obstructed prick three places and measure fourth prick mark using the dimensions given. (**Figure 18**)

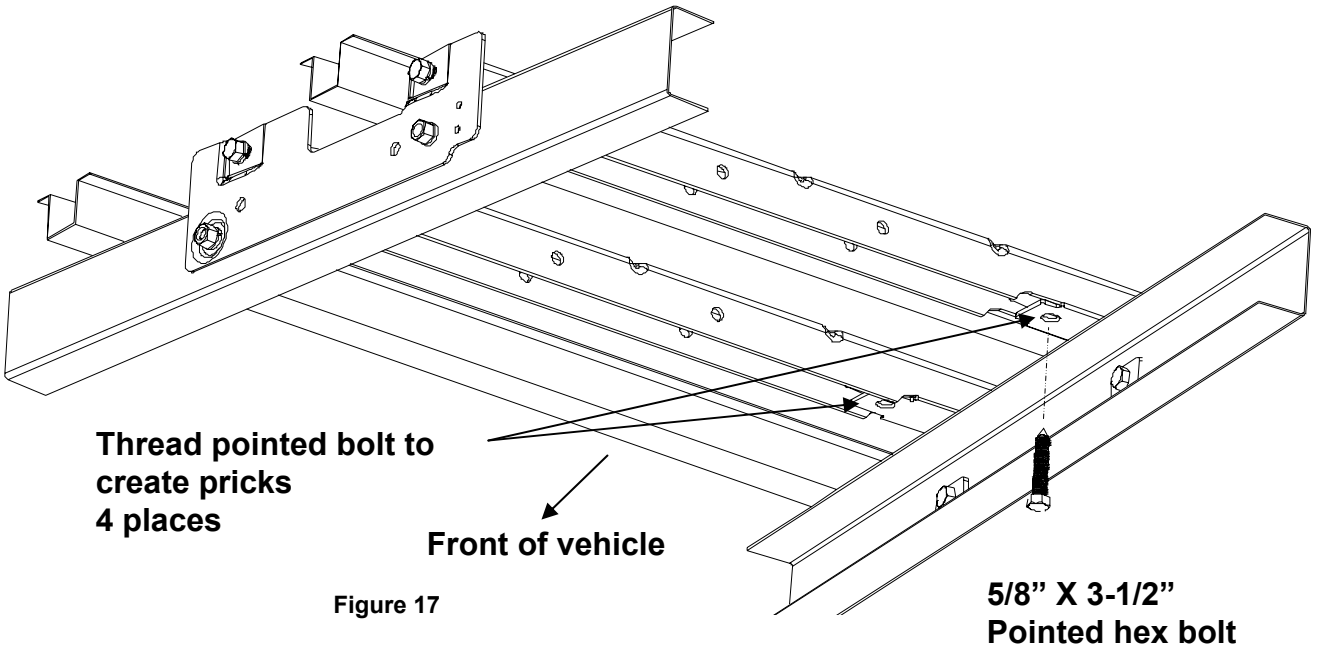



Figure 17


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

13. If a plastic drop-in bed liner is used cut 19" X 4" slots in liner dimensioned from prick marks in truck bed. **(Figure 18)** Spray-in bed liners and bed mats less than 1/4" thick will work with normal installation instructions and do not need to be removed or cut. Replace plastic drop-in bed liners before installing fifth wheel hitch. If the *Signature Series* slider fifth wheel assembly is used, then see fifth wheel slider assembly instructions for slot cut dimensions.

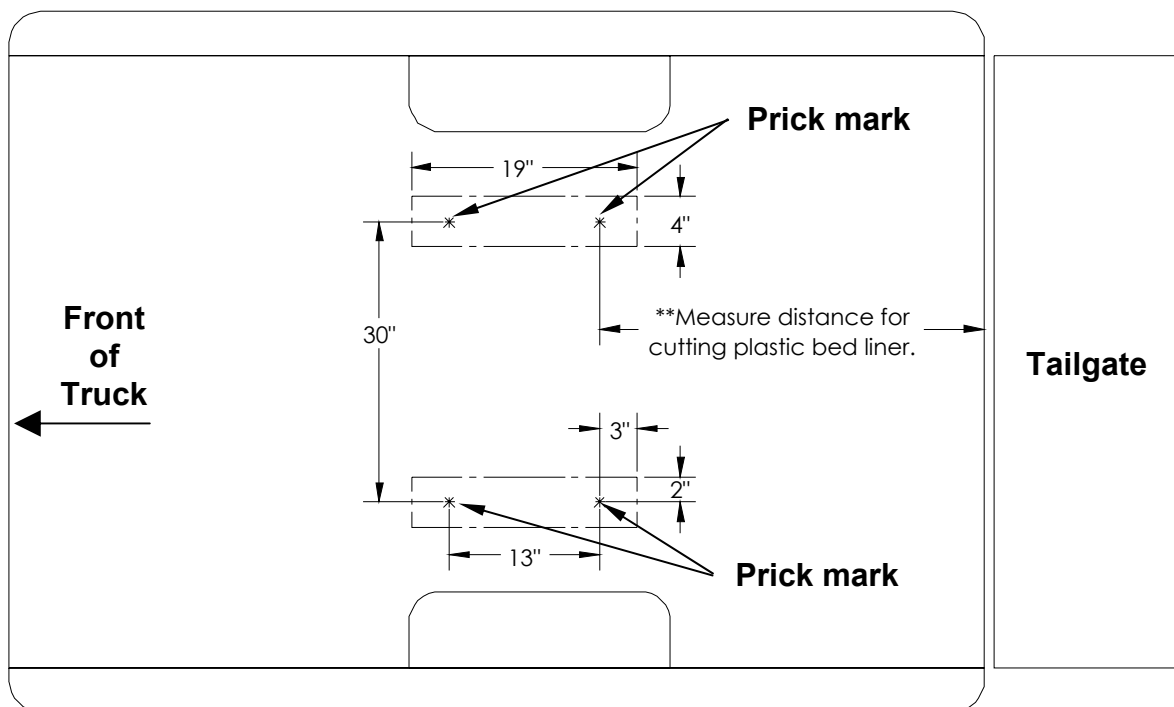


Figure 18

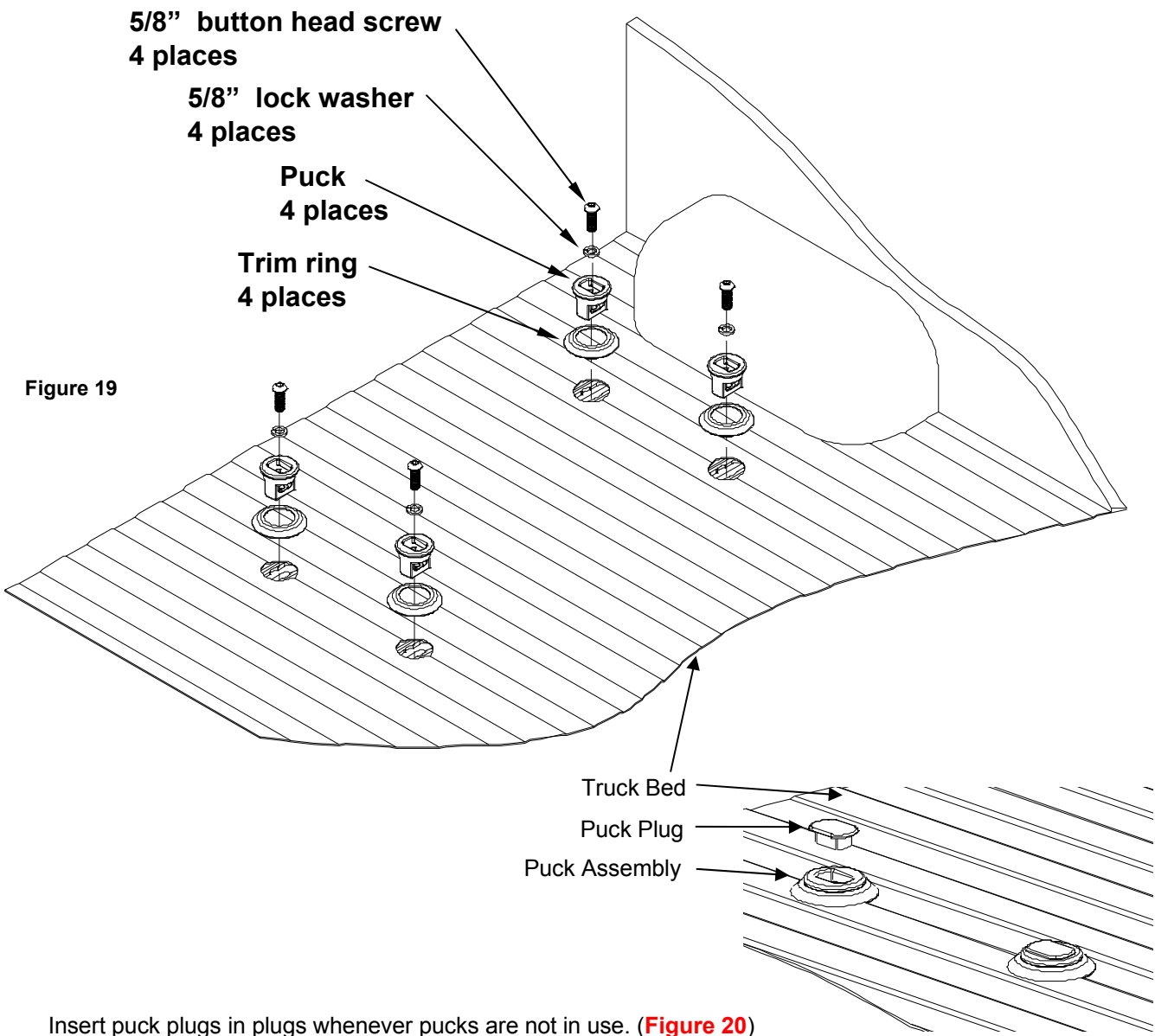
CAUTION:

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

14. Remove 5/8" X 1-1/2" bolts attaching frame bracket to mounting base rails. Move rails rearward or forward to prevent interference when drilling or punching of the truck bed.
15. Drill pilot holes in truck bed at prick mark locations. With hole saw or knockout punch create 2 1/2" hole centered at pilot holes. **Note:** Consult installer for recommended curing time on spray-in liner before cutting holes through bed. **Optional:** Spray undercoating around 2 1/2" holes to prevent rusting.
16. Loosely reattach frame bracket to mounting base rails. Check to ensure that rail spacers are in their proper position.

17. From truck bed attach pucks and trim rings to rails using 5/8" button head screw and lock washer. Ensure button head screws insert into the rail spacers below the rails. Tighten button head screws to 100 ft.lbs. Torque (**Figure 19**).

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



18. Insert puck plugs in plugs whenever pucks are not in use. (**Figure 20**)
19. Install *Signature Series* 5th wheel per hitch assembly instructions.
20. Torque hitch assembly bolts per hitch instructions.
21. Torque all 5/8" rail kit hex bolts to 170ft.lbs.
22. Replace any brake lines and spare tire that may have been removed/relocated.

NOTES

SEVEN YEAR LIMITED WARRANTY

Hitches - Custom Receivers

Cequent Towing Products warrants the *Signature Series* 5th Wheel Hitch Mounting Kits from date of purchase against defects in material and workmanship under normal use and service, ordinary wear and tear excepted, for 7 years of ownership to the original consumer purchaser when a Cequent Towing Products *Signature Series* 5th Wheel Hitch is used.

Cequent Towing Products will replace FREE OF CHARGE any part which proves defective in material or workmanship when presented to any Cequent Towing Products dealer, Cequent Towing Products Warehouse or returned to 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 *Signature Series* 5th Wheel Hitch Mounting Kits as a result of misuse, abuse, neglect, accident, improper installation, or any use violative of instructions furnished by us, WILL VOID THE WARRANTY.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, or a federal district court.

Cequent Towing Products, Inc.
2602 College Avenue
Goshen, IN 46528