



Assembly, Installation, Operation and Maintenance Instructions

FORD & DODGE BASE RAIL MOUNTING KIT

Part # 30607

Use with bracket kit 31563. Use with Base Rail Kit 30686 (4-Bolt and 10-bolt) or 31323 (4-Bolt).

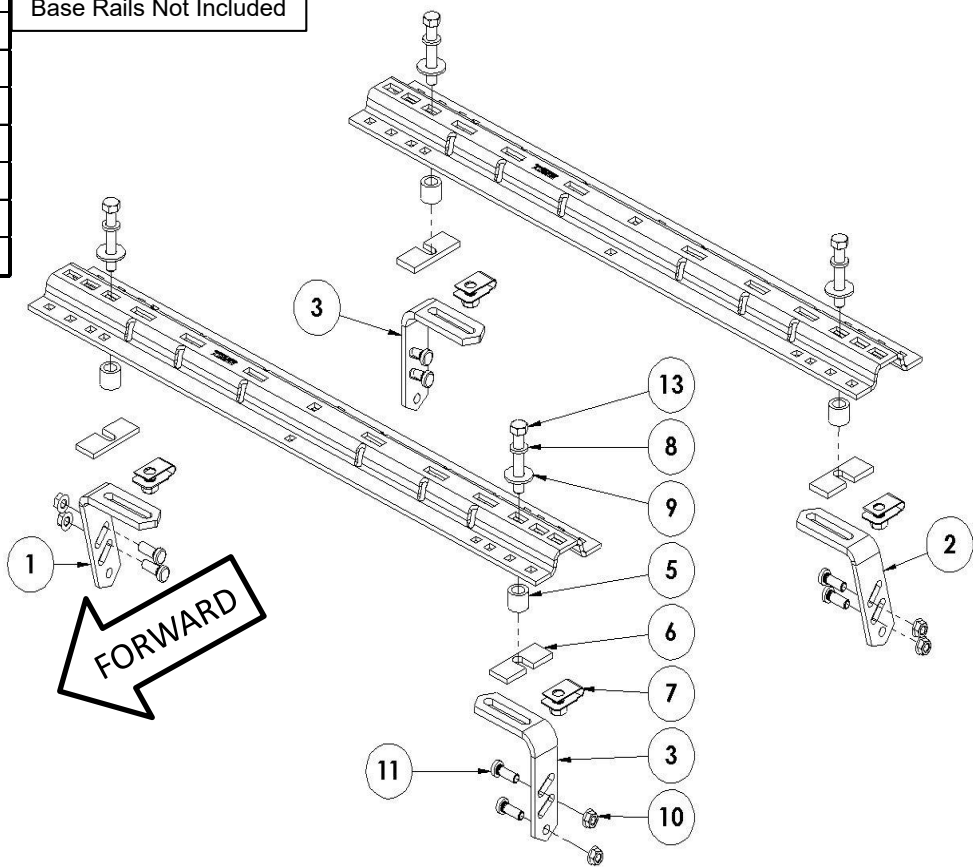
Dealer / Installer:	Provide a copy of these Instructions to the end user of this product. These Instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.
End User:	Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product.

ITEM NO.	DESCRIPTION	QTY
1	LEFT ANGLE BRACKET	1
2	RIGHT ANGLE BRACKET	1
3*	BRACKET, "L" LONG	2
5*	1" SPACER TUBE	4
6*	SPACER PLATE	4
7*	5/8 -11 NUT, HEX	4
8*	5/8 LOCK WASHER	4
9*	5/8" FLAT WASHER	4
10*	1/2 -13 LOCKNUT FLANGE SERRATED	8
11*	5/8-11 UNC X 3.50 CARRIAGE BOLT	4
13*	1/2-13 UNC X 1.5 WHEEL BOLT	8
14*	PULL WIRE	4

Center Bolt Kit 32059 (sold separately) must be used when towing with a 26K hitch, Goose Neck, or Maneuvering System.

CAUTION: Do not install base rails over plastic bed liners. Plastic bed liners must be cut out of the way. Rails may be installed on spray in liners. Consult spray liner installer for recommended curing time.

Base Rails Not Included



Items marked with (*) are supplied with kit 31563.

- Tools Needed:**
- Sockets/Wrenches: 3/4", 15/16"
 - Drill Bits:
 - 3/16", 17/32", 5/8", 1-1/8" Hole Saw.
 - Center Punch.
 - Tape Measure.
 - 150 lbs-ft min. Torque Wrench.

WARNING!
Never exceed the towing capacity of the tow vehicle.

SEE PAGE 6 FOR DODGE MOUNTING.
SEE PAGE 9 FOR CHEVY/GMC MOUNTING

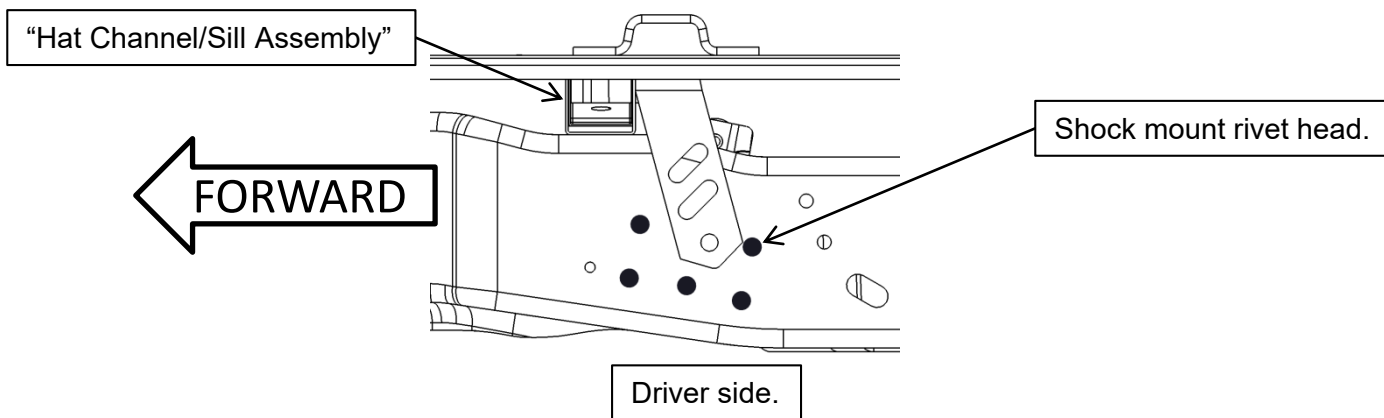
Do not install mounting rails over plastic bed liners. Plastic bed liners must be cut out of the way to provide metal to metal contact. Mounting rails may be installed on spray in liners. Check with liner mfg's for cure time. Use only bolts nuts and washers supplied.

DO NOT INSTALL THIS PRODUCT ON OR ATTEMPT TO TOW WITH A TRUCK WITH A BED THAT IS LESS THAN 6' LONG.

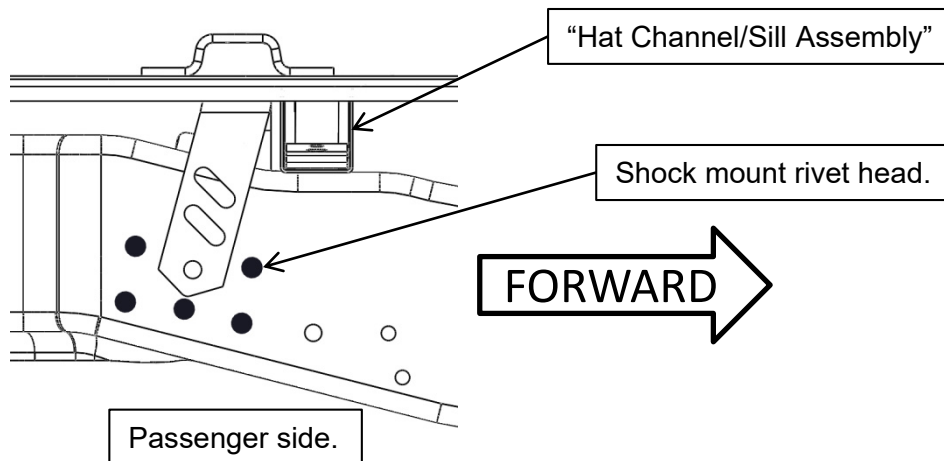
These instructions are guidelines only, actual installation is the responsibility of the installer and the owner. Always measure truck and trailer before installing hitch to be sure that there is clearance at the cab and at the bumper to allow for turns.

Remove the spare tire if this helps to give more room to install the product.

Before drilling any holes you must determine which installation option you will use. Retrieve the Right Angle Bracket and while facing the driver side of the truck locate the "Hat Channel/Sill Assembly" that is just on the rearward side of the rear axle. Hold the Right Angle Bracket against the frame so that it is against the rear side of the "Hat Channel/Sill Assembly", flat against the underside of the bed floor and the lower part of the bracket sets inside the group of shock mount rivet heads as shown below. If the bracket positions as described then installation "Option 1" can be used



This must also be done on the passenger forward bracket position using the Left Angle Bracket on the "Hat Channel/Sill Assembly" that is just forward of the rear axle on the rearward side of the "Hat Channel/Sill Assembly".



If none of the previous conditions apply then installation "Option 2" will have to be used.

Starting with the bolts that fasten the rails to the frame brackets, torque all the nuts. Then torque the fasteners that attach the frame brackets to the vehicle frame. Tighten each 5/8" bed rail attachment bolt to 150 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure. DO NOT apply torque to the nut portion of the clip nuts (#7). You will DAMAGE it. Torque 1/2" fasteners to 75 (ft lb.) 102 (N*M).

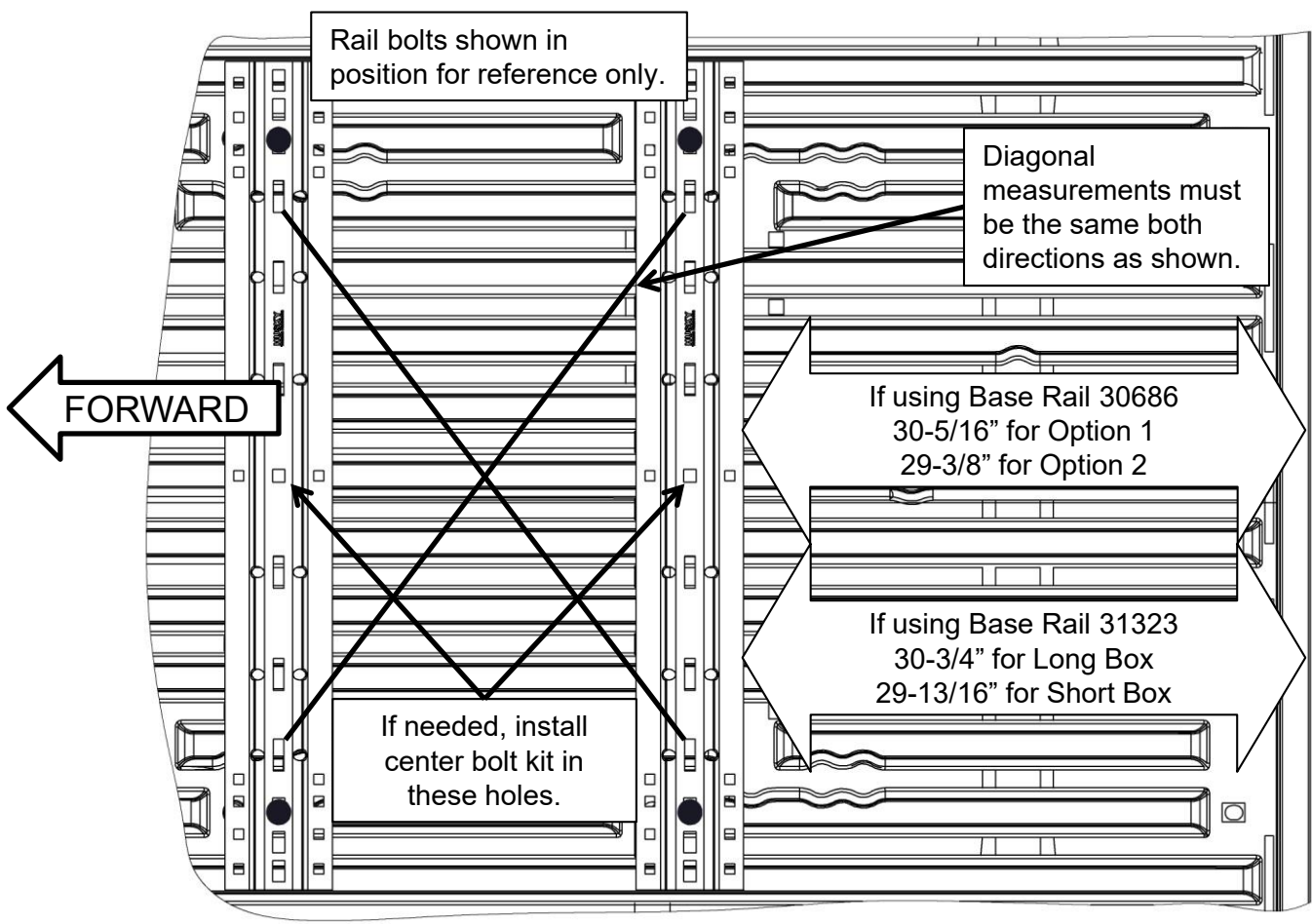
Place the 5th wheel assembly in the bed of the vehicle. Center the rails from left to right on the floor of the truck bed and use your tape measure to locate the proper distance from the rear of the rail to the to the rear edge of the truck box.

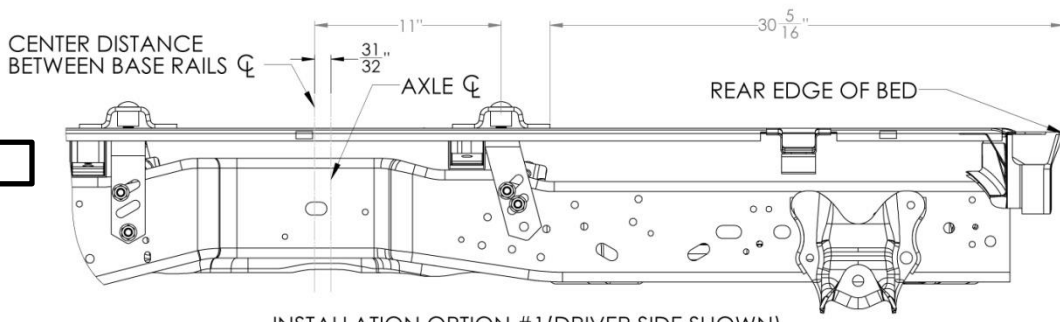
Use a center punch to mark the holes in the rail. Use whichever one of the three 5/8" slots at each end of the rail that line up best with the frame mounting brackets below the bed. Move the rails out of the way and drill each position through the bed with a 3/16" drill bit. **Note: On the driver's side of the vehicle the gas tank is located below the bed of the vehicle. When drilling holes through the bed be sure not to damage the fuel tank.** Drill the holes out to 5/8".

Move the 5th wheel system back in place over the drilled holes and place the 1" thick spacer tube under the rail with a spacer plate either above or below the bed depending on how the corrugations align with the 5/8" bolts then insert the 5/8" hex head bolts into the base rails.

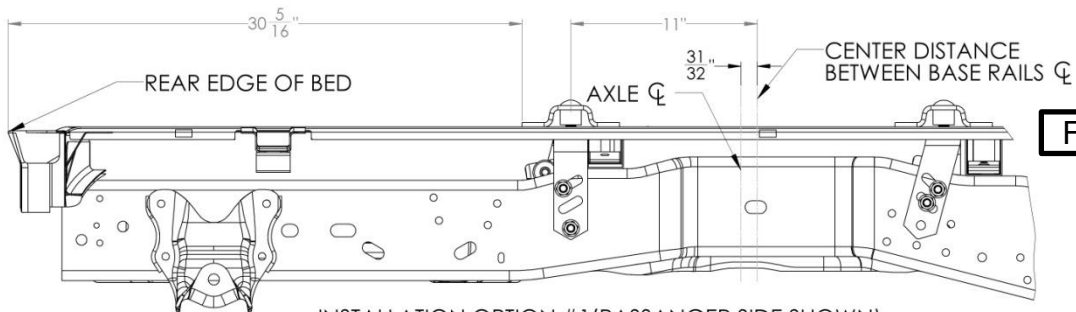
Install frame brackets onto the 5/8" hex head bolts based on the installation option you choose and place the 5/8 lock washer, 5/8 flat washer and the 5/8 clip nut over the bracket flange and tighten finger tight for now.

Using the holes in the "L" bracket as a guide, drill a 17/32" hole into the frame in the locations shown for your installation option. Use the pull wires to pull the 1/2" wheel bolt through the inside of the frame where needed. Apply some grease to the serrations only of the wheel bolts to aid in the installation of the wheel bolts during the tightening process.

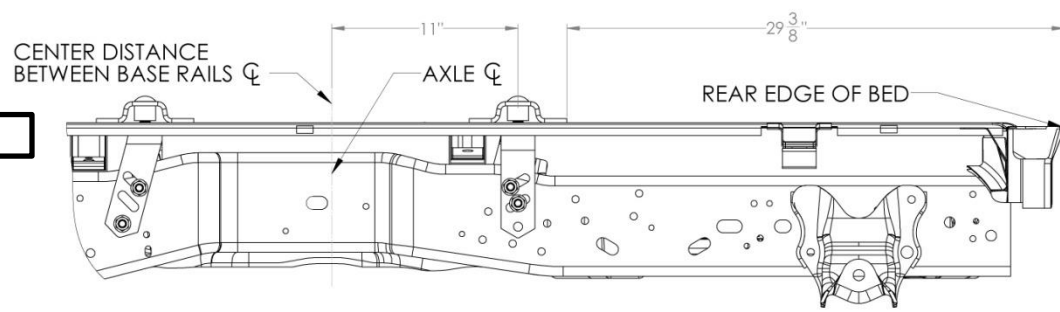




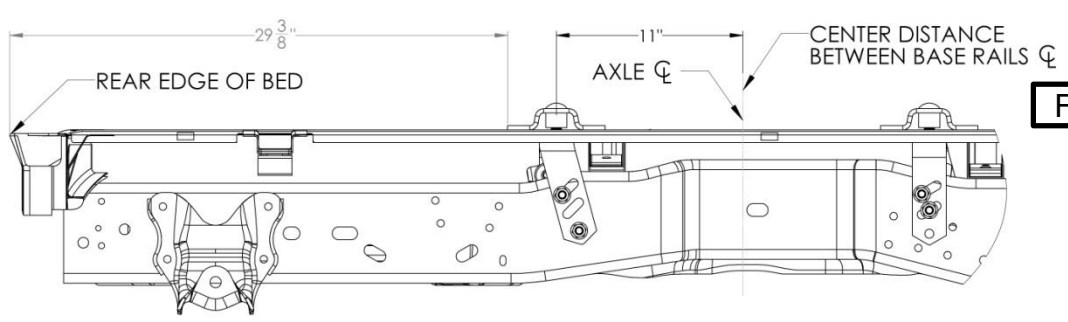
INSTALLATION OPTION #1 (DRIVER SIDE SHOWN)



INSTALLATION OPTION #1 (PASSANGER SIDE SHOWN)



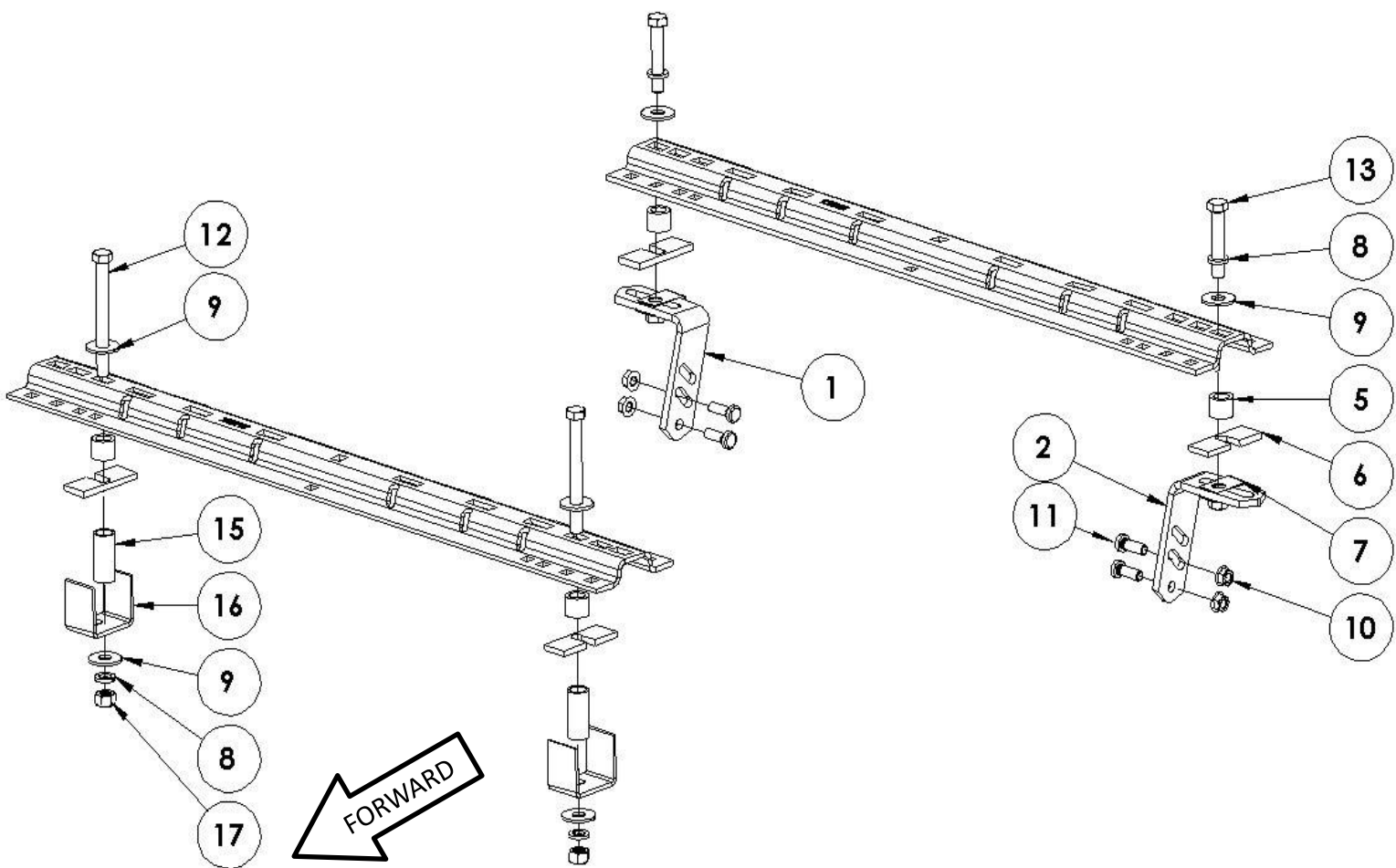
INSTALLATION OPTION #2 (DRIVER SIDE SHOWN)



INSTALLATION OPTION #2 (PASSANGER SIDE SHOWN)

DODGE RAM 1500 LONG & SHORT BED
DODGE RAM 2500 LONG & SHORT BED
DODGE RAM 3500 LONG & SHORT BED

1. Rear base rail location from rear edge of bed floor:
 - a. Short Bed (4 Bolt Rail): 25-7/16"
 - b. Short Bed (10 Bolt Rail): 25-7/8"
 - c. Long Bed (4 Bolt Rail): 27-7/16"
 - d. Long Bed (10 Bolt Rail): 27-7/8"
2. Place both base rails on the bed floor and insert the uprights into the base rails for proper spacing front to back.
3. For your application, position the rear edge of the rear base rail at the appropriate location from the rear edge of the bed floor and mark the edge of the rail on the bed floor in 2 places far apart.
4. Center the base rails left to right. Ensure the base rails are parallel and square to each other by making diagonal measurements from the front base rail to the rear base rail and adjust as necessary without moving the rear base rail from the marks placed on bed from step 3.
5. Use a center punch and mark a spot in the forward base rail in the inner slots and in the rear base rail using the outer slots. Make sure punch marks are centered in the base rail slots.
6. Using the 3/16" drill bit, drill a pilot hole at each of the punch locations. **CAUTION!** Never drill blindly without first looking under the bed to identify any possible components that **SHOULD NOT BE DRILLED INTO**.
7. Move the base rails and uprights out of the way.
8. In the forward pilot holes, use a 1-1/4" hole saw and drill through the bed corrugation only! Once you cut through the bed floor, carefully continue guiding the hole saw down until the pilot drill touches the bottom of the hat channel/bed sill and make a dimple only.
9. Switch to the 5/8" drill bit and use the dimple from step 8 to drill a hole in the bottom of the hat channel/bed sill.
10. Place the long tube spacer (15) into the bed sill. Place the filler spacer (6) into the bed corrugation either above the bed, if the hole is in the bottom of the corrugation or below the bed if the hole is in the top of the corrugation. Place the 1" spacer tubes (5) on the filler spacer (6). Set the forward base rail in position and install the 6" long Hex bolt (12) through the flat washer (9) & top of the base rail and out through the bottom of the hat channel/bed sill.
11. From under the truck bed, place the U-shaped bracket (16) over the hat channel/bed sill. **Note:** the U-shaped bracket hole is not centered so care should be used in which orientation the U-shaped bracket is placed on the 5/8" hex bolt. Guide the hex bolt through the hole in the U-shaped bracket and install the 5/8" flat washer (9), 5/8" lock washer (8) and the 5/8" hex nut (17) finger tight for now.
12. Using the pilot holes drilled in the rear location drill them out with the 5/8" drill bit.
13. The angled brackets (1 or 2) will be placed on the inside of the truck frame and aligned with the 5/8" holes drilled in the bed floor.
14. Place the filler spacer (6) either above the bed corrugation if the 5/8" hole is aligned in the valley of the bed corrugation or under the bed corrugation if this hole is aligned to the peak of the bed corrugation. Place the rear base rail into position, and place the short tube spacers under the base rail and aligned to the 5/8" drilled holes and guide the 5/8"x3.5" hex bolt (13), 5/8" lock washer (8), 5/8" flat washer (9) through the correct slot in the base rail and through the 5/8" hole in the bed.
15. Place the appropriate angled bracket (1 or 2) so that the 5/8"x3.5" hex bolt passes through 5/8" lock washer (8), 5/8" flat washer (9) & the long slot and then install the and the 5/8" clip nut (7) finger tight only.
16. Push the angled bracket against the inside of the truck frame and snug the 5/8" hex bolt to hold the angled bracket in place. Using the 2 angled parallel slots and the bottom hole make 2 marks that would be the farthest apart (centered in the slots/hole) and rotate the bracket away from the frame.
17. Drill a 17/32" diameter hole through the inside wall of the frame at the marks made in step 16.
18. Rotate the bracket back against the inside of the frame and Insert the wheel bolts (11) through the drilled holes from the inside of the frame so they protrude through the angled bracket. Thread the 1/2" serrated hex nut (10) on to the wheel bolts (11) and **tighten to 75 lbs. ft. torque**.
19. Repeat the above steps for the opposite side angled bracket.
Tighten two 5/8" X 3.5" bed rail attachment bolt(#13) to 150 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure. **DO NOT** apply torque to the nut portion of the clip nuts (#7). You will **DAMAGE** it. Tighten two 5/8" bed rail attachment nut (#17) to 150 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure.



ITEM NO.	DESCRIPTION	QTY
1	LEFT ANGLE BRACKET	1
2	RIGHT ANGLE BRACKET	1
5*	1" SPACER TUBE	4
6*	SPACER PLATE	4
7*	5/8" X11,CLIP NUT	2
8*	5/8" LOCK WASHER	4
9*	5/8" FLAT WASHER	4
10*	1/2" -13 LOCKNUT FLANGE SERRATED	8
11*	1/2"-13 UNC X 1.5 WHEEL BOLT	8
12*	5/8"-11 X 6" HEX BOLT	2
13*	5/8"-11 X 3.50 HEX BOLT	4
14*	PULL WIRE	2
15*	1-1/8" OD X 2.44" SPACER TUBE	2
16*	U-BRACKET	2
17*	5/8"-11 NUT, HEX	2

Items marked with (*) are supplied with kit 31563.

Tools Needed:

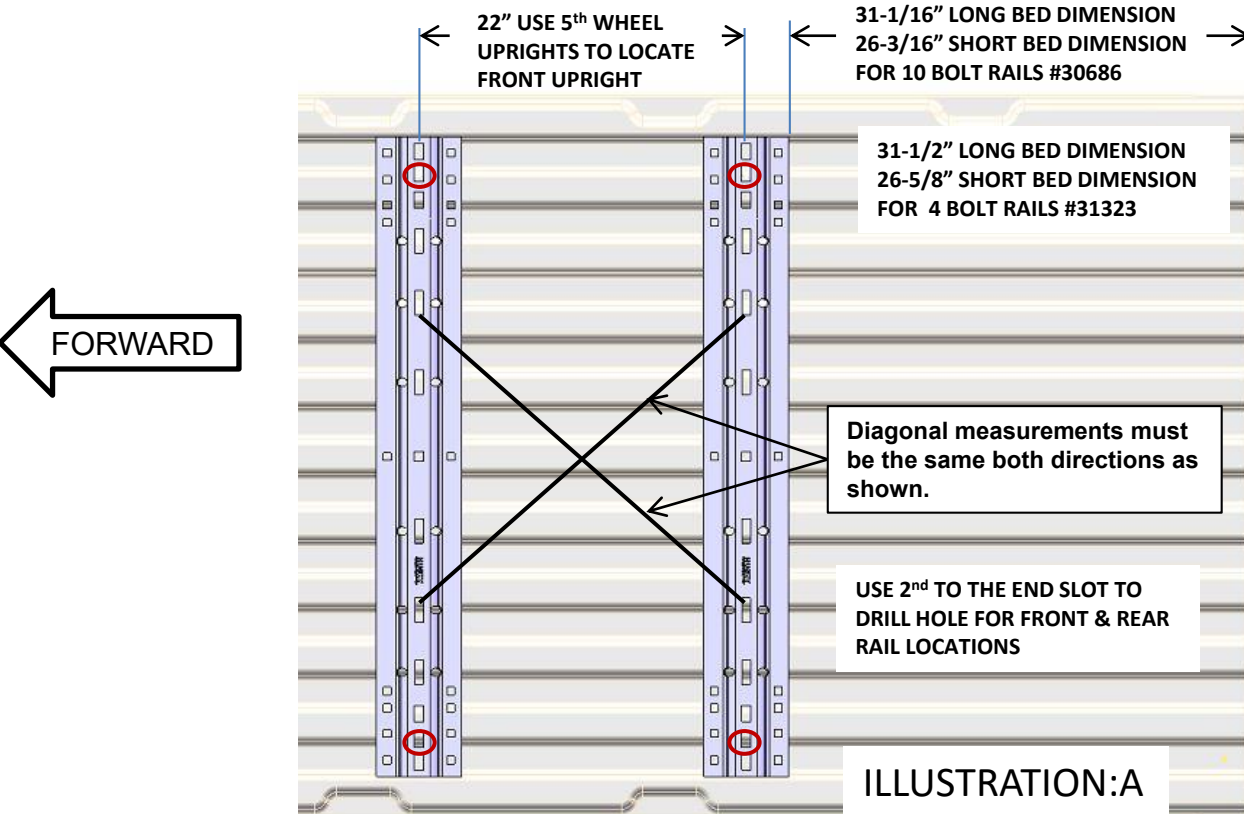
Sockets/Wrenches: 3/4", 15/16"
 Drill Bits: 3/16", 17/32", 5/8", 1-1/8" Hole Saw.
 Center Punch.
 Tape Measure.
 150 lbs-ft min. Torque Wrench.

DIAGRAM SHOWN FOR:

DODGE RAM 1500 LONG & SHORT BED
 DODGE RAM 2500 LONG & SHORT BED
 DODGE RAM 3500 LONG & SHORT BED

Application: Chevrolet & GMC Silverado & Sierra 2500 & 3500 HD Pick-ups

1. Place both base rails on the bed floor and insert the uprights into the base rails for proper spacing front to back.
2. For your application, position the rear edge of the rear base rail at the appropriate location from the rear edge of the bed floor and mark the edge of the rail on the bed floor in 2 places far apart.
3. Center the base rails left to right. Ensure the base rails are parallel and square to each other by making diagonal measurements from the front base rail to the rear base rail and adjust as necessary without moving the rear base rail from the marks placed on bed from step 2.
4. Use a center punch and mark a spot as shown in figure below. Make sure punch marks are centered in the base rail slots.



5. Using the 3/16" drill bit, drill a pilot hole at each of the punch locations. CAUTION! Never drill blindly without first looking under the bed to identify any possible components that SHOULD NOT BE DRILLED INTO.
6. Move the base rails and uprights out of the way.
7. Switch to the 5/8" drill bit and use the dimple from step 5 to drill a hole in the front and rear rail locations.
8. The angled brackets (1 or 2 or 3 or 4) will be placed on the outside of the truck frame as shown in illus. D and aligned with the 5/8" holes drilled in the bed floor.
9. Place the long tube spacer (#5) into the bed sill as shown in illus. B.
10. Place the filler spacer (#6) into the bed corrugation either above the bed, if the hole is in the bottom of the corrugation or below the bed if the hole is in the top of the corrugation. Place the 1" spacer tubes (#5) on the filler spacer (#4) as shown in illus. C.
11. Set the forward base rail in position and install the 5/8"-11 hex bolt (#13) through the lock washer (#8) and flat washer(#9) through top of the base rail and secure it with clip nut (#7). Tight bolt by hand only.

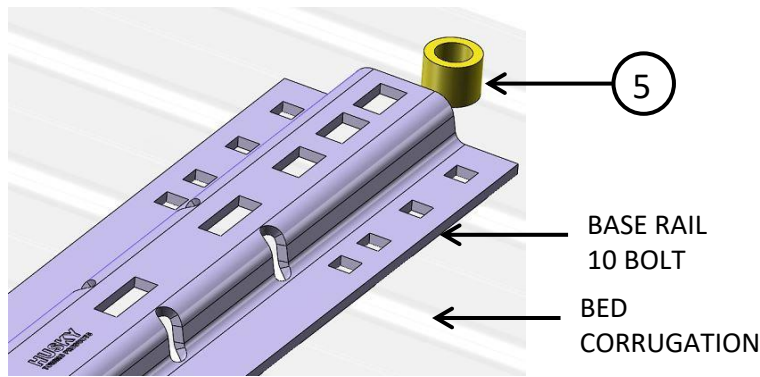


ILLUSTRATION:B

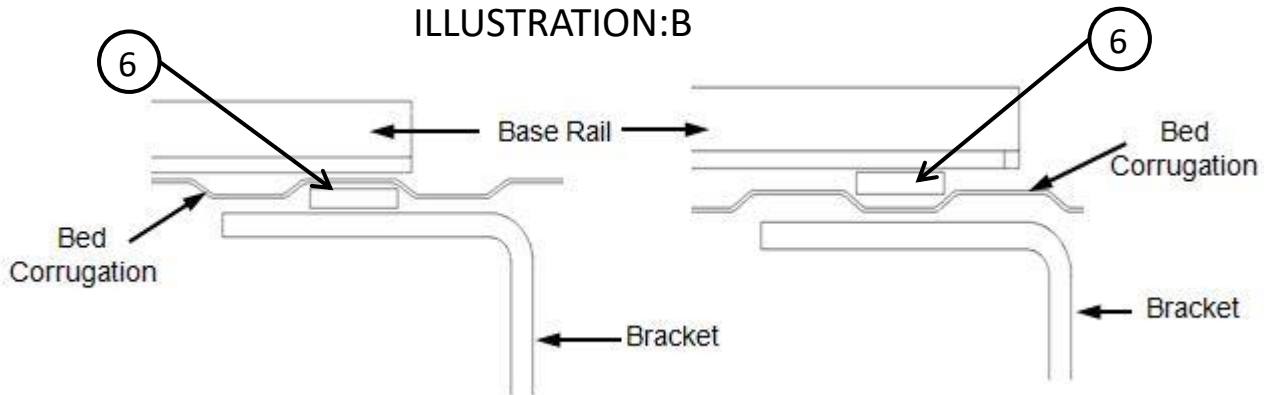
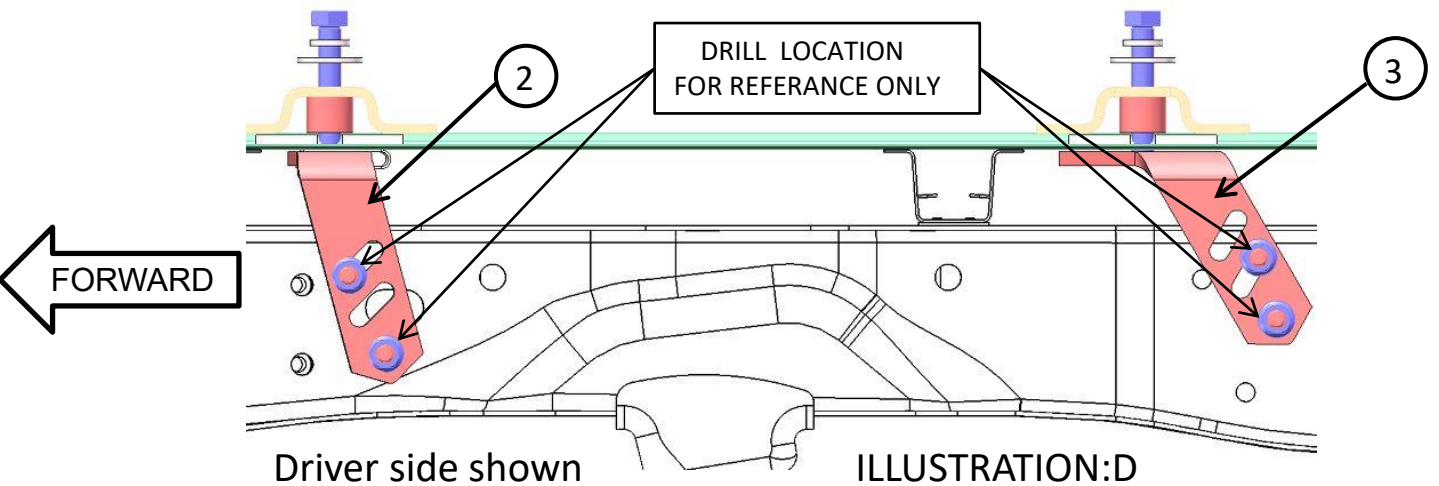


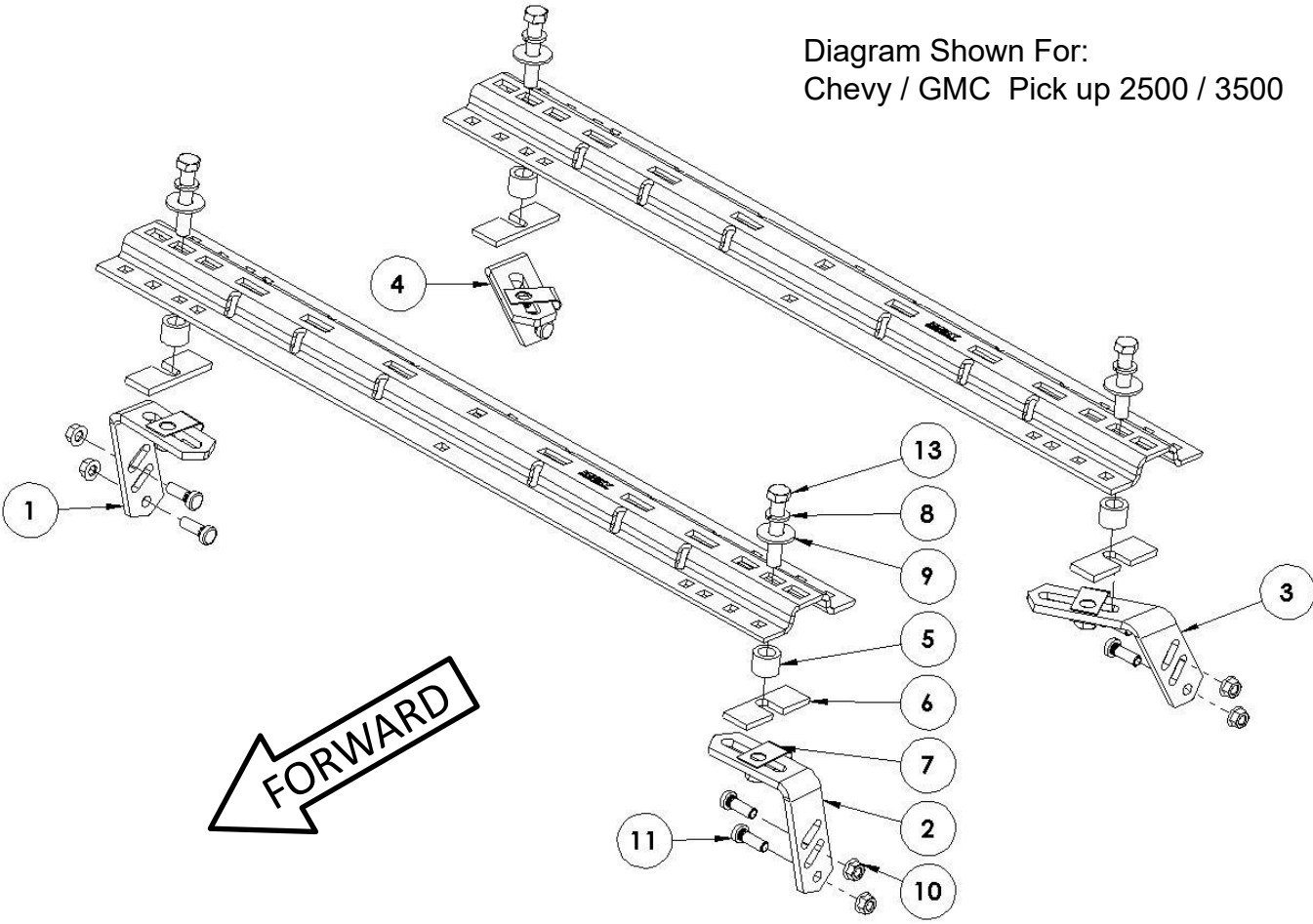
ILLUSTRATION:C

12. Push the angled bracket against the outside of the truck frame and snug the 5/8" hex bolt to hold the angled bracket in place. Using the 2 angled parallel slots and the bottom hole make 2 marks that would be the farthest apart (centered in the slots/hole) and rotate the bracket away from the frame. shown in illus. D
13. Drill a 17/32" diameter hole through the inside wall of the frame at the marks made in step 12.



14. Rotate the bracket back against the inside of the frame and Insert the wheel bolts (#11) through the drilled holes from the inside of the frame so they protrude through the angled bracket. Thread the 1/2" serrated hex nut (#10) on to the wheel bolts (#11) and **tighten to 75 lbs. ft. torque.**
15. Repeat the above steps for the all angled brackets.
Tighten each 5/8" bed rail attachment bolt to 150 ft-lbs. torque. Failure to tighten bolts as described may result in fastener loss or failure. DO NOT apply torque to the nut portion of the clip nuts. You will DAMAGE it.

Diagram Shown For:
Chevy / GMC Pick up 2500 / 3500



ITEM NO.	DESCRIPTION	QTY
1	LEFT ANGLE BRACKET	1
2	RIGHT ANGLE BRACKET	1
3*	RIGHT ANGLE BRACKET	1
4*	LEFT ANGLE BRACKET	1
5*	1" SPACER TUBE	4
6*	SPACER PLATE	4
7*	5/8"-11 CLIP NUT	4
8*	5/8" LOCK WASHER	4
9*	5/8" FLAT WASHER	4
10*	1/2" -13 LOCKNUT FLANGE SERRATED	8
11*	1/2"-13 UNC X 1.5 WHEEL BOLT	8
13*	5/8"-11 X 3.50 HEX HEAD BOLT	4
14*	PULL WIRE	4

Items marked with (*) are supplied with kit 31563.

Tools Needed:

- Sockets/Wrenches: 3/4", 15/16"
- Drill Bits: 3/16", 17/32", 5/8", 1-1/8" Hole Saw.
- Center Punch.
- Tape Measure.
- 150 lbs-ft min. Torque Wrench.

16. Check that the uprights are sitting straight vertically. It may be necessary to shim the uprights by placing a shim between it and the cross member channel. See Illustration "E".

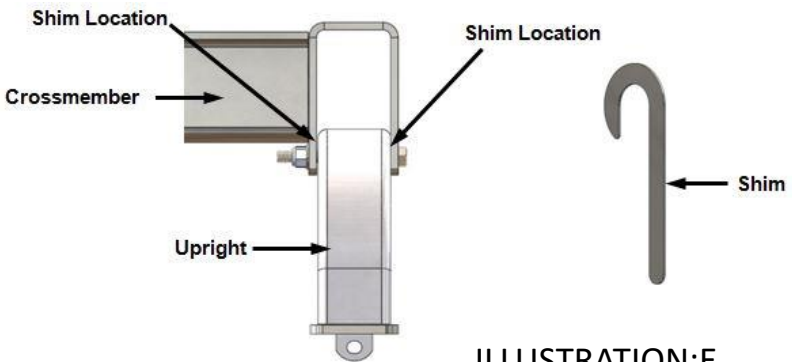


ILLUSTRATION:E