B&W Trailer Hitches
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NOTE: *We recommend reading instructions before beginning the installation.*
WARNING: *The tow vehicle's towing capacities should Under NO Circumstances be exceeded.*

Turnoverball™ Gooseneck Hitch Installation Instructions

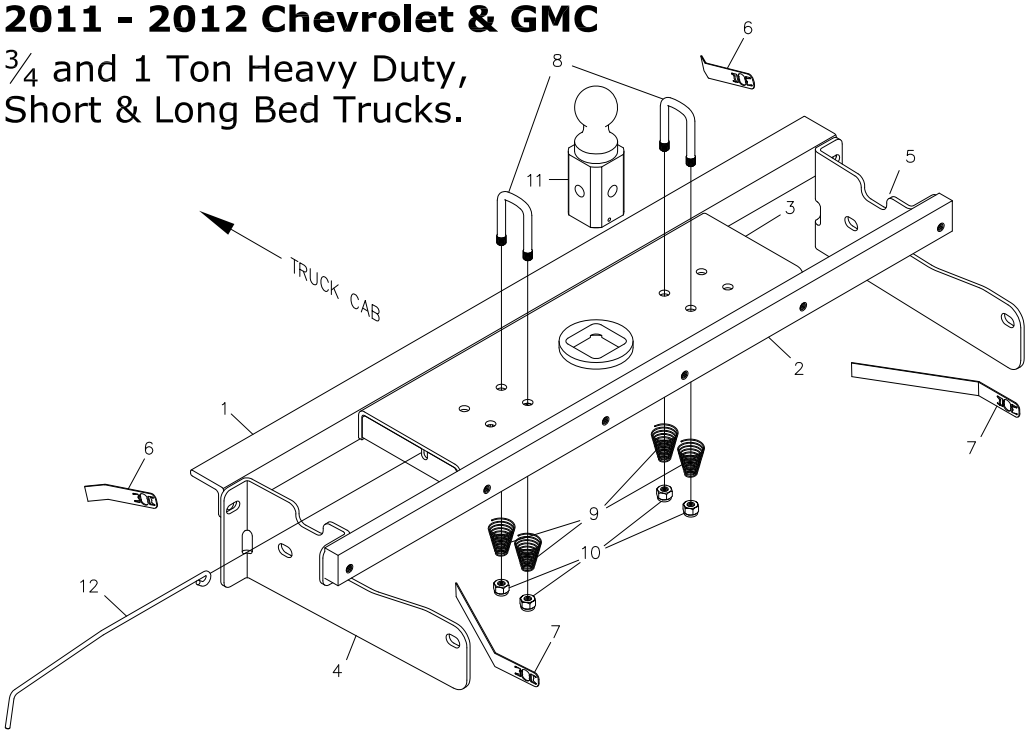
Model 1011

Call or Email us for Instalation Support

hitches@turnoverball.com **www.turnoverball.com**

2011 - 2012 Chevrolet & GMC

¾ and 1 Ton Heavy Duty,
Short & Long Bed Trucks.



HARDWARE KIT

- 2 - Front Bolt Guide ⅝"
- 11 - ½" X 1½" Hex Cap Screws
- 5 - ½" Hex Finish Nuts
- 11 - ½" Split Lock Washers
- 8 - ½" Flat Washers
- 4 - ⅝" x 1½" Hex Cap Screws
- 4 - ⅝" Flat Washers
- 4 - ⅝" Hex Finish Nuts
- 4 - ⅝" Split Lock Washers

SAFETY CHAIN KIT

- 2 - ½" U-Bolts
- 4 - ½" Lock Nuts
- 4 - Conical Springs
- 1 - ⅜" X ¾" Hex Cap Screw
- 1 - ⅜" Lock Nut

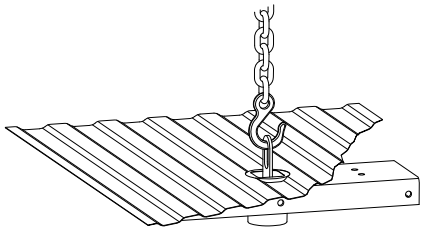
PARTS LIST

1 - Front Cross Member
2 - Rear Cross Member
3 - Center Section
4 - Left Side Plate
5 - Right Side Plate
6 - Front Bolt Guide ⅝"
7 - Rear Bolt Guilde ⅝"
8 - ½" X 1½" X 3⅛" U-Bolt
9 - Conical Spring
10 - ½" Center Lock Nut
11 - 2-5/16" Ball
12 - Latch Pin Handle

BEFORE INSTALLING

OVERHEAD LIFTING DEVICE

An overhead-lifting device, such as chain falls, engine hoist, or cable come-a-long, can be used to lift the center section of the hitch in place. Lower a loop of rope or chain through the 4" hole in the truck bed floor and attach it to the latch pin in the round hitch receiver tube in the center section. Use the lifting device to raise the center section until the round hitch receiver tube that protrudes from the center section fits in the 4" hole in the truck bed floor. Maintaining upward pressure may facilitate fastening the cross member to the center section, especially if the truck bed floor has been distorted downward from heavy use. If you use an overhead-lifting device, it should be disconnected before squaring the center section across the frame, installing the side plates and torquing fasteners.



WARNING

Most trucks have FUEL LINES and/or BRAKE LINES and/or ELECTRICAL WIRES located along the frame rails where B&W Turnoverball™ hitches install. Carefully examine the location of fuel lines, brake lines and electrical wires BEFORE INSTALLATION. Be certain you will not damage fuel lines, brake lines or electrical wires when positioning hitch components, drilling holes and tightening fasteners.

WARNING

On the short bed trucks, BEFORE INSTALLING THIS HITCH, check for adequate turning clearance between the front of all of your trailers and the truck cab.

WARNING

DO not invert the ball in the socket when carrying heavy loads on 2 wheel drive trucks. The ball may hit the top of the differential. Remove the ball from the socket before loading. A plug for the socket is available from B & W.

INSTALLATION INSTRUCTIONS

STEP 1: REMOVE OBSTACLES TO INSTALLATION

order to create more room to access the area of the hitch installation, it is recommended that the spare tire be removed during the installation, then reinstalled when the installation is completed.

Remove the heat shield directly above the exhaust in the area between the two bed cross members that are above the rear axle of the truck, see figure 1.1.

If molded fenders liners are present in the rear fender wells then they will need to be removed or modified before the hitch can be properly installed.

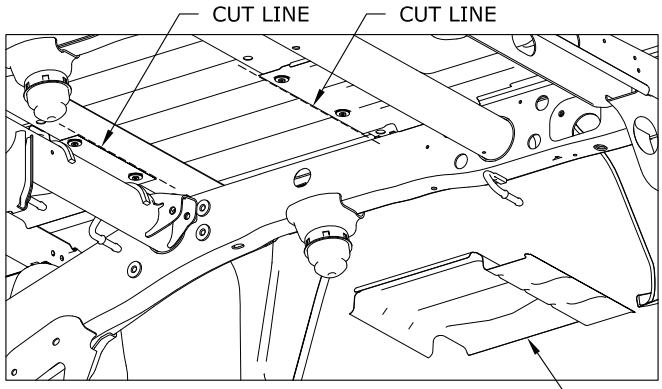


FIGURE 1.1: View Under Bed Looking at Heat Shield Removal Area

STEP 2: CUTTING 4" HOLE IN TRUCK BED

Begin by marking the location for the hole in the truck bed floor. Measure from the back end (tail gate end) of the truck bed floor by hooking a tape measure over the back of the truck box and mark the floor at the correct location. Next, mark the center between the wheel wells. This will be the center point for the 4" hole. This location is critical to the correct installation of this hitch, so measure, mark, and saw carefully, see figure 2.1

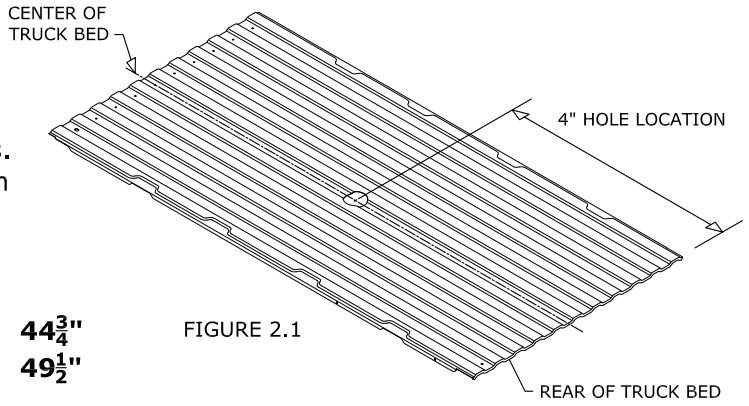


FIGURE 2.1

BALL LOCATION: SHORT BED INSTALLATION: $44\frac{3}{4}$"

LONG BED INSTALLATION: $49\frac{1}{2}$"

NOTE:

If the truck has a plastic bed liner, you may drill through both, but it is more difficult to accurately locate the midpoint between the wheel wells, and to be sure that the bed liner does not move while sawing the hole. Make a 4 inch hole at this location using a four inch hole saw, or by marking a 4 inch circle and cutting it out with a saber saw equipped with a metal cutting blade.

STEP 3: INSTALLATION OF CROSS MEMBERS AND CENTER SECTION

First, install the front cross member (46-3/4" long angle iron). Install the cross member by sliding it from inside the passenger's side rear wheel well, above the tire, through the gap between the truck's frame and bed until it spans across both frame rails. The gap between the frame and the bed is large enough to allow this. However, there is a sheet metal flange (about 1" in height) hanging down from the truck bed floor that partially obstructs this gap. Using a pair of metal shears, cut a V-shaped notch in the flange directly above the axle, see figure 3.1. Place the front cross member between the truck frame and bed floor using the notch. Be sure the holes in the cross member are facing to the rear of the truck, see figure 3.2. Slide the cross member across both frame rails and then forward so that it is approximately 6 inches in front of the 4" hole in the truck bed. Rotate the cross member so that the leg of the angle with the holes is vertical, see figure 3.3.

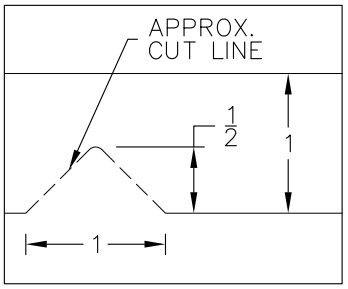


FIGURE 3.1: V-Shaped notch

Next, install the center section. Raise the center section into position, see figure 3.4. The receiver socket must be positioned to the rear with the spring-loaded latch pin on the driver's side. At this time, rest the center section on the exhaust and the fuel tank, or insert the raised portion of the receiver socket into the 4" hole of the truck bed and secure with a lifting device to hold it in place.

Install the rear cross member (46-5/8" long bar). Install the rear cross member by sliding it between the frame and the truck bed just rearward of the center section, see figure 3.5. Rotate the rear cross member a quarter turn so the threaded holes are offset to the bottom of the bar, see figure 3.6. It may be difficult to rotate the cross member due to the narrow space between the frame and the bed. If necessary, slide an adjustable wrench, or similar tool over the end of the bar closest to the holes and pull downward rotating the cross member into position.

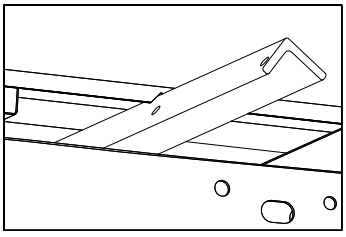


FIGURE 3.2: Front Cross Member

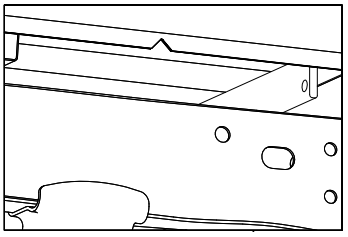


FIGURE 3.3: Front Cross Member

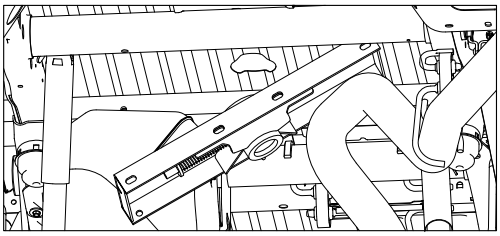


FIGURE 3.4: View of Truck Bed looking towards front of truck

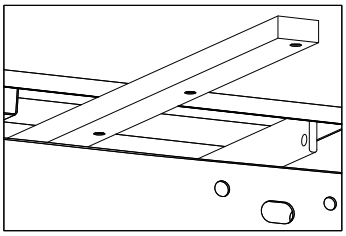


FIGURE 3.5 Rear Cross Member

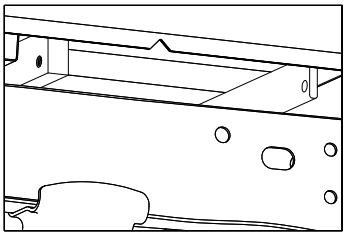


FIGURE 3.6: Rear Cross Member

With the raised portion of the center section inserted into the 4” hole of the truck bed, slide the cross members up against the legs of the center section lining up the holes. Attach the front cross member to the center with three ½” x 1-1/2” long bolts. Secure the bolts with lock washers and finish nuts and hand tighten, see figure 3.7. Attach the rear cross member to the center with four ½” x 1-1/2” long bolts. With a flat washer and lock washer on each bolt, thread the bolts into the bar and hand tighten, see figure 3.8 . Do not fully tighten these bolts at this time.

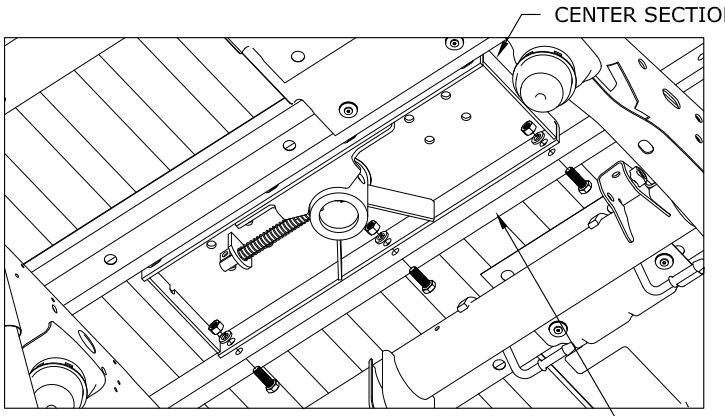


FIGURE 3.7: Attach Front Cross Member

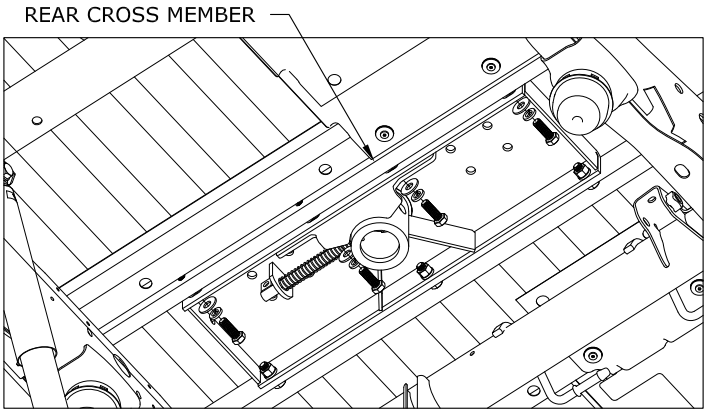


FIGURE 3.8: Attach Rear Cross Member

STEP 4: SIDE PLATE INSTALLATION

Assemble the bolt guides by threading a 5/8” bolt onto each guide as shown in figure 4.1. Tighten the bolt onto the guide so that the shoulder of the bolt head is flush with the surface of the bolt guide. This is designed to be a tight fit. A wrench may be needed to thread the bolts onto the bolt guides. Be sure that the notches of the bolt guide engage the corners of the bolt head so that the bolt is prevented from “backing off” of the guide, see figure 4.2. *The notches of the bolt guide may have to be pried up if they were smashed down when the bolt was tightened down.*

Insert the front bolt guide into the frame and through the side, see figure 4.3 and 4.4. Place each side plate over the 5/8" bolt and secure with a flat washer, lock washer, and a finish nut, see figure 4.5 and 4.6. Attach each side plate to the front and rear cross members with ½” x 1-1/2" long bolts, flat washers, lock washers and finish nuts as needed, see figure 4.7. insert the rear bolt guide into the inside of the frame and through the side plates, see figure 4.8 through 4.10. Secure each bolt with a flat washer, lock washer and finish nut.

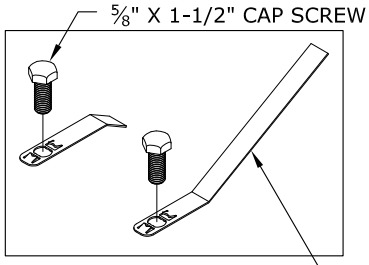


FIGURE 4.1: Bolt Guides

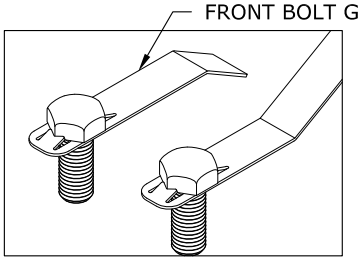


FIGURE 4.2: Bolt Guides

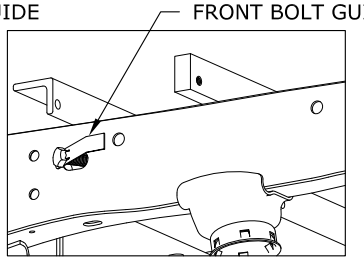


FIGURE 4.3: View from outside of Driver Side Frame, Bolt installation Step. 1

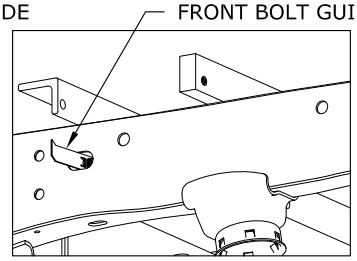


FIGURE 4.4: View from outside of Driver Side Frame, Bolt installation Step. 2

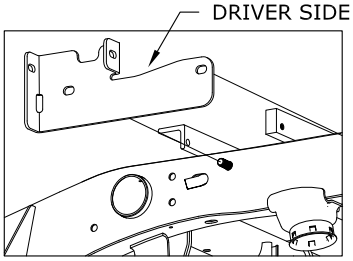


FIGURE 4.5: Driver Side Plate

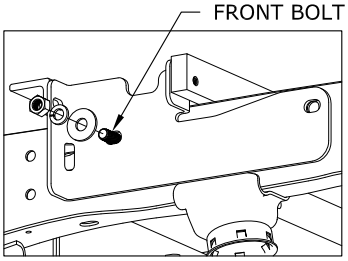


FIGURE 4.6: View from outside of Driver Side Frame, Bolt installation Step. 3

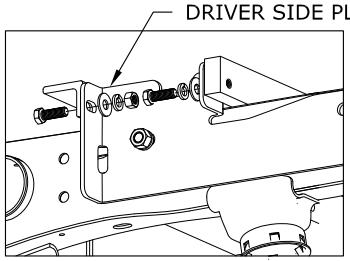


FIGURE 4.7: Driver Side Plate

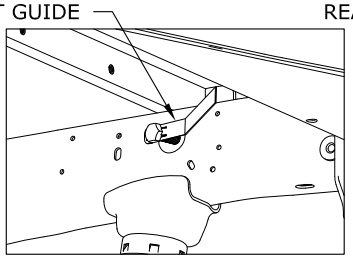


FIGURE 4.8: View from inside of Driver Side Frame, Bolt installation Step. 4

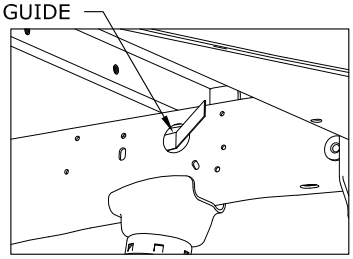


FIGURE 4.9: View from Inside of Driver Side Frame, Bolt installation Step. 5

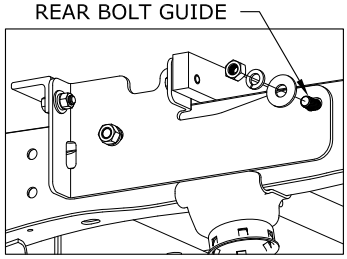


FIGURE 4.10: View from outside of Driver Side Frame, Bolt installation Step. 6

STEP 5: TIGHTEN HARDWARE

With the top surface of the center section firmly against the truck bed, tighten the center section bolts and be sure the hitch is square with the frame. Then tighten the 5/8" bolts securing the side plates to the frame. Finally, tighten the ½" bolts attaching the side plates to the cross members. Torque the ½" bolts to 80 ft. lbs. and the 5/8 bolts to 100 ft. lbs.

STEP 6: MODIFY PLASTIC WHEEL WELL COVERS

If the pickup is equipped with plastic covers in the rear wheel wells, they will need to be modified and reinstalled. If not, skip to step 7. Some covers may be able to be reinstalled without interference caused by the hitch. Some covers may need to be cut to expose the truck frame and allow clearance for the hitch. At a minimum, a hole, or slot will need to be cut into the driver's side wheel well cover so that the latch pin release handle may be accessed.

STEP 7: INSTALL LATCH PIN RELEASE HANDLE

WARNING: LATCH PIN WILL NOT FUNCTION PROPERLY IF HANDLE IS NOT INSTALLED CORRECTLY.

Install the handle from underneath the truck by inserting it through the slot in the end of the center section toward the driver's side rear tire as shown, See Figure 7.1. Attach the handle to the latch pin as shown with the handle on the "cab side" of the square tab welded to the pin. The head of the bolt must be on the handle side, and the lock nut must be on the tab side. The tab is welded to the pin in an offset position so that the handle will be lined up over the center of the pin, See Figure 7.2 and 7.3. If the handle is fastened to the other side of the tab, the handle will not function properly. When installed correctly the latch pin may be disengaged from the ball by pulling on the handle from the driver's side wheel well and rotating the handle clockwise.

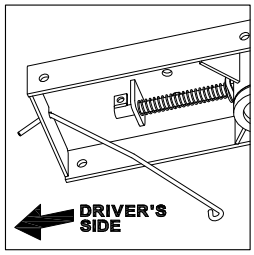


FIGURE 7.1: Center Section

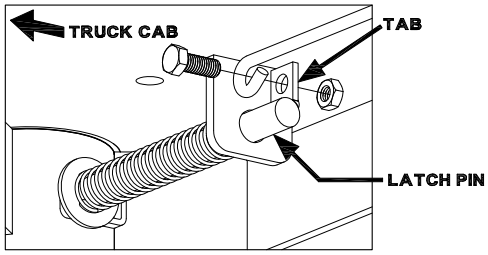


FIGURE 7.2: Handle installation

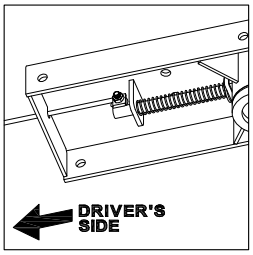


FIGURE 7.3: Completed Assembly

STEP 8: INSTALL SAFETY CHAIN U-BOLTS

To install the safety chain U-bolts it is necessary to drill four 1/2" holes through the truck bed floor. Drill the holes from beneath the truck, through the two holes located on each side and nearest to the round receiver tube in the center section, See Figure 8.1. Drop a U-bolt through each pair of holes from the top side of the truck bed floor. Place a conical spring and lock nut on each of the four legs. Tighten the lock nuts until flush with the bottom of the U-Bolts, See Figure 8.2.

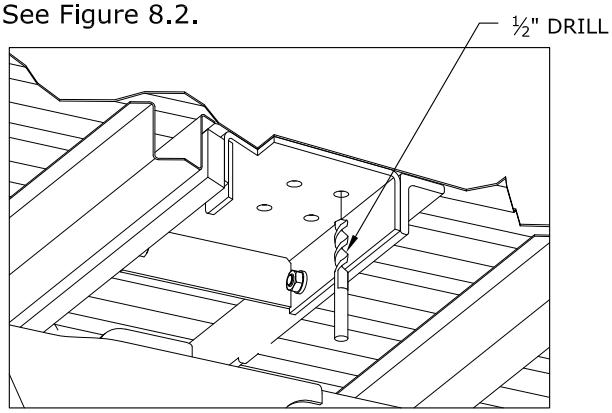


FIGURE 8.1: Cut away view from under the bed

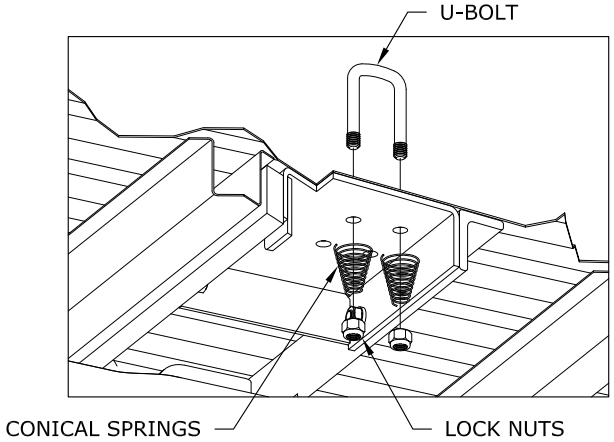


FIGURE 8.2: Cut away view from under the bed.

Step 9: REPLACE SPARE TIRE

If the spare tire was removed in step 1, replace at this time.

STEP 10: ENGAGE LATCH PIN

Retract the latch pin by pulling the handle all the way out until it stops and then rotating it clockwise. Place the 2-5/16" ball (11) in the hitch receiver. Engage the latch pin by rotating the handle counter clockwise. Be certain the latch pin passes through the holes in the 2-5/16" ball and fully engages through the hitch receiver. Finally, remove and lightly grease the four corners on the square base of the 2-5/16" ball.