**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 crossmember 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 sideplates 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, tightening fasteners, and lifting and lowering the truck bed. The fuel tank vent, located on top of the gas tank, can be easily damaged during the installation of the hitch components. Care must be taken when positioning the front crossmember and center section components.

**Warning**

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

STEP ONE
Begin by verifying and measuring the correct hole location 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 bed (not including the tailgate) and marking the floor at the **44 1/4”**. Center the measurement between the wheel wells. This location is critical to the correct installation of this hitch, so measure, mark and saw carefully. 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 sabersaw.

STEP TWO
From the underside of the truck, position the two crossmembers (3) and (4), across the top of the frame rails, between the bed and frame. Start with the rear crossmember, (4) which is the solid bar. It is symmetrical, so it doesn’t matter which end goes to the driver’s side. From behind the differential, raise the passenger side end of the crossmember up over the frame rail and slide it through until the driver's side can be raised up over that side of the frame. Push the crossmember rearward until it is against the bed crossmember that is directly above the truck’s axle. Now position the front angle iron crossmember across the frame, with the slotted leg vertical, the horizontal leg at the top, and the slotted side toward the rear of the truck. Place the angle parallel to the bar, about 9 inches apart, as shown in the diagram.

STEP THREE
Select the drivers side – side plate (1) (see diagram) and attach the rear slotted tab to the end of the rear crossmember by threading a 1/2” bolt with a flat and lock washer into the threaded hole. Repeat with the passenger side plate. With the center section (2) latch pin mechanism on the driver’s side, raise the center section of the hitch up between the crossmembers. Guide the center section on up against the bottom of the floor, inserting the round receiver tube through the 4” hole cut in the floor. Pull the front crossmember back against the center section, insert three 1/2” x 1 1/2” bolts in the front crossmember and through the front legs of the center section. Place flat washer, lock washer and nut on the bolts. Leave these bolts loose. Thread four 1 1/2” bolts with flat and lock washers into the rear bar from inside the center section. Now install the bolts in the front side plate tabs.

STEP FOUR
Square the hitch across the frame and align two of the sideplate holes with existing holes in the truck frame. Install two ½” bolts, flat washers and lock washers on each side. After all fasteners have been installed, torque to 90 ft.-lbs. torque.

STEP FIVE
To install the safety chain brackets, it is necessary to drill four ½” holes through the truck bed floor. Drill the holes from beneath the truck, through the 4 holes nearest the round hitch receiver tube in the center section. This will locate the safety chain brackets in the valley section of the bed floor. Drop a U-bolt through each pair of holes from the topside of the truck bed floor. Place a spring and lock nut on each of the four legs and tighten the lock nuts until they are flush with the bottom of the U-bolt.

STEP SIX – INSTALL LATCH PIN RELEASE HANDLE
**WARNING: LATCH PIN WILL NOT FUNCTION PROPERLY IF HANDLE IS NOT INSTALLED CORRECTLY.**
Install the latch pin release handle by inserting it through the slot in the end of the center section on the driver’s side of the truck. Align the handle eyelet with the square hole in the latch pin so the handle is in line with the latch pin as shown. Secure the handle to the pin with the 5/16 X 3/4” carriage bolt and 5/16” locking flange nut as shown. Note: The included 5/16” cap screw can replace the carriage bolt if wrench access on the “cab side” of the handle is limited. Tighten the nut until it is secure. Do not over-tighten and deform the handle eyelet.

STEP SEVEN
Retract the latch pin by pulling the handle out until it stops and then rotating to the lock out position. Place the 2-5/16” ball in the hitch receiver. Engage the latch pin by rotating the handle back to center. Be certain the latch pin passes through the holes in the 2-5/16” ball and fully engages through the hitch receiver.

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.