INSTALL COUPLER
Lubricate the polyurethane bushings on top of pivot arms with high grade lithium grease (available at your local hardware/automotive store). Place the coupler over the pivot arms. (The saddle handles should be parallel with the base in the latched position.) Place the saddle lock pins through the saddle, then insert the hairpins through the holes in the end of the saddle lock pins to secure the coupler to the pivot arms, see diagram on front page.

PULL TEST
Have the truck stationary with the emergency brake on, the trailer wheels blocked and landing gear still resting firm on the ground supporting the weight of the trailer. Make sure no one is between the truck and trailer, return to the cab of the truck. Release the emergency brake and apply the trailer brakes. Try to pull the trailer forward with the truck. If the trailer is properly hooked up, the wheel blocks and trailer brakes should not allow the truck to move forward. If trailer is not hitched correctly, the trailer will separate from the truck. However, with the landing gear resting firmly on the ground, it will support the trailer and not allow it to drop or fall on the truck sides.

ATTACHING TRAILER
Remove the coupler cam handle safety pin and use the cam handle to open the coupler jaws. Adjust the height of the 5th wheel trailer so that the king pin plate is slightly lower than the top of the coupler. Back the truck towards the trailer, centering the trailer's king pin in the coupler, until the king pin has engaged the jaws. Ensure that the coupler cam handle has completely closed before inserting the cam handle safety pin through the cam handle and the coupler. Hook up brake and lighting connections before towing.

WARNING: Do not use the Companion 5th wheel hitch with any device that changes the location of the king pin pivot point. The king pin on your trailer must rotate in the jaws of the Companion Coupler, see figure E1. Preventing the king pin from rotating within the jaws of the Companion Coupler with a wedge, see figure E2, or any other device, such as a Reese Sidewinder® or Reese Revolution®, could result in property damage, serious injury or death. Reese® is a registered trademark of Cequent Performance Products.

HELPFUL TIPS:
- Approximately 15%-25% of the trailer weight should be on the hitch.
- The height of the king pin box and pivot arms should be adjusted so that the trailer is approximately level for towing.
- Allow adequate clearance between the bed side and the underside of the front of the trailer for pitch and roll of the trailer.
- Lubricate top surface of coupler with automotive type chassis grease or use a nylon lube plate to provide a lubricated surface.

The Companion was designed to be used with the Turnoverball™ mounting system. Other uses will void the warranty and are expressly prohibited by B&W Trailer Hitches.

Grease jaws with automotive type chassis grease.

Grease the saddle through the grease zerk approximately every six months with multi-purpose grease, this allows the coupler to pivot freely, see figure F1.

<THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER>
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Companion™ Hitch Installation Instructions
20,000 LBS. TRAILER WEIGHT
5,000 LBS. TRAILER TONGUE WEIGHT

Model 3500

PARTS LIST

ITEM	DESCRIPTION	QTY
1	2" X 1 1/2" Hex Cap Screws	16
2	Split Lock Washers	16
3	4" Threaded Block	4
4	Pivot Arm A	1
5	Pivot Arm B	1
6	2" X 3/4" Hex Cap Screw	1
7	Socket Post	1
8	4" X 1 1/2" Machine Screw	4
9	3/4" Finish Nut	4
10	3/4" Flat Washer	4
11	4" Lock Washer	4
12	Plastic Foot Pads	2

REQUIRED TOOLS
Installation of the Companion hitch requires a large torque wrench capable of measuring 80 ft-lbs, a 3/4" socket, and a 7/16" socket or wrench.

WARNING
Failure to comply with the safety information in these instructions could result in serious injury or death.

Read all installation and operating instructions along with all labels before using this product.

Without proper knowledge, towing can be a dangerous activity. Understand all the risks involved with towing before proceeding. For information on towing safety, see “The Trailer Handbook: A guide to Understanding Trailer and Towing Safety” from the National Association of Trailer Manufacturers, www.NATM.com.

Do not modify this product in any manner. Doing so could alter its integrity and lead to a loss of attachment between the trailer and the tow vehicle.

Regularly check that all bolted connections are at the correct torque specification. A visual inspection should be performed before each time you tow.

Do not exceed tow or tongue rating of coupler, tow or tongue rating of hitch, or tow or weight ratings of truck or trailer. See vehicle and trailer manufacturer information for ratings. Exceeding these ratings may cause damage to towing components or loss of attachment between the trailer and truck.

Adding components to the chassis of any vehicle can be hazardous. There is potential for damage to vehicle, injury from tool usage and many other hazards. This installation must be completed by someone who is aware of the hazards involved. This person must be knowledgeable of proper safety procedures for a vehicle installation of this nature, and for usage of the equipment required to perform the installation.

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**PREPARING TO INSTALL**

**WARNING:** Components of the Companion hitch are heavy and cumbersome to handle. Failure to use proper lifting techniques when moving and handling these parts could result in property damage or serious injury.

Locate the two plastic foot pads. Each pad attaches to the base through a slot at the end of the base leg. Before attachment, check the width of your bed rib by setting the wide face of the plastic foot in a bed rib, see figure A1. If the plastic foot does not reach the bottom of the bed rib trough, turn the plastic foot over, see figure A2 & A3. Locate four 1/4" machine screws, 1/4" flat washers, 1/4" lock washers and 1/4" finish nuts. Insert the machine screw up through the bottom of the foot pad through the slot and attach it with a 1/4" flat washer, 1/4" lock washer and a 1/4" finish nut, see figure A3. Do not tighten hardware at this time, so that the plastic foot is able to move back and forth in the slot.

**INSTALL SOCKET POST**

**NOTICE:** If the Companion is to be used in conjunction with a 1257 or 1309 model gooseneck hitch, call the factory for a post that is compatible with these hitches.

1. The socket post of the Companion hitch is designed to have two mounting options. In most truck models, the gooseneck socket will be forward of the axle and the Companion socket post will install towards the cab of the truck (position 1). If your socket is located over the axle due to the frame configuration of your truck, as it is in the 2013 RAM 3500 trucks, install your socket post so the post is towards the rear of the truck (position 2).

2. Check that the bed of the truck is clean, and that all debris is removed before beginning installation.

**INSTALL COMPANION BASE**

**NOTICE:** If truck is equipped with a removable bed liner or mat, it should be removed or it must be cut to allow the base to directly connect with the bed. It is acceptable to install the RV base over a spray-in bed liner.

1. Locate the GN latch pin handle of the Turnoverball™ Gooseneck Hitch in the driver’s side fender well. Retract the GN latch pin handle all the way to the base from ball. Remove the Turnoverball from the GN hitch receiver socket.

2. Carefully lift and position the Companion base into the GN hitch socket in the back of the truck bed. Orient the base so that the large warning label and the socket post are on facing the cab side of the truck.

3. Square the Companion base legs with the ribs of the truck. Position the plastic pads so that they are both in line with the rib along their entire length. Tighten the four 1/4" nuts holding the pads to the base.

4. Re-engage the GN latch pin handle in the driver side fender well.

5. Install pivot arms with the four 1/4" threaded blocks, eight 1/2" cap screws, and eight 1/2" split lock washers. Place the lock washers over the cap screws. Align the flat side of the pivot arm flat against the bolt plate and install four 1/2" cap screws through the holes on the arm, holding the arm in place. The holes on one side of the threaded block have a tapered edge for starting screws. Pass the threaded blocks through the leg and align the blocks with each set of screws and start each screw. After all screws are started through the arm, torque each bolt to 80 ft-lbs.

6. Secure the base to the truck bed by first tightening the eight 1/2" cap screws attaching the socket post into the center of the base to 80 ft-lbs. Second, tighten the 1/2" x 3-1/2" draw-down bolt to 60 ft-lbs. Lock the draw down bolt in place by swiveling the locking bracket over the draw down bolt, see figure C2.

**WARNING:** Check the latch pin under the truck. Make sure that the latch pin has passed through both sides of the socket and that the pin is covered up inside the socket by the socket adjuster, see figure C1.

**WARNING:** Do NOT lubricate the draw down bolt, the torque value is for dry threads only.

**NOTICE:** Do NOT clamp to the truck bed. Prop any damage may result when the base is not properly clamped to the truckbed.

**WARNING:** B&W also recommends that you check the clearance between the truck bed and the trailer. Compare the measurement taken from the center of the Coupler to the cab, to the measurement taken from the center of the bed to the farthest forward corner point of the trailer. These measurements will allow you to see how much clearance you will have between the cab and the trailer while towing and turning.

**WARNING:** B&W also recommends that you check the clearance between the bed side and the underside of the front of the trailer and to allow adequate clearance for the pitch and roll of the trailer while towing.