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 RV HITCH WAS DESIGNED TO BE USED WITH THE TURNOVER BALL HITCH MOUNTING SYSTEM. OTHER USES WILL VOID THE WARRANTY AND ARE EXPRESSLY PROHIBITED BY THE MANUFACTURER.**
- **GREASE JAWS WITH AUTOMOTIVE TYPE CHASSIS GREASE.**
- **GREASE THE SADDLE THROUGH THE GREASE ZERK APPROXIMATELY EVERY SIX MONTHS WITH MULT-PURPOSE GREASE. THIS ALLOWS THE COUPLER TO PIVOT FREELY.**

Call or Email us for Installation Support
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US PAT NO 6,170,850 B1
Model 3000
04 22 2008

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NOTE: ***We recommend reading instructions before beginning the installation.***

18,000 LBS. TRAILER WEIGHT
4,500 LBS. TRAILER TONGUE WEIGHT

Installation Instructions

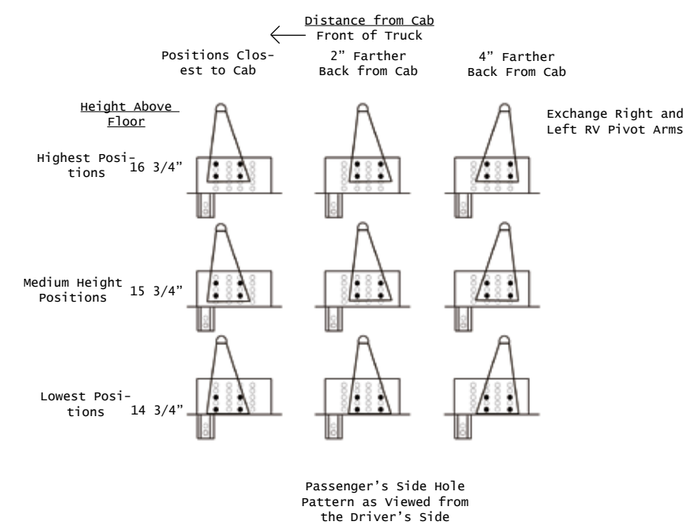
Model 3000

Companion™ 5th Wheel RV Hitch
PART NUMBERS RVB3006 & RVC3006

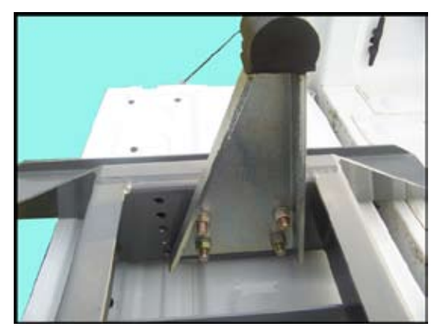
Hardware Kit

8 - 1/2" x 1 1/2" bolts (A)
1 - 1/2" x 3" draw down bolt (D)
8 - 1/2" hex nuts (C)
8 - 1/2" lock washers (B)
1 - 1/2" flat washers (K)
4 - 5/8" lock nuts (F)
4 - 5/8" flat washers (E)
2 - 3 1/2" x 4 1/2" U-bolts (G)
2 - RV Pivot Arms (H)
1 - Installation Instruction (I)
1 - RV Post (J)

[Fig. A]



ASSEMBLY INSTRUCTIONS



STEP ONE - INSTALL RV PIVOT ARMS

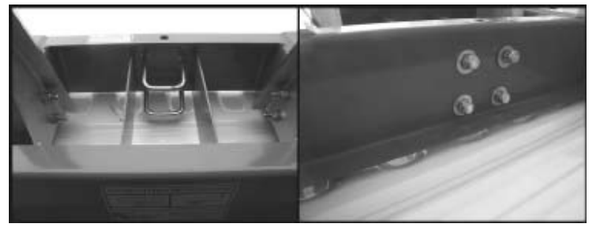
Mount the RV pivot arms (H) using one of the nine different locations illustrated in Figure A. (These nine locations can increase and decrease the clearance for turning between the trailer and the back of the truck cab.) The flat side of the RV pivot arm bolts flat against the plate in the RV base with the 16 holes in it. Use four - ½" x 1 ½" bolts (A) inserting the bolts in the RV Base with the threads toward the center of the RV Base, place the RV pivot arm over the four bolts, use four ½" lock washers (C), and four ½" nuts (D) to attach each RV pivot arm to the RV base. Torque the bolts to 80ft.lbs.

WARNING: B&W recommends that you check the clearance between the truck cab and the trailer. Compare the measurement taken from the center of the RV Companion coupler to the cab, to the measurement taken from the center of the king pin to the widest 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.

ASSEMBLY INSTRUCTIONS CONTINUED

STEP TWO - INSTALL U-BOLTS

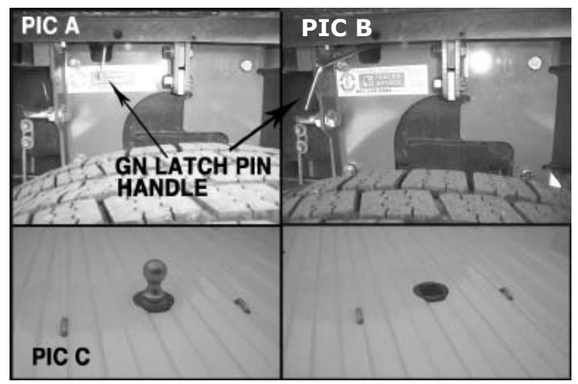
Place the U-bolts (G) from the inside of the RV base out through the existing holes in the RV base. Once inserted place a 5/8" flat washer (E) and a 5/8"lock nut (F) on each leg of the U-bolts, leaving them loose enough to slide over the RV post at a later time.



Installation Instructions

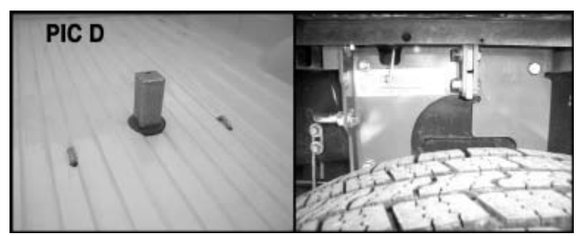
STEP 1:

Locate the GN latch pin handle (PIC A) of the Turnoverball gooseneck hitch in the driver's side fender well. Retract the GN latch pin handle all the way out until it stops and then rotate it clockwise. (PIC B) Remove the Turnoverball (PIC C) from the GN hitch receiver socket.



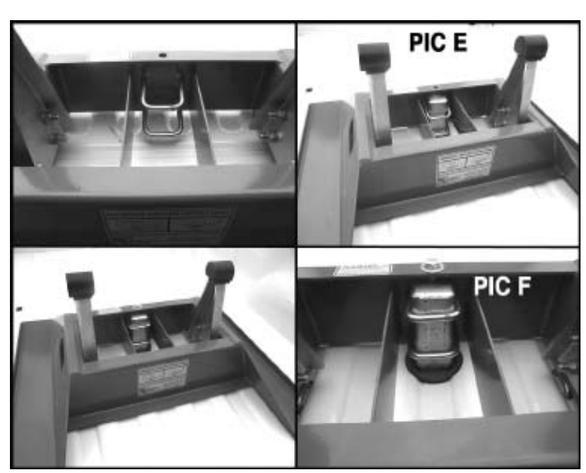
STEP 2:

Install the RV Post (J) in the GN hitch receiver socket with the threaded hole towards the cab. (PIC D) (The RV post has two holes for height adjustment. Do not use the lower hole, unless you have a plastic bed liner that requires it.) After the RV post is placed into the GN hitch receiver socket, engage the GN latch pin by rotating the handle counterclockwise.



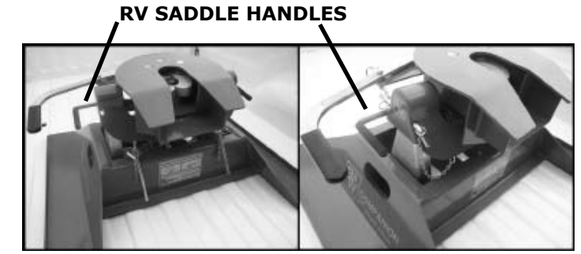
STEP 3:

Place the RV Base over the RV post so that the U-bolts wrap around the RV post. (PIC E) Then place a ½" washer (E) on the ½" x 3" draw-down bolt (B), insert the bolt through the hole in the top flange of the RV base and hand-thread the draw-down bolt into the RV Post. ***<u>NOTE: DO NOT lubricate the draw down bolt or U-bolts, the torque value is for dry threads.</u>* Square the RV base legs with the ribs of the truck bed and then tighten the ½" x 3" draw-down bolt to 40 ft-lb. Next, tighten the two u-bolts to 80 ft-lb. to secure the RV Base to the RV Post. It is very important that the draw-down bolt is tightened before the U-bolts are tightened. When the RV Base is installed correctly, the RV Post should have a ¼" to 1" gap between the RV Post and the RV Base where the draw-down bolt attaches.(PIC F) Also, you should not be able to disengage the latch pin in the wheel well when the base is installed correctly.



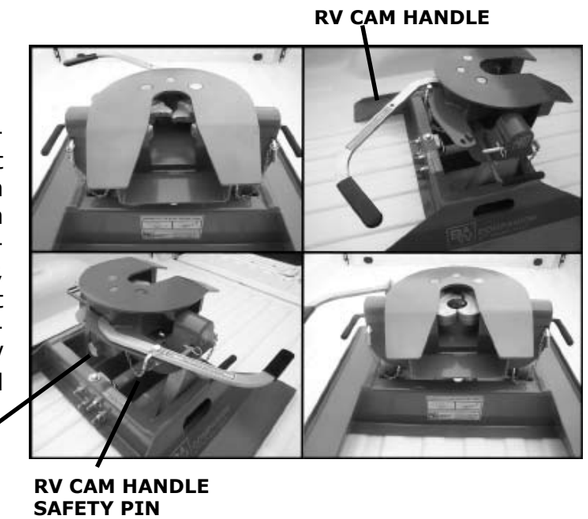
STEP 4:

Lubricate the polyurethane bushings with high grade lithium grease (available at your local hardware/automotive store). Place the RV coupler so it saddles the RV pivot arms. (The RV saddle handles should be parallel with the RV Base in the latched position.) Place the RV saddle lock pins through the RV saddle, then insert the hairpins through the holes in the end of the RV saddle lock pins to secure RV coupler to the RV pivot arms.



STEP 5: ATTACHING TRAILER

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



STEP 6: 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.

STEP 7: UNATTACHING TRAILER

Lower landing gear and block the trailer wheels. Raise the trailer until the tongue weight is removed from the truck. Then, unpin the Companion RV handle and rotate to the open position to unlatch the jaws. If the jaws do not open, readjusting the landing gear may relieve pressure and allow them to open. Use the safety pin to lock the handle in the open position and when you are sure that the landing gear will support the trailer, move the truck forward to release the jaws from the kingpin. The jaws will always open when the pressure of the trailer is taken off the RV Companion as the truck pulls away.

STEP 8: UNINSTALL HITCH

To uninstall the RV Companion, remove the Saddle lock pins, grab the RV saddle handles and lift to remove the RV coupler from the RV pivot arms. To remove the RV base loosen the four ½" nylon lock nuts on the two u-bolts around the RV post and loosen the draw down bolt. Retract the Turnoverball gooseneck latch pin handle all the way out until it stops and then rotate it clockwise. Remove the RV base from the GN hitch receiver socket.