

<THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER>



B&W Trailer Hitches

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See Limited Lifetime Warranty at
bwtrailerhitches.com/warranty

Patriot™ 18K Slider Hitch Installation Instructions

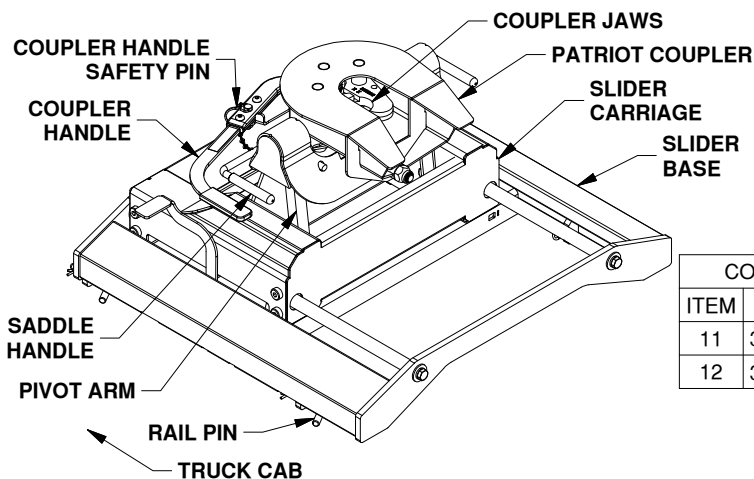
18,000 LBS. TRAILER WEIGHT

4,500 LBS. TRAILER TONGUE WEIGHT

Call or Email us for Installation Support
hitches@turnoverball.com bwtrailerhitches.com

Model 3270

Fits Standard Rail Kit Systems

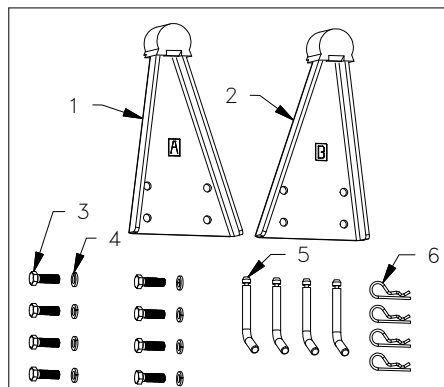


REQUIRED TOOLS

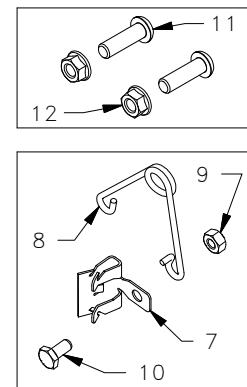
Installation of the Patriot Slider hitch requires a large torque wrench capable of measuring 110 ft-lbs, a 3/4" socket, a 7/16" socket or wrench, and a hammer.

NOTICE:

Installation of the B&W Patriot Slider hitch requires the use of a rail kit to attach the hitch to the truck frame. See your local B&W dealer for information.



COUPLER BOLT BAG (RVC3200)		
ITEM	DESCRIPTION	QTY
11	3/8" Button Head Cap Screw	2
12	3/8" Lock Nut	2



BASE BOLT BAG (RVB3270)		
ITEM	DESCRIPTION	QTY
1	Pivot Arm A	1
2	Pivot Arm B	1
3	1/2" X 1 1/2" Hex Cap Screw	8
4	1/2" Lock Washer	8
5	Rail Pin	4
6	Hairpin	4
7	Mounting Clip	1
8	Wire Torsion Spring	1
9	1/4" Lock Nut	1
10	1/4" X 1/2" Cap Screw	1

⚠ 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 installing or using this product.
- ⚠ 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.
- ⚠ 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 and your trailer manufacturer's owner's manual.
- ⚠ 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.

- ⚠ Additional caution must be used when towing a wedge car trailer. Towing stability greatly depends on keeping the center of gravity as low as possible. Load heavy cars over the axles. Never tow with a single car on the front of the trailer. When towing a wedge car trailer, never exceed speeds that are reasonable for the roadway conditions (e.g. turns, going around a curve, etc.). Failure to account for proper trailer center of gravity and speeds that are reasonable for the roadway conditions may cause damage to the truck, trailer, towing components, and loss of attachment between the truck and trailer.
- ⚠ 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.
- ⚠ A visual inspection of the hitch should be performed before each time you tow. Regularly check that all pinned connections are secure, and that all bolted connections are at the correct torque specification. Check for cracks or damage to the hitch. Do not tow with the hitch if cracks or damage outside of normal wear is found. Towing with a hitch that has cracks or damage could result in damage to the tow vehicle, trailer, towing components or loss of attachment between the tow vehicle and trailer.

PREPARING TO INSTALL

⚠ WARNING: Components of the hitch are heavy and cumbersome to handle. Use proper lifting techniques when moving and handling parts.

⚠ WARNING: Whenever the slider base is being moved, the slider handle must be in the locked position, and the carriage must be unable to slide, see Figure A1. Failure to ensure that the handle is in the locked position can lead to property damage or serious injury.

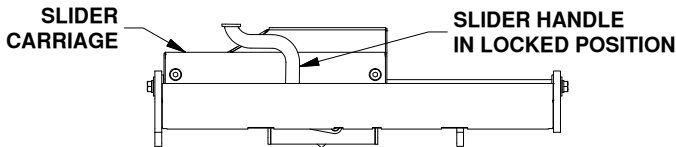


Figure A1: View of driver side of slider base.

Remove all parts from the packaging and familiarize yourself with all the parts and tools required. Use the parts list on the front page to verify that all parts and hardware are present.

INSTALL SLIDER BASE

1. **Place base.** The Patriot Slider base will mount to a rail kit in the truck bed. Remove any debris and/or obstructions from the bed. Position the Patriot Slider base over the rail attachment points. Carefully lower it until the pin tabs pass through the attachment points and the base rests flat against the top of the rails, see Figure B1.

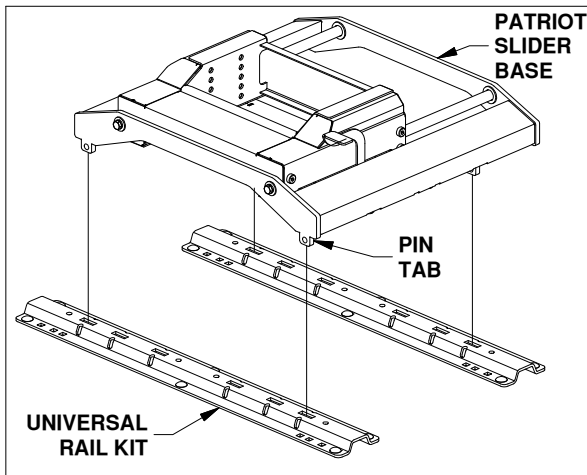


Figure B1: Rail attachment.

2. **Insert pins.** Locate the four rail pins and hairpins. Insert each pin into the corresponding slot on the universal rail kit and through the Patriot Slider base pin tabs. Lock each pin into place with a hairpin, see Figures B2 & B3.

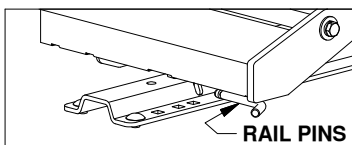


Figure B2: View of base leg.

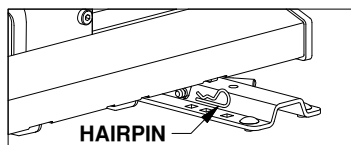


Figure B3: View of base leg.

INSTALL PIVOT ARMS

1. **Mount arms.** Mount the pivot arms using one of the six different positions illustrated in Table C1 and Figure C2. These six positions allow flexibility in coupler height and distance from the cab. Choose a location so that your trailer will be as level as possible and have adequate turning clearance while in the towing position (with the slider in the forward position).

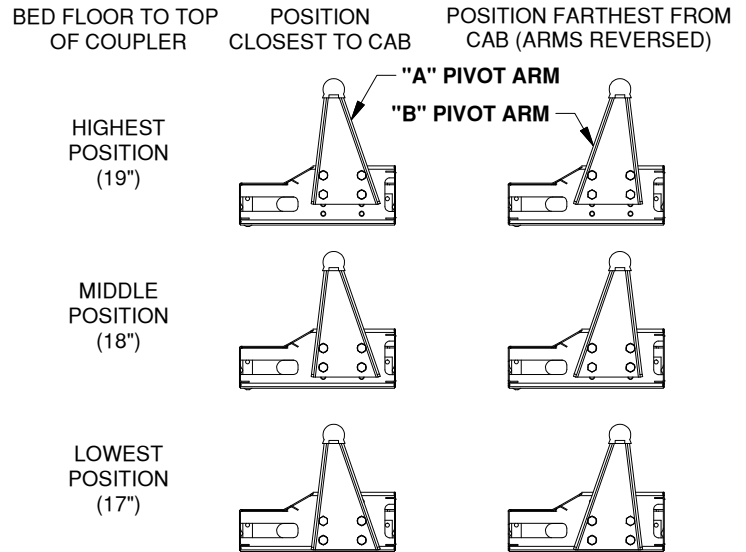


Table C1: Cut away view of slider carriage arm positions.

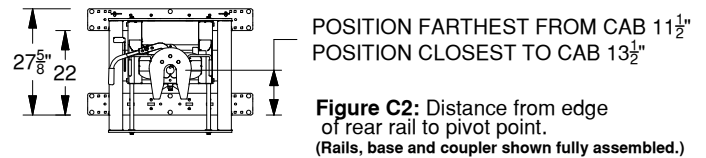


Figure C2: Distance from edge of rear rail to pivot point. (Rails, base and coupler shown fully assembled.)

2. **Secure arms.** With the flat side of the pivot arm flat against the bolt plate in the slider base, install four 1/2" x 1-1/2" bolts and four 1/2" lock washers for each arm. Torque each bolt to 110 ft-lbs.

⚠ WARNING: Towing without adequate clearance between the trailer and the tow vehicle may lead to property damage or serious injury.

3. **Evaluate clearance.** Determine if there is clearance between each truck and trailer combination before towing. Measure from the center of the coupler to the cab of the truck and from the king pin or pivot point of the trailer to the furthest forward corner of the trailer, see Figure C3. Compare these measurements to ensure proper clearance when towing. Also, inspect the clearance between the bed sides and the underside of the front of the trailer to ensure there is room for the pitch and roll of the trailer while towing.

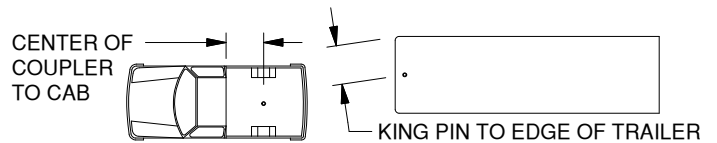
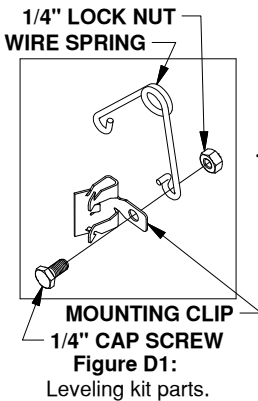


Figure C3: Truck and Trailer

- ⚠ WARNING:** Parts of the trailer may strike the tailgate when sliding the hitch rearward. Check the clearance between the tailgate and trailer components such as the trailer tongue or pin box. Failure to check clearance may cause property damage.

INSTALL LEVELING KIT

1. **Assemble kit.** Locate the 1/4" cap screw and nut, along with the wire torsion spring and mounting clip. Pass the 1/4" cap screw through the mounting clip and the wire spring, as shown in Figure D1. Thread the 1/4" lock nut onto the 1/4" cap screw. Tighten the lock nut just enough that the spring will stay in place but will still be able to rotate around the bolt if needed.



2. **Attach kit.** Locate the flange which will be closest to the truck cab on the driver side pivot arm, see Figure D2. The clip should be placed so that when the spring's coil is in the line with the edge of the arm there will be 1/2" of clearance between the bottom of the polyurethane bushing and the top of the spring, see Figure D3. Drive the clip securely onto the flange with a hammer.

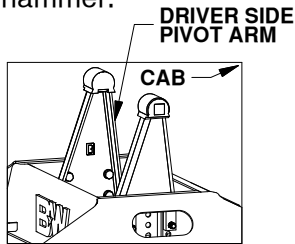


Figure D2:
Base view.

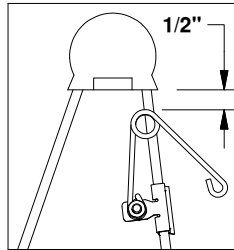


Figure D3: Driver
side pivot arm.

INSTALL COUPLER HANDLE

1. **Attach handle.** Locate the two 3/8" x 1-1/4" button head cap screws and the two 3/8" lock nuts provided in a bolt bag. Using the carriage bolts and the nuts, attach the coupler handle to the arm and tighten, see Figure E1.

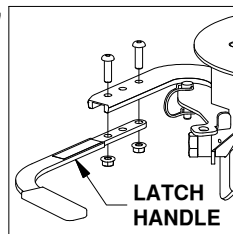


Figure E1: View of
coupler handle.

INSTALL COUPLER

1. **Place coupler.** Lubricate the polyurethane bushings on top of the pivot arms with high grade lithium grease (available at your local hardware/automotive store). Pick up the coupler by lifting up on both saddle handles which will open the saddle latches. Place the coupler over the pivot arms and allow the saddle latches to fall back to their original positions. (The saddle handles should be parallel with the base in the latched position.)

2. **Set coupler angle.** Adjust the resting angle of your coupler plate by rotating the spring on the driver side pivot arm. Pulling the top of the spring away from the cab will increase the angle of the coupler plate. Set the angle of the coupler so that it will tilt away from the cab when coupling, see Figure F1. Tighten the 1/4" nut once the spring's orientation is set.

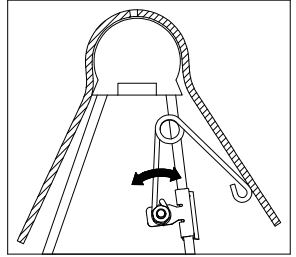


Figure F1: Cutaway view of
driver pivot arm and saddle.

ATTACHING TRAILER

Remove the safety pin from the coupler handle and open it. 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 toward the trailer, centering the trailer's king pin in the coupler, until the king pin engages the jaws. Close the coupler handle and insert the safety pin through the handle and the coupler. Connect the brake and lighting systems before towing.

- ⚠ WARNING:** Failure to correctly close the handle and attach the safety pin may result in a loss of attachment between the trailer and the tow vehicle, leading to property damage, serious injury, or death.

- ⚠ WARNING:** Do not use the 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 coupler, see Figure G1. Preventing the king pin from rotating within the jaws of the coupler with a wedge, see Figure G2, or any other device, such as a Reese Sidewinder® or Reese Revolution®, could result in property damage, serious injury, or death.

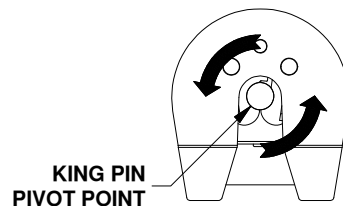


Figure G1:
Top view of coupler.

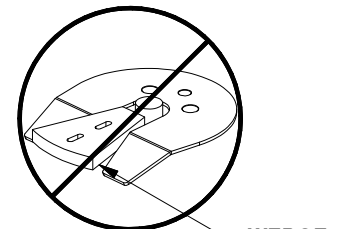


Figure G2:
Coupler with
locking wedge.

PULL TEST

Ensure the truck is stationary with the emergency brake engaged and the tailgate down, trailer wheels chocked, and landing gear down, supporting the trailer's weight. Confirm no one is between the truck and trailer. Release the emergency brake and engage the trailer brakes. Gently attempt to pull the trailer forward with the truck. When properly connected, the trailer will prevent the truck from moving. If the truck and trailer are not correctly attached the trailer will separate from the truck.

UNATTACHING TRAILER

Lower landing gear and chock the trailer wheels. Raise the trailer until the tongue weight is removed from the truck. Then, unpin the coupler 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 king pin. The jaws will always open when the pressure of the trailer is taken off the coupler as the truck pulls away.

SLIDER OPERATION

- ⚠ WARNING:** Use extreme caution when moving the truck and trailer in the maneuvering position. Never exceed 5 mph (roughly walking speed) when in the maneuvering position, doing so may result in property damage, serious injury, or death.
- ⚠ WARNING:** The slider handle must be in the locked position before moving the tow vehicle, failure to do so may cause property damage or serious injury.

Moving from towing position to maneuvering position. (Figures H3 to H4)

1. While the trailer is coupled, set the trailer brakes and/or chock the trailer wheels.
2. Pull the handle toward the rear of the truck to move it to the unlocked position, shown in Figure H2.
3. Pull the truck forward slowly until the handle falls and is in the locked position, shown in Figure H1.
4. Release the trailer brakes, un-chock the trailer and maneuver the trailer as needed.

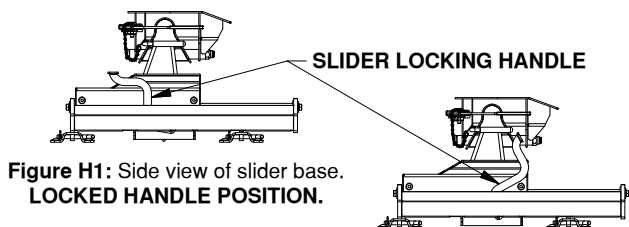


Figure H2: Side view of slider base. UN-LOCKED HANDLE POSITION.

UNINSTALL HITCH

To uninstall the Patriot Slider hitch, grab the saddle handles and lift to remove the coupler from the pivot arms. To remove the Patriot Slider base, remove the rail pins from the base legs and carefully lift and position the base out of the attachment points.

NOTICE: All bolted connections should be checked for the correct torque specification regularly. Always perform a visual inspection before towing.

CAUTION: Use of the slider mechanism should only be attempted while on smooth flat terrain.

- ⚠ WARNING:** The maneuvering position is only intended for parking maneuvers and not for towing. Using the slider in any other capacity could result in serious injury or death.
- ⚠ WARNING:** Never hold onto the handle or force it in any direction while the truck is moving. Failure to stand clear of the handle when the slider is in operation could result in serious injury.

Moving from the maneuvering position to the towing position. (Figures H4 to H3)

5. Once the trailer is satisfactorily positioned, set the trailer brakes and/or chock the trailer wheels.
6. Pull the handle toward the rear of the truck to move it to the unlocked position, shown in Figure H2.
7. Move the truck slowly in reverse until the handle falls and is in the locked position, shown in Figure H1.
8. Release the trailer brakes and un-chock the trailer.

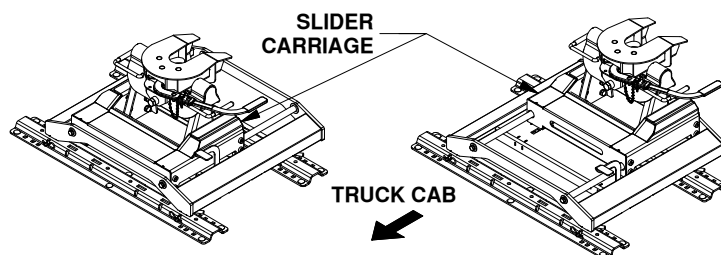


Figure H3: View of slider base with the carriage in a forward position. TOWING POSITION

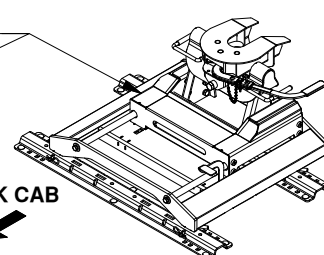


Figure H4: View of slider base with the carriage in a back position. MANEUVERING POSITION

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 multi-purpose automotive type chassis grease or use a nylon lube plate to provide a lubricated surface.

- Grease the saddle through the grease zerk approximately every six months with multi-purpose grease. This allows the coupler to pivot freely, see Figure J1

- Grease jaws with multi-purpose automotive type chassis grease.

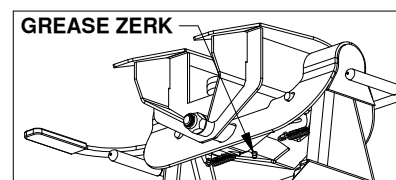


Figure J1: View under saddle.