

# <THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER>



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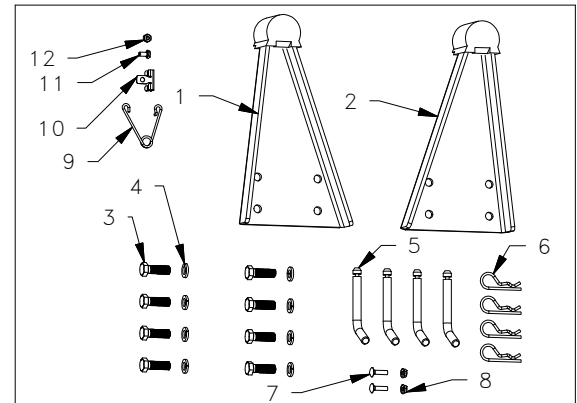
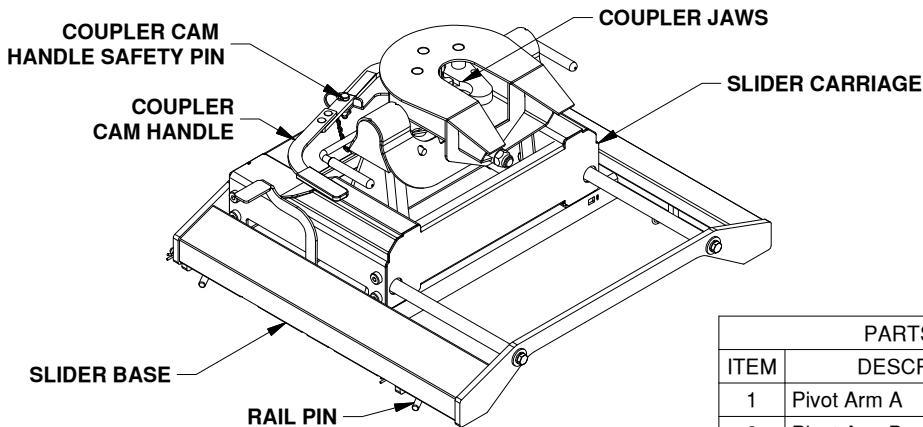
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## Patriot Slider™ Hitch Installation Instructions

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

Call or Email us for Installation Support  
[hitches@turnoverball.com](mailto:hitches@turnoverball.com) [www.turnoverball.com](http://www.turnoverball.com)

# Model 3270



| PARTS LIST |                             |    | PARTS LIST |                         |    |
|------------|-----------------------------|----|------------|-------------------------|----|
| ITEM       | DESCRIPTION                 | QT | ITEM       | DESCRIPTION             | QT |
| 1          | Pivot Arm A                 | 1  | 4          | 1/2" Split Lock Washers | 8  |
| 2          | Pivot Arm B                 | 1  | 5          | Rail Pin                | 4  |
| 3          | 1/2" X 1 1/2" Hex Cap Screw | 8  | 6          | Hair Pin                | 4  |
|            |                             |    | 7          | 1/4" X 1" Carriage Bolt | 2  |
|            |                             |    | 8          | 1/4" Nut                | 2  |
|            |                             |    | 9          | Wire Torsion Spring     | 1  |
|            |                             |    | 10         | Mounting Clip           | 1  |
|            |                             |    | 11         | 1/4" X 1/2" Cap Screw   | 1  |
|            |                             |    | 12         | 1/4" Nylon Lock Nut     | 1  |

### REQUIRED TOOLS

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

### 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.

## **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](http://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.

# PREPARING TO INSTALL

**⚠ WARNING:** Components of the Patriot Slider 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.

**⚠ 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.

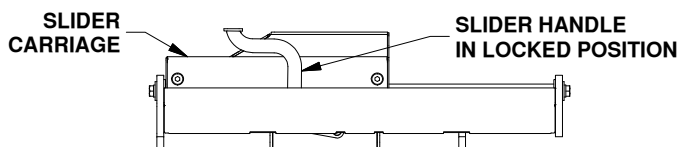


FIGURE A1: View of driver side of Slider Base.

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 BASE

1. The Patriot Slider base will mount to a rail kit in the truck bed. Remove any debris and/or obstructions from the bed. Place the Patriot Slider base over the rail attachment points and 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.

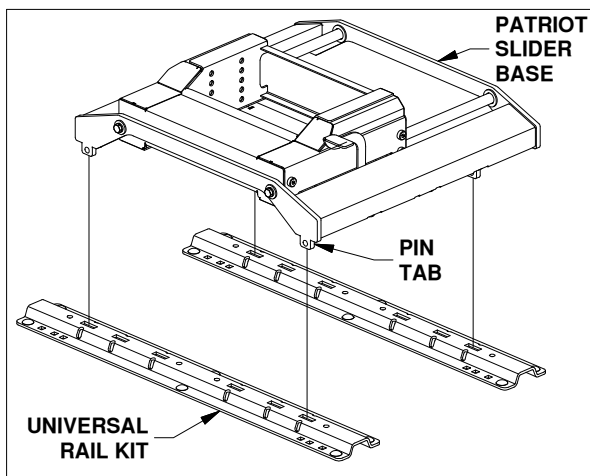


FIGURE B1: Rail attachment.

2. Locate the 4 rail pins and hair pins. 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 hair pin, see figure B2 & B3.

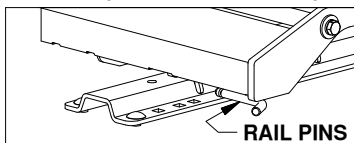


FIGURE B2: View of base leg.

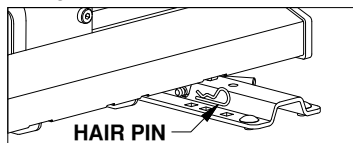


FIGURE B3: View of base leg.

# INSTALL PIVOT ARMS

1. Mount the pivot arms using one of the six different positions illustrated in figures C1 & 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). **See warnings after step 2.**

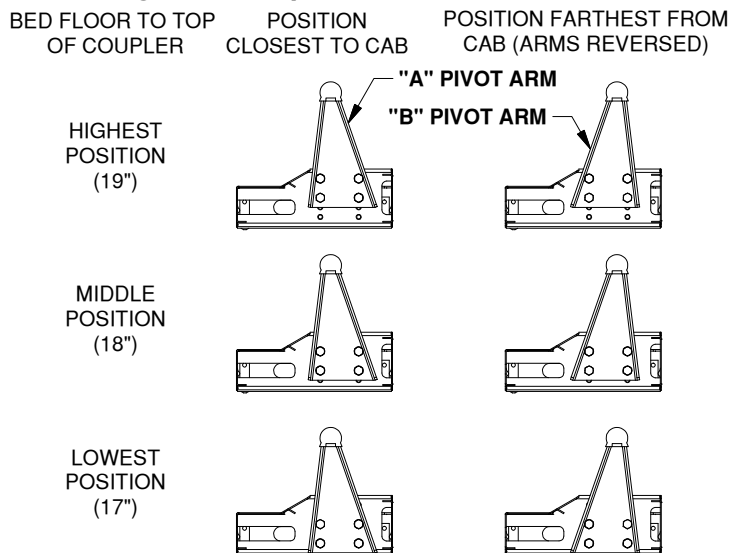


FIGURE C1: Cut away view of slider carriage arm positions.

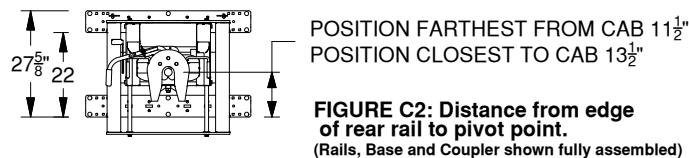
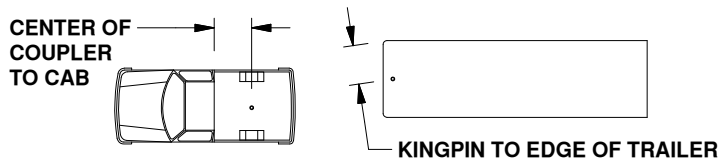


FIGURE C2: Distance from edge of rear rail to pivot point. (Rails, Base and Coupler shown fully assembled)

2. 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" split lock washers for each arm. Torque each bolt to 80 ft-lbs.

**⚠ WARNING:** B&W recommends that you check the clearance between the truck cab and the trailer in both the Towing position and the maneuvering position. Compare the measurement taken from the center of the Slider Coupler to the cab, to the measurement taken from the center of the king pin 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.

## INSTALL COUPLER HANDLE

Locate the two 1/4" x 1" carriage bolts and the two 1/4" nuts provided in a bolt bag. Using the carriage bolts and the nuts, attach the coupler handle to the arm and tighten, see figure D1.

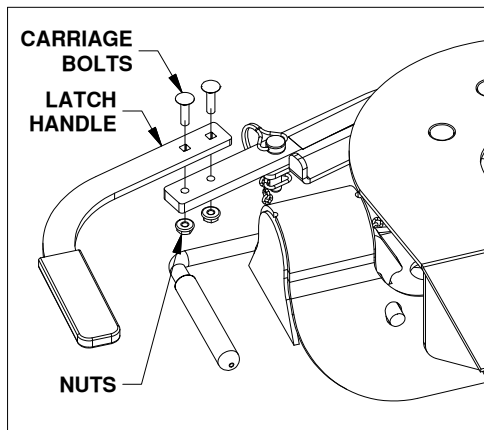


FIGURE D1: View of coupler handle.

## INSTALL 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 couper 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 there original positions. (The saddle handles should be parallel with the base in the latched position.) see figures E1 & E2.

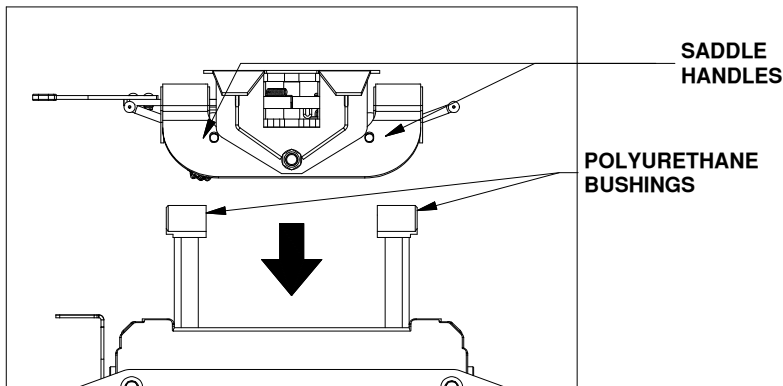


FIGURE E1: View of coupler and base.  
(Saddle handles up)

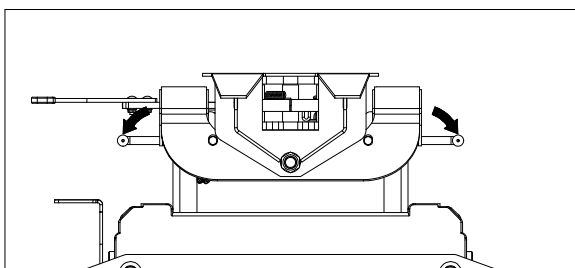


FIGURE E2: View of coupler and base.  
(Saddle handles in locked position)

## ATTACHING TRAILER

Remove the coupler cam handle safety pin and open the cam handle. Adjust the height of the 5th wheel trailer so 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:** Towing a trailer without a functioning pivot point between the hitch & trailer will cause significant damage to the hitch which may lead to serious injury or death. Some pin boxes such as a Pull-rite® Superglide Capture Plate remove the pivot point between a trailer and coupler and should not be used, See figure F1. Pin boxes with a wedge that relocates the pivot point such as a Reese® Sidewinder or Reese® Revolution may be used, see figure F2.

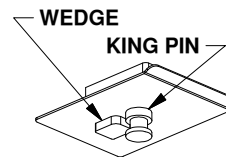


FIGURE F1: Capture plate.

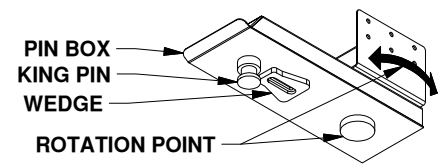


FIGURE F2: pin box with rotation point.

## 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.

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

## Moving from towing position to maneuvering position. (Figure G3 to G4)

While the trailer is coupled, set the trailer brakes and/or chock the trailer wheels.

Pull the handle towards the rear of the truck to move it to the unlocked position, shown in figure G2.

Pull the truck forward slowly until the handle falls and is in the locked position, shown in figure G1.

Release the trailer brakes, un-chock the trailer and maneuver the trailer as needed.

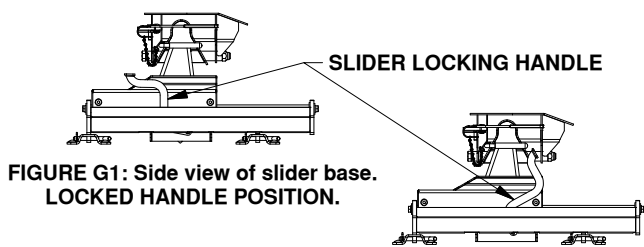


FIGURE G2: Side view of slider base. UN-LOCKED HANDLE POSITION.

# UNINSTALL HITCH

To uninstall the Patriot Slider hitch, remove the saddle lock pins, 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.

- 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. (Figure G4 to G3)

Once the trailer is satisfactorily positioned, set the trailer brakes and/or chock the trailer wheels.

Pull the handle towards the rear of the truck to move it to the unlocked position, shown in Figure G2.

Move the truck slowly in reverse until the handle falls and is in the locked position, shown in Figure G1.

Release the trailer brakes and un-chock the trailer.

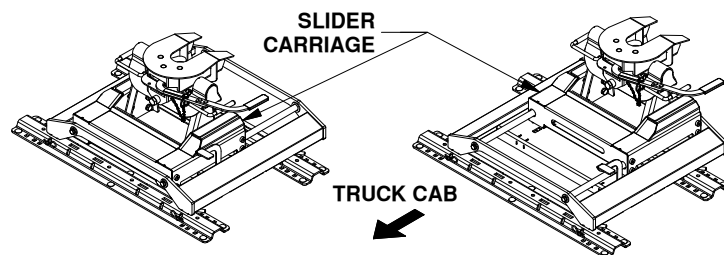


FIGURE G3: View of slider base with the carriage in a forward position. TOWING POSITION

FIGURE G4: 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 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 H1
- Grease jaws with automotive type chassis grease.

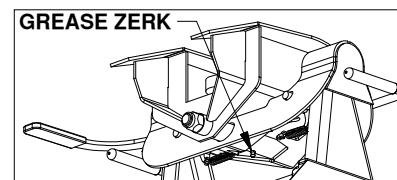


FIGURE H1: View under saddle.