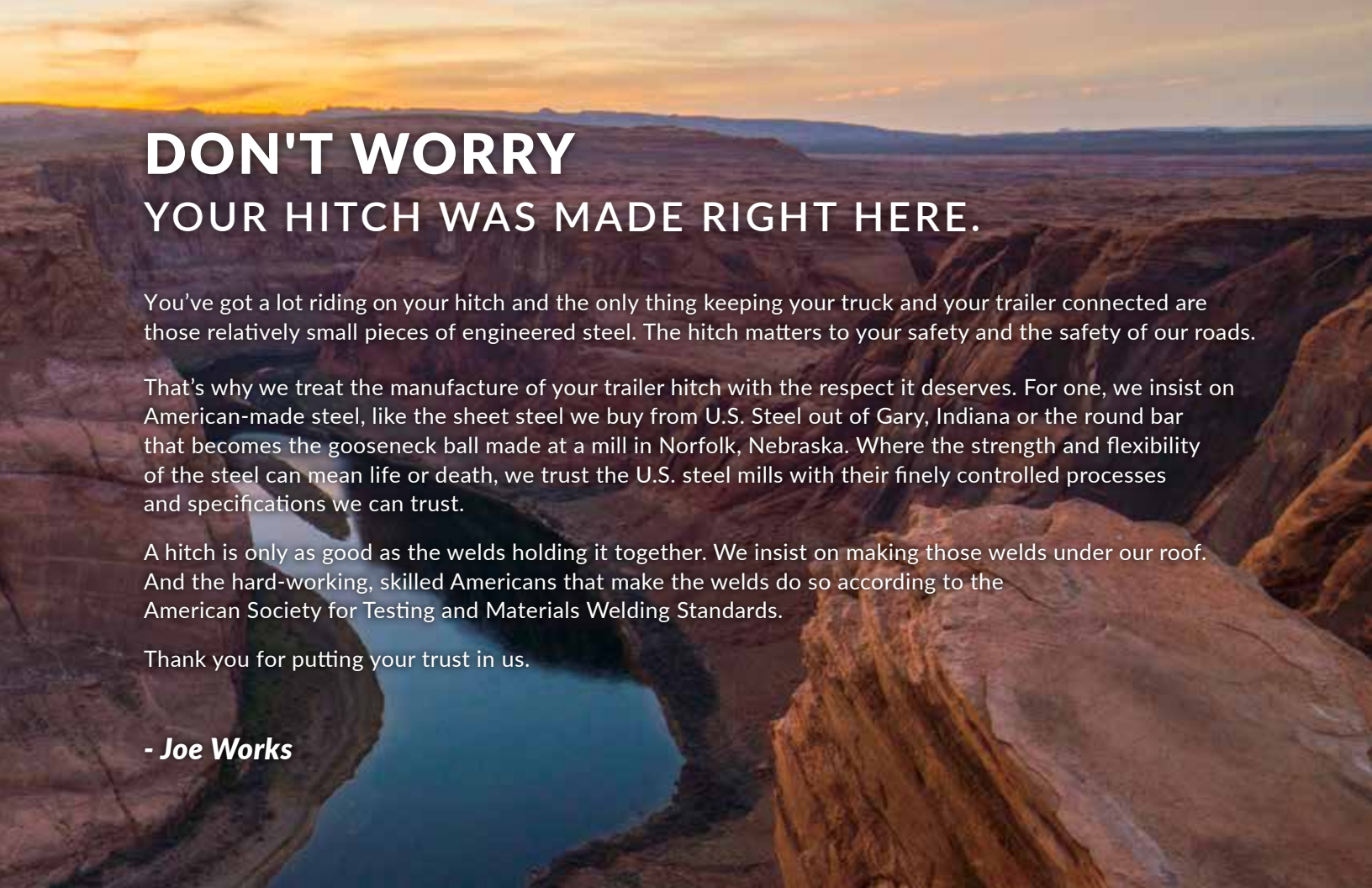
B&W TRAILER HITCHES

# THE PATRIOT™

## 16K, 18K & 18K SLIDER

YOUR TOWING ADVENTURE BEGINS


BW
TRAILER HITCHES
TOWING ADVENTURE



# DON'T WORRY

## YOUR HITCH WAS MADE RIGHT HERE.

You've got a lot riding on your hitch and the only thing keeping your truck and your trailer connected are those relatively small pieces of engineered steel. The hitch matters to your safety and the safety of our roads.

That's why we treat the manufacture of your trailer hitch with the respect it deserves. For one, we insist on American-made steel, like the sheet steel we buy from U.S. Steel out of Gary, Indiana or the round bar that becomes the gooseneck ball made at a mill in Norfolk, Nebraska. Where the strength and flexibility of the steel can mean life or death, we trust the U.S. steel mills with their finely controlled processes and specifications we can trust.

A hitch is only as good as the welds holding it together. We insist on making those welds under our roof. And the hard-working, skilled Americans that make the welds do so according to the American Society for Testing and Materials Welding Standards.

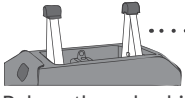
Thank you for putting your trust in us.

***- Joe Works***


WELCOME TO THE FAMILY.
YOU MADE A GREAT CHOICE.

# SIMPLE GOALS:
## MAKE IT SAFE, MAKE THE RIDE SMOOTH.

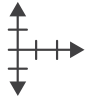
Cam action latching handle for easy release, even when parked on unlevel sites



Polyurethane bushings provide a quiet, rattle-free towing experience

Fully articulating head allows front-to-back and side-to-side pivoting

Thick, wrap-around jaws fit your kingpin perfectly, eliminating sloppy starts and stops



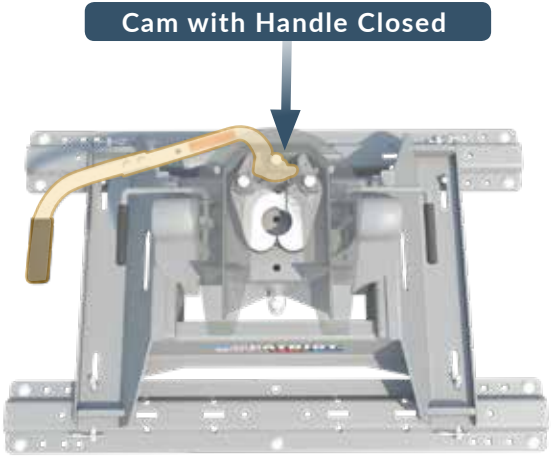
Three height adjustments from 16" to 19 and 4" of front-to-back adjustment
* For non-sliders



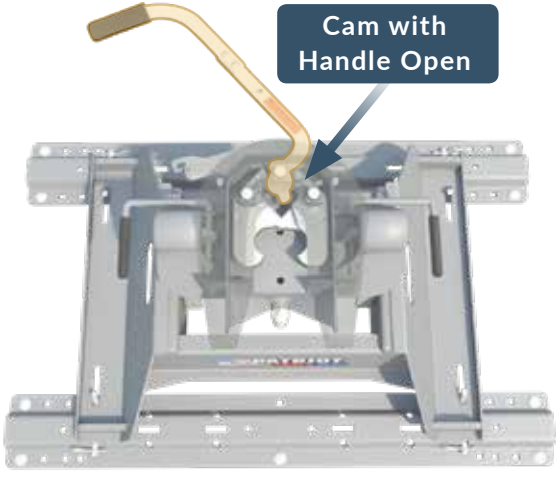

Utilizes standard rails to mount to the truck.

# THE B&W DIFFERENCE

Our jaws are 3/4 inch thick cast material and the left and right jaw are machined together to create a precise connection to your kingpin. Then the jaws are wired together, plated, and assembled as a pair. Learn more about this process on the B&W Trailer Hitches' YouTube channel.




We designed our jaws and handle to work with a cam mechanism. When the handle is pinned closed, the cam keeps the jaws from opening.




When the handle is open the cam allows the jaws to open, **even if you are in a bind** because of unlevel ground. If the handle is pinned open, you may go ahead and drive out of the jaws. They will open as you pull away.

## WATCH YOUR CAB

Check that you know how sharply you can turn before encountering your cab with your fifth wheel. There are several factors that affect this angle including: the pin box location, the width of trailer, and the shape of the trailer nose.

## WATCH YOUR BED SIDES

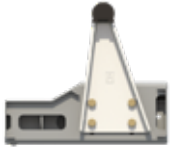
Check for clearance between your fifth wheel and the sides of your truck bed. Allow several inches so that uneven ground doesn't cause contact. Adjust the Patriot to a higher position or your kingpin (if it is adjustable) to a lower position to affect this distance.

# ADJUST ARMS FOR PROPER CLEARANCE

## INSTALLING PIVOT ARMS

Mount the pivot arms using one of these different locations illustrated. These locations allow flexibility in coupler height (vertical adjustment) and distance from the cab (horizontal adjustment). Choose a location so that your trailer will be as level as possible and have adequate turning clearance while towing.

## PATRIOT SLIDER

| | | Horizontal Adjustment | |
|---|---|---|---|
| ◀ CAB | | Position closest to cab | 2" farther back from cab |
| Vertical Adjustment | Highest Position (19") |  |  |
| | Medium Position (18") |  |  |
| | Lowest Position (17") |  |  |

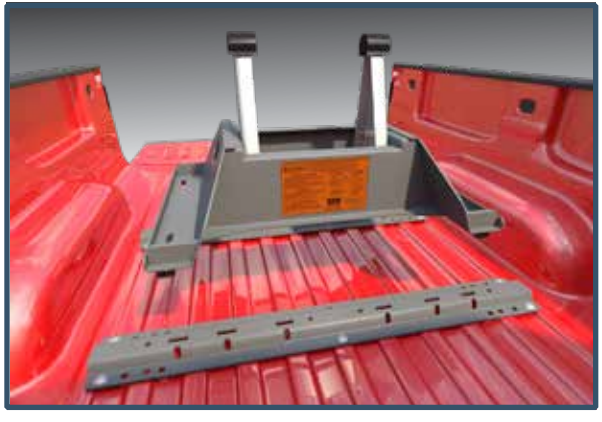
# PATRIOT 16K AND 18K

| | | Horizontal Adjustment | | |
|---|---|---|---|---|
| | ◀ CAB | Position closest to cab | 2" farther back from cab | 4" farther back from cab |
| Vertical Adjustment | Highest Position (19") |  |  |  |
| | Medium Position (18") |  |  |  |
| | Medium Position (17") |  |  |  |
| | Lowest Position (16") |  |  |  |

# INSTALLING YOUR PATRIOT OR PATRIOT SLIDER

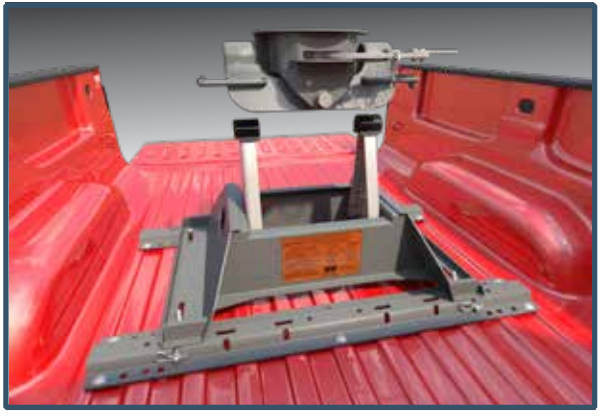
For more information refer to your instruction sheet.

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



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 base pin tabs.

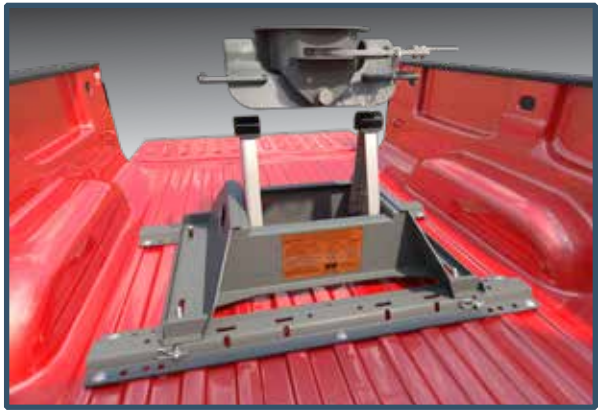
3. Lubricate the polyurethane bushings on top of the pivot arms with high grade lithium grease (available at your local hardware/automotive store). Pick up the coupler by lifting up on both saddle handles which will open the saddle latches.



4. 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).

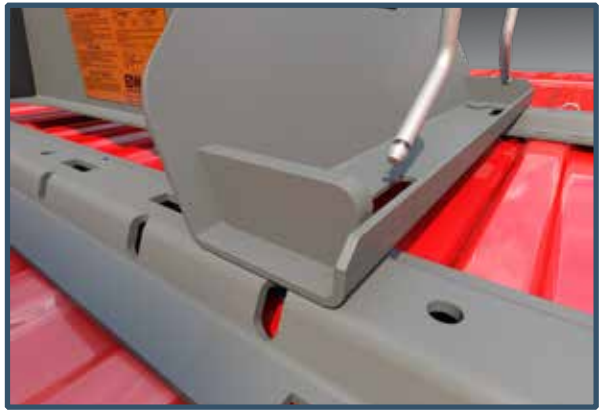
# REMOVING YOUR PATRIOT OR PATRIOT SLIDER

1. Unpin and remove the coupler head.

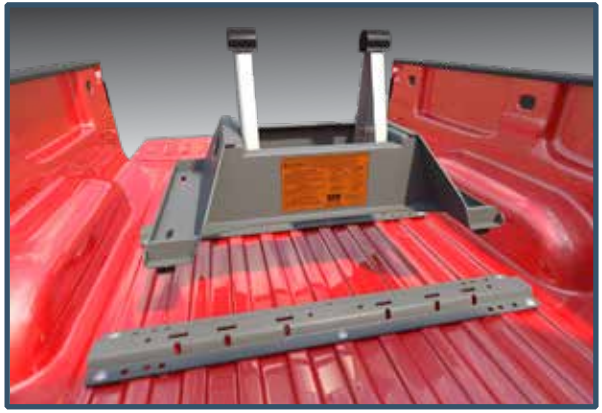


2. Remove cotter pins.

**3.** Remove rail pins.



**4.** Remove Patriot base from rails.



# KNOW BEFORE TOWING

Your Patriot is rated to tow 16,000 lbs. (or 18,000 lbs. if you have the Patriot 18K or the Patriot Slider) It is important to learn your manufacturer's weight limits (truck, fifth wheel, and hitch). Detailed instructions for comparing these weight limits to the actual weights of your set-up are found on the next few pages.

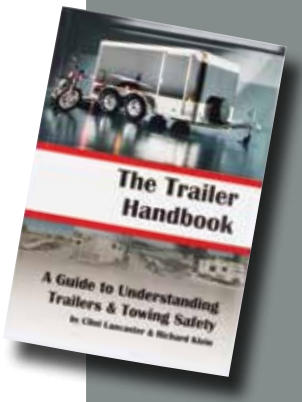
Truck manufacturers give their trucks specific ratings after extensive testing. Tow ratings are based on the capacity of a truck's engine, transmission and brakes to safely handle the weight of a loaded trailer. For Gross Weight Ratings, the truck's tires, frame, and suspension must be able to bear the load. Even though your fifth wheel hitch is rated to tow 16,000 lbs. (or 18,000 lbs. if you have the Patriot 18K or the Patriot Slider), never exceed your truck's weight ratings.

All of our hitches are tested for both strength and durability according to SAE J-2638, the latest standard for fifth wheel hitches.

Without proper knowledge, towing can be a dangerous activity. If you are new to towing, we recommend

***"The Trailer Handbook: A Guide to Understanding Trailer and Towing Safety"***

from the National Association of Trailer Manufacturers.



# FINDING MANUFACTURER WEIGHT LIMITS

Locate your **Gross Vehicle Weight Rating (GVWR)**.
This is the maximum allowable weight of the fully loaded vehicle.
You can find this, most likely, on the sticker inside your driver's side door.

You should also locate your **Gross Combined Weight Rating (GCWR)** from your truck manufacturer. This is the maximum allowable weight of the tow vehicle and the loaded trailer including all cargo and passengers.
Find this in your owner's manual or by calling your truck dealer.

And finally, locate your **Max Tow Rating**.

B&W recommends that your **Vertical Towing Weight Rating (VTWR)** for your hitch be no more than 25% of your truck's Max Tow Rating. Make this calculation: Max Tow Rating x .25 = VTWR

GVWR

GCWR

Max Tow Rating

VTWR

**Once you have located your truck manufacturer's weight ratings, transfer them into the corresponding boxes on the next two pages.**

# FINDING YOUR ACTUAL WEIGHTS

Take your loaded truck and loaded trailer to a scale at a truck stop, quarry or material supply center.
For a small fee you can weigh your tow vehicle and trailer on their scale.

| | MUST BE MORE THAN | |
|---|---|---|
| **GVWR** * | | *your* **GVW** |

**1.** ***Find your* GVW** (Gross Vehicle Weight)

Weigh just your truck with a full tank of gas, all your passengers and items in the cab and truck bed with your trailer loaded and attached, but not on the scale.

**Do Not Exceed Your Truck Manufacturer's GVWR**

| | MUST BE MORE THAN | |
|---|---|---|
| **GCWR** * | | *your* **GCW** |

**2.** ***Find your* GCW** (Gross Combined Weight)

Weigh your fully loaded truck and trailer including all cargo, a full tank of gas and passengers.

**Do Not Exceed Your Truck Manufacturer's GCWR**

* Transfer Manufacturer's Ratings from previous page.

| | | | | |
|---|---|---|---|---|
| | – | | = | |
| *your* GCW | | *your* Truck Weight | | *your* Towing Weight |

## 3. Find your **Towing Weight**

Weigh your loaded truck without the trailer attached. This is your truck weight.

Subtract your **Truck Weight** from your **GCW**. This is your towing weight.

| | | |
|---|---|---|
| | MUST BE MORE THAN | |
| MAX TOW RATING * | | *your* Towing Weight |

| | | | | |
|---|---|---|---|---|
| | – | | = | |
| *your* GVW | | *your* Truck Weight | | *your* VTW |

## 4. Find your **VTW** (Vertical Tow Weight) also known as Tongue Weight

Subtract your **Truck Weight** from your **GVW.**

| | | |
|---|---|---|
| | MUST BE MORE THAN | |
| VTWR * | | *your* VTW |

## IMPORTANT!

Even though you may be under your vehicle's Max Towing Rating, when your Gross Vehicle Weight (GVW) goes up, (more passengers, more cargo) your ability to tow the Max Towing Rating may not be possible, because:

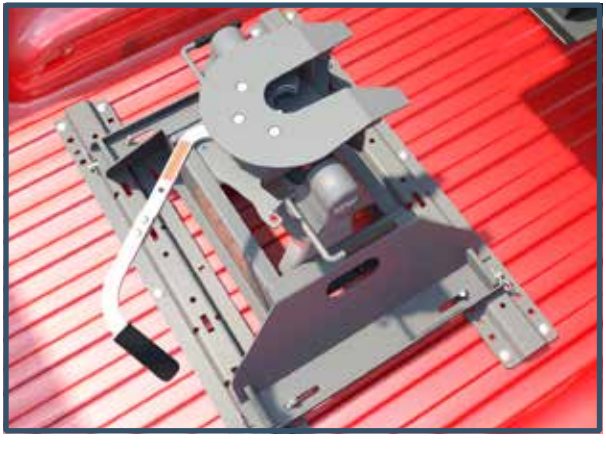
**THE GROSS COMBINED WEIGHT RATING** (GCWR) **MUST NOT BE EXCEEDED.**

# ATTACHING YOUR TRAILER

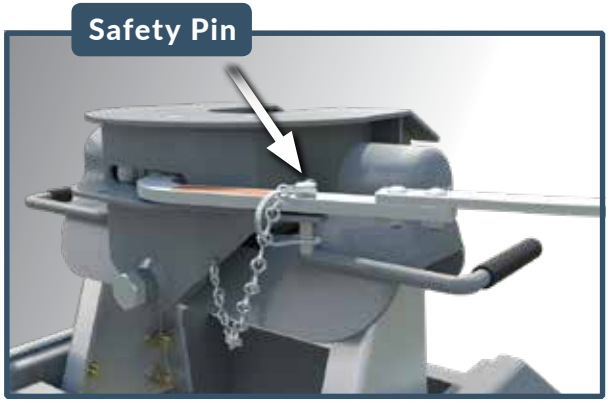
1. Remove the coupler cam handle safety pin and use the cam handle to open the coupler jaws.

2. Adjust the height of the fifth wheel trailer using the jack so that the kingpin plate is slightly lower than the top of the coupler.

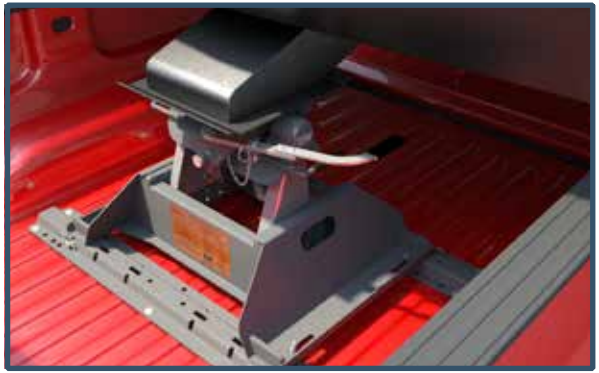
3. Back the truck towards the trailer, centering the trailer's kingpin in the coupler, until the kingpin has engaged the jaws.



**4.** Ensure that the coupler cam handle has completely closed and insert the cam handle safety pin through the cam handle and the coupler.




**5.** Hook up brake and lighting connections before towing.

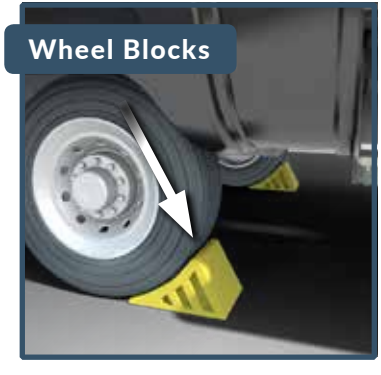


# CONDUCT A SAFETY TEST

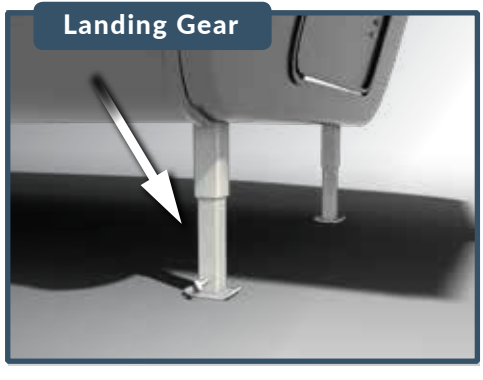
Before towing, you should conduct a safety test to make certain that you are properly hitched.

**1.** Place the truck in 'park', and put the emergency brake on.

The trailer should have wheels blocked:



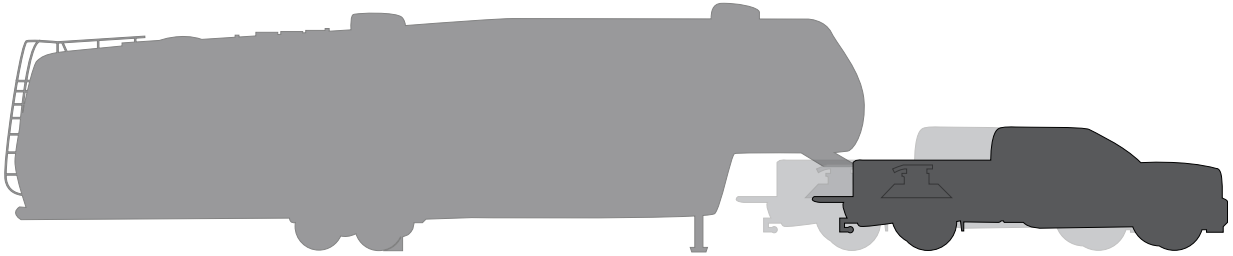

The trailer's landing gear should be firmly on the ground, supporting the weight of the trailer:



2. Make sure that no one is between the truck and the trailer. Release the emergency brake and apply the trailer brakes.

3. 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.

4. If the 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.



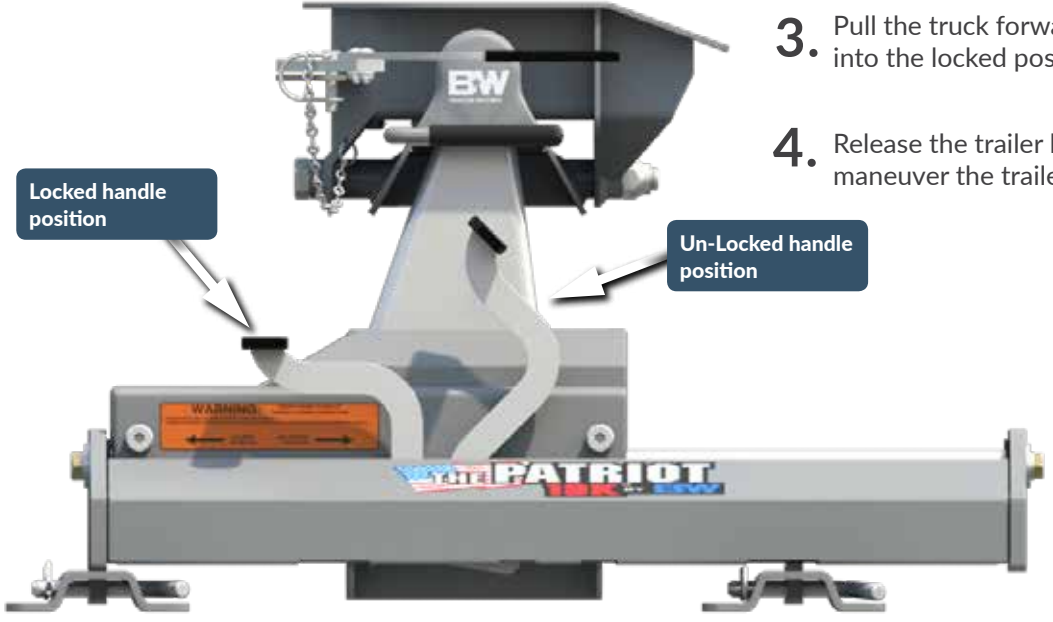
# MOVING YOUR SLIDER TO THE MANEUVERING POSITION

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

2. Pull the handle towards the rear of the truck to move it to the unlocked position.

3. Pull the truck forward slowly until the handle falls into the locked position.

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



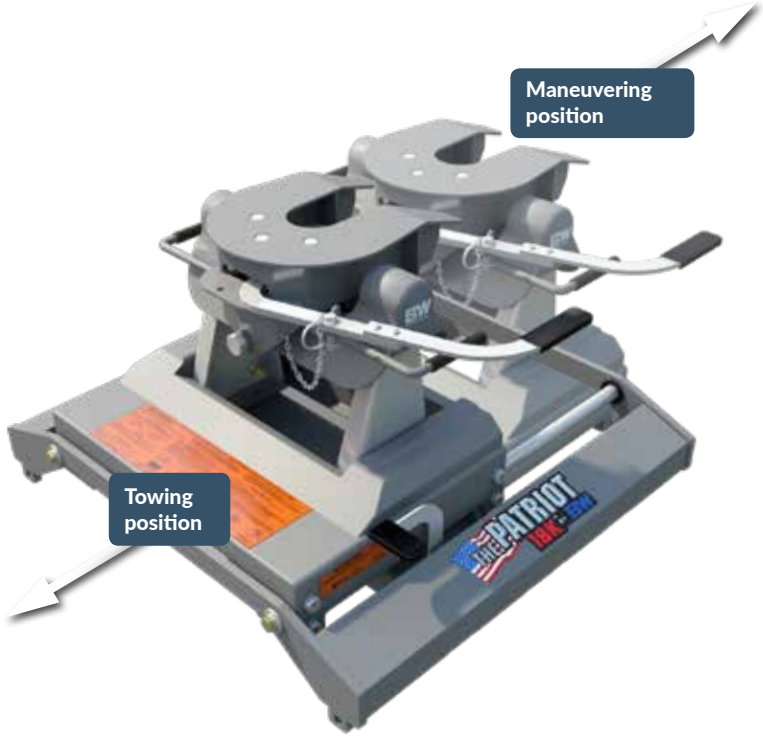
# MOVING YOUR SLIDER TO THE TOWING POSITION

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

2. Pull the handle towards the rear of the truck to move it to the unlocked position.

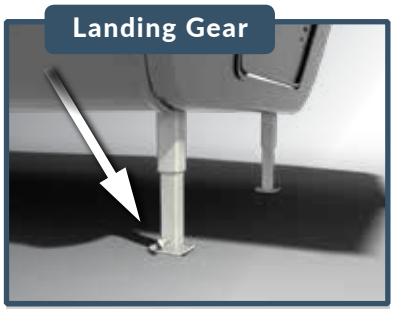
3. Move the truck slowly in reverse until the handle falls and is in the locked position.

4. Release the trailer brakes and/or un-chock the trailer.



# DISCONNECTING YOUR TRAILER

1. Lower landing gear and block the trailer wheels.





2. Raise the trailer until the tongue weight is removed from the truck.

3. Unpin the coupler handle and rotate to the open position to release the jaws.

**4.** 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.

**5.** If the jaws do not open, that may be an indication that there is still pressure on the jaws. Readjusting the landing gear may relieve that pressure. However, if the handle is open, the jaws will always open as you pull away.

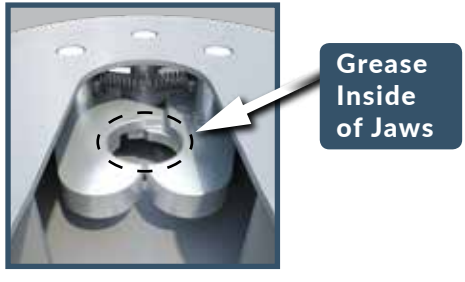
# HITCH MAINTENANCE

There are four places on the Patriot that you should lubricate regularly.

**1.** Grease the saddle through the grease zerk approximately every six months with multi-purpose grease. This allows the coupler to pivot freely.


**2.** Spread a thin layer of automotive type chassis grease around the inside surface of the jaws where they grasp the kingpin. You may also want to apply some grease to the kingpin on your trailer.

**3.** As needed, grease the polyurethane bushings with white lithium grease.

B&W TRAILER HITCHES

MULTI-PURPOSE
**WHITE LITHIUM GREASE**

- Lubricates and Protects
- Water Resistant
- Single Use

**LOVE YOUR HITCH**
LONGER!

Net Wt. 7 g

Here is your first grease packet to get you started.

4. Lubricate the top surface of the coupler with automotive type chassis grease or use a nylon lube plate to provide a lubricated surface.


## LUBE PLATES

Lube plates come in all sizes. We recommend a 10" version, like this one infused with graphite.

# OUR AMERICAN DREAM STORY

Like many, ours began in a garage in 1987, with two men and an idea. Roger Baker and Joe Works (the 'B' and the 'W') began building custom truck beds and quickly recognized a way to improve the inconvenience of a gooseneck ball permanently welded in the bed. They designed a gooseneck hitch with the mounting hardware underneath the bed and a ball that turned over and stowed where it was used. The Turnoverball® Gooseneck Hitch was born.

A few years later, they applied the same concepts to fifth-wheel hitches. Using the same under-bed mounting hardware and hole in the bed, they designed the Companion® with a single-point attachment that was removable when not towing. They also designed the Companion to be quiet and smooth when towing.

While competitors take manufacturing to China and Mexico, Joe (Roger retired in 1999) remains committed to using American-made raw materials and American Labor.

***"You don't work for me, you work for the customer. We can compete in this global economy by designing better, using technology, and truly caring about our customers," Joe affirmed.***

Our product line now includes all types of towing products manufactured under the 497,000 sqft. facility. In 2007, Joe began transferring ownership of the company to us, the now 425 employee-owners.

Discover other trailer hitches and towing on our website.