Serial No.



# PinLock™



# Operator and Installation Manual BXR5203 RBW Li'l Rocker & X-16

TO BE VALID, THE WARRANTY CARD MUST BE COMPLETED IN ITS ENTIRETY BY AN AUTHORIZED DISTRIBUTOR OR DEALER AND SENT TO AUTOMATIC EQUIPMENT MFG. CO., PENDER, NEBRASKA OR REGISTERED ONLINE AT www.blueox.us.

FAILURE TO DO SO WILL VOID THE WARRANTY.



# **Safety Information**

#### SPECIAL DANGER MESSAGE

The act of uncoupling your fifth wheel trailer from your tow vehicle is, singularly, the most dangerous act to be performed when RVing. Many accidents have occurred where broken bones, severed limbs and even death by crushing have resulted from inadvertently dropping the fifth wheel trailer when a person has placed part of his/her body between the tow vehicle and the frame of the fifth wheel trailer. All of these accidents are completely avoidable by following a few simple rules, even without installing PinLock<sup>TM</sup> on your hitch.

- Chock your trailer wheels.
- Extend your front jacks until you see no weight is on the hitch.
- NEVER place any part of your body between the trailer frame and tow vehicle or hitch.
- NEVER allow any helper or observer to place any body part between the trailer frame and tow vehicle or hitch.

PinLock<sup>™</sup> prevents damage to your tow vehicle when an inadvertent release happens. PinLock<sup>™</sup> <u>may NOT</u> prevent injury to someone violating the simple rules above.

For everyone's good, and for a safe and happy RVing experience, follow the above rules and NEVER COMPROMISE them.

#### **Safety Information**

- 1) Blue Ox® strongly recommends installation by a dealer and/or certified technician.
- 2) DO NOT ATTEMPT TO INSTALL THIS PRODUCT WITHOUT FIRST READING THESE INSTRUCTIONS.
- 3) WARNING! FAILURE TO INSTALL THIS PRODUCT PROPERLY CAN RESULT IN DAMAGE TO YOUR FIFTH WHEEL TRAILER, TOW VEHICLE, FIFTH WHEEL HITCH AND/OR CAUSE BODILY INJURY.
- 4) This product is not designed or intended for use with fifth wheel trailers having a pin weight of 4000 pounds or more.
- 5) Your PinLock™ should be inspected for damage after each incident. Note: An incident is defined as any time PinLock™ catches your trailer.

#### Special Messages

"NOTE" provides enhancement information pertinent to the specific step of the procedure being undertaken.

"CAUTION" indicates a potential hazard exists that could result in damage to the tow vehicle, fifth wheel trailer or the fifth wheel hitch.

"WARNING" indicates a potential hazard exists that could result in personal injury, or death

#### **Assumptions**

It is assumed that you have the RBW Li'l Rocker hitch installed properly. If not, have your hitch installed by a certified technician.

Go RVing



## **Parts List**

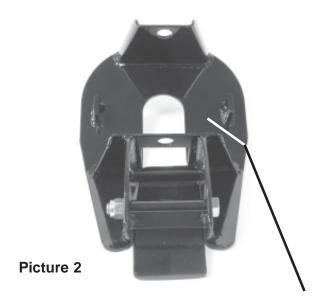
Inspect the parts in your kit and check them off against the pictures and parts listed below.

QtyDescription1PinLock™ Assembly

Picture # 1 & 2



Picture 1



Location of Serial & Model #'s

### **Tools Required**

9/16" Socket Needle Nose Pliers 3/8" Drive Rachet Long Punch or Flat Screw Driver 9/16" Comb. Wrench Hammer or Mallet

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## Installation

#### Hitch Head Removal for installation of PinLock™

To ease installation of the PinLock<sup>™</sup>, it is necessary to remove the hitch head. This allows access to the hardware that secure the vertical supports.

#### Step 1

At each end of the hitch, remove the clip that secures the pin (which keep hold the hitch head on the hitch frame). Refer to Figures 1 and 2 below for details.

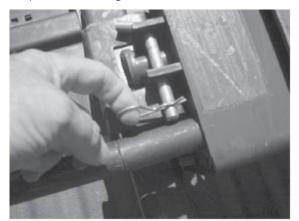


Figure 1-Removing Hitch Head Clip



Figure 2-Removing Hitch Head Pin

#### Step 2

Carefully lift the hitch head off of the hitch frame and place on a blanket or pad, on the tailgate of your pickup or other suitable flat, level surface.

WARNING: The hitch head is very heavy and can cause serious injury if not lifted properly. To avoid personal injury, have someone assist with initial the lift, and the subsequent reinstallation.

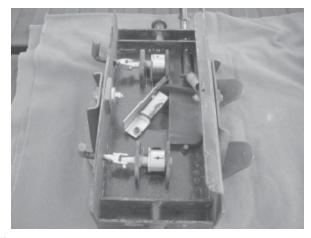


Figure 3-Hitch Head Upside Down

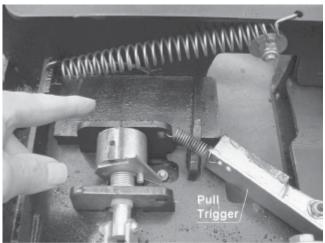
#### Step 3

Spread the blanket out on your tailgate and lay the hitch head upside down on it. Position it such that you can operate the release handle. Inspect the slide bar to make certain it is in the closed (secure) position and the spring is at its lowest tension. If the slide bar is open, carefully rotate the release handle until the roll pin aligns with the slot in the tube and close the release bar. CAUTION: Prior to releasing the slide bar, you must retract (pull) the trigger mechanism. USE EXTREME CAUTION TO AVOID PERSONAL INJURY.

See Figures 3, 4 and 5, pages 3 & 4.









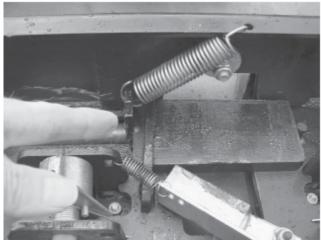


Figure 5 - Catch Bar Closed

#### Step 4

Using needle nose pliers, remove the end of the return spring connected to the hitch frame. See **Figures 6** and **7** below. This accomplishes two purposes: 1) It releases spring tension from the slide bar and prevents inadvertent, sudden and dangerous closing, and 2) It moves the spring out of the way for better access to the mounting bolts and nuts.



Figure 6 – Disconnecting Catch Bar Return Spring

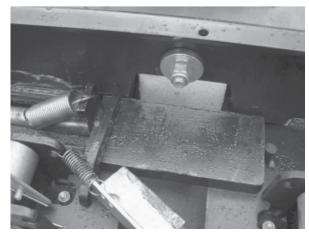


Figure 7 – Catch Bar Return Spring Removed



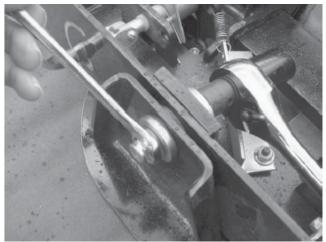


Figure 8 – Removing Front Mounting Nut & Bolt

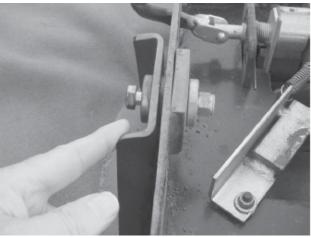


Figure 9 – Removing Front Mounting Nut & Bolt

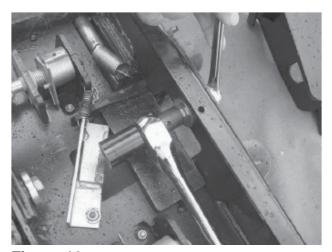


Figure 10 – Removing Rear Mounting Nut & Bolt

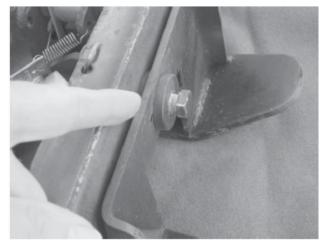


Figure 11 – Removing Rear Mounting Nut & Bolt

#### Step 5

Using a 9/16" wrench and 9/16"socket & ratchet, loosen the front and rear mounting bolts and nuts. Remove the front and rear mounting bolts and nuts. Set them aside for use in securing the PinLock™. See **Figures 8 − 11** below.



#### Step 6

Next remove the steel bushings (one thick, one thin) from each pivot hole. Take note of the orientation of each bushing. The thick bushings go to the outside and the thin bushings go to the inside of the hitch head. NOTE: The thin bushing will probably slip out using your fingers or pliers. It may be necessary to tap out the thick bushings using a long punch, or screwdriver, and a hammer or mallet. See **Figures 12** and **13** below.

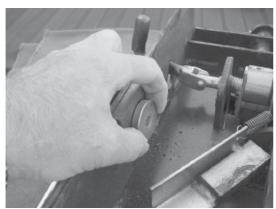


Figure 12 – Removing Thin Bushing



Figure 13 – Removing Thick Bushing

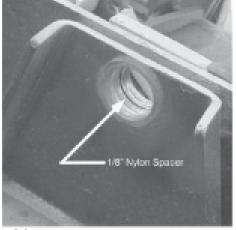


Figure 14 – Removing Rear Nylon Spacer

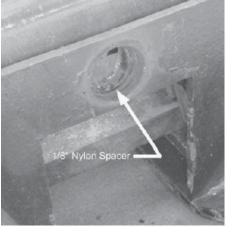


Figure 15 – Removing Front Nylon Spacer

#### Step 7

Take note of the nylon spacers to keep the hitch head centered (fore & aft) within the king pin box pad. See **Figures 14** and **15** above. These spacers will fall out upon removal of the hitch head. **Do NOT misplace them.** They will be used when installing the new king pin box pad.

#### Step 8

Carefully lift the hitch head out of the king pin box pad. NOTE: It may be necessary to pry it out slightly using the long screwdriver until it is free. Set the hitch head aside temporarily. See **Figures 16** and **17**, page 7.





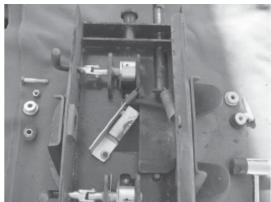


Figure 16 – Hitch Head Ready For Removal



Figure 17 - Hitch Head Removed

#### Step 9

Set aside the old king pin box pad and later discard. It will not be used again. Place the PinLock™ on the blanket in approximately the same position as the old one, upside down with the ramp tongues pointing in the same direction. Take note of the new king pin box pad ramp tongues and flapping door. They extend farther toward the rear than the original king pin box pad. See **Figure 18** below.

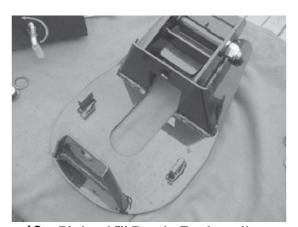


Figure 18 - PinLock™ Ready For Install

#### <u>Step 10</u>

Collect both mounting bolts and nuts, the two nylon spacers, two thin bushings and two thick bushings and inspect for damage and/or wear. If any damage is evident, replace them. You should be able to get replacements from your local hardware store. For replacement nylon spacers or bushings, contact your hitch dealer or the hitch manufacturer.

#### **Step 11**

Clean rust from bushings using emery cloth or fine sandpaper.

#### Step 12

Test fit the thin bushings into their holes in the hitch head. If they are tight and do not insert easily, clean any rust from the holes on the hitch head. Repeat until the thin bushings insert easily.

#### Step 13

Test fit the thick bushings in the holes on the king pin box pad. If they are tight and do not insert easily, clean the paint from the hole using a half moon or rat tail file. Repeat until the thick bushings insert easily.





#### Step 14

Wipe the bushings clean of any grit and lubricate with white lithum grease. See Figure 19 below.

#### **Step 15**

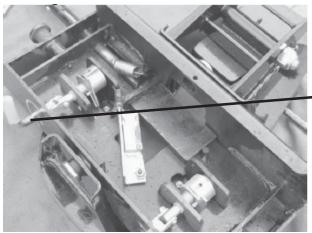
Partially insert the thick bushings into their holes in preparation for mating the king pin box pad with the hitch head. See **Figure 20** below.



Figure 19 – Applying Grease To Clean Bushing



Figure 20 - Installing Thick Bushing



Rocking Lock Handle

Figure 21 – Installing PinLock™ On Hitch Head

#### **Step 16**

Carefully insert the hitch head into the new king pin box pad. Make certain the rocking lock handles turned downward. Away from the top of the king pin box pad. See **Figure 21** above.





#### **Step 17**

Inspect the position of the hitch head and king pin box pad relative to the bushing holes. Slide, as necessary, the hitch head so as to align the bushing holes as closely as possible. See **Figure 22** below.

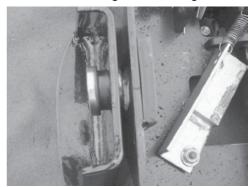


Figure 22 - Aligning Thick Bushing



Figure 23 - Installing Front Nylon Spacer

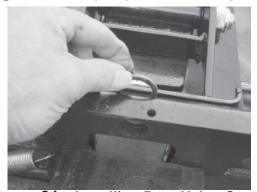


Figure 24 – Installing Rear Nylon Spacer



Figure 25 – Installing Thin Bushing

#### **Step 18**

Take one of the two nylon spacers and carefully insert it into the gap between the hitch head and king pin box pad (front or rear). Looking at it from the other side align the spacer with the bushing and gently push the bushing slightly into the spacer. Lift the hitch head slightly (or have a helper lift it slightly) as you continue to push the bushing gently into the hole in the hitch head. When the holes are properly aligned, the bushing will slip in and support the hitch head. Repeat this step for the other spacer and bushing. When done correctly, the hitch head will be supported by the two thick bushings. See **Figure 25** above.

#### Step 19

Now insert the bolts through the bushings in preparation for installing the thin bushings from the inside of the hitch head. See **Figure 25** above.

#### Step 20

Install the nuts on the bolts and tighten the nuts slightly. With the hitch still upside down, try to rock the hitch head to see if it rocks freely within its limits of travel. If it rocks freely, tighten the nuts securely and rock the hitch head again. NOTE: If the hitch head does not rock freely on the first test, loosen the nuts and inspect the bushings to make certain they are seated properly. The hitch head/king pin box pad should not rock loosely, but should move smoothly with resistance. See **Figures 26** and **27**, **page 10**.





# Reinstalling The Hitch Head



Figure 26 – Tightening Front Mounting Bolt

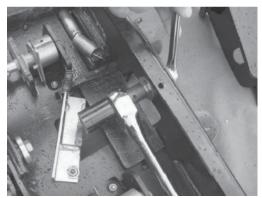


Figure 27 – Tightening Rear Mounting Bolt

#### **Step 21**

Using the pliers reinsert the detached end of the slide bar spring into the same hole from which it was removed in step 5 above. See **Figures 28** and **29** below.



Figure 28 – Reinstalling Catch Bar Return Spring

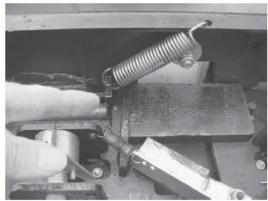


Figure 29 – Catch Bar Return Spring Reinstalled

#### Step 22

Reinstall the hitch head in place on the vertical supports.

#### Step 23

Reinsert the clinch pins (see Step 1, page 3).

#### Step 24

Reinsert the hairpins to secure the clinch pins (see Step 1, page 3).

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# **Reinstalling The Hitch Head**

#### Step 25

Again inspect the installation and compare against **Figures 30**, **31 & 32**. Your PinLock™ installation should look very similar to these figures.

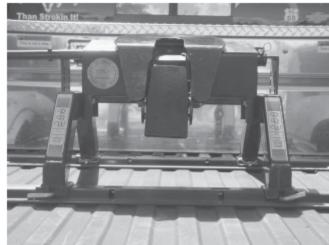


Figure 30 - Complete Installation, Rear



Figure 31 – Complete Installation, Left Rear



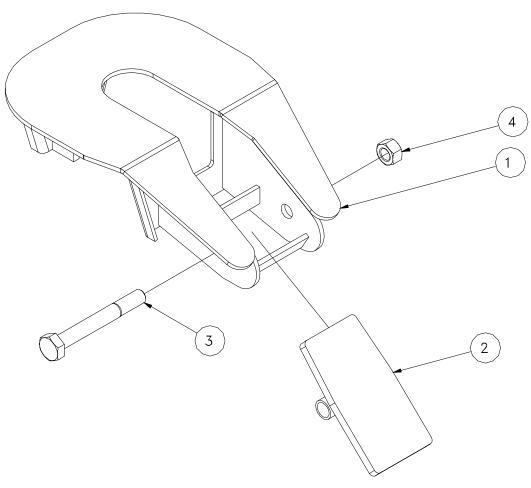
Figure 32 – Complete Installation, Right Rear

If your PinLock™ is properly installed per the above instructions, it will now prevent the king pin from being released by the hitch until you use your trailer jacks to elevate it approximately one inch. **The PinLock™ is NOT designed to prevent high speed breakaway.** 

- PinLock<sup>™</sup> allows you to load your fifth wheel trailer hitch normally.
- When unhooking your fifth wheel trailer from the PinLock™; simply use your front jacks to take the weight off the hitch, release the hitch and jack your trailer up enough for the king pin to clear the pin gate.



## **Parts List**



#### **Parts List**

Ref. No.	Qty.	Part No.	Description
1	1	61-6122	WLDM'T, PINLOCK, BXR5203
2	1	61-6123	WLDM'T, PINLOCK, PIN GATE
3	1	201-0747	3/4-10 X 6 HEX BOLT GR 5
4	1	202-0107	3/4-10 HEX NYL. INS. LOCK NUT, ZP

Note: Parts listed above are shipped from the factory assembled

**IMPORTANT:** Use only genuine factory replacement parts on your bracket kit. Do not substitute homemade or nontypical parts. If a bolt is lost or in need of replacement, for your safety and the preservation of your bracket kit, be sure to use a replacement bolt of the same grade. Repair parts may be ordered through your nearest **Blue Ox**® dealer or distributor.

