

# "The Rock BR"

## Assembly, Care and Usage Instructions



**STOP!**

If you have a problem with this product, **DON'T RETURN IT TO THE STORE WHERE YOU PURCHASED IT.** Contact customer service at...

**Battenfeld**  
Technologies, Inc.

5885 West Van Horn Tavern Road / Columbia, MO 65203  
573-445-9200 / Email: [sales@battenfeldtechnologies.com](mailto:sales@battenfeldtechnologies.com)  
Or visit our website @ [www.battenfeldtechnologies.com](http://www.battenfeldtechnologies.com)

**NOT WARRANTED AGAINST MISUSE, ABUSE, OR COMMERCIAL USE.**

### Limited Warranty

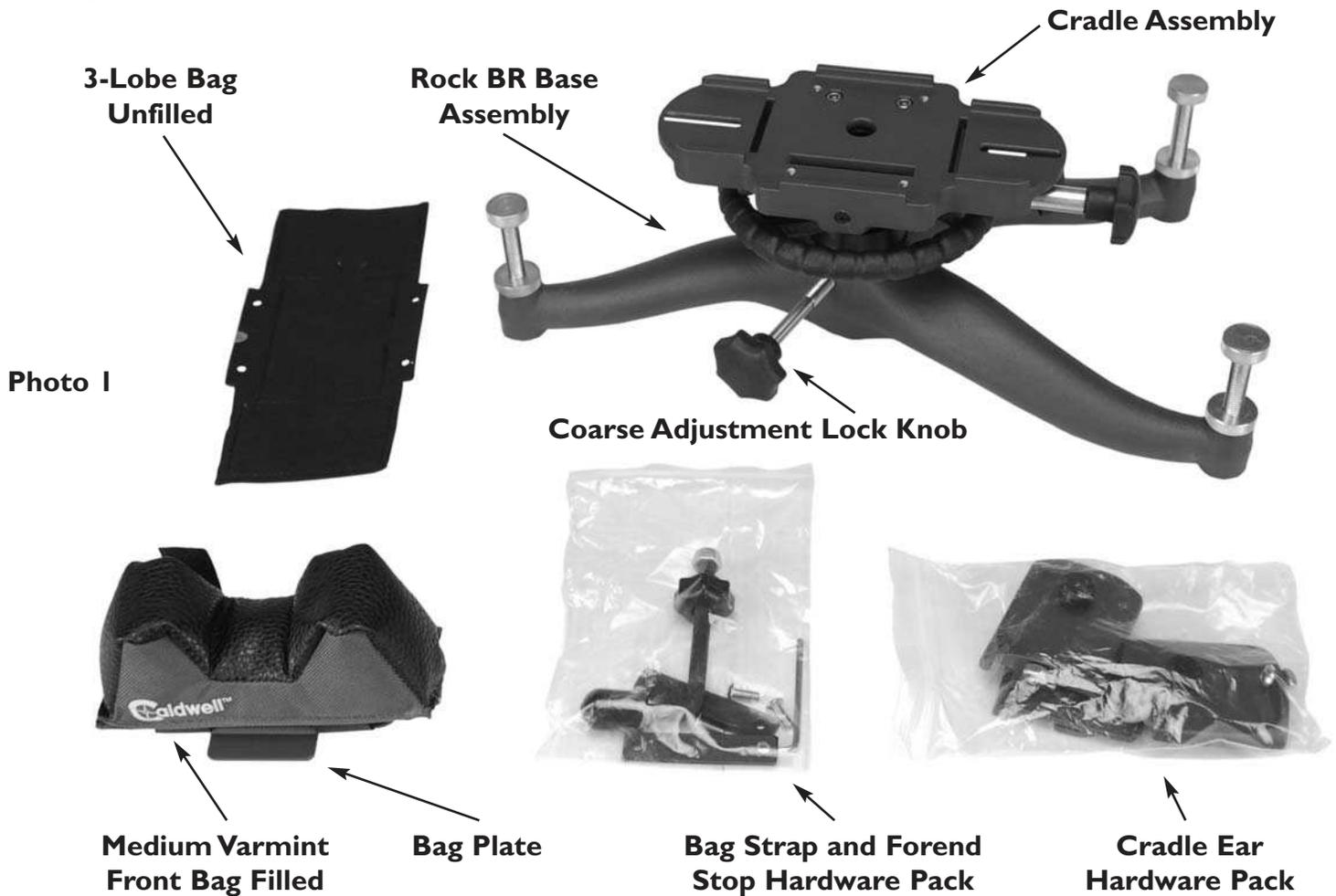
Every Caldwell product is warranted to be free of defects in materials and workmanship for a period of one (1) year from the date of original purchase. Caldwell will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with our Instructions. This warranty does not apply to normal wear or to items whose life is dependent upon their use and care. This warranty is in lieu of all other warranties, expressed or implied and releases Caldwell, its affiliates, and its vendors from all other obligations and liabilities.



### **WARNING: IMPORTANT SAFETY INFORMATION!**

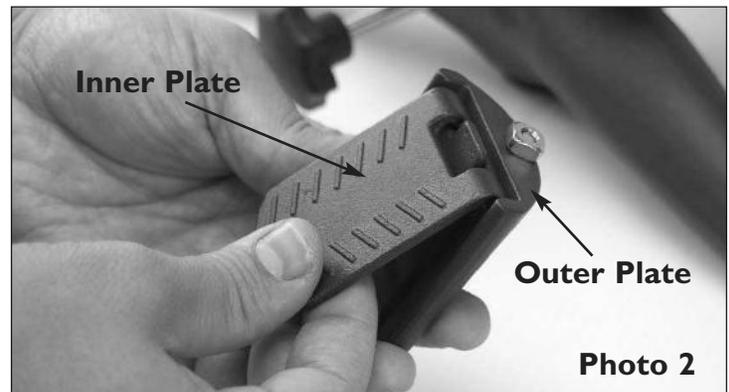
- Always practice safe firearm handling
- Always hold the forend of the firearm when shooting off of this shooting rest or any rest. If it is not held, the recoil can cause the forend to jump out of the front bag, possibly causing damage to the firearm or injuring the shooter.

Thank you for purchasing a Caldwell Rock BR shooting rest. The Rock BR comes to you partially assembled. Please take a moment to locate all of the parts shown in this photo. Since we are always trying to improve our products, some components may vary slightly in appearance.



## Assembly Instructions

1. The first step to assembling the Rock BR is to properly orient the cradle: Loosen the Coarse Adjustment Lock Knob and rotate the cradle assembly until the slot in the Coarse Adjustment Collar lines up with the lock knob. Then lightly tighten the lock knob to hold it in place.
2. To install the Cradle Ears, first remove the screw and square nut from the ears. Then assemble the Inner and Outer Ear Plates together as shown (**SEE PHOTO 2**). Now place the Ear Assembly onto the cradle and place the screw through the ear and the slot on the Cradle. Next place the square nut on the bottom of the cradle and tighten the assembly with the provided hex key (**SEE PHOTO 3**).
3. The next step is to attach the optional Forend Stop. To do this, you will need the Forend Stop, the Locking Knob and the M8 lock nut. Remove the lock nut from the Forend Stop and place it in the cavity on the underside of the Cradle as shown (**SEE PHOTO 4**). Then thread  
2. the Forend Stop through the hole in the Cradle and



into the nut. Finally use the Locking Knob to secure it in place. **(SEE PHOTO 5) (See Usage Instructions for adjustment or deactivation of this feature)**

4. Your Rock BR comes with two front bags. A pre-filled Universal Bag and an unfilled Three-Lobe Bag (see below). The Universal bag comes preinstalled onto a bag plate. To attach this to the rest, use the two Bag Straps and the four M5 screws included in the hardware pack. Place the bag onto the cradle, and then place the bag straps over the tabs on the bag plate. Align the holes in the Bag Strap with the threaded holes in the Cradle, and use the M5 screws and the provided Hex Key to tighten the bag down **(SEE PHOTO 6)**. **Note: These screws only need to be hand-tight. Excessive torque could damage the screws or the cradle plate. See below for instruction on filling and installing the Three-Lobe Front Bag.**

### Changing the Front Bag

Your Rock BR includes a Caldwell Three-Lobe Front Bag. The Three-Lobe Front Bag is useful for any firearm with a wider, varmint or benchrest-style forend. The partitioned design of this bag will conform to the forend of the rifle.

To change the bag, use the hex key to remove the (4) M5 Button Head Screws that are holding the Bag Straps on. Then simply replace the bag and retighten with the hex key.

### Bag Filling Instructions

We recommend using dry silica sand or brass cleaning media when filling the 3-Lobe Bag.

1. Locate the unstitched portion of the bag for filling.
2. Filling is made easier if a rigid tube or small funnel is inserted into the filling spout.
3. A small, flat-faced rod may be inserted in the spout to help pack the filler if desired.
4. When the Bag has been filled to your satisfaction, secure it in place using the two bag straps and screws. The bag strap will seal the opening in the bag.

### Usage Instructions

1. Position the Rock BR on your shooting bench with the rest in the direction of the target, making sure the surface is flat and free of debris.
2. Turn the three adjustable feet in or out to position the rest to your liking.
3. Next place a rear bag (not included) behind the rest for the butt of the gun to rest on. Note: The Caldwell Medium High Rear Bag will make it easier to shoot at downward angles.
4. Place an unloaded firearm on the rest. Adjust or reposition the rest and rear bag laterally to align the firearm's sights with the target. Adjust the height of the Rock BR until the correct elevation is achieved. Elevation adjustments can be made with either the Course Adjustment Collar or the Fine Adjustment Ram. The Coarse Adjustment Collar has a lock knob



Photo 4

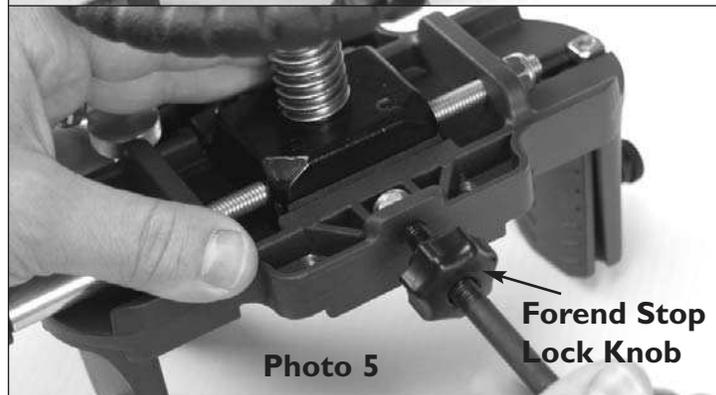


Photo 5

Forend Stop Lock Knob

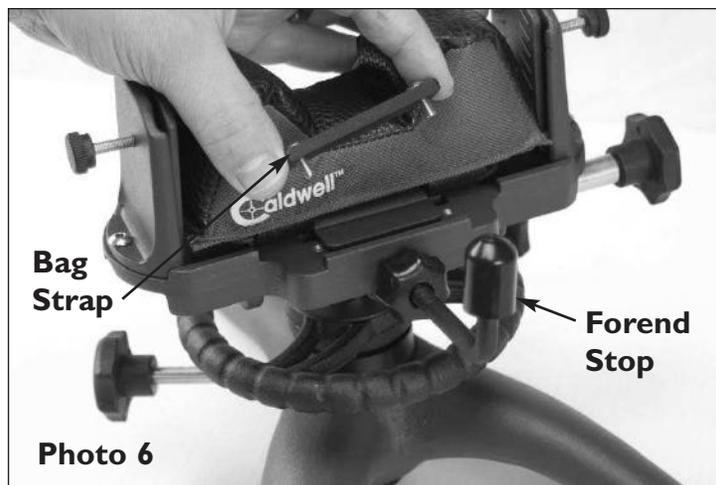


Photo 6

Bag Strap

Forend Stop

on the right side of the rest and slides vertically. The Fine Adjustment Ram has a lock knob on the left side and uses the Elevation Wheel to make adjustments. (The Ram Lock only needs to be tightened enough to keep the front support from moving. The Elevation Wheel will keep the front support in place and only a small amount of tension is necessary to lock it into place. There is no need to tighten the Ram Lock any further.)

5. Once the sights are adjusted with the correct elevation, the Windage Knob can be used to make precise windage adjustments. (See adjustment procedure below for Custom-Tuning)

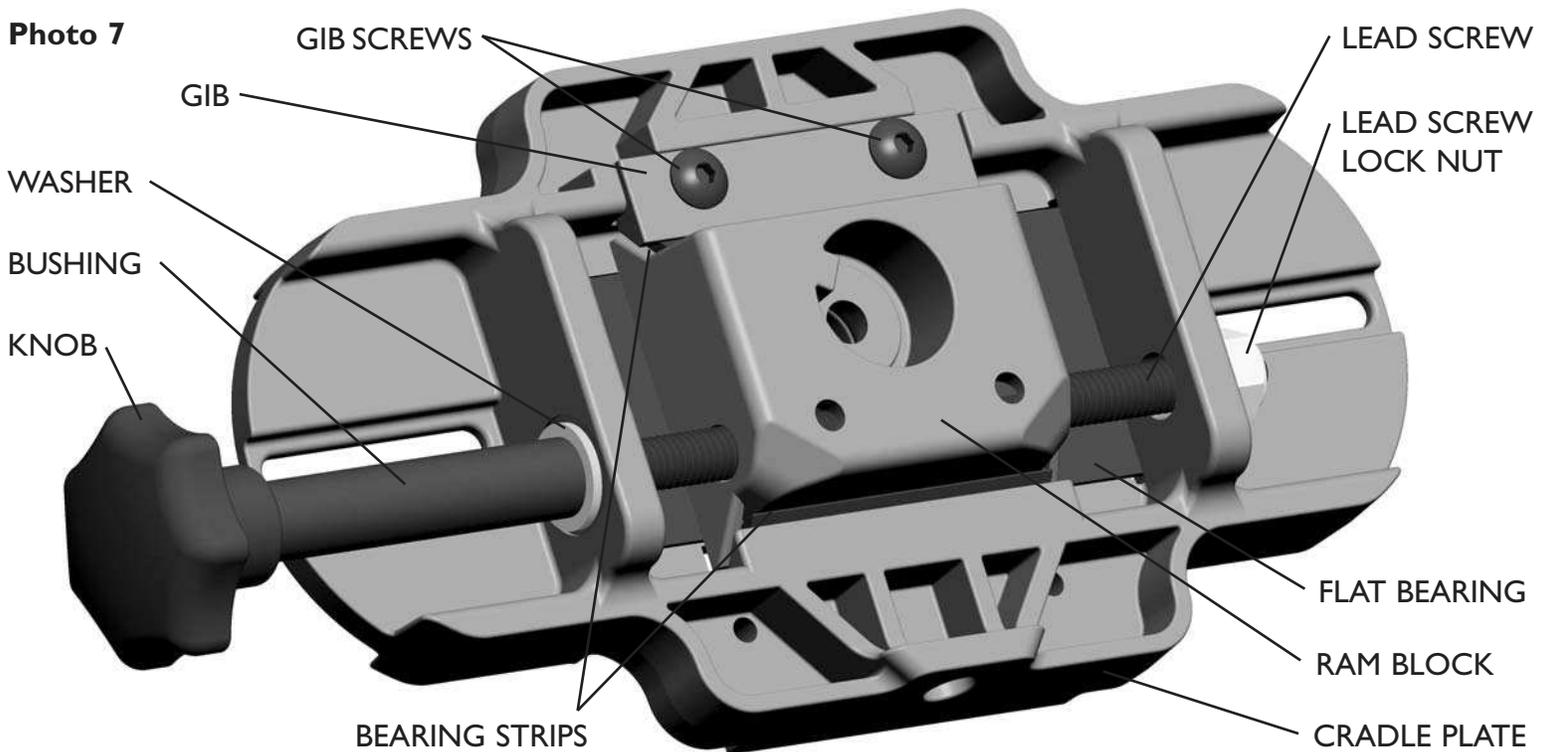
6. The rest includes an adjustable Forend Stop. This stop is used to ensure that your rifle is placed in the exact same spot shot after shot. To raise or lower the forend stop, twist the Stop Bushing and lock it in place with the jam nut when in the desire position. If you choose not to use the Forend stop, it can easily be deactivated by loosening the front knob, rotating the stop 90 degrees and retightening the knob.

## **Storage Instructions**

For best results store The Rock BR in a clean and dry environment. Periodically lubricate the threads on the elevation wheel, ram and feet to prevent corrosion.

## **Windage Cradle Adjustments**

The torque required to turn the knob for the windage system has been adjusted at the factory, but the assembly is designed to be adjustable to meet your specific preference. Before adjusting, please refer to the picture below and familiarize yourself with the components that make up the Windage Cradle Assembly.



## **Lead Screw Tension Adjustment:**

The Lead Screw, which moves the Cradle Plate left and right, should be adjusted to eliminate either excess backlash or unnecessary tension. Turn the Knob two full revolutions in one direction. Then turn the Knob in the opposite direction one revolution.

- If the Knob felt like it loosened up when you turned it in the opposite direction, the Lead Screw might have excess backlash

4.

- If the Knob did NOT feel like it loosened at all when you turned it in the opposite direction, the Lead Screw might have unnecessary tension.

### **To Remove Excess Backlash:**

Hold the Lead Screw Lock Nut with a 13 mm wrench, (not included, but an adjustable wrench or pair of pliers will work as well) and turn the Knob clockwise like you are tightening it. Once you feel it get snug, loosen it one fourth of a turn. **See Photo 8 (below)**. Remove the wrench and try turning the Knob back and forth to see if it still feels like it has a loose spot (backlash). If the Knob feels loose for more than one fourth of a revolution, tighten the Knob a little more while holding the Nut with a wrench or pliers. If it feels like it has less than ¼ turn of backlash, you're done!

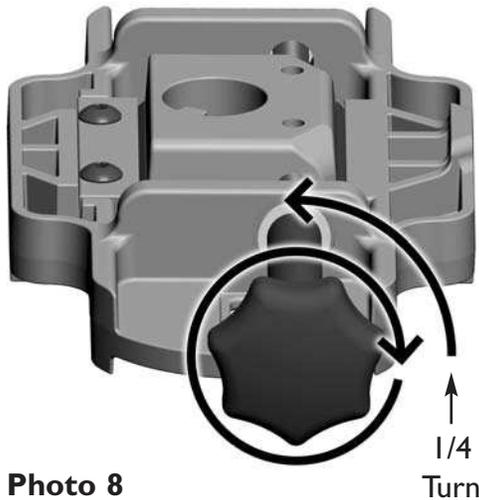


Photo 8

### **To Remove Unnecessary Tension:**

Hold the Lead Screw Lock Nut with a 13 mm wrench, (an adjustable wrench or pair of pliers will work as well). Turn the Knob counter-clockwise like you are loosening it one fourth of a revolution. Remove the wrench and try turning the Knob back and forth to see if it still feels tight when you change directions. If it still feels tight, loosen the Knob a little more while holding the Nut with a wrench or pliers. If it feels like it has a little bit of a loose spot before getting tight again (backlash), you're done!

**NOTE: Due to manufacturing tolerances, it might not be possible to completely eliminate backlash. Up to ½ of a revolution of backlash is considered acceptable.**

### **Ram Block Resistance Adjustment:**

The resistance or tension felt when turning the Knob for windage adjustments can be adjusted to suit your specific preference.

**NOTE: The Lead Screw tension MUST be set according to the instructions before adjusting the Ram Block tension.**

Turn the Knob until the Ram Block is centered in the Cradle Plate. Using the supplied 3 mm hex key, loosen both of the Gib Screws several turns and then retighten them until they feel snug. Try your best to tighten both the Gib Screws with the same amount of torque. Do not over-tighten the Gib Screws or you may permanently deform the Bearing Strips or the Gib. Turn the Knob to test the resistance. If the resistance isn't tight enough, tighten the Gib Screws a little more and re-test. If it feels too tight, loosen the Gib Screws a little, and re-test. Once you are happy with the resistance felt when turning the Knob, you're done!

### **Troubleshooting:**

If the Windage Cradle does not move smoothly through the full range of motion or binds up during use, do not use excessive force to overcome any unusual resistance felt. Check to make sure the Bearing Strips are installed correctly and are seated flat in their slot in the Ram Block. If the Bearing Strips are installed incorrectly or have slipped out of position – disassembly of the Windage Cradle may be required to correct the problem. **See Photo 9 and 10 on page 6.**

1. Remove the Lead Screw Lock Nut and back the Lead Screw all of the way out of the Ram Block.

**See Photo 11 on page 7.**

2. Remove the Gib Screws and the Gib (Don't lose the Gib Screw Lock Nuts sitting in the Cradle Plate).

**See Photo 12 on page 7.**

3. Lift and slide the Ram Block out of the Cradle Plate (the Lead Screw Thread Block and Shim Washer may fall out of the Ram Block – don't lose them!).

**See Photo 13 on page 7.**

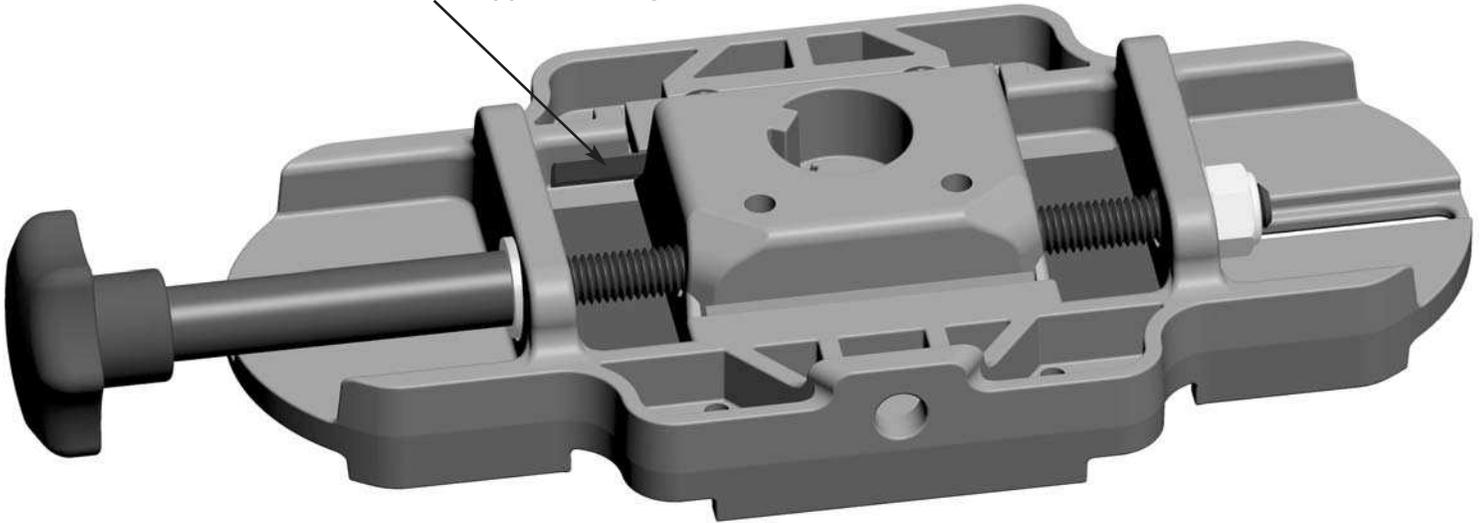
4. Reposition or reinstall the Bearing Strips correctly (circular indentions on the bottom of the Bearing Strips **MUST** sit flat against the bottom of the slots in the Ram Block). **See Photo 14 on page 7.**

5. Wipe all of the parts down with a clean rag. A very light coating of oil can be applied to the Lead Screw if desired. Do not apply oil to the bearing surfaces – just wipe them clean. Reinstall everything in the reverse order.

6. Readjust the Lead Screw tension and Ram Block resistance according to the instructions when you are finished with the assembly.

**Photo 9**

**Problem:** Slipped Bearing



**Photo 10**

**Problem:**

Bearing upside-down (circular indentions visible)

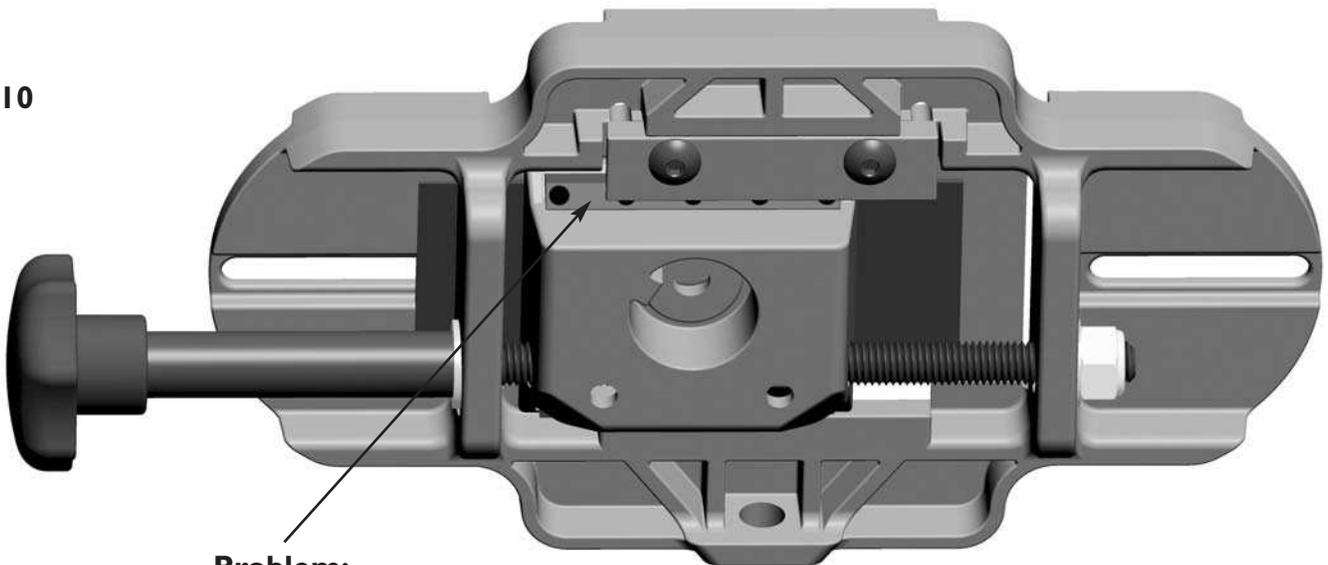


Photo 11

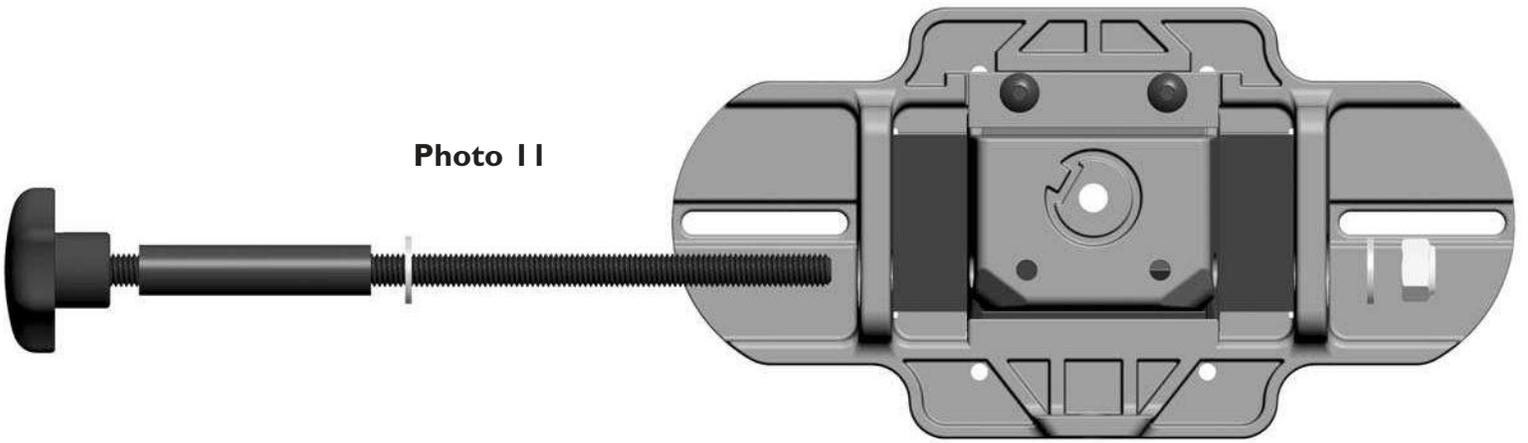


Photo 12

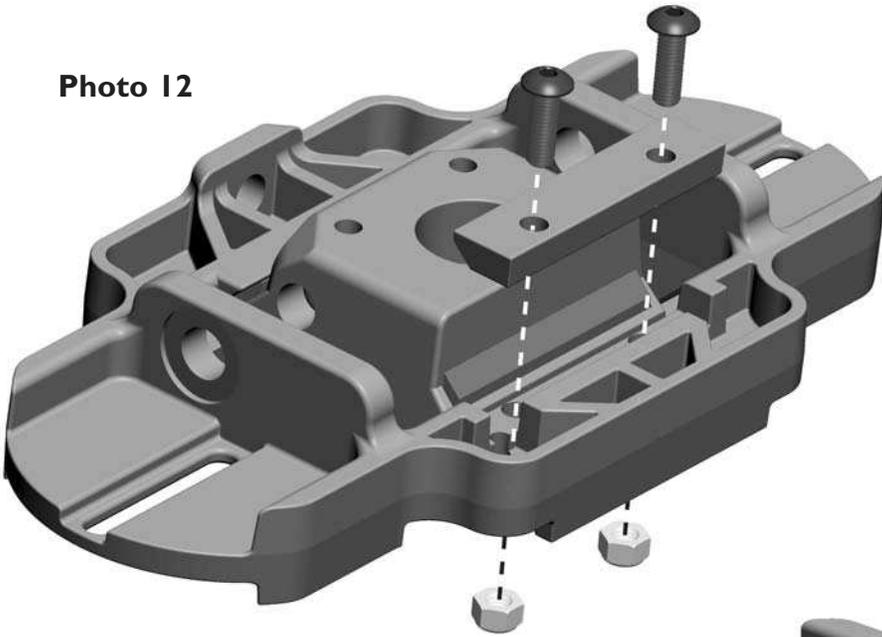


Photo 13

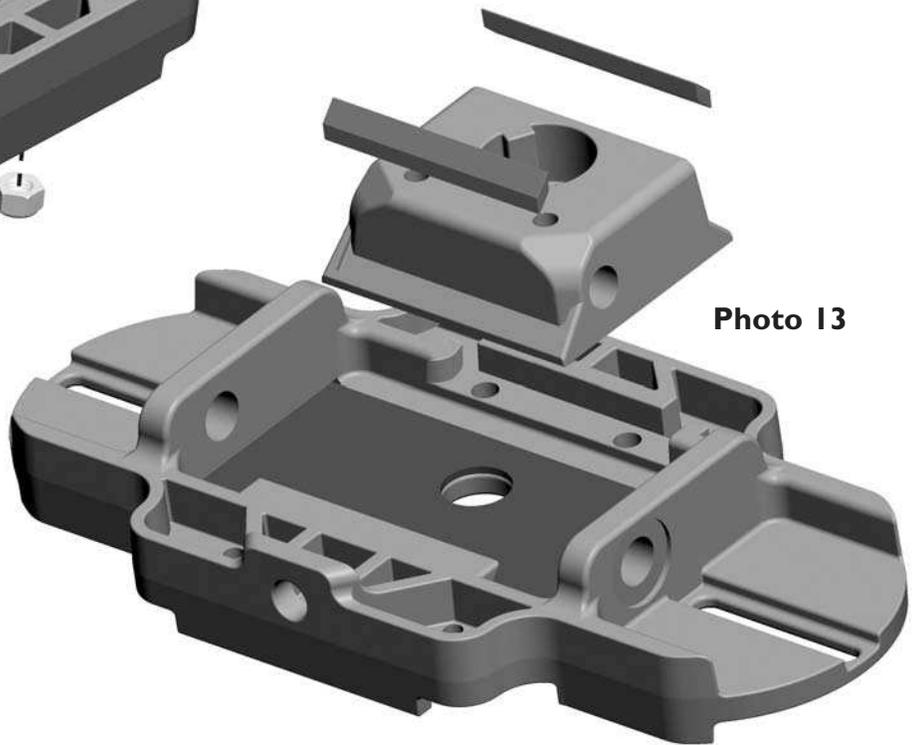
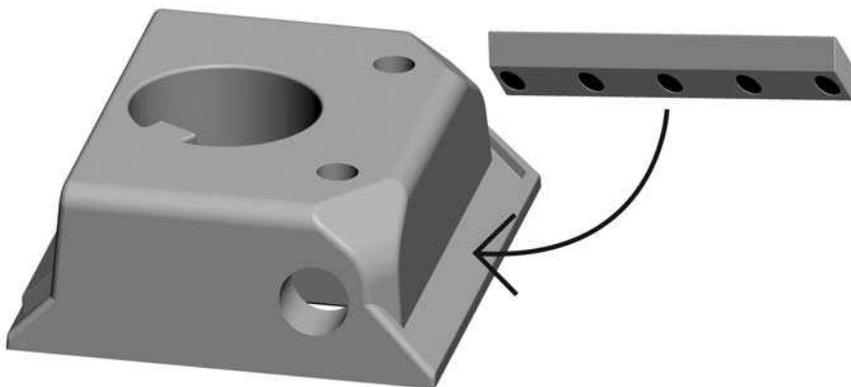
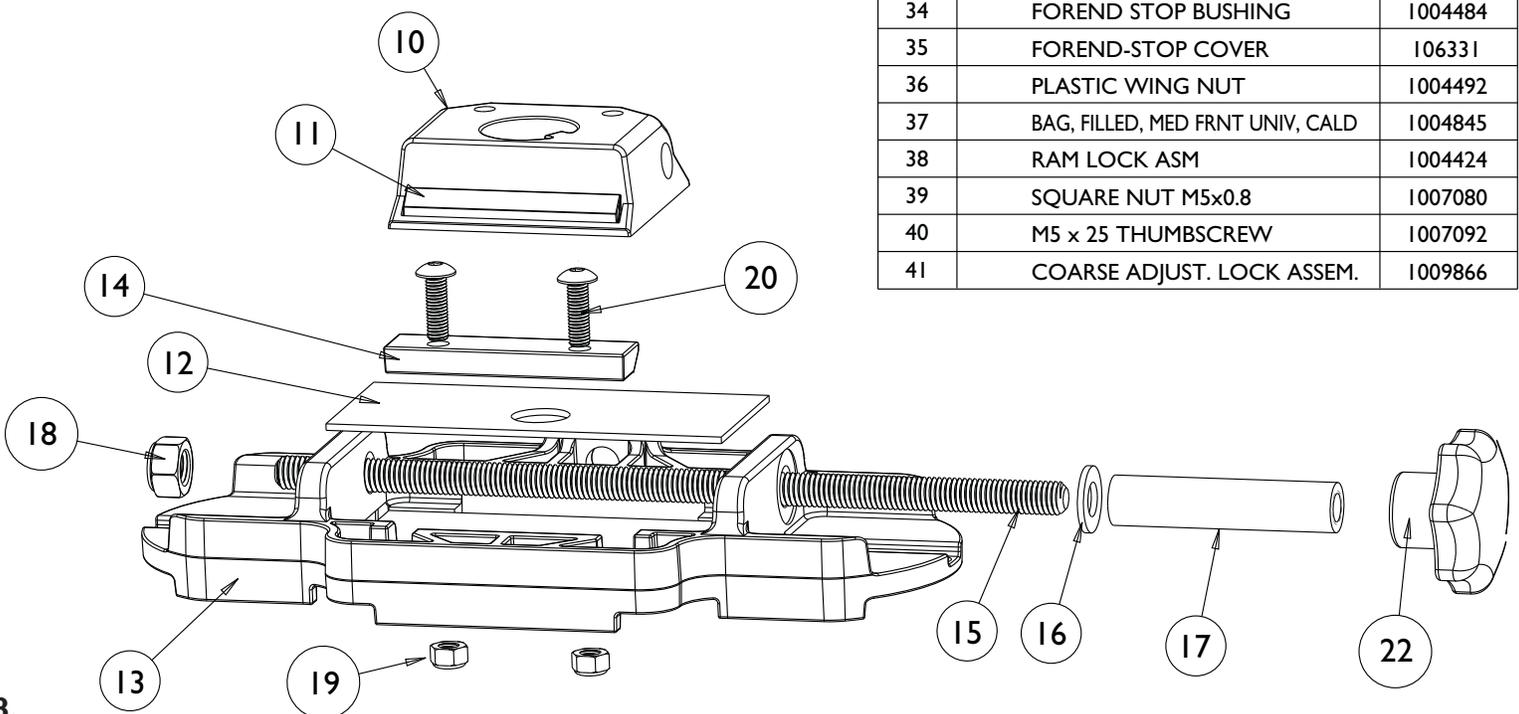
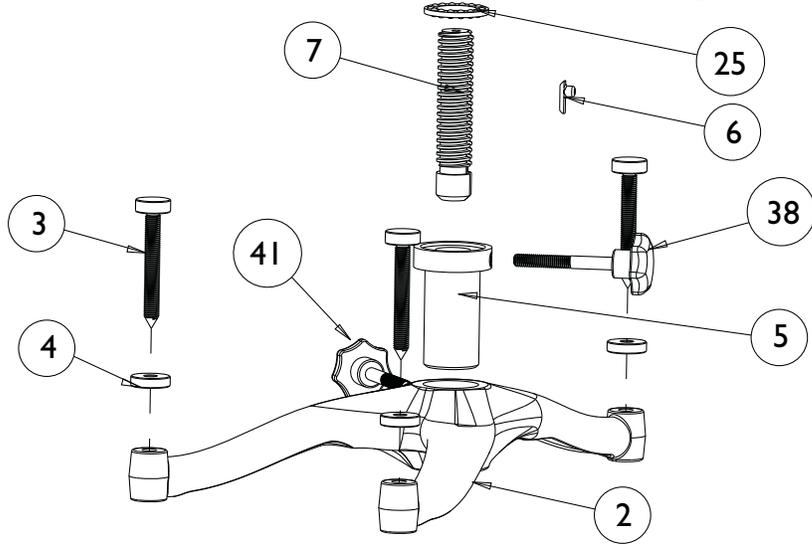
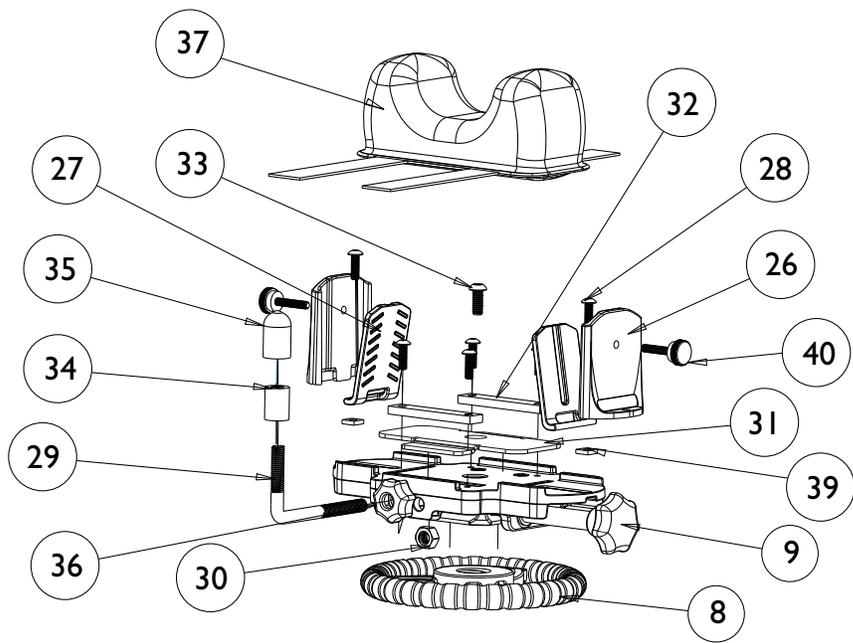


Photo 14



Product #440-907

Instruction #1009130



## BILL OF MATERIAL

No.	Component Name	Part No.
1	ROCK BR	440907
2	ROCK BR BASE	1005381
3	M10 ADJ FOOT SCREW	1006387
4	M10 KNURLED NUT	1006388
5	COARSE ADJ COLLAR	1004531
6	KEY	1008929
7	RAM 7/8-6 ACME	1006395
8	WHEEL	1003296
9	CRADLE ASSEMBLY	1001078
10	MALE DOVETAIL	1001181
11	BEARING-1	1001201
12	BEARING-2	1001202
13	CRADLE PLATE	1001182
14	GIB	1001204
15	LEAD SCREW	1001189
16	PLASTIC WASHER	1001207
17	BUSHING	1001196
18	M8 NYLOCK NUT	1003323
19	M5 NYLOCK NUT	1001205
20	M5 x .8 x 16 BHCS HEX	1001206
22	KNOB	1001199
23	BAG, 3-LOBE, UNFILLED (Not shown)	427144
24	ROCK BR HARDWARE	1004306
25	THRUST BEARING	1007245
26	EAR	1007014
27	EAR PLATE	1007015
28	M5 x 0.8 x 16MM BHCS	1007070
29	FOREND STUD	1004420
30	M8 NYLOCK NUT	1003323
31	BAG PLATE	1001652
32	FRONT BAG STRAP	106759
33	M6 x 1.0 x 20 BHCS	1018925
34	FOREND STOP BUSHING	1004484
35	FOREND-STOP COVER	106331
36	PLASTIC WING NUT	1004492
37	BAG, FILLED, MED FRNT UNIV, CALD	1004845
38	RAM LOCK ASM	1004424
39	SQUARE NUT M5x0.8	1007080
40	M5 x 25 THUMBSCREW	1007092
41	COARSE ADJUST. LOCK ASSEM.	1009866