

# THE BLUE RIPPER SR™

## *Rail Saw*

Blade shown might not ship with saw or be available.  
Saw might not match image due to design changes or model differences.



## *Operation, Safety, and Instruction Manual*

v 20150723



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# **ΩMEGA DIAMOND, INC.**

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## Operating/Safety Instructions

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### **IMPORTANT: Read Before Operating Equipment**

To avoid accidents or injury, keep work area clean, well lit, and well ventilated.

Always wear eye, hand, and all other appropriate protective apparel when operating saw.

Keep all other people, children, and small farm animals away while operating saw.

Use only properly grounded, GFCI protected electrical outlet. GFCI must be tested every 2 months.

**Warning:** Do NOT turn machine on or off with the GFCI safety switch. Turn machine power switch off before resetting the GFCI.

Ensure that the electrical system in your work location meets all codes and regulations prior to operating saw.

Do not modify the plug on the saw or use any adapters between the saw and the electrical outlet.

Do not allow water to run directly on the motor or any other electrical component.

If power cord or any other part of the saw is damaged, discontinue use immediately until damaged parts can be replaced.

Keep saw blade clear of clothing, jewelry, hair, cords, hoses, or any other objects while in operation.

Ensure that the saw is switched off before plugging or unplugging it.

Ensure that blade is clamped firmly between flanges and spinning freely prior to operating.

Do not stand directly in front of or behind the saw while in operation.

Keep hands on top of the saw and away from the blade while operating.

Never force the saw if it seems to be stuck or if it seems to be moving with difficulty.

Use only blades of correct size and shape. Do not modify blades.

Do not force bolts; most have been assembled with an adhesive, such as a Loctite® threadlocker adhesive, for safety.

Loctite is a registered trademark of Henkel Corporation.

Give one good squirt of marine grease in the zerk fitting once a month.

Do not grease the lifting/lowering mechanism. Use a dry lubricant such as PTFE (Teflon®) or a graphite-based spray when necessary.

## Operating Instructions

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### ***Installing/Replacing Blade:***

*Note: This saw is designed for stone and masonry applications exclusively. For optimal performance use only blades designed for your saw model. These blades can be purchased directly from Omega Diamond.*

Place the saw on the rail (with rail rubber side down) providing clearance for installing the blade. Loosen Vertical Adjustment lock and raise motor to full height.

Remove the threaded nut holding the outer flange and blade to the inner flange and shaft. If nut is tight, use the included wrench to turn it. To lock the flange, press the flange lock pin on the back of the blade guard and rotate the flange until it locks.



*Shaft lock pin located on back of guard.*

Remove the front flange (and old blade, if applicable) and slide the new blade against the rear flange. Ensure that the blade is flat against the rear flange with rotation direction arrow matching the arrow on front guard. If you place the blade on backwards the blade will glaze instantly upon first cut attempt and will need to be redressed. See our website for an instructional video for this task.

Replace the front flange so the blade is sandwiched between the two flanges. Replace the threaded nut and tighten with included wrench. To lock the flange, press the flange lock pin on the back of the blade guard and rotate the flange until it locks.

Under normal circumstances the interior flange should not have to be removed. If it seems necessary, please call us at 1-888-996-4777 or at 1-530-889-8977 before attempting to do so.

### ***Typical Operation:***

Note: For most cutting operations, it is recommended that you lay your slab on top of a foam sheet at least 1" (3cm) thick. (1.5" (4cm) is preferred for less crumbling).

- 1) Lay the rail on the slab along the line to be cut.
- 2) Allow the rails to overhang enough for the blade to clear the stone where you will begin your cut. It may be necessary to clamp the rails to the stone to prevent wandering. Clamp onto provided angle bolted to one side of rail.
- 3) Put the saw on the end of the rail with the arrow on the guard pointed at the edge of the stone.
- 4) Adjust the blade height to just enter the stone about ¼ inch (3mm) deep.
- 5) Turn the water valve on and adjust desired flow – the more the merrier.
- 6) Turn saw on before blade touches the stone. Do not stand directly in front of or behind the blade while cutting.
- 7) Slowly begin your cut by pulling or pushing the saw into the stone. After entering the cut, draw the saw along the stone at good speed to finish the “strike” cut. You may need to apply pressure to the top of the saw to keep it from “climbing” out of the cut.
- 8) After clearing the stone on the opposite side of the slab, re-position the motor to the lowest position the blade can be set. The deeper the blade cuts through the stone, the easier and faster the blade will cut.
- 9) Enter the cut by gently pushing the saw into stone. If you enter the cut too hard the saw could kick, and can also cause the blade to wander.
- 10) Once you have initiated the cut you must not go too slow or the diamonds on the blade will glaze over, and the cutting speed will drop dramatically. The speed of cut should be just below the point of stressing the motor: push it to the stressing point and back off a touch.

**Example:** On a 2 cm thick slab of Absolute Black granite try to maintain a cutting speed of about 10 fpm (3 meters per minute) or faster. This is critical in the High-Speed (“HS” model code) saws.

## Troubleshooting

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### ***Blade seems to be cutting slowly or not cutting at all?***

**Suggestions:** Make sure the blade is mounted to spin in the proper direction (align arrow on blade with arrow on face guard).

The material being cut may have “loaded” or “glazed” the diamond. Use a dressing stone or “green stone” to free the diamond. Alternate techniques are available on our website.

### ***Blade binds or “freezes.”***

**Suggestions:** The blade may be cutting at a slight angle. Check alignment. Make sure that the saw is rolling freely on the rails and the rails are not damaged or bent. Make sure that the motor is securely fastened to the mounting plate.

### ***Saw shuts off after a few minutes of use and/or fails to turn on at all.***

**Suggestions:** Check circuit breaker. If that is on and it still fails to start, the motor may have overheated. Allow time to cool, but verify that the power switch is turned to the off position. Then push in the Heat Overload button to reset the protection. You will then hear a dry click sound from the button when pressed and the motor has cooled down enough to restart.

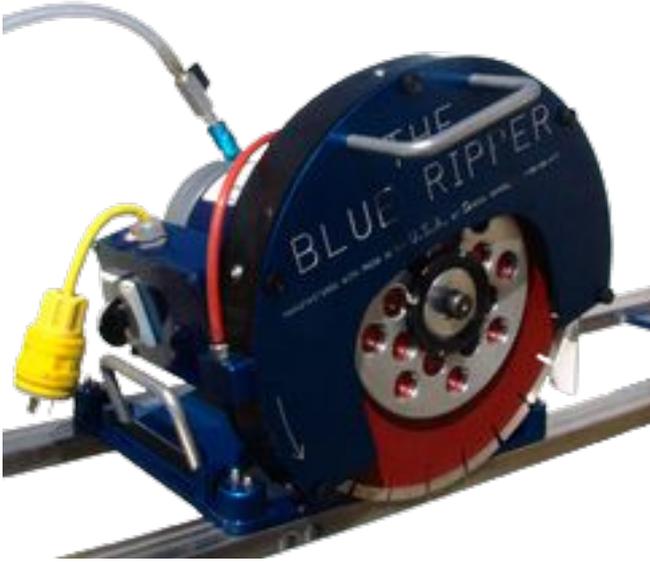
### ***Height adjusting hand wheel is difficult to turn.***

**Suggestions:** Loosen the jamb knob on the right side of the height adjustment post. Spray a PTFE (Teflon®) or graphite-based spray on slide areas. DO NOT APPLY GREASE as this will reduce the life of the assembly dramatically.

Teflon is a registered trademark and brand of the DuPont Co.

If you have any questions please call us toll free 1-888-996-4777, or if you are located outside the USA +1-530-889-8977

## Spin and Machine Motion Direction



Saw might not match image due to design changes or model differences.

### Cut stone by moving machine in either direction

#### *Preferred cut direction*

Strike Cut	Full Cut
← Right to left ←	→ Left to right →

Perform a strike cut about ¼ inch (6mm) deep first, then go to full depth and cut the remainder. This technique reduces surface chipping and provides a straighter cut as the blade has a groove to follow to prevent “wandering.”

## **Replacement Parts**

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Need parts? Is your blade worn out? Want a spare? Need extra rail? Give us a call and we will be happy to take your order.

Toll Free: 1 (888) 996-4777

Outside USA: 1-530-889-8977

Fax: 1 (530) 885-3785

Web: [OmegaDiamond.com](http://OmegaDiamond.com)

Email: [sales@omegadiamond.com](mailto:sales@omegadiamond.com)

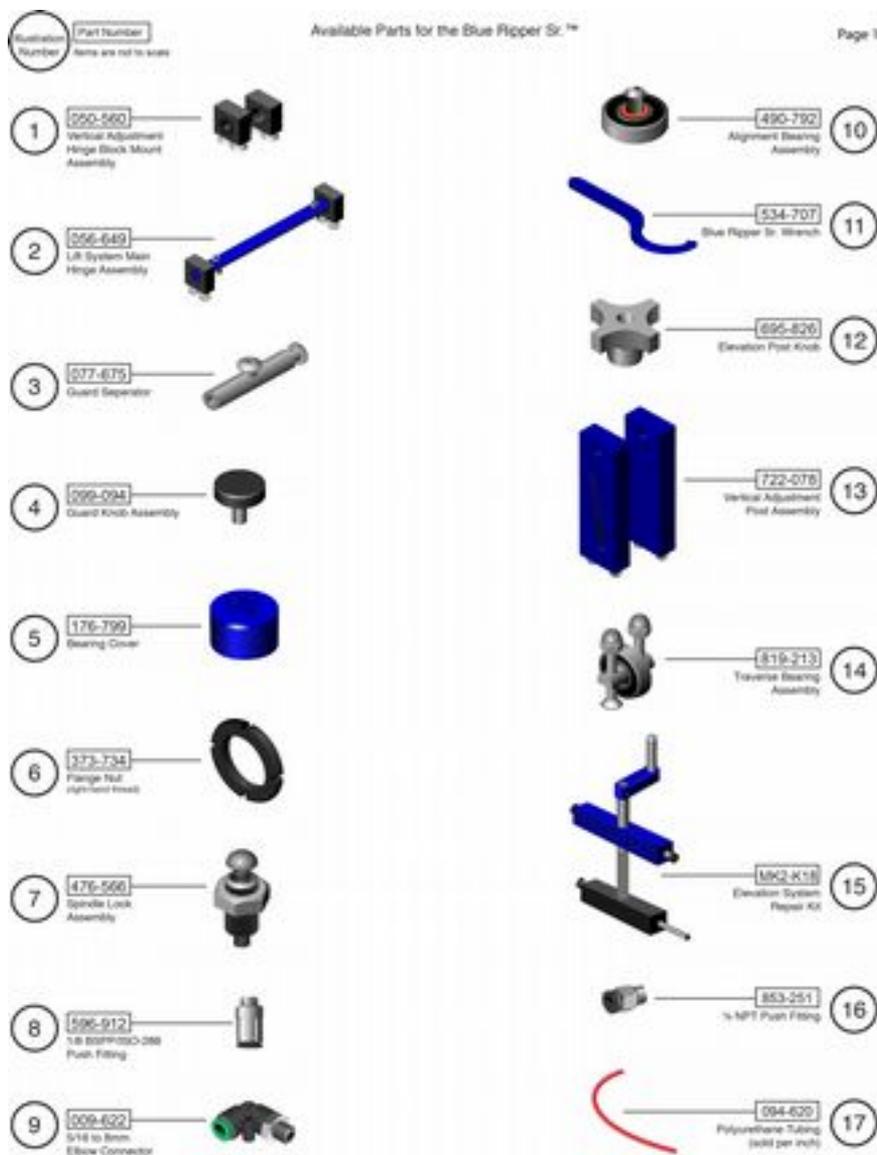
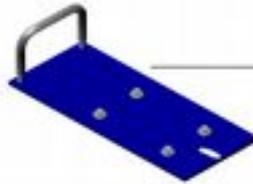


Illustration Number Part Number



18 729-187  
Rear Blade Flange/Hub (right-hand thread)



936-764  
Lift System Hinge Plate Assembly

23



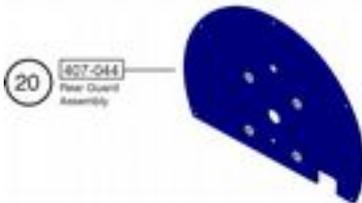
19 861-503  
Outer Blade Flange/Hub



877-609 2hp 1750 rpm Dayton air cooled induction motor  
734-745 2hp 1750 rpm Babco air cooled induction motor  
144-962 2hp 3450 rpm Custom water cooled induction motor

24

Appearance of motor may change with model



20 807-044  
Rear Guard Assembly



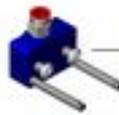
110-055  
HOSE KIT

25



21 833-324  
Vest Curved Blade Guard

Replacement Parts for Older Models



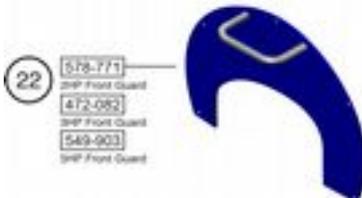
For Water-Cooled Saws  
766-428  
Direct Injection Water Manifold Assembly

26



For Air-Cooled Saws  
918-622  
Direct Injection Water Manifold Assembly

27



22 578-771 2HP Front Guard  
472-092 3HP Front Guard  
549-903 5HP Front Guard

See [omegadiamond.com/676-877](http://omegadiamond.com/676-877) under Attached Files for the most current Replacement Parts List.

## **Limited Warranty**

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For warranty information please visit our web site at [omegadiamond.com/warranty](http://omegadiamond.com/warranty)

Please record the Date of Purchase and the Serial Number of your machine here for future reference:

Date of Purchase:

Serial Number:

## USER NOTES:

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**NOTICE:** *This product may have been field tested for quality control purposes.*

## **Blue Ripper Sr Rail Saw Manual**

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### **\*\*\*WARNING\*\*\***

Not following all of these instructions and warnings included in this manual may result in Injury or Death. Omega Diamond, Inc. and all related Companies and personnel cannot be held responsible for any damages incurred by the installation, use, and/or maintenance of this product.

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