

# GRS MICROBLOCK™ BALL VISE

for engraving, stone setting and other precision work

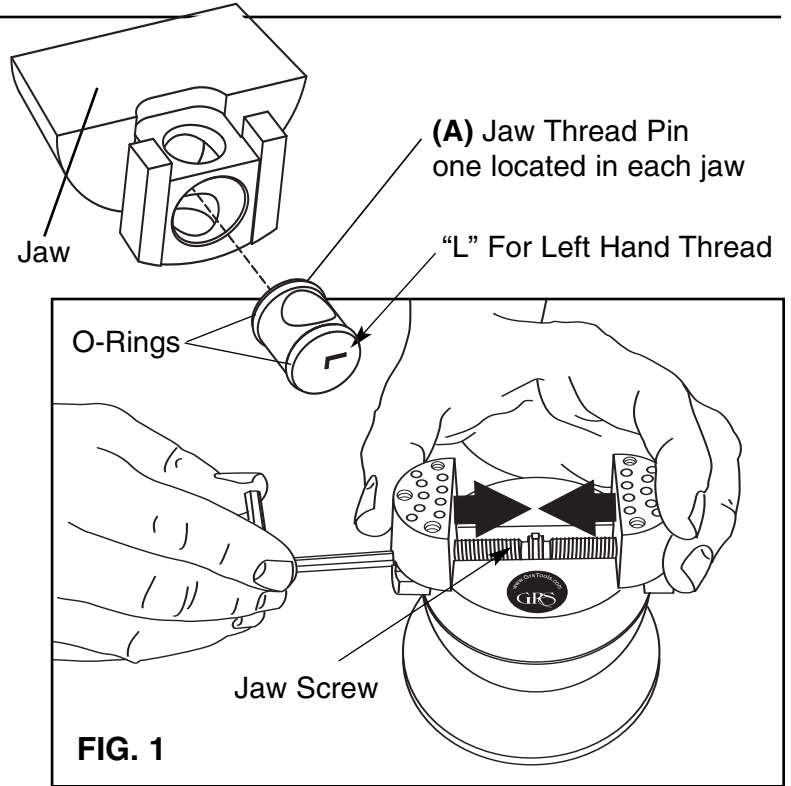
#003-683 & #003-684

Your GRS Microblock will give you many years of trouble-free service. It is extremely rugged in construction, yet is relatively simple and easy to maintain. Lubrication required is minimal.

Jaw plates are drilled to accept GRS engraving block attachments. Included are six socket head screws which fit the six threaded holes in the jaws. These can be used to secure special items or fixtures.

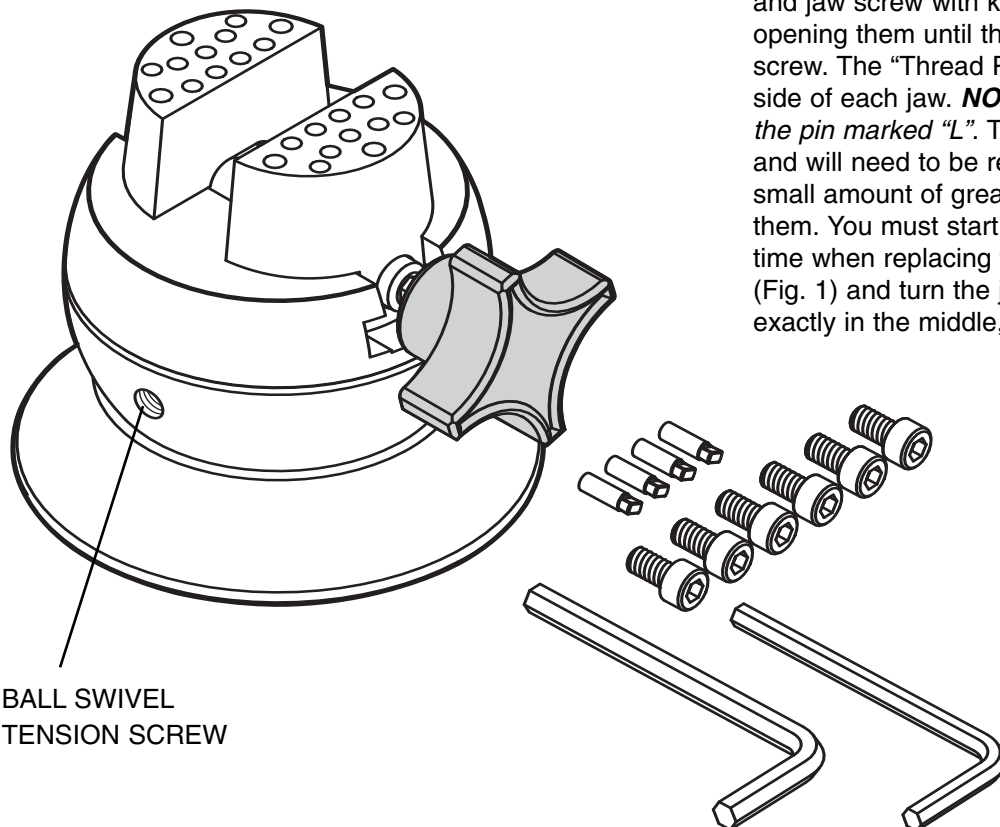
## MAINTENANCE

Based on usage, open jaws fully and clean the dirt and metal pieces from the threads. After cleaning, apply a small amount of light oil or grease to the threads.



## Jaw Thread Replacement

Over tightening the jaws can cause premature wear and possible damage to the threads. If jaws become excessively loose, replace the thread pins and jaw screw with kit #003-629. Remove jaws by opening them until they come off the end of the jaw screw. The “Thread Pin” (A) is located on the under side of each jaw. **NOTE:** Before removing pins locate the pin marked “L”. This is the left hand thread pin and will need to be replaced with the same. Apply a small amount of grease to the o-rings before installing them. You must start the jaw threads at the same time when replacing them. Hold each jaw in position (Fig. 1) and turn the jaw screw. If they do not meet exactly in the middle, remove and install again.



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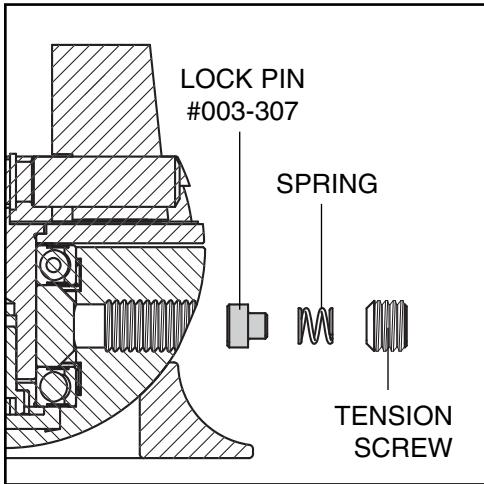
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Lit #276

## Lock (drag) Pin Replacement

The Lock (drag) Pin is subject to wear by design and may need replacement after extended use. Simply remove the ball swivel tension screw with hex wrench. The Spring and Lock Pin should follow. If not, you may need to turn the ball until they fall out. Replace the Lock Pin (order #003-307), Spring and Tension Screw.



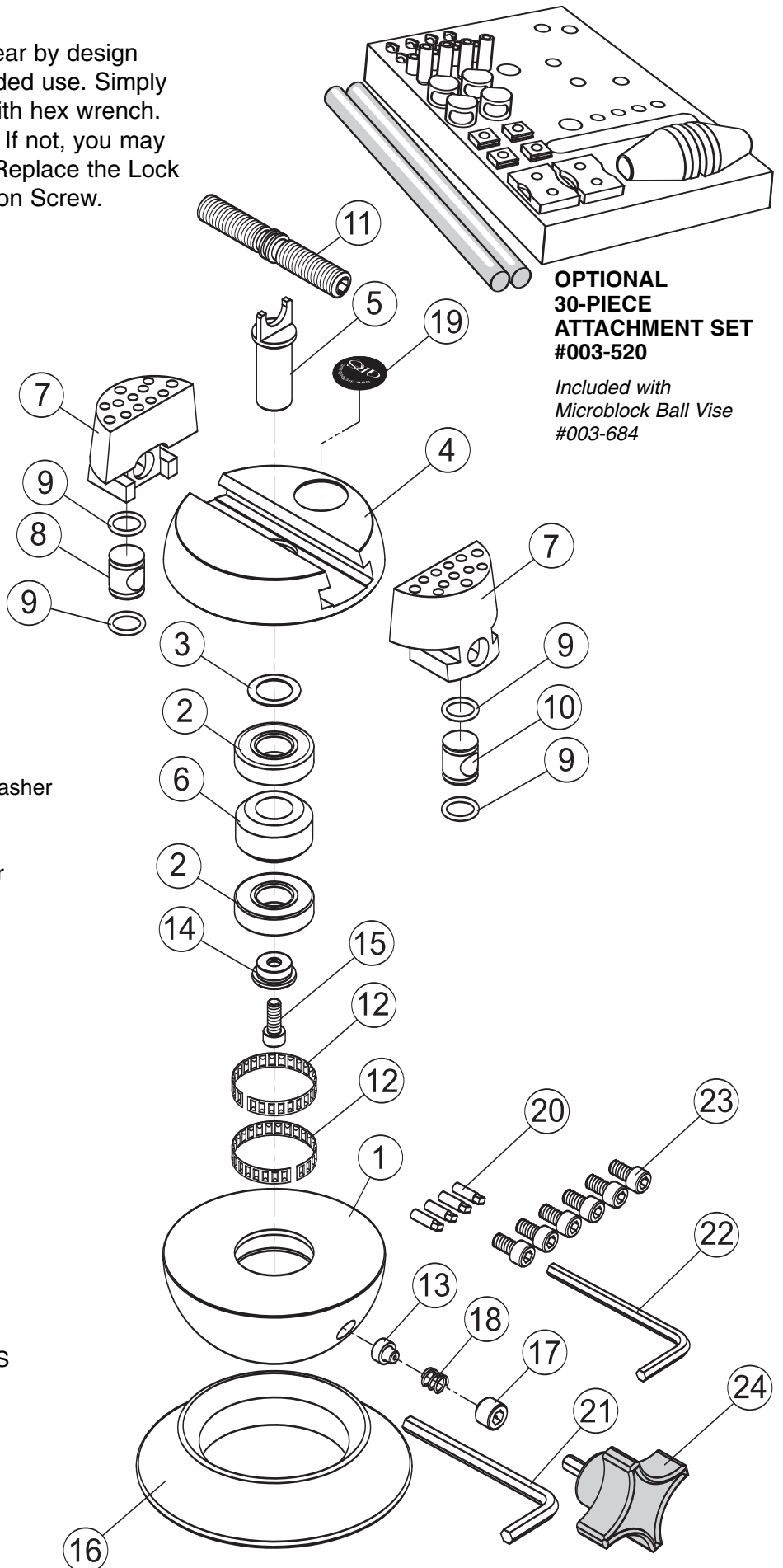
## GRS Microblock Ball Vise

Complete Assembly #003-683 & #003-684

- 1 003-308 Stainless Steel 80mm Base
- 2 022-379 Shielded Bearing
- 3 022-383 .015" x .513" x .750" SS Washer
- 4 003-309 Crown
- 5 003-316 Jaw Screw Yoke
- 6 003-312 Bearing Spacer Brake Rotor
- 7 003-315 Microblock Vise Jaw
- 8 003-314 Left Hand Drive Nut
- 9 002-084 O-Ring, 3/8" x 1/2" x 1/16"
- 10 003-313 Ring Hand Drive Nut
- 11 003-317 Jaw Screw
- 12 022-380 Tolerance Ring
- 13 003-307 Lock Pin
- 14 003-311 Bearing Retainer
- 15 002-067 10-32 x 1/2" SHCS
- 16 003-310 Machined Support Base
- 17 022-382 Flat Nose Set Screw
- 18 003-306 Drag Spring
- 19 003-140 GRS Label
- 20 003-050 Attachment Pin #1
- 21 022-386 5mm Hex Wrench
- 22 022-822 4mm Hex Wrench
- 23 022-823 M5 x .8 x 10mm Long SHCS
- 24 003-673 5mm Hex Driver Knob

## Replacement Thread Pin Kit

Order #003-629 - Includes Jaw Screw (11), Left and Right Thread Pins (8 & 10), O-Rings (9) and Tube of Grease



### OPTIONAL 30-PIECE ATTACHMENT SET #003-520

Included with  
Microblock Ball Vise  
#003-684