



Standard Block Ball Vise For Engraving and Jewelry Making

INSTRUCTIONS • #003-530

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

The jaw adapter plates are drilled to accept engraving block attachments. GRS offers the 520 Attachment Set (#003-520) that includes storage for the adapter plates and pins that come with the block.

Maintenance

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

Vise Jaw Thread Replacement • #003-627 & #003-628

Overtightening the jaws will cause wear and damage to the threads. If jaws become loose, replace with kit #003-627. Remove the jaws by opening them as wide as possible until they come off the end of the jaw screw (FIG. 1). The jaw thread pin is located on the underside of each jaw. NOTE: Before removing pins, locate the one with the "L". This is the left hand thread pin and will need to be replaced with the same. Apply a small amount of synthetic grease (included in kit) to the O-rings and jaw screw before installing them. Lift the jaw screw out of the yoke and replace it. Note which side the left hand thread is on. Grease the threads and yoke well.

Start the jaw threads at the same time when replacing them (FIG. 2). Hold each jaw in position and turn the jaw screw to close them. Either a large rubber band or a second person is useful to hold the jaws against the thread while the jaw screw is turned. If the jaws don't meet at the same time in the center, remove them and try starting the threads at the same time again.

Rotational Lock Replacement

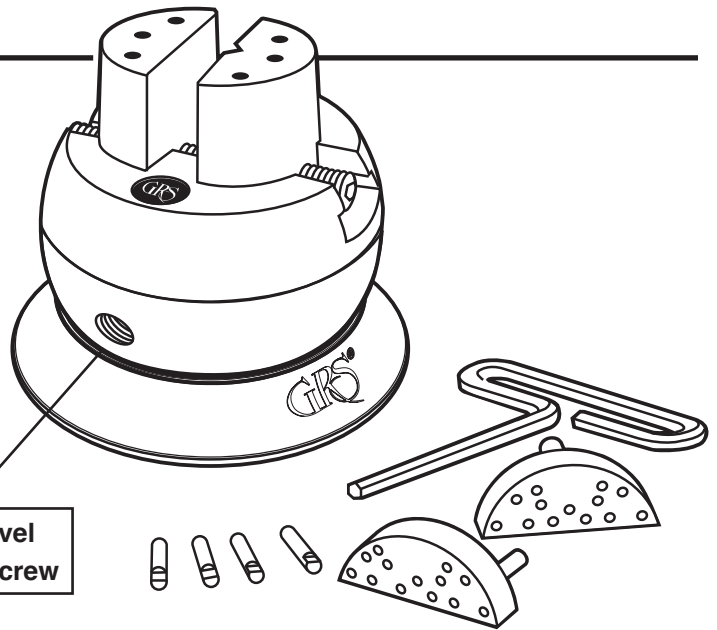
The LOCK or DRAG PIN is subject to wear and may need replacement after extended use. Simply remove the ball swivel tension screw with the hex wrench. The Spring and Lock Pin should follow (FIG. 3). If not, turn the ball until they fall out. Replace the Lock Pin (#003-046), Spring, and Tension Screw.

Turntable Base For Microscope Work • #003-616-V2

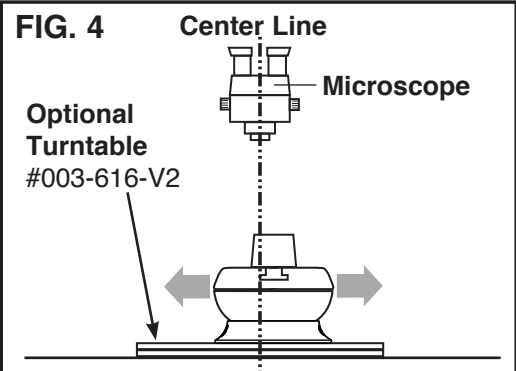
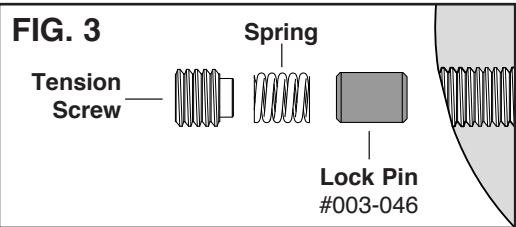
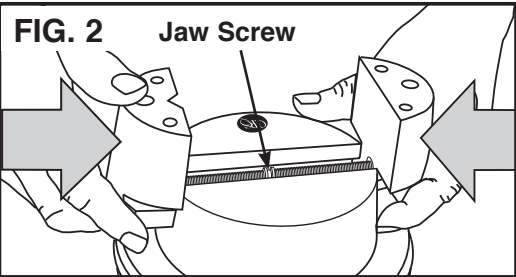
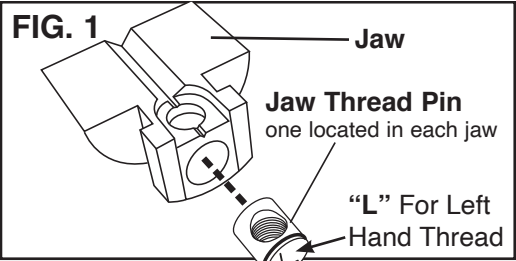
To use the Turntable Base, lock the vise by tightening the swivel tension screw until the ball will not turn. The turntable now becomes the means of rotation, allowing the work to be centered in the field of view of the microscope. Align the center of the turntable with the center of the microscope view (FIG. 4). Change working views by repositioning the vise.

Thread Pin Replacement Kit • #003-628

Includes Jaw Screw, Left and Right Thread Pins, O-Rings, and Tube of Synthetic Grease.



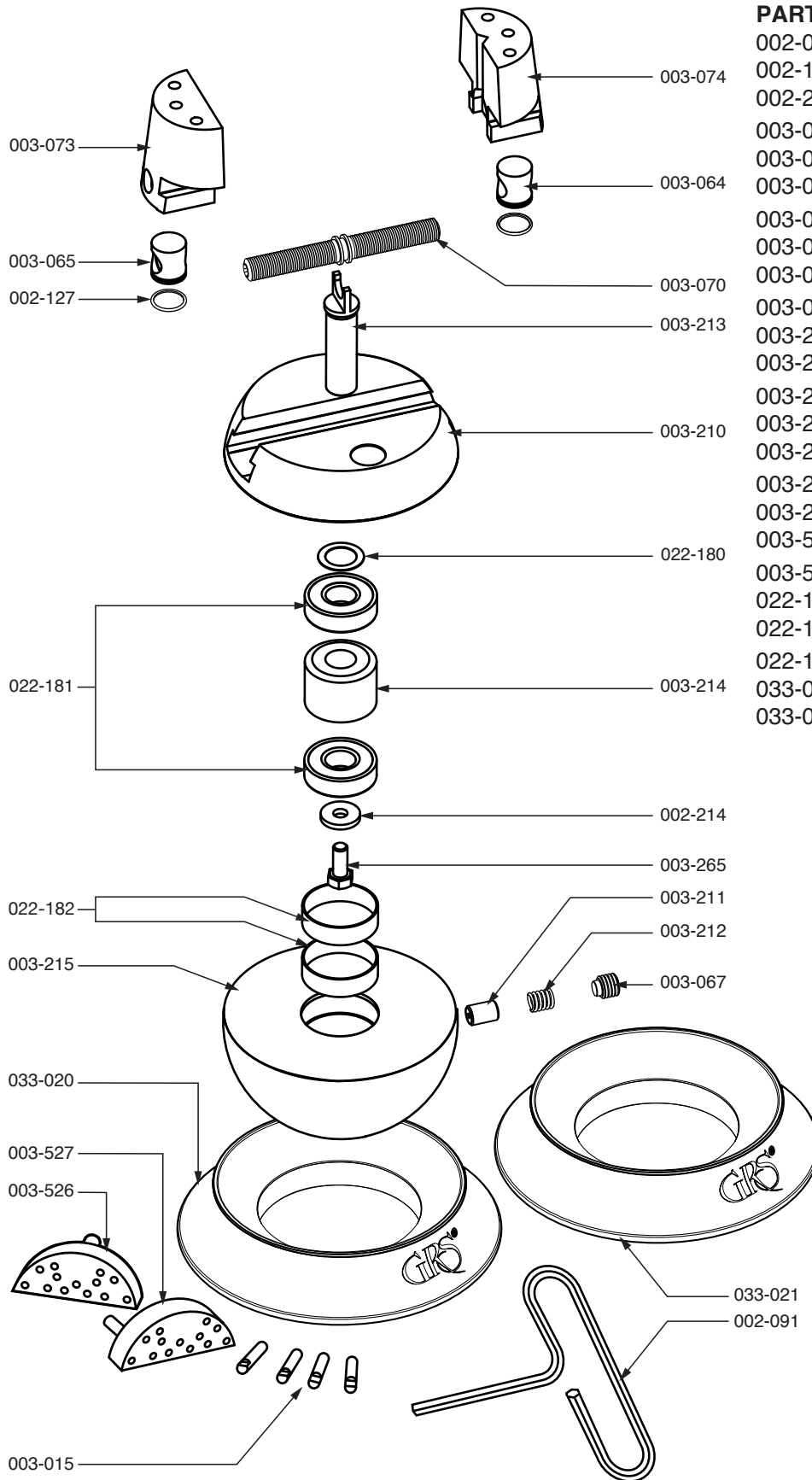
Ball Swivel
Tension Screw





Standard Block Ball Vise For Engraving and Jewelry Making

PARTS LIST • #003-530



PART #	DESCRIPTION
002-091	Wrench - 1/4" T-Handle Hex
002-127	O-Ring - 0.625" x 0.75" x 0.062"
002-214	Washer - 0.312" x 0.859" x 0.125"
003-015	Jaw Pin - 1/4"
003-064	Pin - Left Hand
003-065	Pin - Right Hand
003-067	1/2 - 13 x 1/2 SSS Flt Pt HF Dog
003-070	Screw Post
003-073	Jaw - Right Hand
003-074	Jaw - Left Hand
003-210	Block Crown S.S.
003-211	Lock Pin
003-212	Spring
003-213	Post
003-214	Spacer
003-215	Block Base S.S.
003-265	5/16-18 x 3/4" Flange Head
003-526	Pin Plate - 1 pin
003-527	Pin Plate - 2 pin
022-180	Washer
022-181	Bearing 6203ZZ
022-182	Tolerance Ring
033-020	Large Block Base Ring Plastic
033-021	Large Block Base Ring Rubber

GLENDO LLC

900 Overlander Road • Emporia, KS 66801 USA
 800-835-3519 • 620-343-1084 • Fax: 620-343-9640
 hello@grs.com • grs.com
 Last Updated: 2021-11-17

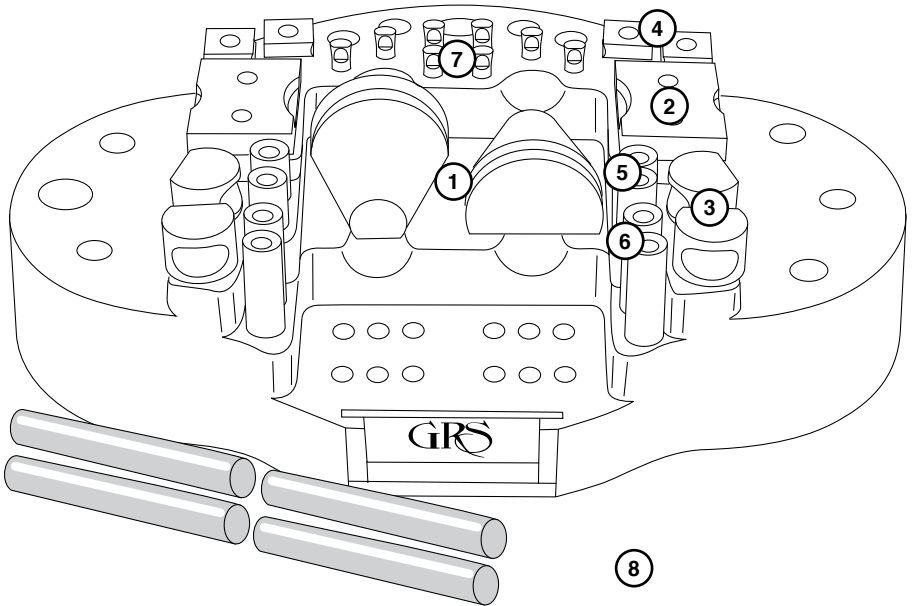


Attachment Set

for GRS Ball Vises • #003-520

With a variety of pins that fit the upper jaw plates of every GRS Block, users can now instantly solve workholding problems and start working sooner. Includes 4 one-half Thermo-Loc sticks, 8 small pins, 4 flat square pins, 2 rectangular inset-curve pins, 4 thick round inset pins, 8 rubber-coated pins, and 2 leather-faced ring clamp pins in molded base.

For more information and instructions on Thermo-Loc's use, please visit: www.thermo-loc.com.



PART #	DESCRIPTION	QTY.
1	003-513 Ring clamp assembly	2
2	003-514 Attachment plate #3 assembly	2
3	003-515 Attachment plate #2 assembly	4
4	003-516 Attachment plate #1 assembly	4
5	003-517 Attachment pin #3 assembly (short)	4
6	003-518 Attachment pin #2 assembly (long)	4
7	003-050 Formed complete attachment pin #1	8
8	011-419 Thermo-Loc (6" PCS)	2

GLEND O LLC

900 Overlander Road • Emporia, KS 66801 USA
 800-835-3519 • 620-343-1084 • Fax: 620-343-9640
grs@grstools.com • www.grstools.com
 Last Updated: 2014-12-2



S U V A
LAPIDARY SUPPLY

DIAMOND WHEELS
PIXIE COLLECTION
GENIE COLLECTION
TITAN COLLECTION
CABBING SUPPLIES
CARVING SUPPLIES
TUMBLING SUPPLIES



GLENDO LLC

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 PRODUCT IDENTIFIER(S)

Product Name: Thermo-Loc

Stock Number: 003-520, 003-664, 003-665, 003-666, 003-667, 003-679, 004-800, 003-520MPV, 003-522, 003-531, 003-684, 003-683, 003-685, 003-698, 006-510, 006-510-LJ, 006-520, 006-521, 003-684

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified uses: Thermoformed Shapes

Uses advised against: None known

1.3 COMPANY INFORMATION

Distributor's Name: Glendo LLC

Address: 900 Overlander Road, Emporia, KS 66801

Phone: (620) 343-1084

1.4 EMERGENCY TELEPHONE NUMBER

CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not classified as hazardous per OSHA GHS CFR 1910.1200

Not classified as hazardous per Directive 67/548/EEC or Directive 1999/45/EC

No classification to Regulation (EC) NO 1272/2008

2.2 LABEL ELEMENTS

Not applicable

2.3 OTHER HAZARDS

Molten material will produce thermal burns.

Post processing that produces fumes or dust may result in eye, skin, nose, lung, or gastrointestinal irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

3.2 MIXTURE

Proprietary blend of thermoplastic materials

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

In case of eye contact: Material that contacts eye should be washed out immediately with water. If possible remove contact lenses. Get medical attention if symptoms persist. If molten material contacts eye, flush with plenty of water for at least 15 minutes. Get medical attention immediately.

4. FIRST AID MEASURES (continued)

In case of skin contact: Wash with soap and water. Get medical attention if symptoms occur. If burned by contact with hot material, cool with plenty of water. Do not remove and get medical attention.

If inhaled: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

If swallowed: Seek medical attention.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Burns should be treated as thermal burns. Seek medical attention for removal of material from skin.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No additional information known. Always seek medical attention when in doubt.

5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Water spray, foam, dry chemical, or carbon dioxide.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Powdered material may make for explosive dust-air mixture.

5.3 ADVICE FOR FIREFIGHTERS

Minimize dust generation and accumulation. Wear self-contained breathing apparatus and full protective clothing in case of fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Product sold as a solid sheet. Not a spill hazard.

6.2 ENVIRONMENTAL PRECAUTIONS

Avoid release of pieces and dust to the environment.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Sweep up pieces and dust. Place in container clearly labeled for chemical waste.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid contact with molten material.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store out of sunlight, and in a dry location.

7.3 SPECIFIC END USES

Thermoformed shapes.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS; OCCUPATIONAL EXPOSURE LIMITS

Exposure limits have not been established.

8.2 EXPOSURE CONTROLS; APPROPRIATE ENGINEERING CONTROLS

Good ventilation (10 air changes per hour recommended) should be used when working with material. When working with molten material, wear eye/face protection and protective gloves and clothing. Wear a dust mask or respirator if dust or fumes are formed when using material.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

General Information

Appearance: Solid sheet

Color: Opaque, off white

Odor: Odorless

pH: No data available

Softening point: > 120 F

Boiling point: No data available

Flash point: Not applicable, combustible solid

Evaporation rate: Not determined

Flammability Limit - Upper (%): No data available

Flammability Limit - Lower (%): No data available

Vapor pressure: Not determined

Vapor density (air=1): No data available

Specific gravity: > 1

Solubility in water: Negligible

Solubility (other): No data available

Partition coefficient (n-octanol/water): No data available

Autoignition temperature: No data available

Decomposition temperature: Not determined (stable at expected operation temperatures)

Viscosity: Not determined

Explosive properties: No data available

Oxidizing properties: No data available

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

None known.

10.2 CHEMICAL STABILITY

Stable.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None known.

10.4 CONDITIONS TO AVOID

None known at ambient temperatures.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Dioxide, Carbon Monoxide, 2-Oxepanone Hexan-6-Olide (CAS# 502-44-3).

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

INFORMATION ON LIKELY ROUTES OF EXPOSURE

Inhalation: Not likely, sold as solid sheet

Skin contact: Molten material will produce thermal burns

Eye contact: Molten material will produce thermal burns

Acute toxicity (Oral): No data available

Acute toxicity (Dermal): No data available

Acute toxicity (Inhalation): No data available

Repeated dose toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity (in vitro): No data available

Germ cell mutagenicity (in vivo): No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

Acute toxicity: No data available

Chronic toxicity: No data available

Toxicity to aquatic plants: No data available

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available

Biological oxygen demand: No data available

Chemical oxygen demand: No data available

BOD/COD ratio: No data available

12.3 BIO ACCUMULATIVE POTENTIAL

No data available

12.4 MOBILITY IN SOIL

No data available

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

No data available

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Dispose of waste in accordance with local requirements. Incinerate.

14. TRANSPORT INFORMATION

DOT: Class not regulated

IMDG: Class not regulated

IATA: Class not regulated

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

OSHA: nonhazardous

TSCA (US Toxic Substances Control Act): All components are listed on the TSCA inventory

16. OTHER INFORMATION

User is granted the ability to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. GLENDO, LLC. shall not be held liable for any damage resulting from handling or from contact with the above product.

Issuing Date: 08/30/2022

Supersedes: 05/15/2017