



#004-725, #004-726

# GRS<sup>®</sup> Metal Former & Accessory

OPERATION AND MAINTENANCE MANUAL

## READ THIS MANUAL ENTIRELY BEFORE USE.

Damage may result from not following the instructions and maintenance in this manual.

### **IMPORTANT NOTICE FOR OPERATORS**

Follow this manual to prevent product / material damage. If you have any questions, please contact us (p. 4) for support.



The Low-Temp-Melt Material included with #004-725 may be carefully heated as instructed in this manual.



**DO NOT HEAT URETHANE IN SET #004-726.**

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## INTRODUCTION

Form perfect “C” style bracelets every time with the GRS Metal Former and optional accessories. Take a flat engraved bracelet and shape it easily using a Forming Die and Die Cup. The optional die set is made to shape non-traditional jewelry metal such as steel — and it’s perfect for creating low dome or flat bracelets.

### BEFORE YOU START

Read all directions carefully before setup, installation, and use to prevent damage to products or materials. Use the Die & Material Guide table (p. 1) to choose the appropriate parts for different metals.


### GRS Metal Former, #004-725 Includes:

(1) Low-Temp-Melt Metal die cup, (2) dies, (1) body, base, and handle unit.

### Urethane Die & Flat Die Set, #004-726 Includes:

(1) urethane die cup, (1) flat die.

## DIE & MATERIAL GUIDE

<i>Table 1</i>	Low-Temp-Melt Metal Set #004-725	Urethane Set #004-726  <b>DO NOT HEAT!</b>
Typical Metals	gold, silver, copper	most steels
Metal Thickness	0.03" — 0.08" (0.0762 cm — 0.2032 cm)	
Inner Curve	Standard Dome	Low Dome, Flat
Strip Width	0.25" - 1.25" (0.635 cm - 3.175 cm)	0.25" - 0.75" (0.635 cm - 1.9 cm)

### NECESSARY TOOLS

The following tools are not included but required to make certain modifications or adjustments.

Necessary tools may include:

- Electric Drill (for mounting)
- (2) 1/4" Bolts or Similar Wood Screws
- Screwdriver for bolts or screws
- Heating Device (for Low-Temp-Melt Metal)

## **SETUP & ADJUSTMENTS**

Use the illustrations as visual aids for the following instructions.

### **Setting the Pivot Tension**

The pivot tension is factory-set during assembly. However, if you prefer a different tension:

1. Locate bolt shown in *Fig. 1a*. Loosen (DO NOT REMOVE) using included hex wrench.
2. Next, locate nut in *Fig. 1b*. Tighten or loosen to attain desired tension.
3. Tighten loosened bolt. [*Fig. 1c*]

### **MOUNTING THE FORMER**

Mounting the former, which we suggest for best performance, gives you a free hand to guide the bracelet.

1. First, make sure desired pivot tension is set and the mounting area is level (to avoid spills when heating the Low-Temp-Melt Metal).
2. Do one of the following:
  - Install a **ceramic pad or metal plate** to provide insulation for your bench surface.

OR

  - Position the Metal Former so it is easy to remove from the bench before using a heating device.
3. Use the two mount holes on the base [*Fig. 2*] with 1/4" bolt or similar size wood screw and secure to your bench surface.

### **CHANGING THE DIE & CUP**

The larger die and die cup are installed during assembly. To change [*Fig. 3*]:

1. Lift handle to a comfortable level.
2. If die is installed, use thumb screw to remove. Insert new die on handle.
3. Holding die in place, secure thumb screw onto die set screw.
4. Loosen die cup base screws on the former base and remove current die cup if necessary. Place new die cup over screws and twist cup to align.
5. Tighten screws to secure.
6. Check that the die and die cup are aligned. If not, reinstall die.

### **FORMING THE LOW-TEMP-MELT METAL**

The Low-Temp-Melt Metal is an alloy composed of bismuth and tin, which melts at 281°F. The alloy is soft enough to prevent damage to the material being formed, but stable enough to prevent distortions during the forming process.

*A level surface is required.*

To form [*Fig. 4*]:

1. Lift handle away from die cup.
2. Install and set Stop Screw so that handle stops parallel to base.
3. Lift handle, then heat die cup material with heating device until the material has liquefied.
4. Slowly lower die into material until the handle is against the Stop Screw.
5. Allow material to cool. Do not move the former until cooled.
6. When cooled, lift handle. Remove and store screw.

## **USING THE FORMER**

Easily shape "C" style bracelets after engraving and before setting stones. Before you begin forming, check the Die & Material Guide (p. 1) first. To use:

1. Start with end of bracelet on the die cup under forming die.
2. Press down on handle with adequate pressure to form the material.
3. Continue to work the bracelet through the former until you have reached the desired "C" style shape.

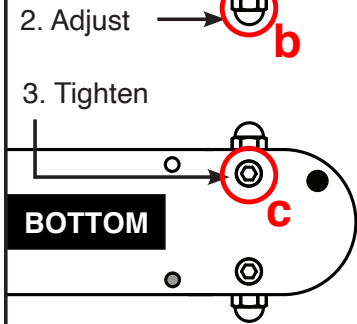
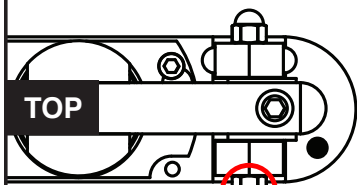
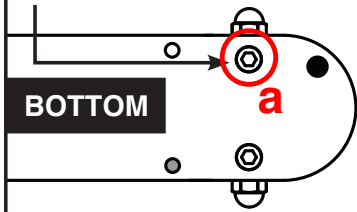
You may find that additional shaping by hand or small hammer is needed to achieve a more specific shape.

## **TIPS & NOTES**

- Any future adjustments to the pivot tension may be made only after dismantling the former.
- Every time you change the die for the Low-Temp-Melt Metal Die Cup, you must heat and form the metal to the die again.
- Recreate a uniform Low-Temp-Melt Metal surface by heating and reforming.
- Forming should ALWAYS take place after engraving but before stone setting.
- Protect work from light abrasions during the forming process by covering with non-damaging tape.

**Fig. 1**

- 1. Loosen
- DO NOT REMOVE-

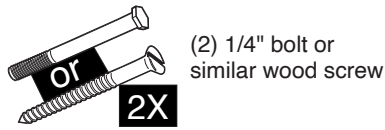


- 2. Adjust

- 3. Tighten

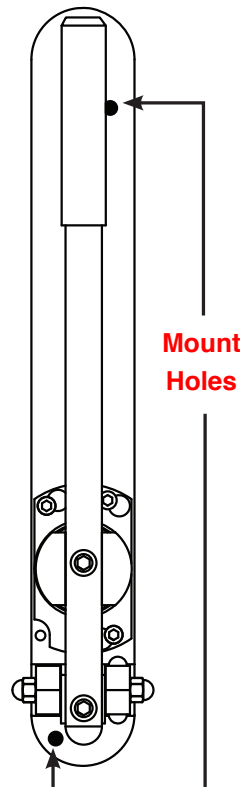
**Fig. 2**

- ✓ Set Pivot Tension
- ✓ Surface = Level
- ✓ Install Pad / Plate -OR- Position for Easy Dismount



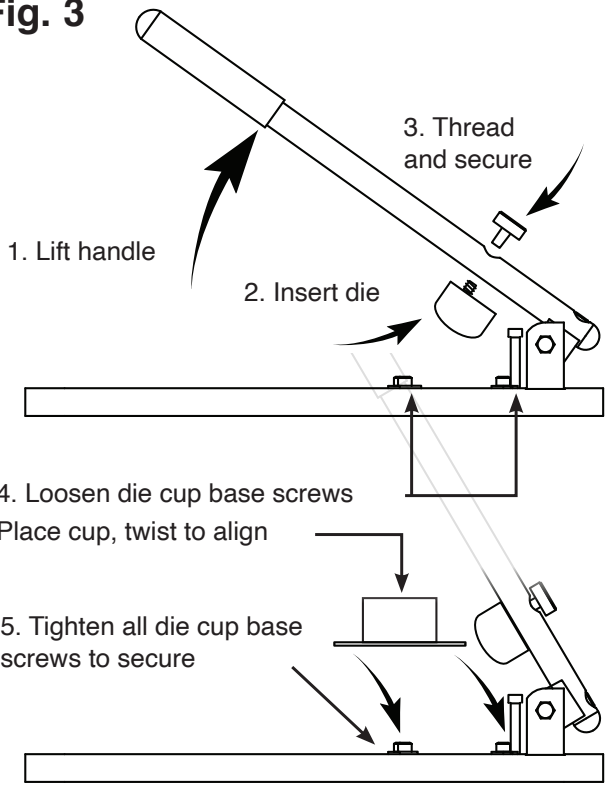
- Select Bolt or Screw

- Secure to level Bench using Mount Holes



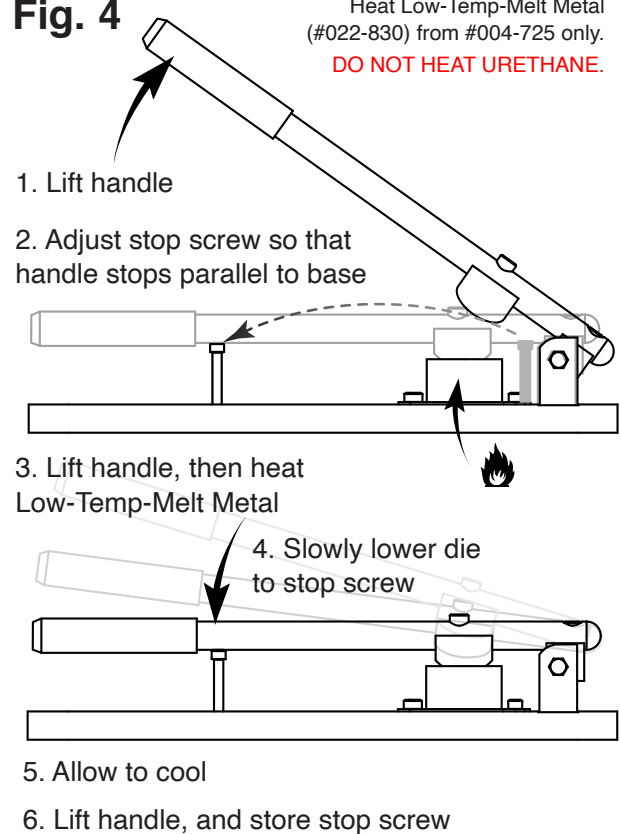
**DO NOT HEAT URETHANE IN SET #004-726.**

**Fig. 3**



**Fig. 4**

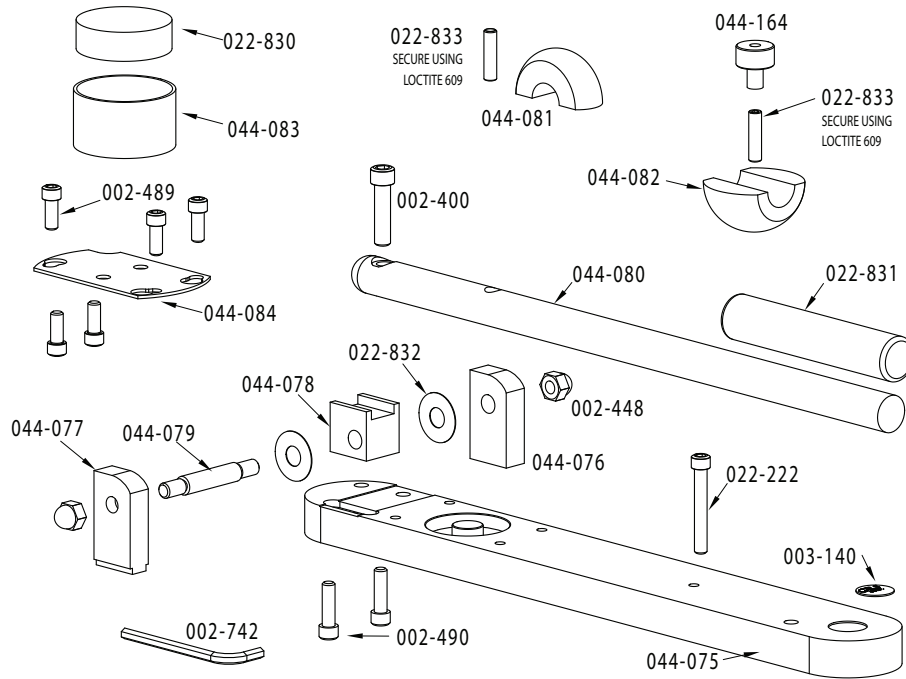
Heat Low-Temp-Melt Metal (#022-830) from #004-725 only.  
**DO NOT HEAT URETHANE.**



# GRS Metal Former #004-725

## PARTS LIST

For Material Safety Data Sheet on Low-Temp-Melt Metal contained in #022-830, please contact us.



Part No.	Description
002-400	1 - Cap Screw for Handle (1/4-20 x 1-3/4" SHCS)
002-448	Nut - 2 (5/16-18 Acorn Z/P)
002-489	5 - Cap Screw for Die Cup (1/4-20 x 1-3/4" SHCS)
002-490	2 - Cap Screw for Former (1/4-20 x 1-3/4" SHCS)
002-742	3/16" Hex Wrench
003-140	GRS Decal
022-222	Stop Screw (1/4-20 x 1-3/4" SHCS)
022-830	Low-Temp-Melt Metal
022-831	Handle Grip
022-832	Washer for Pivot Block
022-833	Set Screw (1/4-28 x 1" SHSS)
044-075	Former Base
044-076	Right Post
044-077	Left Post
044-078	Center Pivot Block
044-079	Pivot Shaft
044-080	Former Handle
044-081	2" x 1/2" Forming Die
044-082	2" x 1" Forming Die
044-083	Die Cup
044-084	Base Plate for Die Cup
044-164	Thumb Screw (1/4-28)

# Urethane Die Cup & Flat Die Set #004-726

## OPTIONAL ACCESSORY FOR THE GRS METAL FORMER

You can purchase the optional Urethane Die Cup & Flat Die Set to shape non-traditional jewelry metal such as steel.

It's designed to work with harder metals, and this set is useful for low dome or flat bracelets.

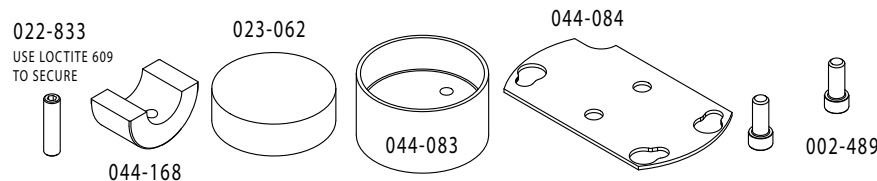
This set features a conformable urethane die cup and a flat forming die. Works as an optional accessory for the GRS Metal Former (#004-725).

Please contact GRS if you have any questions about this product.



**DO NOT HEAT URETHANE IN SET #004-726. DO NOT INGEST.** For Material Safety Data Sheet on Urethane Material contained in #023-062, please contact us.

## Urethane Die Cup & Flat Die Set PARTS LIST #004-726



Part No.	Description	Part No.	Description
002-489	2 - Cap Screw for Die Cup (1/4-20 x 1-3/4" SHCS)	044-168	1.5" x 0.84" Flat Forming Die
022-833	Set Screw (1/4-28 x 1" SHSS)	044-083	Die Cup
023-062	Urethane Die Material	044-084	Base Plate for Die Cup

# GRS®

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