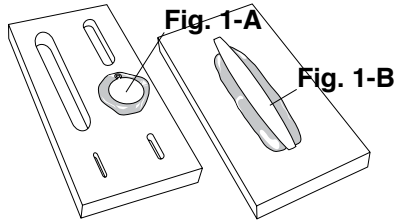
GRS

Thermo-Loc® Form Block

USING THE FORM BLOCK WITHOUT THE ALUMINUM DIVIDER

1. Choose an appropriate slot based on the workpiece size and holding method (vise, ring clamp, etc.). Fill the slot sufficiently with heated Thermo-Loc and pack it into the slot using a blunt metal or non-stick tool. The goal for this step is to completely fill the slot cavity with Thermo-Loc to provide a stable and uniform clamping ledge.

2. Add more heated Thermo-Loc directly above the filled slot to a size and height appropriate to hold your workpiece. Shape the top Thermo-Loc surface so the workpiece will fit it reasonably well. Push the workpiece into the Thermo-Loc and gently work the material up to the edge of the workpiece to hold it securely. Remember that Thermo-Loc sticks aggressively to itself, so avoid letting it flow into hollow or open areas of your workpiece (like filigree jewelry) which can trap your workpiece and make removal difficult. (Fig. 1-A).



3. With a small knife or screwdriver, before the Thermo-Loc fully cools, make a slight depression into the top surface next to the workpiece that is at least as deep as the workpiece itself (Fig. 1-B). This will help you get the workpiece out of the material using a gentle prying action after your work is done.

4. After the Thermo-Loc completely cools, remove the mated Thermo-Loc and workpiece from the form block. It may require a small screwdriver or knife blade to help pry it up and out of its slot.

ITEM #003-699

USING THE ALUMINUM DIVIDER TO MAKE A FLEXIBLE HINGED HOLDER

1. The length of the workpiece determines the length of the hinge cavity. To hold a bracelet blank, for example, you will often use the entire length of the hinge cavity (Fig. 2), while a small pocket knife may require only half of it. The first step is to determine the appropriate length and fill that length of hinge cavity with about 1/8" or 3mm thick Thermo-Loc (Fig. 2-A).

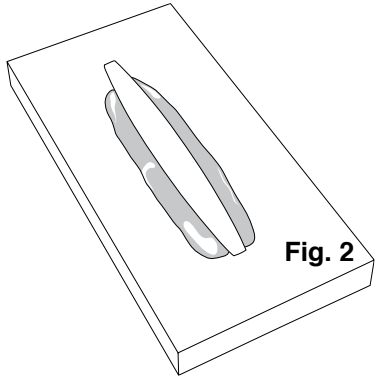


Fig. 2

2. Insert the aluminum divider into the small end slots and press it firmly into the cavity until it bottoms out. If you have done this correctly, the top of the aluminum divider will be parallel to the top of the form block and about 1/4" (6mm) above the top surface (Fig. 2-B).

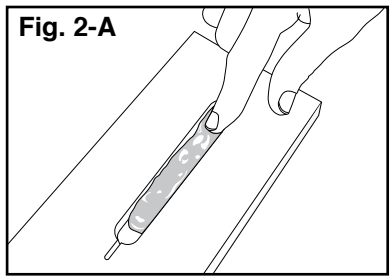


Fig. 2-A

3. Use small amounts of Thermo-Loc to fill both sides of the jaw cavity to the same height at the aluminum divider. Remember, Thermo-Loc loves to stick to itself so do not allow this material to cross the divider. Use the edge of scissors or another piece of flat metal to help press the Thermo-Loc thoroughly into the jaw cavities. Flatten the top of the Thermo-Loc level with the top of the aluminum divider with scissors or a flat metal piece (Fig. 2-C).

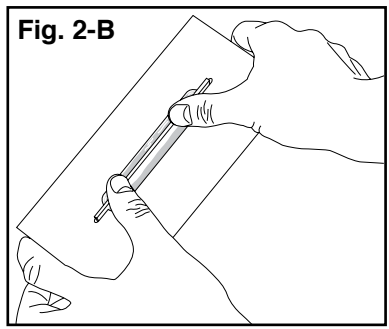


Fig. 2-B

4. Place your workpiece on top of the divider. To hold it properly, gently work the Thermo-Loc around the workpiece using your fingers on opposite sides of the workpiece (Fig. 2-D).

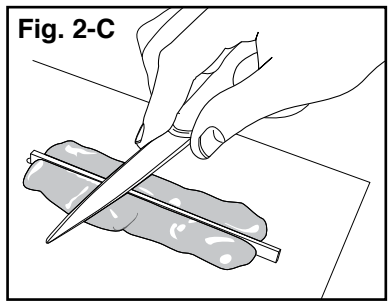


Fig. 2-C

5. When the Thermo-Loc has cooled completely, remove the entire unit from the form block. The Thermo-Loc hinged holder can be separated slightly to remove the workpiece. Next, remove the divider. The custom hinged holder is ready to be used.

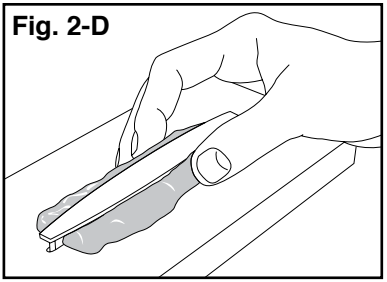


Fig. 2-D

HOW TO USE A FLEXIBLE HINGED HOLDER

1. Place your workpiece in the hinged holder. Then place the holder into an engraving vise, GRS BenchMate, or other such holding device. As you tighten the vise jaws, this will also clamp the workpiece itself by compressing the two halves together (Fig. 2-E).

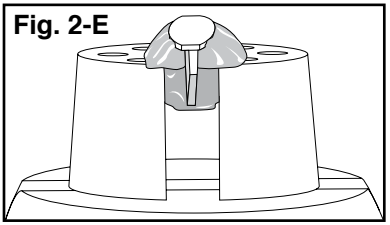


Fig. 2-E

2. HINT: As you work, loosen the vise and reposition the work to stay centered in the vise. This helps your accuracy and work speed by keeping the work zone near the center of your work holder.

HELPFUL TIPS & HINTS

- It often saves time to heat a large amount of Thermo-Loc (6 to 12 sticks) and work it into a single lump of heated material. As needed, cut off the amount for each step with household scissors. Remember, Thermo-Loc sticks to some plastic and painted surfaces, so use a Teflon pad (included with #003-667 Starter Kit).

- To cool Thermo-Loc faster, use compressed air or cool water. Avoid water if you work in steel because Thermo-Loc can trap water for a long time and this may rust your steel workpiece.

- If you want to reheat the Thermo-Loc workholding fixture while making it, you can put the Form Block with the aluminum divider in a microwave oven. Remove your workpiece first. Keep microwave times short (approximately 10 seconds) to avoid overheating and check your progress after each heating cycle.

ADDITIONAL THERMO-LOC PRODUCTS

THERMO-LOC®

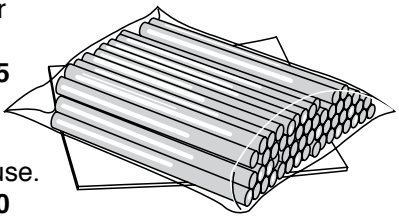
Thermo-Loc softens with heat to a pliable clay-like consistency you can form around your work. At room temperature, it hardens and holds securely. Supplied in 6 long reusable sticks.

#003-664	**0.5 lb.**	**$15.95**
#003-665	**1.0 lb.**	**$26.95**
#003-666	**5 lbs.**	**$108.95**

THERMO-LOC® STARTER KIT

Includes 6" square PTFE/Teflon® pad for microwave use and 1 lb. Thermo-Loc.

#003-667 **$32.95**



PTFE TEFLON® PAD

6" (150mm) square pad for microwave use.

#003-291 **$11.80**

MICRO HOT AIR SYSTEM

Originally designed for electronic hot air soldering, this system has many useful applications including working with Thermo-Loc materials, welding and repairing many types of plastics, and more. It supplies precisely controlled hot air from 210-900°F (100-480°C). Air flow is also adjustable from almost nothing to full flow. It's truly pinpoint heat. Includes three interchangeable round nozzles: 0.1", .17" and .3" diameters (2.5mm, 4.4mm and 7.2mm).

#006-520	**115 Volt, 60 Hz**	**$198.00**
#006-521	**230 Volt, 50 Hz**	**$238.00**

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