

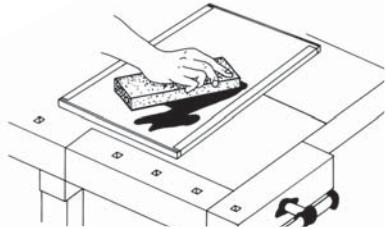
**Figure 1: Components.**

## Assembly Instructions

1. Remove all components from the tank body.
2. Install the adhesive-backed high-friction pads in the outside recesses of the tank base. Press them down well to ensure good adhesion.
3. Slide a clamp block, clamp plate, and tail jaw onto each clamp rod, as shown in **Figure 1**.
4. Set the rods in the tank slots.
5. Slip one cam clamp into each clamp block as shown in **Figure 1**, and secure with thumbscrew.
6. Put  $1/2"$  of water into the tank and put your stones in to soak. They will absorb sufficient water.
7. Put the dust cover on to prevent evaporation.

## Glass Lapping Plate

Included with the glass lapping plate is a 0.010" thick sheet of adhesive-backed laminate. Before lapping your stones, this film should be applied to the lapping plate. Then, add a small amount (1/2 to 1 teaspoon) of 90x silicon carbide lapping compound and a teaspoon or two of water. When the stone is rubbed over the laminate, a slurry will build up between the stone and laminate, rendering a worn stone true again.



**Figure 2: Truing a stone.**

**Note:** The glass lapping plate is a type of safety glass, the virtues of which only become apparent if it is dropped onto a concrete floor on edge. Safety glass can be tempered, wired, or laminated. Tempered glass breaks into hundreds of faceted blocks; it will not break into sharp, pointed shards. If you have seen a broken car windshield, you will know the pattern. Both wired and laminated glass prevent dangerous shards from breaking free of their respective carriers (a wired grid or center laminate). They are all expensive, but very tough and safe.

## Using your Stone Pond

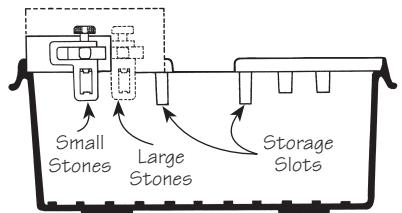
Your Stone Pond is designed to be a self-contained sharpening station. It can be used to clamp your stones while they are in use, to store them when they are not in use, and to keep them perfectly flat so that they can be used effectively. The system is designed to be used in freehand sharpening or with an on-stone honing guide.

It has two clamping bars so that you can have both a coarse stone and a finishing stone clamped in the case at one time. The box is designed so that the stones are at the very top edge of the case; this gives you good clearance when you leave your chisel or plane blade clamped in a honing guide while working alternately on the bevel and on the back of the blade.

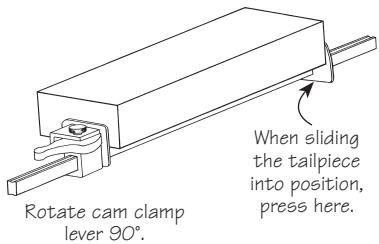
## Clamping Your Stones

For most stones, you would put the clamping bar in the slots closest to the edge of the case; for a very wide stone, you would use the next set of slots. The bar and the inside lip of the case are the same height and both provide support for the stone. Put the bar in the slot with the cam clamp head closest to you and place one stone on the bar.

Fix the clamp head in position with the thumbscrew, and with the cam clamp lever at a right angle to the clamp rod, slide the stainless-steel tail jaw up to the stone using finger pressure on the bottom of the jaw rather than the top. This will ensure that the cam clamp is fitted snugly against the stone, reducing the amount of dead travel of the cam before clamping pressure begins. Once the stone is in position, rotate the cam clamp lever through 90° until it comes to its rest position in line with the clamp rod. Repeat this process with your other stone on the opposite side if you are using two stones.



**Figure 3: Storage slots.**



**Figure 4: Clamping a stone.**

## Storing Your Stones

In general, it is desirable to take the stones out of the clamps and store them directly in the water in the case bottom. The case has been designed with ridges on the bottom to keep stones clear of any sludge. The exception to this practice is the use of Japanese finishing stones with wooden bases. Since these stones do not soak up water in the same manner as the coarser stones, it is not necessary to store them in water. In addition, since they have wooden bases, the wood can warp if it is stored in the water.

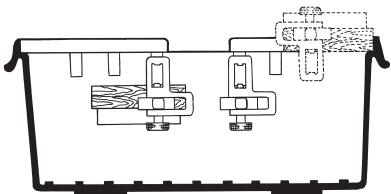
With a wooden-based stone, it is best to leave it clamped, invert the bar, and put it in one of the storage slots at the center of the case. In order to provide the clearance that you will need to replace the glass lapping plate or the lid, both clamping bars must be turned over (as illustrated) and stored in the slots provided.

## Lapping Your Stones

The glass plate is used as a flat lapping surface and the laminate as a wearing surface. Before applying the laminate, create a thin film of water on the glass. This allows you to place the laminate in position and center it as required. To prevent air or water bubbles from becoming entrapped, either roll a dowel or draw the edge of a piece of wood across the laminate (working from the center outward) to bond the laminate in place. With the plate placed on your workbench, add a small amount of 90 grit silicon carbide lapping compound (1/2 to 1 teaspoon) and a teaspoon or two of water. Rub the stone in a circular motion to lap it. Lift the stone periodically and push the compound that has worked its way beyond the circular path of the stone back toward the middle. You can tell with a visual check as soon as any hollowness in the stone has been removed. You will have an even and consistent "scratch pattern" across the surface. Wash your stone of the silicon carbide particles before use.

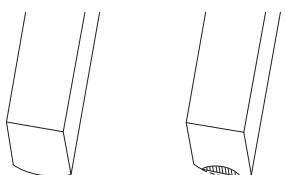
You can use the lapping plate for truing both your coarse and fine stones. On the other hand, you may prefer to true your fine stone with a coarse stone once the coarse stone has been lapped flat. This is easy to do simply by rubbing the two stones together (while wet).

If you do not keep your stones lapped, you will not have straight edges on your plane blades or chisels. You can immediately notice when one stone is dished and the other is true by looking at the abrasion pattern on the tool that you are sharpening. For example, if you have a dished coarse stone and a true finishing stone, when you transfer from the coarse stone to the finishing stone you will see a crescent-shaped abrasion pattern on your bevel. This is because you have shaped the edge to a slight arc on the coarse stone and only the high point of this arc is being abraded by the finishing stone. It is so easy to keep stones properly lapped with this system that you should never encounter this sort of problem.



When storing a wooden-based stone, put the clamp assembly (with the stone in it) in a storage slot.

**Figure 5: Storing a wooden-based stone.**



**Figure 6: Result of shaping on a hollow stone and finishing on a flat one.**

## **General Care of the Stone Pond**

A dust cover is provided with the Stone Pond so that it can be stored anywhere in the shop without having dirt or sawdust contaminate the lapping plate or water in the case. It also controls water evaporation.

Your lapping plate comes with a sheet of 0.010" thick laminate. Its purpose is simply to avoid wearing a trough in the glass lapping plate. Being only 0.010" thick, it conforms to the flat surface of the plate. The laminate will wear and become concave itself. Once worn down to the lapping plate, it may be peeled off, and replaced. Replacement laminate sheets and 90 grit silicon carbide are available.

## **Accessories**

**05M20.07** Repl. 90x Silicon Carbide, 2 oz

**05M20.11** Repl. Laminate Sheets (4)