

FIGURE #2

The Jem Saw 45 will cut slabs of any length with the addition of the slabbing table (stock #20-041). This option allows over the arbor trimming in the case of large or odd shape slabs. Figure #3 is a top view of the installed slabbing table.

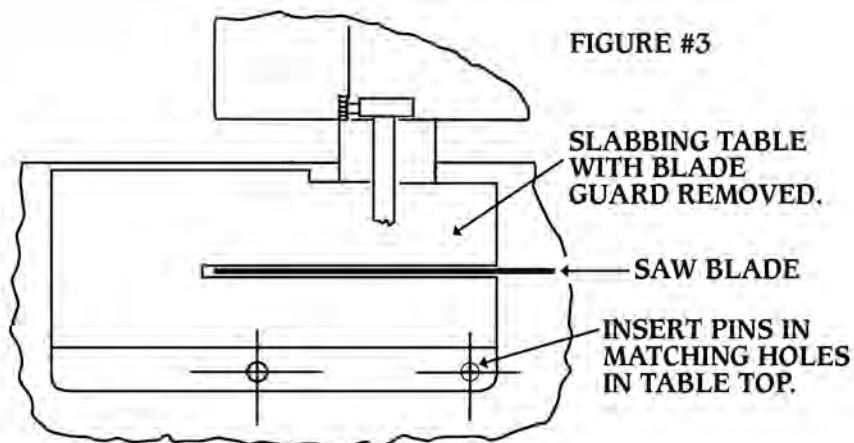


FIGURE #3

CLEANING SUMP

The plastic sump liner has been designed to be easily removed and cleaned when sludge from cutting builds up. Follow instructions for mounting the blade, up until Step 3. At this point, the sump liner can easily be lifted free from the saw and cleaned.

SHARPENING BLAZER BLADES

Raytech Red Blazer blades are exceptionally free cutting and seldom, if ever, require sharpening. However, if the blade is used exclusively on agate or jade, or if the blade has been used to cut hard materials with a water based coolant, the blade may require dressing (sharpening). You can effectively sharpen your blade by cutting 10 sq. in. of an old 100 grit or 220 grit silicon carbide lapidary grinding wheel. Raytech sells a blade sharpening stick made especially for this purpose. (Stock #32-017)

Operating Instructions for Jem Saw 45



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UNPACKING YOUR SAW

Upon receipt of your **Raytech Jem Saw 45**, remove from carton and check for shipping damage. Make sure that all parts have been received. The diamond blade has been packed on the top of the inside of the carton liner. The blade guard and arbor wrench are packed under the saw table in the plastic sump liner. At the front of the motor box, a carriage bolt has been installed for shipping purposes only. The carriage bolt is in a slot directly in front of the motor box hold-down thumbscrew. Remove the carriage bolt and nut and discard. Also for shipping purposes, a plastic washer has been assembled onto the motor box hold-down thumbscrew. Remove the thumbscrew completely to remove the plastic washer. Replace the thumbscrew, and discard the washer. After removing the saw from the carton liner, it may be bolted to a bench using the holes provided in the base. For most work, bolting the saw down is not necessary.

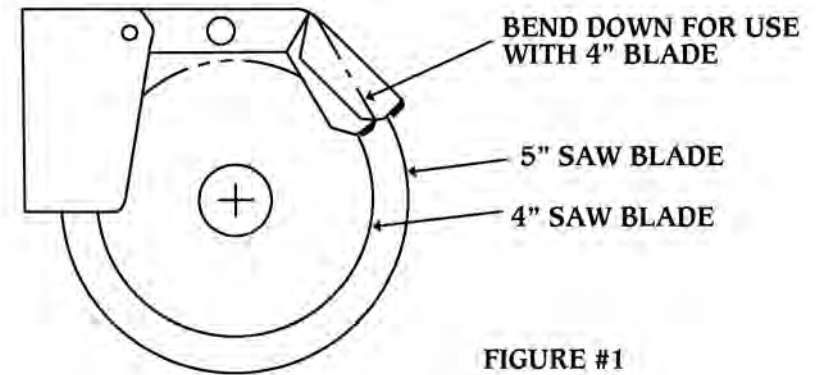
MOUNTING THE BLADE

To mount a diamond blade on the saw, use the following procedure:

1. Unplug electrical cord from wall socket.
2. If the blade guard is attached, remove it by loosening the thumbscrew on top of the motor box.
3. Locate the thumbscrew at the front of the saw which holds the motor box down. Do not remove this thumbscrew, but just loosen enough to swing it forward, freeing the motor box, which can now be lifted up.
4. Lift off the saw table and turn it upside down. You'll notice a small piece of black sponge at the rear of the blade slot. If you are installing a 4" blade, the sponge piece will stay in place. If a 5" blade is to be installed, remove the sponge block.
5. With the allen wrench supplied, remove the button head screw which holds the outside blade flange to the adapter arbor. Insert the outside flange into the 5/8" arbor hole of the diamond blade. If the flange does not fit into the blade, remove the paint from the edge of the blade arbor hole by scraping with a knife. Install blade and outside flange onto the adapter arbor and snug up the button head screw with the allen wrench. Flats are provided on the adapter arbor for a 9/16" wrench if needed to loosen the arbor screw.
6. Lower the motor housing and tighten hold-down thumbscrew.
7. Install blade guard, (SEE "BLADE GUARD ADJUSTMENT") and plug in electrical cord.

BLADE GUARD ADJUSTMENT

The blade guard on the Jem Saw 45 is adjustable to allow either a 4" or a 5" blade to be used. As it comes from the factory, the guard is bent to accommodate a 5" blade. If you are installing a 4", simply bend the front of the guard down (see figure #1) before installing. This will minimize the overspray from the blade.



COOLANTS

A coolant must always be used when cutting with a diamond blade. Your Jem Saw 45 is equipped with a plastic sump to hold the coolant. The saw blade dips into the coolant, carrying it to the rock being cut to keep the blade cool and lubricated, and also flush chips out of the cut area. A light cutting oil such as Shell's Pella Oil, or Texaco's Almag is the best all-around coolant. Pella Oil is available from Raytech by the gallon (stock # 40-007). For light duty trimming of soft materials, Raytech's Ray-Cool water additive is satisfactory (#40-001, 1/2 pint). Ray-Cool contains wetting agents and corrosion inhibitors, but does not contain lubricants. When using plain water or water plus Ray-Cool, it will be necessary to oil the sliding parts of your saw (such as vise rod) from time to time. NOTE: It is not recommended to use water or a water based coolant with Pro-Slicer blades.

To determine the correct amount of coolant to add to your saw, simply pour the coolant slowly onto saw table while saw is running. The correct fill level has been reached when a steady stream of coolant flies off the blade and hits the table.

USING THE SAW

The Jem Saw 45 has been designed to provide the best angle of cut between the blade and saw table. Not only does the blade cut most efficiently with this design, it also allows square inside corners to be cut. (important when trimming out cabs such as hearts and crosses). See figure #2.