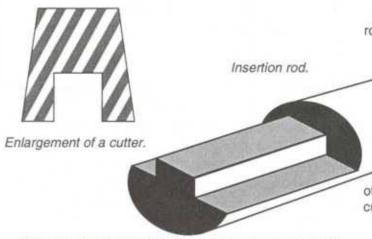


## CLARINET TONE HOLE UNDERCUTTING TOOLS

AUAILABLE FOR BOTH Bb SOPRANO AND Bb BASS CLARINET



This tool was developed at the request of several repair technicians. These technicians had been getting requests to undercut the tone holes on bass and soprano clarinets. Accomplished players feel that this undercutting improves the tone, response and clarity of many of the notes on the clarinet. This tool accomplishes the undercutting that is already standard on many French manufactured clarinets. Now you can perform the procedure on any clarinet. Ferree's G53 Soprano Clarinet Tone Hole Undercutters and G54 Bass Clarinet Tone Hole Undercutters make this undercutting a simple task.

- Choose one of the G53 or G54 Undercutters that matches the tone hole you will be cutting.
- Slide the keyed slot in the bottom of the cutter over the keyed part of the insertion rod.
- Slide the insertion rod (with the cutter resting on it) into the end of the clarinet joint. By looking thru the tone hole, stop the cutter directly under the hole you will be working on.
- Insert the threaded T handle down thru the tone hole and screw it into the undercutter.
  - 5. Pull out the insertion rod from the clarinet joint.
- While holding the clarinet joint, pull up on the T handle and twist it clockwise. This will pull the undercutter against the inside of the tone hole. The clockwise turning will

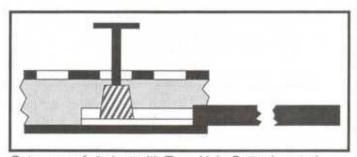
remove the material making a perfect tapered opening. It normally only requires a few turns of the handle ( 5 or 6). Not a lot of upward pressure is necessary.

7. After the hole has been undercut, return the insertion rod into the clarinet joint and insert the keyed end back into the key way in the undercutter.

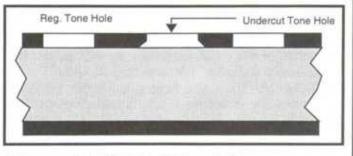
 Now you can unscrew the T handle from the cutter and pull out the insertion rod out of the clarinet. The cutter will come out with the rod.

A G53 Soprano Clarinet Undercutter set consists of the insertion rod, three T handles, and six precision cutters.

- A G54 Bass Clarinet Undercutter set consists of the insertion rod, two T handles and seven precision cutters.
- G53 Soprano Clarinet Tone Hole Undercutter Set (6 cutters)
- G54 Bass Clarinet Tone Hole Undercutter Set (7 cutters)



Cut-a-way of clarinet with Tone Hole Cutter inserted.



Cut-a-way of clarinet showing tone holes.