

**GRINDING INSTRUCTIONS  
INSERTED TOOTH CUTTER HEAD**

The grinding of ITCH cutters is easy and simple when properly set-up. Make yourself familiar with drawing 2075-D-10000. This shows the related parts and their location.

Item "C" is the insert. It is located in the head with a metal dowel pin "A". This provides shelf "B" for correct cutter height and helix angle.

Item "D" is the wedge. It does two things. It has a slot that fits snugly around the locator on the cutter holding the cutter in position sideways and it has a socket head cap screw that, when tightened, locks all parts in the cylinder. **NEVER OVER TIGHTEN.** The screw should be tightened to 195/210 inch pounds.

Item "G" is the guide. It may appear different than the drawing due to various makes and model machines. However, the leading edge in contact with the cutter will be the same. The guide is adjustable up and down and side to side. The portion of the guide in contact with the cutter is at the same angle and about 1/8" wide.

**RULES TO OBSERVE AND FOLLOW:**

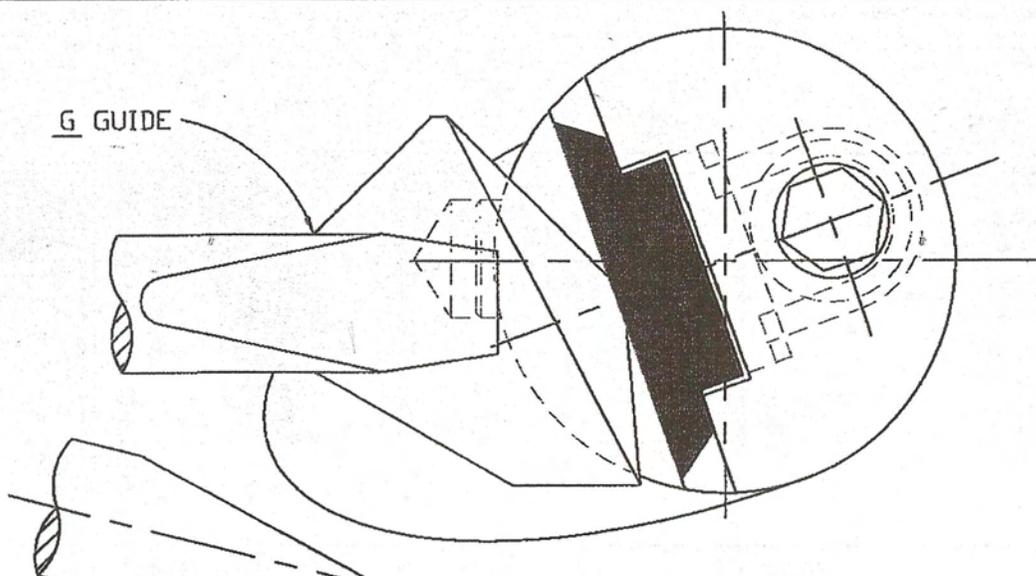
1. Grinding wheel should rotate over the cutter toward the guide.
2. Do not grind the cutters to any less than 3/32" projection above the body of the cylinder.  
The bits have four useable sides and may be rotated in either direction. However, it is suggested they all be rotated the same.
3. Any cutters that may become broken or damaged may be replaced, then ground to match the others.
4. When replacing or rotating the cutters, a little pressure on the cutter downward should be applied while tightening to insure it is seated against ledge "B".
5. When grinding, it is not necessary to grind the complete bevel. Clean up the cutting edge only, taking a very light cut.
6. When making the finish grind, make sure to pass the grinding wheel both left and right over each and every cutter.
7. A torque limiter is furnished pre-set at 200-inch pounds for tightening the wedges, thus locking cutters, etc. in the head. It is suggested the torque limiter be re-checked whenever installing a new set of cutters.

**GRINDING PROCEDURE:**

1. Loosen and remove the cutterhead drive belts. If cylinder is direct driven, disconnect the coupling. In the event the coupling cannot be disconnected, make sure any brake or other restriction is released.  
The cutter head must be able to be rotated freely by hand.
2. Mount the grinding unit and guide.
3. With the grinding wheel raised, the guide is set to ride just over the top of Insert "C". Adjust the guide so the flat on the center of the guide will contact the cutter bit at the center of the grinding wheel.
4. SLIGHT rotation pressure is required on the cylinder while moving the grinding unit.
5. With the grinding wheel raised, try moving the unit across an entire row. The taper edges are for picking up the next cutter.
6. Now select a cutter near the end of the cylinder to test grind. It should be one that can be easily checked with a dial indicator when the grinding wheel is off the end of the cylinder.
7. Test grind this cutter and adjust the guide in or out so the angle matches a new unground cutter; then move the guide forward 1/16".
8. Attach a dial indicator to the grinding unit; then check the cutter you ground from corner to corner. It must read exactly the same on both ends. .001" variation will leave a mark on the finished surface.  
If a correction is required, move the guide sideways slightly. This also requires the guide be moved in or out to maintain the top angle.  
Re-grind and test the trial cutter.
9. When the trial cutter tests the same on both ends, proceed to grind the entire head.

TOOL NAME	NUMBER	LTR	REVISION	DATE	BY
1	-	-	-	-	-

G GUIDE



CUTTER

D WEDGE

NOT TO SCALE

CAP SCREW

CYLINDER

A PIN, PART OF C INSERT

C INSERT

B LOCATER INCLUDED WITH CUTTER

