10. With the hand drill on the universal drive adapter (40) commence boring the machine freewheels (approx. 2 minutes). About half-way down during the cut the cutter begins cutting out the old counterbore ledge. The operator should have a firm grip on the hand drill to be prepared for the increased load on the hand drill from the added metal being cut. Stop immediately when the cutter freewheels or some chatter may occur. (See Fig. 9).

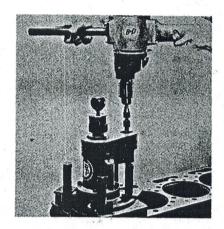


Fig. 9 Starting the Bore Cut

11. Retract the cutter plate (10 or 32) by turning the needle valve knob counter-clockwise and pulling up. Turn needle valve knob to right to close valve to hold it in the up position. Remove the cutter (13) from the cutter plate and then remove the boring machine. (See Fig. 10).

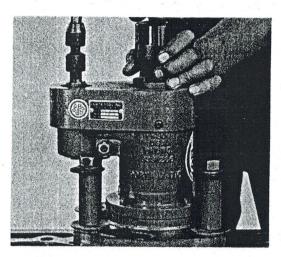


Fig. 10 Retracting Cutter Plate

- 12. Clean away all shavings and deburr the bore with emery cloth.
- 13. Clean the cutter recess in the cutter plate (10 or 32) and remove all chips and material. Also there is an access area where the cutter contacts the main shaft; it is easy to clean this area with a "Q" Tip so you don't bore oversize by accident. However, we do stock oversized repair bushings—just in case you should ever overbore. All we need to know is exactly what size hole you've bored. We can then send you a bushing to fit your bore.

- 14. **IMPORTANT!** It is imperative that you bore your hole and install the repair bushing before going on to the next hole. Never bore all the cylinder bores and then expect to install the repair bushings.
- 15. If the block is to be resurfaced, the rebushing operation should be done first and at least four hours should elapse before resurfacing the block; this gives the Loctite time to set-up.
- 16. Rebushing the counterbore is a very successful operation if the job is done correctly; over 50,000 blocks have been saved in this manner since 1967.

## INSTALLING THE SALVAGE BUSHING

1. Clean the bore and bushing outside diameter thoroughly with PTP-20 PRIMER-T. (See Fig. 11).



Fig. 11 Cleaning Bore with Primer-T

2. Coat the outside diameter of the bushing lightly with PTL-40 LOCTITE COMPOUND and drive it into the bore with the bushing driver (29 through 31) using a soft hammer until it bottoms. A solid sound can be heard when the bushing bottoms. (See Fig. 12). Also see Fig. 14 on back side (this page) which shows bushing driver assembled.

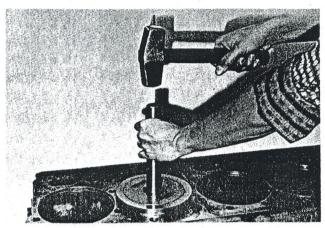


Fig. 12 Driving the bushing into the bore.