Dave Manson Precision Reamers

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The BEST **in the Business**

Notes and Instructions for Using the Manson Recoil Lug Reamer

After truing receiver threads with an oversize tap, any barrels fitted to the receiver must also have oversize threads. This necessitates opening the hole in the recoil lug to fit the new barrel shank diameter. The Manson Recoil Lug Reamer is designed to perform this operation quickly and easily without having to set up the lug in a mill for a time-consuming boring operation.

The Reamer may be used on factory lugs, or any of the aftermarket recoil lugs intended for the Rem 700.

Additional Tools Required

The following tools are suggested for use during the lug-reaming operation:

- Drill press or vertical mill
- Channel Lock-type pliers OR reaming fixture (see separate sheet for design if you want to make one)
- Good-quality cutting oil (Brownells Do-Drill)

Preliminary Steps

Whether using a drill press or a mill, the table must be flat, burr-free and square to the spindle. If it isn't, the reamed hole may not be square to the bearing surfaces of the recoil lug and the lug may bind on the barrels threads when assembled to the receiver.

If using a drill press, the hole in the table must be slightly larger than the reamer (1.075"), but not so large that the curved section of the lug will fall through it. A diameter of 1.100" is about right. The hole must be centered under the spindle so the reamer will go through it with out striking the sides. Check for interference with the table by chucking the reamer in the spindle and running it though the hole in the table without the motor running. Insure the table is clamped securely and cannot move during reaming.

Place the recoil lug on the table roughly centered under the reamer and apply cutting oil to the hole. Bring the non-running reamer down on the lug to center it and hold it in place with the channel-locks. Bring up the reamer, turn on the spindle—LOW, LOW SPEED (40-60 RPM). Check to make sure the lug hasn't shifted too much and run the reamer through the lug with firm pressure, fairly fast. The high-helix design of the reamer will press the lug against the table—you only have to keep it from turning. Bring the spindle back up, turn off the motor and check your work.

You'll likely have to deburr the reamed hole as any chamfer that existed before reaming has probably been removed. Don't be surprised if the hole hasn't completely cleaned up—we've seen a few aftermarket lugs with oval holes.

If using a mill, the procedure is basically the same. You may want to make a plate with a through hole to raise the lug off the mill table, or you may want to consider making a reaming fixture as appears on a separate sheet. In either case, the goal is to have a flat and square surface against which the lug is pressed during reaming—your equipment and experience will determine how best to accomplish this.

The Recoil Lug Reamer, like all tools we manufacture, is warranted against defects in material and workmanship. It will perform the job for which it was designed when used in accordance with accepted machining principles and these guidelines. If you have questions about its use, or suggestions as to how it might be improved, please call or write us. IT'S BETTER TO ASK A QUESTION THAN TO RUIN AN EXPENSIVE TOOL OR COMPONENT.