

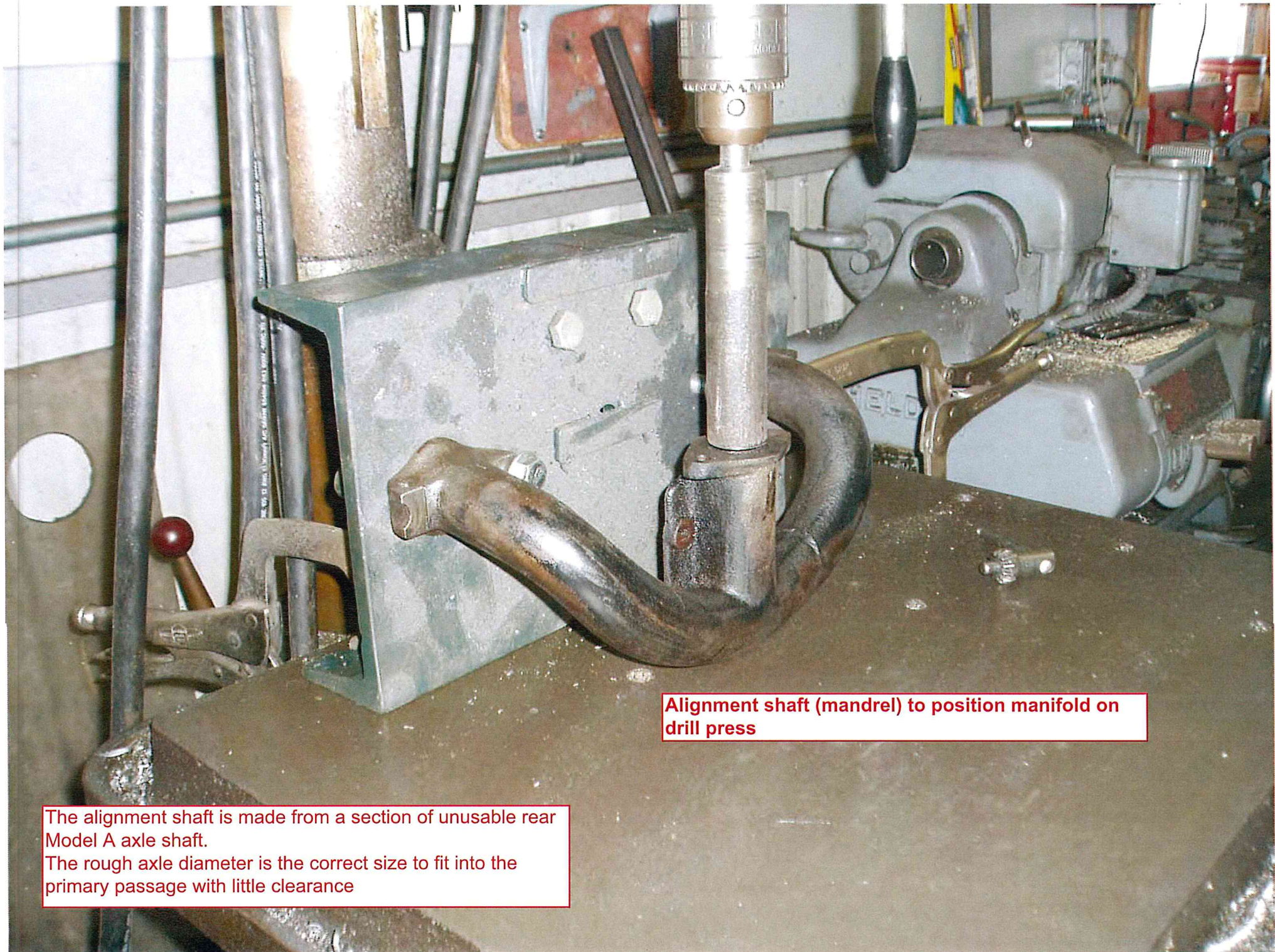
I use the 1-5/16" Drill Bit ( 1.3125")  
for 90% of the manifolds



Check back to my website for updates:  
[www.durableperformance.net](http://www.durableperformance.net)

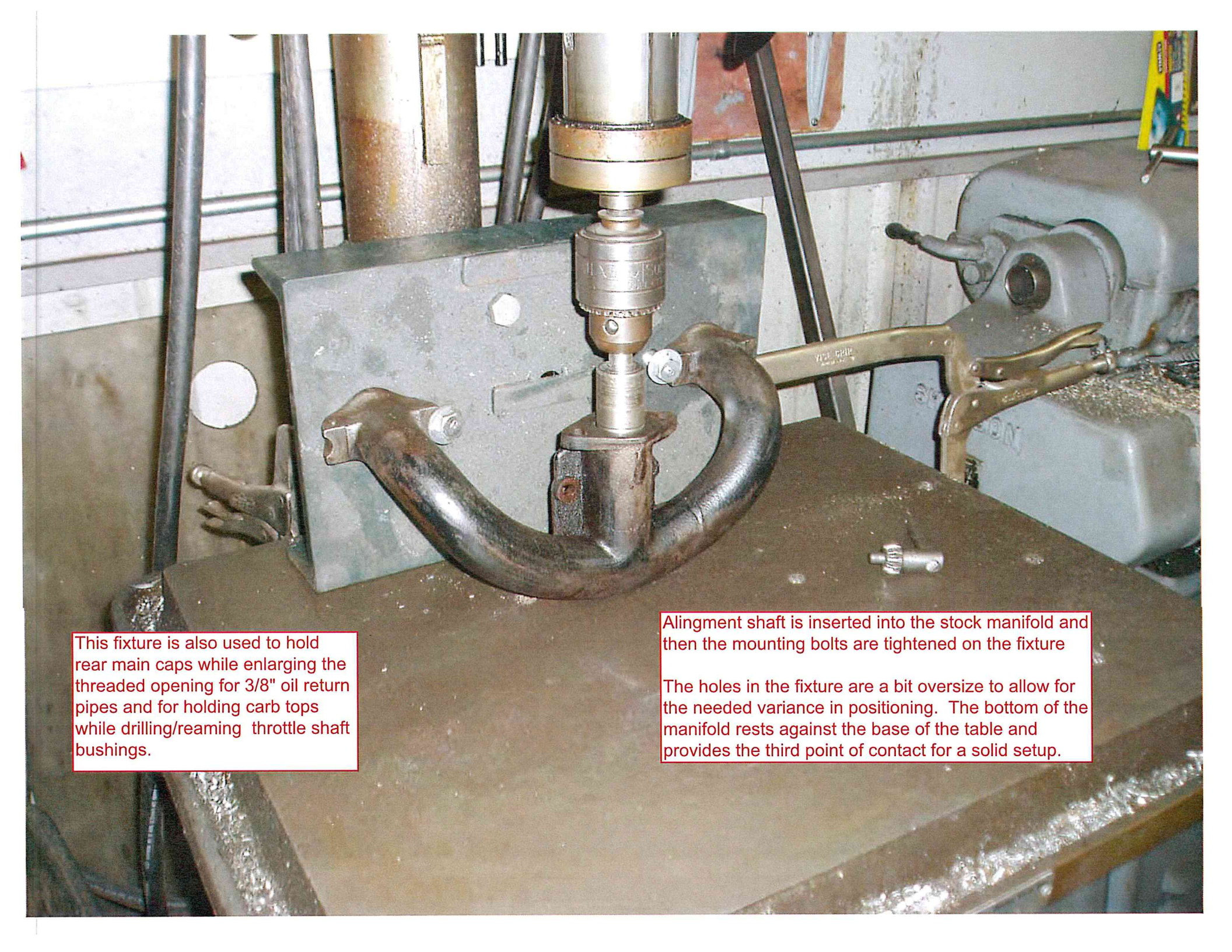
Opening up the Model A manifold will give you a little better performance. The smaller of these two drills will almost provide the air flow of the "B" intake manifold

Using the 1-3/8 drill (1.375") increases the chance of drilling through the outer surface of the intake manifold. Be careful in your setup.



**Alignment shaft (mandrel) to position manifold on drill press**

The alignment shaft is made from a section of unusable rear Model A axle shaft.  
The rough axle diameter is the correct size to fit into the primary passage with little clearance



This fixture is also used to hold rear main caps while enlarging the threaded opening for 3/8" oil return pipes and for holding carb tops while drilling/reaming throttle shaft bushings.

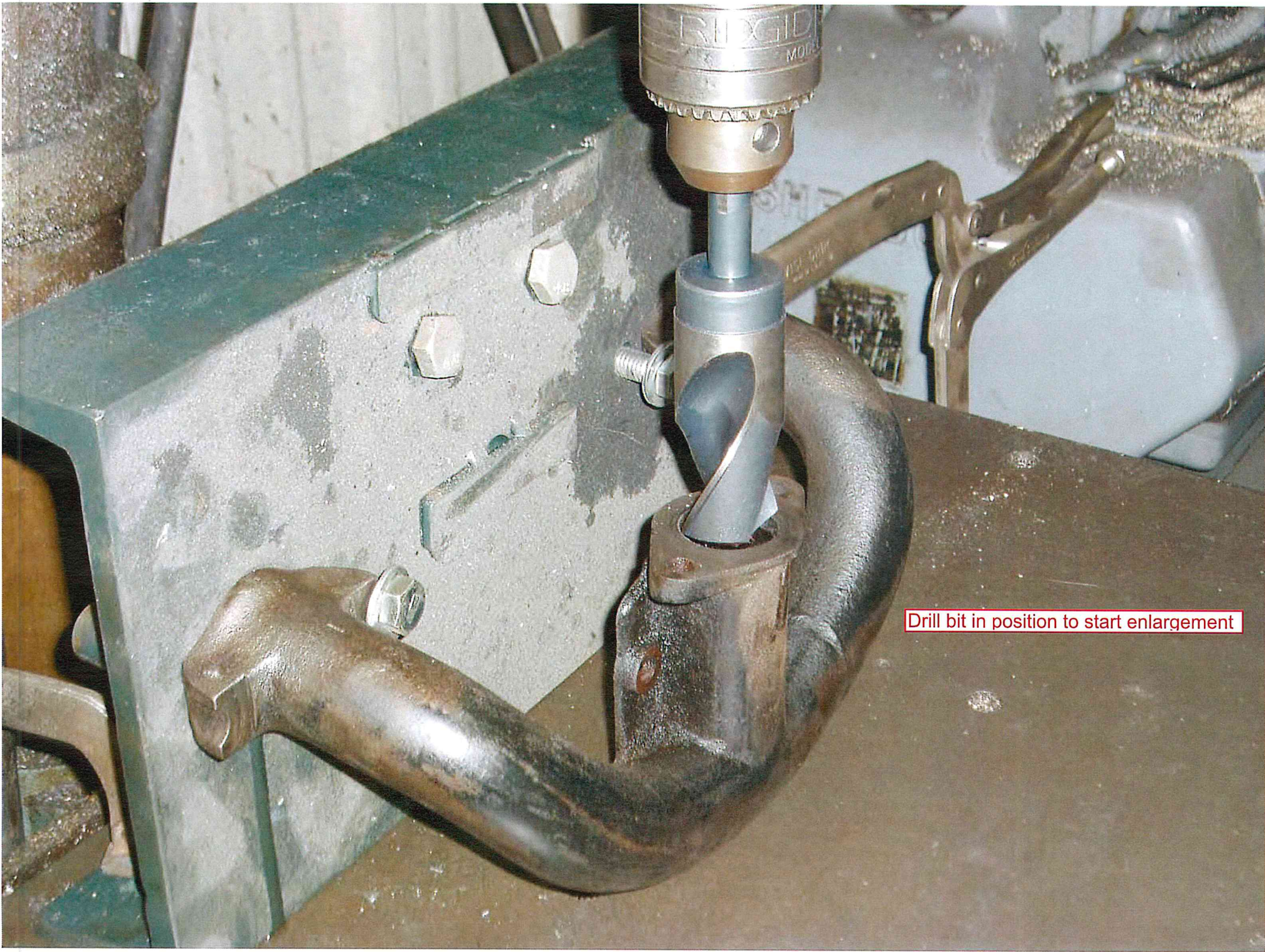
Alignment shaft is inserted into the stock manifold and then the mounting bolts are tightened on the fixture

The holes in the fixture are a bit oversize to allow for the needed variance in positioning. The bottom of the manifold rests against the base of the table and provides the third point of contact for a solid setup.

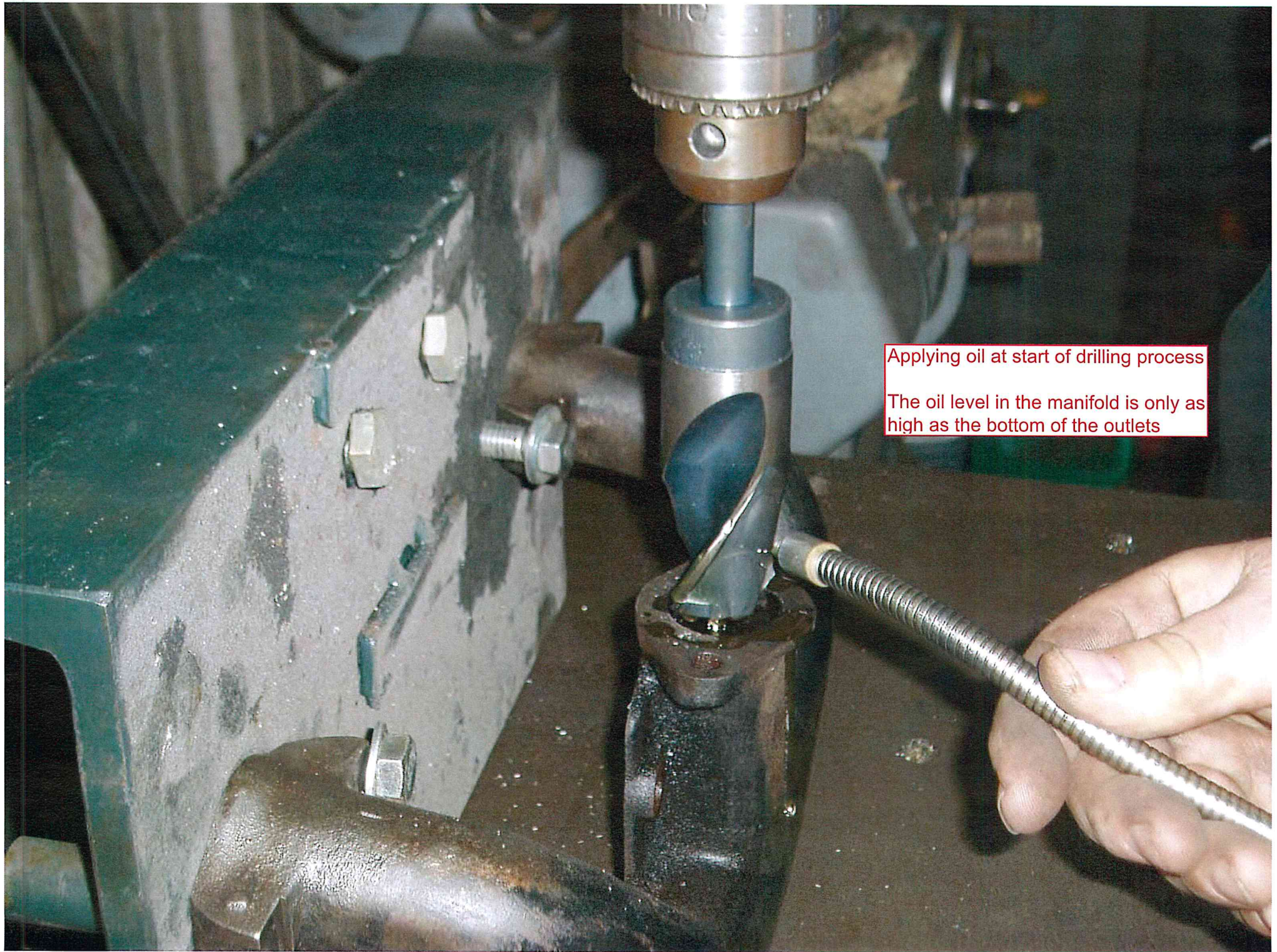
A close-up photograph of a person wearing blue nitrile gloves pouring yellow-green oil from a blue plastic jug into a metal machine. The jug has a yellow label with the word 'NAPA' in black. The machine is a dark grey metal block with several bolts and a large, curved metal handle. A silver drill bit is mounted vertically on the machine. The background is a wooden wall.

Oil is poured into the intake to lubricate the drill bit  
The oil level is kept below the lowest outlet opening

Note the alignment shaft has been replaced with the drill bit

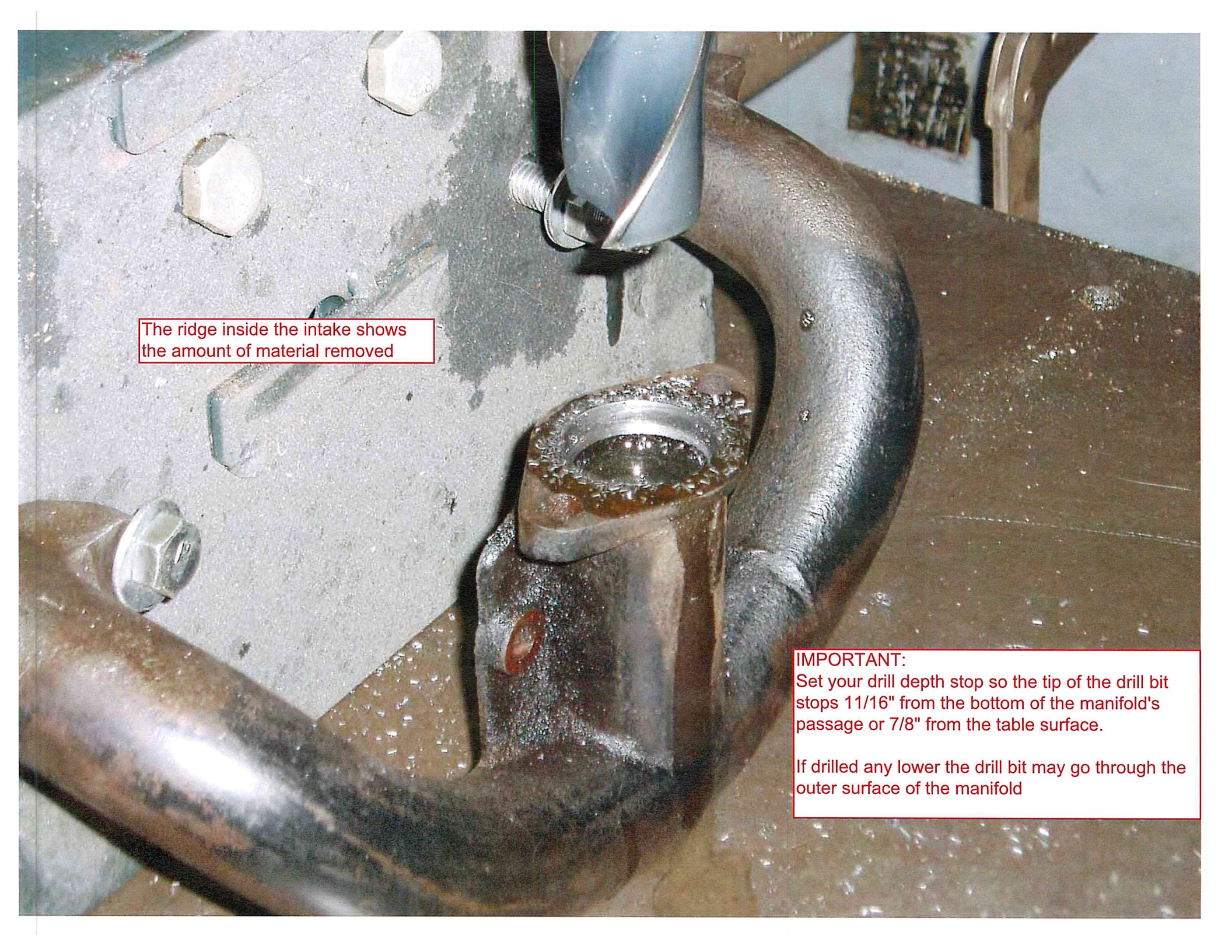


Drill bit in position to start enlargement



Applying oil at start of drilling process

The oil level in the manifold is only as high as the bottom of the outlets



The ridge inside the intake shows the amount of material removed

**IMPORTANT:**

Set your drill depth stop so the tip of the drill bit stops  $11/16$ " from the bottom of the manifold's passage or  $7/8$ " from the table surface.

If drilled any lower the drill bit may go through the outer surface of the manifold

Saving the oil for the next manifold



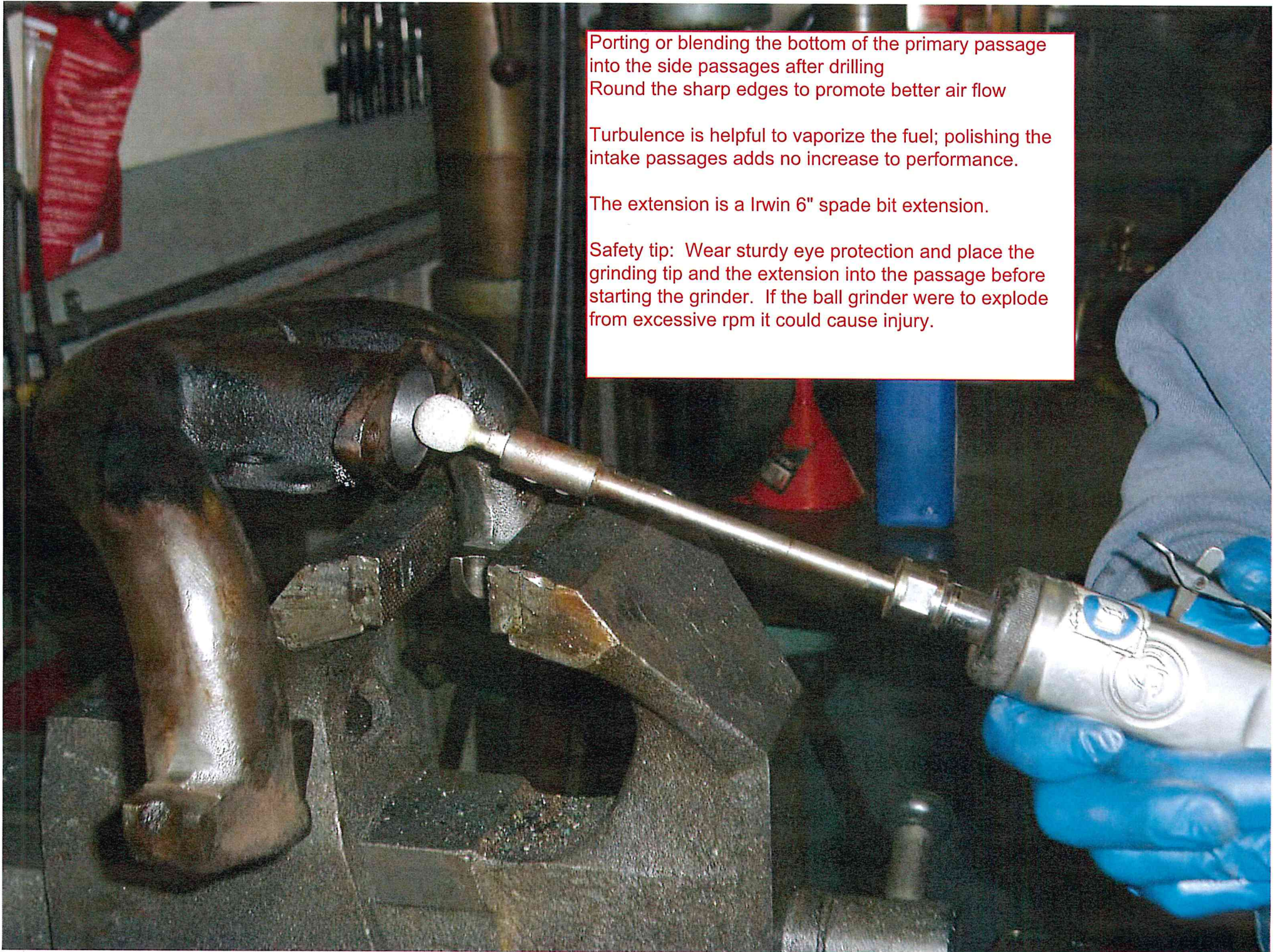


Porting or blending the bottom of the primary passage into the side passages after drilling  
Round the sharp edges to promote better air flow

Turbulence is helpful to vaporize the fuel; polishing the intake passages adds no increase to performance.

The extension is a Irwin 6" spade bit extension.

Safety tip: Wear sturdy eye protection and place the grinding tip and the extension into the passage before starting the grinder. If the ball grinder were to explode from excessive rpm it could cause injury.





Flat filing the carb mounting surface.