

Chapter 8

Buffer Retainer Hole

In this chapter we will drill the buffer tube retainer hole and in a similar and closely related setup put a small chamfer on the back of the receiver. The buffer retainer needs to be in just the right spot. The buffer tube itself keeps the retainer in place, but must allow the tip of the retainer to extend up to stop the buffer. Thanks again to modern computer graphics for helping us locate this hole easily.



Workholding: Set your protractor for 6 degrees and clamp the forging against the angle plate using the clamping pad. Tap the forging until the bubble is level and add a second clamp. Re-check the angle after tightening the second clamp.

Locating: Edgefind the corner at the top of the buttface. Alternatly, you can pick up the center of the take-down pin, but since the detent hold is relative to the buffer tube, it is best to pick up from the surface the buffer tube shoulders against.





Since you will be drilling into the buffer tube threads, the investment in a long #3 center drill is well worth it. Move to the location and spot the hole to the full diameter (.250) of the center drill.

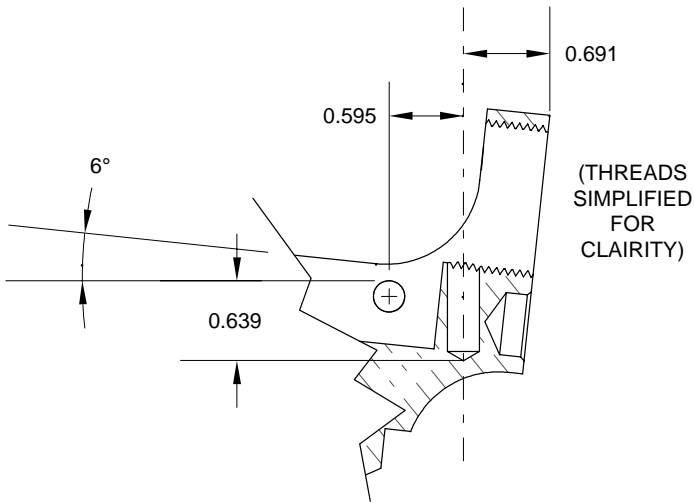
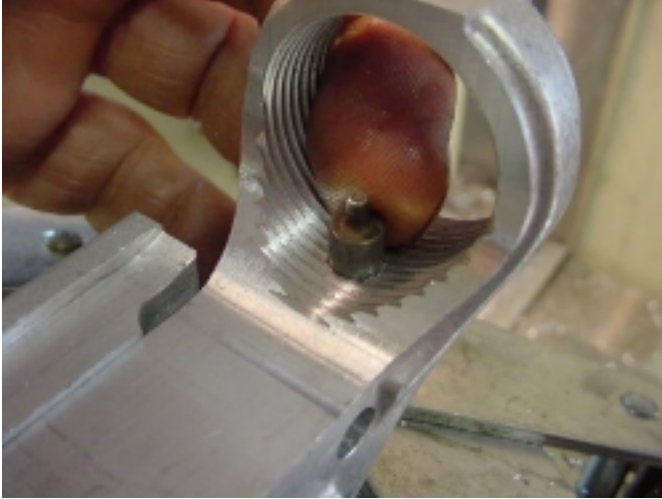


Put a 0.250 dowel pin in the take down hole and move the spindle over it with your drill in place. Bring the quill down to the stop and then bring the table up until the drill touches the pin. A paper shim is always handy and makes a good feeler. Set your elevation dial to zero and then come up 0.639”.



You don't want to make a mistake here by drilling through by accident. Double check your depth setting by moving to X-zero and bring the drill down to the stop and look in to see; first-that the drill tip will not break out of the forging at the bottom and second-that your drill chuck will not run into the top of the buffer tube ring.

Always check for fit with the part before breaking the setup. I had a 1/4" drill that drilled just a half thousandth small and the plunger wouldn't go in. This is the best time to find out if the hole is tight. I opened it up with a .251" reamer and the fit was perfect!



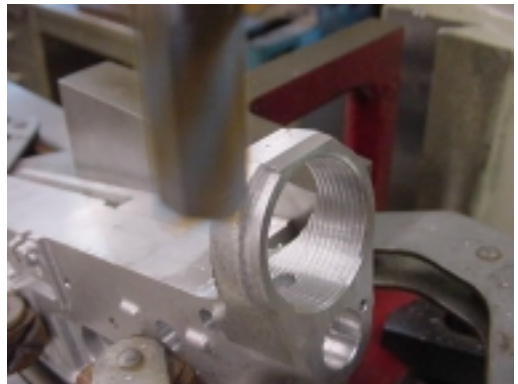
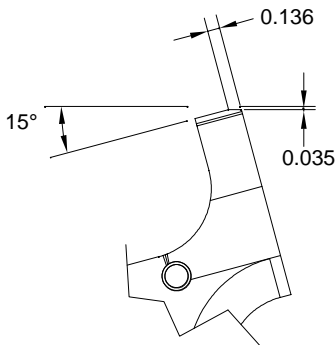
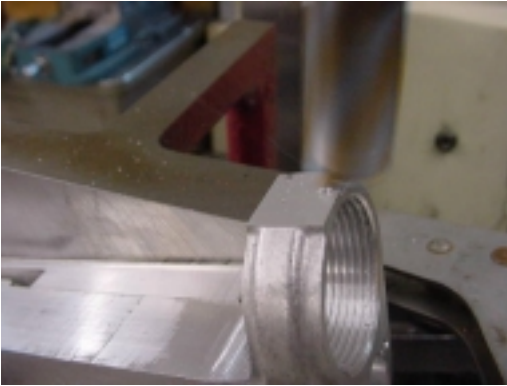
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Charging Handle Relief

This was originally another chapter, but I combined it here because the setup is so similar and the location and cut are simple.

Workholding: Clamp the lower at 15 degrees. Use your protractor and clamp it up and tap until the bubble is centered. Then add a second clamp.

Location: No location required for this setup. Just come down with your cutter until you touch the corner and then come down another .035". If you scheduled your work right, it might be a good time to go have a beer!



Clean your machine and then check your work!



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Charging Handle Relief