

Giraud Tool Company

1711 Carriage Way
Sugar Land, Texas 77478
713-980-0131
doug@giraudtool.com www.giraudtool.com

Blank Case Holder Instructions

The case holder blank is available in two versions. One is a solid piece of 303 free-machining stainless steel as illustrated in drawing #1. The other consists of four pieces; an outer threaded body and inner chamber insert made from 303 free-machining stainless steel, a small compression spring, and a retaining clip as illustrated in drawing #2. Both versions are furnished with a light duty jam nut. The required work to complete either version is basically the same. The solid version is furnished for use when the cartridge case is larger in diameter than the inner chamber insert. This occurs primarily with the larger Ultra Magnum or Short Magnum calibers. For most calibers using a .30-06 size case rim or smaller, the four piece case holder will accommodate the finished cartridge size.

To complete the case holder, a chamber reamer of the appropriate caliber must be used to remove enough material that a cartridge case may be inserted into it and the case mouth must project beyond the end to allow for trimming. There is no specific headspace requirement or exact length of case mouth protrusion. As long as the case mouth projects between .100" - .150" and is concentric within .000" to .0015" with the outside diameter, it will work fine.

To hold the case holder blank in your lathe, I suggest a 7/8" 5C collet for the solid case holder blank or a 17/32" 5C collet for the inner chamber insert. If these are not available, a three or four jaw chuck may be used if proper care is taken. Avoid damage to the threads of the solid case holder. These threads are 7/8-14 UNF, typical of a standard sized reloading die.

Typically, I first measure the diameter of the case body or chamber reamer at the larger end of the bottleneck shoulder. Find the best size twist drill to remove the majority of the material for roughing out the case holder by subtracting .015" - .030" from the case body measurement above. Drill with the case body roughing size deep enough so that the chamber reamer will clean up the bottom of the relief and cut the proper shoulder angle. I typically leave .030"-.060" depth for the reamer to remove.

Next measure the pilot size of the chamber reamer. The twist drill nearest that pilot diameter should be used to finish the rough machine work by drilling through the remaining portion of the case holder.

By whatever method of driving the chamber reamer you normally use (live center or floating holder), insert the chamber reamer and begin cutting the final contour.

Remember to stop frequently and remove the chips from the reamer flutes and use a good grade of cutting fluid to achieve the best finish possible. You may stop the chambering process when the reamer has removed enough material to clean up all roughing cut surfaces and a proper caliber full length resized cartridge case projects between .100" -.150" beyond the far end of the case holder. I personally try to use .125", but there is really no critical tolerance on the length of projection. as long as it allows easy trimming. Deburr the front and rear surfaces of the freshly cut case holder to prevent marring of the cartridge case using an appropriate deburring tool or abrasive media (emery paper on split dowel).

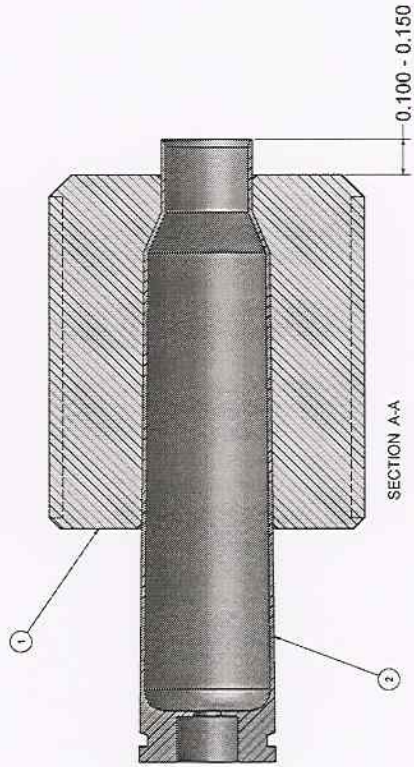
The four piece case holders can be assembled once the inner chamber insert machining is completed. Clean and degrease all pieces before assembling. Insert compression spring into outer body, install inner chamber insert and depress. Align small end of inner chamber insert with mating surface of outer body to allow full motion. While holding inner chamber insert depressed, push retaining ring into outer body and seat in small groove provided. If properly assembled, the inner chamber insert will now travel approximately 1/16" until the end of both the inner chamber insert and outer body are flush with each other.

Feel free to contact Giraud Tool Company at the address, telephone number or email address above for any questions.

Doug Giraud
Giraud Tool Company

Parts List	
QTY	ITEM
1	1
1	2

DESCRIPTION	
1	Solid Case Holder
1	Cartridge Case



Description	
Finish	STD TOLERANCE UNLESS OTHERWISE NOTED
Material	304
Insulation	None
Part Name	Case Holder
Rev	1
Date	11/02/2003
By	Power
Check	Power
Drawn	Power
Checked	Power
Approved	Power

POWELL INDUSTRIES
Powell Electrical Manufacturing Company
Houston, Texas

DWG #

