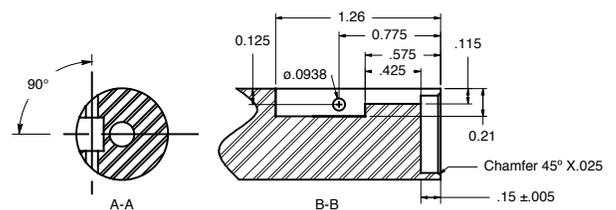


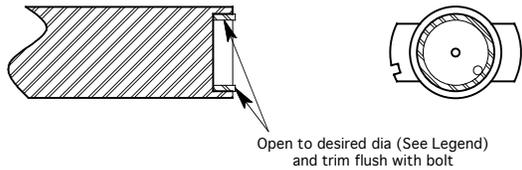
Filler ring
 For Magnum X= .625"
 For Lapua X= .640"

Fig. 1



Working limit of the extractor. Bolt nose to bolt face .150 +/- .005

Fig. 3a



Open to desired dia (See Legend) and trim flush with bolt

Fig. 2

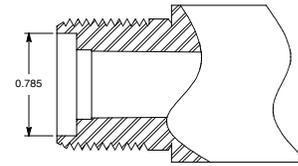


Fig. 4

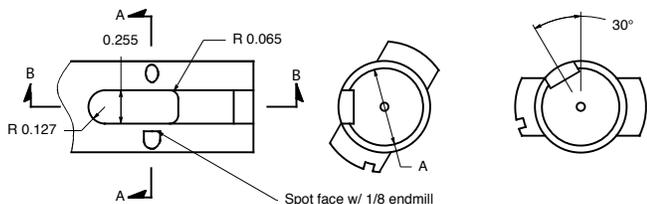


Fig. 3

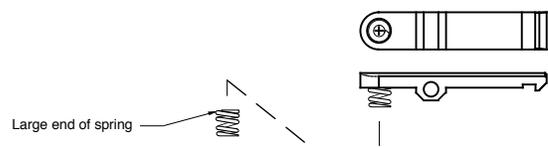


Fig. 5

Legend

Standard	A	.475 -.003	P/N 306-90
Magnum	A	.536 -.003	P/N 306-91
Lapua	A	.594 -.003	P/N 306-92

Unless otherwise specified Dimensions are in Inches TOLERANCES: ANGLES ± .5° FRACTIONS ± .015 .00 ± .01 .000 ± .005 .0000 ± .0005		BADGER ORDNANCE 1209 Swift St 816 421-4956 N. Kansas City, MO 64116 FAX 816 421-4958	
Extractor Installation			
A	Dwg No. 306-90-93	Part No.	
ENGINEER: M. BORDSON	Scale NTS	Date: 1 Sept 12	Page 1 of 1

**Installation of the Badger Ordnance
 Standard, HSLD Magnum and Super Mag Extractor**
 Will work for Remington M700 721, 722, 40X, XP-100, 7, 78, 600 and 660 bolts

WARNING!

This Extractor must be installed by a competent gunsmith familiar with this type of work, failure to install this upgrade correctly will cause the bolt to be rendered unusable!

Making sure that the firearm is unloaded, Remove the bolt from the rifle and disassemble the firing pin assembly per manufacturers instructions also remove extractor and ejector.

- You will need to make a filler ring and open the bolt face to match, fig. 1
 When making the ring we find Barrel steel works well for this application however, any good grade of steel will do. Make the ID of the ring slightly smaller than the final diameter listed in the legend by at least .010" and at least .010" longer than the depth of your bolt nose (.165 +/- .005).
 NOTE: If you use a Standard face bolt (30-06) for Lapua/Rigby based cartridges, it is not necessary to make a filler ring, just open the bolt face to the .594 +/- .003 diameter.
- Using Soft silver solder, solder the ring into the bolt nose fig. 2 re-cut the bolt nose to the new specifications, fig. 3 Dimension "A" (See Legend)
 Cut a roll out chamfer in the bolt nose (fig 3a) this aids in the cartridge rolling out of the bolt during ejection, you may need to cut this bigger than the spec.
- Set the bolt up at 30° per fig. 3 Cut the Extractor pockets per the dimensions in fig. 3 and fig. 3a

CAUTION!

It is absolutely critical that the cross hole pin be exactly 90° to the extractor cutout!

- After cutting the pockets, rotate the bolt 90° and locate the position for the cross pin hole, Spot face with a 1/8" center cutting end mill, center drill with a #0 center drill, drill through with a #43 drill being very careful when you break through the bottom of the bolt so as not to break the drill or elongate the hole.
- Ream the hole with a 3/32" chucking reamer, clean up any burrs and refinish the bolt as necessary.
- IMPORTANT!** You must open the counter bore in the barrel for the extractor to work! fig. 4
- Install the Extractor spring into the Extractor, the spring is tapered, insert the large end into the spring recess in the Extractor, use a clockwise twisting motion when inserting. Once properly installed the spring will remain captured in the Extractor fig. 5
- Slip the Extractor into the bolt, line up the hole with a slave pin and install the roll pin and check to make sure the Extractor moves freely. Re-install ejector and firing pin assemblies.
- For Lapua conversions, it will not eject a live round properly unless you open the rear of the ejection port.