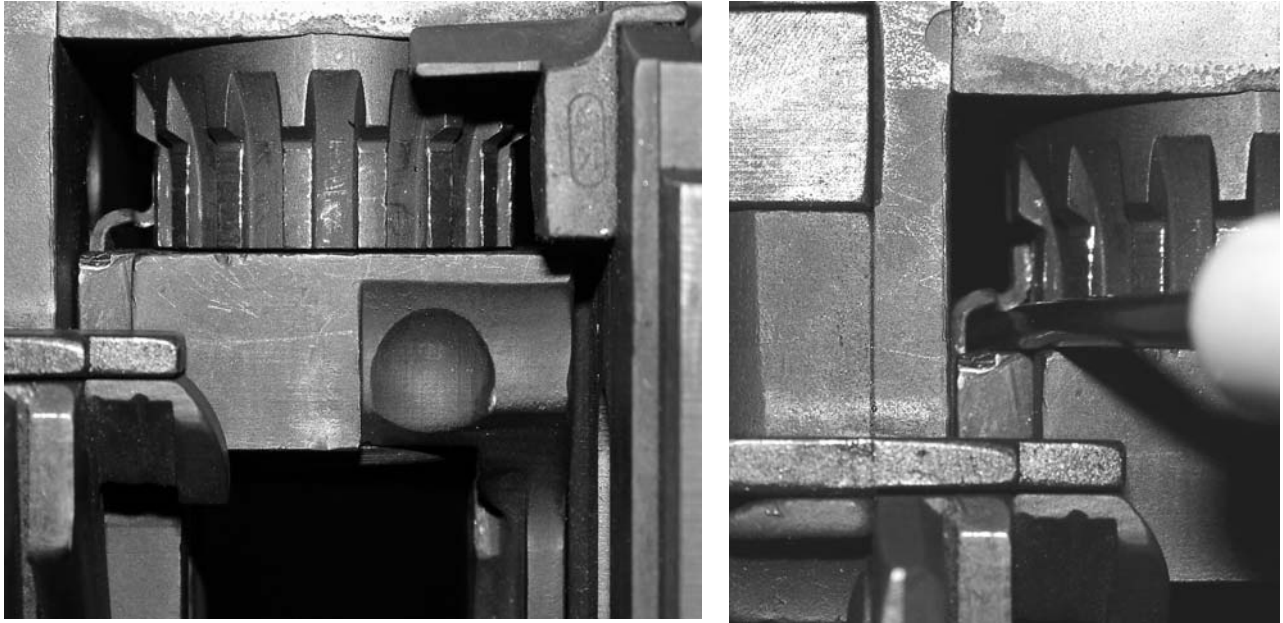
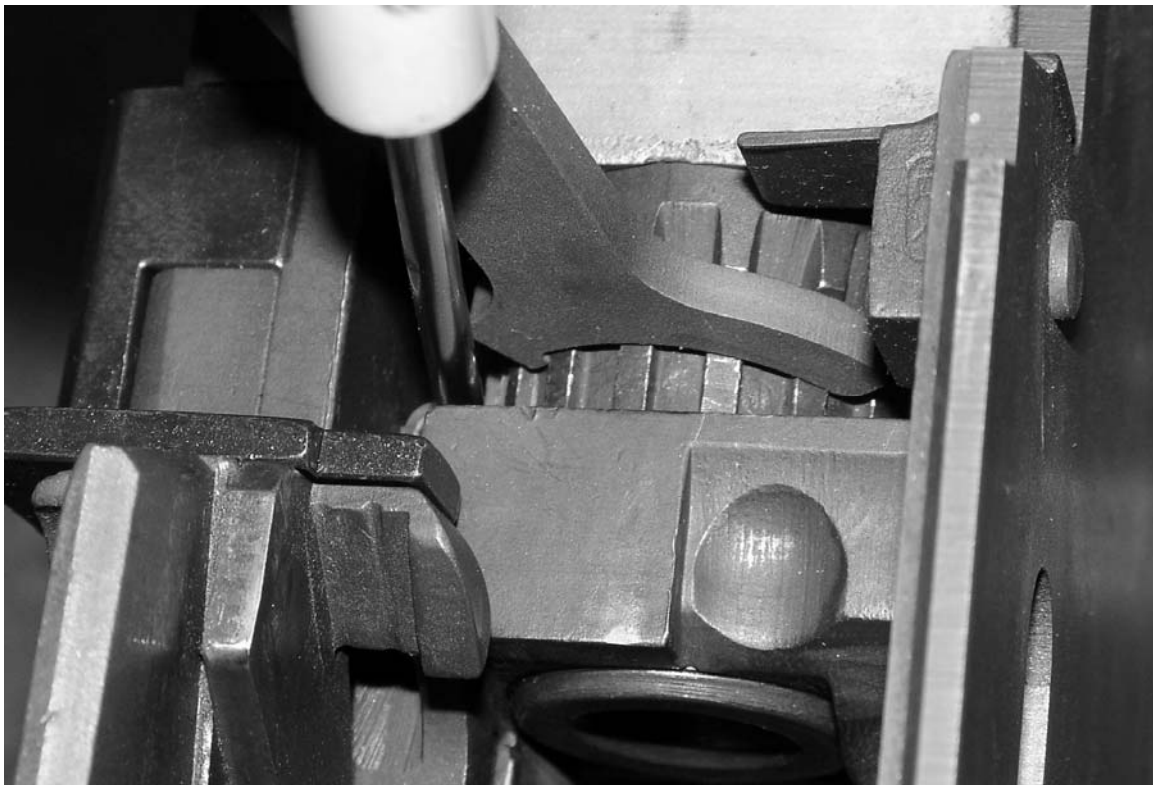


JJ Custom, LLC Headspace Barrel Wrench allows adjusting headspace of the 1917/1919A4/M37 series of guns without pulling the internals from the gun, and avoids scratching of the metal's finish. In addition to the wrench you will need a small screwdriver to move the barrel retention spring away from the grooves in the barrel. Following is the procedure to adjust headspace with the wrench.

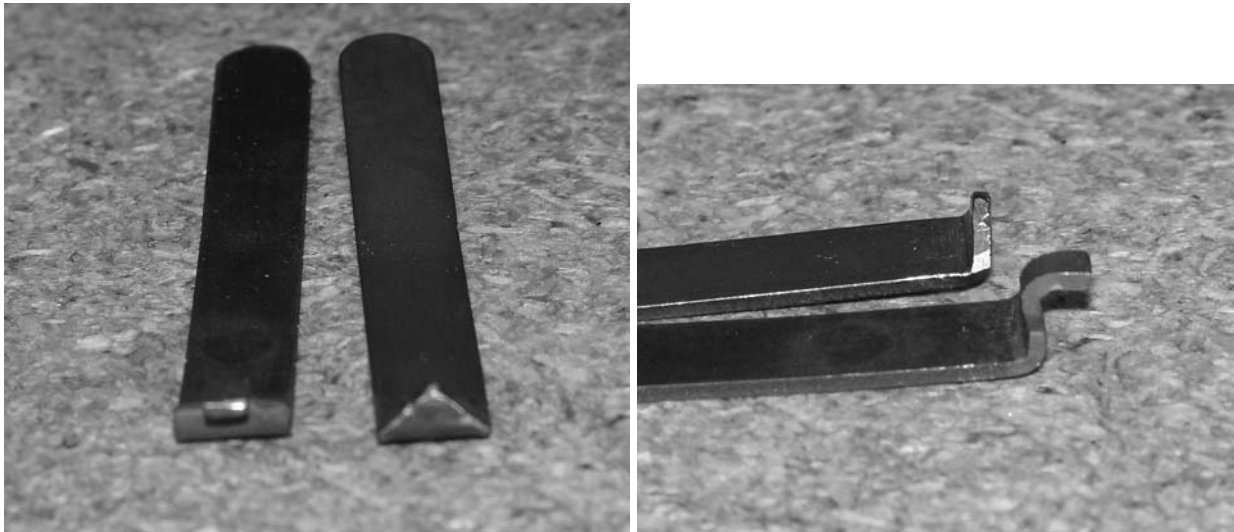
The photo on the left shows the normal position of the barrel retention spring. With a small screwdriver pry the barrel retention spring out of the groove of the barrel:



While simultaneously holding the barrel retention spring away from the groove in the barrel, use the wrench to turn the barrel in or out. The picture demonstrates screwing the barrel out – to screw the barrel in, flip the wrench around so that the hook is on the right.



Alternatively, the use of the screwdriver can be omitted if the barrel retention spring is ground to a point removing the flat. A slightly sharper bend may be applied to the spring (as demonstrated in the picture on the right) to allow the barrel retention spring to lock the barrel into position more securely.



Head spacing procedure and the headspace gauge:

Head spacing should be performed as per the method outlined in the field manual.

The following is the method taken from section 11k of the Field Manual:

k. Make headspace adjustment as follows:

- (1) Pull bolt to rear about $\frac{3}{4}$ inch.
- (2) Screw barrel into barrel extension (by using point of a cartridge or the combination tool in barrel notches) until the action will just close (recoiling parts will go fully forward) without being forced.
- (3) Then unscrew barrel two notches.

CAUTION: Care must be exercised to avoid roughening the barrel surface during the adjustment. Also, the packing must not bind the barrel, as a false adjustment will result in such a case.

Keep in mind; this is located in the assembly procedure after the back plate has been installed and the driving spring released so that the bolt is under spring pressure. The manual also notes:

a. *General.* — Probably the most important adjustment of the machine gun is the headspace adjustment. Tests show that shot patterns are not adversely affected by the headspace when the guns are adjusted as outlined above. In fact, better uniformity of shot patterns will be obtained when the guns are operated with the above adjustment, which is based on the fundamental design of the weapon. Tests have also proved that guns may be damaged and in some cases put out of action by using unapproved methods of adjusting the headspace. Many reports show that difficulties with improperly guided belts and with firing mechanisms have been attributed to undue concern over head space adjustment.

What about the use of a headspace gauge? The depth from the forward edge of the T-Slot to the bolt face was originally $\frac{1}{8}$ " or .125". If the forward edge of the T-Slot were severely worn, this would facilitate use of the headspace gauge. The procedure would be the same except the headspace gauge would be installed between the bolt face and the chamber face.