

From My Shop

by Phil Lawrence

Clutch Finger Adjustment Gauge

This month I'll show you how to make a handy little gauge for adjusting your clutch finger screws. These need to be adjusted so that the proper clearance of $\frac{13}{16}$ or 0.8125 thousands of an inch is obtained for the clutch to function properly. If you're not familiar with this adjustment it's described in the Ford Service Book for Model T's on page 82.

So, let's get started! You'll only need two things to make the gauge. First is a #16 common nail (no coating or plating). Next is a piece of $\frac{3}{8}$ inch rod. If you have an old un-plated $\frac{3}{8}$ bolt with a one-inch section of un-threaded shank that will also work.

Cut the head off your $\frac{3}{8}$ bolt if that's what you're going to use. Next, measure the unthreaded shank of the bolt or rod. You'll need a $\frac{13}{16}$ inch piece so cut that a little longer, say $\frac{7}{8}$ inch long. Now, with a micrometer or vernier caliper to accurately measure with, very carefully file the ends to a smooth square surface, constantly checking the length until it measures 0.8125, then stop.

Now you need to drill a $\frac{1}{8}$ -inch hole centered on the length of that piece at 90 degrees. The $\frac{1}{8}$ -inch hole will only be $\frac{1}{16}$ inch deep, so you have a spot for the next drill bit which is $\frac{11}{32}$ -inch diameter. On drilling this you will need to drill at an angle of 45 degrees or so, it's not too critical. Having a drill press with an adjustable vice is a help here but you can also do it by hand. This is where that $\frac{1}{8}$ -inch hole you drilled earlier becomes handy. Be very careful to not drill through your piece. The hole only needs to be deep enough to hold the #16 nail in place until you can fasten it permanently.

Cut or grind the point off the nail and fit it to the other piece. The nail can be welded, brazed, soldered or super-glued in place. Make sure the two pieces will not come apart. You don't want to drop anything down into the transmission. The nail makes a handy handle. If, for some reason, the angle of the nail handle is off and prevents you from getting the gauge into where it needs to go, it can easily be bent to your needs.

That's it for this month. I think you'll find it a very handy little gadget to have. In fact, if you check that adjustment on your clutch now, you may find it very well may need immediate adjustment. Well, you'll have just the right tool to do it, and best of all, you made it yourself!

