

Pressure Plate Adjustment

by Tom Endy

The July\August 2009 publication of the Restorer features an excellent article by Les Andrews on how to properly adjust the six fingers on a Model A Ford clutch pressure plate. The average hobbyist should be able to adjust the clutch correctly by following Les' instructions. It is prudent to always check the finger depth of a pressure plate as many on the market are not adjusted correctly.

By following Les' instruction I was able to correctly adjust the clutch on two engines. However, the problem I had was that I needed more hands than I came equipped with and I had a difficult time getting close enough to read the markings on the ruler. Therefore a tool was needed. Les says to lay a flat piece of metal across the surface of the back side of the pressure plate and measure down with a scale to each clutch finger. Most documentation floating around the hobby indicates that the finger depth settings should be between $5\frac{5}{8}$ " and $3\frac{3}{4}$ ", $11\frac{1}{16}$ " being nominal. I approached a friend and fellow club member, who is an excellent machinist, and asked if he could make the needed tool. The photo below is that tool.



My thanks to Red Sickman of the Orange County Model A Ford Club (Southern California) for producing the tool.

Looking at the photo, the horizontal piece of metal is placed across the pressure plate back surface. The vertical piece measures the distance to the clutch finger. The vertical piece has a slot cut into it. As it is shown the distance is $3\frac{3}{4}$ ". Loosen the screw and push it up to the stop in the slot and it is automatically $5\frac{5}{8}$ ". In between is $11\frac{1}{16}$ ".

I later discovered that it would be better if the vertical was off to one side. However, as it is the tool works just fine.

During the adjustment process of the clutch on my two engines I discovered an interesting phenomenon. The first clutch would engage when the pedal was about $1\frac{1}{16}$ " off the floor. When I measured the finger depth the distance was $1\frac{1}{4}$ ". I reset the finger depth to $3\frac{3}{4}$ " and it brought the engagement point into the middle of the pedal travel.

The second engine clutch would engage when the pedal was almost all the way up to the stop. I found the measurement of the finger depth in this clutch to be at $1\frac{1}{2}$ ". I reset them to $3\frac{3}{4}$ " and it brought the engagement point into the middle of the pedal travel.

My conclusion is that setting the fingers at between $5\frac{5}{8}$ " and $3\frac{3}{4}$ " will bring the engagement point into the middle of the pedal travel. The $5\frac{5}{8}$ " setting will bring it closer to the all the way up to the stop of the pedal. The $3\frac{3}{4}$ " will bring the engagement point closer to the floor. It would seem that $11\frac{1}{16}$ " is the nominal.

It is also important that all six fingers be adjusted exactly even. The tool makes it easy to do that. Les recommends that after the adjustments are made that you place the flat side of a rear wheel bearing on the fingers and see if there is any wobble. I did this and it works well. Of course the engine has to be sitting vertical in an engine stand to do that.

It should be understood that the adjustment procedure and the measurement values are for a fully assembled clutch. The clutch disk and pressure plate must be attached to the flywheel. This will place the six fingers in position to engage the throw out bearing, and that is when the depth should be between $5\frac{5}{8}$ " and $3\frac{3}{4}$ ". It also makes it much easier if the engine is out of the car or at least the transmission and bell housing have been removed if the engine is still in the car.

My thanks to Les Andrews for his excellent article and my thanks to Red Sickman for producing such a fine tool. ☺