

Baffled!

by Tom Endy

The Model A Ford transmission was designed with two oil baffles to control oil leakage. One baffle is located at the front ball bearing on the input shaft; the other is located at the rear ball bearing on the main shaft.

The baffles are disk shaped with an off-set. The off-set is supposed to be set against the bearing so that at the outside edge there is nominal 1/16" clearance. Often they are found installed backwards. This causes the baffle to contact the outer diameter of the bearing and metal is ground off into the oil.

The early transmission housings had a machined bearing stop at both ends. This required the oil baffle at both ends to be small enough to clear the stops. The later transmissions had bearing stops that were re-designed to use snap rings and both oil baffles were made 1/8" larger. It is difficult to tell which baffle you have unless you compare them.

The service bulletins of September 1929, page 379 tells all about it. The explanation is very confusing. However, the service bulletin does indicate the dimensions of each baffle; the outside diameter of each being significant. To add to the confusion the front and rear baffle part numbers are transposed in the transmission diagram (fig. 770).

The baffle diameter change may have been a sinister plot instigated by Henry Ford to confuse and confound the next 100 years of Model A enthusiasts.

The problem in the modern day is that if you install a set of late baffles in an early Model A transmission housing with machined bearing stops it will bind up the transmission and cause a lot of grief. **And the Model A suppliers today only sell the late larger baffles.**

Most people who overhaul Model A transmissions today install new front and rear bearings that have oil seals incorporated. Oil baffles are not needed to control oil leakage, but they are required for proper assembly spacing and should not be left out.



A complete transmission parts layout. Note the two baffles and snap rings directly in front of a late housing



The early and late oil baffles are shown here. The outside diameters of the late baffles were increased by 1/8" over the early baffles.



The off-set on the baffle should produce a nominal 1/16" space around the outside diameter and not touch the bearing.