

TRAACA Tech Day: Driving the Ford Model T
By Craig Brown

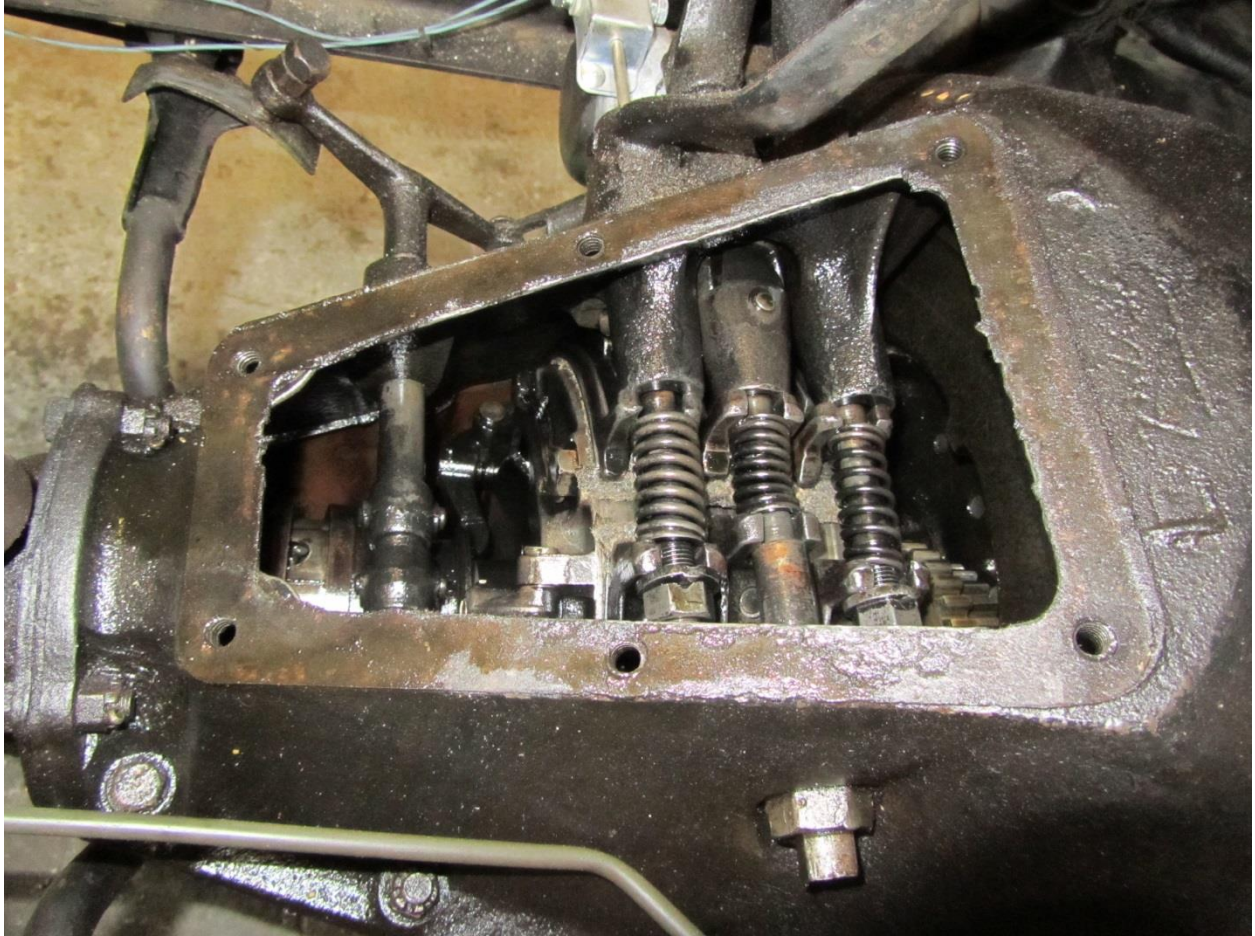
April 30, 2016 N & E Machine



The warm and sunny weather brought the club together for the first Tech. Day of the new year. The tasks for the day included changing the bands in Annette Ford's Model T transmission and then learning to drive a Model T after completing the maintenance work. It may amuse some to know that members of a car club might require driving lessons, but I will admit that prior to this tech day all I knew about driving Model T's was there are three pedals on the floor and none of them do what you think they will do!



Neil already had Annette's car in the shop with the transmission inspection plate removed as the club members arrived. The bands were actually in decent shape, so only an adjustment was necessary to return the car to drivable condition. Neil showed and explained the transmission bands work as well as the choices of band material now available including: cotton, leather, wood and Kevlar. The advantages and disadvantages of each material as well as proper installation procedures were covered.



Prior to attempting to drive a Model T, It was helpful to see how the three pedals actuate the three bands to provide forward gear shifting, reverse and braking. It was also interesting to see how the low-neutral-high band works on a drum containing planetary gears—just like a modern automatic transmission. The difference being the Model T driver actuates the band with a foot pedal instead of the modern transmission using hydraulic pressure or an electric servo to apply and release the band without driver intervention. The engineering is impressive and the concept still in use over 100 years later.

With the potentially challenging part of the day out of the way, we were free to proceed to the driving lessons and wander around N & E Machine to observe some of the latest projects underway. Some fought off hunger with an array of pastries and coffee thoughtfully provided by Nancy and Annette.



Norm bravely volunteered his 1922 Model T for driving lessons. The club safety officer was not present, so the safety lecture consisted of one instruction: "Don't stand behind a Model T when it is being backed off a trailer and don't stand in front of it when going forward." Apparently the band we observed in the transmission that some refer to as a "brake" actually functions as a "slow down a little" pedal. No club members were harmed during the unloading evolution.

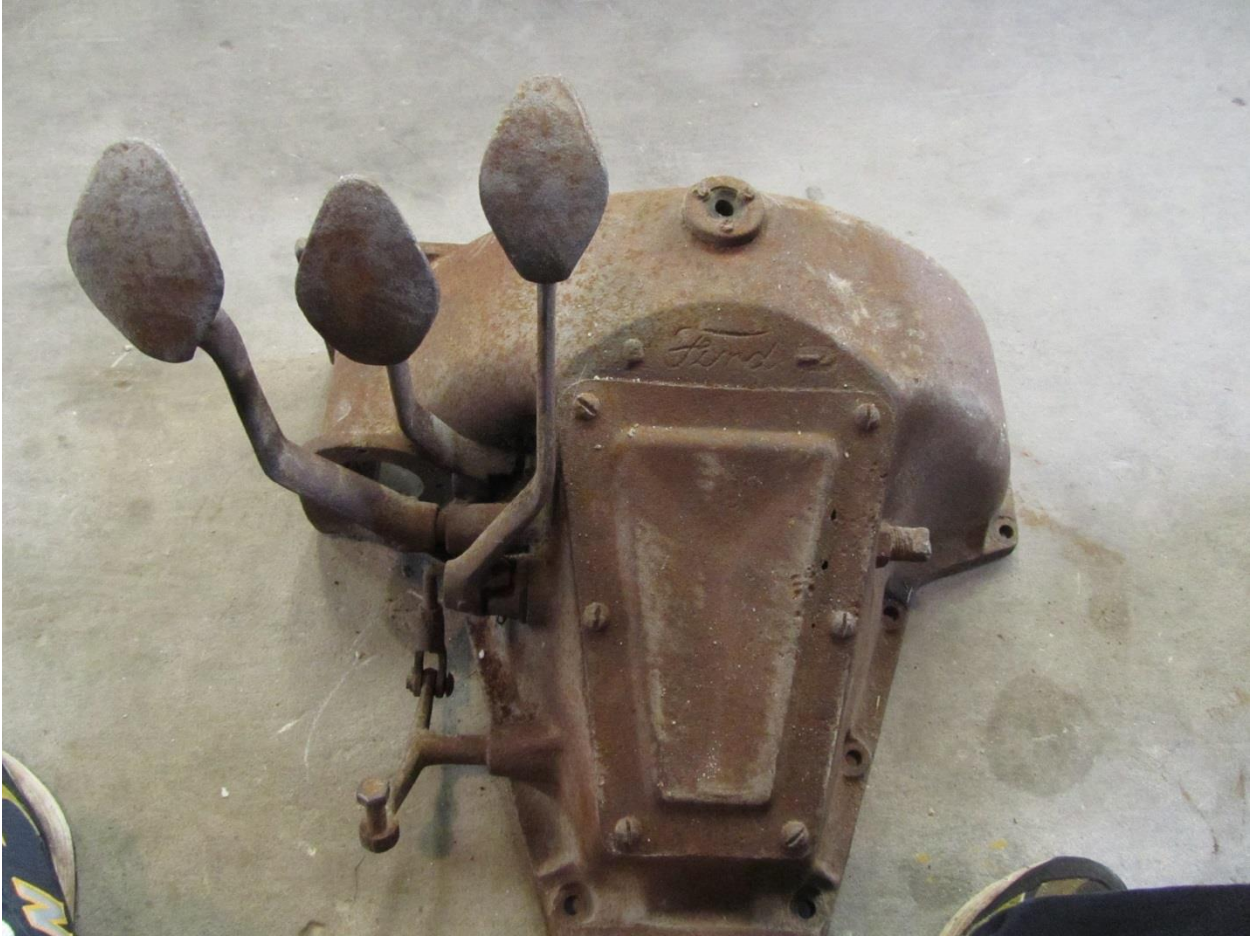


Norm gathered everyone around and explained the operation of the Model T controls:

- Left pedal up for high gear, middle position for neutral and down for low gear
- Floor lever on the left in middle position is linked to left pedal for neutral, full forward is high gear, full back actuates the emergency/parking drum brakes on the rear wheels
- Middle pedal pushed down actuates a band in the transmission for reverse (the left pedal must be in neutral position or the floor lever must be in neutral position before reverse is engaged).
- Right pedal is a brake that actuates a band on a drum that slows rotation of the transmission to slow the Model T, previously referred to as the "slow down a little" pedal.
- Left lever on steering column is the spark advance. Up retards the spark and is used for starting; down is full advance for higher engine speeds.
- Right lever on steering column is the throttle. Up is idle and down is full throttle.



Norm also covered proper use of the choke and showed some Model T modifications such as front oil feed to increase main bearing life and a water pump. After all questions were answered and all fears allayed, the next step was the high-tech Model T simulator to allow student drivers to master pedal coordination.



Those with wide feet were shown how to rotate the ankle and use the blade of the foot to depress the reverse pedal in the middle without pressing the other two pedals. This is sort of the antithesis of performance driving heel-toe technique.

After seat time on the Model T simulator, students were started out in the N & E Machine parking lot to get the feel of the controls. The next step was the back-roads of Quincy. Someone a block away was having a yard sale and the repeated Model T drive by provided a distraction for some shoppers.



Even with Kevlar bands installed in the 1922 Model T, the student drivers took their toll. A short pit stop was required to adjust the band tension before the lessons could continue. Luckily, everyone was an expert on band adjustment from the first part of tech. day.

There was plenty for the off-duty students to enjoy while other lessons were underway. Dan gave rides in his beautifully restored Model T runabout. It was also beneficial to see someone who is comfortable with driving Model T's maneuver one about.



By the end of the day, some club members had learned to drive a Model T, some vowed to never drive one again and a few are now potential buyers. Everyone who attended learned about Model T's. The group celebrated their new knowledge with an outstanding lunch at the West End Grill.

