Fender Chatter

A Monthly Newsletter

SEPTEMBER 2014

What Happened?

July 3-6 – Walla Walla 4th of July Tour

4th of July Senior Citizen Visitation , the club headed up a visit to the Senior Citizen Assisted Living Facility at 6th & Park in Spokane Valley on Friday, July 4th from 11:00 AM to 1:00 PM to show our T's to the residents. Lunch was provided by the Center.

July 11-13 – Spokane V-8 Club Swap Meet Contact Daryl Skomer Swap Meet Booth. We got lot's of complements on it's informational displays , including Bill Barr's '2 Touring

July 17 - INCCC Downtown Scholarship Car Show

Aug 1 – Monthly T Club meeting & Picnic Contact Lee Burgess

Where did I put that?

Hello T Members

Hope everyone is doing fine this summer. I saw a few members at the Swap meet this year. Great location! I sure hope we have a big turnout for the picknick in August! Hope to see you there!

THANKS! BILL Barr

Coming up:

Picnic

Movie Night

Fall tour?

General Club Information

President	Vice President	Secretary	Treasurer
			
Bill Barr 509-998-2476	Daryl Skomer 509-209-3643	Ed Hope 570-8333	Betty Patterson 214-9522

Please direct club correspondence to the clubs mailing address: IEMTFCA PO Box 11708 Spokane Valley, WA 99211-1708

Dues

The yearly dues are $20 per year from an individual or family and due by January 31st of each year. Please renew your membership or join the club as a new member. We look forward to seeing you.

All items to be published are due by the 20th of the month. Please send photos, articles and anything else for the newsletter to fenderchatter @gmail.com

Committee	Lead	Contact
Charity Committee	Jillian Robison	509-701-0983
Banquet for 2015	Steve/Julie Heid	509-928-0215
Email/Mailing/Roster/ Membership/Printing	Jim Patterson	509-214-9522
Entertainment/Programs	Tom Carnegie	509-922-1805
Fenderchatter	Diane Swanson	Fenderchatter@ gmail.com
Greeting Committee	Mike Stormo	509-725-4531
Library	Gene Kicha	509-926-4872
Nametags and Patches	Steve & Julie Heid	509-928-0215
Photographer	Jillian Robison	509-701-0983
Refreshments	Candy Burgess	509-924-0898
Roster Cover Roster Editor/publisher	Glen Whitely Jim Patterson	509-926-4872 509-21 4-9522
Safety/Seminars	Mike Robison	509-844-5900
Scrapbooks/ Photo Album	Roy Moffit	509-449-6305
Sunshine Report	Susie Carnegie	509-922-1805
Swap Meet	Daryl Skomer	509-209-3643
Tours	Mike Robinson & Hal Moffit	509-844-5900 509-924-9161
Webmaster/Facebook at Inland Empire Model T	Mike Robison	www.spokanemodelt club.com

The monthly meeting begins at 7:30 PM on the 1 st Friday of each month at the Opportunity Presbyterian Church, 202 North Pines, Spokane Valley, WA. Our next regular metting is September 5, 201 4 at the church. A reminder for anyone wishing to join other T Club members for the regular pre-meeting dinner that it will be at 5:30 - 6:00 PM at Conley's Restaurant next to the White Elephant just eat of Pines at 1 2622 E. Sprague in the Valley. We Hope to see you there!

Model T Ford Transmission Components

The Model T transmission is perhaps the least understood parts of the Model T Ford. In all the research I've done, the transmission seems to have the least amount of explanation available, or, well at least not in "lay" terms, simple, for the non mechanically minded. So, here's my effort at explaining just what goes on.

It assumes a basic understanding of mechanical components, so if you don't have this, let me know and I'll see if I can fill in any blanks. I've done the above animated diagram to help those of us that need to visualise things to get an understanding. The first thing to do is understand the different components so that you can make the link between the explanation and the component and its action. Lets start at the flywheel at the back of the engine.

Exploded view of the drum assembly

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The Flywheel (fig 1, #1) obviously provides the motion that is transferred through the transmission. It provides the transmission shaft mounting(fig 1 #3) (that the rest of the main components rotate on) and three small shafts or pins (fig1 #2), that the triple gears rotate on.

As mentioned, the Triple gears (fig 1 #4) mount on their pins with the flywheel, rotating with it, but also able to rotate on their own pins in either direction at the same time as they rotate with the flywheel. (Picture how the Earth rotates on its axis, as well as rotating around the sun at the same time, hence the term Planetary transmission) The Triple gears are named, not just because there are 3 of them, but also because each one has three different numbers of rings of gear teeth or ratios.

Next in line is the driven gear (fig 1 #5), this is mounted on the transmission shaft against the flywheel, but not "locked" with it, so that it can spin independently of the shaft/flywheel.(its locked to the brake drum, but we'll get to that later) The Driven gear is meshed with the first set of gear teeth on the Triple gears (see fig 3 below), closest to the flywheel. (think of the driven gear as the sun, and the triple gears the planets spinning around it)

Next we have the reverse speed drum and gear (fig 1 #6). The reverse drum gear is fixed, so whatever the gear does, the drum does. This drum slides onto the transmission shaft, and the gear meshes with the triple gear teeth set that are furthest from the flywheel.

Next in-line is the low speed drum and gear (fig 1 #7), this gear also fixed to its drum, protudes further out from the drum than the one on the reverse drum, this is because it passes through the centre of the reverse drum and gear, further than the reverse gear and therefore able to mesh with the second set of teeth on the triple gears. See figure 3 below to see the relationship between each gear. (note, it's not really necessary to understand why they are aligned this way, suffice to say its to ensure the gear ratios work and allow the right motions to occur when required

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WE'RE THINKING OF YOU

Update at the August picnic
~Susie~

Candy's Cookie Corner

September	Tina & Daryl Skomer; Candy & Lee Burgess
October	Joe Swanson; Joanne Jepperson
November	Rebecca Gibson; Susie Carnegie

Tours and Activity Reports

CHECK THE CLUB WEB SITE FOR SPUR-OF-THE-MOMENT EVENTS.
Tours may be arranged at the last minute so check the club web site Calendar of Events at http://www.spokanemodeltclub.com for the latest activities.

UPCOMING EVENTS

Aug 7 – Grandview, WA parade – Meet 1:00 PM Albertson's on Trent - Contact Nan Robison
Aug 30- Sep 1- Labor Day Speedster Endurance Run - Dayton, WA – contact DaJuan Recknagle
Sep 5 – Monthly T Club meeting
Sept 6 - Hassie Club "All Original" Car ShowSep 1 4 - Edwall & Sprague, WA Tour - Dave Thompson's car collection – Contact Jim P.
Sep 20 -Drive in Movie night @ Mike and Jil lian Robison'sSep 1 4 - Edwall & Sprague, WA Tour - Dave Thompson's car collection – Contact Jim P.
Oct 3 - Monthly T Club meeting
Nov 7 - Monthly T Club meeting
Dec 5 - Monthly T Club meeting
Jan 9 - Annual Installation Banquet—Airport Ramada Inn - Contact Steve / Julie Heid

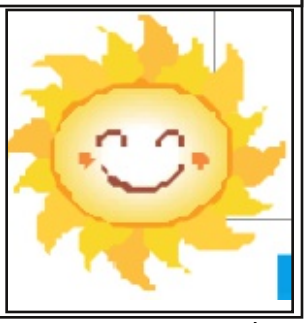
Contact Gene Kicha or Jim Patterson for tours

Tuesday Nights at the Ranch

A number of T owners taking advantage of Tom Carnegie's generous contribution of his shop's facilities on Tuesday evenings along with his employees' (Mike Robison and Mark Hutchinson) expertise in fixing, repairing, and building Model T's. . Come on out on Tuesday evenings around 4:30 – 5:00 with your T parts and join in on the fun and camaraderie.

http://www.antiqueautoranch.com

Also, Check out the info on Spokane Model T Club wesite: www.spokanemodletclub.com
And available on Facebook: Inland Empire Model T Club



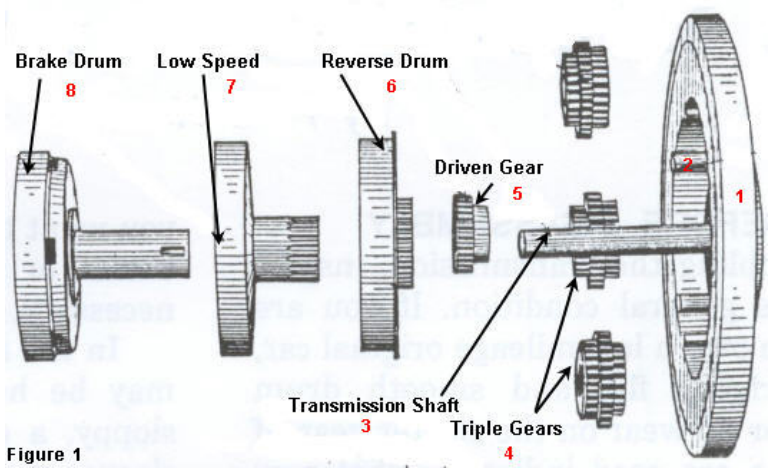


Figure 1

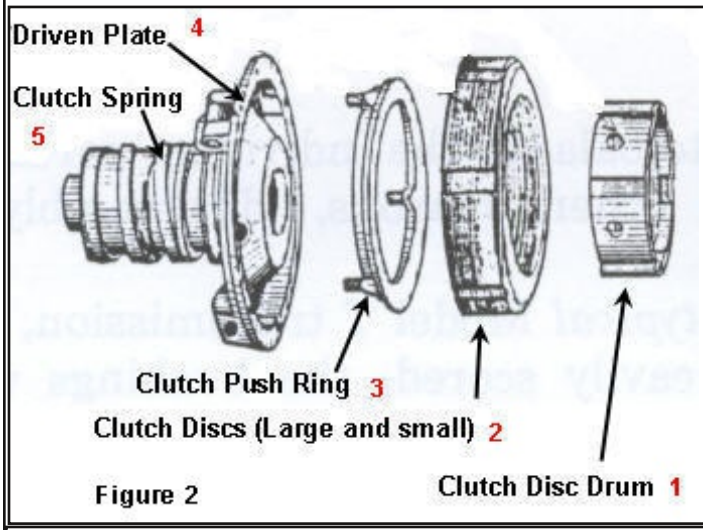


Figure 2

Next in the assembly is the brake drum (fig 1 #8). The brake drum also rotates on the transmission shaft, but has no gear teeth. Instead, it has an "extension" that passes through both the low speed drum, and reverse speed drum with a keyway that is used to lock the driven gear to it. This means that whatever the driven gear does, the brake drum does. The brake drum provides a "housing" within which the next component fits, the clutch disc drum (fig 2 #1) and discs (fig 2 #2).

The clutch assembly provides the physical "break" between the action of the engine and the rear axle, without it, the car would always be moving when the engine was running. The clutch is comprised of two sets of different sized steel discs. The larger set have recesses in their circumference that engage with lugs on the inside of the brake drum, so that these discs do whatever the brake drum does.

In between each larger disc is a small disc that engages with the clutch disc drum, these are sandwiched and rely on engine oil to provide lubrication and prevent wear. The clutch disc drum is fixed to the end of the transmission shaft and therefore rotates with it, as do the small clutch discs. The next part of the assembly is the clutch push ring, this as its description suggests, pushes against the clutch discs and it in turn is acted on by the driving plate and clutch fingers. The driving plate (fig 2 #4) provides the physical link between the driveshaft and rear axle. It is bolted to the brake drum and therefore connected to the driven gear. It also comprises the clutch spring (fig 2 #5), the spring providing clamping pressure which is "magnified" by the lever action of the clutch fingers and "sandwiches" the inner and outer clutch discs together when required by passing pressure onto the push ring (fig 2 #3) through holes in the driving plate. Figure 3 shows the entire drum assembly mounted with all the triple gears, driven gear and transmission gears meshed and mounted to the flywheel. Externally, the transmission controls are three floor pedals, one for the low speed drum (and high speed/clutch control), one for the reverse speed drum and one for the brake drum. In addition the emergency brake lever. This provides two actions, it pulls on the rear emergency brakes as well as acting on the clutch spring, either allowing or preventing the spring from acting on the clutch discs. Each floor pedal clamps a transmission band around the outside surface of its respective drum, the action of which is explained next. Before proceeding however, it is important to note that the low/high speed pedal also acts to disengage the clutch spring pressure (as does the handbrake lever) when held in the "neutral position"

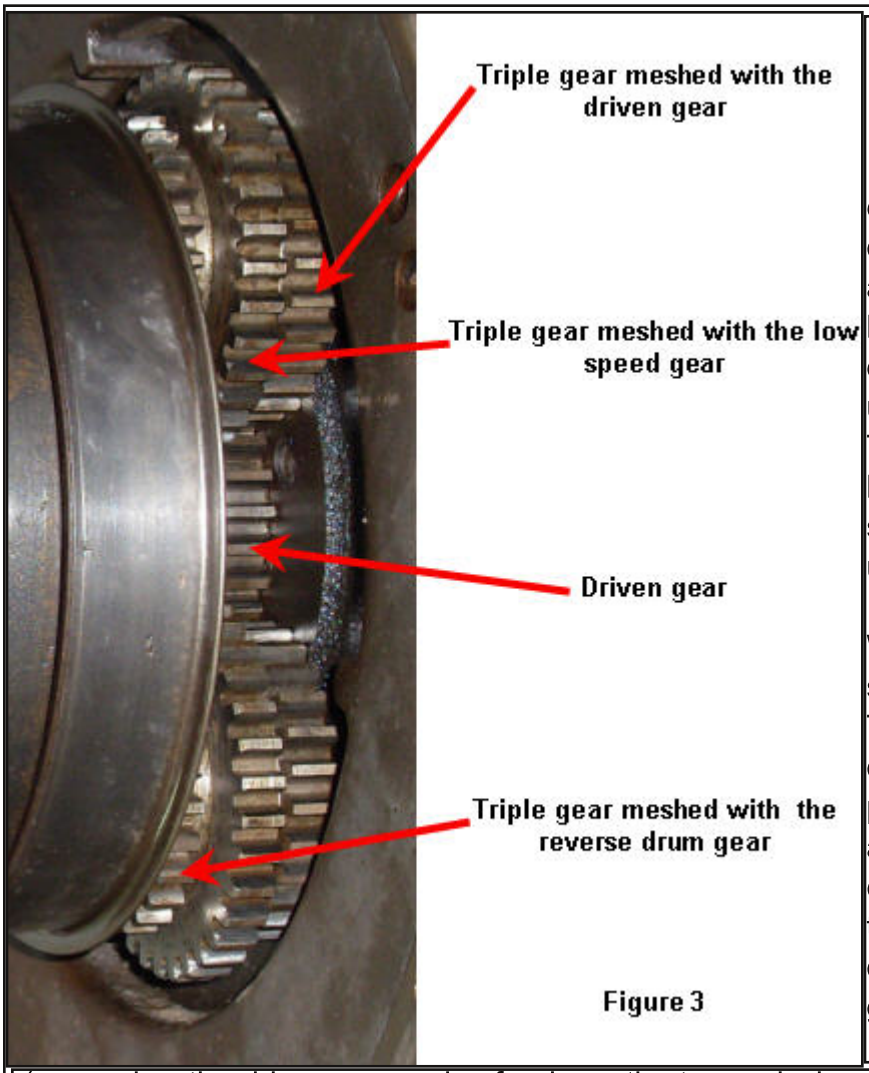


Figure 3

How the transmission works , remembering these simple rules:

Each of the Triple Gears does exactly the same as the other The driven gear and therefore brake drum always do whatever the car is doing, be the car stationary, going forwards or in reverse. The clutch is only used in direct drive (high gear) The Triple gears are only used to drive in low gear and reverse. The low speed drum and reverse drums spin unless clamped by the pedal bands.

With the engine running and the car standing still the following happens: The car is stationary, which means the driving plate is stationary because it is permanently fixed to the driveshaft and rear axle. The reason the engine can still run is because the link follows this: Driveshaft, driven plate, brake drum, large clutch discs and driven gear are all stationary.

(remember the driven gear spins freely on the transmission shaft, so when its still, the shaft spins inside it) because they are all joined together.

Flywheel, transmission shaft, clutch disc drum, small clutch discs all spin, because either the emergency brake lever or the driver (via the low speed pedal) is holding the clutch spring pressure off the discs, allowing the large to be stationary and the small to spin with the clutch disc drum and small discs.

All drums can, and to some degree will, spin when the car is in neutral, unless held by the bands when a pedal is depressed.

http://www.modeltcentral.com/transmission_animation.html

FOR SALE / WANTED / SERVICES

For pictures of ads, if available, go to the Spokane Model T Club website www.spokanemodeltclub.com/for-sale.php

For Sale: ’27 Canadian Model T Roadster / Pickup, s.n. 14,707,500 with ’25 rebuilt engine, transmission, starter, generator, and Ruckstell rearend. New 21” tires, all woodwork rebuilt, new seat springs; just needs final cosmetics and painting. $10,250. Also have 1912 T chassis ($8,500) & ’17 T chassis ($10,000).– Eric Stendell - 509-680-0355 (Colville, WA). 3

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A Monthly Newsletter

Fender Chatter is published monthly by the Inland Empire Chapter Model T Club of America in Spokane, WA. To be included, as apce permits, in the next newsletter, items must be received no later than the 20th of the month. Please submit your articles, photos, trip reports, adventures, Fort T parts for sale, want ads, ideas, etc. to fenderchatter@gmail.com

See you next month and safe - T in your driving