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## **UVMAC** Mission Statement

The purpose of the club is two-fold:

- 1. To serve as a medium of exchange of ideas, information, and parts for admirers of Model A Ford cars and trucks and to aid them in their efforts to restore and preserve these vehicles in their original likeness.
- 2. To unite in a central organization, all individuals who are interested in restoring the automobile in a manner to attract prestige and respect within the community. It shall further be the purpose of this club to help these individuals become better acquainted and encourage and maintain among its members the spirit of good fellowship, sociality, and fair play through sponsored activities including the use of the Model A Ford and family participation.

The Utah Valley Model A Club is a chapter of the Model A Club of America (MAFCA). Membership with MAFCA is highly encouraged. See MAFCA News at the end of this newsletter for more information.

Club meetings are on the 3rd Thursday of each month at 7:00 p.m. upstairs in the Larry H. Miller Ford Dealership at 1995 N. University Parkway in Provo

## 2017 Club Officers

## **CLUB OFFICERS**

Board Chairman President Vice President Sec/Historian Treasurers

Nicholas Mack Reid Carlson Greg Mack Howard Eckstein Diane Brimley & Brim Brimley

kcam1999@yahoo.com rcarlson1964@yahoo.com gregmack02@yahoo.com h\_eckstein@hotmail.com brimleydiane@gmail.com ralpher@gmail.com

### **APPOINTED POSITIONS**

Web Page	Nicholas Mack	5
	& Greg Mack	5
Facebook	Clyde Munson	]
Photographers	Greg Mack	S
	Allison Mack	7
Activities	Clyde Munson	5
Awards	Kelly Barker	1
Newsletter	Robert Mack	1

see above see above bjerg\_menneskene@yahoo.com see above windjamer9945@yahoo.com see above rustycarkb@yahoo.com mack4759@yahoo.com





## A Message from Our President BY REID CARLSON

Dear Club Members,

The year is half-gone and the Model A driving season is in full swing. I know each of you love your very own Model A and like to show it to other interested parties. Well, the month of July is for you. Get your cars filled with fuel, give her a good grease job, adjust the brakes, tune her up again, and give her a bath.

See the club calendar and inside information for more details, which are:

- **July 4** (Tuesday) Grand Parade in Provo.
- **July 8** (Saturday) Car Show American Fork.

• **July 15** (Saturday) – Steel Days Parade in American Fork, where the city Mayor JH Hadfield (one of our Club Members) will have our club highlighted and lead the Parade. If there is only one parade you are going to be in this year, let THIS BE THE ONE ! We would love to have a full club presence for this parade.

• **July 22** (Saturday) – Pioneer Parade in Mapleton, with Car Show and meal at Carlson's home.

As you all know, July is the month that we celebrate our Independence as a country. What a rich heritage we have as Americans. Another aspect of our independence as a people was made possible by Henry Ford. He made the automobile affordable for almost everyone. The Model T and of course our beloved Model A's made it all possible. Think of how much independence America, and your family car provides. You can go anywhere at anytime. Celebrate your independence by driving your Model A a little extra this month.

Again, I would like to publicly thank so many in our club that do so much for us all. I apologize for not being at our club meetings the last few times. I do plan to attend in July. Our great Board does a lot of work behind the scenes. I won't mention names, but you all know who they are: our two roving mechanics, club photographers, our technical presenters, our technical writer, and especially our Newsletter Editor.

I hope to see you at all our July events.

Thanks again,

Reid Carlson

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## **2017 Calendar of Events**

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-. Model . A Club

#### July

- 8th Steel Days Car Show, Rotary Park, American Fork, 4-8:00 p.m. registration, free for UVMAC members
- 15th Steel Days Grande Parade w/ Mayor JH Hadfield, see page seven for details.
- 20th Club Meeting, 7:00 p.m. Larry H Miller Ford, TechTalk, lubrication points, Nicholas Mack
- 22th Mapleton Pioneer Day Parade 9:00 a.m.
- 30th Henry Ford's 153rd Birthday

**MOTOMETER** 

#### August

- 7th 4 to 9 p.m. Lindon Car Show, Lindon City Park, 200 N State Street. Early registrations receive free t-shirt
- 24th Club Meeting, 7:00 p.m. Larry H Miller Ford, TechTalk, Model A body styles by Bill Thompson
- 30th-Sep 3rd —Ely, Nevada Tour, ride the Nevada Northern Railway with Salty A's.

#### September

- 4th Onions Days Car Show, 12-5 p.m., Payson, http://shoutout.wix.com/so/dLnVpmnb? cid=7e941c22-6278-47f9-ae40-bbd5793d157c#/main
- 15th MAFCA Board Meeting, Hickory Corners, MI
- 16th Model A Ford Day at the Gilmore Car Museum sponsored by Model A Ford Foundation, 9:00 a.m.
- 21th Club Meeting, 7:00 p.m. Larry H Miller Ford, TechTalk, timing & setting points, Bob Todd
- 24-29th —MAFCA National Tour, traveling Pacific Coast Highway, visit Half Moon Bay, Big Sur, Golden Gate Bridge, Monterey Bay, Carmel and San Francisco, <u>h t t p : / / w w w. m a f c a . c o m / e v e n t s / 2017%20Nat%20Tour%20Info.pdf</u> has more info.
- International Model A Day/Vintage Iron Chef, TBA

#### October

- 4th-7th Annual Hershey Swap Meet, Hershey, PA
- 26th Club Meeting, 7:00 p.m. Larry H Miller Ford
- Fall Color Tour with the Copper Classics Chapter of the Veteran Motor Car Club of America, Sanpete County
- 28-29th Cedar City Heritage Festival, parade, arts and crafts, concerts, vendor booths and food
- 28th Murder Mystery, American Fork Senior Center



#### November

- 14th Club Meeting, 7:00 p.m. Larry H Miller Ford
- 29th Dec 3rd Annual MAFCA Awards Banquet, Oklahoma City, Oklahoma. Information available at: <u>h t t p : / / w w w. s o o n e r m o d e l a . o r g /</u> mafcaawardsbanquet.htm

#### December

- TBA Annual Christmas Dinner
- TBA Christmas Light Tour



Gemma Eckstein – July 5 Lisa Cope – July 12 Elaine Carlson – July 18 Bob Todd – July 6

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# Heard it Through the Grapevine

**OUT & ABOUT WITH CLUB MEMBERS** 

We received the following note on our webpage:

My father is Larry Taylor. His phone number is 801 369-2899. He lives in Mona Utah. He has a Model A and is interested in your club and affiliation. His car is currently not starting after sitting through the winter. He could really use some help and guidance with getting it started and road worthy again.

He has owned the car since 2011 and has enjoyed driving it and showing it at some local shows. It is not a show car and the restoration is aged but he enjoys his car as my mother passed away in 2010. My father would appreciate if someone could reach out to him.

Thank you, Jeff Taylor





Greg and Howard drove down to Mona and spent a couple of hours with Larry to get his car running. Howard did the troubleshooting and narrowed down the problem to the carb. and bad gas. Greg cleaned out the carburetor and reinstalled it. Now Larry can drive his car to Nephi for a car show he wanted to attend. Thanks Howard and Greg!



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We're in good company. Reid found a picture of Colonel Sanders with his Model A. Andy Griffith also had a collection of Fords (2 A's). From "The Henry Ford" is a picture of FDR in his every-day driver.



# June's Monthly Meeting

#### Attendance:

Ken Johns, Karl Pope, Bob Todd, Tony Jabos, Richard Burr, Karl Furr, Larry Taylor, Brim and Diane Brimley, Clyde Munson, Robert and Greg Mack, Vern Cope, Collette and Bill Thompson, Howard Eckstein, Roger Davis, Richard Judd, JH Hadfield

#### Club Business:

**President Reid Carlson** was absent, as was Board Director Nicholas Mack. Greg Mack had to work late so Robert Mack conducted until Greg arrived.

**Treasury:** Diane accounted for the money we have currently, which is \$2014.90 in savings and \$194.43 in checking.

**Welcome Larry Taylor!** Larry was introduced to the group through his son. Larry, originally in the construction industry, has a 1928 Sport Coupe (see pictures on page 10) which he needed help getting running. Because of the club's help, Larry decided to come and check us out. Larry lives in Mona, so it is quite the drive to get here.

**T-shirts and Jackets:** Brimleys received more orders for t-shirts tonight so they will be placing orders again. If you want another t-shirt or jackets for yourself or family members, call Brimelys at: (801) 756-3688.

**Motometer:** We appreciate the help of those who have submitted articles to the Motometer, and want to specifically single out Howard Eckstein and Clyde Munson, who have submitted articles on a regular basis. Without their help the newsletter would be significantly lacking. We invite everyone else to take up the pen and write an article too. It doesn't have to be a technical article, write about an experience driving your Model A, or about the past that involved your car. If you have an interest in some Model A era hobby, write about it. It doesn't have to be perfect. We have a couple of people who have volunteered to help with editing.

#### Activities:

Our most recent activities were the Spring City Heritage Day tour and the Heber Creeper trip. Several members described their experiences during those two activities and the thing that was consistent was the exuberant welcome we received in both instances. The VP of the Spring City event spent 15 minutes with club members welcoming them and thanking them for coming. He adamantly "insisted"

### 2017 Club Goals:

President Carlson has outlined four goals he would like us to strive toward:

MOTOMETER

- 1. Get all club member's cars running and on the road before the end of June.
- 2. Have an activity where everyone's car is in a club photograph.
- Develop a 90th anniversary/celebration gift for the Model A's as they each turn 90 years old.

we return next year because we made such an impact on their event. When we arrived at the Heber Creeper, Mark Nelson, the Chief of Operations, stopped what he was doing to come and welcome us to their "Cowboy Days." He asked us to help them with their "Photographer's Day" where they pull out the locomotives and trains so that photographers can spend the day with them. We would provide cars for photographic opportunities.

TAH

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While some members were on the Heber Tour, the Manti group was busy at the Rat Fink Reunion. They were joined by Reid and Elaine Carlson, but they didn't take their Model A. They took their Grand Prix.

**Steel Days** was discussed and JH gave us final instructions. We are to meet at the Holiday station (300 W & Main) at 9:00 on July 15th for the Grande Parade. Steel Days Car Show & Cruise - Saturday, on July 8th is from 12 Noon to 8 p.m. at Rotary Park (400 So. 200 East) in American Fork. Entry fee waived for the club. There will be a space reserved for the club.

**Provo Parade**, Tuesday, July 4th. No parade fee. They need Convertibles and Rumble Seats for VIP's. VIP's will be dispersed through-out the parade, so you will not be in a group. Other old cars 1932 or older that do not have VIPs will travel in the parade in a group. Meet at Provo High School parking lot. Cars and drivers arrive by 6:30 a.m.. Parade starts at 9:00 a.m.. We had six volunteers, but the parade transportation coordinator will contact other club members who weren't present at the meeting.

The line-up of TechTalks and Monthly activities were reviewed. The Murder Mystery was moved from November 4th to October 28th which eliminated the option to visit the Cedar City Heritage Festival. September's activity was discussed, but no decision was made.

#### TechTalk:

MOTOMETER

**The Transmission Tower** was the topic of discussion this month. Clyde went through several precautions that should be taken before assembling the transmission. Make sure the notches in the gates on the forks are square. Once the stick shift is installed, there should be very little play. If there is, the ball on the shift lever is too worn and should be fixed or replaced.

#### **Refreshments:**

Thanks to Richard Judd for providing donuts and soda tonight.

JH: "Henry Ford made two types of bell housings; those that are cracked and those that are about to crack."

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# Member Spotlight

**UTAH VALLEY** 

-. Model . A Club -

KARL AND CONNIE LUNDELL POPE

We were both born in Vernal, Utah, within a few hundred yards of each other—Connie in the local hospital, Karl in a clinic. After Karl and his mother had their six week checkups (following his birth), his mother took him to join his father, who had left a month earlier to begin drilling an oil well in Wyoming. Then, for the next seven years, the family lived in various parts in Wyoming and Montana, as his father continued in a variety of jobs: driller, welder, refrigeration repairman, and finally, as the foreman of

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elementary school, he excitedly told his mother one day, that he had seen Margaret O'Brien in town. His mother was sure that the child movie actress had not come to Vernal, but assured her son that it must have been Harold Lundell's daughter, Connie.)

During high school, the two ran around with the same crowd of boys and girls. The cars were wider then, with bench seats both fore and aft, (and no seat belts), so there were typically two couples in the front,

the welding shop at the East Air B a s e (h e a v y bombers) in Great Falls, Montana.

**MOTOMETER** 

Connie, on the other hand, grew up in Vernal where her mother was an English teacher at the Uintah High School, and where her father was also a teacher of agriculture, and



several other disciplines. (He once commented that he had taught everything except girls P.E.) He later became the high school principal, and eventually Superintendent of the Uintah School District.

Just prior to Karl's seventh birthday, the family moved back to Vernal (actually Naples, on the outskirts of town), and he attended Naples Elementary School. Connie attended Central Elementary School in Vernal, and while the two don't remember any interaction with each other, they both attended the same junior high school. (Karl does remember, however, that during

back (with girls in big, flouncy petticoats), as they headed off to a school dance or a party at someone's house. While they didn't date each other, they were usually in the same car-either in the front or the rear-so they have fond memories of the s a m e activities. Getting

and two in the

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to the dance was the thing. Once there, between dances, the couples often exchanged partners as they danced the night away.

After high school graduation, in 1955, the "gang" split up, with some attending the three Utah universities: Utah State, Utah, and BYU. Karl and Connie were at the "Y"; Connie lived in the new brick Broadbent Hall of the Heritage Halls complex (girls only back then), while Karl was in D-2, one of the WWII wooden barracks buildings. (Both were razed—the "D Dorms" to make room for the Fine Arts

# 

were leveled to construct the new, multi-storied

MOTOMETER

dorms.

The couple had always been very close friends. But that was it. However, after attending the "Y" for a quarter, they began to date each other (between dates with other BYU students, of course). However, over time, they found themselves dating each other more and more, and eventually a romance evolved. In January, 1957, the two became engaged. In May, Karl took the bus to Salt Lake City for an interview with Elder Harold B. Lee (at that time, all prospective missionaries were interviewed by a General Authority of the Church), but he wasn't able to make it, so Elder Bruce R. McConkie did the interview. As they visited, Karl mentioned that he and Connie were engaged. (At that time, English-speaking missions were 24 months, foreign-speaking were 30, and Asian were 36).

When the letter from Salt Lake arrived, the couple quickly opened it. After fumbling around through several pages of information, and seeing some Oriental-looking characters, they finally found the destination: Japan! Connie committed to wait for her missionary. And she was true to her word (and still is, after 57 years)!

Connie continued her studies, graduated in elementary education, in 1959, and was hired by the Uintah School District, and was still teaching at Central School when Karl returned home.

Sometime in the summer or early fall of 1959, the brethren decided to shorten the length of Japanese missions (no extensions and no exceptions), so Karl was released the end of January, 1960, and they were married eleven days later. (Three years seemed long enough to be engaged.)

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Karl continued his education at BYU, received a Bachelor's degree from that institution in 1962, and a Master's degree in 1963. (Majors were in speech and theatre, with minors in art.) The family, including a boy and a girl, then headed to Detroit, Michigan, where twin boys were born, and in 1965, a Ph.D. was awarded by Wayne State University. The chair of the BYU Theatre Department then invited Karl to consider joining the faculty there (which he accepted), but since the paper-work would likely not be completed soon enough, the Chair suggested that he accept the position at KSC (now the University of Nebraska at Kearney). The following year, 1966, the family traveled to Provo, where Karl would teach theatre courses and design sets, lighting, and properties for BYU productions for the next 30 plus years. (Three more girls were born during that time).

The old car bug probably bit Karl sometime during our stint in Nebraska, as he noticed the remains of rusting hulks of vehicles slowly decaying among the weeds and bushes in local farmer's fields. However, with all the pressures and deadlines on a young graduate, Karl hardly had time to tinker with another project. It wasn't until sometime in the 1970's that the venom from the old car bug—that bit him in Nebraska—finally took hold.

In addition to Franklins, a Star, a Detroit Electric, and some Model T's. We have also had a couple of Model A Tudor sedans, and currently own a 1928 Model A roadster that was restored by Robert Todd. Incredibly, through it all, Connie has been extremely patient, and what's more, mercifully forgiving.

- Model A Club



# Grand Excursion on the Heber Valley Railroad

BY GREG MACK



For over 60 years the Rio Grande Western traveled through the impressive Provo Canyon as it hauled freight and passengers between Heber and Provo. The trains snaked their way through the canyon along the banks of the Provo River at a whopping 20 miles

per hour. During the 1920's and '30's the railroads most common passenger/commodity being hauled to market was sheep. Manifests show that during that time more sheep passed through the Heber depot than any where else in the country.

Fast forward 50 years and a lot has changed. What was originally a three day wagon trip on a toll road through the canyon transformed to an hour and a half train ride, and today has become a short 45 minute drive on the highway. The railroad has since been isolated from Provo. It has gone through abandonment and revivals; and the name is now affectionately known as the Heber Creeper. One likeness that has remained constant however is the sheep.

Early last month 19 clueless but adventurous sheep and their 5 Model A's (and a Chevy) gathered to make the



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voyage to Heber to ride the train. They aimlessly followed the lead sheep up the winding canyon, ironically in the very

vehicle that ruined the railroad. Every curve in the road brought about new views of the majestic mountains, and in some areas, much like the train did in the early 1900's, we chugged along at 20 miles per hour as the Model A's worked their way up the grades with ahooga horns echoing against the canyon walls.

Most of our flock made it to Heber safely, with the exception of one sheep who had lost his way, but he quickly found the 'tracks' that led him to the rest of the



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# UTAH VALLEY

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flock. Upon arrival at the depot we were rounded up by cowboys and onlookers who oohed and aahed over our cars.

After basking in the spotlight for a little while we

were eventually herded into the rail cars which soon departed Heber. The train casually rumbled down the tracks and through the countryside. We sang along to some old time songs, showed off our moves in a danceoff and even shared some sheepish jokes. It was not long however before some outlaws caught wind of our good times and wanted to crash our party. They boarded the train with guns drawn, hootin' and hollerin' looking for their misplaced treasure.

With hands in the air, guns mindlessly aimed at innocent bystanders and accusations being thrown left and right, we thought we had all reached our eminent end! That is when the Sheriff burst through the door nick of time to put a stop to the bandits' rule! With treasure in hand and the bandits put away, the deputies shared the "chocolate gold" with us as we were

with his deputy arriving just in the





serenaded by a violin and guitar duet on our return trip to the depot.

All of the commotion really worked up our appetites so, after the ride, we stopped at our favorite feed shop to get some slop and then headed

on our way. We made a side stop in Midway at a covered bridge as well as a farmers field for some pictures before shepherd Clyde guided us safely home.





## That Second Gear Jump BY HOWARD BECKSTEIN

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Some Model A owners complain that their car jumps out of second gear. If it happens at the wrong time, it can be a serious safety issue. Frustrated drivers employ compensatory techniques to avoid depending on second gear when accelerating or climbing a hill. This takes a lot of the fun out of driving a Model A.

We'll take a look at the major issues that can cause second gear jump. It may surprise you, but not all of them are faults with the transmission. Some lie in misalignment of the transmission to the engine, some have to do with shifting habits. And of course we'll look at common wear & tear in the transmission itself.

#### Don't take anything for granted

**MOTOMETER** 

You never know what you'll find when cracking open a Model A transmission. After an excess of 85 years, it's possible that more than one set of hands has been inside it and stirred things around from the factory version. Surprises lurk in the condition of the gears and bearings inside.

While working with Wayne Carlton on his '29 Tudor, we discovered that one of the bolt holes for the brake light switch which mounts on the top of the transmission was stripped out. This was no big deal. He went to the industrial supply store to get a Helicoil set and came back with the drill, tap and inserts. Ι suggested that since he would be working in a blind hole, it would be fine to leave the top on the transmission to prevent metal chips from falling inside.

He drilled the oversize

hole and ran the tap down. When we screwed in the insert it went all the way through the hole into the case! Now the top *had* to come off.

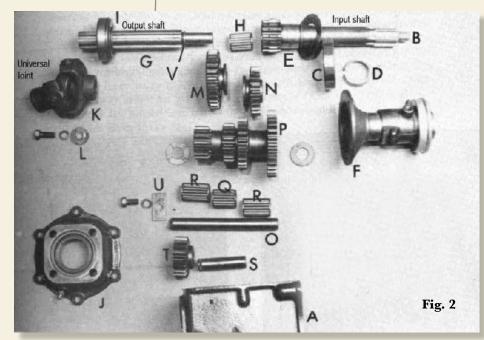


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When we looked inside, we could see that a chunk of the case had broken away from behind the threads. It was obvious that the break was old because the wound was oil stained. See **Fig 1**.

We removed the rear axle so we could take out the transmission to replace the damaged case. JH Hadfield gave Wayne a spare transmission which had no top but the innards were there.

**Fig 2** is an exploded view of a Model A Transmission. References will be made to the lettered parts in the following paragraphs.





The output shaft G fits into the end of the input shaft E and is supported by a roller bearing H that keeps them aligned and allows the shafts to rotate independently. We found that this bearing in Wayne's transmission was the wrong one; it was too long. Whoever assembled it last time took the spacer ring V off the output shaft to allow the longer bearing to fit...sort of. The bearing's cage twisted into a spiral after having been forced into the space when the previous rebuilder bolted the covers onto the case. The result was that the bearing rollers wiped as they went around the output shaft rather than rolled in a friction-reducing parallel direction with the shaft. Fortunately the oil did its job in this situation. When the bearing race on the end of the output shaft was measured with a dial caliper, it was found to be the right diameter.



Fig 3 shows the side and top views of the twisted bearing on the left next to the correct one on the right. You can see in the bottom left picture how the cage bar pins have been deformed on the twisted

Fortunately we found in the donor a good bearing Q in the cluster gear P. This bearing is the correct size so we

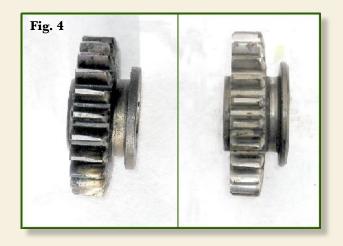
bearing.

used it in place of the twisted one. We used the spacer V from the donor transmission to replace the original which had been removed from Wayne's.

#### Some things to look for

We took this opportunity to inspect the gears for wear that could cause problems. The second and high slider N and second gear on the cluster P from the donor

transmission had badly worn teeth. Not shown here is the donor's first and reverse slider which had two broken teeth.



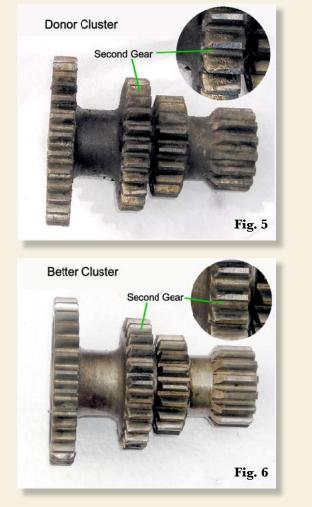
**Fig 4** compares the teeth of the original and donor second and high speed slider gear *N*. On the right is the one we chose to use; the donor gear on the left showed signs of tapering on the teeth. This wear pattern can cause the transmission to jump out of second gear. In addition to the taper of the teeth, the donor gear showed uneven wear on the teeth as though it was never fully engaged into its mate on the cluster gear. This may be due to excessive wear on the gates of the shift tower. It can also be a sign that previous drivers had been careless in their shifting habits.

The corresponding second gears on the clusters **P** are shown in **Figs 5 & 6**. **Fig 5** shows the wear pattern on the donor transmission's second gear with its tapered teeth. The same teeth look better in **Fig 6**. This is the cluster we used.

The October 1929 Ford Service Bulletins shows a cluster gear that had been worn in the same way as the one shown in **Fig 5**. The bulletin says that the driver "... invariably started in second speed and in addition was careless about meshing the gears. That is, when shifting gears, he disengaged the clutch only sufficiently to allow the outer edges of the second and high

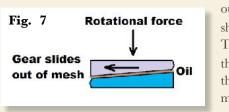






speed sliding gear to mesh with the countershaft gear. As a result all of the load was directed on the outer edges of the teeth and the gears became permanently worn."

The problem with tapered teeth on the gears is that the rotational forces against them will cause the



gears to work out of mesh as shown in **Fig 7**. The only thing that can keep these gears in mesh under these circumstances is the spring for the detent in the shifter fork rail which is part of the tower assembly. Under acceleration, there is a great amount of rotational force that will cause the tapered slider gear's forward movement to overcome the pressure of the detent spring which in turn causes the gear shift to snap into neutral.

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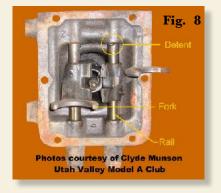
You may also notice pitting on the surfaces of the donor gear's teeth in **Fig 5**. This contributes to noise and was likely caused by running the transmission low on oil for a long time.

Another thing to look for is proper fit of the slider gears on the output shaft. In the December 1928 Ford <u>Service Bulletins</u> it was announced that: "The intermediate and high sliding gear and the low and reverse sliding gear are now fitted to exceptionally close limits on the transmission main shaft. In addition the parts are selectively assembled. This procedure ensures extremely accurate fitting and it eliminates any possibility of the gears coming out of mesh."

#### A worn tower will contribute to 2nd gear jump

**Fig 8** shows the shifting mechanism inside the tower. The half-round forks fit into grooves on the ends of the gears and when moved by the shift lever, push or pull the slider gears in and out of mesh. Detents inside the casting consist of a spring with a small plunger on each end. These plungers engage ground-out notches in the shift rails. The spring pressure against the plungers keeps the rails in place after the driver has

selected a gear. The shift lever is long enough that the driver has sufficient leverage to force the detent plungers back against the spring to allow movement of the rails.



# **Fig 9** illustrates good gates and ball on the end of the shift lever. The gates are square and the ball fits in with only a small amount of play for easy shifting.

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- Model A Club -

MOTOMETER



**Fig 10** shows a badly worn gate and shift lever ball which can be a big contributor to second gear jump by not fully engaging the slider into the cluster. The funny looking blob on the right fork is the remains of someone's attempt to repair it with brazing rod.

Another cause for second gear jump can be excessive end play in the cluster gear in the transmission. Shown

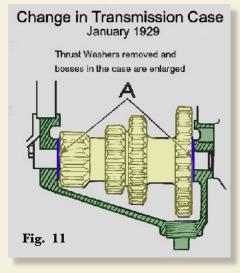


in **Fig 2** on either side of the cluster gear P are two spacer washers that center the cluster in the case and take up end play. These thrust washers were discontinued in January 1929. The transmission case was redesigned so that the cluster fit without the washers. If you have an early case, check to see there is no end play when the cluster is installed. An older case will have almost 1/8 inch of end play if the washers are left out. See **Fig 11**.

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#### Why double-clutching saves your transmission

Double clutching is a technique where the d r i v e r depresses the clutch, moves the shifter into neutral, lets out the clutch for a second, depresses the clutch again and shifts into the next gear.



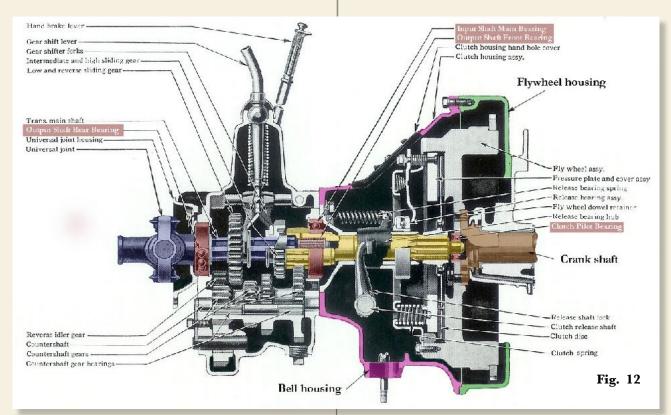
Double clutching when upshifting from first to second speed allows time for the countershaft to slow down so the slider can be fully engaged without grinding before letting off the clutch.

To help understand why the Model A transmission benefits from slower shifting habits than modern cars, let's look at what is going on inside. **Fig 12** is a cut-away drawing of the transmission. Engine speed is either reduced by the different gear ratios selected or passed through the transmission by connecting the output and input shafts.

MOTOMETER

For easy calculating, we are setting the engine RPM at 1000. The final result for first and second gear is a product of two ratios, so we'll need to calculate them both. Because the cluster is always in mesh with the

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As shown in **Fig 2**, the cluster (or countershaft) gear **P** is one piece. It is always in mesh with the input shaft **E**, thus it spins with the engine when the clutch is engaged. The output shaft **G** is always connected to the rear axle, thus it and the slider gears on it spins at a rate corresponding to road speed.

The gear ratios of the Model A transmission are about 3.12:1 for first, about 1.85:1 for second and 1:1 for high. To show how we arrived at these ratios, you're invited to follow along with the arithmetic and **Fig 14**. input shaft, once we figure that ratio, it becomes a constant in arriving at the final outputs.

Continued next month



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# Golden Wrench Award — Wiper Change

## BY CLYDE MUNSON

When my Dad and I originally restored my car we put an electric aftermarket wiper on. My Dad has the original vacuum wiper on his sedan but the fact that it is very inconsistent and we could not find an affordable vacuum unit for my car helped make the decision for us.

There are compromises when using an aftermarket electric, first it limits the ability for the windshield to tip out the way it should, it also hangs down farther than an original vac unit; that may not be a problem for shorter folks but for me it runs right into my sightline.

The other problem with the aftermarket electric wipers is they only have a 110 degree swing. It would be better if they would go to 145-160 degrees.

The more I drove my car, the more this irritated me so I looked into different ideas to correct this. I wanted to stay electric just so it would work well and stay in my cheap budget. I would need to accept the short swing angle.

After looking at some ideas online I figured I would follow the idea of what Ford did on the slant window sedans and a modification I found online and I would run the wiper through the header rather than the windshield. I also decided to flip the wiper "upside-down." It would cause the wiper to park on the wrong side but it would put the motor up rather than hanging right where I was trying to look.

I pulled the old wiper and the upholstery panel and drilled through the header. I then had to figure out how much of the new wiper's shaft and housing to trim off. I then wired in a switch, drilled a couple of holes in the upholstery, and put everything together. To finish things off, I got a couple of small snap plugs to fill the old holes in the windshield frame.

I am very happy with this change. It got the wiper out of my sight line and allows the full opening of the windshield. It still only wipes a 110 degree angle but for the limited times I need it, I could accept this shortcoming.



# 2018 MAFCA National Convention

- Model A Club -

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SPARKS, NEVADA, JUNE 24-29, 2018

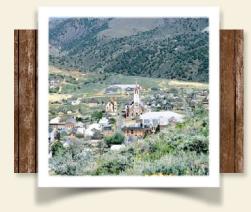


**MOTOMETER** 

Editor's Note: Each month until next June, we will devote a page in each newsletter to sights and activities that will be part of the convention. There will be a lot to do and see.

There are a number of self-guided tours that will be available during the week of the National Convention. One such tour is a trip to Virginia City. It is about 25 miles from Sparks, or about an hour's drive with a climb from 4,400 to 6,200 feet.

"Virginia City is known as the home of the Comstock Lode and one of the largest mining camps west of Denver. Virginia City is a result of the discovery of the first major silver deposit in the United States in 1859. By the early 1870's the population increased to 25,000. As the deposits declined, so did the population, which at present is



about 850.

There are more things to do than can be done in a day, so pick your activities ahead of time, and make

reservations if needed before you get there. Here are some of the things you can do while in Virginia City:

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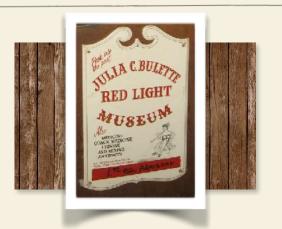
**V & T Railroad**: "Take a Ride on the V&T: Travel aboard Nevada's most famous short line, and feel what it was like to ride into Virginia City 'back in the day."" <u>https://www.virginiatruckee.com/</u>



**Mining Tours:** There are five mining tours available. "Going Deep Into Mining History: Learn what made the State of Nevada what it is today, and how Virginia City was the iconic mining town." http://visitvirginiacitynv.com/attractions/popularitineraries-aamp-tours/mines-aamp-mine-tours.html



## **PAGE 19**



**Museums:** There are about a dozen museums in town. There is everything from mining and railroad museums to jailhouse and haunted museums. There is sure to be one that matches your interests. <u>http://visitvirginiacitynv.com/attractions/virginia-city-museums.html</u>

**Cemeteries:** A stroll through one of the old mining cemeteries might be of interest. "Great hopes and dreams pulled immigrants from all over the world to Virginia City. Now they all rest together in these authentic Old West mining cemeteries."



**Shopping:** Virginia City is a tourists' delight when it comes to shopping. They have jewelry stores, mercantiles, antique and apparel shops, specialty, food, and old photo stores. There is something to delight every palate.



**Bucket of Blood Saloon:** Almost every night, as the saloon keeper would wash the floor with buckets of water, the water would turn red with the blood shed from the lawless crowd. Not up for a drink, there's free popcorn.

**Trolley, Stage Coach and Walking Tours:** "Get a brief sneak at the history of Virginia City while seeing the landmarks and views the historic town has to offer. "

You can keep up with the latest information by subscribing to their early bird newsletter at <u>http://www.mafca.com/events/</u>2018EarlyBirdRegistration.pdf.



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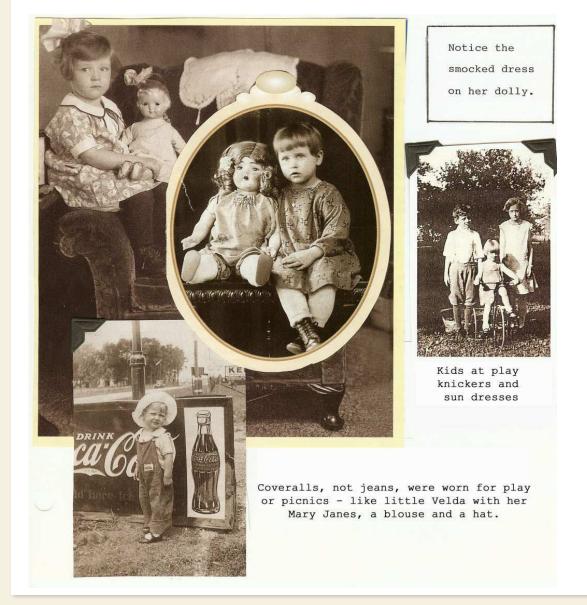
Courtesy of The Model A Club of America, by Pegge Binco

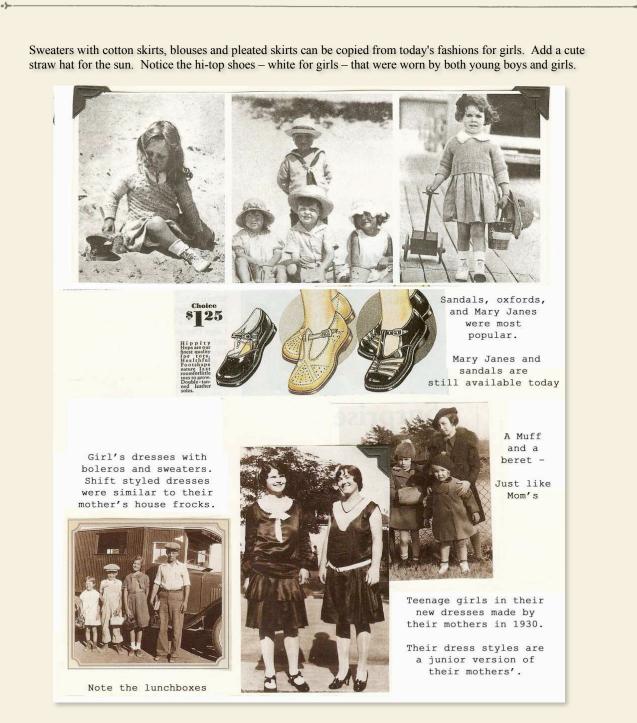
# The Fashion Journal

FUN FASHIONS FOR THE YOUNGER SET - PART 1

I think it's very important to include our children in Fun Fashions and "share the era" as we adults do. These photos are great fun to study as they clearly define the styles of the era and how the little people are wearing them and look in them.

Dresses for the littlest girls are simple – smock style with or without collars and cuffs. Notice the VERY important BIG Hair bows.





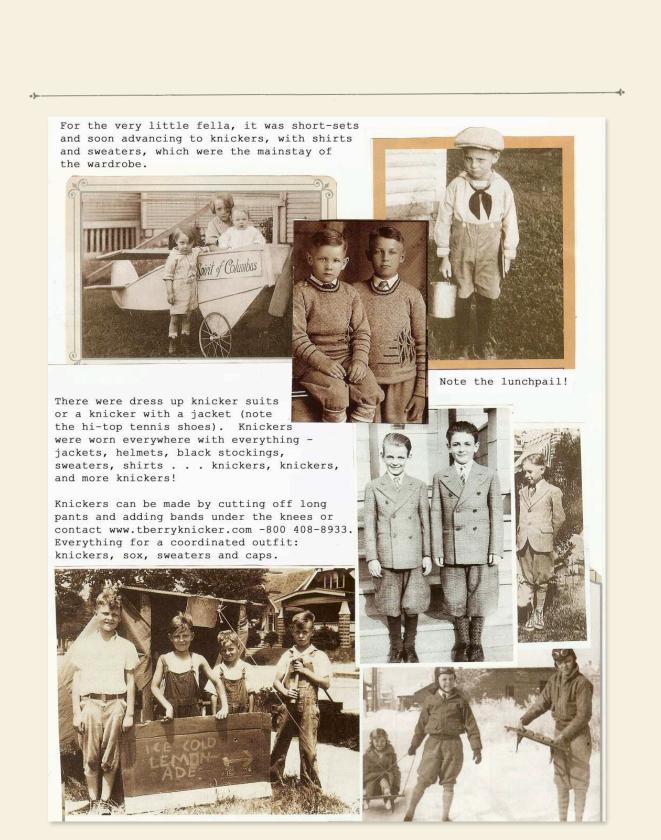
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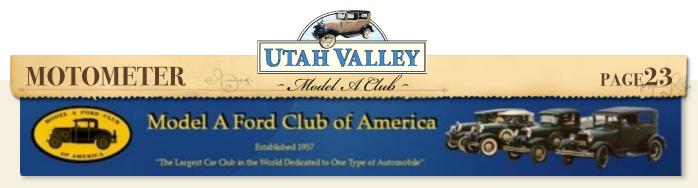


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MAFCA can be reached at: 250 South Cypress, La Habra CA 90631-5515. Their phone number is: 562-697-2712. Take advantage of their FREE membership for "first-timers." Regular memberships are \$40. Visit their webpage for more details: <u>http://www.mafca.com/</u>

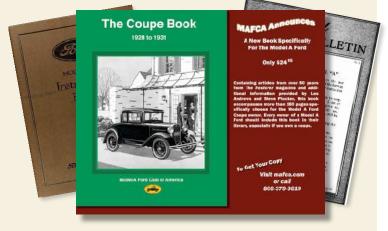


I recently came across a Ford M o t o r C o m p a n y advertisement from a Good Housekeeping magazine, dated August 1930. It features a photo of a 1930 Roadster on a dock near the sea. Its caption was, "A joyous car for golden summer days." It goes further to say, "Many are the

delights of the Ford Roadster these golden summer days. Short the miles and pleasant because of its alert and sprightly performance, its safety and its easy-riding comfort. And what a joy it is to travel along the way with the top down, the blue sky overhead and the fresh, cool air brushing a rosy glow upon your cheeks... Many months of glorious motoring await your beckoning." Wow, I'm sold! Let's take out our Model A's and go for a ride! Don't forget to keep track of your miles for the 100K Miles in A Day Challenge! Travel with your Chapter or on your own - you pick the day! Send your mileage to Garth Shreading, Membership Director, 100k@mafca.com.

The long awaited Model A Coupe Book is now available for purchase, \$24.95, through the MAFCA Store and online at www.mafca.com. This book was put together by some of our most dedicated members, Alex and Ruth Janke, Les Andrews and Garth Shreading, with assistance from many others. This is a superior compilation of all of the articles ever published in **The Restorer** on Model A Coupes, plus some written by Les Andrews and never before published, until now! The book has a terrific introduction written by Alex Janke, which includes all of the data sheets with the original fabric, paint, and stripe combinations available on the various Coupes. This book is a must for the Model A hobbyist! It is only available from MAFCA and our vendors, order yours, today!

Over the years, the Model A Ford Club of America and your Board of Directors has been very successful in giving you, our membership, the best that can be offered in the antique car hobby. Our membership is the largest of any single marque. I believe this is because we have many great membership benefits such as our award winning magazine, The Restorer. Our magazine went from a fledgling cut and paste, black and white newsletter in 1957 to a sixty-six page, full color magazine today. Published six times a year, The Restorer, features articles about the Model A Ford, news of Chapters and activities, and other interesting articles. Along with The **Restorer**, MAFCA's Directors, especially the Technical Director, are available to you via telephone, mail and email to answer your questions and guide you in the repair and restoration of your cars. Each year, MAFCA recognizes our members who have contributed their talents to MAFCA and the Model A hobby at the National Awards Banquet. Every even numbered year, we hold a National Convention, hosted by one or more Host Chapters in different places, gathering more than 1,000 members, and every odd numbered year, one or more Chapters host a National Tour for our members. We help to bring you together with others who have the same great love for the Model A Ford.







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