



UTAH VALLEY

- Model A Club -

Motometer

- 2014/2015/2019/2021 Newsletter of Merit • 2016 Newsletter of Distinction
- 2017/2020 Newsletter of Excellence • 2018 Newsletter of the Year
- 2013 Most Improved Newsletter

Vol. 14 No. 9

September 2026



Remember...

Pay your dues for 2026 – Now \$30

Be sure to document your car's mileage each time you drive

Previous editions of the Motometer are available on the club's website

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 Ford Club of America (MAFCA). Membership with MAFCA is highly encouraged. See MAFCA membership application at the end of this newsletter for more information.

Club meetings are held on the third Thursday of each month — 7:00 p.m. in the Clyde Companies building at 730 N. 1500 W. Orem, Utah. Use the north side entrance. The meeting room is on the immediate right.

2026 Club Officers

CLUB OFFICERS

Board Chair	Roger Davis
President	Howard Eckstein
Vice President	Andy Hudspeth
Secretary	Robert Mack
Treasurer	Diane Brimley
Activities	Roger Davis
Membership	Amber Morrell

APPOINTED POSITIONS

Awards	Theon Laney
Facebook	Clyde Munson
Librarian	TBD
Merchandise	Paul Jerome
Photographers	Howard Eckstein
	Amber Morrell
	Buster Hansen
	Greg Mack
	Nicholas Mack
	Robert Mack
Tech Talks	John Salzl
Meeting Refreshments	Gemma Eckstein
Web Page	Greg Mack
Newsletter	Jeff Niven
Restorer Chapter News	Clyde Munson

Past and Current Club Presidents

2013 Robert Mack	2020 Greg Mack
2014 Clyde Munson	2021 Greg Mack
2015 Howard Eckstein	2022 Brad Christofferson
2016 Nicholas Mack	2023 Brian Lindenlaub
2017 Reid Carlson	2024 Roger Davis
2018 Clyde Munson	2025 Roger Davis
2019 Clyde Munson	2026 Howard Eckstein

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Do You Need A Torque Wrench? – See article on page 32

President's Message

From Howard Eckstein



It's been a busy spring and summer for the Utah Valley Model A Club. And we aren't done yet. We're not a coffee shop club or a parade and car show group, although we do get invited by different people to participate in their car shows and parades. Sometimes these events occur on the same day. There are enough cars in the club that a few of us can attend these events simultaneously.

Sometimes, we must disappoint callers as it is easy to be overbooked. Such are the results of fame. My purpose in writing today is to thank club members for keeping their cars in ready condition to answer the calls to be involved in these local events.

I was rereading our mission statement which states to the effect that the club endeavors to encourage members to restore their cars to their original condition where possible and help families to enjoy the hobby. You can read the whole thing on page two of this *Motometer*.

I think we achieve those principles. Of the 60 or so paid members, our cars are over 90% roadworthy. To see a group of our cars that represent a variety of body styles and colors makes for a beautiful sight. I often wonder what the driving public thinks when they see our train of Model As on the highways. Sometimes passengers in modern cars will photograph us with their cell phone cameras focused on our cars as they pass by. I think many people enjoy seeing our cars on the road, even though we may be a little slow.

Fortunately, our cars hold up pretty well on our tours. Sometimes a car will break down hard, requiring a ride home on a trailer. Some may think this is an ignominy, but what's important is we make sure everyone gets home. Club members come to the aid of the hapless owners who may need assistance or parts to get their car going again.

On a trip to Reno for a convention, I drove my car along with Clyde Munson all the way from our home to Lake Tahoe. On the way back, my generator failed. Nicholas Mack had his Tudor on a trailer and loaned me the alternator from his car so that I could continue my journey home. These are the kinds of people who make up our club. After that experience, I bought an alternator for my car. Rebuilding an obsolete generator just didn't make sense to me anymore. I've learned more about my Model A and enjoy it more as a member of the club than I had all the years before I joined. I hope you can say the same thing.



Outside Model A Organizations

Model A Ford Club of America

250 South Cypress Street
La Habra, CA 90631-5515

Dues are \$50 per calendar year, which includes six copies, of The Restorer magazine, published bimonthly. mafca.com.



Model "A" Restorers Club

6721 Merriman Road
Garden City, MI 48135

Dues are \$50 per calendar year (\$60 Canada/\$70 International), which includes six copies of Model "A" News magazine, published bi-monthly. More information at model-a-ford.org



Model A Ford Foundation Inc.

P.O. Box 28
Peotone, IL 60468-0028

Preserving Model A Fords and memorabilia through research, education, and various programs. Family membership is \$35 for one year, \$100 for three years, or \$500 for lifetime. maffi.org.



Model A Ford Youth Scholarship Fund, Inc.

Jo Johnson, President
375 High Head Road
Harpwell, ME 04079
jo.johnson@comcast.net

Sponsored by the Victoria Association, funds come from financial contributions and various fund-raising efforts from MAFCA and MARC members and chapters. All scholarship winners receive \$1,000 every year for up to four years upon submission of satisfactory grade requirements.



Model A Youth Restoration Award

Bob Moore
529 Winston Avenue
Bradbury, CA 91010
bobmoore1@aol.com

This program has been around since 1994. The award is presented every two years at either a MAFCA or MARC national convention. The grant amount awarded to each applicant is determined by the amount of money in the program's bank account, and is divided equally among all the applicants. This includes items donated by the participating Model A Ford vendors. Any MAFCA/ MARC youth restoring a Model A Ford may request an application form.



UVMAC August Club Meeting

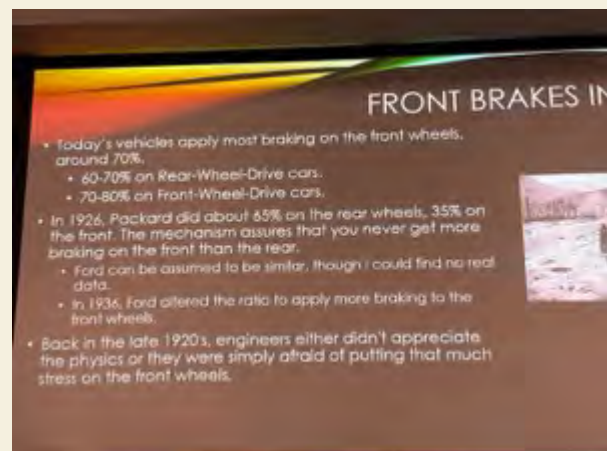
20 August 2026

The August 2026 club meeting of the Utah Valley Model A Club was called to order by the club's Tech Talk Coordinator, John Salzl, at 7:06 P.M. on Thursday, 20th of August 2026 in the Clyde Building in Orem, Utah. Instead of the normal meeting agenda, this meeting began with the evening's Tech Talk, from Buster Hansen, as Buster had a previous appointment that required him to leave the meeting early. The subject of Buster's Tech Talk was The Model A Brakes and how to adjust them.

Buster began his presentation by talking about the importance of the Model A's brakes. He showed an early Ford advertisement which spoke of how "The Safety of the fully-enclosed SIX-BRAKE SYSTEM is an outstanding feature of the New Ford."



The rear Model A's Brakes were designed with a greater mechanical advantage than the front.

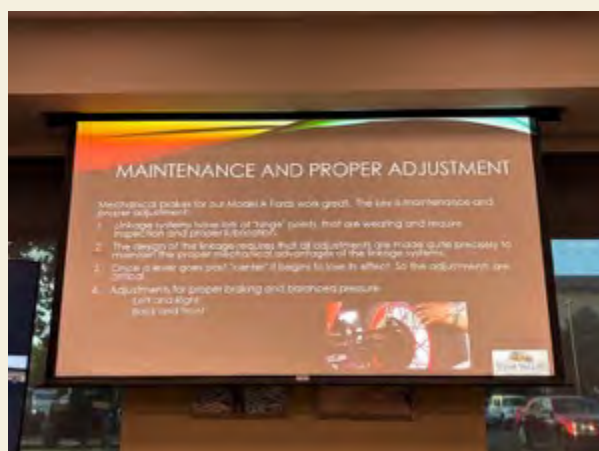




Buster then related a story about Howard and Gemma while they were on an activity with their Model A, while going into Zion's Canyon. Apparently, Howard went to apply his service brake and his foot went to the floor with no brakes. Without panicking, he was able to use the transmission and the emergency brake to bring the car to a stop before hitting the car in front of him.

It was later discovered that the cotter pin that secures the clevis pin to the main brake rod had come loose, and fell out. Buster warned the club members to purchase high quality cotter pins and not those inexpensive ones from outlets that won't be mentioned here.

Buster then explained why maintenance and proper adjustment are very important and how to adjust the brakes properly.





Next, Buster quickly reviewed what he had just explained, before moving onto the final step in the adjustment process.

Once, the brakes are properly adjusted, it is important to take the car out for a test drive to confirm that the brakes can stop the car and also not pull to the side when braking.

Buster had numerous pieces of actual Model A brake hardware, which he showed to the club members during his talk and invited anyone, who wished, to come up later to check them out.

One additional point that Buster made is that molded brake shoes work best for Cast Iron

Drums and woven brake shoes work best for Steel Drums. If you use woven shoes with Cast Iron Drums, they make lots of noise when you apply the brakes to stop.

All of this was in preparation for the Garage Activity this Saturday at the home of Roger Davis. Thanks Buster for a great presentation.

At this time Club President, Howard Eckstein, welcomed everyone to the meeting, and commented that he thought this was the largest attendance we have ever had since the club was organized. He especially welcomed our visitors and recognized MAFCA Treasurer, Dennis Thompson, who was with us that evening with his wife. Howard also welcomed Harley Jacobs and his friend Kent, who had brought their 1928 Roadster Pickup that the club was planning to use for the Garage Day example this Saturday. Two additional visitors were with us via the Internet, Bill and Colette's son, Sean Thompson, joining the meeting from Tennessee and Don Olmstead viewed the meeting from Colorado. It was reported that we had 51 people attending the meeting this evening! Wonderful!!



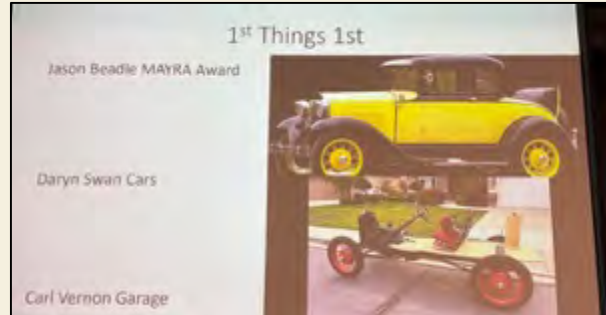
Roger Davis, this year's club Activity Chairman, was next up. He first announced that Jason Beadle had received an MAYRA Award of \$1600. Congratulations Jason and welcome back from your recent mission to West Africa.



Next Roger announced that Daryn Swan is offering two Model A's for sale, including the Speedster that he bought from Andrew Watson, that the club had been working on. Here is a photo of those two vehicles.

Carl Vernon announced that his garage and tools are available for a club member who might want to work on their cars there.

And finally, Roger presented a list of the club activities in which the club members had either recently participated as well as those that are planned for the remainder of the year. Here is that list.



Month	Activity	Member	Notes
22 August	Garage Day at Roger's - Brake inspection	Wes/Karla Lynn Howard	
19 Sept 19 Sept	Nebo Loop Color Tour/Lunch in Mona Jamestown Square - Gail Harveston Candy Drop	Wes/Karla Lynn Howard	Int'l Model A Day
17 Oct, 9 am 23-24 Oct	The Ruth Theater Beetlejuice West Desert Tour	Andy Robert	
14 Nov	Mrs. Cavanaugh's Chocolates Tour	Andy	
12 Dec ?	Christmas Party: Lunch and old movie @ Springville Art City Cinema	Theon	Details to follow

Note there are two activities planned for September 19, so the club members will have to choose between them;

the Nebo Loop Color Tour and Lunch in Mona or the Annual Car Show at the Jamestown Assisted Living facility in Provo. The car show is a fund raising activity by Jamestown for the Gail Halvorsen Aviation Education Foundation, which receives all the proceeds from the car show. There is a flyer and application for the car show inside this newsletter.

Here is a list of recent activities in which our club members participated thus far this summer:

- 4 July - Provo Freedom Festival Grand Parade
- 18 July - Mapleton Parade
- 24 July - Days of 47 Parade
- 25 July - Mona Parade
- 25 July - American Fork Parade
- 30 July - Highland Car Show in which are club received the Layne Downs Memory Maker Award (photo right).
- 1 August - Midvale Parade
- 6 August - Garage Day for Bill Cashdollar's 1929 Taxi
- 7 August - Lindon Parade and Fun at Par and Patsy's
- 8 August - Lindon Car Show
- 15 August - Eureka City Parade
- 17 August - Andrew Watson's Wedding Reception
- 22 August - Garage Day for Brake Work at Roger's



As you can see, our club has been very busy, including those days on which our club was represented at multiple events on the same day.

Theon Laney was next with the presentation of the club member's awards. The first was Jason Beadle who received the club's High Mileage Trophy for driving his car the most miles this past month.

The next award that was presented was the 13+ Award to those members who drive their cars for 13 straight months including to a club activity. The recipients were Nathan Swenson, Theon Laney and Andy Hudspeth. Nathan was not present to receive his award (left).



Next came the Lucky 7 Award which is presented to those members who drive their cars to at least 7 of the approved club activities. Theon mentioned that additional activities

may be added to that list as the year goes by, including the recent MAFCA National Convention this past June, in Pendleton, Oregon. The recipients of the Lucky 7 this month, were Theon Laney, Dave Morrell, Roger Davis, Jeff Niven, and Andy Hudspeth (right). Since the Lucky 7 Award is for a particular calendar year, we expect that we will be seeing more club members receive this award as the year progresses.

The Bent Rod Award is presented each month to two most worthy club members who have problems with their cars, for which they are responsible for the problem. This award is determined by vote of the attendees at the monthly club meeting.

The nominees for the Bent Rod Award for this month were 1) Diane Brimley for getting caught for speeding in her Model A, 2) Dave Morrell for a fire in Amber's new car, 3) Tyler Lewallen for blowing up his clutch, and 4) Robert Mack for having a loose electrical wire.



The nominees were voted on by a show of hands from the club members (each club member voting for two) and the two members with the most votes were Tyler Lewallen and Dave Morrell. Since he will not be at the next meeting, due to being at school, up in Logan, Tyler gave his award to Diane.



Next on the agenda, Howard solicited comments from the club members about this year's Christmas Party, in particular about a gift that would be given to the club members, as is the tradition. The tentative date and location for the party is December 12th in Springville.

Two possible gifts were mentioned, 1) A set of ignition wrenches, and 2) A 4-sided plug wrench to be used to remove the plugs in the differential and transmission of the Model A. A SAE set of ignition wrenches, even of questionable quality will cost at least \$5 to \$10, so that possibility might cost the club \$250 to \$500. A good quality set might cost as much as \$20. The board will continue to look for something.



At this time the club treasurer, Diane Brimley, gave the financial report.

- Checking Account – \$154.44
- Savings Account – \$1175.71
- CD – \$3534.85
- Total – \$4865

At this time, Howard asked John Salzl to present the subject/titles of the upcoming Tech Talks for 2026.

- August – Brakes – Buster Hansen (presented at today's meeting)
- September – ? – Clyde Munson
- October – ? – ?
- November – Bearings – Jeff Niven

If anyone in the club would like to volunteer to give a future Tech Talk, please contact John Salzl.

At this time, Howard told the club about an actual phone call he recently received from a man in Wyoming, who was requesting help fixing his Model A. Howard said that he suggested that the man contact his local Model A Club members for help. The man told Howard that he had

already contacted them and the only help the Wyoming Club members provided was to tell him to purchase a copy of Les Andrews book. He was so disappointed that he promptly canceled his membership in that club. It would have been an entirely different outcome if this man had lived close enough for members of our club to go and help him. (And who knows... some of our club members may end up driving to Wyoming soon to pay this man a visit.)

The point of Howard's story, was that our Model A Club has many wonderful members who are willing to help other members of the club with their cars. This is just one of the many great qualities of our club and its members.

After delivering that powerful message, Howard closed the club meeting at 9:18 P.M. and the club members drove home with thoughts of the upcoming weekend garage day, fresh on their minds.

Editor's Note: Check out the Letter to the Editor at the end of this newsletter.



Utah Valley Model A Club Garage Day – January 14, 2023

August Car Shows and Parades

Lindon Car Show – Aug 8 (5 Cars and 9 People)



Eureka City Parade – Aug 15

(14 Cars and 27 People)



Eureka City Parade (con't)



Eureka City Parade (con't)



Eureka City Parade (con't)



Other parades and activities in August included:

Andrew Watson Reception – Aug 17

5 Cars and 12 people

Lindon Parade – Aug 7

Midvale Parade – Aug 1

Helping Hands

Harley Jacobs 1929 Roadster Pickup

On a hot Utah afternoon in mid-July, Buster Hansen, John Salzl, and Roger Davis met at the garage owned by Harley Jacobs. Amongst a 1952 M-38 military jeep, a Russian sidecar motorcycle, a half-dozen other motorcycles, boats and some other cars we found Harley's 1929 Roadster pickup.

Buster was quick to identify that it had some kind of modern points but he managed to adjust the timing a bit and we got it running. It had been some time since the truck was running so we decided a good cleanup and rebuild of the carb would be well-advised.

John and Roger got together a couple of mornings, took the carb completely apart, cleaned everything up, inside and out, put in a new carb kit and painted it. It turned out very nice. We



then tested the float to make sure it closes at 5/8" below the rim of the bowl. We also put the bowl on Roger's Mail Truck and drove it around to make sure it was running well.



A few days later we put the carb back on Harley's pickup and it started right up and runs great! We took the pickup out for a quick ride and while it runs well, the brakes are really bad--maybe Harley should come to our August Club Meeting to see Buster's presentation on Model A Brakes.

Also this month, John Warby and John Salzl helped get Curt Martinsen's car running, and Sam and Roger removed a faulty rear axle from Bill Cashdollar's sedan

Thanks all of you!

International Model A Day
UVMAC Nebo Loop Tour
Itinerary for 19 September 2026

- 9:00 am: Meet at Payson Market, Payson, UT
 - Nostalgia Drive Down Payson Main Street
- 9:30 am: Stop at Maple Dell Parking Lot
 - Overview of Maple Dell Scout Camp
- 10:00 am: Pause at Bennie Creek/Grotto Area
- 10:30 am: Photo Opp at Guard Station
- 10:45 am: Stop at Beaver Dam/Birdseye View
- 11:00 am: Photo Opp at Utah Valley Overlook
- 11:30 am: Stop at Mount Nebo Overlook
- 12:00 noon: One block walk to Devil's Kitchen
- 1:00 pm: Lunch at One Man Band, Nephi
- 2:30 pm: Drive home thru Mona
- 3:30 pm: Adjourn at Santaquin Main Street



A Note on Authenticity

By Roger Davis

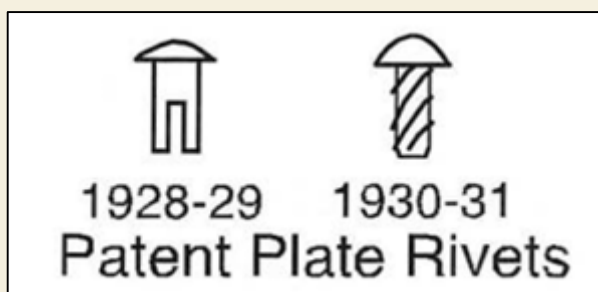


Last month we discussed the release of the updated Restoration Guidelines and Judging Standards (RGJS). Distribution has had a few hiccups including some printing problems so distribution will be delayed until those problems are resolved.

Every Model A came with a Patent Plate. It is my understanding that all Patent Plates were the same so if you can find an original you can mount it on any car. Reproduction plates are readily available from the suppliers. I have observed that some people selling their Model A photograph the patent plate as though it establishes something authoritative about the car—as far as I know, it does not. See

photo below.

Per the RGJS, “A Ford Motor Company zinc patent data plate was attached to the right [passenger] side of the firewall. Split type black or nickel rivets with an oval head were used in 1928-29. In 1930-31 the rivets were changed to a cadmium plated drive-in style with a round head. All rivets were installed with the



rivet head on the engine side of the firewall.”

From my own experience, it is really hard to get the split rivets installed tightly as there is minimal space between the firewall and the gas tank.

Note also in the photo that there is a small plug in the firewall near the patent plate. You’ll

need to insert an expansion plug in that hole if it is missing. The RGJS states “With the introduction of vacuum windshield wipers on Tudor Sedans in June 1929, all firewalls were punched with a hole for the vacuum line connector. Vehicles not equipped with a vacuum wiper after that date had a brass expansion plug inserted into the hole. The plug was left unfinished or painted with the body. Additionally, some very early 1928 bodies had a vacuum hole punched and they were similarly plugged.”

Be authentic!

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Special Visit by the Iconic Oscar Meyer Wienermobile

By Jeff Niven

Attendees and participants at the recent Lindon Car Show were treated to a special guest appearance of the Oscar Meyer Wienermobile. The Wienermobile has been around since it was designed by the nephew of the company's founder, Carl Meyer, in 1936. The company currently owns and operates six of these spectacular vehicles that drive around the United States spreading goodwill and joy to all who see them. They also hand out their iconic Oscar Meyer Wiener Whistles to all who ask for them.



The Wiener Whistle was developed in 1952, and in 1958 children of all ages found one of these whistles in each package of Oscar Meyer Wieners. Here is a photo of the Wiener Whistle that I received at the car show.



Here are some fun facts about the Wienermobile:

- Height – 11 feet
- Length – 27 feet
- Width – 8 feet
- Weight – 14,050 pounds
- Engine – General Motors – V-8, 6.0 Liter 300 Vortec
- Transmission – 6 speed automatic
- Gull Wing Side Door
- Automatic Retractable Step
- GPS Navigation System
- Removable Sunroof
- Six Mustard and Ketchup colored Seats
- Official Wiener Jingle Horn



Oscar Meyer is always looking for young enthusiastic representatives (“Hotdoggers”) to drive the Wienermobiles. They are currently accepting applications (See link here)

<https://www.oscarmayer.com/hotdoggers>

Since 1988, less than 450 college graduates have held the prestigious position of “Hotdogger”.

#####

All Proceeds Support the Gail Halvorsen Aviation Foundation

THE CANDY BOMBER FOUNDATION
THE GAIL HALVORSEN LEGACY

CARNIVAL CAR SHOW FUNDRAISER

Sept. 19th
12pm - 3 pm

Car Registration:
\$20

Admission:
FREE

HELICOPTER CANDY DROP - BBQ - ROCK WALL
PONY RIDES - BOUNCE HOUSE - PETTING ZOO

40+ CARS - GAMES - PRIZES - VENDORS - RAFFLES

COURTYARD
AT
JAMESTOWN
ASSISTED LIVING

3352 N 100 E PROVO UT 84604
(801) 377-3730

\$1 RAFFLE TICKETS • \$6 MEAL TICKETS • \$12 CARNIVAL PASS

COME SHOW OFF YOUR CLASSIC CAR!

COURTYARD AT JAMESTOWN

**22ND ANNUAL
CAR SHOW & CARNIVAL**

SATURDAY, SEPTEMBER 19, 2026 12-3 PM

CAR REGISTRATION FORM

Vehicle Check-in begins at 9:30 am (all cars in place by 11:30)

Registration includes 2 free meals, 5 raffle tickets and a certificate of participation.

Please complete & return this form with \$20 registration fee

by September 15th to Courtyard at Jamestown

3352 N 100 E, Provo, UT 84604

Questions? Reach out to Tracy

Ph: 801-377-3730 Email: twagstaff@stellarliving.com

All proceeds will go to the Gail Halvorsen

(The Candy Bomber) Aviation Education Foundation

Owner/Participant Name: _____

Phone: _____ **Email:** _____

Address: _____

Vehicle Make: _____ **Year:** _____

Model: _____ **Color:** _____

Entrants assume all responsibility and liability for their person, vehicle, and related items, and hereby release, indemnify and hold harmless Courtyard at Jamestown, from any and all liabilities arising from this event. I have insurance on the participating vehicle. Driving onto the site I will follow traffic coordinators and instructions and drive slowly. Event staff will determine the location of the exhibitors. Courtyard at Jamestown reserves the right to photograph, video, or reproduce any entry of person for future use at no compensation to entry owner. If an exhibitor is less than 18 years old, a parent or guardian must sign for exhibitor and accept responsibility.

I understand and accept these rules and regulations. _____

Signature



UTAH VALLEY

- Model A Club -

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September Birthdays, Activities & Holidays

Birthdays

Greg Mack	21
Karla Lynn	24
Linda Vernon	24
Judd Houser	30

Club Activities

UVMAC Board Meeting	1
UVMAC Club Meeting	17
Nebo Loop Color Tour	19
Jamestown Car Show	19

Holidays and Special Days

VJ Day	2
Labor Day	7
First Day of Fall	22
Full Moon	26

MAFCA Events

International Model A Ford Day	19 Sep 2026
National Awards Banquet	11-12 Dec 2026
National Tour	13-18 Jun 2027



Garage Day – August 22, 2026

From Roger Davis and Greg Mack

On 22 Aug 2026, 13 Club members brought 6 cars to our August Garage Day. We had a unique chance to see Harley Jacobs' Roadster Pickup on the lift where we could easily see the "farmer repairs" that had been made to the pickup. The most surprising was two brake rods welded together to be just the right length, removing the adjusting clevis fisheyes. That rod also had a 1-inch-long bolt with a hole drilled in it for a cotter pin.

We pulled a front wheel and a rear wheel to see up close the inner workings of the Model A braking mechanism. The brakes were worn but they had obviously been rebuilt as the backing plates were clean and the bearings with clean grease in them.

Theon completed a lube job on Harley's pickup. Greg and Roger straightened out Harley's gas gauge. Jason Beadle brought the muffler and exhaust manifold from his car to assess what repairs he will need to make. We also helped Nicholas Mack adjust his brakes to bring them to more optimal performance.

We had a great time chatting and sharing experiences. It was great having Howard back with us.



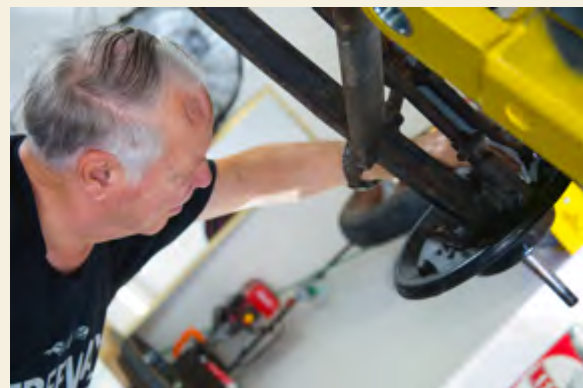


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Do I Need a Torque Wrench?

By Jeff Niven

During my early engineering career, I created numerous mechanical and electrical designs that used threaded fasteners to hold metal parts together. I selected bolts such that they could provide the necessary clamping force without breaking. The required clamping force depended on the static and dynamic loads that were expected.



My drawings were then used to fabricate the metal parts as well as to show the assemblers how everything fit together. The question that was immediately asked of me, by those assemblers was, "How tight do we need to make all of these fasteners?"

If they were too tight, they could break when external loads were applied. If they were too loose, the metal parts could loosen and separate and maybe allow fluids to leak, or worse, to loosen even further



and eventually allow the nuts to come off. For critical joints such as those found in aircraft, and structures that support people including suspended loads such as bridges and buildings, it is essential that the fasteners be properly tightened to prevent bolt failure in any of those conditions. Any fastener whose failure could produce an unsafe condition and cause bodily harm or death, must receive particular attention by the design engineer. Thus, design engineers must not only design fasteners to support their expected loads, but they must also specify how tight to make the nuts and bolts when they are assembled.

The calculations, that are used by the engineers to determine a fastener's size, strength, material and torque are too involved for this discussion. **However, it must be understood that the engineers at Ford, during the design and assembly of the Model A Ford, well understood the importance of proper Torques and that they actually calculated how tight the various fasteners needed to be during the assembly of the Model A Ford.** The problem for these engineers was **how** to achieve these torques on the assembly line, using the unskilled laborers that they had to work with. The idea that they had no way to achieve consistent and known torques, without Torque Wrenches, is not correct. Here is how they did it.



The method that was used by the Ford engineers to achieve these critical torques during Model A production was by creating custom length wrenches that when used by a normal person who tightened the fastener as tight as possible, would achieve the desired torque. Instead of providing the assembler with a modern Torque Wrench like is done today, Ford gave them a specific wrench and told them to use only that particular wrench to tighten one specific nut or bolt and make it as tight as possible. The length of the wrench, combined with the maximum force applied, was the torque that was applied. Variations in torque, therefore, could only result from different strengths of individuals. Here is a photo of three such wrenches used by Ford.

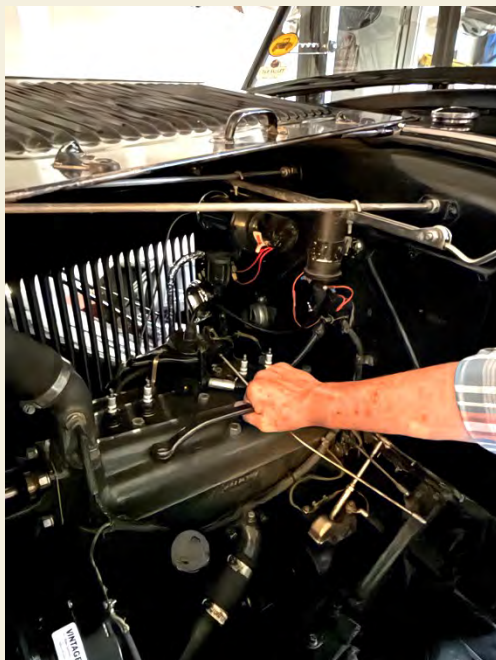
If you look closely at these wrenches, they do not have sizes on them, as you might find on a set of modern combination wrenches. Instead they have a simple letter/number that could indicate where they were to be used.

For example, the long wrench in the middle that is marked with "M4", could well have been used to tighten the head bolts on the Model A engine. The closed end of the wrench fits snugly over the head nuts, and if the user applies 70 pounds of force at the other end of the wrench (about 9 inches from the closed end), the applied torque is:



$$70 \text{ pounds} \times 9 \text{ inches} = 630 \text{ inch pounds (53 ft lbs)}$$

According to Les Andrews, the torque to be applied to the head bolts is 55 ft lbs (ref 1-134). And based on my own testing, I can pull between 50 and 70 pounds with one arm. There is no way I can exceed 70 pounds of pull, without jerking the wrench, which would not be allowed.



As you can see, it was possible for Ford to assemble the Model A Ford, without Torque Wrenches, through the use of custom sized wrenches. This was great for the factory people as well as dealerships and repair shops that had access to a set of these wrenches. However, those without the special wrenches, had to resort to alternative methods of achieving consistent and proper torques.

And since Ford achieved proper torque using special hardware, and not with Torque Wrenches, it seems there are no records of the calculated torques from the design engineers at Ford. Thus, mechanics, nearly 100 years later, even with modern Torque Wrenches, must rely on torque values published by people such as Les Andrews.

Here is a list of the few torque values to be used with modern Torque Wrenches (Beam or Clicker - right) taken from the specification pages at the end of Les Andrews' Book 1:

- Rear Axle Torque – 100 ft lbs
- Connecting Rod Cap Bolt – 40 to 50 ft lbs
- Main Bearing Cap Bolts – 80 to 100 ft lbs
- Flywheel Bolt Torque – 65 ft lbs
- Head Nut Torque – 55 ft lbs



If you really search through the book, you will find numerous other critical torque specifications for the vehicle, especially for the engine. For example, on page 1-134, you will find a list of eleven critical torques for the assembly of the engine listed here:

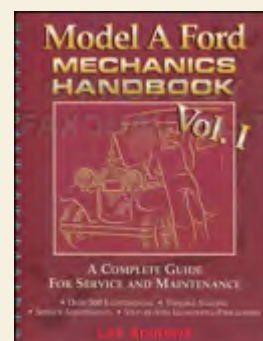
- Cylinder Head Nuts – 55 ft lbs
- Manifold Nuts – 45 ft lbs
- Flywheel Housing to Cylinder Block Bolts – 55 ft lbs
- Flywheel to Crank Bolts – 65 ft lbs
- Pressure Plate to Flywheel Bolts – 20 ft lbs
- Camshaft Nut – 100 ft lbs
- Crankshaft Pulley Nut – 80 ft lbs
- Main Bearing Cap Bolts – 80 ft lbs
- Rod Bearing Cap Bolts – 35 ft lbs
- Valve Chamber Cover Bolts – 20 ft lbs
- Spark Plugs – 25 ft lbs

Additional critical torque specifications can be found scattered throughout his book including the often needed and critical torque for the Lug Nuts, found on page A-2 of the book.

Lug Nuts – 64 ft lbs

If there is one major complaint I have with Les Andrews' Book 1, it is that there is no comprehensive list of the torque specifications needed to work on the Model A Ford. Instead the user must search through the book looking for those torque values that they need for the particular job they are doing.

In summary, while the first torque limiting tool may have been invented in 1918 by Conrad Bahr, the first Torque Wrench was not patented or produced until after 1931. As a result, all Model A Ford automobiles were assembled to the Ford engineers' calculated torque values through the use of custom length wrenches. Because of this, some people may believe that Ford did not achieve proper and consistent assembly torques in the Model A Ford. This is not correct. However, since those original torque specifications are not available today, and since the custom wrenches have been replaced by modern Torque Wrenches, mechanics and engineers have done their best to reproduce those original torque specifications and published them in books such as Les Andrews – Book 1.



Check out this Link about Torque Wrenches:

https://www.youtube.com/watch?app=desktop&v=r9E7cH_ZPBU&t=483s

Letters to the Editor

Dear editor,

I'd like to comment on our recent garage day where brakes were the focus. The attendees were new members of our club. Veteran club members took over the teaching of the basic workings of the brake system. This means that over the past years of the club's existence we have matured regarding experience with our cars.

I'm proud of our members who were able to show others the correct and wrong repairs made on Harley's truck in the past.

Our members are helping others solve issues with their cars, from minor ignition problems to major driveline repairs. May we continue in this positive club culture.

Howard

Dear Howard,

Thank you for your letter and the positive report of the club members helping each other. That was one of the first things that impressed me about the club members, when I attended my first garage day many years ago. What started out to be only the installation of an engine expanded to include the attachment of a new tail-light, the overhaul of a carburetor and several other repair and maintenance tasks. Members helping and teaching other members is a key part of being a part of this great organization.

Editor





- Model A Club -

Application for Club Awards

Today's Date _____

Club Member's Name _____

Award Requested:Bent Rod - ☐ (trophy for avoidable or self-inflicted Model A mishap)Crying Towel - ☐ (for Model A mishap - unavoidable or caused by others)Mileage - 500 - ☐ 1000 - ☐ 1500 - ☐ 2500 - ☐ 5000 - ☐ 10K - ☐13+ Award - ☐ (Driving car 13 consecutive months including to club mtg)Golden Wrench - ☐ (writing newsletter article re. your Model A car work)

Justification/Details/Information, etc. _____

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