

"Aogah" Newsletter

The Newsletter of the Twin Cities Model A Ford Club

May 2017

Twin Cities Model "A" Club Events

- May 6th - Spring Tune Up Clinic**
- May 16 th - Business Meeting**
- May 18th- Men's Clinic - 1st. Half: Karry Keen Trunk Rebuild, Differential Rebuild Experience and Cast Iron Brake and Shoe Rebuild Phil Zins**
2nd Half: Repairing With Heli - Coil Don Wynn
- May 19th-20th-21st Whalen Stand Still Parade and Fun Days**
- June 3rd - Pancake Breakfast**
- June 4th Early V- 8 Club Car Show - All Ford Picnic and No Trophy Show**
- June 14th - Capitol City Steak Fry**
- June 15th - Ice Cream Social at Meadow Ridge Senior Living**
- June 23rd - Motor To Medora (Not An Official TCMAFC Event)**
- June 24th - Ride For Freedom**
- August 6th - Redwing River City Days Parade**
- September 16th - Apple Days Excelsior MN.**
- October 1st - Midwest Fall Swap Meet And Antique Auto Show**
- October 2nd - 5th Great Northern Tour**

More events sponsored by other clubs and announcements by club members, inside this newsletter

Board Meetings – 7:30 PM, Hall A, Room 104

Restoration Clinic – 7:00 PM, Lunch Room Ladies Clinic – 7:00 PM, Staff Lounge

Clinics held at: Brooklyn Center High School, 6500 Humboldt Ave N, Brooklyn Center, MN

Come in the South door and ask for directions to our Meetings / Clinics. * Noted as non-standard meeting date

"AOGAH" Newsletter is published monthly for the members of the Twin Cities Model A Ford Club.

Newsletter Editor:

Mark Leder 952-926-3995

President:

Doug Portlance 763-783-8920

Past President:

Doug Persing 763-434-4110

Vice President:

John Roehl 763-427-9185

Senior Board Member:

Justin Maas 505-206-1097

Junior Board Member:

James Slettehaugh 651-357-2540

Treasurer:

Mel Eder 651- 770-3347

Secretary:

Cathy Kieger 612-597-1719

Clinic Coordinators:

Dale Pomerleau ,Jerry Schilling
763-458-9880, 763-434-7464 &

Historian:

Neal Anderson 952-473-5269

Librarian, Government Affairs:

Ken Huber 763-377-1385

Videos:

Jim Schleicher 952-448-2254

Tools:

Steven Barnacle 952-473-2071

Era Fashion:

Barb Rousseau 952-461-2725

Sunshine:

Joan Frisk

**Electronic Information
Coordinator:**

Dale Pomerleau 763-458-9880,...

Club Photographer:

Neal Anderson 952-473-5269

Event Coordinator:

Tom Owens 651-492-4398

Membership Director:

Doug Persing 763-434-4110

Service Advisor:

Vince Smith 763-786-4145

Become A Member

**Interested in joining our club?
We would like you to join. Dues
are only \$25.00 per year.**

**For all the information about
what our club has to offer
please call our membership
director or see www.tcmafc.org**

**Members are recommended to
also have a membership in the
Model A Ford Club of America
or the Model A Restorer's Club.**



Doug Portlance

TCMAFC President



President's Letter

Greetings All,

The meeting went well this month. The insurance quotes for our club appear getting closer as you can see from the minutes.

I completed the form letter for advertising in the club newsletter. I received some good suggestions from all that were at the monthly meeting. I hope to finalize the letter next month.

We do need a couple of volunteers to host the monthly club meeting for June 19th and July 17th so if you are interested please contact someone on the board.

Our last month's clinic was really interesting. I did not know that there was such a wide range of oils out there and what to look for on the labels. The main message I took away from the clinic was use oils with HIGH Zinc was stressed for the Model A Fords.

The bucket swap went well and there were some nice bargains to be had. Thank you to our clinic staff for a job well done!!!! We still are in need of a Woman's Clinic Coordinator. If any of you know of someone that can help our ladies out please let someone on the Board know.

Our condolences to the family of Lynn Groven who's mother passed away earlier this month. Lynn Groven is the wife of Rog Anderson. Lynn and Rog put on the "Ironman Tour" every leap year (Feb 29th) that we have all come to enjoy.

I have nothing new on the "Poker Run / Charity" event with "Ride For Freedom" motorcycle group. The "Ride For Freedom" is a POW-MIA awareness group that also supports our veterans, past and present. The event this year is going to happen on June 24th. I contacted Dan Jayson and understand a flyer is in the works to for us put in the Newsletter soon.

If you are considering an event and it is not "specifically" listed in the budget, remember to attend a board meeting to discuss your plans so funding can be approved. Otherwise your event may not be funded by the club!

The weather is calling us to get the A's out of storage and out on the road. Make sure to keep an eye on the "Coming Events" since we seem to be getting into the busy driving season!!

Well that's it for now. Warmest Regards,
Doug Portlance - TCMAFC President

**MINUTES OF THE TCMAFC MEETING
April 2017 MEETING MINUTES**

The April 18,, 2017 Business Meeting was called to order at 7:30 p.m. by President Doug Portlance. The meeting was held at the Brooklyn Center High School.

BOARD PRESENT: President – Doug Portlance, Vice President – John Roehl.
Treasurer – Mel Eder, Junior Board Member – Jimmy Slettehaugh, Secretary Catherine Kieger.

MEMBERS PRESENT – Larry Erickson, Mark Leder, Dave Kieger, Jerry Schilling and Phil Zins.

LAST MONNTH MINUTES: The March 21, 2017 Board Meeting minutes was reviewed and approved, motion by Mel Eder and 2nd by Jimmy Slettehaugh the minutes approved.

TREASURER’S REPORT: Mel Eder handed out hard copies of the Treasurer’s report for March and was it was reviewed for the details of the report. John Roehl made a motion to accept the Treasurer’s report as presented and it was seconded by Catherine Kieger, the motion carried.
The Treasurer’s Report was accepted .

Member Report: There were no new members this month.

MEMBERSHIP GREETING: Volunteer not present.

MEN'S CLINIC: Next month clinic Lucas Oil and the Bucket Swap Meet. Members bring in parts and leave with new parts

WOMANS CLINIC: Volunteer not present. Note – We are looking for a woman to take over the clinic, if you know of anybody please let us know.

GOVERNMENT AFFAIRS: Volunteer not present.

LIBRARIAN: Volunteer not present.

VIDEOS: Volunteer not present.

HISTORIAN: Volunteer not present.

FASHIONS: We are still looking for someone to fill this position.

SUNSHINE LADY: Life Time Member – Helen Long passed away.

NEWSLETTER : Everything going fine, will try to get the bill for the newsletter.

WEBSITE: Volunteer not present.

SWAP MEET: Volunteer not present.

SERVICE ADVISOR: Volunteer not present.

CALENDAR OF EVENTS: Volunteer not present, looking for the 100,000 mileage event date. Anything on the Vets home social?.

OLD BUSINESS: There is a letter for advertising and is being reviewed. Update on club insurance. Doug Persing’s sister is still working on a quote, Doug Portlance was waiting from is insurance agent also. We have until June to get this done.

NEW BUSINESS: The Motor to Medora event is not hosted by the Twin Cities Model A Club. Phil Zins will be hosting the August 15th meeting , looking for volunteers for the month of June and July to host the meeting. Discussion was brought up About putting a picture of the person or car in the roster book and possibly even the birthday. Larry Erickson brought up to the board about doing a Friendship picnic for the club, that was tabled for now.

ANNOUNCEMENTS: Lynn Groven wife of Roger Anderson, mother passed away
Update on Little Dearborn , they will continue to function it will be in Long Lake, MN and will continue to help the Model A clinic out.

MEETING ADJOURNED: The meeting was adjourned at 8:21 p.m., the Board approved a motion to adjourn made Mel Ecker and second by Jimmy Slettehaugh.

RECORDING SECRETARY: Catherine Kieger.

Summer Business Meeting Locations Are Needed For The June and July Meetings

Please consider offering your home for one of these dates. An informal gathering where members bring a potluck food item and get to socialize for a time before the business meeting. Contact Doug Portalance or Tom Owens with your choice of dates

TUNE UP CLINIC DIRECTIONS

Directions from Minneapolis: Continue West on highway 12/394. After you go by Wayzata (watch for the water tower) take the highway 112 Long Lake/Orono exit. You will go thru down town Long Lake and after the second stop light watch for the American Flag on the left. 2205 West Wayzata Blvd. - Charlies Auto Body is our destination.

This section of highway is under construction. It is open and no delay but if you get to the stop light after the construction you went too far.

SPRING TUNE UP CLINIC

MAY 6TH

THIS YEAR MEET US AT:
CHARLIES AUTO BODY, 2205 WEST WAYZATA BLVD.
LONG LAKE, MN. 55356.

WE WILL BE USING THIS FACILITY THAT HAS AMPLE
PARKING AND WORK SPACE ALONG WITH A CAR HOIST

WE ALL WANT THIS TO BE A GREAT EVENT HELPING TO
GET THE CARS IN ORDER FOR THE DRIVING SEASON! YOUR
HELP IS NEEDED SO :

**Please bring something to share for the Pot Luck. We will be
grilling Brats and having refreshments. Bring a chair.**

***PLEASE VOLUNTEER !
TO HELP SET UP AND OR CLEAN UP, IF YOU HAVE A REPAIR
SKILL OR WANT TO WORK ON A TEAM AT THE VARIOUS
STATIONS. SUGGEST A STATION YOU WOULD LIKE TO SEE
THERE. CONTACT: DAVE PETERSON AT 612 221 0282***

**WE WILL HAVE EXPERIENCED CLUB MEMBERS TO MENTOR
AND HELP WITH VARIOUS STATIONS SET UP FOR SPECIFIC
REPAIRS .**



Not an official TCMAFC event.



Motor to Medora

FRIDAY, JUNE 23
2017
OLD HIGHWAY 10



MANDAN - MEDORA
137 MILES
TOP SPEED: 30MPH

A unique opportunity to cruise antique and vintage classics as a group to scenic Medora, ND for the Medora Car Show.

We encourage participation in the Medora Car Show:
<http://www.medora.com/dof/events/medoras-classic-car-show/>



- SLOW SPEED FOR ANTIQUE VEHICLES - FREQUENT STOPS
- ALL PAVED ROUTE WITH MINIMAL MILES ON INTERSTATE
- CHASE VEHICLES WITH TRAILERS AND SUPPLIES
- ALL VEHICLES WELCOME BUT WE'LL BE MOVING SLOW

SCHEDULE

(all times CDT)

8:00am Depart Mandan
9:15am Arrive New Salem
9:45am Depart New Salem
10:30am Arrive Glen Ullin
10:45am Depart Glen Ullin
11:15am Arrive Hebron
1:00pm Depart Hebron
1:45pm Arrive Taylor
2:00pm Depart Taylor
3:15pm Arrive Belfield
3:45pm Depart Belfield
4:15pm Arrive Medora

LUNCH
TBA



FOR EXTRA FUN
Dress in the era
of your car

INFO

Kari/Jerome
Zimmerman
701-527-5031

www.motortomedora.com

info@motortomedora.com

Map: goo.gl/maps/27M70

If considering going, call and reserve a room ASAP in Medora for Friday & Saturday June 23rd & 24th. 1-800-633-6721 Let them know you are with the CAR SHOW as a block has been reserved. The Show is Saturday June 24th in Medora, ND. A Hotel in the Mandan / Bismark area has not yet been selected.

Dale and Cindy Pomerleau from the club are tentatively planning to go. Contact them if your interested in going as well.

FOR SALE / WANTED / SERVICES :**TO PLACE YOUR AD: CONTACT NEWSLETTER EDITOR**

- For Sale:** Rebuilt engines in stock.
Trade in or bring me yours to re-build. Precision machining and assembly work.
Call Dave Gerold for options and pricing at (952) 290-3630 or see my website
www.durableperformance.net
- For Sale:** 1928 Town Sedan - complete, 1930 Town Sedan - basket case.
Call Chuck Maas (320) - 277-3242
- For Sale:** 1930 Tudor Sedan - many new parts, green and black with tan interior. This nice car needs a new owner. Call Wayne (612) - 202-5590
- For Sale:** Model A parts, almost any part you may need including fenders, hoods, tires, gas tanks, windshield frames, distributors, lights, manifolds, horns and many more items. Contact Larry Erickson (651) - 631 - 9127 or Larrybecky@usfamily.net
- For Sale:** 1930 5 window coupe, dual side mounts, ground up restoration, first place trophy in 2014. Zero road miles, car is black and Ford maroon with red wheels and pinstripe. Contact Glenn Crandall (406) - 930 - 2528
- Wanted:** Small amount of thorne brown paint for touch up. Bob Butek, 651 459 8039.
- For Sale:** 1929 5 window Coupe with rumble seat, freshly rebuilt engine and new shocks.
Medical Issues prevent me from driving this car. Contact Charles Hilgert 651 - 455 -7274
- For Sale:** 1929 Cabriolet, Very nice running and driving car. Well put together car with good upholstery, top and britework. Priced at \$25000.00 firm. Contact Jeffrey Perkins 651 - 283 - 1167
- Wanted:** 100% complete original or restored 1928 or 1929 Tudor. Call Benjamin Rowan 651- 202-3040
- Wanted :** 28 AA rear brake drum (the one without the separate emergency brake). Contact Dave Hetchler
952 - 261 - 2688
- Wanted :** New member desires clean , straight and drivable 1931 4 door Model A sedan . Contact Daniel Bourgeois 612 - 721 - 4021, 612 - 408 - 3212 coldrod007@gmail.com
- For Sale:** Front and rear fenders from 1931 Coupe. Poor conditions. Contact Arlen Kylo 507 - 732 - 5009
- Wanted /Trade** I would like 5 - 21" original black painted wheels, I have excellent cream/yellow wheels and tires with stainless lug nuts for possible trade. Contact Rog Anderson 651 - 457 - 8820
- Wanted:** Enclosed trailer to haul my Model A Coupe. Contact Catherine Jammer 540 - 354 - 2782
- For Sale:** 1930 Deluxe Coupe, Fully restored with custom upholstery, painted pearly white (Cadillac Escalade paint) , runs well. See it on my web-site:<http://www.davehagen.net/modela.html>
hagen050@comcast.net or 651-428-5896.



YOU ARE INVITED TO



THE TWIN CITIES MODEL A FORD CLUB
PANCAKE BREAKFAST & MYSTERY TOUR



Breakfast at:

Thom and Linda Boche's Home
5747 Highlands Ct N, Lake Elmo, MN. 55042

SATURDAY JUNE 3, 2017

BREAKFAST SERVED from
8:30 AM until 10:30 AM.

Serving pancakes, maple syrup, warm muffins,
sausage, assorted fresh fruit, orange juice, coffee,
and milk



{The MYSTERY TOUR WILL START AFTER CLEAN-UP}



Free to TCMAFC, Lady Slipper and Capital City Car Club
members and guests

So we don't run out of food, please RSVP your attendance (how
many) to the address above or email your attendance to us at:
thomboche@aol.com



Volunteers Are Needed:

The Pancake Breakfast and Mystery Tour is one of the kick off events for our driving season! This event takes a lot of helpers to make it successful for the large number of members who turn out. Contact Thom Boche (651 - 770 -2370) or Dave Gerold (952 - 290 - 3630) to see how you may help.

April Men's Clinic

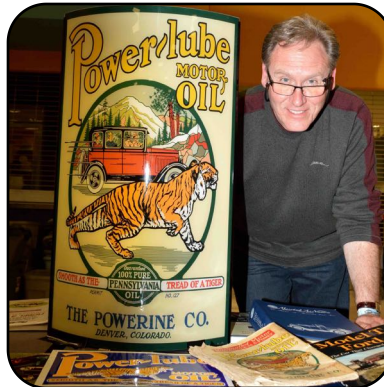
This night I believe was one of our largest ever in attendance in the last number of years! We had a lot of ground to cover. It was bucket swap night and a lot of merchandise was brought and many items changed hands. Good quality items were on the tables at reasonable prices. Even if you didn't buy or sell, the ability to learn a little bit more about the parts and tools that could help you out later with your car ownership were worth a lot. We had a few new members come for their first clinic experience as well as some visitors.

Announcements regarding the Tune Up Clinic (May 6th and the Pancake Breakfast June 3rd.) beginning the kick off of our 2017 season. We learned the Mystery tour will once again have a Richard Zins plotting the course. A couple of awards were delivered by Dale Pomerleau to our members for the MARC Mileage driving awards and our newsletter and its editor received the MARC Award of Excellence for the club's publication the Ahooga News.

The featured program of the night dealt with the history of oil. We were schooled by Darrel Sanderson of the Lucas Oil products company. We found out the lubricating oils really come from different locations than the fuel oils. The largest portion of this oil type surprisingly comes from our neighbor to the north Canada.

As the automobile industry has progressed in its ability to build more precise and efficient cars the oil products have changed to keep pace with the different metals used in engine, transmissions and any friction areas needing lubrication. As these design changes became common place, the oil and lubrication supplies have become much better, however our "old" cars were designed for less sophisticated lubricants and some of the base ingredients and additives that we need for them are disappearing from the mix the manufacturers are making today. What was emphasized in the case of our cars is the removal of the additive zinc in the lubricants. Our engines are sensitive needing zinc in our oil to repel wear. We were alerted to look for labeling on motor oils outlining the additive zinc and to look for oils and greases that are friendly to "yellow metals" (brass and copper).

Specialty oil suppliers like the employer of the presenter and others marketing to the auto enthusiast who have specialty cars like classics or high performance autos will have products that will protect our Model A's. You need to carefully look at labels as even the old standard products we've bought can be reformulated but still keeping their old name. There were many questions answered and if we had additional time that night our presenter had much more to share with us.



MARC Mileage Award Recipients



Darrel Sanderson of Lucas Oil Co.



Award Of Excellence Ahooga News



AACA Capitol City Chapter
Annual Steak Fry
June 14, 2017
Battle Creek Park
2300 Upper Afton Road
Maplewood, MN 55119



Meet at 6:00 PM

Steaks & Potluck served at 6:30 PM

Please bring:

- ◆ Your Old Car
- ◆ Potluck dish to share
- ◆ Your own plates & silverware

Capitol City Chapter will provide:

- ◆ Rolls, Pop, Water & Coffee
- ◆ Cake for Dessert

Cost is \$7.00 per member (CCC and TCMAFC)

Non-member cost is \$8.00

*****Reservation form must be returned if you are attending in order to ensure that enough steaks are purchased!!*****

Make check payable to Capitol City Chapter and mail to:

Joan Frisk

9270 Syndicate Avenue

Lexington, MN 55014

Questions: Call Joan @ 763-784-7698

Clip and send the form below by **June 7, 2017**

Name: _____

Phone # _____

Number of people _____ @ \$ 7.00 each

Number of people _____ @ \$ 8.00 each TOTAL ENCLOSED \$ _____



TOUR OPPORTUNITY

Steve Barnacle is putting together a Model A trip from June 10th-24th. Taking the ferry across Lake Michigan to Detroit. Driving home he is going to travel along the coast of Lake Huron to the U P of Michigan and then home. He has filled out the number of cars going. **There is open spaces in some of the cars going if you want to be a passenger. Contact Steve at 952-473-2071.**

slbarnacle@aol.com

Ride for Freedom “Veterans on the Lake Resort” Charity Event.

The Ride for Freedom club cordially invites the Twin Cities Model A Ford Club of Minnesota to attend charity ride / tour to raise funds for the Veterans on The Lake Resort that is located in Ely, Mn.

The purpose is to provide disabled veterans and other veterans a place to enjoy Mother Nature in a relaxing atmosphere. For more information please visit the veteransonthelakeresort.org website.

The benefit poker run is planned to be on June 24th. The ride / tour will be around 120 miles total.

We start at a predetermined location and have a number of scheduled stops on the ride / tour. At each stop those participating in the run are given a card. A final rally point is determined with a final check in time to be determined.

At the completion of the ride / tour everyone's poker hand is recorded and prizes are given out for the top hands. In addition there will be raffle drawings done at the final location.

More details to come as we get close to the event.

If you have any questions please feel free to contact Dan Jayson at the number below.

Dan Jayson

Treasurer: Ride For Freedom

612-479-8881

Great Northern Tour Monday Oct 2nd thru Thursday Oct 5th, 2017

If you missed out on the Hayward tour in 2015 you have another chance to tour this beautiful county. The committee is busy planning the 2017 Great Northern tour where will spend 3 days in the Hayward WI area driving the back roads and visiting some great sites.

Be sure to mark your calendar!

While registration will begin in July you can reserve your room now at the Comfort Inn and Suites. A block of rooms has been set aside, be sure to mention the Twin Cities Model A Club for the special rate of \$119 per night and includes breakfast.

Comfort Inn and Suites
15586 Co Rd B,
Hayward, WI 54843
Phone (715) 634-0700

Contact Doug Persing 763-443-2375 if you have any questions.



TCMAFC Items For Sale

Caps—Solid Blue, Blue Mesh, Solid White and White Mesh \$10

“A” Gasoline Ration Sticker Best quality around \$5

We A’s Patch ready to be sewn on your shirt \$5

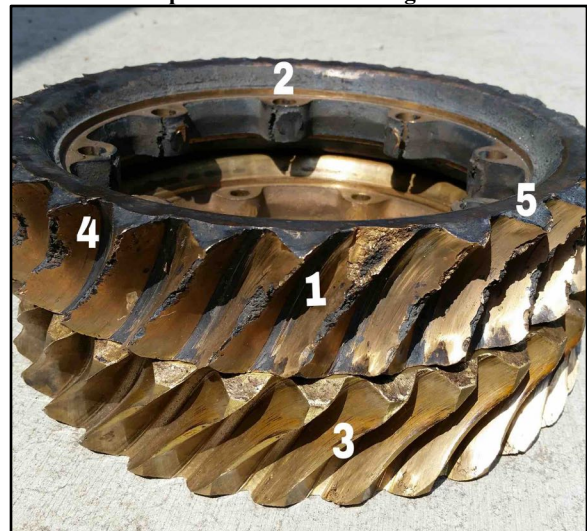
Contact Doug Persing 763-443-2375

Proper Gear Lube - Model AA 28-29 Worm Gear Differentials

by Dave Hetchler – April 2017

The purpose of this article is to show you what happens to your gears if an improper lube is used and to provide you with a list of the proper lubes so you don't get hoodwinked into buying a lube that can cause you gear problems later. If you already know all what you want to know to buy your gear lube, a spreadsheet with qualifying gear lubes and their suppliers is at the end of this article. We are trying to grow the lube list so if you know of qualifying lube (manufacturer intended use, and manufacturer literature states yellow metal compatibility or ASTM D130 1a or 1b), please email the manufacturer's literature to Dave Hetchler at dhetch@frontiernet.net so the list can be updated. In the 100 years since the Model TT and subsequent Model AA worm gear differentials were designed and installed in Ford trucks, lubricants have been continuously improving. While many of today's lubricants can lubricate the worm gear set much better than the original lube could, there have been some additive packages that are very good for steel gears but will destroy the yellow metal gears used in these worm gear differentials. Since the AA Ford club is now international, it is extremely unlikely that we can depend on one or two pre-qualified suppliers or brands of lube to be the best answer for everyone's needs. A lot has been written on the forum about viscosity of gear lubes for Model A's and AA's but there appears to be less information and understanding about obtaining the proper gear lube required to protect the bronze gear in the 28 & 29 AA worm gear differentials. This not only affects worm gear AA's and TT's but also T's because of their bronze thrust washers. Through the years, many of us in the car/truck hobbies have been told that we have to use the correct gear lube in our worm gear differentials but what problems can the wrong lube create?

You can see in the photo above the difference between two bronze gears removed from AA differentials. The lower one was run in the correct lube and the upper one apparently was run in lube that deteriorated it; most likely the sulfur/phosphorous EP (extreme pressure) additives in GL-5. Note the (1) weakened teeth and (2) cracked mounting ears on the inside of the upper gear. Also note the (3) smooth tooth contour of the teeth on the lower gear compared to the (4) jagged, erratic and sharp contours of the upper teeth. Although it is hard to see in the picture, note the (5) buildup of the EP additives flaking where the teeth don't contact it and wear it down. I am told that these additives also leach the lead out of this bronze, weakening it. All the cracked mounting ears seem to confirm this. The housing for the upper gear was filled with bronze nodules resembling "popcorn" scraped off a ceiling to the point that the drain plug would hardly drain. These bronze chunks also got into the channel to the rear bearings for the worm gear. If you are



wondering why they would use a soft gear like this for contacting the worm, remember the worm has only 4 or 6 teeth (depending on ratio) that are in constant contact with the approx. 30 teeth on the bronze gear that are only engaged with the worm 3 or 4 at a time. The steel worm teeth are contacting and scuffing 100% of the time vs. 12% for each bronze tooth. See the explanation in the following:

Metallurgy of the Gears - From "The Ins and Outs of Worm Gears" <http://machinerylubrication.com/Read/1080/worm-gears>

The most common worm gears are made with a brass wheel and a steel worm. This is because the brass wheel is typically easier to replace than the worm itself. The wheel is made out of brass because it is designed to be sacrificial. In the event that the two surfaces come into contact, the worm is marginally safe from wear because the wheel is softer, and therefore, most of the wear occurs on the wheel. Oil analysis reports on this type of unit almost always show some level of copper and low levels of iron - as a result of the sacrificial wheel.

This brass wheel throws another problem into the lubrication equation for worm gears. If a sulfur-phosphorous EP gear oil is put into the sump of a worm gear with a brass wheel, and the temperature is high enough, the EP additive will activate. In normal steel gears, this activation produces a thin layer of oxidation on the surface that helps to protect the gear tooth from shock loads and other extreme mechanical conditions. On the brass surface however, the activation of the EP additive results in significant corrosion from the sulfur. In a short amount of time, you can lose a significant portion of the load surface of the wheel and cause major damage.

I frequently hear, if I only buy my gear lube from Model A parts suppliers it is good for our AA's, right? Maybe. If it is formulated with the GL-5 extreme pressure (EP) additives, it will be excellent for a hypoid gear differential, but these same EP additives will kill your bronze gear.

We have to recognize that AA's are probably less than 1% of the Model A supplier's revenue base and yellow metal friendly lube is probably less than 1% of that. Even if you are a customer for their regular lube for the rest of your truck; you should request the yellow metal friendly lube for your differential. Don't leave it up to the counter person to guess if you want the more expensive and less common lube. Before accepting this "yellow metal friendly" lube, read the next paragraph.

How do we know what the right lube is? While doing research for this project, I asked a random number of respected Model A vendors if they had the correct lube for these rear ends and got answers from "yes" (when it wasn't) to "yes, we have been selling ours for a long time and nobody has had problems" (the most common response and not the correct lube) to "yes, we blend it right here especially for that." (Not So.) I only found one Model A supplier who offered verifiable yellow metal compatible lube.

I even got differing answers on two calls to a major lube manufacturer. The first rep told me what I needed instantly from memory, while the second rep looked it up and recommended another of their products. When I asked why not the first product, he said the second is current technology, will do a much better job of lubricating, and is yellow metal compatible and the first has been "improved" and he would not recommend the "new" additives with a yellow metal gear. When I checked the tech sheet of both, the "improved" old standby of many years makes no mention of yellow metal compatibility while the second product states "the anti-wear properties are compatible with brass, bronze, and silver-alloy metals." This points out that lube manufacturers have the right to and do change their formulations at any time without notice. This is on the bottom of almost every spec sheet from every lube manufacturer and it does happen. Therefore you need to check the current product spec sheet before every order.

There are two ways you can ensure every purchase of yellow metal friendly (compatible) gear lube is right for your gears. First, you can find a lube you like on the spreadsheet at the bottom of this article and order it. Often times, you can get a 5 gallon pail for the cost of 5 to 7 quarts. Second, if you prefer to or need to do it yourself, we suggest that you qualify the gear lube (manufacturer intended use, and manufacturer literature states yellow metal compatibility or ASTM D130 1a or 1b).

You should be aware that a few of the lube manufacturers maintain an internet store so you can buy directly from them. Some of these lubes are sold in smaller quantities on EBay and other internet only sites. Buy from someone credible because by the time you find out they may have repackaged with a different product, it could have cost you your bronze gear. This is not the time to save a few bucks by getting it from a guy who knows a guy.

One restoration vendor who sells smaller quantities of yellow metal compatible and other lubes is Restoration Supply Company www.RestorationStuff.com 800-306-7008. Their catalog clearly states which of their lubes are yellow metal compatible.

Is this gear deterioration more of a problem now than it used to be? There was no problem with most gear lubes deteriorating yellow metals until the "great improvement" when GL-5 became available in the late 50's/early 60's. GL-5 greatly reduced the wear and friction on hypoid gear differentials and bearings in some manual transmissions. It also had the unfortunate side effect of deteriorating any yellow metals including T, TT and AA bronze gears and some transmission synchronizers (not a problem with stock A and AA transmissions-no synchronizers). GL-5 gear lube became commonplace for a while and has since been mostly replaced by newer more efficient and more environmentally friendly lubes. See The Difference between GL-4 and GL-5 Gear Oils' at www.widman.biz/uploads/Transaxle_oil.pdf, especially if you have other collector vehicles.

If you suspect you could have some of the wrong gear lube in your worm gear differential, you can drain it and after waiting for it to stop dripping, inspect the gear teeth through the drain and fill plugs while slowly rotating the gear. The easiest way to do this is to raise one wheel, put your tranny or hi/lo in neutral, take the rear 4 bolt cover off the back of the axle housing and turn the nut on the back of the worm with a wrench. You can't undo any gear damage, but if you flush and refill a few times over the next year with the right lube, you should be able to stop further deterioration.

If your gear becomes unserviceable, you can get a new set of high speed gears made. They make them for Model T's, TT's, and AA's currently \$1850 per set of 2 gears. Contact them to order the gears you need; they can't always keep them in stock.

Mike Hartmann
 Mike's Machine Shop & Welding
 479-489-5815x114
 email: machshop@arkwest.com

For the record, I am not a lube expert, only an AA hobbyist who has been playing with worm gear AA's since the 70's. I am just trying to help us minimize mistakes and keep as many bronze gears in serviceable condition as possible so our grandkids can play with these trucks too.

| Worm Gear Approved Lube Choices - 2 Quarts Required (TT or AA) | | | | | |
|--|---------|------------------|----------------------|-------------|---------------------------|
| Product Name | *Source | Minimum Quantity | *ISO Viscosity Grade | | Yellow Metal Compatible? |
| | | | 460 | 680 | |
| Lubriplate SPO Series | L,R. | Qt | SPO 277 | SPO 288 | Yes-Mfg Stated Compatible |
| Phillips 66 Comp Gear Oil | P | 5 gal Pail | Gear Oil 460 | N/A | Yes-Mfg Stated Compatible |
| Mobil 600W Super Cylinder Oil | P,M | 5 gal Pail | 460 | 55 gal Drum | YES-ASTM D130 1B |
| Mobil SHC Series Synthetic | P,M | 5 gal Pail | SHC 634 | SHC 636 | YES-ASTM D130 1B |

*Viscosity - Because of varying temperatures of operation, two are listed (680 is the closest to the original 600wt)
 *Sources - L=Lubriplate 973-589-9150, and Local; M=Mobil Distributors, Local
 P=Petroleum Service Co 570-822-1151; R=Restoration Supply Co 800-306-7008

Directions to the Pancake Breakfast

At the home of Thom and Linda Boche
 5747 Highlands Ct N, Lake Elmo, MN 55042

From the intersection of Highway 36 and Highway 694 take the exit east toward Stillwater on Highway 36. Go east roughly 6 tenths of a mile and turn right (south) onto Highlands Trail. Travel south as the road takes a gentle curve to the right (slightly west) for about 3 tenths of a mile. Take a left onto Highlands Ct N. (now heading south again into a cul-de-sac). The house is the 6th house on the left in about 2 tenths of a mile, it is white with black roof and shutters. Phone number at the house is 651-770-2370 or cell 612-840-4046 Should you need further directions or have a road breakdown. Trailer storage will be difficult at this address. We are working on a nearby drop area and hope to have information soon.

Twin Cities Model A Ford Club

Mark Leder

4420 West 25th. Street

St. Louis Park, Minnesota 55416

mleder22@aol.com

Address label



Little Dearborn Parts, Inc. 2424 University Avenue Minneapolis, MN 55414

Toll Free: 1-888-282-2066 Phone: 612-331-2066 Fax: 612-331-3847

www.littledearborn.com

**FORD-MERCURY-CLASSIC PICKUP
EARLY FORD CARS AND PARTS WANTED**