

GAUGE

Ye Olde
Car Club

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OF THE TRI CITIES.
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Phone 509-967-2844
Editor: Denny Kehl

BUSINESS MEETINGS ARE HELD THE SECOND MONDAY OF EACH MONTH IN THE
FRONTIER FEDERAL SAVINGS & LOAN BUILDING, AT 8:00 P.M. GUESTS ARE WELCOME

* Editor's Notes *

After a long hot summer I have resurrected THE GAS GAUGE with a new look. The front cover is the brainchild of artist Fred Fraser (our guest at recent meetings). I am adding several new features to the bulletin which hopefully will be of interest to members. The first is the "Car of the Month" contest. Fred has drawn a well known vintage auto in this issue. The first person to correctly identify it to me, gets to supply the photo for the next "Car of the Month" and an accompanying article about the car to appear in the issue following the appearance of Fred's drawing of it. At the end of 12 months, the person supplying the most right answers will be appointed editor! How's that for incentive? All kidding aside, lets try to have fun with this feature and maybe we will all learn some unusual autos. Another feature is "Restoration Tips". I have dug up some old ideas from my scrap books to get this feature going. But I am counting on the readers to provide tips for future issues. In addition I am attempting to reprint interesting articles and want ads from other club's bulletins.

I won't attend the November meeting due to a conflict with ELK season (which only comes once a year). Please give Dave your comments about the content of this bulletin - both good and bad. I need to know what you want and I need your contributions.

Get your articles in early

Denny Kehl, editor

NEXT MEETING NOVEMBER 10, 1980

CALENDER OF EVENTSNovember 1980

- 1-2 Olympia Vintage Auto Club Swap Meet
Kitsap County Fairgrounds, Bremerton, Wa
- 7,8,9 Northwest Car Collector Show
PI Building, Portland, Ore admission \$4
- 15 Albany Swap Meet
Linnwood County Fairgrounds, Albany, Ore

February 1981

- 14-15 Early Bird Swap Meet
Puyallup, Wa
- 28-
March 1 Freeze Your Fanny Tour , Walla Walla

April 1981

- 11-12 Portland Swap Meet

May 1981

- 16-17 Camp Wooten (Crankers, Lewiston)
- 16-17 Seattle Swap Meet, Evergreen, Wa
- 30 Tri-Cities Swap Meet ***** ONE DAY ONLY *****
Benton-Franklin Fairgrounds, Kennewick, Wa

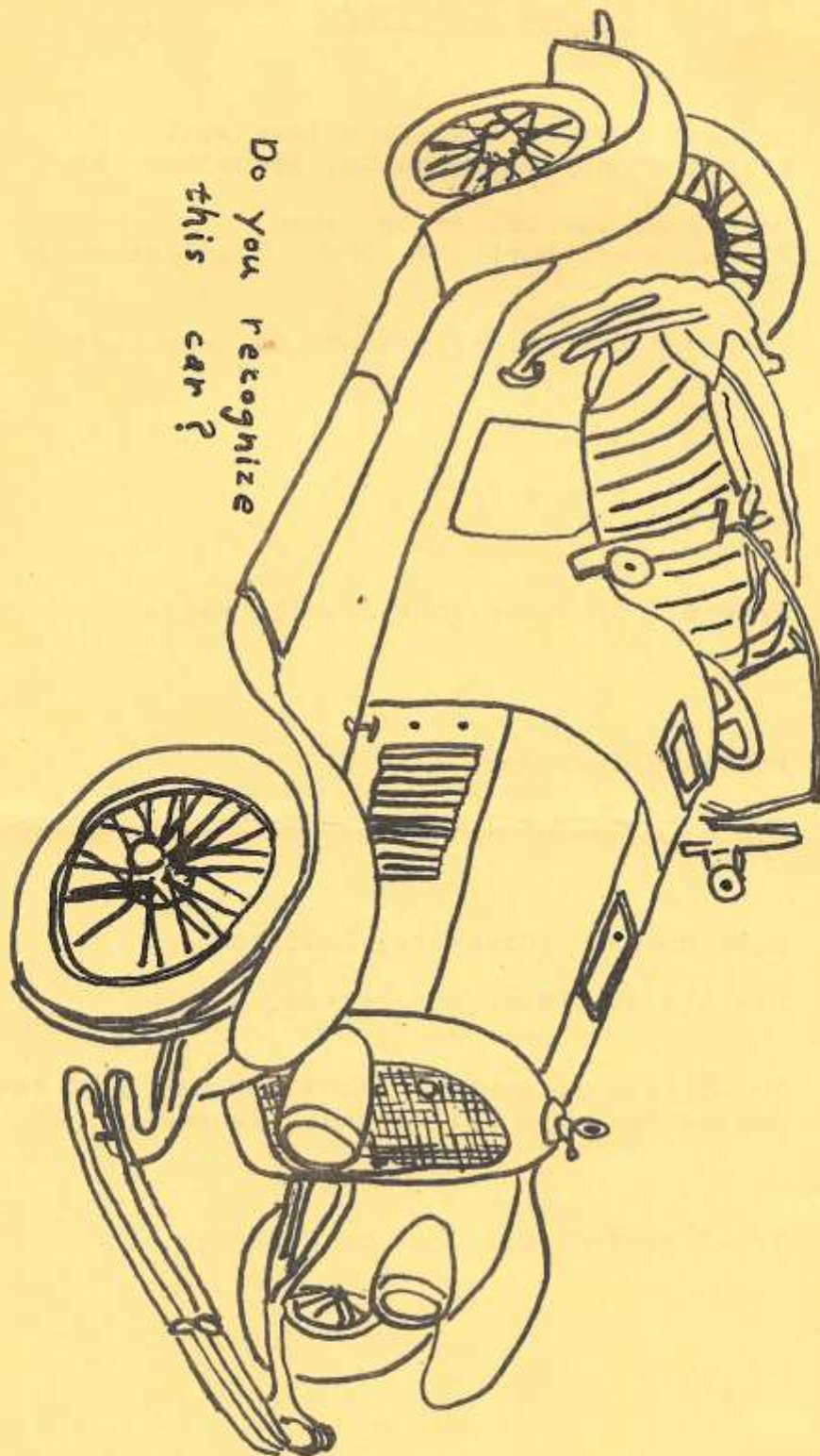
June 1981

- 13 Tri-Cities Circle Tour to Victoria, BC

July 1981

- 2-5 4th of July Tour
Spokane T Club
- 11-12 Spokane Swap Meet

Do You recognize
this car?



RESTORATION TIPS

Why Ball Bearings Fail

A number of years ago we restored a 490 Chevrolet for a friend. During its maiden tour a front wheel bearing failed. It failed in such a way as to wreck the hub also. This event took place along a country road. Nearby in a farmer's boneyard there was a Model T front end that had been made over into a trailer. Knowing the interchangeability between the two cars, we salvaged a hub and bearings from the trailer and put them into the 490, and the tour was resumed.

The bearing failed for three reasons: *One*—because the balls and races were worn, we overtightened the bearing, seeking to remove the wobble in the wheel; *Two*—we had used chassis grease, rather than wheel bearing grease, so that when the bearing got hot, the grease melted away, leaving metal-to-metal contact, and *Three*—when the balls jammed, the race, which hadn't been fit tightly enough, spun in the hub, destroying that also. It was a humbling, well-remembered lesson.

Many antique autos were fitted with ball bearings rather than the more sturdy rollers. Such a bearing will have a long life *if*: it is appropriate for the application, has been fitted and adjusted properly, and has enough of the correct lubricant. Most bearing failures are traceable to one of these being done incorrectly.

FITS AND ADJUSTMENTS. Excessive mounting clearance between races, and hubs or axle stubs inhibit heat transfer, which increases bearing temperature, which speeds wear. In addition, as with the 490 incident, a race mounted in a stretched hub or on a worn axle surface, can rotate and/or vibrate causing still more galling and wear of the mating surface, leading to eventual failure.

The fit of races in oversized hubs and on axle stubs can be improved through the use of shim stock inserts, assuring a press fit engagement of the race and the seat.

Many early ball bearings could not be disassembled. In these cases, it is possible to re-assemble using new balls. This serves the dual purposes of tightening up internal tolerances of the bearing and of providing a slightly different wear path for the balls in the race. While this may seem a halfway solution, I have had such bearings with new balls and worn races to run thousands of trouble-free miles.

In adjusting the running fit of ball bearings, tighten the cone until the wheel will just reverse rotational direction after a free spin. If you've really achieved a top notch bearing fit, the wheel will come to stand with the valve stem on the bottom.

Too tight a fit will result in fatigue failure or spalling of the raceway, breaching the hardened surface. Rapid wear will result until the too-tight condition is relieved, then the vibration will continue until ball failure occurs.

IMPROPER APPLICATION.

I have seen press fit bearings mounted or removed by hammer blows struck axially on the outer race. Such treatment will result in brinelling or dimpling of the race with ball imprints which will lead to vibration and early failure. Such bearings should be mounted using heat expansion or an arbor press, and removed using a suitable bearing puller. If it is *necessary* to hammer on the bearing itself, then strike the inner race or whichever race is against the press surface, using a hard wood driver.

Another application failure pertains to thrust or angular contact bearings which are designed to accept an axial load in one direction only. Some will take limited radial loading and some none. These types of applications are often found in differential carriers and pinion bearings. The bearing selected must be appropriate for the type of loading to be encountered.

LUBRICATION FAILURE.

I have an Owners Manual for a 1905 automobile which calls for the lucky driver to disassemble, clean and re-pack his front wheel bearings in VASELINE every 200 miles! Now Vaseline, I suppose, must have a melting point of about 98.6° F so I can imagine that even 200 miles was stretching the application.

For years, through lack of knowledge, I used chassis grease for wheel bearings, with only occasional failures, but this was still wrong, nevertheless. So called "wheel bearing grease" is a high-melting-point, heavy-bodied grease which stands up under elevated temperatures. It is important that wheel bearing grease not melt away leaving wearing surfaces unprotected, since temperatures in excess of only 300°F can anneal the ring and ball materials, causing deformation.

One last word on bearing overheating. When arc welding on your car, be sure that the vehicle is properly grounded so that the ground path is not through the wheel bearings or you may fry the bearings to failure and never know why.

Reprinted from
March 1977
Antique Automobile
Magazine.

MARKETPLACE

IF YOU WOULD LIKE TO PLACE AN AD, TELEPHONE (509) 967-2844 EVENINGS OR SEND IT TO RT 1 BOX 5343 RICHLAND, WA 99352.

FOR SALE

1928 CHRYSLER CUSTOM IMPERIAL CONVERTIBLE COUPE.
by LeBaron, only known survivor of 39 built, 136" wheel base ,
wire wheels, new 750/18 whites, extremely sound original with
new white leather throughout including rumble and top. Concours
value \$57,000, my price \$25,000.

Jack Yale, 3505 S. Garfield, Kennewick, WA. 99336
(509) 586-4933

1931 CHRYSLER 70 SEDAN, sidemounts, wire wheels, trunk, clock, factory
4 speed, nice older restoration, new upholstery, will blow the
doors off Mike Martin's 34 Buick. \$7000.

Jim Gilbert (509) 946-0554

1939 CHEVY 85 DELUXE, 2 door, good restored original.

E.K. Nesbitt, 907 Wright, Richland, WA 99352
(509) 943-9466

1951 DESOTO CARRYALL, quite rare.

1953 PACKARD CLIPPER, 4 door

Both cars better than average condition.
Jerry Durham, 1225 South 12th Pasco, WA 99301
(509) 547-0657

1953 FORD 4 DOOR, 48,000 original miles, condition 2 or better.

Dave Johnson (509) 943-0441



MOTORING SERVICES

Auto Repairing & Consulting

DAVE JOHNSON

418 WELLHOUSE LOOP
RICHLAND, WA 99352

509-943-0441

FINE AUTOMOBILES REPAIRED

Columbia
MOTOR CO.

BUZZ O'CONNOR
RT. 1, Box 855, RICHLAND, WA 99352
(509) 967-3370

CRAIG KELSEY
Box 384, CONNELL, WA 99326
(509) 234-6561

THE MARKET PLACE CONTINUED

1918 Buick roadster, partially restored. Contact JIM SANDBERG, (503) 653-2281.

1910 Chalmers Detroit
1930 Nash 6 wire wheel sedan, original 33,000 miles
Contact JIM SCHOFFSTOLL, (503) 643-1873

Fall close out!! 1926 T Touring. Restored, mint condition. Contact LES WAMPOLE, (503) 829-8562

Trailer 8'x22' enclosed. 1980 model, full rear doors, car ramps, vending & side doors, tandem wheel, elec. brake. \$7495.00. Contact: DAVE STONER, (503) 656-6378.

Six pump oiler for '13 Overland. Contact ED GILL (503) 635-4101. (EDITORS PLEASE COPY)

1924 Dodge Touring, restored in 1970. Asking \$7,000.00
1934 Dodge Cab. "6", unrestored, running fair. Asking \$10,000.00.
Contact: JACK McQUOWN, PO Box 305, Shasta, CA 96087. Phone (916) 241-6501.

1927 Buick 115 touring. Restoration started, wood done, drives o.k.
1929 Model A Roadster, pick-up body
1935 Dodge Coupe, complete, no rust, \$800.00
1946 Chrysler New Yorker, drives, damage to left front, original interior, \$1,200.00
1951 Pontiac Convertible, rough, \$100.00

For any of the above, contact PHIL MIACHEE, 431 W. Columbia, Troutdale, Oregon 97060. Phone: (503) 665-2461 or 695-2942.

'14 Overland Parts (all or part):

Transaxle with hubs, brake drums and bands	Universal joint
Drive shaft and housing	Clutch plate
Crank shaft	Differential lower plate
Cylinder jugs	Radiator fan fork with bearing and pull
Front axle with spindle bolts and arm (2)	
Front hubs	
Tie rod (1)	Set headlights
Brake and drum (rear)	Side lights (5)
Flywheel	Magneto
Rear Axle (2)	Carburator-shieglar
Universal joint	16' headlight
Clutch plate	
Differential lower plate	
Radiator fan fork with bearing and pulley	
Windshield frame	

HARV BRESEE, 922 E. Main,
Medford, Oregon 97501

(area code 503).

772-2756 or 773-5547

BOX 433
RICHLAND, WASH.
99352

TRI CITIES, WA
AM
NOV 4
1980



FIRST CLASS MAIL

Chuck Sungren
1519 South Tacoma
Kennewick, WA 99336