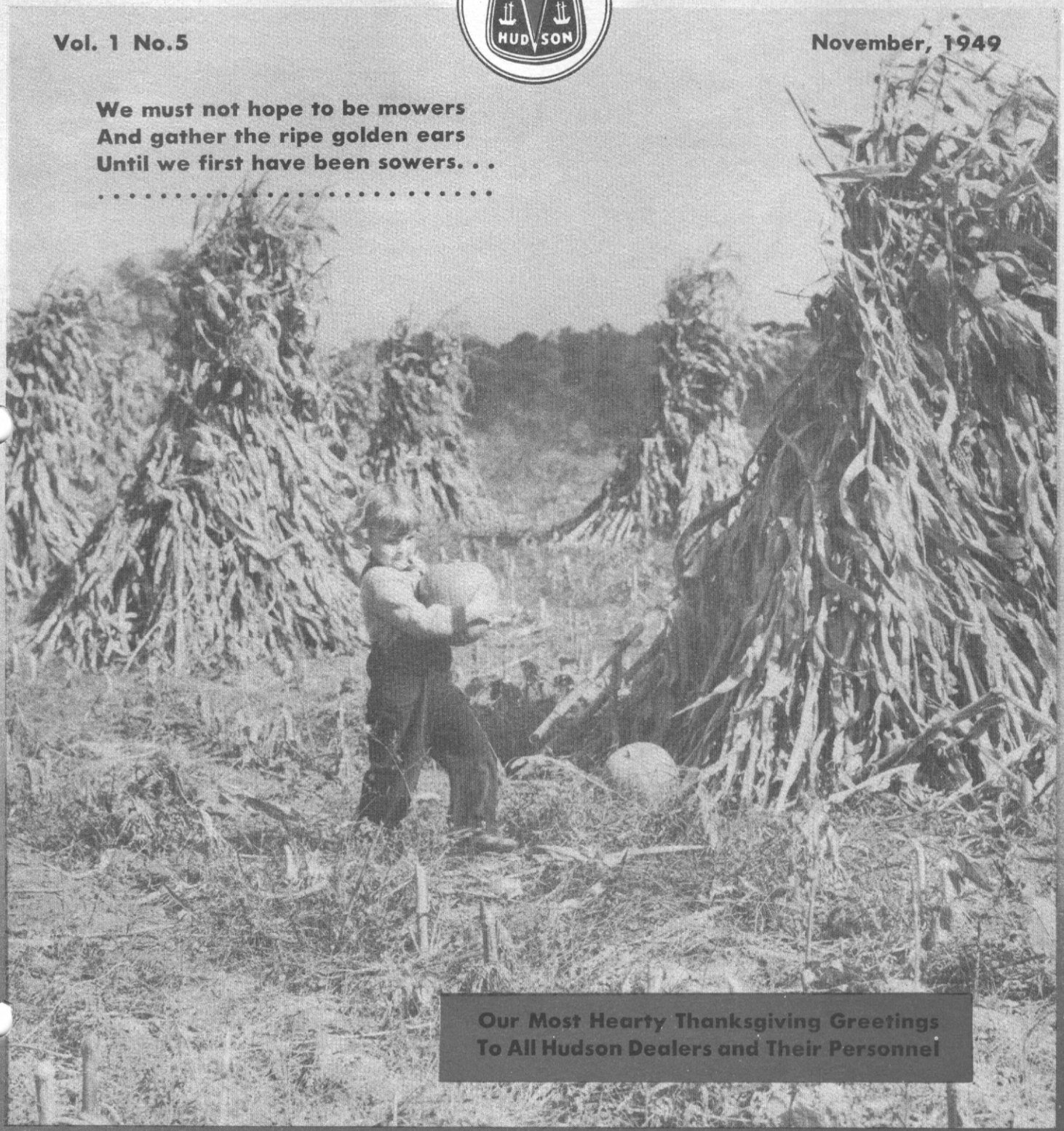
HUDSON

Service Merchandiser

Vol. 1 No.5

November, 1949

We must not hope to be mowers
And gather the ripe golden ears
Until we first have been sowers. . .
. . . . . .



Our Most Hearty Thanksgiving Greetings
To All Hudson Dealers and Their Personnel

HUDSON MOTOR CAR COMPANY.. DETROIT 14, MICHIGAN

FRAME NO. 3 CROSSMEMBER GUARDS

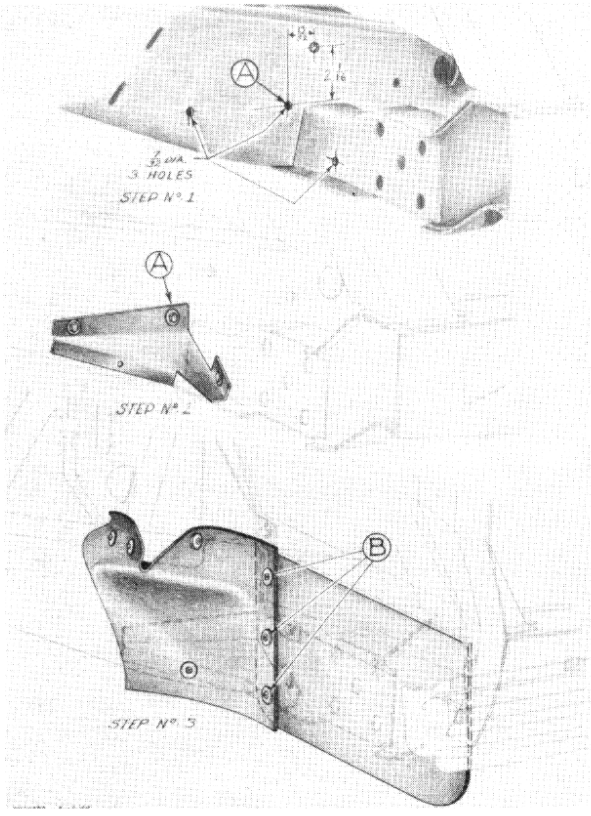
To prevent snow and ice from piling up on No. 3 crossmember and interfering with the operation of the clutch pedal, frame crossmember guards 301913 and 301914 R and L were installed, beginning at car No. 482-57890.

INSTALLATION INSTRUCTIONS

Parts required 1-301913, 1-301914, 3-170519 and 3-170368.

Raise car on hoist, turn front wheels to extreme right or left for working convenience.

Remove the three screws (B, step 3) from the seal to



allow access for drilling three 7/32" holes in the frame side member, and No. 3 crossmember. See illustration.

Locate and drill hole A, Step 1—place guard in position and install self-tapping screw 170519 and washer 170368.

Drill end holes and install screws and washers. Complete the job by replacing those screws removed at B, step 3.

Those 480 series cars, under car number 482-57890, being operated in rural sections and in the extreme northern section should have these guards installed.

INSTRUCTIONS FOR THE BILLING OF PARTS ORDERS (ZONES AND DISTRIBUTORS)

In order to facilitate the handling of Parts Orders, and to insure their being shipped with a minimum of delay, the following instructions must be strictly adhered to.

Part numbers are always preceded by a prefix and are divided into the following four classifications:

1. "B" parts, which includes BM, BO, BZ, BX, etc., as well as MF, TF, ZF, OF, etc.
2. "F" parts.
3. "C" parts, which includes CF, etc.
4. "HA" parts, which includes SP, HS, etc.

Consequently, in the writing up of orders it is important that each classification of parts be written up, by themselves, on the following forms:

1. "F" parts on Form No. 9731.
2. "HA, SP, HS" parts on Form No. 9728.
3. "B, MF, TF, ZF, OF" parts on Form No. 9726.
4. "C, CF" parts on Form No. 9726.

Paints should be written on separate pages on Form No. 9726.

Chassis Springs and Spring Leaves with "F" prefixes should be written on separate pages on Form No. 9731.

Motors, Frame Assemblies, Transmissions and Tail Pipes should be written on separate pages on Form No. 9726.

Trim Parts should be written on separate pages on Form No. 9726, and to insure that the proper part and color is specified, the number of the car that the part is required for should be given.

When it is necessary to order by description, this should be done on a separate page and care should be taken that the description is complete enough to enable the part to be specified. Also, the car number must be given.

It is important that it be shown on all pages of the order; how the order is to be shipped, such as, via Freight, Parcel Post, Express, etc. All Freight Orders are shipped collect except monthly Prepaid Freight orders. Engines, Skeleton Engines, and Frames are always shipped transportation charges collect.

As there is only one Emergency Order Form No. 11519, this can be used for all parts regardless of prefix, excepting HA's, which must always be written on Form No. 9728. However, each of the Prefix Classifications must be written on separate pages. It is also necessary that all information relative to car number, model number, etc., be given.

BODY SURFACE PREPARATION AND FINISH APPLICATION

In compliance with requests from the field for details covering body finish, the following has been prepared as a guide to those who may not have had extensive experience in the line of re-finishing. To those who have had years of successful experience, this may serve as a refresher or supplement to their present knowledge.

It has been noted that there is one outstanding reason for paint failures, namely, an uncleaned or improperly cleaned surface. Too much care cannot be taken to insure a surface free from oil, wax, dust, and rust before starting a paint job.

Always complete all body work, as sheet metal straightening and replacement, door fitting, etc., before starting a refinish job.

Step One—Wash

The car should be given a good wash job, using a good grade of non-alkaline soap, similar to ethyl cleaner. An alkali soap may leave a deposit on the old film which hinders adhesion to your original paint film. The wash job should extend to the underside of fenders of the car to remove all loose dirt. Steam cleaning, of course, is the ideal preparation.

Step Two—Remove Film

Completely and carefully clean the surface of the car with Hudson Film Remover. This insures removal of oil and wax films which otherwise would be ground into the old finish in the sanding operation.

Step Three—Sanding

All loose paint, rust, dirt, road scum, etc., should be completely sanded from the car before applying Hudson Primer Surfacer. This sanding operation should be applied to the entire surface to be primed. By doing this, one is assured of two things; a clean surface and a surface which will provide "bite" or mechanical linkage for the paint film.

The sanding may be accomplished by any of the following methods:

1. Use of a "Jitter-Bug" with 280 sand paper.
2. The use of a power sander using No. 24 grit open coat disc for an overall job.
3. The use of water sanding using 280 sand paper.

   The use of a coarser grit than 280 makes more work in the later finishing stages and isn't recommended for a superior refinishing operation.

Step Four—Acid Wash

The entire surface to be primed should be carefully cleaned with a weak acid preparation after sanding to insure a neutral film and add a chemical linkage for your primer surfacer.

Step Five—Masking

The car is now ready to be masked, using Hudson new masking tape of the necessary size for the best job.

Step Six—Tack-Ragging

The car is now ready for the spray booth. Carefully remove all loose dust and dirt with air pressure, then go over entire surface with a *tack-rag* to insure the utmost cleanliness.

Step Seven

The car is now ready for Hudson Primer Surfacer.

a. Thoroughly stir the primer surfacer.

b. Reduce primer surfacer with Hudson Lacquer Thinner. Reduction is 2 parts of primer surfacer to 3 parts of Hudson Lacquer Thinner.

c. Although the primer surfacer is filtered at the factory, for the best results it is suggested that the reduced primer surfacer be strained to remove any foreign matter which might have been picked up before application.

d. Bleed all air lines and compressor tank to remove any water and oil in lines. This is very important as any condensation or moisture that may come through the air line is apt to cause paint to blister and peel.

e. Air pressure should be about 55 pounds.

f. Always apply wet coats of primer surfacer, this insures the maximum in chemical and mechanical linkage. Apply a minimum of *two* coats with *four* coats recommended for best filling results. A time period of ten to fifteen minutes between applications is suggested.

g. Allow a minimum of one hour for drying of the primer surfacer film.

Step Eight

The car is now ready for the final sanding operation. The use of water sanding with the 320 paper is recommended to produce a fine, smooth, scratch free film with the minimum amount of time and effort. Using a coarser paper may speed your sanding operation slightly, however, it is felt that the loss of smoothness and the increased porosity do not warrant the slight saving in time. Hudson Primer Surfacers are designed to give the maximum hold-out when sanded with 320 paper either wet or dry to produce the best working properties and results.

Step Nine

The car is now ready for the color or finish coat. The following steps are suggested:

a. It is of utmost importance that the car be completely dry. Blow excess water from seams, around doors and any spots which might trap moisture.

b. Completely and carefully "tack-rag" the entire surface to be painted. A good job is essential.

c. Select color, thoroughly stir or agitate the lacquer. Use a Red Devil mixer if available. *Omission of this step causes more unnecessary complaints than all other factors combined.*

d. Reduce as specified on the label.

e. Again bleed air lines and compressor.

f. Air pressure should be 50-55 pounds.

Step Ten

Applying the finish. This phase can only be learned through spraying experience, but the following ideas are suggested as aids to a good job.

a. Lacquers

1. Reduce Hudson Lacquers with Hudson Lacquer thinner as specified on the label.

2. Apply a minimum of *four* wet coats of lacquer—*six* coats suggested for best results.

3. The use of one part Retarder to one part lacquer thinner, in the last coat, is recommended for more flow and higher initial gloss.

4. When the film is *completely* dry, wet sand with 400 sand paper, *never try to rush the drying time on your finish coat.* You have spent a good deal of time and effort preparing your car properly and all of your previous work may be wasted if the film is not allowed to dry completely.

5. Use hand rubbing compound to bring out the fullness and richness of gloss of the lacquer.

6. Buff the car completely, using clean bonnets as the need for a change is indicated, otherwise smearing will be evident.

7. To give the lacquer its final touch, polish the car with Hudson Polish and Cleaner to remove any buffing haze.

The foregoing procedure applies to refinishing any single panel or partial panel. The same care with respect to cleaning and preparation of surface should always be followed, just as is done when refinishing on entire body.

Following the above suggestions, plus the use of Hudson approved Lacquers, Thinners, and Primers will give you the personal satisfaction of a job well done and even more important, a satisfied customer.

QUESTIONS AND ANSWERS

Following are the answers to questions that appeared in the October issue of Service MERCHANDISER. Reference is also made to location where they may be found.

1. $1\frac{3}{16}$ of one inch—Procedure Manual, page 5-9.
2. Six cylinder—inlet $\frac{5}{64}$"—exhaust $\frac{3}{32}$"
   Eight cylinder—inlet $\frac{1}{16}$"—exhaust $\frac{5}{64}$"
   Procedure Manual page 3-43.
3. Float level—six cylinder $\frac{3}{16}$"—8 cylinder $\frac{3}{64}$"
   Procedure Manual, page 4-3.
4. Standard thermostat begins to open at 150-155—fully open at 185. Procedure Manual pages 5-9-10.
5. Oil tube superseded by oil trough, July MERCHANDISER, page 5.
6. Mechanical and Vacuum Spark advance change. August MERCHANDISER, page 11.
7. The proper end of the manifold studs should be started so that stud will drive tight before bottoming. August MERCHANDISER, page 16.
8. Two second speed transmission gear ratios were used in 480 and 490 series. 165:1 without Drive-Master, and 182:1 with Drive-Master. Procedure Manual, page 9-4.
9. Drive pinion shaft should have no end play; the bearings should be pre-loaded to 17 to 32 inch pounds when companion flange nut is tightened to 200 foot pounds.—Procedure Manual page 13-12 and 13.
10. There should be .001 to .004 end play on each rear axle shaft. Use dial indicator. Procedure Manual, page 13-15.

The answers to the following questions will appear in the December issue of the Service Merchandiser:

1. What is the correct back lash between the ring gear and pinion teeth, and the proper method of determining it?
2. What is the recommended preload of differential bearings?
3. Why in your opinion is it necessary to preload the pinion and differential bearings?
4. Why should only a matched set (gear and pinion wired together) be installed together?
5. Why is it important to have the arrows on splined end of propeller shaft and splined yoke in exact line with each other?
6. What is the brush spring load of the starter—the generator?
7. What is the fuse capacity in Drive-Master Circuit? Where located?
8. What is the correct countershaft cluster end play? How is it controlled?
9. At what speed should engine be idled with Drive-Master equipment?
10. What is the recommended clearance between brake drum and lining?

Immediately after Thanksgiving is the time to set up your Parts and Accessories Department with Christmas decorations in attractive gift displays—and start your Christmas selling of accessories.

The above display is a good example of what can be accomplished at very low cost. Materials can be obtained locally from dime stores or art shops.

Every year department stores spend huge sums of money in decorating, advertising and preparation for the Christmas Selling Season because they know that this is the time of the year that buyers' resistance is at its lowest.

You can cash in on this tremendous market if you will set up an aggressive Christmas Merchandising Program. Follow these simple rules:

- *Clean up* the Parts and Accessories Department
- *Decorate* Parts and Accessories Department in the Christmas mood
- *Display* accessories, wrap some as gifts, etc.
- *Sell* by personal contact, telephone, direct mail and newspaper advertising

THOUGHT-OF-THE-MONTH CLUB

"A rolling Accessory Program gathers lots of moss—and it's all that good 'GREEN STUFF'."

ACCESSORY HINT

At Christmas time, merchants are wise
Who strive for that "melon" so ripe,
By making big plans to merchandise
HUDSON SEAT COVERS—each type ! ! !

TRANSMISSION GEAR RATIO

In the past, two transmission gear ratios were employed. These were known as 1.82:1—as used with Drive-Master and 1.65:1 standard on all transmissions without Drive-Master equipment. The difference in these ratios was effected by the number of teeth in the main shaft drive gear and counter shaft cluster gear.

The 1.65:1 ratio has been discontinued in production and only the 1.82:1 ratio will be standard with all transmissions regardless of equipment. In the past a metal tag was attached by a transmission cover screw as a means of identification. Following are the part numbers of the gears affecting ratio change.

302471 Main Drive Gear—18 teeth—1.65:1 Ratio
302472 Main Drive Gear—17 teeth—1.82:1 Ratio
163904 Countershaft Cluster Gear 25 teeth in large gear—1.65:1 Ratio
163905 Countershaft Cluster Gear 26 teeth in large gear—1.82:1 Ratio

We will continue to supply the 302471 and 163904 gears of the 1.65:1 ratio until such time as the parts stock is depleted after which only the gears for the 1.82:1 ratio will be furnished.

CHECK THAT WINDSHIELD WIPER

With the coming of winter the windshield wiper will be called upon for heavier duty than at any time during the year and should be at maximum operating efficiency.

When windshield wiper efficiency falls off there's a reason. A check up in the following order has produced results.

Examine Motor

Remove the dash unit and inspect breather for dirt and obstruction. Rotate paddles to see that motor is free in each direction. A heavy drag may be caused by distorted case, grease logged or leathers that are completely dried out.

Lubricate and Adjust

If motor is free and in good condition install and adjust tension bracket just sufficient to remove slack in cables. CAUTION: Cables that are often *too tight, reduce power* and may cause *rapid wear.* Following loosening of tension lock nut, hold tension bracket while retightening lock nut to prevent over tension of cables. The wiper blades should be reset on serrated shaft if necessary after cable adjustment. Lubricate all pulley pivots with a light oil and cables with a light grease.

Check Vacuum

Install a vacuum gauge at the inlet side of windshield wiper.

Remove outlet from intake manifold.

Operate engine at idle speed. Vacuum gauge should show 8 to 10 Hg.

Windshield wiper vacuum hose that are found to be contacting the transmission cables are likely to become cut or damaged. Where you find this condition, simply cut off sufficient from the hose so that the shorter length will clear the cables.

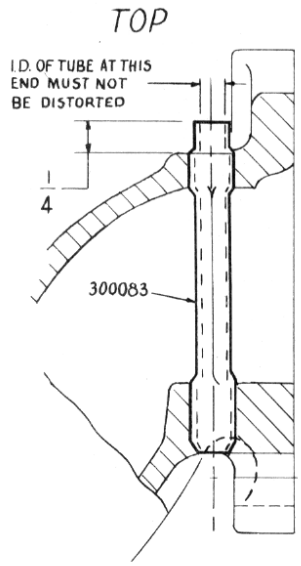
IGNITION COIL

Beginning at car number 12-26c ignition coil part number 300357 has been superseded by ignition coil part number 302820. The new coil differs from the old primarily, in that it develops a higher secondary voltage and receives a "snap-in" type high tension wire terminal instead of the screw type high tension terminal previously used.

For the six cylinder—coil to distributor high tension wire 301908 is superseded by 302821 and the eight cylinder 300973 is superseded by 302823. The difference in these cables being the "Snap-in" terminal at the coil end part number 171126. This part may be installed, replacing the screw type terminal at coil end.

EXHAUST MANIFOLD CHOKE HEATER TUBE 6 CYLINDER

To insure absolute silent passage of air through the Exhaust Manifold automatic choke heater tube, part 300083, the lower opening of the tube has been swedged or choked at the end to 3/16" diameter, Note illustration. All tubes bearing this part number that may be ordered and shipped from the factory in the future will be of the latest type. Replacement with this tube will eliminate the hissing sound emitted from some of these tubes.



CAMSHAFT AND OIL PUMP GEAR 6 CYLINDER ENGINE

For some time production has been applying a Granoseal process to the mating gears of both the oil pump and the camshaft. Tests have shown that this reduces wear to a minimum.

Should it be necessary to install a new camshaft in a six cylinder engine of the 480 to 490 series be sure that a new oil pump gear is installed at the same time. Parts men should be sure that an oil pump gear is included with the camshaft when filling orders for either the shop or the field.

There is no change in the part numbers. Those gears having this treatment may be identified by their black velvet-like appearance as compared with the blue grey appearance of gears that are not so processed.

PINION AND DIFFERENTIAL PRELOAD

A differential that is properly set up must not show the slightest end play in pinion shaft or differential bearings. As a matter of fact both the pinion bearings and differential bearings are preloaded so as to eliminate end play even after the bearings are run in.

Any end play in the pinion or differential bearing allows the pinion shaft or differential case to drift or shift position on drive and coast thus changing the bearing pitch line. Such end play may be the cause of gear noise on drive or coast.

The rear axle drive gear and pinion are furnished only in matched sets that are wired together. Under no circumstances should these be broken and sold separate. The reason—matched sets have been carefully matched and lapped to assure quiet operation when installed together.

Left to right are W. E. Gazzaway, Fillmore, winner in district No. 4; Henry Caruso, of Des Latte-Caruso, Downey, grand prize winner and first prize winner in District No. 2; Roy D. Wells, Los Angeles Zone Service Manager; who made the awards; M. Martin, service manager for Wright & Beal, winners in District No. 1; and Roy C. Armstrong, San Gabriel, winner in District No. 4.

PRIZE WINNERS SERVICE SALES CONTEST

Des Latte-Caruso, Hudson dealers in Downey, Calif., are displaying a beautifully engraved plaque, as a result of winning the service promotion contest, in which the 70 Hudson dealers of Southern California participated, under the Hudson Dealers Sales and Service Promotion Committee.

Des Latte-Caruso won the grand prize of $200 in addition to the plaque, having shown a 73.59 per cent increase in the dollar volume of customer labor during the month of July, which was established by a comparison with the monthly average over a six months period of business for that organization.

Presentation of the winning check and plaque was made to Henry Caruso of the winning firm, and Malcolm Adee, service manager, by Roy D. Wells, Los Angeles Zone service manager for the Hudson Sales Corporation at a dinner meeting attended by more than 150 Hudson dealers and their service managers.

Additional first prizes for four districts in Southern California, each representing $100 in cash went to Wright & Beal, Los Angeles in District No. 1 with 41.11 per cent increase; Des Latte-Caruso, Downey, in District No. 2 with 73.59 per cent increase; Gazzaway's Garage, Fillmore, in District No. 3, with 47.41 per cent increase; and Roy Armstrong, San Gabriel, in District No. 4 with 35.18 per cent increase.

Runner-up prizes of $50 each went to Jack Raley, Inc., Los Angeles, District No. 1, with 33.46 per cent increase; Rodgers Bros. Motor Co., El Centro, with 29.25 per cent increase; Dewey Felton, Ventura, with 40.40 per cent increase; and L. Albert Mencke, Whittier, District No. 4, with 33.11 per cent increase.

Second prizes of $25 in cash went to Monroe & Frankson, Burbank, in District No. 1, with 24.11 per cent increase; Storey-Ricketts of Long Beach, in District No. 2, with 15.98 per cent increase; Tabco Service of Taft in District No. 3 with 27.02 per cent increase; and Herb Waldman Motor Co., Las Vegas, Nev., in District No. 4 with 25.40 per cent increase.

HUDSON SERVICE AND PARTS MANAGERS COUNCIL

Twin City Area Reports Meetings

Mr. W. J. St. Onge—Minneapolis Zone Manager has mailed us a copy of Secretary Treas. report of the twelfth meeting of the Hudson Parts & Service Managers Council which was held on Tuesday, August 16, 1949 in the Curtis Hotel at Minneapolis, following a fine dinner.

The minutes of the previous meeting were read and approved as was the Treasurers report. Mr. Amos Copeland presented a unique plan for "Bring your Boss Night". The idea was unanimously adopted—believing it will make for a more clear understanding of the Parts & Service Managers Club objective.

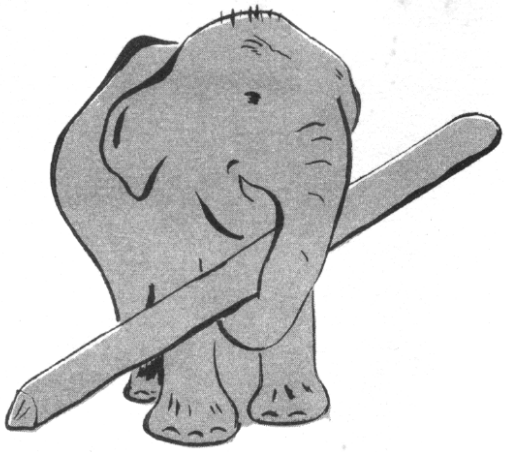
The following officers were elected:

Steve Turpin, President
Gene Olsen, Vice-President
Stan Embretson, Secy. Treasurer

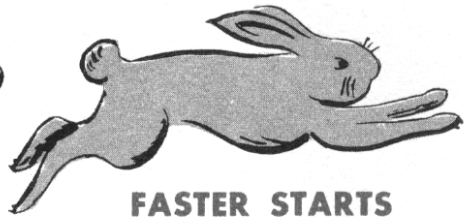
Main discussion centered around preparation of new cars for delivery and proper application of tags and filling out of Replacement Certificates for returned material.

Mr. Hanson, representing Auto-Lite spoke briefly on electrical equipment, adjustment and policy. Approximately 20 were in attendance and the next meeting was set for September 20. Editor's Note—Excellent report of a real interesting meeting, Stan:—are you using Membership Cards? See September issue SERVICE MERCHANDISER.

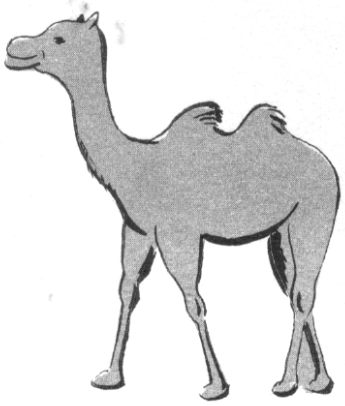
WISE SERVICE MANAGERS NEVER MISS THE OPPORTUNITY TO TELL THEIR CUSTOMERS THAT INSTALLATION OF *NEW PISTON RINGS* FOR FALL AND WINTER DRIVING WILL GIVE...



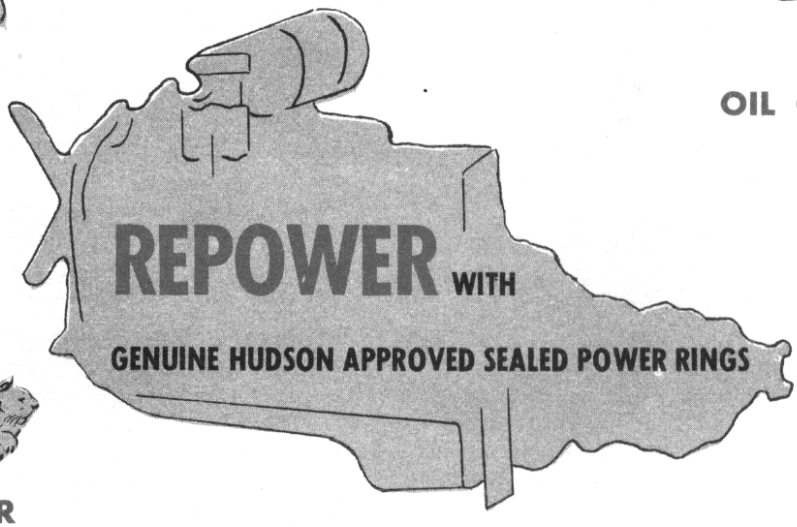
INCREASED POWER



FASTER STARTS IN COLD WEATHER



MINIMUM OIL CONSUMPTION



SMOOTHER PERFORMANCE

GREATER GAS ECONOMY

ONLY GENUINE HUDSON ENGINEERED PARTS ASSURE COMPLETE CUSTOMER SATISFACTION

TIMING GEAR COVER OIL SEAL

The timing gear cover oil seal part number 40151 as used on the six and eight cylinder engines has been superseded by oil seal part number 302858. The primary difference in these oil seals is that the sealing medium of the former was of synthetic rubber while that of the new oil seal is of leather.

It is recommended that all oil seals part 40151 be used as replacements on the eight cylinder engine and any renewals of the timing cover oil seal on the six cylinder be of the late type seal, part number 302858.

CENTRALIZE COVER WHEN INSTALLING

With the seal in position in timing gear cover and before tightening, carefully centralize the seal over the vibration damper spacer as accurately as possible by shifting the cover as allowed by the clearance between the studs and timing cover holes.