# HUDSON Service Merchandiser



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BERKELEY ZONE Parts and Service Managers Club Meeting

(story on page 378)

HUDSON MOTOR CAR COMPANY..DETROIT 14, MICHIGAN



### GENERAL REPAIRS:

(continued from January)

In this department will be the equipment which is used in general repairs on engines, clutches, transmissions, axles, etc.

Keep the department clean and the equipment in good mechanical condition and appearance, because, to the customer, a well-organized department with modern equipment means quality work and it gives him confidence to see concrete evidence of good housekeeping.

These five basic departments which have been covered apply to all dealers regardless of size. Dealers who sell between 100 and 200 cars a year should have front end equipment, a body and paint shop and, of course, this department can also be used to advantage by all dealers who aggressively solicit profitable service work.

As the volume of business demands, Brake, Electrical and Radio Departments should also be set up in the service area. The idea being to have a one-stop Service Department and be able to handle all customers' Service needs under your own roof.

# SPECIAL TOOLS:

To be competitive and to realize profit from the Service Department, it is most essential that tools and equipment be provided for mechanics.

Manpower is one of the most expensive commodities, much more expensive than tools and equipment; therefore, it is to your advantage to save all the time possible for both the mechanic and the customer. Hudson Special Tools are developed for this purpose.

Flat Rate Time Studies are based upon the use of Special Tools developed for the various operations; as a mechanic is expected to produce, he must be provided with Special Tools for the job which will enable him to do his work efficiently.

Not only is the tool designed to perform a special mechanical function, but also to protect the parts which are removed. For example: It is possible to remove a steering wheel with a hammer, but the customer undoubtedly would not accept it when replaced, due to being mutilated by the method of removal.

A steering wheel puller will aid in quickly removing the wheel and leave it in good condition for replacement. This same reasoning applies to all Special Tools that are developed and offered for sale to you. No Special Tool is ever developed if other tools are available and will serve the purpose. Consequently, for better, faster and more profitable jobs, keep Special Tools on hand and in good condition.

# BAY AREA PARTS AND SERVICE MANAGERS MEETING

(photograph on front cover)

Photograph submitted by Ray Olsen, Berkeley, California, Zone Parts and Service Manager, who writes as follows:

"The attendance at this meeting was unusually low because of the weather and several members, including the President, were ill.

"At each meeting we use banners to decorate the assembly room and to carry our message. Mr. Joe Damazio, Parts Warehouse Manager, is pointing at: 'To Sell More People, Solicit More People,' and Mr. Ray C. Olsen, Parts and Service Manager, is pointing to: 'The More People You Ask to Buy, the More You Will Sell.'

"This is an important part of our Parts Merchandising Program, and it is stressed at every meeting. This night we featured Miracle H-Power. In every meeting the center feature is changed, but the two outside banners contain our 'Battle Cry,' which is:

- (1) Know Your Products
- (5) Solicit

(2) Order

(6) Ask

(3) Stock

- (7) Sell
- (4) Display
- (8) Today!

"Members present are:

Seated L to R: B. Smith; G. Dal Poggetto; E. Wright; J. Di Modica; E. Wolf; M. R. Holland, Service Representative; H. Trimble.

Standing L to R: J. Damazio, Parts Warehouse Manager; L. Cook; J. Close; T. McClay; C. Ogden; C. Hansen; J. Duplanty; Ray C. Olsen, Parts and Service Manager."

### FLYWHEEL RING GEAR CHANGE

A recent engineering change specified an increase in the hardness of the Flywheel Ring Gear and, at the same time, eliminated the chamfer from the teeth on the pinion engaging side. See illustrations below.



NOT CHAMFERED



CHAMFERED

This change became effective in production beginning with Car Number B-194600. This change does not, in any way, impair the engaging of starter pinion, but is intended to prolong the life of the Flywheel Ring Gear.

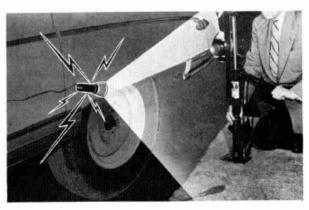


# ATTRACTS ACCESSORY PROFITS INTO YOUR SERVICE CASH REGISTER

# HERE'S HOW:

You tell your service customers that you have a new Hudson Accessory that will prove its worth many times over in an emergency while driving at night.

Then, you show it to them—plug it into the lighter socket and show them how it works — demonstrate it!



# SELL HUDSON MAGNALITE IN TERMS OF SAFETY AND CONVENIENCE!

- Base of permanently magnetized metal—your customers can position Hudson Magnalite on any part of the car body and have both hands free to work!
- Red plastic guard serves as warning light for oncoming cars.
- Retractable wire hanger permits hanging wherever desired—can be used as a fine night light for picnics, camping.
- · Extension cord more than 12 feet long!

Check Your Stock — ORDER FROM YOUR ZONE TODAY!

HA 206236 — Magnalite

HA 307195 — Hydraulic Jack





Here is the 5 Star team of Humphrey and Evans Motor Co., Logan, Utah, with their Maintenance Department Crew. No Hudson owner may leave their shop dissatisfied.

From left to right: Ray Naef, Herb Humphrey, Bill Evans, Bill Humphrey, Dewey Beck and Alton Sorensen.

Trained mechanics and a departmentized shop make for efficiency. Humphrey and Evans, Logan, Utah, are proud of their service record.







Parts and accessories are attractively displayed and stocked in ample quantity.

This neat stock room is just another one of those features that goes a long way to make a successful dealership.

Humphrey and Evans, Logan, Utah.

# THE CYLINDER HEAD GASKET (6 Cyl.)

Perhaps one of the most critical points in connection with the present stepped-up compression and highly stressed engines is that of the cylinder head gasket seal.

When a cylinder head has been removed for any reason, there is much in the care exercised in the installation that will have to do with preventing a blown cylinder head gasket.

With the use of a straight edge, a careful check should be made of the top face of cylinder block for bulge or slightly raised metal around stud holes. Such raised points may be dressed off with a fine mill file. A cylinder head that is warped in excess of .010, should be milled or planed off just sufficient to clean up over the entire surface.

Examine cylinder head gasket for any broken spots; also check for all water hole alignment. Carefully wipe off both cylinder head and cylinder block face with a clean cloth. Cap screw threads must be clean and turn freely in threaded block openings. Use two J-2969 Locating Studs to properly position the gasket and cylinder head.

The cylinder head gasket has been treated by the manufacturer with an effective sealing agent. However, Hudson Perfect Seal Gasket Paste, Part No. 164848, may be used without detrimental effect on this sealer.

Proper tightening of the cylinder head is very important and this alone can determine the success of a cylinder head gasket holding as it should. Following is a recommended installation tightening procedure for the aluminum cylinder head.

Illustrated below is an order of tightening. The initial tightening should be very gradual, going over all cap bolts three or four times until the torque wrench indicates a uniformity of 75 to 80 foot pounds.

13)	(1)	9	8	10	(12)	14)
6	4	2	1	3	(5)	7
20	18	16	15	(17)	19	21)

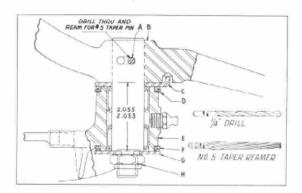
Engine should be idled slowly until it reaches normal operating temperature when all cap bolts should be re-tightened to 75 to 80 foot pounds. Run engine again until it reaches normal operating temperature—this time allow it to cool—and again torque all cap bolts to 75 to 80 foot pounds in the order shown in illustration.

It is important to again re-tighten a cylinder head after 800 to 1000 miles. An aluminum or cast iron cylinder head should be tightened to 75 to 80 foot pounds—COLD.

### CENTER STEERING PIVOT PIN REPLACEMENT

The installation of the Center Steering Kit, Part Number F 306164, for all Hudson Cars—1948 to 1953, inclusive, seemingly has baffled some mechanics.

The pivot pin is a press fit in the center steering arm, secured by a No. 5 taper pin. The cross section of the center steering arm pivot pin and support bracket, illustrated below, is also shown on Page 13-11 of 1952 Mechanical Procedure Manual.



When there is occasion for replacing center steering arm or pivot pin, disconnect tie rod ends, unbolt and remove center arm pivot support bracket. Remove nut "H" shown in illustration and take out steering arm and pivot assembly. Drive out taper pin and press pivot pin out of steering arm.

The pivot pin is not drilled because it is much easier to drill it in position than to try to maintain the dimension, as shown in the illustration, and, at the same time, have the holes coincide.

After pressing the new pivot pin in position in center steering arm holding the dimension 2.055-2.053, as shown above, and with a good center punch, mark pin for drill start through the large taper opening.

Pivot pin is hardened over the bearing area only, and may be drilled quite easily—using a ¼-inch drill, followed by reaming with a No. 5 taper reamer.

When assembling the center steering arm and pivot pin in the support bracket, follow instructions outlined on Page 13-11 of the 1952 Mechanical Procedure Manual.

# **TECHNICAL DATA FOR 1953 MODELS**

The 1953 Hudson Wasp, Model 4-C—Super Wasp, 5-C—and Hornet, Model 7-C, have been in production several months and are being shipped to the field.

The data and technical information contained in the 1952 service publications, consisting of the Mechanical Procedure Manual and Flat Rate Manual with Supplement, is entirely applicable and should be used when servicing the 1953 cars.

All Special Service Tools used in servicing 1952 models are applicable to the 1953 models.



### QUESTIONS AND ANSWERS

 Q. Why is the center steering pivot not drilled at the factory and before making up the center steering kit?

Ans. See Page 382 this issue for detailed answer.

2. Q. Why are the differential and pinion gear bearings pre-loaded?

Ans. In order to hold a definite pitch line of the drive gear and pinion. End movement of either gear or pinion results in a noisy rear axle.

Q. Have noticed that the differential carrier becomes extremely hot. Is this not injurious?

Ans. It is not unusual for differential to become quite hot, particularly in hard pulling, as in mountainous or high speed driving when contact pressure between gear and pinion teeth is very high. Resulting heat is not injurious as long as lubrication is right.

4. Q. Does the installation of an oil filter have a tendency to reduce the pressure or supply of oil to engine bearings?

Ans. The installation of an oil filter does not, in the least, deprive the engine of correct pressure and volume of oil flow to all points. The engine oil requirements are provided for before any oil may flow through the oil filter. The design of the oil pressure relief valve is so arranged as to protect the engine.

5. Q. Want to equip my shop with the latest modern portable engine stand. Where can we procure one adapted to all Hudson Engines?

Ans. K. R. Wilson, 215 Main Street, Buffalo 3, New York, manufactures an engine stand that is quite adaptable to Hudson Engines. Write for their catalog.

 Q. Can the H-51 Hydra-Matic Transmission be replaced with the later type H-52 Hydra-Matic Transmission?

Ans. This is possible physically, but should not be done due to the different rear axle ratios used with these two transmissions, account of the different transmission gear reductions.

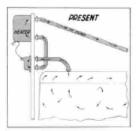
Q. How is the propeller shaft center bearing lubricated?

Ans. There is no provision for lubricating this bearing. It is pre-lubricated and sealed.

 Q. From the Far North comes an inquiry on how to get more heat from Weather Control. Ans. It must be kept in mind that we can get only as much heat from the Weather Control as is contained in the circulating water. Water temperature may be raised by using cooling thermostat, Part No. 161664, but only when permanent antifreeze is used in cooling system, as this thermostat opens at about 15° higher temperature than the standard thermostat. Check thermostat for correct temperature operation and for possible bypass leakage between upper part of thermostat and housing.

Circulation is important. Sometimes the hose connections or the heater core itself become obstructed and heat output is below normal. Carefully check the manner in which the hoses are connected at the heater core. See illustration below and Page 145, December, 1950 Merchandiser.





Q. A new universal joint recently installed became very rough and badly worn in a short time.

Ans. Without having the opportunity of checking or inspecting, we suggest the following points to be watched carefully when installing a new joint:

1. It's very important to use Tool J-881-A, so as to be sure that needle bearing cup seats properly in companion flange. 2. Be sure that the universal joint is properly lubricated. 3. Universal joint "U" bolts should not be tightened more than 14 to 17 foot pounds torque. This is very important on account of possibility of distorting needle bearing cup. 4. Be sure spline engagement is correct as indicated by marks on propeller shaft and splined end of universal yoke.

10. Q. How much "juice" does a battery lose through an engine start and how long must the car be driven to restore this loss of battery power used in starting?

Ans. During summer, a fully-charged 100-ampere battery is subjected to a starting drain of from 125 to 300 amps. Assuming that the average car will start in five seconds using 300 amps., the battery loss is approximately .5 ampere hours. Recharging at 30 amps., with all electrical equipment, cables, and terminals in good shape, the generator should replace this loss in about one minute. During winter, however, the starting load is greater—about 2½ times the summer figure, or 700 amps—and battery power is lower. The recharging time required in winter would thus be slightly over 2 minutes, again assuming the equipment to be in good shape.



Dealers, capitalize on this February and March Battery business... you have at *your* command the finest Battery Program available today! Hudson's Battery Program was designed to increase your... Battery sales... profits \$\$\$\$... and safeguard your customer goodwill.

# . . . CREATED ESPECIALLY FOR YOU . . .

- Factory Fresh Batteries—no shelf life before delivery.
- Liberal Adjustment Policy—YOU MAKE on-the-spot adjustment!
- Competitively priced.
- Designed and built to original equipment specifications.
- No transportation cast . . . freight prepaid direct from Factory to Dealer.

# A HUDSON BATTERY...

is your guarantee for customer satisfaction.