

# HUDSON

## *Service Merchandiser*

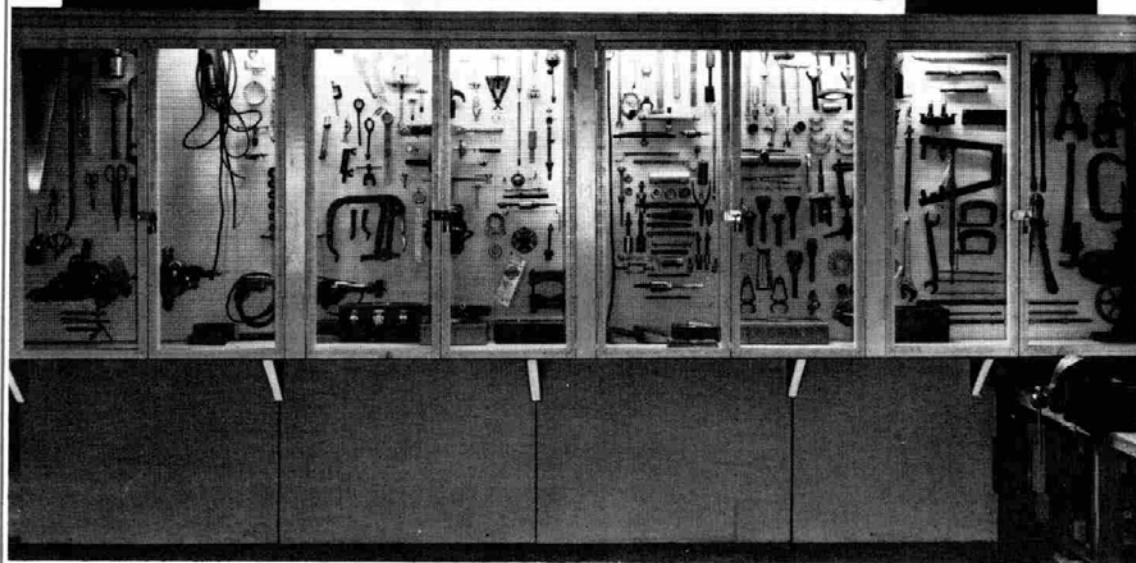
Dedicated to the interest of field service, parts and accessory merchandising.



VOL. 4 NO. 7

JULY 1952

### SPECIAL SERVICE TOOLS



#### SPECIAL TOOL DISPLAY

(See story on Page 320)

HUDSON MOTOR CAR COMPANY..DETROIT 14, MICHIGAN



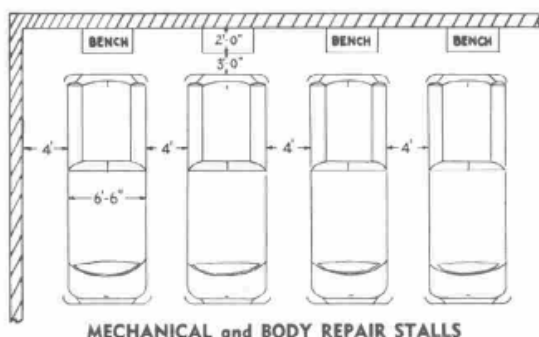
## SERVICE MANAGEMENT

(Continued From June)

In order to lay out floor space in the most efficient manner, keep in mind the fact that the average car requires roughly 250 square feet of floor space.

For example if you have an average of twelve customers per day, 12 x 250 square feet equals 3,000 square feet of total space would seem to be sufficient to care for their needs. However, we have provided no space for storage, customer reception, aisles, driveways, etc., so the formula that has to be used is that for every active customer per day, an area of 2½ stalls is required, or roughly 625 square feet. Actually, then, instead of 3,000 square feet to take care of twelve active customers daily, 7,500 square feet is required. This is a good rule of thumb and can be used for larger or smaller service areas.

Below is shown a typical working stall lay-out:



If the stalls are to be used for storage, a 2-foot space between cars is all that is necessary. For 45, 60, or 90 degree angle parking the Factory Service Representative has sample lay-outs of this type.

Following are the answers to questions that appeared in the June issue.

1. The circuits of the carburetor are as follows: float, low speed, high speed, pump and choke.
2. The *choke* circuit is used to make the low and high speed circuits richer, to improve starting.
3. The *low* speed circuit furnishes an air fuel mixture for engine idle up to approximately 18 M.P.H.
4. The *high* speed circuit furnishes an air fuel mixture from approximately 18 M.P.H. to wide-open throttle.
5. The *pump* circuit furnishes *added* fuel for acceleration and *additional* fuel until the high speed circuit is in full operation.
6. Five causes of flat spot in accelerator pump circuit are: play in linkage, obstructed inlet or outlet, check valve inoperative, set too lean and worn pump leather.
7. The *float* controls the fuel level in the carburetor bowl at all times.
8. The W.D.O. Carburetor is used on 6 and 8 Cylinder engines—1942 to 1950; the W.A. 7 on 500 Series, 4A and 4B Pacemaker Engines.
9. Adjustments are made in the following order when rebuilding a carburetor: float setting, idle adjusting screws, pump travel, metering rod, anti-percolator, fast idling and unloader adjustment.
10. The carburetor should be overhauled every 10,000 miles.

Answers to the following questions will appear in the August Service Merchandiser.

1. Name five units of the vacumotive drive:  
(A) \_\_\_\_\_ (D) \_\_\_\_\_  
(B) \_\_\_\_\_ (E) \_\_\_\_\_  
(C) \_\_\_\_\_
2. Binding and sticking of the power unit linkage does not hinder the application of the clutch. True or False? \_\_\_\_\_
3. The clutch must be in good mechanical condition for proper operation of the vacumotive system. True or False? \_\_\_\_\_
4. (Fill in) \_\_\_\_\_ switch makes it possible to start with a wide open throttle for rapid acceleration.
5. (Fill in) \_\_\_\_\_ switch prevents automatic clutch disengagement when in high gear at speeds of 16 to 21 M.P.H.
6. (Fill in) \_\_\_\_\_ switch permits automatic clutch operation in low, second, or reverse gears regardless of car speed.
7. The shift rail switch controls clutch operation in high gear. True or False? \_\_\_\_\_
8. The governor switch controls the clutch operation in low, second and reverse. True or False? \_\_\_\_\_
9. A grounded shift rail switch or circuit will cause disengagement of the clutch in any gear at any speed on deceleration. True or False? \_\_\_\_\_
10. Sticking accelerator linkage will not hinder clutch operation. True or False? \_\_\_\_\_

## CARE AND MAINTENANCE OF THE HUDSON WINDSHIELD WASHER

(Continued from June Issue)

### NON-OPERATIVE SYSTEM:

If at any time the Washer system fails to deliver water to the windshield, the fault, in most cases, will be minor and can be easily remedied. These points of potential trouble should be checked.

- Check water level in Jar.
- Jets should be removed and, while the car engine is running, the Push-button Control operated. If water flows, jets should be cleaned or replaced.
- If no water is produced, check all Hoses to determine if they are firmly connected to the correct Hose Connections. Other work in the engine compartment or under the dash may have disturbed such connections. Also check whether the Hoses are kinked or collapsed.
- If the Washer still does not function, disconnect the Water Hose at the Washer and operate again. If water flows here, the difficulty remains in the Water Hose system which should be checked further. However, if the Washer does not operate under these conditions, and the Windshield Wiper does, disconnect the Vacuum Hose at the Pump to determine whether vacuum power is exerted at the end of the Hose when the Control is operated. If vacuum is present, the difficulty is in the Pump which may be disassembled and cleaned. Preferably, the Pump and Cover Assembly should be replaced if non-operative, as the failure will probably be due to old age or some internal adjustment which could be expensive to correct and may recur if factory standards are not observed.

### ROUTINE SERVICE:

As part of complete HUDSON Service, it is recommended that the Washer be filled at the same time as the crankcase, battery and radiator are checked or whenever the car is lubricated. With normal usage by the driver, especially during Spring and Summer seasons, the Jar will require refilling each two or three weeks.

The customer may not always be advised of the advantages gained by the addition of HUDSON Windshield Washer Solvent. It will promote satisfaction on his part and profit to the Dealer to recommend and explain its use.

"Good visibility is of first importance for Safe Driving."

### CORRECTION

Please refer to Page 312 of June, 1952 Service Merchandiser and make the following correction on Karvisor specification:

HA 213288 Karvisor—Fits all 48-52 Models, except 1951-1952 Hollywoods and 7B, 8B

HA 233456 Karvisor—Fits 1951-1952 Hollywoods and 7B, 8B

Please see that your records are corrected accordingly and notify affected personnel.

## CONTEST PRIZE WINNER

# The Other Fellow's Suggestion

First prize goes to Mr. Frank Riegel, Service Manager for Heinen Motor, Hudson Dealer at Maspeth, New York, for his suggestion in connection with eliminating an oil leak at rear main bearing oil seal. This is how he does it:

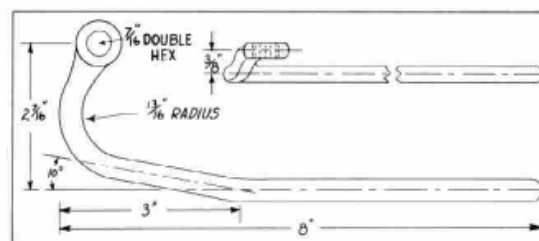
"After removing engine oil pan and rear main bearing cap, bolt a metal plate up against the opening at one side of upper packing retainer. Now, with the use of a curved punch and hammer, drive or caulk the packing securely, the plate preventing it from coming out.

"Following this, remove the packing from the bearing cap and cut off the amount necessary to fill in the upper packing. A complete new packing is then placed in the bearing cap, using the regular Service Tool for this purpose."

This procedure precludes the necessity of loosening or removing the oil seal upper retainer.

Should it become necessary to remove the Rear Main Bearing upper packing retainer for the purpose of installing a new packing, a special wrench is necessary to save time and do a good job.

Mr. Frank H. Palmer, mechanic, with the Motor and Equipment Co., Hudson Dealer at Rice Lake, Wisconsin, wins second prize in sending in the wrench illustrated below.



The wrench has a hex size 7/16, and must be properly formed to close limits in order to reach over the hub of the flywheel of the 6 Cylinder Engine.

### OWNER SATISFACTION WILL PAY DIVIDENDS

By: L. L. Sharon  
Manager, Owner Relations Division

The theme of this message has to do with the effect of satisfied owners on anybody's business. By "satisfied owners" we mean they can be satisfied by reason of courteous treatment, prompt service, good workmanship and the willingness to give owner complaints immediate attention. One of the surest ways of losing old customers is by handling complaints in a dilatory or unfair manner.

In most cases owner complaints received by the factory are not the result of serious product failures but are due principally to lack of the right kind of attention or proper handling *at the time the complaints were first registered*. Here are some things you can do to develop owner satisfaction and good will:

1. Complaints should always be welcomed and given prompt attention.
2. If the product is at fault make prompt, courteous adjustments in accordance with Hudson's policies.
3. If the product is not at fault explain the circumstances to owners in a friendly, tactful manner.
4. When your service is at fault do not hesitate to make good.
5. Give owners the full benefit of the New Car Warranty, the Owner Service Policy and the Tourist Policy. You make a profit on the Tourist Policy, therefore, do not charge tourist owners and tell them to take your bill to their selling dealer for reimbursement.
6. Do not evade any issue by advising owners to write the factory. Don't argue with them. Face the facts.
7. Adhere strictly to factory established parts prices and factory flat rate time allowances.
8. Leave the owner with a thorough understanding of your handling of his complaint and with a friendly attitude toward you, the product, the service and the factory.

**MR. SERVICE MANAGER** be sure to meet your New Owners—then

1. Introduce him to your Service Salesmen.
2. Show him your service department and equipment.
3. Show him your well rounded-out parts department.
4. Show him your owner follow-up system which is to remind him to return his car to you periodically for preventive and maintenance service.
5. Present the Owner Service Policy and Owner Identification Card, both properly filled in, including car key numbers, and explain the Policy to him.

Now, most essential of all, keep this in mind. There are two major and very important reasons why an owner buys another car of the same make—he has been satisfied with the car and the service he has received. Give owners their full share of good service and send them away happy. It's a sure shot—if you do this they will always come back for service and another Hudson.

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### SPECIAL TOOL DISPLAY

Shining new tools, particularly Special tools, always attract attention. In those shops where we see an abundance of Special tools and equipment, one can not help but associate skill and accurate workmanship.

The front page photograph of a very neat and attractive Special tool display was sent to us from the Chicago Zone. The display was set up on the service floor of the Taylor Motor Sales, Hudson Dealer at Bloomington, Illinois, under the supervision of Mr. K. M. Hodges, Service Representative from Chicago Zone.

Some of the larger shops have the Special tools segregated for the different jobs, as—valve grind, rear end overhaul, transmission, front end, etc., and contained in a roll cab. Perhaps a most common method is to mount them on a large board in the stock room, with the shape of each tool outlined in paint and pass them out as needed, placing the mechanic's check on the hook from which the tool was removed.

Special tools as a means of reducing time on operations, improving the quality of workmanship and increasing profits, are for the most part greatly underestimated. The most successful and profitable shops always have a generous supply of Special tools.

**MEET MR. C. D. SIEGRIST**, Parts Manager for Hutchinson Motor Car Co., Hudson Dealer at Hutchinson, Kansas, with a unique record of 35 years' continuous service with the same firm, starting in January, 1917. This is believed to be a record and we offer congratulations.

Known to his friends as "Dan" he has shipped and served parts and accessories to thousands of mechanics and Hudson Owners of the Middle West.

No doubt Dan could tell some very interesting stories, as well as give valuable advice to new beginners in stock room work.

Editor's Note: Let's hear from some of you other old timers.



# Hudson

## Custom Tailored



### NYLON (WASHABLE)

## Seat Covers

Hudson Nylon Seat Covers are now available to you in all Zone and Distributor Warehouses. They are soft, smooth-as-silk and will outlast any standard seat cover. And they are washable! Grease, mud, ink, food spots can all be washed out in a matter of minutes.

New beautiful patterns—smart stripes and modern small figure prints—in two-tone shades of red, gray or brown. The gay colors add a pleasant note to the interior of the car and please the most discriminating taste.

Hudson Nylon Seat Covers are Custom Tailored to fit into the soft upholstered interior of the Hudson car. These Nylon Seat Covers were selected by Hudson stylists with the same careful consideration you give the selection of a new suit.

Install Nylon Seat Covers on Demonstrators and Show Cars!

Let your Customers see and feel the beauty and protection they provide.

Tell every one about Hudson Nylon Seat Covers!! Cash in on this opportunity!!!

REFER TO YOUR  
ACCESSORY ORDER PAD  
FOR PART NUMBER

Hudson Seat Covers are  
*Custom Tailored*  
for Hudson cars

A HUDSON *Approved* ACCESSORY

## HYDRA-MATIC TRANSMISSION IMPROVEMENTS

### FRONT SERVO GASKET

Late production 1952 (H-52) Hydra-Matic Transmission front servos are equipped with a gasket, Part Number 307385, located between the release cylinder and the servo body. The gasket, which provides an improved seal to reduce leakage, was not incorporated in early 1952 (H-51) Model production.

Any time an H-52 type front servo is disassembled for inspection or repair, a gasket, Part Number 307385, should be installed.

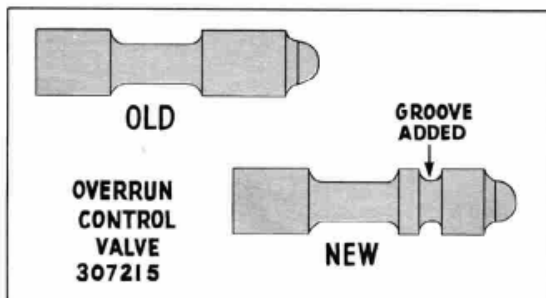
### PRESSURE REGULATOR PLUG IDENTIFICATION (SERVICE PACKAGE)

The 1952 (H-52) Pressure Regulator Plug Assembly is similar in appearance to the 1951 (H-51). The difference in booster and T. V. Plug diameters, however, produce different pressure characteristics.

To facilitate identification of the 1952 (H-52) Pressure Regulator Plug Assembly (Service Package), Part Number 307390, the top of the Plug is marked with white paint.

### OVERRUN CONTROL VALVE

An oil groove has been added to the Overrun Control Valve to reduce any possible tendency to stick. Shown in the illustration below are both the old and new Control Valves. There is no change in part number.



If any transmissions are found to have a "slipping" condition when using the engine as a brake in third gear, we suggest the installation of the new type valve. All Overrun Control Valves now being shipped have the groove added.

### TORUS COVER NECK RING WEAR

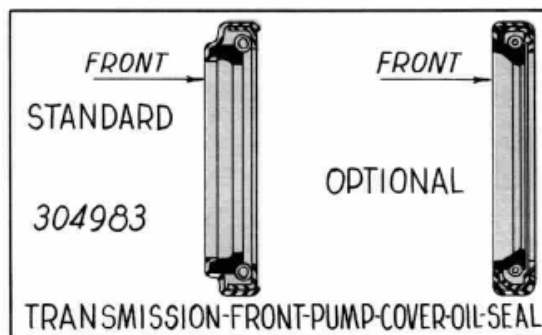
It is probable that some torus covers are being replaced unnecessarily on past model transmissions because of grooves worn by the front pump rings.

To determine if the wear is excessive, install a new set of rings in the grooves of the cover. If the ring gaps are not over twenty-five thousandths (.025) of an inch, the cover is within limits and should be re-installed.

### FRONT PUMP COVER OIL SEAL

Two types of Front Pump Cover Oil Seals have been used in production and service under the same part number—304983.

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Illustrated above is the construction of both the standard and optional seals. Note carefully the manner in which these are installed, particularly the optional design seal.

### REAR SERVO GASKET ALIGNMENT

The rear servo gasket should be carefully aligned to the accumulator body assembly when building up a rear servo. If the gasket is misaligned enough to partially cover the rear servo exhaust valve port, the valve may hang up on the gasket, resulting in a severe 3-1 closed throttle downshift.

The rear servo exhaust valve has been redesigned to eliminate this possible difficulty on future production.

### FRONT BAND ADJUSTMENT

Smoother shifting may be obtained with the 1952 Hydra-Matic Transmission by adjusting the front band one turn tighter than on past models. This adjustment results in better shift timing with the 1952 design front servo.

It is recommended that the front band be adjusted five (5) turns by the internal or six and one-half (6½) turns by the external method on H-52 Hydra-Matic Transmissions.

### PROTECT IGNITION SYSTEM AGAINST MOISTURE

Protecting the ignition system primary and secondary wires, coil, distributor and battery against the effects of moisture is a worthwhile service that can be easily sold and one that will reduce complaints of hard starting, particularly in sections of much fog or rain and near oceanside operation.

"Pib," a liquid that, when applied on battery, wires, distributor, coil and terminals, leaves a tough insulation skin that prevents any moisture or water from impairing current flow. This preparation is supplied through the Factory Accessory Division and is available in one-ounce and four-ounce containers.

Treatment of the ignition system with "Pib" consists of first removing the grease, dirt and corrosion from the surfaces to which it is to be applied. This is very important. Following this, either spray or brush "Pib" on those parts.

Every Dealer should check his stock of "Pib" today and if low or completely exhausted, place an order with his Zone for a quantity of "Pib."



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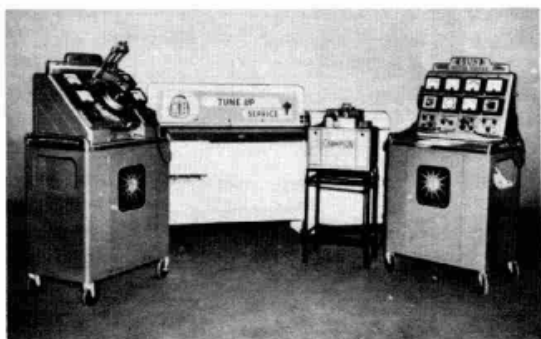
## BUILDING BUSINESS AND CONFIDENCE WITH DIAGNOSIS

By: R. W. Dillaway—Parts and Service Supervisor  
Eastern Division

In an effort to obtain more service business, eliminate guesswork in motor adjustment and, at the same time, render a more satisfactory service to Hudson Owners, many Dealers have begun to specialize in selling **DIAGNOSIS**.

Most owners have only a very slight knowledge of the advantage of Scientific Diagnosis.

It is found that when this feature, which includes more than fifty actual tests with Electronic instruments, is fully explained, they are readily receptive to the plan. For this a charge of \$3.00 is made, with a complete report to the owner.



DIAGNOSIS EQUIPMENT

Some Dealerships starting a department of this type may have difficulty in getting the Service Salesmen interested in selling "Diagnosis Service." To overcome this, one Dealer called the men into the office and showed them a stack of silver dollars. They were told to come to the cashier as soon as they had sold a diagnosis deal, and collect one silver dollar.

The idea is not to wait until the end of the day to collect their dollars, but to collect the minute the deal is sold. The psychology of this is that the sight of a silver dollar makes a man realize he has one, and creates a desire for another one. On this basis, salesmen go to work, and a diagnosis man will be kept busy on paid customer labor most of the time.

## HUDSON SERVICE MERCHANDISER

Records indicate that Customer labor has been increased in those Dealerships who operate this plan efficiently.

Naturally, all the work indicated by the analysis is not always purchased by a customer. Some postpone the work, paying only for the diagnosis. Even this is good because it is felt that an Owner then has an honest conception of the workings of his car, and will tell his friends about the service.

Therefore, it is important that the man running the department gives an honest, dependable and unbiased report on the diagnosis check sheet. Correctly manned, and efficiently operated, this department brings back many repeat customers.

Records indicate further that unapplied time in the shop can be cut at least 50 per cent and allowing an equal amount in the absorption figure.

A file is kept on all work needed on a customer's car not done at the time the analysis was made. In this manner, the Service Department has a record of untotalled dollars of uncompleted work, much of which was not done only because the customer found it inconvenient to tie his car up at the time of the diagnosis. Referring to this file for service work, most of the jobs are taken care of by appointment, for a specific day in the near future.

Following such a procedure, a smooth flow of work is maintained in a shop, accounting for better quality work, the least possible amount of unapplied time, high percentage of profit, and most of all, *additional service work and customer satisfaction.*

## VACUUM SPARK ADVANCE CHANGED

On Models 5-B, 6-B and 7-B the Vacuum Spark Advance characteristics are revised and the name plate color is **GREEN**. The former Distributor has a red name plate and the Vacuum Spark Advance remains the same and as indicated on Page 6-3 of the 1951 Mechanical Procedure Manual.

In the new Distributor (Model IAT 4009-B), Part 307044, the maximum Vacuum Spark Advance does not change, but a weaker diaphragm spring is used so that less Vacuum is required to give the same advance as with the former Distributor.

Here is the new Distributor Vacuum Advance rate:

- 0°— 9 $\frac{3}{8}$  inches Vacuum
- 1°— 9 $\frac{3}{4}$  inches Vacuum
- 2°— 10 $\frac{1}{2}$  inches Vacuum
- 3°— 11 inches Vacuum
- 4°— 11 $\frac{1}{2}$  inches Vacuum

The Mechanical Spark Advance of this new Distributor remains the same as that of the former type (Model IAT 4009-A).

# Hudson Engine Tune-Up Oil Keeps My Engine in Top Condition

**SAYS MARSHALL TEAGUE**

famous stock-car race driver



"Driving is a business with me," says Marshall Teague. "That's why I use Hudson Engine Tune-Up Oil. It gives my engine added pep, and it keeps it free of carbon and oil sludge. It also cuts down wear on valves and piston rings.

"At regular intervals I give my engine an upperlube treatment, and use it as a gasoline additive. In that way, I know my engine is kept properly lubricated at all times.

"Regular use of Hudson Engine Tune-Up Oil is one of the best and most economical ways I know of to keep your car's engine in top running condition."



Hudson Engine Tune-Up Oil is a superior petroleum-base product with a specially prepared chemical additive. *It is the only engine tune-up oil tested and approved by the engineering laboratories of the Hudson Motor Car Company.* Hudson Engine Tune-Up Oil is entirely harmless to the finest engine parts.

Hudson Engine Tune-Up Oil is highly recommended for breaking in new engines. Used as a gasoline additive, it protects cylinders and pistons and helps seat rings properly.

Hudson Engine Tune-Up Oil brings new life to old, sluggish engines when used as an upperlube. Complete directions are included on every can.