HUDSON Convice Mendandiser Sentite Mendandiser

VOL. 2 - NO. 8

AUGUST 1950

It's Time

70 Prepare

for



Complete Anti-Freeze Service with

Hudson REGULAR Anti-Freeze

BE ON TIME FOR COLD WEATHER with Hudson REGULAR Anti-Freeze—the Anti-Freeze that gives MAXIMUM PROTECTION FOR MINIMUM INVESTMENT. Requires less to protect—approved for all Hudson automobiles.

- ECONOMICAL
- CONCENTRATED
- SPECIAL RUST INHIBITOR APPROVED BY HUDSON ENGINEERS.

Hudson PERMANENT Anti-Freeze

BE ON TIME FOR PROFITS with Hudson PER-MANENT Anti-Freeze, the finest Anti-Freeze available today. It is an Ethylene Glycol solution containing SPECIAL Corrosion Inhibitors which assure the MAXIMUM Anti-Freeze performance in Hudson engines.

- NON-EVAPORATING
- LASTS ALL WINTER
- SPECIAL RUST INHIBITOR APPROVED BY HUDSON ENGINEERS.

BUILD DISPLAYS with the attractive one-gallon containers in your Parts Department, Service Department and Dealer Showrooms.

Only DEALERS who STOCK Anti-Freeze SELL Anti-Freeze!
PLACE ORDERS NOW FOR FUTURE DELIVERY.

Hudson Regular Anti-Freeze Part No.

Hudson Permanent Anti-Freeze Part No.

HS-302402 (54-gallon Drum)

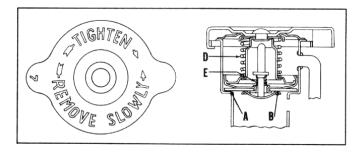
HS-302569 (1-gallon Can)

HS-304634 (1-gallon Can)

COOLING SYSTEM OPERATION

A pressure type radiator cap has been standard on all 501-2-3 and 4 cars since the start of their production. Beginning with Pacemaker car number 500-58924 (except 59223 to 59461 inclusive) when the radiator core thickness was changed from $2\frac{1}{4}$ to 2 inches, the same pressure type radiator cap, part number S.P. 2265 became standard.

The pressure type radiator cap is fitted with two valves as shown in the illustration below. Valve A is held to a seated position by spring D until a pressure of $6\frac{1}{4}$ lbs. is reached. When the engine has stopped and temperature of cooling system begins to lower, valve B—under tension of spring E begins to open when the vacuum within the cooling system reaches $\frac{5}{8}$ lb. PSI below atmospheric pressure.



Under normal operating conditions the use of a Radiator Pressure Cap will cause the temperature gauge to give a higher reading than with a nonpressure cap. This is due to the pressure in the upper radiator tank reacting against the thermostat valve and bellows retarding the start of its opening by possibly 10°. As soon as the thermostat valve opens, the pressure is equalized on both sides of the valve and the operating temperature will not be affected regardless of the type of radiator cap used.

The Hudson cooling system has been designed to take advantage of the increased cooling capacity under adverse driving conditions which are obtained by use of the pressure cap. The radiator and other parts of the system are designed to withstand several times the normal operating pressures, therefore, leaks, water loss or overheating cannot be attributed to use of the pressure cap.

Under no conditions should a pressure cap be replaced by a standard cap as this reduces the cooling capacity under adverse operations as definitely as would the removal of part of the radiator core.

A declomania on the radiator filler neck of all new cars stresses the importance of removing cap slowly. When the cap is turned to the left or counterclockwise, to the first notch or stop the built up pressure will be relieved gradually. When the cap is installed it must be locked or turned to the right as far as it will go.

The thermostat in the cooling system serves a definite purpose and should not be removed because of suspected inoperative condition. It may be tested in water at 150 to 155 degrees Fahrenheidt at which temperature it will begin to open—the valve being fully open at 185 degrees F. If defective replace with a new one.

The radiator and hood seals as outlined in General Technical Policies and Information Bulletin No. 8 dated May 5, 1950, also illustrated in the June issue of Service Merchandiser are important in the improvement of cooling especially in the lower speed range. The sealing prevents re-circulation of the under hood heated air.

In any case of a tendency of engine to overheat a simple check as tightening the cylinder head to proper torque and eliminating any air leak to radiator outlet hose should be given a routine check.

Cars that have seen several years service should be given a radiator flow test—and checked for a possible obstructed muffler, late spark, etc.

WANTED! — MORE NEWS FROM THE SERVICE FRONT!

With the object of encouraging the field Service and Parts men to exchange ideas—mechanical kinks, short cuts, etc., your Service Merchandiser has offered three cash prizes monthly for those suggestions that would be judged as first, second and third prize. The prize offer is still open to all Hudson Dealer employees. Unfortunately the boys in the field have sadly neglected this interesting part of their Service Merchandiser.

We believe there is practically an unlimited store of this kind of information available from the field if the boys will just take the time to give us the details with a photograph or sketch, if necessary. All Service and Parts men that are eligible should get into this contest and a cash prize may be yours for a brief outline of your story.

Please bear in mind that the Service Merchandiser is devoted entirely to material that is considered of interest to the field organization as mechanical, parts and accessories, field activity, exchange of ideas, etc. Obviously we must rely upon you men in the field for much of this last mentioned feature, and the three monthly prizes have been set up purposely to stimulate this interest. Checks are awaiting the winners!



THE FOLLOWING ANSWERS ARE ALL TAKEN FROM THE 500 SERIES OWNER MANUAL

- 1. The oil that is placed in the new car engines at the factory should be drained and replaced with a good grade of oil having an S.A.E. body as shown in the temperature chart, after the first 500 miles.
- 2. At intervals of 2,000 miles.
- 3. Tires (on wheels) should be rotated every 2,500 to 3,000 miles.
- 4. By changing the tire positions and rotating as shown on page 25 of 500 Series Owner Manual brings the spare in use and greatly increases tire life otherwise.
- 5. The front and rear wheel bearings should be removed—washed clean and repacked with sodium soap base lubricant. This should be done without fail at 10,000 mile intervals, but is all too often neglected.
- 6. Both the oil bath and oil wetted type air cleaners should be serviced at 2,000-mile intervals or more frequently during severe dust conditions. This point is sadly neglected by most motorists and lubrication attendants.
- 7. The gasoline filter screen should be removed and cleaned every 2,000 miles.
- 8. The cooling system thermostat begins to open at 150° to $155^{\circ}F$. and is fully opened at $185^{\circ}F$.
- 9. It is important that the sealed cooling cap be turned down tightly to maintain the correct pressure.
- 10. Belt adjustment is correct when it may be depressed 3/4 of an inch at the central point between the fan and generator pullies.

QUESTIONS

Answers to the following questions will appear in the September issue of the Service Merchandiser.

- 1. Why is it important to install the special gasket with the aluminum cylinder head?
- 2. What is the recommended tire pressure 500 Series —front and rear?
- 3. Why should tire air pressure be checked and corrected only when tires are cold or at atmospheric temperature?

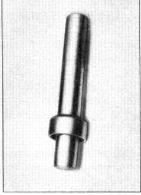
- 4. Why should new gaskets always be used when installing spark plugs—and tightened to an exact torque?
- 5. When ordering parts why is it very important to always carefully read the NOTES where those parts are listed in the catalogue?
- 6. Why should lubricant not be used on uncovered rear springs?
- 7. Why should pressure type radiator cap be removed slowly?
- 8. How can the latest type connecting rods used in Pacemaker and Super Six engine be distinguished from the previous type?
- 9. Why is it advantageous for every Hudson Dealer to order Anti-Freeze through the factory?
- 10. Why should this always be ordered as early as possible?

A SPECIAL TOOL FOR A SPECIAL JOB

A renowned statesman on an occasion when his nation was engaged in a war, said, "Give us the tools and we'll finish the job."

Special Tools play an all important part in every profession and trade—they are the manifestation of skill and without them the most highly trained expert is handicapped in his work. No matter what the repair job is, you'll find it can be done more profitably and accurately with the use of Special Tools that have have been designed specifically for that purpose.





The Special Tool shown above is a Differential Bearing Cone Replacer, Tool Number J-2646, and is applicable to all 480-490 and 500 Series Hudsons. Made up of special steel and designed so as to pilot in the inner bore of the Differential Case as the wider shoulder portion of the tool contacts the inner race of the roller bearing, as it is being driven into place.

The recess just back of the pilot end clears the hub of Differential Case and enables the mechanic to drive the bearing to a full seat—quickly and with no danger of damaging it.

All of these Special Tools have been designed for Hudson Mechanics—to expedite work and improve the quality of the finished job. They are available and will be shipped immediately upon receipt of your order.

CAR LUBRICATION

Sometime ago our Engineering Department changed the specification of the universal joint lubrication from viscous chassis lubricant to a straight mineral Gear Lubricant S.A.E. 140 for all Models 1941 to 1950. The spline lubrications recommendation remains unchanged.

Lubrication charts as supplied by the factory Service Dept. should be posted close to the lubrication hoist so as to be available for reference at any time during or before starting a lub. job. Notation should be made on the charts of any change in recommendation.

Wipe all grease fittings before starting to lubricate, this will not only remove the grit but also aid in locating fittings when lubricating. Always check battery water level and tire inflation upon completion of the job.

Never fail to check the oil filter when changing oil. The cartridge may not only be due for a change but the oil flow may be completely obstructed. A clogged filter will not heat up to engine oil temperature but will merely become warm from the general underhood heat.

Air cleaners are so vital to the life of an automotive engine that everyone built has this unit fitted, yet most car owners pay little or no attention to the condition of the air cleaner on their car. It is in general taken for granted that the man who lubricates his car will attend to the cleaning and re-oiling of this unit.

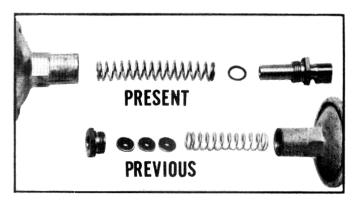
CHECK YOUR PARTS ORDERS

Your factory receives wire orders and regular parts orders daily, specifying paint or lacquer to be shipped parcel post or air express. The only way material of this kind may be shipped is by railway express or freight. Postal and air transit regulations strictly forbid shipping inflammable material via parcel post or air express.

When placing orders for convertibles either trim or top material—be sure to specify top color also if equipped with hydraulic windows. This will enable specifiers to fill orders accurately and also avoid delays.

VACUUM ADVANCE DIAPHRAGM SPRING WASHERS—500 MODELS

The rate of vacuum spark advance is governed by the diaphragm spring tension: Washers may be added or removed to effect the exact rate of advance as is required for the various distributors. Recent ignition distributors are fitted with a somewhat longer but softer spring, having a washer of larger inner diameter than was used heretofore. The connection plug has a guide over which the spring and washer are mounted and an extension carrying the threads for pipe connector.



The component parts of the present and previous types of the vacuum advance are shown in the illustration above.

FOR FUTURE SALES

It is a known fact that sales will follow service in the same relation in which service follows sales. The following quotation from a letter directed to the factory by Marine Sergeant Major James R. Thill of Concord, California, is just one of many examples of Hudson Owner enthusiasm. We know of no finer selling medium than is presented with the excellent Hudson Product and backed up by a field service as good as the car itself.

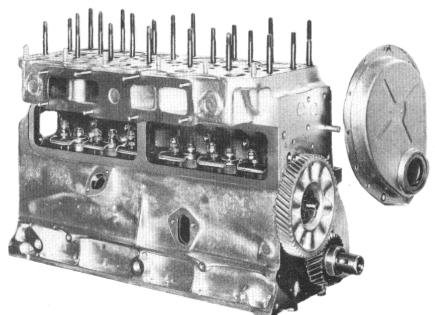
"I am a Marine Sergeant Major and am continuously moving around the country. I took my 1950 Super Six in for the 2,000 mile check and even though I probably will not be in this district when I am ready for my next Hudson, and I did not buy this one new from Metro, they serviced it and offered to make the regular inspection and adjustments for me free of charge."

"In my estimation this service represents the highest type of customer appeal and speaks well not only for Metro Motors, but also reflects a very high standard of service and dependability for the entire Hudson Motor Car Company."

"Had I been dissatisfied with my car or service, I would have wasted no time in registering a complaint, and likewise, as I have received such outstanding service, I would like you, as well as all my Marine friends, to know that I appreciate it. This consideration has made me a volunteer Hudson salesman and representative."

JA CAR OWNER ASKS WHEN HAVING HIS WORN ENGINE ASSEMBLY REPLACED

- Will the replacing engine assembly...be NEW?
- Will the replacing engine assembly...be FACTORY BUILT?
- Will the replacing engine assembly... have GENUINE PARTS?
- Will the replacing engine assembly... carry a FACTORY GUARANTEE?
- Will the replacing engine assembly...be ECONOMICAL TO INSTALL?



Yes...

to all FIVE questions

when installing...C165590 Skeleton Engine Assembly.

C 165590 Skeleton Engine is adaptable for 1940-1947 cars—(Long Stroke) and consists of the following new parts...Cylinder Block...Pistons...Piston Rings and Pins...Camshaft and Crankshaft Bearings...Crankshaft and Camshaft...Timing Gear Set and Cover...Connecting Rods...Valve Tapets, Guides, Clamps, Adjusting Nuts, Screws...All other essential parts.

Installation of Genuine Hudson Engine Assemblies is profitable for dealers too.

BODY UNDERCOATING MUST NOT BE SPRAYED ON PROPELLER SHAFT AND OTHER UNITS

In the July, 1949, issue of the Service Merchandiser (Vol. 1, No. 1) page seven, we called attention to the importance of protecting various parts from body undercoating. While we realize that some of this work is done outside of authorized Hudson Service Shops, due to the large number of instances where undercoating was found to be sprayed on the propeller shaft, transmission and rear axle breathers and even on the lower portion of the radiator core, we feel it is in order to again caution those doing this work to protect these units when applying undercoating.

A propeller shaft that has a heavy coating on one side, full length of the shaft is decidedly out of balance and cannot help but cause vibration and roughness. Breathers in the rear axle and transmission are for the purpose of relieving pressure that comes with heat and expansion. Should these be obstructed, obviously some of the lubricants will be forced out of these units. The front and rear sides of the lower section of the radiator core must be protected against a deposit of this coating which if sprayed through the core is not only difficult to remove but will cause a tendency of overheating.

The answer is to properly protect such units as propeller shaft, uncovered rear springs, shock absorbers, muffler, exhaust line, breathers, grease fittings and radiator core before doing a body undercoating job in your own shop. Any cars that come into your shop that have been given an undercoating by an independent garage should be checked carefully and any undercoating removed from the above units.

Here again is an excellent service selling opportunity and three good reasons why the selling dealer should get not only the accessory business but also the undercoating work. 1—He has through the sale of Hudson cars, created the market for that owners requirements. 2—He has the first opportunity of selling that which was tested and approved for Hudson cars. 3—Practically every Hudson car purchaser DOES BUY undercoating and a certain amount of accessories.

Based upon the mileage and number of trucks in this country, the annual gasoline consumption by them alone, according to Automotive records, totals 7,800,000,000 gallons. Piled in one gallon cans, that would make five stacks to the moon.

TRAILER COUPLINGS AND HITCHES

From the many queries received at the factory concerning trailer hitches and method of their installation, etc., it is felt some information on this subject to our field organization might place them in a position to give direct advice to those who may contemplate attaching a trailer to their car.

Your factory does not furnish any type of hitches or couplings for attaching trailers, neither do we have any sketches or Engineering approval of design or layout of couplings or hitches of any kind. Practically all trailer manufacturers design and supply the various kinds of hitches and couplings adequate in strength and adaptable to the various automobile designs. There are also many manufacturers of this equipment throughout the country.

Under no circumstances should any type of coupling be attached directly to the axle housing or spring clips. The reason being that while the housing is designed to carry loads—the driving thrust is through the spring leaves near the ends of Banjo housing (Hotchkiss drive) thereby cushioning the stress on axle housing, ring gear and pinion. Neither should any towing attachment be made to the bumper direct without reinforcement of the brackets and frame members to which it attaches. As a large portion of trailer weight is imposed upon the coupling, obviously the bumper was not designed to carry such additional load.

These facts should be brought to the attention of those who plan to attach a trailer to their car. (1) Possibility of loads and stresses beyond the limit of that for which the vehicle was designed. (2) Increased stress on tires calls for either a heavy duty, larger size or raised air pressure. (3) Brakes should by all means be provided for on the trailer, also the installation of safety chains as may be required by various state laws. (4) The clutch comes in for the most severe over stressing in the case of towing a trailer and only the 10" clutch should be used under those conditions. (5) Trailer weight carried on the rear bumper may be equivalent to two or three times a rear seat passenger load, therefore heavier or helper rear springs are usually necessary.

An engine that otherwise operates at normal temperature will more often show indication of overheating with the lugging load of a trailer. The lowest rear axle ratio should be installed so as to give the engine all possible advantage. This would also be conducive to longer clutch life with the overload condition.

WHERE ELECTRICAL UNITS AND ACCESSORIES SHOULD BE CONNECTED

The correct functioning and protection of electrical units and accessories are contingent not only upon the proper point of connection but also by the fuse or circuit breaker in the circuit, as shown below.

CIRCUIT	WHERE CONNECTED	FUSE LOCATION	FUSE CAPACITY
Clock	LS-Circuit Breaker-Battery side	In line at clock	1-AG-3 Amp
Radio	AUX-Circuit Breaker-Battery side	In line at set	SFE-14 Amp
Heater & Defroster	IGN switch-Cold side	In line clamped to heater	SFE-14 Amp
Directional Signal	Battery side of temp. gauge	In line near switch	3-AG-10 Amp
Overdrive	B term of Gen. Volt Reg.	On Overdrive relay	3-AG-30 Amp
Drive Master	IGN switch	In line near switch	
Cigar Lighter	AUX Circuit Breaker-Battery side	None	
Light Sw. Circuit Bkr.	To Lighting switch	20 ampere capacity	
Aux. Circuit Breaker	Between tail, instrument & Dome Lamps	20 ampere capacity	

While full directions for electrical connection are usually included within the Hudson accessory carton, it is well to use a car wiring diagram to properly identify the point of connection thus affording proper protection and avoiding current overload.

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NEW PISTONS NOW IN PACEMAKER ENGINE

The new Piston illustrated and described in the July issue of Service Merchandiser as being used in the Super Six engine is now also standard in all the Pacemaker engines, starting June 8th at serial number 50A-85995.

Pacemaker engines prior to 50A-85995 in which the new type pistons were used intermittently may be identified by the letter "P" stamped on the front face of cylinder block near the right upper corner. This new piston is not interchangeable with those previously used except in complete sets.

MR. SALESMAN

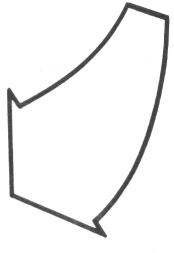


Sell the OUTSIDE VISOR

AND the TRAFFIC LIGHT VIEW

Makes the Outside Visor easy to sell!!!





The Traffic Light Viewer is a large clear plastic prism which makes overhead traffic signals easy to see.

The Traffic Light Viewer helps sell Outside Visors.

Increases Dealer Profit and gives complete Customer satisfaction.

For Dealer Installation: Order Traffic Light Viewer—HA-220544

Outside Visor

—HA-213288