

HUDSON

Service Merchandiser

VOL. 1 NO. 3



SEPTEMBER, 1949



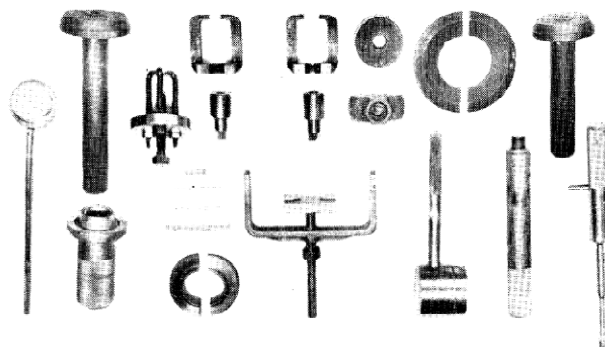
In expression of their appreciation of the fine school set-up and very capable instructors, the dean of Hudson Service Supervisors, Mr. Roy Wells, (left) on behalf of the first class of Regional Service Supervisors is presenting a plaque to the Faculty. Right to left: Glen S. Potter, Service Manager, Carl Schisler, Chief Instructor, Lee Swisher, Assistant Instructor and Roy Wells, Zone Service Manager, Los Angeles.

This CERTIFICATE OF ACCOMPLISHMENT is awarded only after successfully completing a course of study and training that may not be duplicated in any other School.



HUDSON MOTOR CAR COMPANY.. DETROIT 14, MICHIGAN

HUDSON 480-490 SERIES
ESSENTIAL SERVICE TOOL GROUP



Hudson Motor Car Co. devotes much time and expense in the developing and testing out of special tools also the cataloging and listing of them. Our program in this direction is in the interest of mechanical efficiency and we want all Hudson dealerships to have and use the tools that are needed.

More than ever before, the present day motor car necessitates the use of special tools to perform work accurately and within time limits that are competitive and upon which flat rate time study is predicated. From this standpoint alone it may be seen that there is a distinct handicap in shop operation without proper special tool equipment.

Viewed from an investment angle, the Hudson dealer will quickly realize that, special tools enable the shop to turn out an increased number of better repair jobs, more profit and better satisfied customers. There is no substitute for the proper tool for the job. Special tools pay for themselves over and over during the course of their use.

The full effectiveness of special tools is directly related to their availability and convenience. Certain special tools because of their frequent use, may not be available to the mechanic who wishes to use them due to another mechanic using them at that time. Duplicates of those frequently used prevents delays due to being in use or account of breakage.

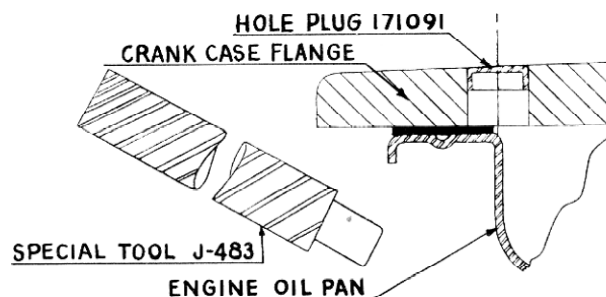
A special tool board arrangement is commonly used, whereon is outlined in paint, the shape of the tool occupying that space and when in use one of the mechanics' tool checks is in its place. This may be conveniently handled by the stock room.

All Hudson Dealers need the essential tools. The repair shop is placed in a more competitive position. Bear in mind that all necessary special tools have been designed and are available.

MACHINE LOCATING HOLES 6 & 8 CYLINDER BLOCK

The first operation in the machining of the cylinder block consists of drilling two locating holes through the oil pan flange near the right front and left rear ends. These holes serve to locate the block in the fixtures and jigs for the subsequent machining operations.

The locating hole at the left rear of crankcase is directly behind the starter motor and is so located that one half of the hole opens into the crankcase. In a few instances the cup shaped plug Part 171091— $\frac{9}{16}$ " in diameter which is used to close this hole was found to have become dislodged, thus allowing oil to be thrown out, or water and dirt to enter the crankcase.



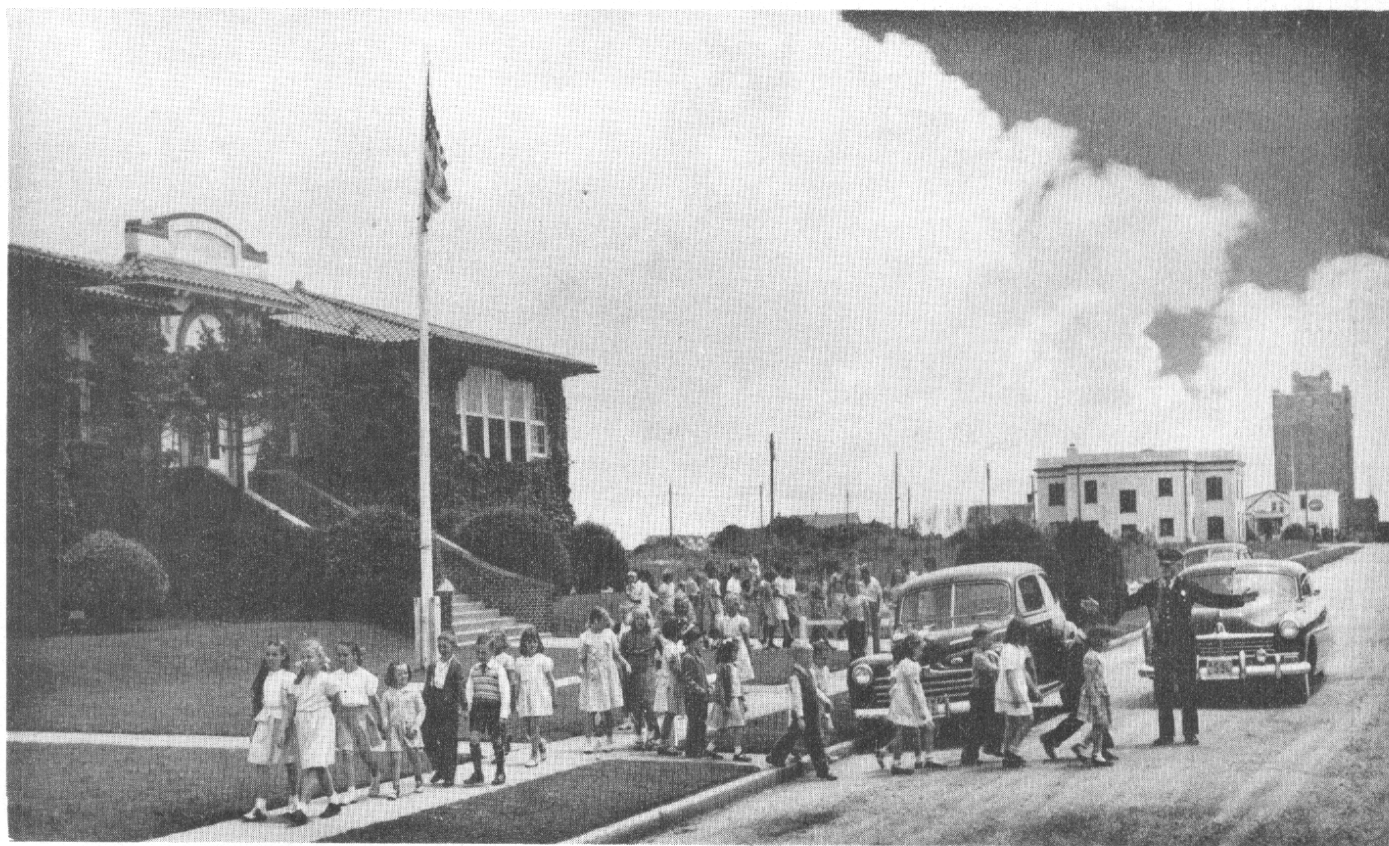
Without having the oil pan removed, access may be had for installing a new plug by removing the starter motor. If the oil pan has been removed for some other reason the plug should be installed from beneath the engine. In either case the closed end of the plug must be entered in the opening. A very satisfactory tool for making this installation is the handle of J-483 vibration dampener installer tool. Apply white lead or a sealer to cup before installation.

GASOLINE TANK VENT

The gasoline tank vent is located at the top or highest point of the tank and is connected by a hose to a pipe leading up into the gasoline filler spout.

A tank that takes gas only very slowly or cannot be completely filled, likely has a partial or entire obstruction of the vent. This may be corrected by removing the vent hose connection and inserting a piece of stiff wire in each of the vent pipes to remove any obstruction.

Be sure that the hose connection is tightened thoroughly and is not twisted or kinked.



LET'S ALL GET BEHIND THE SAFETY DRIVE!

There is a constant never ending effort being made to prevent vehicular accidents—to reduce loss of life and injury. Particularly at this time of the year when many millions of children will be crossing the streets with the reopening of school, all effort towards safety is being redoubled throughout the entire nation.

Mechanical knowledge and training enables every service salesman, tester and mechanic to be able to detect the developing of conditions that may later jeopardize the safe operating of a car and which have not been noticed by the car drivers.

Records of traffic accidents reveal that three important factors are by far in majority where accident or injury occur:

1. The mechanical condition of the car—ineffective brakes, poor lights, steering difficulty, etc.
2. Law violation—speeding, disregard of traffic regulation, taking the right of way.
3. Pedestrian disregard of rules and traffic ordinances as—crossing against red light, crossing between intersections or failing to look both ways for traffic before crossing the street.

The mechanical condition of the car being an important factor in preventing accidents, places before each and every one of us in the field of maintenance the definite responsibility insofar as the safety of those cars that are within our scope of maintenance.

This calls for a closer and more critical inspection of brakes, which includes brake lining and drums, entire mechanism and pedal reserve. Steering, and all connection, all lights, horn and signaling devices.

Let's each and every one of us become *safety-minded* and not only sell the visible safety corrections, but let nothing go unchecked so far as is possible, that may forestall an accident.

THE SERVICE MANAGERS' CLUBS

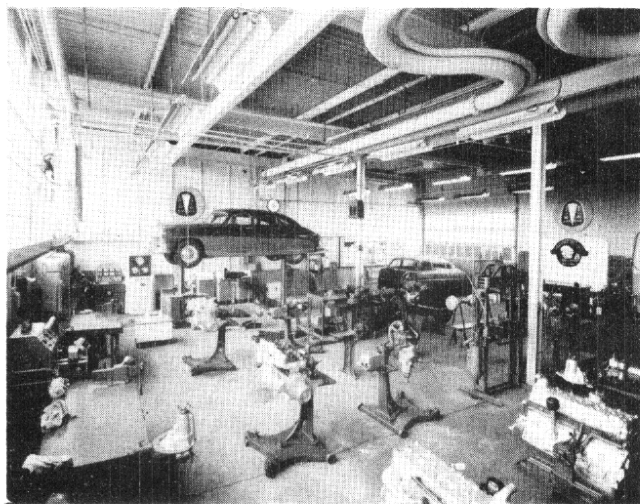
News from the field indicates some Service Managers Clubs have continued their usual activities throughout the summer. No doubt these meetings have been made of unusual interest to the members of those clubs.

The value of close association and exchange of ideas, experience and policies to all those engaged in directing service cannot be overestimated. Please remember the other boys are eager to learn what your club is doing. So let us have the story with any available photographs.

LET US HAVE YOUR STORY, QUESTION OR PROBLEM

Your SERVICE MERCHANDISER solicits material and information from the field. We know this is practically unlimited and don't be bashful or backward about sending yours in.

If you have a special tool or a short cut for some particular operation, let us have a sketch or details, and if applicable it will be passed on to the thousands of boys in the field.



Sectional View of Training School Shop

FACTORY TRAINING SCHOOL DOING AN EXCELLENT JOB

Perhaps never before have Hudson Dealers had the opportunity of having their Service Managers trained in so splendid equipped school as has been made available by the Factory.

Realizing the prestige as well as increase in efficiency that is to be derived through a factory training of their key personnel, Dealers all over the country whose Service Managers have attended the school are delighted with the marked results attained and others are rapidly mailing their applications for enrollment.

With the eighth class under way, each class is as enthusiastic as the other in the vast amount of good they have obtained. They have that personal satisfaction in having any problems they may have encountered cleared up. There is not an idle or dull moment during the entire two weeks course.

Owners and prospects alike react favorably to knowing their Dealer has factory-trained technicians and mechanics. We believe that every Hudson Dealer, to strengthen his maintenance position, will want his Service Manager to be trained at the factory school.

A nicely arranged and very appropriate post card is available for Dealer mailing to Hudson owners to acquaint them with the fact that his Service Manager has completed the requirements of the Factory Training School course. This definitely tends to instill owner confidence.

USED CAR CONDITIONING SUGGESTIONS

(Dealers please note)

When estimating your cost of conditioning a 480 series used car for retail sale it is well to consider the advantage of conditioning this car against possible water or dust entry.

To enhance the value of the used car as well as guaranteeing good customer relations each used 480 model that needs it should be sealed at the time of making the car ready for sale.

Floor mats should be cleaned and renewed if the old one detracts from the inside appearance of the car.

The inside of the trunk compartment should be flocked and all rusted out sections of the body, fenders, gas tanks, etc. can be repaired and renewed by the application of nu-metal.

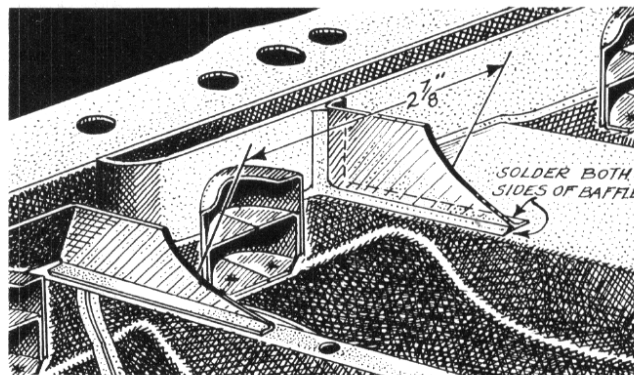
All the necessary material is available and can be ordered from your Zone Warehouse or Distributor.

Detailed information as to method of installation is available through technical Bulletins and the Hudson Used Car Manual. All Zone Service personnel has been well trained in the application of suggested procedures and can be of material assistance to you if needed.

OIL PAN TRAY Baffle

A small sheet metal baffle has been added to the oil pan tray on the eight-cylinder engine. This part is attached by soldering to the top of the oil pan tray on the right side, next to the large oil return opening at the center of the pan.

The purpose of this part is to better control the movement of the oil in the tray, resulting in improved



engine lubrication. This part 302539 is available for installation on engines not so equipped. The illustration above shows the position of baffle and method of securing it.



OKLAHOMA DEALER LOOKS TO THE FUTURE

Oklahoma Hudson Company announces the opening of their new Scientific Diagnosis Department.

Tim May, Factory Service Promotion Manager, spent two days with Mr. Wynne Ames, Service Director for Oklahoma Hudson Company, and Pat Sheridan, Kansas City Zone Service Manager. A complete analysis was made as to the practicability of this type of service selling with a view to possible recommendation of national dealer participation.

Standing from left to right—Pat Sheridan, Tim May, Richard Swanson, Diagnostician, Melvin Bass, Sun Representative and W. E. Coudren, Mechanic.

DOLLARS FROM DIAGNOSIS

Based on the doctors' theory that you must diagnose before you can recommend, many dealers across the country are now setting up Scientific Diagnosis Departments. The purpose of these Departments are to offer service customers a means of having their cars scientifically checked before any recommendations to repair are made.

Most dealers sell this service to the customer, and after the diagnosis has been performed, the customer can then determine what repairs he wishes to purchase.

Investigation by the Service Promotion Department, in Detroit, of this Program reveals that this is a sound approach to better repair jobs. It was found that not only does this sort of promotion eliminate come-backs, but builds customer goodwill and raises the amount per repair order.

A thorough diagnosis of a customer's car generally takes approximately 2 hours. The average charge for this work has been \$5. Regular forms have been printed up by the Sun Electric Corporation which lists the step-by-step procedure. Three copies are usually made out; one for the customer, one for the dealer's files, and one for the man performing the work.

One of the nicest features of this Department is that the dealer builds up a backlog of work which he can refer to during slack times by sending out mail pieces to customers who did not have all the work performed listed on the Diagnosis Report.

To make this Department a success, a dealer should write 30 to 40 repair orders a day and have sufficient space near the Customer Reception area to install and properly display the equipment. Many dealers offer their service salesmen a bonus for writing Scientific Diagnosis Repair Orders.

The Sun Electric Corporation sells all of the equipment and background necessary for this installation and, furthermore, installed on a 30-day free trial basis. At the end of 30 days, if dealer does not prove that the Department is satisfactory in his operation, equipment is returned.

We think Scientific Diagnosis is an excellent means of obtaining customer repair work; it invariably results in customer satisfaction. Repair orders that are written as a result of Scientific Diagnosis average \$20 to \$40 higher. Furthermore, when an Easy Time Payment Plan is offered for these repairs, the customer generally goes the limit on all recommendations—regardless of how dealers sell their services, they should first CHECK, THEN SELL!

VIBRATION DAMPENER SIX AND EIGHT CYLINDER—480 AND 490

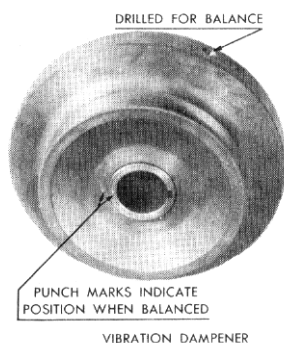
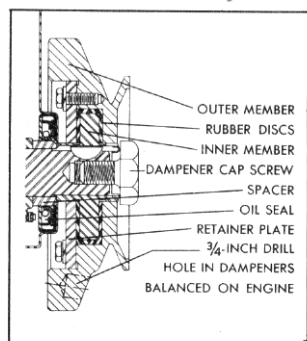
Regardless of the number of cylinders, the crankshaft of a gasoline engine does not rotate at a uniform or constant speed. This variation in the speed of rotation may be accounted for chiefly by the intermittent power impulses and results in what is termed torsional vibration, a momentary winding and unwinding of the crankshaft.

To eliminate this as far as is possible the vibration dampener whose inner and outer members are separated by rubber facings, is mounted at the front end of the crankshaft. Through the flexing of this disc the momentum of the outer member of the vibration dampener opposes the accelerated and decelerated rotation of the crankshaft.

Vibration dampener Part No. 300098 was superseded by Part No. 201934, on which the front face is machined at an angle to accommodate the drill of the Special Balancing Machine. These two dampeners are interchangeable in the field.

The center punch marks, one on the front end of hub, another opposite it on the pulley, simply indicate the relative position of the inner and outer members when assembled and balanced, and may also serve as a guide to the mechanic for proper assembling.

Six cylinder engines that have been balanced on a Special balancing machine may be identified by a letter "B" stamped on the front machined face of the



cylinder block beside the water pump housing. These dampeners may or may not be drilled as indicated in the above cut at left but are in proper balance with the crankshaft of the engine on which it was installed.

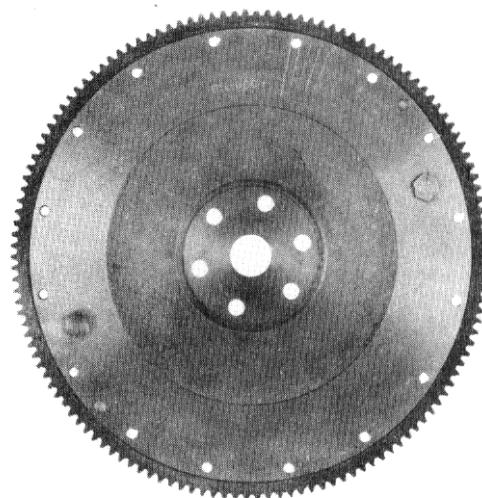
Should it become necessary to replace a crankshaft of a Special balanced engine do not use the same dampener that was originally on it but use a dampener Part No. 301934.

A CHANGE IN FLYWHEEL MARKING

Outlined in General Technical Policies and Information Bulletin No. 11 makes one flywheel adaptable to both the six and eight cylinder engines of both the 480 and 490 series under Part No. 166302. This marking—Cyl. U.D.C.-1 indicates upper dead center of piston in No. 1 cylinder.

The standard factory spark setting is at top dead center. Those marks ahead of U.D.C.-1 are spaced at approximately $\frac{1}{4}$ inch or 5 degrees and may serve as gauging the amount of spark advance.

The flywheel is fitted with two drain plugs so as to form a perfect balance. When it is necessary to drain



oil from the clutch, the engine may be cranked until one of the drain plugs is accessible at the left rear motor support opening.

After the plug has been removed, crank the engine again until the first star registers at the pointer, when the opening will be at the lowest point. The clutch oil should be drained and refilled with $\frac{1}{3}$ pint of Hudsonite every 5,000 miles.

ENGINE OVERHAUL GASKET KITS

Have been released for 6 and 8 cylinder engines of the 480 and 490 series. These are available and may be obtained by placing parts orders in the regular manner. Part 302434 covers the 6 cylinder kit and Part 302435 the 8 cylinder gasket kit. These kits should be kept intact and used only for engine overhaul.

WEATHER CONTROL WATER VALVE

Weather Control equipped cars beginning at serial number 494116814 the water valve 301886 and control wire 301890 were superseded by Parts 302628 and 302629 respectively.

Control wire 301890 may be replaced by 302629 by snipping off the coil which is at the end of the new wire to $20\frac{1}{2}$ inch length. Water valve 301886 may be replaced with 302628 by including latest control wire 302629.

BODY SEALING

Water and dust leaks have always been an item of service on all cars. To assist you when a customer complains of dust in a 490 Series Hudson car with serial number above 60000 we outline the conditions and corrections at the point where dust may enter.

A. A gap at the bottom of the doors, an opening between the door bottom weather strip and rocker panel extension.

AA. Adjust doors until there is an even tension between the weatherstrip and body all around the door opening. This is accomplished by shifting door on hinges and adjusting the striker plate and can be checked by using a calling card as a feeler. For a dust proof seal there should be a drag on the card after door is closed. Always check the seal at the bottom, top and sides of doors.

B. Dust entering through scuff plates.

BB. Seal the scuff plates as outlined in General Technical Policies and Information Bulletin No. 13, dated May 31, 1949.

C. Dust entering trunk and rear compartment.

CC. Where there is evidence of dust in the trunk compartment, check first for a broken rear compartment floor panel—this will be most prevalent between car serial numbers 491-53512 and 491-115800. Should a break be found in the floor repair as outlined in General Technical Policies and Information Bulletin No. 14, dated June 24, 1949.

Also, check interior of trunk for dust plumes, if any are found, seal at the point of dust entry with sealer or undercoating material.

Your Service Representative is fully informed on the above repair procedures and will be glad to assist you if necessary.

WATER SEALING 480 AND EARLY 490 SERIES

Bulletins No. 10, 12 and 13 issued in 1948 have all been superseded by General Technical Policies and Information Bulletin No. 13, dated May 31, 1949. This Bulletin covers in detail all changes and improvements which have been incorporated in production in later cars to effectively seal them against the entrance of water and outlines the procedure step-by-step for installing late production material available for the purpose as well as the sealing of various points in the car to prevent water entry.

Your Service Representative has been fully trained on water sealing procedure and has all the necessary information at hand to assist you. Consult him on any cars you may have that need sealing to eliminate water or dust.

ABOUT SPARK PLUGS

Failure to blow the sand and dirt away from around the spark plugs before removing them may cause damage to the engine account of grit and sand reaching the combustion chamber.

The gap of all spark plugs (even new ones) should always be checked with a wire gauge before installing. Correct gap and uniformity are vital to good engine tuning. The threads of neither the spark plug nor spark plug opening should be exposed in the combustion, as this can cause pre-ignition. The use of the factory recommended spark plug will preclude this possibility.

More careful attention than heretofore was perhaps considered necessary must be given to proper tightening of the spark plugs. For the greater part of the spark plugs heat is transferred through the cooling system and it follows that if they are loose (but not sufficient to leak) there is likely to be overheating and mis-firing.

Be sure that spark plug threads in cylinder head and the seating surface are well cleaned. Always use a new gasket and tighten to 25 foot pounds for cast iron cylinder heads and 23 foot pounds for aluminum heads. If a torque indicating wrench is not available, tighten to about $\frac{3}{4}$ of a turn after the spark plug has been seated on its gasket.

REAR COMPARTMENT FLOOR BREAKAGE

Reports have been received from the field on certain 490 cars that a fracture has occurred at a point where the forward ends of the gas tank straps are attached to the hangers on the floor.

Be sure and inspect all cars coming in to the shop, for floor fracture between serial numbers 491-53512 and 491-115800. The presence of dust on top of the rear compartment floor panel near the front end of the gasoline tank straps generally indicates a break.

Should a break be found, correction can be made by installing Rear Compartment Reinforcement Plate Kit No. 216829 as per General Technical Policies and Information Bulletin No. 14, dated June 24, 1949.



HUDSON REFINISHING PROGRAM

A Winning Combination

The time is rapidly approaching for owners to become conscious of preparing their cars for the coming fall and winter seasons.

During this period Dealers should inspect the car's exterior finish, bringing to the attention of the owner any damages such as, stone and gravel abrasions, scratches, rust spots, etc., that if left untouched would eventually be costly to repair.

Fall and winter refinishing and touch-up will be as profitable as a Royal Flush for the Dealer who is using Hudson Refinishing materials.



Hudson Refinishing Virgin Lacquers is the Dealer's assurance of exact matching of production colors. These lacquers are formulated for the exacting specifications of the Hudson Engineering Department.

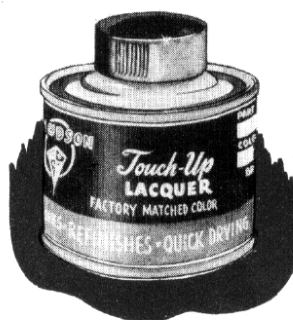
Hudson Paint Thinner is formulated with true primary solvents in proper proportions to assure against tell-tale residual matter in the paint film. It is also laboratory controlled in its formulation and is blended to guard against seasonal variation.



Hudson Red-Primer-Surfacer was formulated exclusively for refinishing work and the conditions that exist in local bump shops and garages as well as the modern up-to-date paint operations. Hudson Red-Primer-Surfacer contains over sixty percent (60%) solids by actual weight giving exceptional uniform filling qualities.

We have also stressed stability, assuring Hudson Dealers against a non-settling, non-separating type of primer-surfacer.

Hudson Chassis Black Enamel is a fast drying corrosion resistant. A finish for coating chassis and other under parts of the car. For example: Under fenders, trunk space, etc. Covers solid in one coat over the old finish or bare metal. It resists salt and other injurious corrosive substances. It is jet black with a high gloss.



Hudson Three-Ounce Can of Touch-Up (for brushing) Lacquer is formulated for ease of application by either the car owner or Hudson Dealer. This material is designed for protection against small paint scratches, chipping, etc., until the car owner has the damages properly repaired.

CORRECTION

Note the following corrections apply to the July issue of SERVICE MERCHANDISER, page 7, should read Intake Manifold Assembly, cast iron—Part No. 302458, Intake Manifold Assembly, Aluminum—Part No. 302459. These numbers cover complete assembly as shipped. The Bulletin referred to on the above subject should read 4 instead of 6.