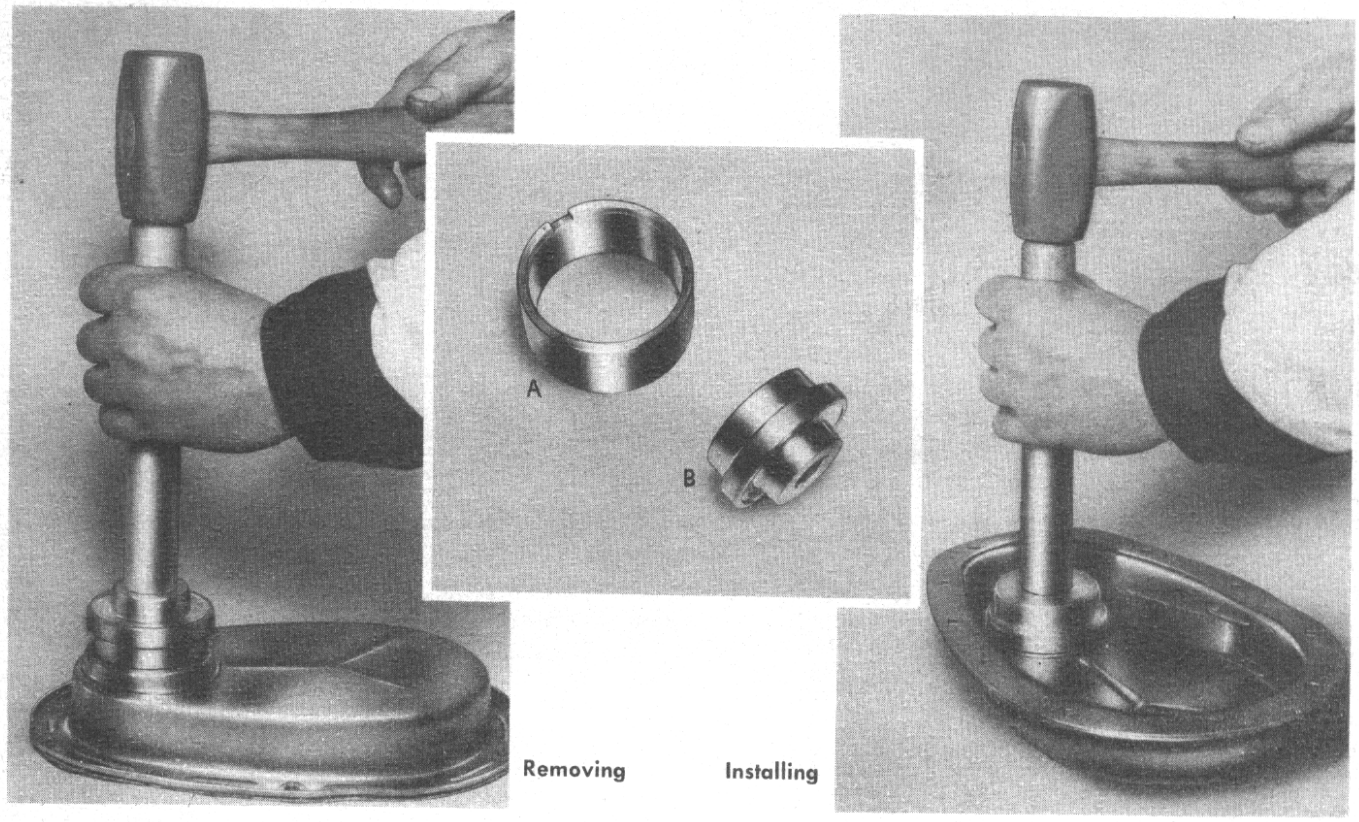
HUDSON Service Merchandiser

Vol. 2 No. 3

MARCH, 1950



Removing

Installing

TIMING GEAR COVER OIL SEAL REMOVER AND INSTALLER SET

This tool set is applicable to all six and eight cylinder Hudson Engines, 1932 up to and including the current models. It is a real precision tool job—designed and built to do an accurate job where accuracy is vitally necessary.

Tool number J-2776 covers the set shown in center section of above cut. The driver handle J-872-5 shown in use at right and left is applicable to the remover and installer. The use of this tool enables the mechanic to remove or install the timing cover oil seal quickly—do the job accurately and most important, avoiding damaging or cocking the oil seal.

The tool head (B) is reversible, one side is used for removal, the other or tapered side, for installing the oil seal. The collar (A) is designed to support the cover when removing the oil seal, it being notched to provide clearance for the bead inside the cover.

There is no satisfactory substitute for a special tool designed to aid the mechanic in rapid and accurate repair work. In view of the wide range of adaptability—1932 to 1950 inclusive, its use means the saving of many hours of time, better workmanship and customer satisfaction. Special tools are not an expenditure but an investment that pays big dividends constantly.

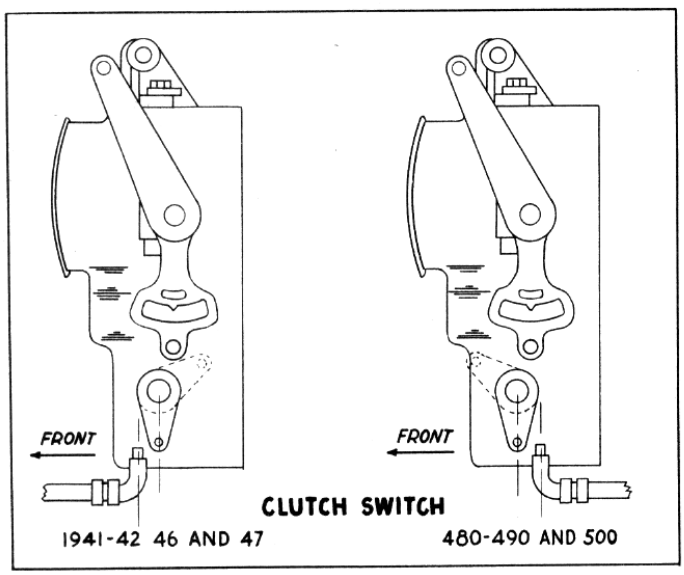
PRIZE WINNERS!

Following are the prize winners for January Service and Parts Mens Contest:

First prize is awarded to Mr. William Owad, Shop Foreman—Tyjeski's Motor Sales, Cleveland, Ohio on the following suggestion:

Cars fitted with Drivemaster stall on fast stop or when changing gears and failure to shift into pick-up or second gear.

The Clutch Switch (lowest lever on Transmission Switch) Shaft has turned in the fiber hub and does not move the proper distance to effect contact. To correct this condition and re-time the switch action, remove snap lock and clutch rod from lever, turn lever *forward* 1/3 turn as shown by dotted line in sketch at right below and bring it back until the rod coincides with the hole in lever; install rod and snap lock. The above applies to 480—490 and 500 series.



The procedure for resetting the clutch switch on 1941-42, 46 and 47 is the reverse of the foregoing procedure; after disconnecting clutch rod, move clutch switch lever 1/3 turn to the *rear* and return to position to coincide with rod as shown by dotted line in sketch at left above.

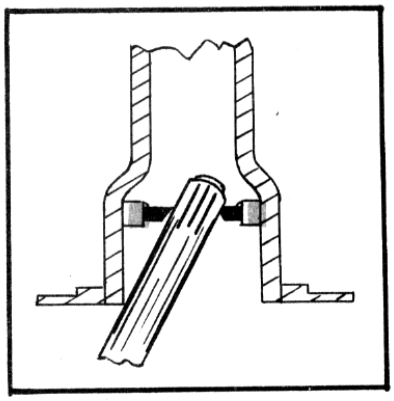
Second prize to Mr. M. S. Hoisington, 30 years with Henley Kimball Co., Hudson Dealer at Boston. It is a splendid short cut and time saver.

To simplify draining and refilling clutch and while the car is on a hoist, or over a pit, the flywheel pan may be removed and turning the flywheel so that one of the drain plugs is at the low point, when the clutch may be drained at same time and in same receptacle with engine oil.

The above procedure enables the mechanic to inspect the condition of the clutch oil and he will know by the amount and condition what treatment to give the clutch to make correction. He will know if the clutch mixture has been thickened by over-lubricating the thrust bearing or if transmission oil is leaking into the clutch or if the clutch plate is burned.

At this time the clutch can be refilled by turning the flywheel around to the proper position (the point that will hold 1/3 of a pint of Hudsonite—no more.) This can be done with a small 8 oz. suction gun. The flywheel plug can then be replaced and the flywheel pan put on.

Third prize is awarded to Bill Thompson—a mechanic, with Tyjeski's Motor Sales—Cleveland, Ohio —Hudson Dealer.

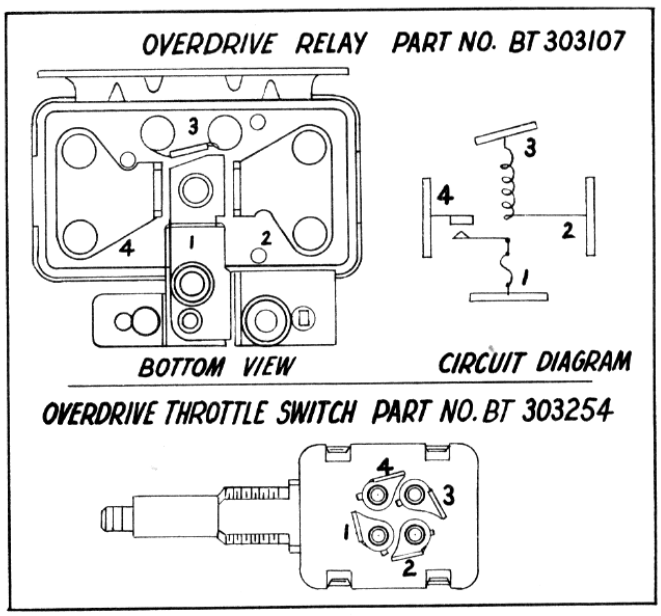


He says and you will agree if you try it—when removing the axle shaft (and you don't happen to have oil seal puller J-943) as the axle shaft is withdrawn and only three or four inches of the end remains in the oil seal, pry the shaft sidewise and oil seal will pop out. The seal should not however be used again.

Congratulations to the prize winners and all the others who have mailed in their suggestions. You may be sure that thousands of boys in the service field will be trying out your suggestions. Three cash prizes each month—Let's have your entry today.

OVERDRIVE THROTTLE SWITCH AND OVERDRIVE RELAY

To facilitate assembly and testing in the field, terminal markings have been placed on both the Overdrive Throttle Switch and Overdrive Relay, as shown in the sketch below.



There is no change in part numbers.

THE LAST WORD IN MODERN REPAIR SHOP ELECTRICAL EQUIPMENT

Mr. O. O. Allen, President of The Allen Hudson Co Inc. located at 43 West Broad Street, Savannah, Georgia, announces the opening of a splendidly equipped diagnosing and analyzing clinic, a separate Division of their Service Department shown above.

This is in keeping with the modern trend of up to date service equipment. Here the skilled operator eliminates all guess work as to the electrical and mechanical condition of the engine. We congratulate President Allen and his organization.

Previewing this scientific new equipment are, reading from left—J. C. Pruitt, Sun Electric Corp., Jacksonville, Fla.—W. M. Godwin, Service Manager, Atlanta Zone—O. O. Allen, Pres., Allen Hudson Co., Savannah, Georgia—R. W. Dillaway, Divisional Ser. Mgr., Hudson Motor Co.—J. J. Dunn, Service Manager, Allen Hudson Co., Savanah, Ga.

SERVICE BEYOND THE CALL OF DUTY

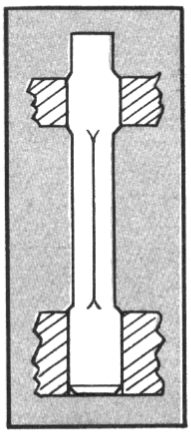
definitely has its reward in business as well as military service.

In a very nice letter received from Mr. Clarence Ward presently traveling in Florida, whose home address is 335 East College Ave., Oberlin, Ohio. He outlines briefly why he has purchased his twenty-ninth (29) Hudson.

While this approaches a near record there is perhaps no mystery as to why—summed briefly and we quote from Mr. Ward's letter: "I should like to make it clear that, while I consider Hudson an excellent car, I have bought this long series from them quite so much because of Mr. Lee's outstanding service and personality . . . once more may I say that I consider service quite as important as salesmanship . . . with such service and courtesy as that which we have had for many years from Mr. Lee, I shall probably continue buying cars from him whether or not he happens to be selling Hudsons." Again Mr. Harry Lee, President of Lee Motor Company, our Hudson Dealer in Wellington, Ohio, may take a curtain bow. We know of no stronger endorsement of a Dealers service policy and practice than that of an owner's expression and repeated purchasing of the same product. We congratulate Mr. Lee and his splendid organization.

The difference in the cost of doing things right or nearly right is negligible—courtesy costs no more than indifference or discourtesy, yet the pay-off is so vastly different that it is hard to understand why any Dealer—every Dealer should not catch the cue.

EXHAUST MANIFOLD HEAT TUBE LEAK



Failure of the climatic control choke to operate properly may be attributed to exhaust gas reaching the vacuum piston controlling the choke valve, causing a carbon formation.

In a number of instances such inoperative condition was found to be due to a crack in the exhaust manifold heat tube, which permitted exhaust gas to reach the climatic choke vacuum piston.

AVOIDING SAND SCRATCHES IN BODY FINISHES

(Outline by Ditzler Color Division)

One of the most disappointing things to a painter is to find that his otherwise beautiful paint job is ruined by sand scratches showing through the new finish. The worst part of it is that these sand scratches do not show up until the final coat is applied and the job is thoroughly dry, and then it is too late to correct them.

Sand scratches can of course be produced in the final finish by the use of an inferior rubbing compound, one in which the abrasive particles are not well graded or in which there are some hard particles. However, most of these surface scratches can be eliminated by further compounding with a good compound.

The first and prime requisite for a good paint job is smooth metal. The metal finisher or bump-man can make it doubly hard for the painter if the metal is not properly finished—careless filing or bearing down too hard on the coarse disc will leave furrows that are hard to fill. The best practice is to use the coarse disc for ruffing out the job, getting rid of weld spots and high areas only. Then do the major part of sanding with the 24 disc and finally finish off the metal with a No. 50 or No. 80 disc.

Modern lacquer primer surfacers are very versatile materials and will do a lot of filling but none of them do *all* of the filling in *one coat*. It isn't hard to understand that the thicker the coat the slower the drying, so spray several medium coats with 15 to 30 minutes between them and you will actually save time over spraying a real heavy coat and having to wait a long time for it to dry through. It is difficult to tell when a thick coat is really dry because the surface will appear to be dry while there is still a lot of thinner below the surface and shrinkage is still going on.

After the primer surfacer has dried thoroughly the next thing to consider is the sanding operation. The use of coarse sand paper such as No. 220 or No. 240 will produce scratches in the primer surfacer that will be hard to fill by the final finish because finish coats do very little filling. The only reason the painter uses these coarse sand papers is to speed up the sanding rate.

When a lacquer finish coat is sprayed over surfacer the lacquer thinner penetrates and swells the lacquer undercoat and where the undercoat is the heaviest the swelling will be the greatest. If the finish coat is sanded or compounded and polished before all of the thinner has evaporated from the swollen areas there will be further shrinkage at the point of deepest fill. Therefore it is important to give the finish coat of lacquer plenty of drying time before sanding and polishing. Some of the tendency toward swelling can be eliminated if the first coat or two of color is sprayed very lightly.

When fresh lacquer is applied to an old lacquer surface that has been sanded the lacquer solvent will penetrate the scratches and cause a swelling of the disturbed part of the old lacquer film. This raising or swelling of the sand scratches is particularly noticeable on certain makes of cars and especially during cold weather when the lacquer solvents remain longer in contact with the old film causing an excessive amount of swelling.

In fact there are some old finishes that it is practically impossible to paint over without getting sand scratches and to prevent this difficulty some Automotive Paint Manufacturers have developed gloss sealers that can be used as in intermediate coat and which will prevent the penetration of the strong solvents into the old lacquer finish. Besides eliminating sand scratches these gloss sealers improve the lustre of the final coat because they prevent any soak-in or penetration into the old finish. Use of gloss sealers will not slow up the job because they dry very rapidly and their use requires no more time than is required for very careful sanding.

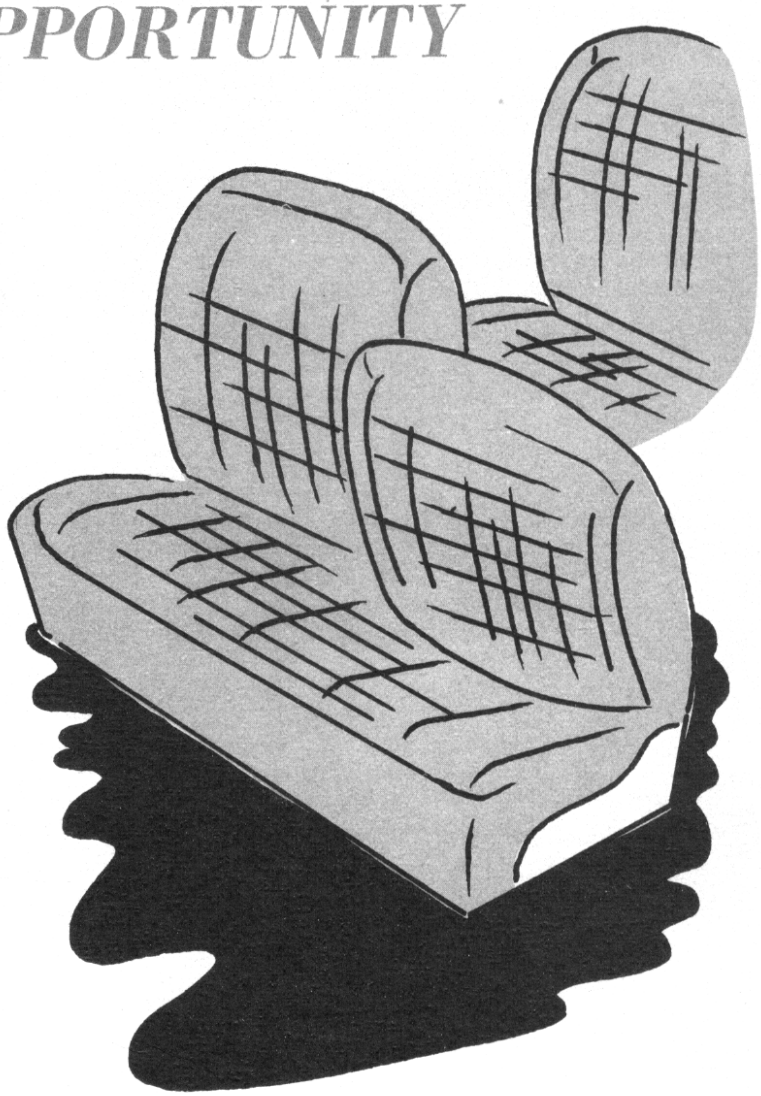
If you are doing a touch-up job on enamel you will be obliged to use a thinner carrying a good percentage of strong slow solvents so that the over-spray will blend and flow into the surrounding enamel. In a case like this you will have to be very careful to eliminate all of the other sources of sand scratches because the thinners you are obliged to use will cause excessive swelling of the undercoats.

If you are repainting an old lacquer job you should not use a thinner with strong solvents because it will cause the old lacquer to swell and you will magnify the sand scratches. Some Automotive Finish Manufacturers have special non-penetrating thinners for this purpose. Keep in mind what transpires when you spray one coat over another and also remember that the temperature in your shop and also the humidity of the air are determining factors in the evaporation of thinners.

To sum up the whole matter here are the factors that influence sand scratches and if you keep them in mind you will save many headaches.

1. Grade of sand paper.
2. Thickness of new coats.
3. Kind of thinner.
4. Drying time between coats.
5. Temperature and humidity of shop.
6. Kind of old finish.

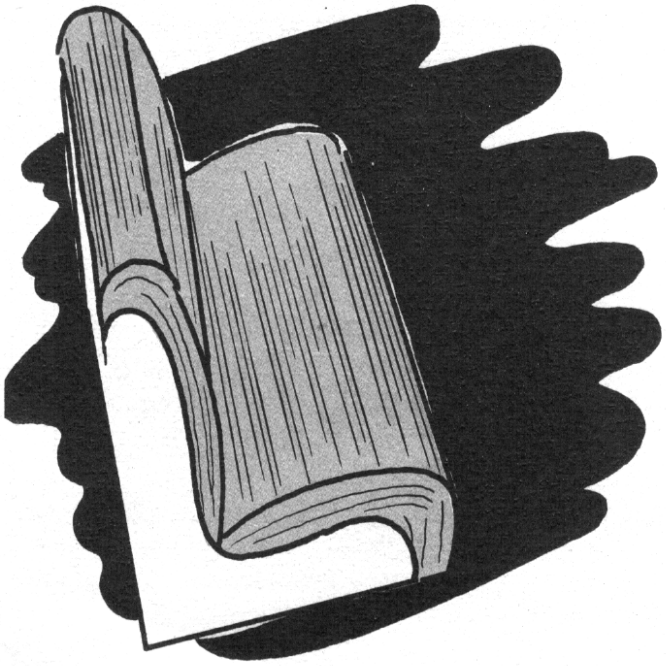
A SELLING OPPORTUNITY



The rich new upholstery selected for the 1950 Hudson Commodore, Super and Pacemaker Models gives you that extra opportunity of selling Hudson Seat Covers to your customers for preservation of that "brand new look." When your customers look at these beautiful cars they are more than ever conscious of *keeping* them neat and clean.

Here are several reasons why Hudson Seat Covers are the best buy on the market:

1) High quality material.
2) New low prices to dealers make them so outstanding in value and so far ahead of competition price-wise that there is no question but that dealers should buy and sell ONLY HUDSON APPROVED SEAT COVERS.
3) Recent substantial reductions in LIST prices of Hudson Seat Covers now bring them so low that your customers can purchase a set for a little over $1.00 per month on time payments over an 18 month period.
4) Perfect fit, custom tailored for Hudson cars.
5) Variety of patterns that blend with the car colors.



Get more for your *USED CARS* by installing a set of Hudson Approved Seat Covers on each used car offered for sale. Used 480 and 490 models that are brought in with no seat covers should have a set of Hudson Seat Covers to make the interior of the car look "spanking brand new." Old, soiled or worn-out seat covers that come with the trade-ins should be replaced.

Used car PROSPECTS
will be turned into
Used car BUYERS

When you install a set of
HUDSON APPROVED SEAT COVERS
on EVERY 480—490 used car.

BODY LACQUERS USED ON 480 AND 490 CARS

A complete listing of all body lacquers and the color code is listed on pages 213 and 214 of the 480 and 490 Master Parts Catalogue which has recently been mailed out to all Hudson Zone Offices and Distributors. The following is a reproduction of these pages in order that those who have to do with finishing may have an up-to-date authentic list of Code and Colors.

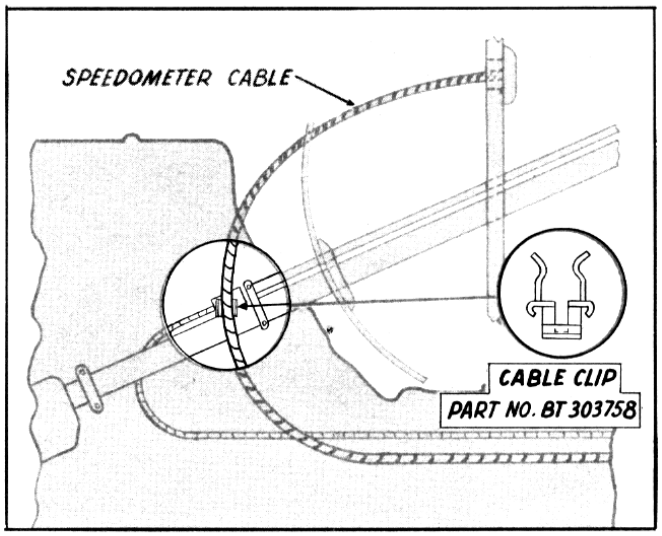
Color option letter or number is stamped on right front door upper hinge and may be seen when door is open. The use of numbers to identify single colors as well as Duo-Tone combinations eliminates further need for supplying the exact serial numbers when colors change.

One number is assigned to one color or Duo-Tone combination and will always identify that color or combination only. Subsequent colors and combinations will receive new numbers as they are used.

NAME	CODE	MODELS
Ebony Black	K or 5	All
Quartermaster Gray—Opalescent	Q	All to 482-65778
Gallant Gray—Opalescent	G	All to 482-65778
Harness Tan—Opalescent	H	All to 482-41192
Banner Blue—Opalescent	B	All to 482-68732
Platinum—Opalescent	CC	All
Savoy Green—Opalescent	S	All
Piedmont Green—Opalescent	P	All
Navahoe Bronze—Opalescent	N	All to 482-41192
Jockey Blue—Opalescent	J	All to 482-68732
Deep Maroon—Opalescent	M	All
Ruby Red—Opalescent	RR	All
Queenstown Gray—Opalescent	Q	All from 482-65778 exc. 65800-66458 incl.
Glowing Gray—Opalescent	G	All from 482-65778 exc. 65800-66458 incl.
Brigantine Blue—Opalescent	B	All from 482-68732 exc. 68900-69397 incl.
Jersey Blue—Opalescent	J	All from 482-68732 exc. 68900-69397 incl.
Holster Tan—Opalescent	H	All from 482-41192 exc. 41401-41902 incl.
Nomad Bronze—Opalescent	N	All from 482-41192 exc. 41401-41902 incl.
Pacemaker Green—Opalescent	8	All
Sierra Green—Opalescent	10	All
Hardwood Tan—Opalescent	3	All
Jet Blue—Opalescent	4	All
Brazilian Blue-Opalescent	1	All
Burgundy Maroon—Opalescent	6	All (Very limited usage)
Quebec Gray—Opalescent	9	All
Gull Gray—Opalescent	2	All
Radiant Red—Opalescent	16	All
Gray Gold—Opalescent	17	All
Brigade Blue—Opalescent	18	All
Roman Red—Bright	19	All
Bright Red	21	All
Piedmont Green —upper / Savoy Green —lower	Duo-Tone SP	All
Banner Blue —upper / Jockey Blue —lower	Duo-Tone JB	All to 482-68732
Brigantine Blue —upper / Jersey Blue —lower	Duo-Tone JB	All after 482-68732 exc. 68900-69397 incl.
Gallant Gray —upper / Quartermaster Gray—lower	Duo-Tone QG	All to 482-65778
Glowing Gray —upper / Queenstown Gray —lower	Duo-Tone QG	All from 482-65778 exc. 65880-66458 incl.
Navahoe Bronze —upper / Harness Tan —lower	Duo-Tone HN	All to 482-41192
Nomad Bronze —upper / Holster Tan —lower	Duo-Tone HN	All after 482-41192 exc. 41401-41902 incl.
Deep Maroon —upper / Ruby Red —lower	Duo-Tone RM	All
Burgundy Maroon —upper / Radiant Red —lower	Duo-Tone 15	All
Pacemaker Green —upper / Sierra Green —lower	Duo-Tone 14	All
Gull Gray —upper / Quebec Gray —lower	Duo-Tone 13	All
Radiant Red —upper / Roman Red —lower	Duo-Tone 20	All
Radiant Red —upper / Bright Red —lower	Duo-Tone 22	All
Brazilian Blue —upper / Jet Blue —lower	Duo-Tone 12	All

PACEMAKER SPEEDOMETER CABLE AND CABLE CLIP

A Speedometer Cable Clip for holding the speedometer cable securely against the steering gear jacket tube and maintaining a fixed radius, has become standard in production. The clip part number B.T. 303758 attaches to cable and is then slid on the Handy Shift Control wire casing anchor bracket, at lower end of steering column as shown in sketch.



The Speedometer Cable assembly was also increased slightly in length to increase the bend radius at that point.

QUESTIONS AND ANSWERS

Following are the answers to questions that appeared in February issue of the Service Merchandiser, also reference to where they may be found.

1. The 9 inch clutch has 6 inner and 9 outer and the 10 inch clutch has 3 inner and 12 outer springs. 500 Procedure Manual Page 7-1.
2. At 1800 engine R.P.M. the Carter fuel pump should register 4 to 5 lbs. pressure; the AC combination fuel vacuum pump should show 3 to 4 lbs. at same engine speed. 500 Procedure Manual Page 4-23.
3. Fuel pump pressure test is made, having a pressure gauge connected in Carburetor line and operate engine at 1800 R.P.M. When engine is stopped pressure should not fall perceptibly. 500 Procedure Manual Page 4-23.
4. Carburetor float level is ½ inch measured from projection on bowl cover to soldered seam on float. 500 Procedure Manual Page 4-11.
5. There should be a .005 to .015 between rocker arm and pump when a .020 gauge is placed between throttle valve and carburetor bore. 500 Procedure Manual Page 4-14.
6. The carburetor idle adjustment is ½ to 1½ turns out from a seated position—adjust carburetor throttle lever stop screw as may be necessary. 500 Procedure Manual Page 4-6.
7. The condenser capacity is 20 to 25 microfarads. 500 Procedure Manual Page 6-25.
8. Cam angle (dwell) is 38 degrees. 500 Procedure Manual Page 2-10.
9. Cut-out point gap in relay is .015. 500 Procedure Manual Page 6-18.
10. The armature air gap should be .031 to .034. 500 Procedure Manual Page 6-2.

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

1. 480—490 and 500 Hudson engines should idle at _____ _____ _____ R.P.M.
2. Vacuum gauge at idle speed should read _____ at _____ to _____ inches of vacuum.
3. In making a cylinder balance test the following items can be checked.
   A._____ B._____
   C._____ D._____
4. What variation in vacuum gauge reading between banks of cylinders while making cylinder balance test 1"_____2"_____3"_____?
5. How many R.P.M.'s should an engine turn while making a compression test of a cylinder 3_____, 4_____ or 5_____?
6. How much variation is permitted between cylinders while making a compression test 5 lbs._____, 10 lbs._____ or 15 lbs._____?
7. What reading should you have on the compression tester on the first turn of the engine? 50 lbs._____, 75 lbs._____, 100 lbs._____? Why is this important?_____
   _____
   _____
   _____
8. Name the three tests on a battery.
   1._____ 2._____ 3._____
9. Name the three tests on the Starter Circuit.
   1._____ 2._____ 3._____
10. What is normal loss of voltage in a battery cable?
    0 Volts_____, .1 Volts_____, or .2 Volts_____.

PROSPECTS BUY WHERE AND WHAT PLEASES THEM IN SERVICE

Based upon over a quarter of a century of observation and supervising direct owner contact and selling service, here is a suggestion from our Mr. Jack Gooch, Supt. of Hudson Factory Service Repair Shop, and we quote:

"Have we lost our desire to please?"

"Much has been said about mechanical repairs and the method of making mechanical adjustments, and rightly so; but let's touch upon a subject of equal importance—that of 'Customer Contact.'

"Many of you will remember when it was necessary to greet a Customer with courtesy, and show a desire to please. That day is with us again and, with the determination to get our quota of the business and build up good Customer Relations, there must be a coordinated effort on part of the entire service organization with each one realizing that their job depends upon SATISFIED CUSTOMERS.

"Why not start with the Service Salesman and analyze each step from the first contact with a Customer until the car is delivered to him. You will be surprised at the many improvements you can make. Remember—the approach is not WHAT DO YOU WANT?—but rather, Good Morning, Mr. or Mrs. Jones, WHAT CAN WE DO FOR YOU?"

FACTORY SERVICE TRAINING SCHOOL IN SECOND YEAR OF OPERATION

During the first year of operation of the Factory Service Training School, approximately 350 Dealers Service Managers and Mechanics have completed the regular prescribed course of instructions and were awarded Certificates of Accomplishment.

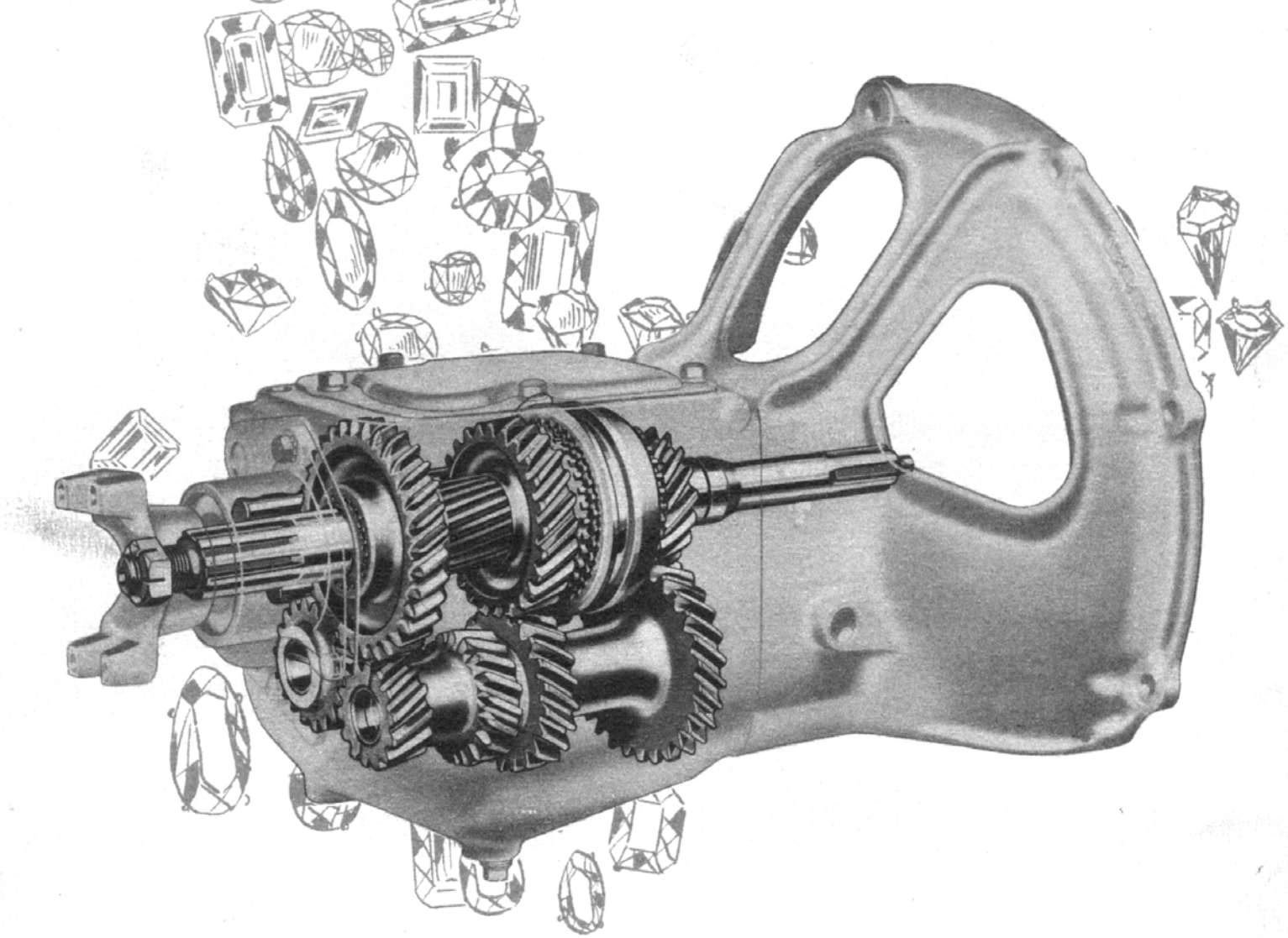
These men were from Hudson Dealer personnel throughout United States, from Canada, Mexico, South America, Europe and India. Special refresher courses and mechanical clinics were held from time to time for factory field Service Representatives.

This is the finest opportunity ever offered the Hudson Dealer Organization to have their key men thoroughly trained in Owner Contact, Service Salesmanship, Mechanics and Automobile Repair Shop Practice. We quote below what one Dealer says—which is typical of the expression of many:

"From the knowledge gained by our foreman at your school, he was able to clear up some of the problems that came up at the Foreman's Club meeting recently, at which time he recommended that every one who had the opportunity should attend this school.

"His impression of the Hudson plant and of the product is greatly strengthened, which adds much to his confidence in selling our product. We cannot speak highly enough of the good we received by this training in the betterment of our service."

Like Diamonds... HUDSON GENUINE TRANSMISSION GEARS...are also precision cut



FOR YOUR ASSURANCE GENUINE HUDSON TRANSMISSION GEARS ARE . . .

- Specifically engineered and designed by the Hudson Engineering Department.
- Manufactured in Hudson's own machine shop from the finest grades of Nickel Chromium and Molybdenum Alloy Steels assuring . . . dependable and economical service.
- Rigidly inspected to maintain Hudson's prescribed tolerances.
- Synchronized for silent meshing.
- Designed for . . . easy shifting.
- Individually packaged to guard against damaged material.

Keep your customers coming back . . . use only GENUINE Hudson Engineered Parts assuring . . . . GENUINE customer satisfaction.