

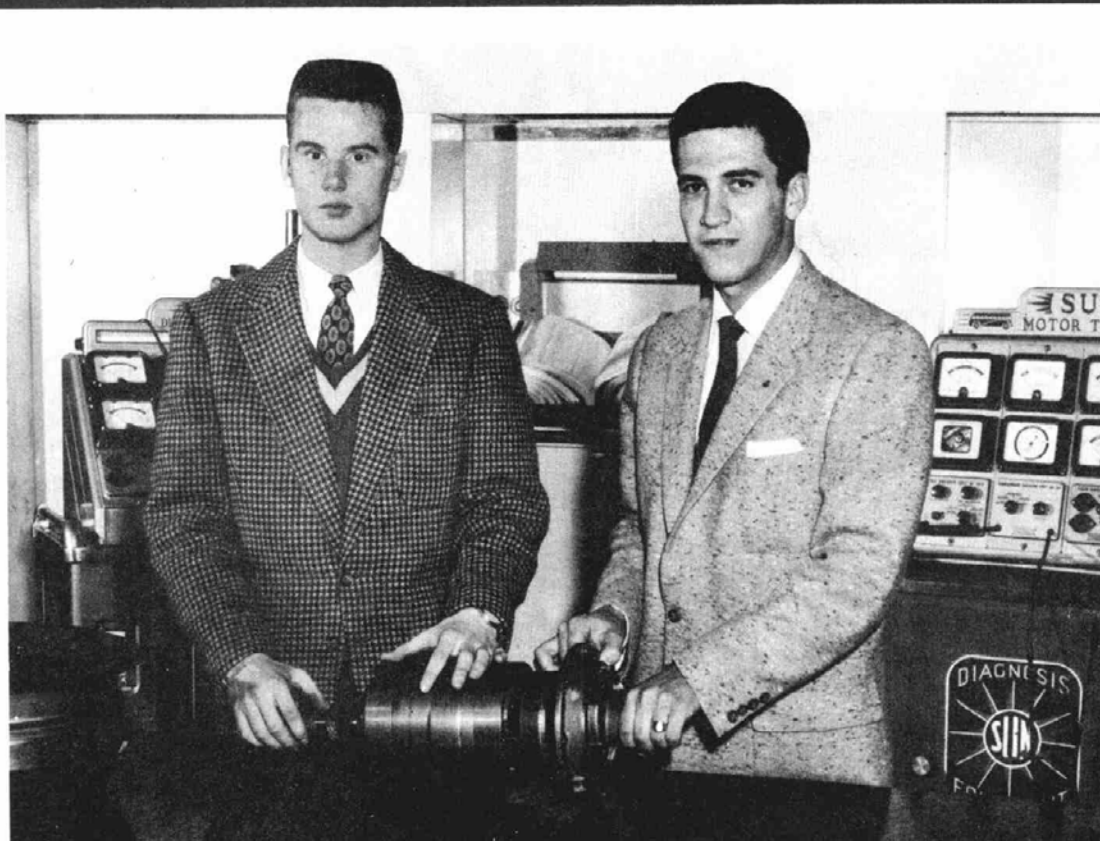
HUDSON

Service Merchandiser

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

VOL. 6 NO. 1

JANUARY 1954



STUDENTS FROM ABROAD . . .

with the class attending the Factory Service School during the two weeks, ending November 20, were the following young men from distant lands.

Jacques De Lange (left), 24 years old, son of the President of the Hudson Dealer at Liege, Belgium who operates under the firm name of Garage de la Cathedrale.

Jose E. Mejia (right) also 24 years old who is a nephew of Senor Santiago Mejia, President of Companias Unidas de Combustibles, Ltda, Hudson Dealer at Medellin, Columbia.

We congratulate these fine young men on their determination to learn the minute details of the Hudson car which they sell and service.

HUDSON MOTOR CAR COMPANY • DETROIT 15, MICHIGAN

T-209

SAN DIEGO, CALIFORNIA PARTS & SERVICE MANAGERS' CLUB MEETING

Though somewhat small in size, this club is 100% in attendance, interest and efficiency.

What did they do at this meeting? First Mr. M. W. Roden, Zone Parts & Service Representative



(Standing fourth from left) gave a presentation of the fundamental oil circuits of the Hydra-Matic transmission. Following this, he had each member go through the latest control valve assembly, pointing out the correct function of each and every valve.

T. M. Newell, Parts & Service Manager of Los Angeles (standing second from right) reports that the success of this club is hinged around the President, Mr. Walt Taylor (seated third from left) who takes a keen personal interest in program and attendance. The Secretary-Treasurer, John Foster sits at his left.

INSTRUMENT CLUSTER—HORNET—WASP—JET

HORNET & WASP—1954

Any one of the eight light bulbs may be replaced by reaching up behind the instrument panel.

To replace the speedometer, electric clock, fuel gauge, temperature gauge or voltage regulator, it is necessary to remove the instrument cluster. First, disconnect battery positive lead and disconnect speedometer. Remove eight $\frac{5}{16}$ nuts from studs that hold the instrument cluster to dash. These are accessible without the necessity of removing radio.

Protect dash and shift control, leave all wires intact, laying instrument cluster back with glass downward. Care must be exercised in the removal and installation of the speedometer, account of bending or damaging the indicator, to see that it lines up with the upper edge of rivet on speedometer face plate with approximately $\frac{1}{2}$ inch clearance between the indicator and face plate.

When installing instrument cluster, tighten one stud, then check all lights and speedometer for operation.

To replace the instrument cluster glass, first remove as described above, then remove six metal screws which hold the glass retainer in position.

JET—1953-54

The instrument cluster on the Jet for 1953 and 1954 may be laid back to make all instrument removal and installation accessible by first removing six nuts from $\frac{1}{4}$ inch studs. All instrument light bulbs are removable from behind the instruments, and without removing the cluster, except the high beam indicator light bulb.

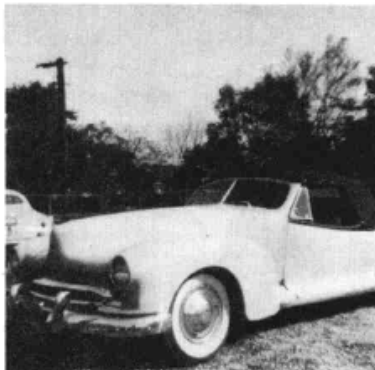
To remove this bulb, it is necessary to first unbolt and lay the instrument cluster back from the dash. Then remove the speedometer cover and two screws holding cover to speedometer.

In view of the inconvenience of replacing this bulb, be sure to use a Mazda 44 which is the longer life bulb.

The glass sections of any of the three instruments may be replaced by first removing the screws and retainers from the inner side—accessible only after laying the instrument cluster back from the dash.



Are you keeping your Service Merchandiser Mailing List up-to-date and mailing them out promptly when received?



HANDMADE BY A MECHANIC

Not all the Hotsy-Totsy designs come from Italy. The sports car pictured above was fabricated from a 1946 Super Six sedan by Mr. Ray Frey, a native of Cleveland, Ohio, and presently attached to the mechanical staff of the Roto-Wallman Motors, Hudson Dealer, of Chicago. Partners, Henry Wallman and Peter Roto, shown at upper right. This young designer (lower left) has ideas and we may hear more of him in the future.

HAVE YOU READ?



LET'S TEACH DRIVING—administrative guidebook for school administrators and driver education teachers who wish to inaugurate or extend high school driver education programs.

Any organization desiring to include a copy of "Let's Teach Driving" in kits of materials which are made available to present or prospective teachers of safety education or driver education may obtain up to 1,000 copies free of charge (except for shipping charges). Address requests to the National Commission on Safety Education, 1201 Sixteenth Street, N.W., Washington 6, D. C.

A Guidebook for Automobile Driving Schools—prepared to help raise instructional standards for commercial driving schools. The manual published by New York University's Center for Safety Education, urges lengthening the time for road instructions; the inclusion of at least four periods of instruction on rules, regulations and safe driving practices.

Adoption of a "Code of Ethics" for schools; improvement of the training of instructors and setting up a

system of record bookkeeping and reporting. The Guidebook may be obtained from New York University, Center for Safety Education, Washington Square, New York 3, New York.

When every motor vehicle is operated by a safe driver, you may be sure accidents will be diminished. Here is the answer to those inquiries from the many schools throughout the nation that may include driving training in the school curriculum.

ALL SERVICE MEN

Help save a life—it might be your own.

The National Safety Council is doing all it can to reduce the dreadful toll of highway accidents.

You can help them! How?

By impressing upon all drivers with whom you come in contact, that they have the personal responsibility, not only of safety and careful driving, but also of keeping their cars in good mechanical condition.

Everyone of us should go out of our way to bring to the attention of our customers conditions of an unsafe nature, with special emphasis on steering and brakes, that exist in their cars.

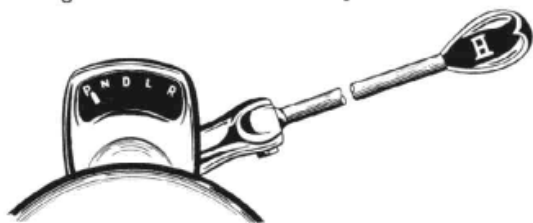
The National Safety Council has released for use in all publications a number of very timely articles on the subject of safety and car maintenance, one of which is printed herein. As time goes on, more of these articles will be found in the columns of your Service Merchandiser. Read them and show them to your customers and friends. Let's help save a life.

NEW AUTOMATIC TRANSMISSION OPERATING INSTRUCTIONS

The following deals with the new Automatic Transmission available as optional equipment on the 1954 Hudson Hornet, Super Wasp and Wasp Models and provides information pertinent to the operation and servicing of this unit.

OPERATION

The operation of the Hudson Automatic Transmission is controlled by the selector lever which is used to select the forward and reverse drive ranges, as well as the park and neutral positions. These positions are shown on the indicator dial at the top of the steering column. The lever must be raised to select the "P", "L", or "R" positions and when moving from the "P" to another position.



P—(PARK) locks rear wheels when car is stopped. Use Park when starting engine, especially on an incline. When car has been parked on a grade and shift lever in the Park position, a sharp impact of the hand on the lever will release it, allowing movement to another position on the quadrant.

N—(NEUTRAL) permits idling the engine. It may also be used when starting the engine.

D—(DRIVE) is for all normal forward driving. Set selector lever in "D" position. Then—step on gas to go, step on brake to stop. No gear shifting—No clutch pushing.

L—(LOW) is an emergency power range for extra engine braking while descending steep hills, extra heavy pulling and for rocking out of mud, sand, or snow. Do not drive over 40 miles per hour in this range.

R—(REVERSE) provides reverse driving range.

ADDITIONAL POWER AND ACCELERATION in "D" range (below approximately 65 miles per hour). Depress accelerator to floor board to obtain intermediate range, which continues until relief of accelerator pressure or until approximately 72 M.P.H. Below approximately 22 M.P.H., intermediate is also obtained by exerting greater than normal accelerator pressure.

HARD PULLING as in mud or sand, is best done in "L" range.

ENGINE BRAKING is secured by releasing accelerator, bringing car speed below 40 M.P.H. and selecting "L" range.

ROCKING OUT OF MUD, SAND, OR SNOW. Depress accelerator *slightly*, hold steady and make quick, alternate selections of "L" and "R" ranges.

PROLONGED IDLING. Select "P" or "N" positions.

HOLDING CAR ON GRADE. By slightly depressing the accelerator pedal with the selector lever in the "D" position, it is possible to hold the car from moving backward when stopping on slight upgrades. This practice, however, is not recommended on steep grades or for an extended length of time.

PUSH STARTING. Turn ignition on, depress and release accelerator, place selector lever in "N". Push car; between 20 and 30 M.P.H., move lever to "D" or "L". Do not tow car to start engine—*your car may overtake towing car.*

TOWING. Should be done with lever in "N" position. *Car should not be towed in excess of 30 M.P.H.*

If the transmission has not been operating properly, the propeller shaft must be disconnected at the rear universal joint before towing.

MAINTENANCE

CHECKING FLUID LEVEL. Every 1000 miles, at the regular chassis lubrication period, the level should be checked and fluid added if necessary, as follows:

1. With car on level floor, *firmly apply parking brakes*, set selector lever at "L", and run the engine at *idling speed* until it reaches the normal operating temperature.
2. If front floor carpet has an access opening for the transmission filler, remove 2 screws and take off cover. If access hole is not in carpet, loosen front floor carpet and mat and disconnect accelerator pedal. Roll away the left side of the carpet until the inspection hole cover is exposed, remove cover, wipe area around level gauge and cap clean and withdraw the oil level gauge. If the level indicated on the stick is below the full mark, add oil to bring it up to the mark. Use only *Hudson Approved Hydra-Matic Drive Fluid* or other Type A Automatic Transmission Fluid meeting Armour Qualification requirements.

DRAINING FLUID AND REFILLING. Transmission and converter should be completely drained and refilled with new fluid every 25,000 miles.

1. Apply parking brakes firmly, set selector lever at "L" and idle engine until it reaches normal operating temperature.
2. Shut off engine, remove hole cover, clean around filler cap and remove cap and level gauge.
3. Remove drain plug at left side of pan and drain transmission.
4. Remove cap screws and take off flywheel pan. Rotate flywheel until plug in converter is at bottom, remove plug and drain converter.

5. Remove the converter pressure take-off pipe plug pointing downward in line with the oil pan drain plug. This facilitates draining the converter.
6. Upon completion of the draining, install and tighten the drain plugs of the converter, oil pan and pressure take-off openings. Install flywheel pan.
7. Introduce 6 quarts of approved transmission fluid through the transmission filler opening.
8. Start the engine and permit it to idle for a few minutes with the selector lever in the "L" position. This transfers the fluid from the transmission to the converter.
9. With engine still idling and the selector lever in the "L" position, slowly add enough approved transmission fluid to bring the level up to the full mark on the gauge. Approximately 11 quarts are required for refilling after draining.

ADJUSTMENTS

TRANSMISSION GOVERNOR CONTROL ROD ADJUSTMENT:

1. With the carburetor linkage properly adjusted and with the engine shut off, hold the throttle control bell crank operating rod so that the throttle is in the wide-open position. This is the point where any further movement would only result in operating the throttle rod over-travel spring.
2. Adjust length of governor control rod so when governor lever is held at the detent, the trunnion pin will enter the bell crank freely. (This detent is located at approximately $1\frac{1}{2}$ inches of rod travel from the rear. The resistance felt at $\frac{1}{4}$ inch to $\frac{1}{2}$ inch of travel is the governor spring pick-up and not the detent.) Tighten lock.

ACCELERATOR PEDAL ROD ADJUSTMENT:

1. Hold accelerator pedal against its stop with pedal jack or other means.
2. With governor control rod pulled forward until the governor lever bottoms against its stop in the transmission, adjust the accelerator pedal rod length until the governor rod trunnion pin can be entered freely in the throttle bell crank.

NOTE: On some Hornet Models, it may be necessary to release the accelerator to facilitate adjustment; however, final check should be made with accelerator pedal against its stop.

3. Tighten all lock nuts securely and install cotter pins.

Do not make any readjustment of the governor control rod trunnion to accommodate the accelerator pedal rod adjustment.

SELECTOR LEVER ADJUSTMENT:

1. Check upper and lower control tube brackets and make sure they are securely tightened on the steering column jacket tube and that the selector lever tube is parallel with the jacket tube. Disconnect the transmission shift rod at the selector tube lower lever.
2. Place the selector lever in the "D" position on the quadrant and the selector control shaft outer lever at transmission in the "D" position (No. 3 detent or selector valve) and adjust the transmission shift rod until the clevis pin enters the clevis and lower lever freely; then lengthen rod one full turn.

NOTE: To preclude the possibility of the shift rod bending in service, thereby affecting its adjustment and the operation of the transmission, a larger ($\frac{7}{16}$ " diameter) rod is now used in production.

NEUTRAL SAFETY SWITCH ADJUSTMENT:

1. Place the control selector lever in the "N" position.
2. Loosen the safety switch adjusting screw (attaching the switch to the control shaft lower bracket) and adjust the switch so starter will operate only when control selector lever is in "N" (Neutral) and "P" (Park) positions.

NOISE:

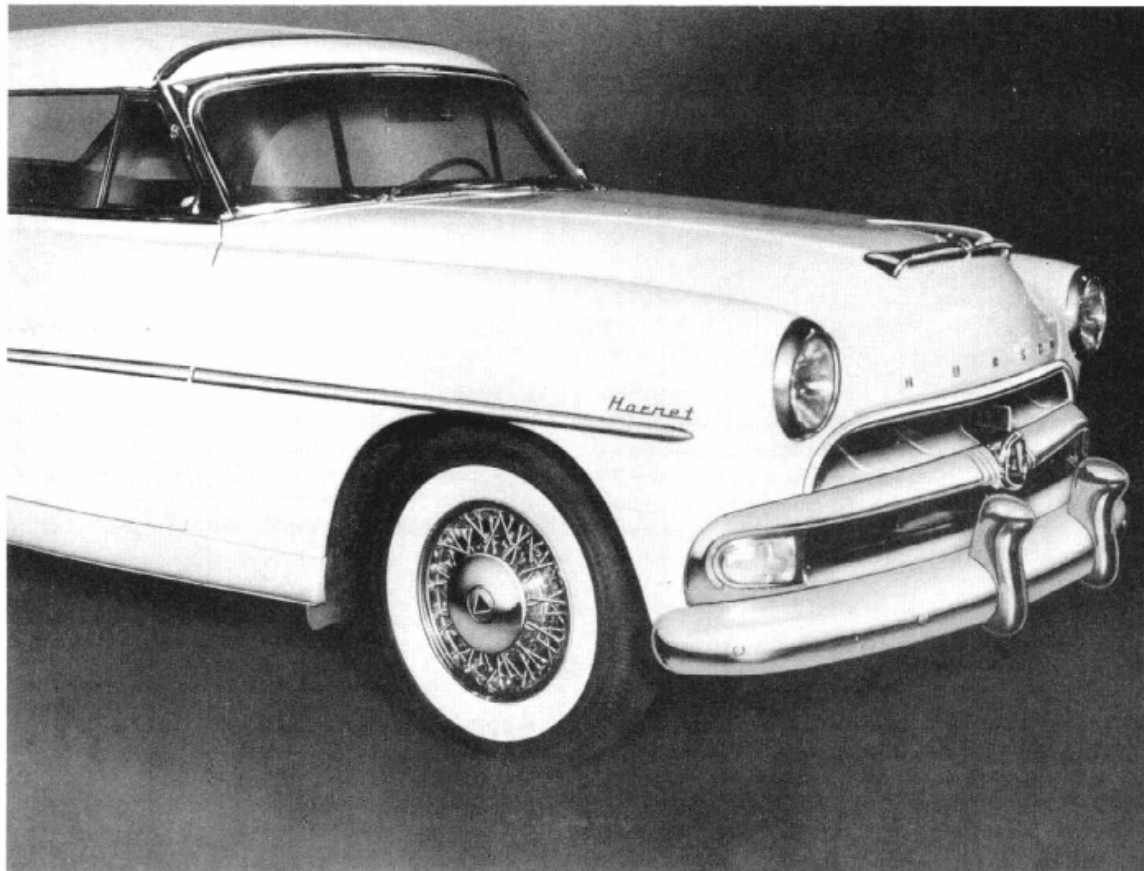
As in the case of all automatic transmissions, a slight noise may be encountered during idling and under certain driving conditions. Ordinarily, such noises, which may vary from car to car, are not too objectionable and since they are more or less inherent in automatic drives, no effort should be made in the field on new cars to eliminate this condition through service work.

NEW MANUAL:

A comprehensive manual covering the servicing of the new automatic transmission is now being compiled and will go to the printer soon.

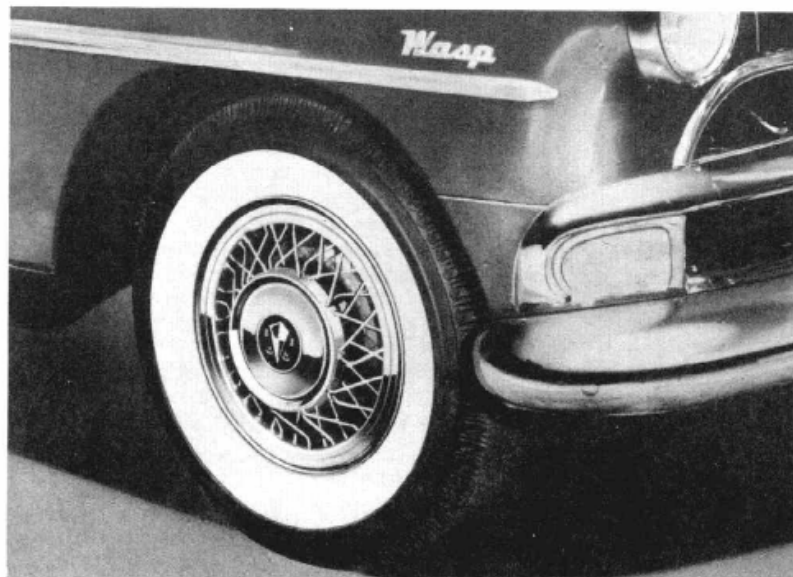
FIELD TRAINING:

Schools to provide complete information to the field covering the operating and servicing of the new automatic transmission are now in progress.



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Discs—be
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Installed on show-
room cars, Hudson
Wire Wheels and
Wire Wheel Discs
stop shoppers, get
prospects inside!

BUILD UP YOUR STOCK . . .

ORDER TODAY!!

suit all tastes...To accommodate all pocketbooks HUDSON Wheel Ornamentation COMPLETE FOR ALL MODELS

Whatever what your Customers want in Wheel Ornamentation, you have it!

Wheels—Matchless in glamorous and fine construction; *Wire Wheel Discs*—beautiful and economical, too; *Trim Rings*—limited ornamentation—greatly reduced cost; *Custom Discs*—handsome wheel covers—entirety of dash and sparkle!

You have them all—handsome Hudson Wheel Ornamentation that adds the final touch of elegance, style, and luxury to the Hornet, to the Wasp, to the Jet!

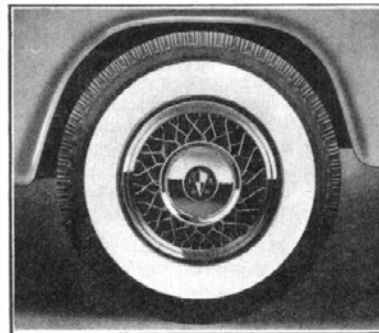
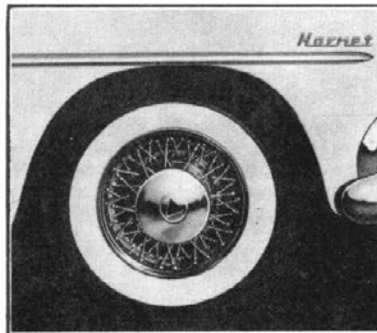
As a Hudson Dealer, you are in an envious position to supply each Customer according to his needs. You have the finest in quality and beauty. You have Wheel Ornamentation in all price ranges and to accommodate all budgets. And your profit incentive is excellent!

To take full advantage of your opportunity, promote the sale of Wheel Ornamentation to every Customer—New Car, Used Car, and Service.

We sincerely recommend that you display Hudson Wheel Ornamentation of all types on your Accessory tables, on your Parts Counter, above your Service Write Up Desk, and installed on showroom cars. It will pay off . . . handsomely!

CUSTOM WIRE WHEELS

The eye-arresting distinction of Hudson Wire Wheels greatly enhance Hudson's custom styling for those to whom pride of ownership is all important. Skillfully designed and much improved over early types, Hudson Wire Wheels are of superior strength, safety, and brake cooling action.



WIRE WHEEL DISCS

These glamorous discs give the appearance of expensive Wire Wheels, at just a fraction of the cost. Made of durable stainless steel—rust and corrosion proof, locked on with hub-bolts. Truly beautiful Wheel Ornamentation.

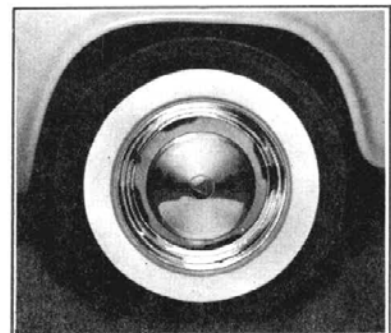


CUSTOM WHEEL DISCS

Cover the entire wheel, add dash and sparkle. Contribute to that look of fine-car distinction. Highly polished stainless steel for a long life of handsome beauty.

WHEEL TRIM RINGS

Add the type of Wheel Ornamentation many owners desire. Permit just enough of the wheel color to show for pleasant contrast.





HOME OF HUDSON IN BROCKTON, MASSACHUSETTS

The City Garage, Hudson Dealer, located at 693 North Montello Street, has an atmosphere of welcome and friendliness.

Their formal opening on Announcement Day drew an unusually large group of Hudson enthusiasts. We like the service entrance.

HIGH SPEED VIBRATIONS

High speed vibration is most noticeable in the steering wheel and occurs usually at speeds in excess of 60 miles per hour.

In contrast to thumping, the high speed vibration may be caused by an unbalanced wheel assembly. It may also be caused by a tire or wheel with excessive runout or a mechanical condition such as wheel misalignment, wheel wobble, looseness in steering mechanism, etc.

To find the cause of high speed vibration proceed as follows:

1. Check the Balance of All Tires.

A good method for determining whether the difficulty is due to balance is by subjecting the wheel to the spinner test. To do this, jack up the wheels—apply the spinner—then remove the spinner from the wheel after it has reached maximum speed and permit the tire to rotate freely. If a wheel is out of balance, there will be excessive vibration in the bumper, fender, or other parts of the car.

The spinner test should be given also after the wheels are balanced. (Always balance the complete assembly of tire, tube and wheel. In balancing front wheel, it is advisable to include the hub and brake drum.) If the vibration persists, check for dragging brake or loose wheel bearings. If brake and bearing are correct, the difficulty lies elsewhere so proceed with the next step.

2. Check All Tires for Radial Run-Out.

Radial run-out should be checked by the fixed object method as previously described for locating a thumping tire.

Do not attempt to check by merely watching the variation in clearance when the tire is jacked off the floor just enough to permit rotation. Such a method will invariably lead to an exaggerated estimate of the extent of the run-out. The variation must be measured.

If excessive run-out is noted at the tire tread, proceed with step 3 before removing the tire.

3. Check Radial Run-Out of Wheel.

Radial run-out of the wheel can be checked at the base of the rim flange without removing the tire.

If there is an appreciable amount of run-out dismount the tire and check the run-out at the middle of the rim bead seat to obtain a more accurate measurement.

If wheel run-out and tire run-out are discovered at the same location, the run-out of the complete assembly can sometimes be improved by moving the tire so as to shift the relative positions of the high and low spot of tire and wheel.

It is not possible to state definitely just how much run-out causes vibration. Sensitivity to run-out and unbalance varies considerably for different makes and models of cars.

Furthermore, the run-out tolerance required by the rim manufacturers is of about the same order of magnitude as the average run-out on tires. If a given tire and rim are assembled so that the run-outs are added, then the assembly may be as much out as $\frac{1}{8}$ ".

A tire-wheel assembly out of round by this degree on a car with a high speed vibration complaint would be subject to suspicion and should be corrected by shifting the tire on the wheel or by replacing the tire or wheel or both, depending upon what the run-out checks have shown, as outlined under 3 above.

Thumping and vibration are problems which every tire and car dealer must face and problems that are bound to require a certain amount of servicing. So, in the interest of customer goodwill, it is best to recognize this fact, to show an interest in your customer's problem and to do your best to correct it.

Explain to your customers the causes of thumping and vibration—that they are not necessarily due to imperfect tires but rather are frequently due to the smooth roads and smooth-running, well-balanced cars they drive. Point out that minor, difficult-to-produce disturbances are considered commercially acceptable and will in no way affect tire wear or car performance. Service problems of this nature call for tact, diplomacy, and patience but they will pay off for the dealer who uses them.



THE PORTLAND GROUP OF A RECENT FACTORY SCHOOL CLASS

Grouped about a demonstration model at the Factory Permanent School Shop shown at left: are: front row, reading from left Messrs. Tiffany and Borgsdorf, School Instructors, James R. Wilkeson, Spur Moormeier, Al Beal and Bob Graves. Back row from left, Wes Pendergraft, Ward McAnally and Bill Gould.

Among this group were those winners of a factory School instruction course—choice prizes of a recent Service Contest held by the Portland Zone.

FRONT SEAT POSITION

The front seat tracks used on Hudson Hornet, Wasp and Super Wasp Series Cars provide a fore-and-aft seat movement of 4 inches, obtained by raising the lever on the left side and sliding the seat to the most comfortable position for the driver.

In addition, further provision is made for changing the position of the seat itself on the tracks to accommodate persons of unusually tall or short stature. This is done by simply removing the 4 screws holding the seat base to the tracks, moving the seat backward or forward 1 inch and replacing the bolts through the extra set of holes in the seat base.

The height and angularity of the front seat can also be changed to enhance driver comfort by raising the seat tracks at the front and/or rear ends. This is accomplished by inserting front seat spacers, part #123405 and washers, part #70746, singly or in combination, on both sides between the bottom of the seat tracks and the floor panel until the most suitable position is found.

DO YOU HAVE CARS TIED-UP IN YOUR SERVICE DEPARTMENT DUE TO PARTS SHORTAGE?

Parts and Service Managers . . . if you have cars tied-up in your Service Department for lack of parts—or if any of your Owners are driving cars partially repaired pending the receipt of the parts—advise your Zone or Distributor Parts & Service Representative immediately!

The availability of parts is the best ever and Owners' cars should not be tied up for lack of parts. Many parts shortages we investigate are the result of incom-

plete orders placed with Zone or Distributor, incorrect part numbers specified, unpulled or mis-filed Back Order slips, etc.

Therefore it is highly important that you keep Zone or Distributor Parts & Service Representatives informed of all critical parts shortages. It is the responsibility of these men to correct such situations and get the parts for you with a minimum of delay.

SERVICE OF THE MONTH POSTER FOR FEBRUARY

The answer to those two most common questions: What will it cost? and When can I get it?—are beyond any doubt the mechanics' Know-How, the use of Special Tools and the Flat Rate Guide.

HUDSON Flat Rate Manual *and* **HUDSON Special Tools**
assure you of a good job . . . *Done Right!*

DESCRIPTION	TIME	PRICE
CLUTCH—Continued		
THROW-OUT LEVER — Remove and Install.		
PISTONING — Remove and Install. Includes runner and tie pin.	1.0	
Full Standard Transmission — Remove and Install.	5.0	
Full Overhaul Transmission — Remove and Install.	6.0	
REAR END — Remove and Install.	4.0	
TRANSMISSION		
Full Assembly — Remove and Install.		
Standard Transmission — Remove and Install.	2.4	
Overhaul Transmission — Remove and Install.	2.8	
Full Assembly — Overhaul. Includes runner and tie pin.		
Standard Transmission — Remove and Install.	3.0	
Overhaul Transmission — Remove and Install.	3.4	
Full Assembly — Rear End — Remove and Install.		
Full Overhaul — Rear End — Remove and Install.		

LET US BE RESPONSIBLE FOR SEEING THAT YOUR CAR GIVES FULLEST SATISFACTION

HUDSON SERVICE OF THE MONTH

WHAT TO DO

to improve safety in motor car operation is the subject title of one of the articles below and is a reprint from a booklet arranged by the National Safety Council Committee sponsored by the Automobile Manufacturers Association.

The rapid increase of accidents during the past is well known to us all and it is high time to do something about it . . . These six basic rules for safe winter driving are a one page excerpt from the above mentioned booklet entitled, "Here Are Winter Facts".

They are:

1. Accept Your Responsibility to do all in your power to drive without accident. Don't blame the weatherman for an accident. Be prepared and meet the situation.
2. Get the "feel" of the Road. Try brakes occasionally while driving slowly and away from traffic. Find out just how slippery the road is and adjust your speed to road and weather conditions. Remember you can't stop on an icy dime.
3. Keep the Windshield Clean of snow and ice, fog and frost. Be sure headlights, windshield wiper blades and defrosters are in top condition. You have to see danger to avoid it.
4. Use Tire Chains on snow and ice. They cut stopping distances about half, give 4 to 7 times more starting and climbing traction ability. But even with the help of chains, slower than normal speeds are a "must" on snow and ice.
5. Pump Your Brakes to slow down or stop. Jamming them on can lock the wheels and throw you into a dangerous skid. A little skidding can carry you a long way.
6. Follow at a Safe Distance. Keep well back of the vehicle ahead—give yourself room to stop. Remember, without tire chains, it takes 3 to 12 times as far to stop on snow and ice as on dry concrete.

HE HANDLES A TOUGH JOB . . .

with a big smile, our good friend Fleming L. Lippy, Service Manager, for Bourne-Jones Motor Company, Hudson Dealer at Richmond, Va., our first 5-Star Dealer. Mr. Lippy has been with the Bourne-Jones

Organization for approximately six years and is held in high esteem by his organization as well as Hudson owners. He has attended the Factory Training School for the full two weeks' course on two occasions.



TO ASSIST HIS DEALERS . . .

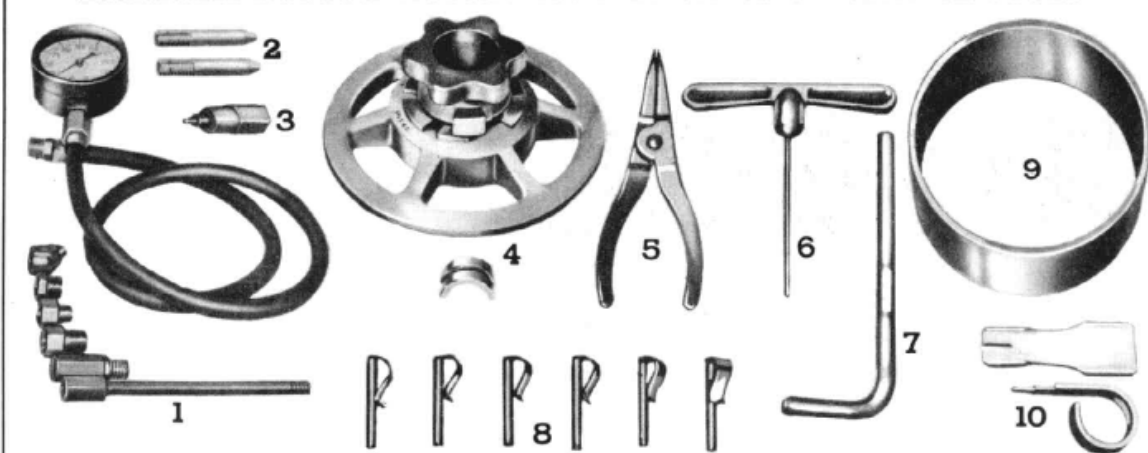
in adapting a method of interesting owners and increasing service business, Tommy Newell, Parts & Service Manager of Los Angeles, at a recent Parts & Service Managers' Club Meeting, presented a newly published and highly interesting book on the subject of profitable automotive service merchandising.

The title of this book is "303 WAYS TO GET MORE SERVICE BUSINESS". Needless, perhaps, to mention that all who examined the book were very much interested. Each Zone and Division Parts & Service Manager has been given a copy of this book, and it is suggested that you bring this subject up at your next club meeting.

The book may be procured in single copy or any quantity from M. A. Barnett and Company, 6432 Cass Avenue, Detroit 2, Michigan.

Are you keeping your Service Merchandiser Mailing List up-to-date and mailing them out promptly when received?

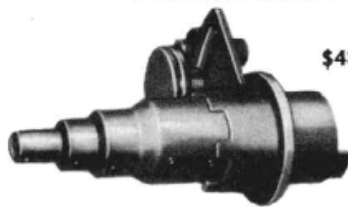
ESSENTIAL HUDSON AUTOMATIC TRANSMISSION SERVICE TOOLS



NO.	TOOL	DESCRIPTION	NO.	TOOL	DESCRIPTION
1.	J 4270	Transmission Pressure Gauge	6.	J 5482	Governor Shaft Set Screw Wrench
2.	J 4284	Transmission Pilot Studs	7.	J 5481	Test Rod
3.	J 4285	Brake Band Adjusting Tool	8.	J 5487	Multiple Disc Clutch Piston Ring
4.	J 4668	Thrust Washer Gauge and Spline Locking Clip	9.	J 5478	Clutch Assembly Fixture
5.	J 4880	Snap Ring Plier (external—truarc)	10.	J 4547	Valve Spring Unloader

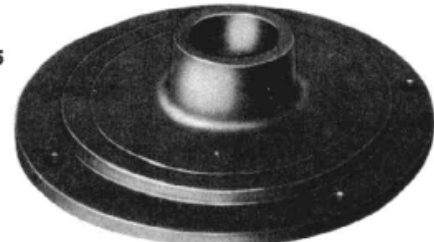
PRICE
\$60.80

OTHER AVAILABLE AUTOMATIC TRANSMISSION SERVICE TOOLS



\$43.15

J 4283 Spline Alignment Fixture



\$23.15

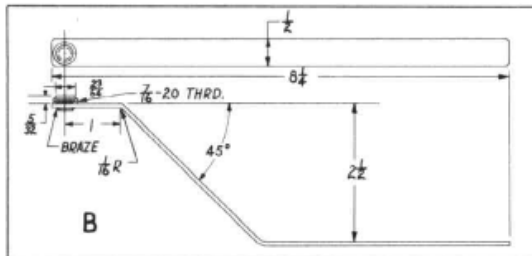
J 4286 Converter Alignment Flange

Use Order Blank
PLACE ORDER WITH

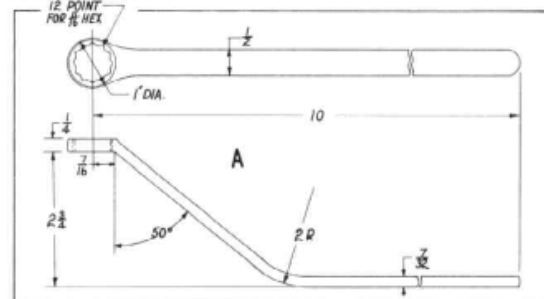
KENT-MOORE ORGANIZATION, INC., 5-105 GENERAL MOTORS BLDG., DETROIT 2, MICHIGAN

YOU MAY FIND THESE TOOLS TO BE VERY HANDY . . .

in the removal or installation of the two lower nuts holding the Automatic Transmission to the bell housing—when removing the transmission only, *with* engine in car and *without* removing 3rd cross-member.

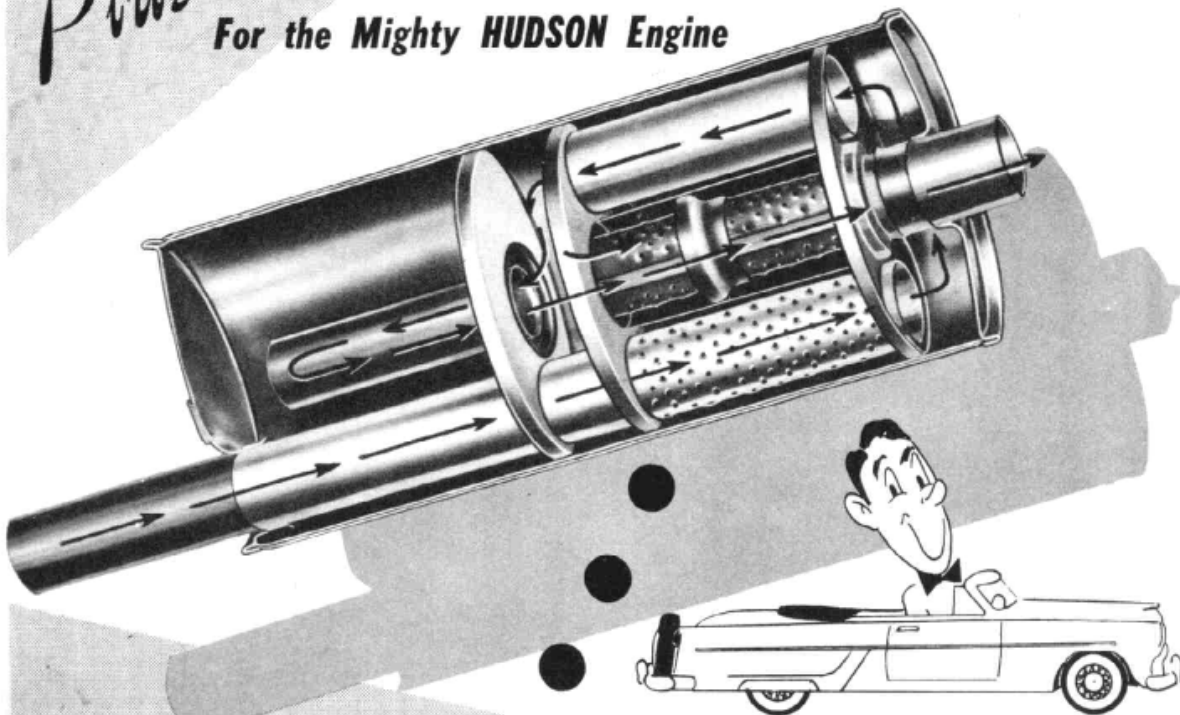


Due to the somewhat concealed location—the use of wrench “A” makes it rather easy to loosen or tighten these nuts. The holding tool “B” is to be used to get the nuts started on the threads of the studs, when reassembling. Simply start the nut on the holder threads first, then place in position and start nut on stud threads.



RUGGED...

plus **MODERN SOUND CONTROL**
For the Mighty HUDSON Engine



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