

HUDSON Service MAGAZINE

INFORMATION ON PARTS • ACCESSORIES
AND TECHNICAL MATTERS

HUDSON Terraplane

HUDSON Six

HUDSON Eight

Issue 3

December 1937

1938 Series

We All Wish You

★ A Merry Christmas ★

and

A Happy and Prosperous New Year

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HUDSON MOTOR CAR CO.

DETROIT, MICH.,

U. S. A.

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Article II

If it is agreed that the retail automobile dealer is definitely a positive factor in determining whether collision insurance premiums shall go up or down, then it is reasonable to ask just what the retail automobile dealer can do about it, and in what ways he can exert his influence to keep collision insurance premiums low. Or for that matter, even granting that the dealer can do something about insurance rates, one may ask the question whether the dealer ought to be bothered doing anything at all. Unless the dealer can offer his purchasers something definite, or can render a service to the automobile industry, or—what is equally important—can see a direct benefit to himself, perhaps the dealer would be justified in ignoring the question entirely and permitting nature to take its course.

Now let's take a look under the hood of the retail automobile business, and see what goes on when the dealer or one of his salesmen sells a car. There has been a "meeting of the minds", as the lawyers like to put it; the dealer has sold not only a car, but also himself to the purchaser as a reliable individual with whom to do business. Mutual respect has been established and that most intangible and yet most valuable ingredient of any sale—goodwill—has been generated, and has passed between the buyer and seller, just as two gentlemen might exchange cards upon being introduced.

Just so long as that goodwill continues to exist, the purchaser will turn to the dealer in every problem connected with his car. If it is necessary to buy replacement parts, or additional accessories or if service is indicated, the purchaser turns back to the dealer who made the original sale. Much, then, of the dealer's profits from the relationship hinges entirely upon goodwill. The dealer naturally, realizing this fact, in turn will study methods by which he may extend favors to his customers wherever possible and in that desire to favor customers sometimes lies danger which threatens the goodwill relationship.

Assume one of your purchasers has suffered a collision and the terms under which the car was originally bought included collision insurance. Your service men tow the car into your service garage and start their examination to determine the extent of the damage. You want to help and favor your customer in order to foster his goodwill. Perhaps you allow your service men to view the wreck sympathetically and to plan a restoration of the car on a generous scale. If the insurance policy calls for \$50.00 deductible, the kindly impulse might suggest that you spread a \$50 inflation

over the various items of labor, repairs, and replacement parts "as a favor to the purchaser". After all he is a good fellow and the Insurance Company can better stand that \$50.00 expense than this purchaser can.

But have you succeeded in doing the purchaser a favor and will it result in his continued goodwill?

Multiply the above illustration by possible thousands and thousands all over the United States, and we find the Insurance Companies being forced into a position of giving *full coverage collision insurance* in reality, when the premium received is for deductible insurance. Basing its rates on experience the Insurance Underwriter increases the rate, and when the time comes for renewal of the policy, the purchaser resists the higher rate for the same coverage, and the favor the dealer attempts to do him turns out to be a beating.

The net result is that the individual purchaser has been harmed instead of helped, and there is added sales resistance aroused by mounting collision insurance costs, to be overcome in every new car sale the dealer makes thereafter.

Now it becomes evident that the dealer is a factor in controlling collision insurance premiums, and that a willingness to load collision adjustment charges or costs is in the final analysis a dis-service to the purchaser and to the automobile business, and a boomerang to the dealer himself. Willingness to cooperate with insurance companies and their adjusters in an effort to keep down collision insurance costs on the other hand, is a constructive service to the industry, a genuine favor to the purchaser, and for the dealer himself a certain means of avoiding one factor that undermines the goodwill between the dealer and the purchaser when the sale originally was made. Furthermore, the purchaser who knows that the dealer has inflated his charges on a repair job, even as an apparent accommodation to the purchaser, will lose confidence in the honesty of the dealer's cost system. His next repair job is likely to go elsewhere. By his very efforts to keep the purchaser loyal to the car and to his place of business, the dealer has succeeded only in this case in driving the purchaser to a competitor.

It should then be axiomatic that in the dealer's own interest, every effort should be made to keep repair costs as low as possible as a means of attracting repair business. It will be forthcoming, not only from the purchasers you have sold, but from their friends and from insurance adjusters whose responsibility it is to arrange for proper servicing of all collision losses in their territory.

Missing A Bet!

It is hard to realize or explain why certain territories "go to town" in a big way on the sale of particular accessory items while other territories neglect them entirely. Here is some proof of what can be done by aggressive merchandising.

Last year six territories taking 9208 cars, took 3820 pairs of license plate frames. This is a ratio of one

pair of license plate frames to every 2.4 cars. In contrast to this showing fourteen territories taking 10,429 cars did not take any license plate frames at all. This does not seem logical, but it is a true fact that many territories are missing a bet in not realizing the profit possibilities and potential market for saleable accessories.

Abutment Indicator Testing

Since the selector and shifting circuits of the Electric Hand are the same for 1938 as they have been in previous models, they can be tested with your present Electric Hand Test Kit by adding Adapter No. J-813-5. This adapter is available through the Hinckley-Myers Company of Jackson, Michigan. This adapter connects the 9-wire upper harness of the J-813-B Master Selector to the 10-wire lower harness of the new models. This arrangement does not provide for the testing of the abutment indicator.

Test Lamp

Prepare a test lamp as shown in Figure 1. Place a Mazda No. 63 bulb or equivalent in a standard bayonet

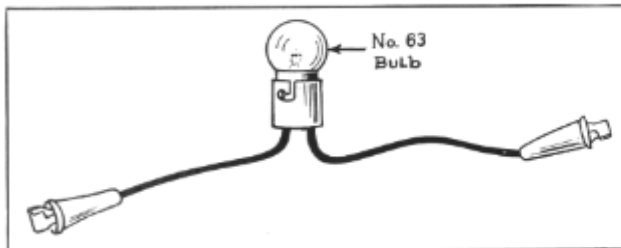


Figure 1

type socket. Attach 2 wires about 3 feet long and tape all metal parts of socket and terminals to prevent grounding or shorting. Attach a small test clip to the free end of each wire. The small, narrow alligator type is preferable for test work in attaching the clip to terminals located in close places.

Circuit

The abutment indicator is very simple in its testing since it is composed of a single circuit consisting of solenoid and a switch in series. This circuit is shown in Figure 2.

Current for the solenoid is taken from the cross shift solenoid circuit at the plug jack. The cross shift circuit has a white wire (w) and a white wire (w) is also connected back to the abutment indicator solenoid. A white with red tracer wire (WR) connects the solenoid winding with the shift rail switch through the plug jack.

Analysis

A study of the following preliminary test procedure will help to isolate any trouble that may occur with the abutment indicator.

1—If the standard selector (1938 car equipment) refuses to stay in low or reverse gear positions after the shift has been completed in the transmission, hold finger tip control in gear position with clutch disengaged, and slide "off-on" switch to "off" position.

- (a) If a click is heard in the selector, indicating that the solenoid has released the rotor, check for a short circuit in the wiring or a defective shift rail switch.
- (b) If a click is not heard, replace the detent rotor assembly in the selector housing, since this indicates that the detent balls are sticking in the solenoid slots.

2—With transmission in neutral, turn on ignition and depress clutch pedal without starting the engine. Move the finger tip control to low or reverse position and release.

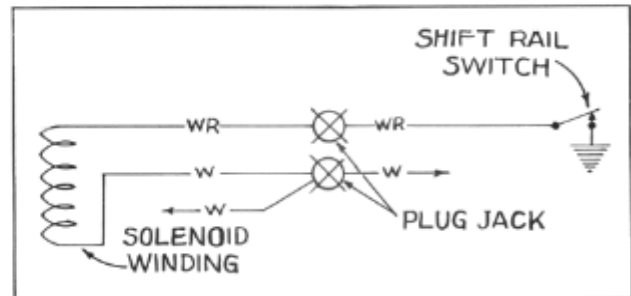


Figure 2

- (a) If the finger tip control will not return to neutral from either position, check for open circuit or defective shift rail switch.
- (b) If it returns to neutral from one position and not the other, check for excessive friction in "H" slot, or drag or binding on selector switch shaft.

Testing of Solenoid

1—Disconnect upper harness plug jack and ground

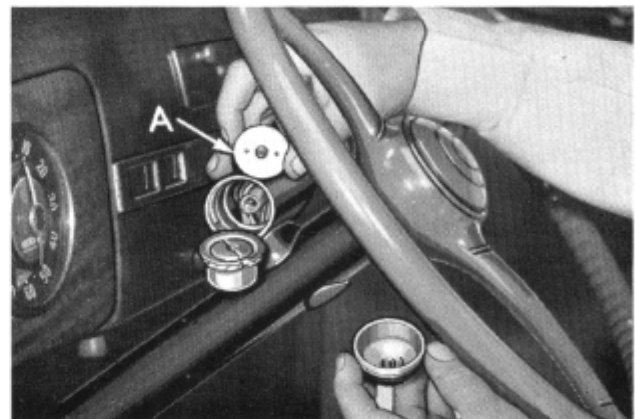


Figure 3

(WR) prong, see Figure 2. Connect one clip of test lamp (using No. 63 bulb or equivalent) to battery cable terminal and touch other clip to the (W) prong of jack. This places the 63 bulb in series with the abutment indicator solenoid winding and the bulb will burn with a red glow if the circuit is normal. No light indicates an open circuit and a bright light indicates a short circuit.

2—The abutment indicator solenoid and its upper harness circuit can also be readily tested with an ohmmeter. Balance the ohmmeter on the 0-1000 scale or smaller and connect its leads to the (W) and WR prongs of the upper harness plug jack. A normal circuit should read approximately 10 ohms.

Testing of Shift Rail Switch

Disconnect the (WR) wire from the low and reverse shift rail switch. Connect one clip of test lamp to the battery cable terminal and the other clip to the shift rail switch terminal. Attach the manual shift lever and shift from neutral to low and to reverse. The lamp should remain lighted $\frac{3}{4}$ of the distance each way from neutral and then go out. If the light acts differently, replace the switch after first making certain that the switch operating ball between the switch plunger and the shift rail, is free to operate and is not stuck by chips or burrs in its pilot hole. This ball can be lifted from its seat by a small hose connected to the manifold vacuum.

Testing of Abutment Indicator Wiring

Shift the test light clip from the switch terminal to the (WR) wire terminal which was removed from the switch. With the finger tip control in neutral, a lighted lamp indicates a short circuit in wiring.

- (a) If the light goes out when the plug jack is parted, a short in upper harness is indicated.
- (b) If the lamp remains lighted when the plug jack is parted, a short in the lower harness is indicated.

Detent Rotor Replacement

- 1—Remove end cap of selector housing by turning counter-clockwise.
- 2—Remove solenoid retaining spring and solenoid assembly by pulling outward and rotating downward at the same time. Observe how solenoid leads are placed around solenoid.

- 3—The rotor can be slid outward along the selector shaft by pulling with a small bent wire or hook.
- 4—Replace rotor by sliding over end of selector shaft. The face of the rotor containing two steel balls should be outward.
- 5—Turn solenoid back into place, placing lug on solenoid into slot in housing. Do not pinch or damage the solenoid leads.
- 6—Replace end cap after making sure that the solenoid retaining spring is in place in the center of the cap.

Solenoid Replacement

- 7—Remove end cap and solenoid as in rotor replacement.
- 8—Part the plug jack and remove the upper cover by bending back the cover lugs.
- 9—Unsolder the white and white-red tracer wires.
- 10—Fasten length of small iron wire (4 ft.) to unsoldered wires and pull it into steering post tube from the bottom as the solenoid leads are pulled out at the top.
- 11—Fasten upper end of iron wire to wires of new solenoid and pull them into tube. The wires should be carefully straightened and laid parallel. NOTE: Splicing of solenoid leads is not recommended.
- 12—Resolder wire ends to their corresponding jack lugs and replace jack cover.
- 13—Place solenoid in housing and replace retainer spring and cap.

Batteries—Winter Car Operation

A dealer once turned over a new car to an owner with the crankcase almost empty. This can never happen you say. Why? Because your personnel always check to be certain that the oil level is correct.

What is the difference between turning a new car over to the owner with an almost empty crankcase or an almost empty battery? In either case there is no direct expense to the owner, but the dissatisfaction to the owner and the possibility of losing him as a traveling advertisement for our cars is really serious.

It is serious since in buying a new car he has pictured in his mind a new beginning with everything ready to do its job with plenty of stamina and reserve. In a week he has a discharged battery and can't start. To him it is a 100% failure of the automobile and he accuses us of using inferior equipment.

There couldn't be any accusation further from the truth. We at Hudson appreciate the reputation of having "an easy starting automobile" and intend to maintain it. Our efforts toward this are evidenced in the larger 1938 generator, the improvements to coil and distributor, improved cold starting carburetion and

continuing with batteries that we know have much more capacity than is required.

A battery slowly loses its charged condition when not used. In demonstrating a new car the engine may be started many times without enough operation to put any charge into the battery. The car may be towed away from the factory or it may be on the rear of a trailer and at night the lights turned on. It may also be necessary to make minor adjustments which require starting the engine several times. Perhaps a radio is installed and the car is on your floor where it is demonstrated to your customers.

Assume that one or several of these conditions affect the car your customer accepts. He then goes out and probably does a lot of stopping and starting, with short running periods in between, at night to show his friends that he is the owner of a new automobile. Then some cold night or morning it happens.

All of this can be prevented if we keep in mind that we have a reputation for easy starting which appeals in a direct way to the owner. Make it a practice without exception to never deliver a new car having a battery with the specific gravity lower than 1.280.

1938 Flat Rate Manual

Printing of the 1938 Flat Rate Manuals has been completed and shipments of these books made to all distributors in quantities sufficient to take care of their dealer requirements. The new flat rate manual is published in substantially the same form as the 1937 edition with certain sections completely revised on the basis of last year's experience to more closely fit the needs of the field.

In working the various flat rate operations here at the factory for the purpose of arriving at standard operation times and procedures, we naturally endeavor to duplicate conditions in the average shop and in addition it is our regular practice to allow extra time in setting our final figures, to take care of the dealer whose service department is deficient in tools and equipment.

Regardless of our efforts in this direction, we realize that due to the wide variation in conditions throughout the country, any publication of this kind must necessarily serve as a guide and be more or less subject to

individual interpretation to meet local requirements. We are, nevertheless, anxious that our flat rate manual fulfills its purpose in as full a measure as possible and in order to receive the benefit of our field service organizations' experience, we instituted a practice a year or two ago, of inserting extra pages of printed forms in the back of the book. By this means, it is hoped that individual experiences in distributors' and dealers' service departments calling for flat rate changes, would be passed on to assist us in making the book more useful. Because of their importance, we urge you to make full use of these forms, jotting down the information and sending it to us whenever you encounter anything which you feel would help us to attain our objective.

Needless to say the new manual should be in use in every service department as quickly as possible, and if you have not already received your copies, get in touch with your distributor at once. As in the past, the 1938 Flat Rate Manual is priced at \$0.75 per copy, which includes the substantial, flexible cover ring binder.



BEFORE

This picture shows the Lubrication Department of the Hudson Sales & Service Co., Inc., Watertown, South Dakota, Dealer before their recent modernization.

Now look at the other picture and see the remarkable change made by the addition of new equipment, paint and valance.

AFTER

This is just one more example of the fine progress being made by Hudson Dealers throughout the country. Adequate equipment, cleanliness and attractiveness are an asset to any business, likewise when applied to the Service and Lubrication business they usually result in attracting more customers and bringing in more profits.



Answers to Questions

These Questions on Mechanical Procedure Appeared in the November, 1937 Issue

- (1) Q. *What troubles are encountered when a low speed jet is loose in the carburetor body?*
A. Rough idle and stalling will result.
- (2) Q. *What conditions of carburetion and what carburetor functions should be checked for poor acceleration?*
A. Poor acceleration may be due to a damaged or worn plunger leather in accelerating pump, loose plunger, corrosion or sediment in pump cylinder or bent pump arm. Check pump shaft operating link for proper setting.
- (3) Q. *Why should special tools furnished in the tune-up kit be used in carburetor repair?*
A. The use of these tools prevents the sluffing of screw slots and threads. Any cuttings of this nature will cause leaky gaskets and valves and will clog up the jets.
- (4) Q. *What will result from an improperly clamped valve guide?*
A. An improperly clamped valve guide will throw the tappet out of alignment with the cam and scoring will result. This is because of the greatly reduced area of contact between the cam and tappet face, allowing the extreme unit pressures to break down the lubrication.
- (5) Q. *Why is it recommended that all heater motors be grounded to the car?*
A. This is necessary to get a good ground. Grounding through heater mountings are apt to be of high resistance due to paint, rust, padding, etc.
When $\frac{1}{2}$ ohm of resistance is introduced in the circuit of a heater drawing 3 amperes, a drop of $1\frac{1}{2}$ volts is the result. This is 25% of the 6 volts available so the maximum speed that could be expected from the motor would be about $\frac{2}{3}$ of its normal speed.
- (6) Q. *Why should heater cores be cleaned?*
A. The function of the heater is to transfer the heat from the water to the air circulated through it. Scale, sludge, or corrosion in the water passages insulate the metal parts of the core and limit the flow of heat from the water to the fins. Lint and dust on the fins also limit the heat transfer from the metal to the air as well as to limit the flow of air through the core.
- (7) Q. *How can a door lock cylinder be serviced in order to reduce freezing to a minimum?*
A. Moisture enters the lock by condensation, car washing, or driving in the rain. All door lock cylinders should be serviced at regular intervals by flushing with a volatile cleaning liquid and then lubricated with a dry lock cylinder lubricant. Lock reconditioning Set HMO 166 contains all necessary materials and applicator guns.
- (8) Q. *What is the more common cause of lights brightening up when the engine speed is increased?*
A. This condition is generally caused by added resistance (usually a poor connection) in the generator and battery charging circuit. Each individual wire terminal in the complete generating circuit should be carefully checked.
- (9) Q. *What particular kind of image should be avoided in aligning the I. F. Section of a receiver?*
A. The irregular double peaked response should be avoided in either the oscillograph or the output meter indication.
- (10) Q. *Why can't an ordinary voltmeter be used to measure the plate and screen voltages of a second detector circuit?*
A. In most receivers these circuits are so balanced that the meter resistance in parallel with the circuit network of resistances will cause untrue values due to the lowered total resistance and the increased current draw. A vacuum tube voltmeter is usually employed in these measurements.

Exhaust Manifold Heat Valve Setting

In order to secure quick warming up, maximum fuel economy and the best possible cold weather operation, the exhaust manifold heat control valve on the Hudson Terraplane DeLuxe and Business models is being set to the winter position on all cars being produced at this time. Because of its importance, we suggest checking this detail on all cars coming into your service department and changing the valve setting to the winter position when this has not already been done. This involves loosening the two clamp stud nuts and moving

the valve body from the straight up and down or summer position to the rear position in which the arrow on the valve body points to the letter "W" on the exhaust manifold. The flow of exhaust gas around the intake manifold is thus increased providing better vaporization of the fuel as well as to minimize crankcase dilution.

This operation requires but a few minutes to perform and the resulting improvement in the operation of the car will go a long way toward insuring owner satisfaction.

SILENT SALES

. . . always at your service

The Most Important Part of Any Selling Program
Getting The Product Before The Public In An Effective
Manner To Create Buying Interest

THIS year Hudson Dealers have more merchandising material for promoting accessory business than ever before. An important factor in this Accessory promotional material is the several display stands which are valuable and useful only when set up in prominent locations in either the Service

Waiting area or the New Car Showroom. The displays should always be stocked with accessories and kept in an orderly condition. They should be used continually by service men and salesmen demonstrating and explaining to customers the outstanding features of Hudson Approved Accessories.



The Most Opportune Time of the year to sell heaters is right now. Every effort should be put forth to get 100% of the heater business from Hudson and Terraplane owners in your locality. Both the De Luxe and Custom model heaters should be kept on display in the heater display stand at all times. You will find this stand most effective in attracting heater prospects and creating heater buying interest.

June In on greater radio profits during 1938 by having "1938's Outstanding Car Radio Value" prominently displayed in your place of business. The attractive Hudson Radio Demonstrating stand shown below makes it possible for your customers to see them, try them, hear them and buy them. Be sure to follow up your Radio prospects with the Stop! Look! and Listen! making pi



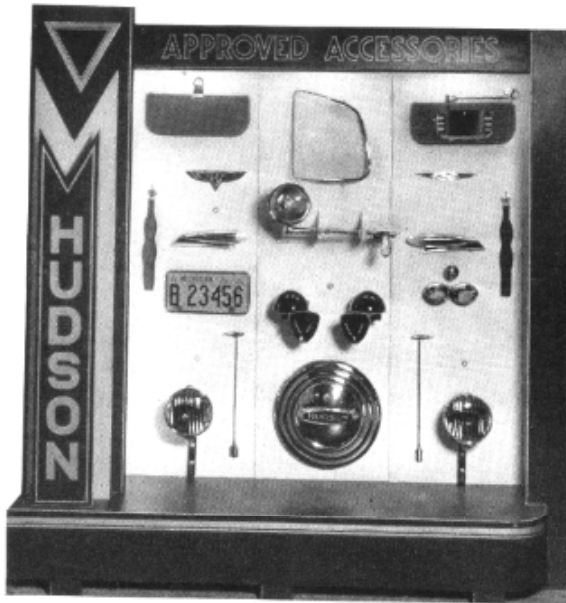
WOMEN!

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A Sound Investment is represented by the Master Accessory Board which is substantially built to give many years of practical service. This board is designed with removable back panels which can be replaced with new panels from year to year at a small cost. Dealers who desire a large and effective display which they can use as a permanent showroom fixture will appreciate this attractive board.

Every Dealer Should Have One of these beautiful Junior Accessory Boards which are available at no extra charge with the Junior Accessory Board Kit. Part number HIA-128207 which includes a sufficient quantity of accessories to completely assemble the display board and an adequate stock of duplicates for quick turn-over sales. This board is very attractive, sturdy and electrically illuminated.

Accessories for Christmas

Add a Holiday touch to your Accessory displays by dressing them up with cellophane, ribbons, wreaths, artificial snow, etc. Useful and practical gifts are most desired at Christmas time which offers a potential market for car accessories. Suggest to your customers that they give Hudson Approved Accessories this Christmas. You will find that an effective Christmas atmosphere can be obtained very inexpensively and will help convey the Christmas spirit to your customers.

. . . *Accessories* WELL
DISPLAYED CREATE BUYING INTEREST RESULTING IN
GREATER SALES AND GREATER PROFITS TO YOU

The Care of Upholstery Fabrics

The life of any upholstery cloth can be lengthened considerably if it is cleaned regularly and carefully. A thorough brushing with a whisk broom, or better still, vacuum cleaning, once or twice a month, will keep the interior in good condition.

Cleaning and Removal of Spots and Stains

There are several methods by which the trim can be cleaned and renovated. These are generally listed as vacuum cleaning, washing, dry cleaning, spot and stain removal, and deodorizing. Surprising results can be obtained by closely following a few simple instructions.

A few emphatic "don'ts" should be considered in the cleaning of upholstery and the handling of cleaning fluids.

1. ***DON'T work against the nap of the cloth when cleaning upholstery fabrics.***
2. ***DON'T breathe the fumes of cleaning fluids. They are usually poisonous if inhaled in large quantities.***
3. ***DON'T use hot water in removing stains unless the stain is known and then very sparingly. Hot water or hot water and soap will set most stains.***
4. ***DON'T use a soiled wiping cloth in removing spots. Change to a clean part of the cloth as the stain is taken up.***
5. ***DON'T set cushions and seat backs in the sun to dry. A thorough brushing with a whisk broom before and after drying will enliven the surface of the fabric.***

PROCEDURE

Use Vacuum First: Before attempting to clean or spot clean any fabric, all accumulated dust and dirt should be removed with a vacuum cleaner. This will produce a much neater job as it will greatly lessen the chances for rings and unevenness.

Dry Cleaning Fluids: When the cleaning operation calls for the use of a prepared cleaner, we recommend that HUDSON UPHOLSTERY CLEANER be used exclusively. This is a preparation of proven merit, is manufactured under our supervision, and is available from the factory parts department. In using the cleaner it is generally advisable to apply it sparingly by moistening a clean wiping cloth and rubbing the stain or spot *lightly, in the direction of the nap*. Always use a clean spot on the wiping cloth as soon as it becomes stained and avoid circular strokes which are apt to leave a cleaning ring after the fabric is dry.

Always brush the fabric with the nap. This will remove that discolored appearance which is so often apparent after cleaning.

Removing Oil and Grease Spots

The most common stains found on automobile upholstery are oil and grease stains. Excessive amounts of hardened grease should be removed with a dull knife or similar tool.

A few drops of cleaner should be applied to the spot

and blotted up with a dry cloth or blotting paper. Repeat as often as necessary to remove the stain, using a new surface of the cloth or blotter each time.

Rust Spots

Rust is another common stain found on car trim. Faint traces of rust stain can be removed with a cloth and warm soap suds (neutral soap).

Ice Cream

Ice cream stains should be removed by sponging with lukewarm soap suds (neutral soap). Rinse with cold water and allow to dry. If an oily spot remains, sponge it with cleaner.

Candy

Candy stains (chocolate excepted) should be rubbed with a cloth and very hot water. After drying treat as for ice cream.

Chocolate stains should be sponged with lukewarm water. Sponging with cleaner after drying will remove any remaining traces.

Blood

Rubbing with a clean cloth, wet with *cold water*, is best for removing blood spots. A few drops of household ammonia applied to the stained area and another rubbing with cold water should remove all traces of this stain.

Caution: Do not use warm water as it will set the stain.

Fruits and Wines

Fruit and wine stains should be treated by applying a little boiling water directly on the stain. Then rub the stain lightly with a cloth moistened with hot water. Allow the spot to dry. Rub lightly, using cleaner. Remove remaining stain by the use of a blotter or clean cloth.

Never use soaps or dry heat on a fruit stain as this will spread and set the stain.

Some fabrics are susceptible to water stains and its use as a cleaner for the above should be performed with great care.

Chewing Gum

Chewing gum can be removed from trim fabrics by scraping with a *dull* knife, care being taken not to injure the fabric. A little cleaning fluid applied to the remainder of the gum will loosen it from the fibres of the cloth.

Cosmetics

Lipstick and other grease cosmetics can be removed by applying cleaner to the stain and blotting.

Paints and Lacquers

Paints and lacquers can be removed with lacquer thinner or turpentine.

If the spot has become dry and hard, *moisten* a small cloth or wadding with one of these solvents and lay it on the spot until the paint becomes soft. It may then

be sponged with the solvent and dried. If a greasy spot remains, sponge it with cleaner.

Caution: Extreme care should be taken not to use an excessive amount of these materials when cleaning mohair as they may loosen the pile from its backing.

Battery Acids

When battery acid is spilled on the upholstery, it should be treated immediately with a household ammonia solution or a solution of common baking soda and water. Either of these will neutralize the acid.

If the acid is allowed to remain for even a few minutes it will attack the fabric and the fibres will be eaten away.

Leather and Imitation Leather

Leather and imitation leather should be cleaned with lukewarm water only. Neutral soaps may be used sparingly. Do not use cleaners as they will harm the material.

Deodorizing

Deodorants such as essence of pine or essence of wintergreen are good. These are used by placing a few drops on a piece of blotting paper, wood shavings, etc., and placing it in the car for a few days. Hudson Upholstery Cleaner also contains oils which act as an excellent deodorant.

1938 Electric Hand Adapter

The addition of the abutment indicator device in the Electric Hand Selector necessitated the addition of one more wire in the wiring harness over that used in 1937 models.

Since all basic selector circuits remain the same, the 1938 Electric Hands can be tested with the 1937 test

kits (J-813-B) by using a new adapter, No. J-813-5. The testing of the abutment indicator and its related circuits requires two distinct tests, as outlined elsewhere in this publication, and cannot be accomplished with the J-813-B Master Selector.

Place your order immediately with Hinckley-Myers at Jackson, Michigan, for one No. J-813-5 Adapter for each J-813-B Electric Hand Test Kit you have in your shop. The price is \$1.75.

Telescopic Cowl Antennas

In the construction of the Hudson Telescopic Cowl Antenna, particular attention has been given to the use of materials which would resist rust and corrosion and insure radio reception of maximum efficiency over an indefinite period of time.

One of the important requisites in the design of an antenna of this type is that the various sections slide smoothly and fit snugly within each other and remain free from corrosion. If these conditions do not obtain, there is a strong possibility that the contact between sections will be broken at times resulting in a loss of efficiency and noisy radio reception.

Because of the fact that some difficulty is being experienced with the plating processes available at present in meeting these requirements, the Hudson Telescopic Antenna is made of German silver and is not plated. The use of this metal, which incidentally is of the same composition all the way through, frees it from the shortcomings of other antennae of this type although exposure to the elements tends to tarnish the surface.

With an ordinary application of Hudson Pre-Wax Cleaner, however, this discoloration can be quickly and easily removed and the finish restored to its original brightness.

This well equipped and well maintained Lubrication Department is featured by Orr's Garage, 1553 East St., Pittsburgh, Pa., Dealer.



Do Not Attach Ground Wire to Heater

The motor of the 1938 Hudson Heaters is attached to a plate which in turn is fastened to the back of the heater case by two screws. Quite a number of heaters have been returned to us on which the ground wire has been fastened under the head of one of the two screws.

When this is done, the motor is loosened and falls to a position which allows the fan to strike either the case or the core of the heater. In other words, if these screws are loosened, the motor immediately loses its alignment.

Starting today we are attaching a tag on each heater as well as adding a rubber stamp to the instruction sheet that states "Important—Do Not Attach Ground To Heater."

The Heater instruction sheets have advocated for 4 years to place the ground wire on the car rather than on the heater case since it is not a satisfactory ground connection. However, in spite of this, it seems we cannot entirely stop this method of installation, so we are now adding to our statement in the instruction sheet the rubber stamp as well as the above-mentioned warning tag which is attached to one of the heater mounting bolts.

Accessory Folders And Christmas Stickers

You are all familiar with the Accessory Folder which is being placed in all new cars at the Factory. In having these folders printed, we secured an extra quantity which we can offer to Distributors or Dealers at the extremely low price of 50c per hundred.

We also have available an attractive Christmas sticker. It is our thought that the Accessory Folder with the Christmas sticker can be used to excellent advantage in calling your owners' attention to the desirability of accessories as Christmas gifts.

With every order for the Accessory Folder at 50c per hundred, we will supply an equal quantity of the Christmas sticker without charge. Orders should be placed immediately so that you can take full advantage of this idea in your Christmas merchandising.

Winter Fronts

Winter fronts are important to motorists in two respects. First they provide a more ideal motor temperature during cold winter weather, giving greater performance and more economical motor operation. And second is the important part they play in giving greater comfort to passengers in heater-equipped cars.

We suggest for real heater comfort that all owners of heater-equipped cars have a winter front installed. This will greatly decrease the time of the warm-up period required by the motor and give quick heater results, besides giving greater and more constant heat to the heater at all times.

A Profitable Item the Year Around

We stressed at the beginning of our Heater Merchandising for the 1938 selling program that heaters are not a seasonal item nor should they be looked upon as such by the field selling organization.

We should drill harder than ever on heaters at this time. Just because we are nearing the middle of December, we should not have any thought other than that we are just barely into the selling season and want to keep right on drilling with owners who do not have heaters and owners who are purchasing cars from hence on.

The moderate winter so far in many sections of the country has delayed the sales perhaps in some instances. Due to the type of winter we have had, without doubt, we are in for some heavy weather the latter part of December and all through January and February and perhaps some of March.

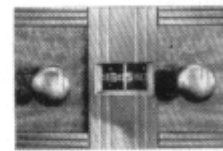
January, February and March, and of course, the last half of December, should be exceptionally good heater months. April, with its rains and damp weather, particularly can be used as a month for heater sales in that the evenings many times are damp and we know that owners would use their heaters on such days and evenings if they had them in the car. There are many selling points to be used in connection with a continuous sale of heaters and we are going to miss a bet if we just don't follow right through with our heater efforts continuously.

See that heaters are on display in the display stand which is furnished by the Factory. Continue using the mailing piece to create interest on the part of present owners and very definitely follow every new car sale with a selling talk on the installation of a heater at the time of new car delivery.

A Selling Message

THIS IS THE PLACE
designed for your

1938
HUDSON RADIO



LET OUR RADIO EXPERTS INSTALL ONE IN YOUR NEW CAR

OUTSTANDING FEATURES of the
NEW CUSTOM AND DELUXE
HUDSON RADIOS

1. New and remarkably efficient Automatic Sensitivity Control provides quiet tuning for local stations and makes high sensitivity available when used in a locality having very weak signal strength.
2. Designed by Hudson engineers and built to Hudson specifications. Tailor-made for this car.
3. No control cables. Quick, inexpensive installation.
4. Tubes and vibrator accessible for service without removing set from car.
5. Control knob and speaker designed and built integral with set proper, saving space and speeding up installation.

BEAUTY IN APPEARANCE AND TONE... BUILT FOR ENDURANCE AND LASTING SATISFACTION

The tag shown above is attached to the instrument panel of every car leaving the factory not equipped with radio.

This tag carries an important selling message to customers taking delivery of cars not equipped with radio. So do not remove this tag.



National Meeting of Service and Parts Managers held in Detroit, September 27 and 28, 1937

Headlamp Maintenance

A great deal of progress has been made in the past few years in making the public conscious of the need of certain periodic maintenance services in order to obtain economic operation and satisfactory performance from their cars as well as from the standpoint of safety to the car occupants and the public at large. Much of the credit for this interest must be given to the various civic bodies, law enforcement agencies, safety councils and clubs for their efforts in curbing accidents and promoting highway safety. As a result, lubrication, engine tune-up, brake, wheel alignment and other essential services are easier to sell to the motorist than heretofore.

Unfortunately one of the most essential of the services falling in the safety category has been passed over lightly or overlooked completely. This item is that of proper lighting.

Recent findings indicate that it is of such importance in relation to highway safety that a concerted effort is being made to improve the standard of lighting as well as to make the motorist realize the important part he plays by seeing to it that the lighting system of his car is kept in proper condition through regular maintenance service. This opens up a splendid avenue through which the car dealer can render a real service to his owners and participate in the profits possible through the adoption and execution of a properly planned lighting service program. This includes:

- 1—Taking lighting out of the category of gratis or courtesy service and selling it to the motorist at a reasonable profit.
- 2—Development of someone in the dealer's service organization to specialize on lighting maintenance. Individuals proficient in engine tune-up and electrical service are generally best fitted for this work.
- 3—Making a complete check of the entire lighting system instead of simply replacing bulbs or lenses, cleaning reflectors or aiming the lights.
- 4—Instructing the car driver regarding the operation of the lights, especially the proper use of the headlight "passing beam".
- 5—Instructing all service men, especially those engaged in lubrication and car washing, to be on the alert for lamp maintenance needs.

- 6—Inclusion of lamp maintenance in inspection maintenance service sold at combination prices.
- 7—Includes lamp service in owner follow-up systems.
- 8—Check lighting system on all cars during Pre-delivery, 500-mile and 1500-mile inspections.
- 9—Providing the proper and necessary tools and equipment for servicing the lighting system.

The need for lighting maintenance centers largely around the conditions reflected on the system through the length of time the car has been in service. Some of the conditions entering into failure of the beam to reflect far enough ahead of the car and produce proper lighting are:

Loose or corroded electrical connections in lamps, switches and wires.

Blackened and below standard bulbs.

Bulbs that have lost their brilliancy due to lengthy service.

Generators with low output charging rate, thereby not furnishing sufficient current to supply lamps as well as other electrical accessories.

Cracked lens causing tarnished reflectors.

Non-genuine lens.

Improperly aimed headlights. Under this classification we might mention that one of the greatest factors in causing glare in the eyes of oncoming drivers with both the highway and passing beam is the fact that a lamp aimed incorrectly just a few degrees will throw the beam well over the top of the oncoming car, thereby

greatly reducing the brilliancy of the light where it is actually required—on the road. Likewise a headlamp aimed a few degrees too low will result in reducing the length of the beam, thereby inconveniencing the driver and causing him to drive beyond the beam. When driving on the passing beam the direction of the light is aimed directly ahead of the car, causing "near sighted lights."

Due to the increase in the use of trailers, particularly in the summer months when highways are more crowded than ever, a new problem confronts the motorist and service station. With a trailer hitched to the back of the car considerable load is placed on the rear springs, and this in addition to loading the car with additional luggage results in directing the beam too high. Dealers should contact all owners contemplating vacation trips with trailers and advise them to have their headlights adjusted accordingly. It is, of course, essential that the lights be readjusted for normal use of the car.

SERVICE MEETING PROGRAM

for

December 1937

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Subjects for Discussion

GENERAL DISCUSSION—What Can We Do to Attract More Service Customers During the Winter Months?

USED CAR CONDITIONING—Page 50

HEADLAMP MAINTENANCE—Page 54

ACCESSORIES FOR CHRISTMAS—Pages 49 and 52

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Material

DECEMBER SERVICE MAGAZINE

Tail lamps and license lamps also enter into the lighting maintenance program and every attention should be given to insure their operating properly for night driving—particular attention being given to proper stop light operation.

Lighting equipment on low-priced used cars is also a factor that must be given every attention for increased safety.

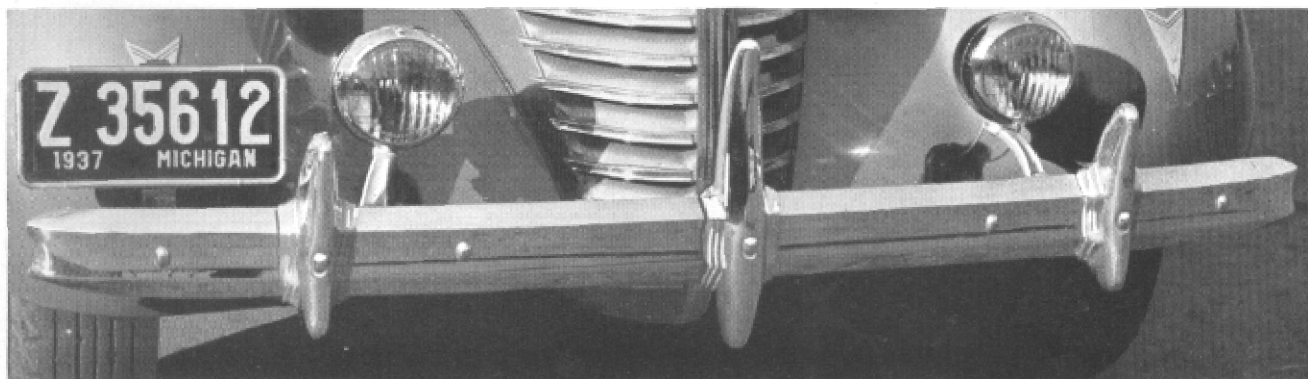
All of the conditions outlined in the preceding paragraphs can be scientifically checked and corrected by means of proper headlight equipment which is

available through our tool source as mentioned in a broadside recently mailed to the field.

The importance of daily wiping off headlamp lens should be stressed to owners, as well as certain service men in dealers' establishments to remove dust, dirt and insects which fog up the lens and deprive the motorist of all the lighting ability built into his car.

After carefully considering the various angles mentioned it is obvious that considerable effort should be put forth by distributors and dealers in promoting this safety as well as profitable program.

1938 Master Bumper Guards



The 1938 line of Hudson Approved Master Bumper Guards includes the front bumper guard similar to the one used during 1937 and a new rear guard which is so constructed that it permits easy access to the rear compartment. Also, because of the large variation in the Hudson and Terraplane Bumpers there is an individual difference in the design of the guards to permit them to fit their respective bumpers. This gives us four different guards for 1938 which are as follows: HA-128384 Master Bumper Guard—Front—Terraplane;

HA-128395 Master Bumper Guard—front—Hudson; HA-126719 Master Bumper Guard—rear—Terraplane; HA-126720 Master Bumper Guard—rear—Hudson.

Last year's demand for Master Guards, as most of you experienced, increased tremendously throughout the year. This year, Master Guards are slated as one of the most popular selling accessories. So let's "cash in" on the sale of Master Guards during 1938. Sell their merits to every Hudson or Hudson Terraplane owner who does not already have one.

Modernization Brings More Business

Word comes from M. Christensen, Service Manager for Brandes-Campbell Motor Co., Omaha, Nebraska, Distributor, that after recent modernization of their Service Department they showed an increase in the first month of 100 service jobs over the previous month in the old Service Department.

On this page are pictured the new Lubrication and Accessory and Parts Divisions which are both equally modern and most attractive. Mr. Christensen realizes the importance of the Lubrication Department as a leader for the shop as he states that the new Lubrication Department is located in front of a large window facing the street.



"It Pays to Display Accessories"

Hudson Motor Car Company
Detroit, Michigan

Attention: H. J. Hudson

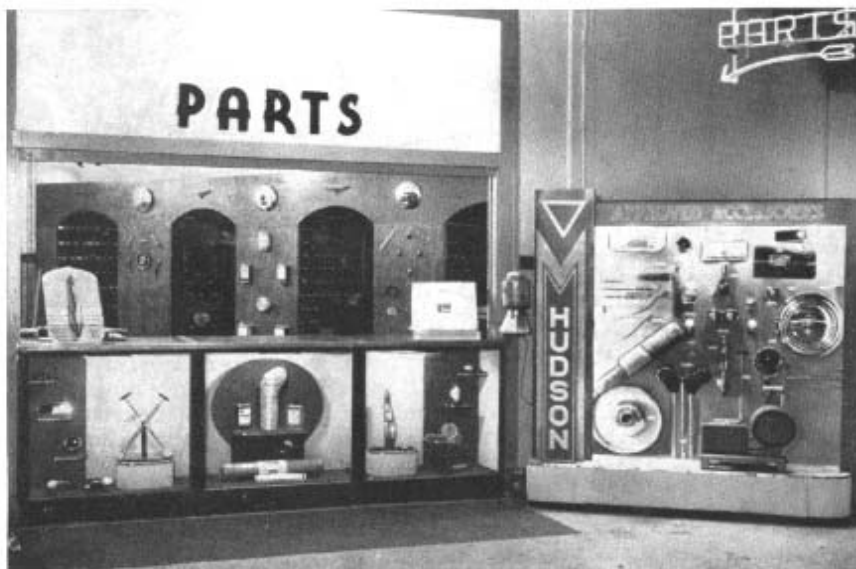
Dear Sir:

Here is a story, not a new one, perhaps, but one that bears out the fact that "Accessories properly displayed sell themselves."

A few weeks ago we moved our Service Department to a larger location. Because we had our accessory display board built into the front of the Service office, we could not move it until we were entirely set up. Not to have an accessory display would have

meant the loss of accessory sales so we decided to dress up a model 71 Sedan, painted maroon that was equipped with white side wall tires and selective automatic shift and placed it in a conspicuous place in the Service Department.

Not only, did this result in the sale of a lot of accessories but it also resulted in the sale of this 71 Sedan with all the accessories (\$200.95) on it. The purchaser also placed an order for a heater and defroster (\$22.00) to be installed later. So well are we sold on the idea of displaying accessories on cars that we intend displaying one accessory equipped car on our sales floor and one on our Service floor in addition to accessory boards.



The following accessories were sold on the 71 Sedan: Draft Deflectors, Arm Rests, Assist Cord, Cigar Lighter, Locker Box Door Clock, Pull to Cords, Fender Guides, Fender Lamps, Fog Lamps, Gas Tank Cap, Glare Shield, Horns, Initials, Radiator Grille Guard, Radiator Screen, Custom Radio, Outside Rear View Mirror, Safety Swinging Stop Lamp, Seat Covers, Tail Pipe Extension, Vanity Mirror, L. H. Visor, Wheel Rings, Special Steering Wheel, Tell Turn and L. H. Signal Light.

Yours very truly,

BRANDES-CAMPBELL
MOTOR COMPANY.

J. C. SCHNEIDER

Parts Sales Manager.