TYPICAL CLASS OF THE FACTORY PERMANENT SCHOOL. ALTHOUGH THERE ARE NEW FACES EVERY TWO WEEKS THE SAME INTEREST AND ENTHUSIASM ALWAYS PREVAILS.
A successful Service Operation requires a qualified and aggressive Service Manager—one who is expense and profit conscious, capable of leading and directing all personnel under his supervision, planning parts and labor sales campaigns. He must be capable of winning friends and influencing people, which is the knack of handling customers, and he must be able to build and maintain an aggressive well-trained group of mechanics, partsmen and other service personnel.

**AXLE GEAR RATIOS AND TIRE SIZES**

Not infrequently an Owner may have installed at his own expense various tire sizes in combination with different axle ratios which are neither standard or optional on any new car.

The results of this is considerable inaccuracy of speedometer and the dealer is asked to supply speedometer gear and pinion to make correction of speedometer reading. If there is no pinion and gear combination to make correction of the off standard combination of tires or axle ratio, the best procedure is to attach an adapter or compensator at the transmission to bring speedometer reading within an accurate range.

We do not supply such adapters, but they may be procured in a very wide variety from the Stewart-Warner Service Stations in any one of the principal cities. This is by far the most convenient and economical method.

The Speedometer Gear data table on Page 182 of the April, 1951 Service Merchandiser applies in full to the 1952 Series B Hudsons.

**ENGINE TIMING MARK POINTER**

All “B” Series Engines are fitted with a Timing Mark Pointer. This, as you will note, is held in position by a cup screw that is threaded into the Rear Cylinder Support Plate. Positioned very close to the flywheel, it permits a more accurate timing check.

This Timing Mark Pointer may be installed on Six or Eight Cylinder Engines back to 1942 models. This part will be supplied to Service—and the Part Number is 306348.

With the thought in mind of aiding the Dealer, the Service Manager and all mechanics interested in becoming Service Managers, we plan to run a series of articles on the fundamentals of the Service Business and the title will be “Service Management.”

The career of a mechanic is an honorable one and most beneficial to the American way of life. It has often been said by noted authorities that much of the credit for “World War II Victories” should go to the mechanical “know-how” of the men who made up the fighting forces. In peace as well as in war, the mechanic is most essential and many men who have founded some of the Nation’s greatest businesses started as mechanics. Many successful automobile dealers started in the shop as a mechanic and progressed steadily to shop foreman, Service Manager and on to his own business.

Many Service Managers of today have come up through the ranks and learned the hard way the basic principles of their business which as time goes on becomes more complex. For example, modern motor cars demand modern and complicated test equipment.

Good owner and employee relations are most important as they have a definite bearing on the Service Manager’s ability to achieve the primary objectives:

1. Protect the reputation of the Dealer and the product.
2. Have a profitable Parts and Service Operation.

All Service Managers who have attended the Factory Service School have been well trained on the technical points of the Hudson car and we will through this monthly column endeavor to outline the fundamental principles of Service Management.

We think that probably the first Service Manager was a mechanical minded fellow who stuck his head under the hood of the first stalled automobile and said to the owner, as he shouldered him out of the way, “Let me fix that.”

The Industry has grown until now good Service means not something for nothing, but doing what the customer wants, intelligently, economically and promptly.
EXHAUST MANIFOLD DAMPER

Perhaps no other important moving part of a gas engine is overlooked or neglected as much as the Exhaust Manifold Damper.

Although the Exhaust Damper Shaft is of a heat-resisting steel, it sometimes sticks or becomes so tight due to carbon build-up that the springs, thermostat or counter-weight fail to move it.

When the damper action becomes sluggish or sticks, the results are a very slow warm-up and poor performance in winter if stuck at the "heat off" position.

If stuck at the "heat on" position and the atmospheric temperature is high, engine power falls off and performance becomes sluggish. A sharp, responsive Exhaust Manifold Damper is important and accentuates engine tuning.

Should the Damper Shaft be found to be stuck, remove the thermostat and springs, apply penetrating oil or kerosene and tap the shaft for end play to break the carbon and corrosion. The shaft should not be oiled. When properly freed, carefully check springs and thermostat before installing and replace them if weak.

H-11 SPARK PLUG FOR HORNET

The Champion H-11 is standard in the 1952 B Series Hornet Engine. Our Engineers recommend that the H-11 also be used in the 7-A Hornet Engine. The point gap remains unchanged—.032 of one inch.

CANADIAN DISTRIBUTOR PLANS
MECHANICAL TRAINING SCHOOL

We learn from Mr. Andre Pelletier, Service Manager for Healy Motors, Ltd., Hudson Distributor at Edmonton, Alberta, Canada, that plans are in the making to prepare a Training School in their establishment for the mechanics of the fifty dealers in his territory.

Mr. Pelletier attended the Factory Permanent Training School Class of March 3 to 16. Without exception, this was one of the most studious and enthusiastic classes. He has a fine background of automotive experience on the practical side of mechanics and in parts and accessory merchandising.

The Edmonton Distributor has been handling Hudson since 1939 and has a well staffed organization of approximately sixty. With twenty mechanics, six body men, washing and lubrication service, between fifty and seventy cars pass through the shop each day. Their customer percentage in relation to Owners is very high.

Fitted with every modern device and instrument to facilitate service, Mr. Pelletier expresses the feeling that mechanical training is of the most vital importance to bring even the older mechanics abreast with modern car design. They have recently installed in their shop and have in operation, a Tower system of car travel control which Mr. Pelletier believes will work out advantageously to their customers.
Hudson Service Merchandiser

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

1. Name the units of complete Drive-Master system.
   (a) ____________________________ (b) ____________________________
   (c) ____________________________ (d) ____________________________
   (e) ____________________________ (f) ____________________________
   (g) ____________________________ (h) ____________________________

2. The Hudson Drive-Master power unit shifts the Transmission in low, reverse, second and high. True or false?

3. The transfer key is used to manually shift the Transmission in low and reverse and automatically shift in second and high. True or false?

4. The Transmission switch consists of five separate switches. True or false?

5. The throttle lock is used to prevent shifting of the Transmission in low and reverse. True or false?

6. The idle speed of the engine (on Hudson Drive-Master cars) should be ______ R.P.M. and the low speed circuit should be slightly on the lean ______ or richer ______ side.

7. In mountain driving, the car should be started in low or pick-up gear. True or false?

8. The Hudson Drive-Master power unit and clutch power unit should be oiled every 20,000 miles. True or false?

9. Name five causes why Hudson Drive-Master will not shift from second to high:
   (a) ____________________________ (b) ____________________________
   (c) ____________________________ (d) ____________________________
   (e) ____________________________

10. Name five causes why Hudson Drive-Master will not shift from high to second:
    (a) ____________________________ (b) ____________________________
    (c) ____________________________ (d) ____________________________
    (e) ____________________________

Following are the answers to questions that appeared in the April issue of Service Merchandiser.

1. Five important factors when checking front wheel alignment are: Curb height of front and rear end, Camber, Caster, Toe-in and Turning angle.

2. Toe-in is adjusted by means of turning the threaded tie rod ends so as to shorten or lengthen as may be required.

3. Toe-in or toe-out is the relation of the front wheels to a straight ahead position.

4. Caster is always checked and corrected before Camber.

5. Camber is the outward tilt of the front wheels at the top—measured in inches or degrees.

6. Caster is the backward tilt of the steering spindle pivot pin, usually measured in degrees.

7. Pivot pin inclination is the inward tilt of the pivot pin—and is fixed by the angle of boring the spindles.

8. True. The turning angle or steering geometry is the toeing out of the front wheels on a turn due to the outer side wheel taking the larger circle.

9. True. The design (angle) of the steering arms provides for the different angle of the front wheels on a turn.

10. Where steering angle is in error due to a bent arm, it may be straightened by applying a moderate heat. If bent in excess of 7 degrees, the arm should be replaced.

THE ANSWER TO A PROBLEM

Many Dealers have hit upon an idea or plan to bring in customers—a more attractive method of displaying accessories and parts—or perhaps a very successful practice of merchandising, a novel way of owner follow-up, etc. Most highly successful Dealers have one or more of these that the test has proven to produce results.

The following submitted by Mr. F. H. Butterworth, Zone Parts and Service Manager, Boston, Massachusetts, as we believe, applicable wherever there are Hudson cars.

"We have had difficulty with some of our owners going to small service stations to have their clutch serviced. After they had driven the car from 350 to 500 miles, their clutch started to slip. They immediately phoned me.

"Through investigation we found they were not using the special Hudsonite which our Dealers sell and only which should be used in the Hudson clutch. Neither were they using the proper solution to flush out the clutch. The following method was put into effect at three of our Dealerships:

"When an owner has the clutch oil changed, the service manager leaves the empty bottle on the floor of the car. This creates interest and the owner, member of the family, or friend pick the bottle up and read the label. The wording is so effective they were favorably impressed and continued to bring their cars to Authorized Hudson Dealers to have their clutch serviced.

"Reports of clutch slipping have dropped off to zero. This method also helps to sell Hudson parts and accessories."
Thermaster “8 Hour” JUG

It's the month of May. Fishing season is just around the corner. The handy, gun-metal Thermaster Jug with its eye-catching, red plastic top is a must in the fishing boat and on family picnics. Its foldaway shut-off tap makes for simple pouring in two aluminum and red plastic cups which store away in the top of the jug. Liquids are kept hot for 6 hours and cold for 8 hours. Display this jug in a prominent place in your showroom and Service Department.

Portable REFRIGERATOR

The ladies will be delighted with this Portable Refrigerator. Its sanitary, white porcelain lining and aluminum drain tap please the most discriminating eye. So light and roomy—just the thing for those summer picnics and vacation lunches. Order now—display prominently—watch the profits grow!

HUDSON Approved ACCESSORIES
CONTEST PRIZE WINNERS

The Other Fellow's Suggestion

We are always delighted to have the Field Service Men enter the Prize Contest with suggestions, new ideas, shortcuts, etc.

Winner of First Prize this month is C. M. Lang, Mechanic with Downtown Hudson in Detroit. This is what he does:

"On the late Model Cars (1948 and later), I have experienced considerable noise in the rear of the car. When traced to its source, we found to be the rear stabilizer bar. No amount of tightening or shifting of position will remedy this noise.

"The thing I have found that will correct this condition is simple: First, remove the stabilizer bar. Inside the rubber bushing you will find a steel sleeve. Remove the sleeve from each end of stabilizer bar and grind approximately 1/6 of one inch off each end.

"Reassemble with soap grease—or cantor oil which is better if available, tighten thoroughly when reinstalling. I have removed the heavy body rattle at the rear in approximately ten Hudsons in the past two years in this manner, and never have had a comeback."

Second Prize goes to Jim Stanford, Body Repair Man for Shrock Motor Company, Hudson Dealer at Salem, Oregon. Mechanics can sometimes show Tool Engineers how it should be done. Here is his story and the illustration:

"To save knuckles and tempers when pulling on vibration dampeners with Kent-Moore Tool No. J-483-1, I have made a handle to replace the one that came with the tool. I find it easier and much faster to use.

"This homemade handle does not damage the edges of the holes in the tool and consequently slip off, as does the standard straight handle. Material required is a piece of 1/4th or 3/4th steel rod about 16 inches long, bent and shaped as per attached sketch."

IS EVERY PARTS AND SERVICE EMPLOYEE in your service organization getting a Service Merchandiser each month? It is our desire that a sufficient quantity be shipped to every Hudson Dealer so that each one of his Parts and Service employees may obtain a copy for himself each month.

If any Dealer is not obtaining an adequate quantity from his Zone or Distributor, we ask that he write to them today and ask for the exact number of copies required.

UNIVERSAL JOINT LUBRICATION

For the three Universal Joints of the propeller shaft, an S. A. E. 140 gear oil is to be used. This lubricant should be applied with a hand gun. If applied with a high pressure gun, a relief fitting should be used in order to avoid high pressure and damage to the seals. This is Alemite No. 6247 Hydraulic Extension Coupling.

This applies to all propeller shafts, the Universal Joints of which are fitted with grease valves. The propeller shaft splines should be lubricated with a viscous chassis grease.

PLEASE REMEMBER

Any quantity of all of the following Manuals are available to Zones, Dealers and Mechanics:

Owner Manuals—1942 to 1952 (Over 5—.25 each) Mechanical Procedure Manuals: 1942-1947 ($1.50) — 1948-1952 ($2.00)

Body Manuals—1948-1952 (.75)

Body Manual Supplement—No charge

Simply use the regular parts order form and place your order in the usual manner.

WHEN CLEANING SPARK PLUGS, it will be found that there is a very hard scale on the electrodes that is not generally removed by the sand blast. This scale does interfere with the efficiency of the spark.

The spark plug point file that is used to dress the point gap surfaces bright and parallel should also be used to remove the oxidation scale from the electrode bodies.
KEEPING GASKETS STRAIGHT

Some reports have been received from the Field relative to difficulty in positively identifying cylinder head and other gaskets once the part number tag has become lost.

The answer to keeping gaskets in an attractive, easy for customer to pick out—yet using a minimum space and positive method of identification, is to stock them on a gasket board with an EXACT outline of each and every gasket and showing its part number and usage.

<table>
<thead>
<tr>
<th>Hudson Number</th>
<th>Usage—Model or Year</th>
<th>Cylinder Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>304626 6266 4 A-B, 5 A-B, 6 A-B</td>
<td>Cast Iron</td>
<td></td>
</tr>
<tr>
<td>304627 6267 4 A-B, 5 A-B, 6 A-B</td>
<td>(Wide Water Jacket)</td>
<td></td>
</tr>
<tr>
<td>304669 6268 7 A-B</td>
<td>Aluminum</td>
<td></td>
</tr>
<tr>
<td>304670 6269 7 A-B</td>
<td>Cast Iron</td>
<td></td>
</tr>
<tr>
<td>166240 5063 8 Cyl. 1946-1951</td>
<td>Cast Iron</td>
<td></td>
</tr>
<tr>
<td>166625 6227 8 Cyl. 1946-1951</td>
<td>Aluminum</td>
<td></td>
</tr>
<tr>
<td>300011 6226 1948-49-50 6 Cyl.</td>
<td>Cast Iron</td>
<td></td>
</tr>
<tr>
<td>300065 6345 (Narrow Water Jacket)</td>
<td>Aluminum</td>
<td></td>
</tr>
<tr>
<td>302841 None Also used for 1948-49-50 Cast Iron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>304628 None Also used for 4-5 &amp; 6 A-B</td>
<td>Aluminum</td>
<td></td>
</tr>
<tr>
<td>304671 None Also used for 7 A-B</td>
<td>Cast Iron</td>
<td></td>
</tr>
</tbody>
</table>

The above table of cylinder head gaskets may be of some assistance in identification, having the numbers stamped on the gaskets. Three very important points must be watched by the mechanic when making installation—and before placing cylinder head in position.

CORRECTION

Please refer to Page 289—March 1952 Service Merchandiser. Only the Red Primer Surfacer and the Lacquer Thinner will be furnished in the gallon container. You will delete the entire third column at the top and the first two items of the third column at the bottom of the above mentioned page.

★ FAST CARS MOVE TO THE FRONT ★

Hudsons finished first, second, fourth and fifth at Jacksonville, Florida, 100-Mile race Sunday, March 16. Finishers were in the following order: Teague first; Thomas second; Flock fourth; and Tommy Moon fifth. At one time in race Hudsons were running 1-2-3-4. Accidents prevented ending that way. Four fastest qualifiers were four named drivers. This is third NASCAR race this year, all of which have been won by Hudsons.

FLAT RATE MANUAL—ADDITIONAL OPERATIONS

The following flat rate operations should be written in your manual under the section and number indicated.

There have been requests for these operations which were omitted in error when publishing the "A" Series Flat Rate Manual.

SECTION No. 4 BRAKES

Master Cylinder—Remove and Install
All Models .......................... .5

SECTION No. 10 BODY

Instrument Panel Cluster Assembly—Remove and Install "A" and "B" Series Cars
All Models .......................... 1.3

CONVERTIBLE BODY

Door Window Hydraulic Hose—Remove and Install "A" and "B" Series Cars
All Models .......................... 1.0

SECTION No. 13 ELECTRICAL

Lighting Switch and Circuit Breaker—Remove and Install
All Models .......................... .3

Dimmer Switch—Remove and Install
All Models .......................... .4

Headlight Rim—Remove and Install
All Models .......................... .2

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reasons why it is important that Dealers use this new Program for contacting their wholesale parts customers.

- Encourages Greater Use of Genuine Hudson Parts
- Highlights Hudson Parts' Superiority
- Makes it easier for Garagemen to Identify and Order Parts from You
- Creates good will among Independents—for More Hudson Parts Purchases
- Counteracts Jobber Claims About Their—"Just as Good" Parts
- Assures Correct Reassembly of Hudson Parts
- Assures Better Repair Work by Independents—for Hudson Owner Satisfaction with Hudson Cars
- Gives your Wholesale Parts Customers the Kind of Technical Information They Want and Need
- Illustrates Technical Repair Information