Studebaker

SERVICE BULLETIN

AUGUST NO. 207 STUDEBAKER 1948

In this issue

Beginning the first week of August the graphic midsummer mailing piece illustrated above will be sent to the mailing lists of those dealers who subscribed to the second series of the Studebaker-Donnelley "Selling By Mail" program.

The midsummer piece stresses protection of customers' cars from the extra mileage run during extreme summer temperatures and suggests that when owners try to forget the heat they should remember that their cars need heat protection, too. Specifically brought out as points requiring hot weather attention are lubrication, cooling system, filtering system, brakes, lights, and tires. A message regarding the value of appearance conditioning is also included.

This mailing piece is designed and timed to help dealers maintain a satisfactory service volume during the midsummer weeks and to assist in establishing this as one of four regular seasonal service periods, instead of relying only upon spring and fall conditioning campaigns.

Note to Export Dealers.--*The above is a U.S.A. mailing campaign.*

GET THE NEW OWNER OFF TO A GOOD START

A glow of pride is in the heart of every one who has just purchased a new car or truck. The average new owner has made one of the largest investments of his life. He is convinced of the soundness of his judgment in having purchased a Studebaker and is anxious to have this judgment upheld by satisfactory performance of his vehicle.

One of the first things the new car owner will want to do is to "show off" his car to his family and friends. He will take them for rides to demonstrate the car's comfort, performance, and style characteristics. Should anything go wrong on one of these drives, such as a stalled or unevenly running engine, or inoperative windows or lights, the embarrassment and disappointment the owner feels will be laid directly at the door of the dealer. The owner will lose confidence in the car and blame the dealer for not having checked it carefully before delivery. The task of restoring the owner's pride and confidence in the car and the dealership will then be a job of selling that may be much harder than the original selling of the new car. This can largely be prevented by careful preparation of the car before delivery.

The buyer who experiences trouble caused by improper preparation will soon become an expensive and unhappy customer of the service department, for he will make repeated trips to have this or that item corrected or adjusted gratis. By properly preparing the car before the customer receives it, the dealer can, in most cases, make sure that the customer need not bring his car in for any adjustment until it is time for his 1000 mile checkup.

It is one of the prime responsibilities of the service department in all Studebaker dealerships to use every means at its command to sustain the new Studebaker owner's enthusiasm and pride in his car. Your business will not grow on one-time customers only, but must have customers who come back again and again for the products you sell -- new and used cars, parts and accessories, and service labor. Thus you must do everything you can when making delivery of the new vehicle to assure yourself that the buyer will return to your place of business for all his automotive needs and, of course, for his next new car or truck.

Form H350 - Preparation of New Vehicle for Retail Delivery

One of these forms will be found in the package compartment of every new car and truck you receive from the factory. One side of this card is for use in preparing new passenger cars, and the other, for new trucks.

Get out one of those cards now, and read the instructions at the top. Talk with the men in your new car preparation department and *know how this most important part of the new vehicle sale is being handled.*

1. Are all preparation services checked as having been performed and the lubrication, inspection, and adjustment spaces initialed? Was every item actually examined?
2. Is the check-list section of the card filed by unit serial number in the new vehicle preparation files?
3. Is the check list section transferred to a customer file in the service department when the vehicle is sold?
4. Does every new unit awaiting delivery have the stub tied securely to the steering wheel?

One or more mechanics, as needed, should be assigned to the preparation of new vehicles for delivery and be specially trained in the routine so that they will become increasingly more proficient and skilled in the work as experience is gained.

At The Time Of Delivery

The service manager, or an assistant trained for the purpose, should turn the keys over to the customer along with the Owner's Guide and the Dealer Service Policy properly filled out as to dealer's name, and owner's name, address, date of delivery, and serial number.

This is an important function calling for sincerity, tact, and patience. How well the owner understands the operation of the vehicle, the terms of the warranty, the Dealer Service Policy, or the vehicle's service requirements, will have a direct bearing upon how much of that owner's service business is handled by the selling dealer and consequently how many new Studebakers are sold to him in future years.

The Dealer Service Policy

The owner should understand exactly what benefits this policy offers, what rights he has under the standard factory warranty, and how important the two free adjustment services are to the future operation of his new Studebaker.

The service manager should ask the owner if he expects to be away from the dealership when the adjustment services come due. If that is the case, he should make some arrangement with the owner for the performance of these adjustment services by another authorized Studebaker dealer.

The Owner's Guide (Passenger Cars)

The service manager should explain the purpose of the Owner's Guide. He should outline its general contents, then turn to page 5 of the Guide and, with the owner present, fill in the serial, engine, body, and key numbers. He should fill in the registerable weight of the owner's car and at the same time point out that here will be found data necessary to secure license plates when they are next due.

The service manager should point out the sections in the Owner's Guide pertaining to *instruments and controls, run-in period, and operating the car.* Sections about *lubrication, maintenance and care of the car, and service and adjustments* should be covered next.

The chart on p. 34 representing the basic recommendations for seasonal service should be explained. No matter when the car is bought the next seasonal service time cannot be more than six months away. Inform the owner that you'll notify him at the proper time and convince him that adherence to such a preventive procedure will save him later annoyance, inconvenience, and expense.

After the service manager has gone through the Owner's Guide, he should place it in the package compartment, suggesting as he does so that the owner keep the book in that place for convenient reference. Before he closes the package compartment door, the service manager should draw the owner's attention to the package compartment card explaining how the owner can make use of the erasable record space to keep track of the more frequently required services recorded there.

Driving Demonstration of Use of Controls

After the owner has seen in the Owner's Guide the explanation of the operation of the various driving controls, the service manager should ask him to drive the car and accompany him to offer any other explanations that might be required. It is good insurance for the dealership in preventing irritation of the owner at some later date should he find he has misused or neglected to take advantage of some feature of the car.

The service manager should instruct the owner, during the check-up drive, in the use of such units as the overdrive, hill-holder, Climatizer, and radio, if the car is so equipped. The purpose and operation of *any* optional or special equipment installed on the car should be carefully explained, for many owners will be new to Studebaker cars and many others will never before have had such accessory items on their cars.

The owner should be reminded that he has purchased an item of high intrinsic value and that it represents an investment worth protecting and preserving. It should be made clear that while every component of his automobile is precision made and fitted, later adjustment and care are normally required, since the use of any machine must result in wear of moving parts and also require occasional replacement of oils and greases, battery, and tires. Explain that such items as body finish, the air cleaner and the cooling system, require certain protective measures against weather.

Trip Thru Service Department

Now ask him to step into the shop with you for a few minutes and point out your specialized equipment. As you make the rounds, introduce him to several of the men in the service department to give him an "at home" feeling.

These are not new ideas, nor is it new experience that only good merchants can "keep goods sold". To be able to boast of a continuing record of business progress, all Studebaker dealers should, through never-ending care in rendering good service, create a reservoir of customer good will without which no business dealing directly with the public can succeed.

NEW CIRCUIT BREAKER USED FOR CONVERTIBLE TOPS - 6G, 7G; 14A, 15A

Please record this article on page 18L of 1947 Shop Manual.

SHOP MANUAL CORRECTION

On page 18E, in the fifth paragraph under Electric Motor and Lift Assembly", please mark out the figure "75" and write the figure "30" in the sentence beginning, "A 75-ampere circuit breaker . . . "

Circuit Breakers Used on Convertible Models

From the start of production of 6G-7G Champion and 14A-15A Commander convertible models a 30-ampere circuit breaker has been used to guard the convertible top electric motor against overload.

After convertibles produced May 28, 1948 (approximately Serial Nos. 7G-357250 and 15A-4324500) a new type circuit breaker, Part No. 289246 has been used, replacing Part No. 288957 used previously. The new type circuit breaker should give more uniform performance because it is fully enclosed and protected against the entrance of underhood dust and dirt. The old type breaker was shielded by a perforated housing.

The new type circuit breaker is interchangeable with the old and only the new type, Part No. 289246, is carried in Studebaker service parts stock.

Operation of the 30-Ampere Circuit Breaker

The specification rating of the circuit

breaker at 30-amperes means that it will withstand loads up to and including 30 amperes *indefinitely* without opening. The opening characteristics under loads *above* 30 amperes are specified as follows:

TABLE I

Load in Amperes	Time Required to Open (Seconds) @ 70°-90°F.	
	Maximum	Minimum
40	210	90
50	50	25
60	20	15
90	7	5

Under a given load, therefore, the circuit breaker will not open before the minimum elapsed time given and will not remain closed longer than the maximum elapsed time shown above. Thus the action of the circuit breaker, when given a load in excess of 30 amperes, is to open and close the circuit intermittently. If an overload is put upon the circuit breaker while the top is being either raised or lowered, the breaker will open and close the circuit intermittently, permitting the top to be operated until either completely raised or lowered. Such action of the circuit breaker will, of course, require a longer period for the operation of the top and *is, in any case, a sign of trouble which should be corrected as soon as possible.*

Service Test for Current Draw

A test of convertibles for top raising and lowering characteristics gives the following average data which can be viewed as representative of a normal unit:

TABLE II

Test Point	With Generator Charging	With Engine Turned Off
Voltage at battery	6.7	6.1
Voltage at motor	6.1	5.8
Amperage load (raise or lower)	58-24	58-24
Time (seconds) to raise	12.2	14.0
Time (seconds) to lower	9.1	9.6
Amperage load at stall	87	82

The reason for the variation in current draw during the raising or lowering process is the breaking-over-center characteristic of the bow assembly and resultant tendency of the top to fold itself after this point in travel is reached.

Circuit Breaker Operation Aids Diagnosis

If, upon checking, the current draw in operating the top mechanism is found to be in excess of 60 amperes, abnormal binding or friction in the top assembly or lift mechanism is indicated.

On the other hand, if under loads less than 60 amperes any interruption in operation is encountered due to the circuit breaker's opening, the indication would be that it was not operating within tolerances and replacement of the circuit breaker should be considered.

Assuming that the battery is carrying a normal charge, the top operating system is designed to function whether or not the engine is running. With an undercharged battery the time required to operate the top is increased and, as indicated in Table I, the circuit breaker limits might be exceeded and the breaker might open.

If the top does not raise or lower properly with the engine stopped, the specific gravity of the battery should be checked before any further repairs are attempted. The specific gravity of a satisfactorily charged battery should be between 1.280 and 1.300 at air temperatures of 70° F.

RATTLE AT TRANSMISSION REMOTE CONTROL (GEARSHIFT) LEVER

Please record on page 178 of 1947 Shop Manual.

A rattle caused by vibration of the transmission remote control lever can be corrected by installing a small coil spring, Part No. 524640. To install this spring, remove the gear shift lever, press the spring over the ball at the end of the lever and reassemble the lever to the steering column.

The new spring went into production at Serial No. G-343788 on the 7G Champion model and Serial No. 4311597 on the 15A Commander Model.

BIND IN CONVERTIBLE DOOR WINDOW - 7G, 15A

Please record on page 18L of 1947 Shop Manual.

Should either door window glass of the 7G or 15A convertible model bind in its travel or jam before reaching a fully raised or lowered position, the following checks and corrections should be performed:

1. If the window operates hard, i.e., with some strain upon the window regulator handle, loosen the regulator screws and adjust as explained on page 18B of the 1947 Shop Manual. Lubricate the glass runs with powdered graphite.
2. Inspect the leatherette door window frame front guide liner in the ventilator assembly. If the liner is torn or crumpled, replace it with Part No.

1865x-34-1/16 Door Window Frame Front Guide Liner, as follows:

a) Remove the door window ventilator assembly from the door and place it in a vise with the channel at the top and horizontal.
b) Use masking tape or putty to close both ends of the channel.
c) Fill the channel with toluol, xylol, or lacquer thinner.
d) Allow the solvent to remain in the channel for 10 to 15 minutes, then pour it out. Note.--If lacquer thinner is used, more time will be required to soften the cement. Remove the masking tape and the door window stop located in the top end of the window guide channel. Use a wire with a hook bent in the end to pull the old guide liner out of the channel.
e) With a rag and the piece of wire, clean out the channel.
f) Insert the new guide liner as soon as the cleaning operation is complete. *It is necessary that this be done at once before any cement remaining in the channel has a chance to harden.*

3. If Steps 1 and 2 above do not result in free operation of the door window, it will probably be necessary to replace the entire ventilator assembly with Part No. 286502 Right Door Ventilator Outer Frame and Liner 1865X-34-1/16 or Part No. 286503 Left Door Ventilator Outer Frame and Liner 1865X-34-1/16.

The parts listed above should be ordered from your nearest parts depot.

WATER LEAKS AT TOP HEADER -- 7G, 15A CONVERTIBLE MODELS

This is a reprint of Passenger Car Service Letter No. 777, June 3, 1948, which may now be discarded from your files.

Please record this article on page 18L of 1947 Shop Manual.

If water should leak into the driver's compartment of convertible models at either corner of the top header, it must first be carefully determined at just what point the water enters before a correction can be effected.

Leak Around Windshield Fence

DESCRIPTION: Occasionally the header weatherseal is pulled too tight before it is cemented into place, causing a poor seal of the corner in the channel. See Point A in Fig. 1. In such cases, water may work behind the weatherseal and down the inner side of the windshield post or glass and drip from the instrument panel. HOW TO FIND: With the top raised and locked and the windows closed, spray

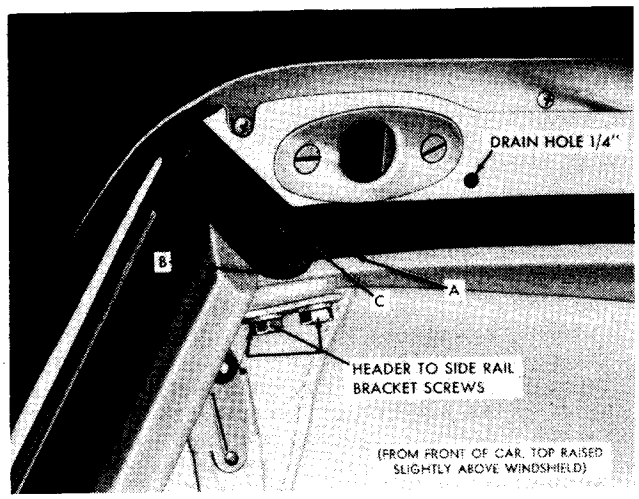

FIG. 1

water over windshield and along the top cover across the header. Inspect the inner sides of the windshield posts and glass for signs of water leaks. HOW TO CORRECT: Lower the top. Remove the weatherseal from its channel to a line even with the inner end of the top pilot escutcheon plate. Cement a piece of 5/16" rubber weatherstripping, Part No. 1587XD, about one inch long around the outer edge of the corner of the channel (Point C in Fig. 1). Recement the header weatherseal in the channel and be careful not to pull it toward the outer ends of the header. A slight amount of bulking of this weatherseal at the bend is important to assure a tight seal with the windshield fence.

Leaks at End of Front Side Rail

DESCRIPTION: Water may leak into the header through the welding seams until enough accumulates to overflow the inner edge of the cavity in the header-to-side rail bracket (see Fig. 2) along the rear inner edge of the bracket, and into the driver's compartment at Point B in Fig. 1. HOW TO FIND: With the top raised and

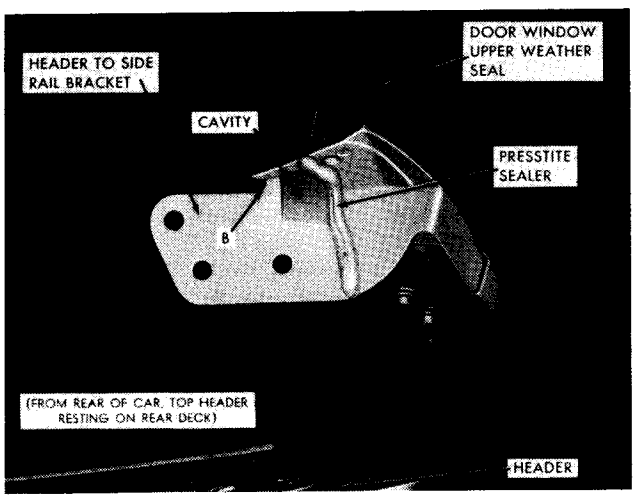

FIG. 2

locked and windows closed, spray water over header in sufficient quantities to permit it to build up as described above and test inside car for water running down windshield post or glass. Test both sides of the car. HOW TO CORRECT: Lower the top until it rests on the rear deck. Pull back enough of the door window upper weatherseal (see Fig. 2) to expose the Phillips head metal screw in the weatherseal retainer and remove this screw. Lift the rubber retainer gasket and the metal retainer *(do not bend retainer)* sufficiently high to permit removal of the large flat head screw which secures the bracket to the under side of the header. Remove the three hex head screws holding the bracket to the interior face of the header (see Fig. 2). Let the header rest on the rear deck and raise the side rail sufficiently to permit application of a doubled ribbon of Presstite sealing compound between the hole for the flat head screw and the edge of the cavity (see Fig. 2), straight back along the inner face of the bracket to the inner end of its curved edge. (Presstite available through Parts and Accessories Division under Part No. S-645.)

Reassemble header to the front side rail bracket and drill a 1/4" drain hole approximately 1/2" from the inner end of each header pilot escutcheon plate and 1/4" forward from the inner edge of the header weatherseal. Note.--These drain holes are currently provided in production.

DOOR OPENING WEATHERSTRIP CHANGE ON 7G AND 15A CONVERTIBLE MODELS

Please record on page 18L of 1947 Shop Manual.

Effective with Convertible Model Body Serial No. S-3692 (7G) and No. S-3708 (15A), the door opening weatherstrip, rear lower, has been changed to provide a tighter seal at the junction of the door window and the rear quarter window.

The new seal, Part No. 289208 (right) and 289209 (left) is installed with a screw, Part No. 633-#6-8U, and a finish washer, Part No. 373-#6U.

The new seal, screw, and finish washer are available from your nearest parts depot. Stock on hand of Part No. 1754X36 Weatherseal, No. 639-#6-8U screw, and Part No. 287756 clip should be retained for use on service of the door opening weatherstrip, front lower.

BORG CLOCK WARRANTY, SERVICE PROVISIONS

This article contains the latest list of Borg Service Stations. Please mark out similar information in Service Bulletins No. 175, page 1, and No. 191, page 4, and make a reference note to this article.

Borg electric clocks supplied by the Studebaker Parts and Accessories Division can be returned to the Studebaker factory during the standard 90 day or 4,000 mile warranty period for warranty service under the terms of the CLAIMS POLICIES AND PROCEDURES bulletin.

For warranty or other service outside the Studebaker warranty period the Borg procedures, as printed in this article, should be followed.

The clock is guaranteed for six months. During this period, Borg service stations will replace or repair the unit on a no charge basis providing the clock has not been abused, tampered with, or repaired by anyone other than authorized Borg service stations listed below.

For clocks over six months of age, a service charge of $2.50 each, plus necessary parts and postage, will be made.

For clocks over five years old a service charge of $3.00 each, plus necessary parts and postage, will be made.

The Borg Products division requests that for major repairs clocks be sent to the Clock Division, George W. Borg Corporation, 469 E. Ohio St., Chicago, Illinois.

Clocks requiring general non-factory service such as cleaning, oiling, and adjusting may be sent to the nearest of the following authorized service stations:

EASTERN STATES

Automotive Clock Repair Co.
1355 West Farms Road
Bronx 59, New York

Boston Speedometer Service Co.
116-120 Brighton Avenue
Boston 34, Massachusetts

Buffalo Auto Clock Service
179 Kingsley Street
Buffalo 8, New York

Instrument Service Co.
Room 55, 1110 F. St., N. W.
Washington 4, D. C.

Roemer & Zeller
307 Washington Ave.
Albany, New York

SOUTHERN STATES

Electric Clock Service
3039 N. W. 7th Ave.
Miami 37, Florida

Speedometer Service Co.
960 Spring St., N. W.
Atlanta, Georgia

Tolbert Auto Clock & Instrument Service
1673 Evelyn Street
Memphis, Tennessee

World Radio Technicians
225 Dauphine Street
New Orleans, Louisiana

SOUTHWESTERN STATES

Fred Jones, Inc.
200 South Harvey
Oklahoma City, Okla.

Speedometer Service Co.
810 Macon Street
Fort Worth, Texas

Sweeney Radio & Clock Co.
3920 South Prensa
San Antonio 4, Texas

MIDDLE WESTERN STATES

The George W. Borg Corporation
Factory Service Department
469 E. Ohio Street
Chicago, Illinois

Clark Bros. Instrument Co.
10300 Whittier Ave. & Somerset
Detroit 24, Michigan

Empire Clock Company
93 E. Fifth Street
St. Paul 1, Minnesota

Schreiber Auto Clock Service
1610-12 W. Center Street
Milwaukee 6, Wisconsin

Cleveland Instrument Service Co.
7400 Euclid Avenue
Cleveland 3, Ohio

Jack Harrison's Speedometer Service
3126 Locust Street
St. Louis 3, Missouri

WESTERN STATES

Deluxe Speedometer & Radio Service
1410-12 Speer Boulevard
Denver 4, Colorado

Donovan's Auto Clock Service
6811 Melrose Avenue
Hollywood, California

Graf's Automobile Clock Service
533 E. 12th Street
Oakland 6, California

Graf's Automobile Clock Service
895 E. Orange Grove Avenue
Pasadena, California

Graf's Automobile Clock Service
4921 Santa Monica Blvd.
Los Angeles 27, California

Smith's Clock Shop
1016 W. Adams
Phoenix, Arizona

Sturgill-Wright Instrument Co.
701 S. E. Grand Ave. at Alder
Portland, Oregon

Time & Instrument Co.
57 Richards Street
Salt Lake City 1, Utah

CANADA

Auto Electric Limited
3429 Park Avenue
Montreal, Canada

Auto Electric Service Co., Ltd.
1009-1027 Bay Street
Toronto 5, Canada

Beattie Auto Electric Limited
176 Fort Street
Winnipeg, Canada

Boultbee, Limited
1025 Howe St.
Vancouver, Canada

Loveseth, Ltd.
Jasper Ave. at 106
Edmonton, Alberta, Canada

FOREIGN COUNTRIES

G. Vozary
Rua' Cons Nebias, 27
Caixa Postal, 5052
Sao Paulo, Brazil, S. A.

Adolph Kusterer
Zimmergasse 9
Zurich 8, Switzerland

G. Bottcher
Appareils De Controle
Berchem-Anvers, Le
Avenue Lode Van Bercken, 92
Antwerp, Belgium

TRUCK SERVICE ITEMS

RADIOS FOR 1949 MODEL TRUCKS

Effective March 31, 1948, all radios shipped from the factory included felt sealing strips around the automatic push buttons inside the dial baffle. This sealing felt prevents entry of air around the push buttons when the radio is installed in the 2R Series trucks.

In order to identify these radios, a large letter "F" was stamped on the outside of the packing carton adjacent to the part number identification.

Only radios bearing this letter "F" on the packing carton should be installed in 2R Series trucks. In about 90 days we will discontinue placing the letter "F" on the cartons since by that time all radios without the felt will probably have been used.

FOUR TRUCK QUESTIONS AND ANSWERS

In the latest Master Mechanic examinations there were ten questions relating to M Series trucks. Of these ten, the four most frequently answered incorrectly are printed below with the correct answers (X).

1. When reinstalling brake shoes on the backing plate, how much clearance should there be between the brake shoe and the guide bolt washer?

____.005"	REFERENCE: Subject was covered in 1947 Truck Service Clinic and also in the adjustment instructions on the Wagner Form H.U.-232.
__X__.010"	
____.016"	

2. What is the minimum vacuum necessary in the two-speed rear axle to insure proper shifting?

____5 inches	REFERENCE: M Series Truck Shop Manual, page 124B, last item on page.
__X__15 inches	
____12 inches	

3. How is the shift collar of the two-speed rear axle adjusted?

____set screws	REFERENCE: M Series Truck Shop Manual, page 119, Fig. 62.
____adjusting nuts	
__X__shims	

4. When installing the universal joint flange on the M15A rear axle pinion shaft, the key should be installed

____before placing flange on shaft	REFERENCE: Service Bulletin No. 201, page 2.
__X__after placing flange on shaft	

SERVICE EQUIPMENT

PEERLESS POWER TIMING LIGHT

A catalog insert sheet describing the Peerless Model A6 power timing light is enclosed with this issue of the Service Bulletin.

The Peerless Model A6 light has a gooseneck extension on the stroboscopic light so that the light may be aimed at the timing marks and left in position, thus freeing both hands of the operator for making any necessary adjustments.

The stroboscopic light is a special type of neon light which flashes at the moment current flows to spark plug in No. 1 cylinder. When the light is aimed at the timing marks on the vibration damper, each flash has the visual effect of stopping the damper so that the marks appear to be stationary. Thus, by observing the position of the marks in relation to the pointer, as seen with each flash of the timing light, it is possible to adjust the ignition timing so that the marks appear exactly in line with the pointer (see page 55 in 1947 Shop Manual).

The Model A6 operates on both 6-and 12-volt systems and is compact, weighing only five pounds. It can be used with any 105-125 volt 50-60 cycle A.C. outlet.

The Peerless Power Timing Light is available from all Cornwell Tool representatives or direct from Cornwell Tool Company, 4548 Milwaukee Avenue, Chicago 30, Illinois.

Note.--*Export dealers may order from The Studebaker Export Corporation.*

GAUTHIER GASOLINE MILEAGE TESTER

Enclosed with this issue of the Service Bulletin is a description and order form for the Gauthier gasoline mileage tester known as the Vacomat.

Gasoline mileage testers have two important uses: they can dispel all question in the owner's mind as to what kind of mileage he is getting from his car, and they are useful to the serviceman for testing before and after finishing his work.

The Vacomat is quickly installed on the car and tests gasoline consumption per mile with an accuracy of 99.6%, according to the manufacturer. It consumes only one-tenth of a gallon of gasoline for the test.

Vacomat sells for $12 with standard fitting adapters for *most* cars or trucks; for $13.50 with adapters to fit *all* cars and trucks. If check accompanies order, Vacomat is shipped prepaid; otherwise, it is shipped C.O.D.

Note.--*Export dealers may order from The Studebaker Export Corporation. The trial offer is, of necessity, limited to U.S.A.*

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