

1951 - 1952 - 1953

Pam file

*Automobile mechanics manual
Domestic*

Henry J

**SHOP
MANUAL**



KAISER-FRAZER SALES CORPORATION
WILLOW RUN, MICHIGAN, U.S.A.

53

~~MAIN~~

reference
collection
book

MAIN

SHOP MANUAL

for

Henry J

1951 - 1952 - 1953

Models

K-513, K-523, K-533 (4 Cylinder Engine)

K-514, K-524, K-534 (6 Cylinder Engine)

KAISER-FRAZER SALES CORPORATION

1/
Willow Run, Michigan

LINDA HALL LIBRARY
5109 CHERRY
KANSAS CITY 10, MISSOURI

INTRODUCTION

Information in this manual has been compiled for use by Kaiser-Frazer servicemen and mechanics to assist them in efficiently servicing and repairing Henry J automobiles.

This Shop Manual contains general information, data, and procedures relative to vehicle maintenance, overhaul and repair for the models listed on the title page. Operating information of interest to an owner or driver is covered in separate manuals furnished with each new vehicle.

The following page defines the scope of the manual and provides an explanation of the contents. Familiarity with this information will increase the usefulness of this manual and facilitate locating desired information.

WARRANTY

The following A.M.A. UNIFORM WARRANTY applies to all Henry J automobiles:

"The Manufacturer warrants each new motor vehicle manufactured by it to be free from defects in material and workmanship under normal use and service, its obligation under this warranty being limited to making good at its factory any part or parts thereof, including all equipment or trade accessories (except tires) supplied by the Motor Vehicle Manufacturer, which shall, within ninety (90) days after making delivery of such vehicle to the original purchaser or before such vehicle has been driven four thousand (4,000) miles, whichever event shall first occur, be returned to it with transportation charges prepaid, and which its examination shall disclose to its satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied and of all other obligations or liabilities on its part, and it neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of its vehicles.

"The Warranty shall not apply to any vehicle which shall have been repaired or altered outside of an authorized Kaiser-Frazer Service Station in any way so as, in the judgment of the Manufacturer, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident."

144
 8679.287
 K13h
 1951-53

INDEX

This Shop Manual is conveniently divided into Sections as listed in the column at the right along with the page on which each Section begins. To use this manual, turn to the first page of the Section that would logically include the desired information. Select the item desired from the Table of Contents appearing on that page and turn to the page indicated for it. On small or detailed items which cannot be found in the Table of Contents, refer to the alphabetical index which is found on the last few pages of this manual.

REFERENCES IN THE TEXT

References are sometimes made in the text of this manual to other subject headings within the Section, or to other Sections of the manual. To quickly find a subject within the same Section, turn to the first page of the Section, select the desired subject heading, and turn to the indicated page. If the reference is to another Section of the manual, turn to the first page of that Section, select the desired subject from the detailed list, and turn to the indicated page.

SERVICE BULLETINS

Service Bulletins are issued from time to time to supplement information in this manual. They should be filed in the Service Bulletin binder for future reference and noted in the appropriate place in this manual.

SPECIAL TOOLS

The use of special tools is frequently called for in this text. Illustrations are provided to show the application of these tools, with the tool identified by name and number. In addition, a complete list of all essential and desirable special tools is provided in Section 18, "Service Tools."

SERVICE STANDARDS

Specifications and recommended limits, for fitting or adjusting parts or units, are provided throughout this text. These recommendations must be carefully followed to obtain the utmost in performance and service from the automobile.

SERVICE DIAGNOSIS

Information on Service Diagnosis, or "trouble shooting" is provided at the end of many of the Sections in this manual. These tabulations of trouble symptoms, together with possible causes, will be helpful to the serviceman when diagnosing service difficulties.

PARTS NOMENCLATURE

Part names as used throughout this manual are the same as used in the Parts Lists. This assures more positive identification of parts when using the Shop Manual and the Parts List together. Illustrations in the applicable Parts List may be used effectively to supplement the manual, especially when detail parts identification is required.

Section No. Page

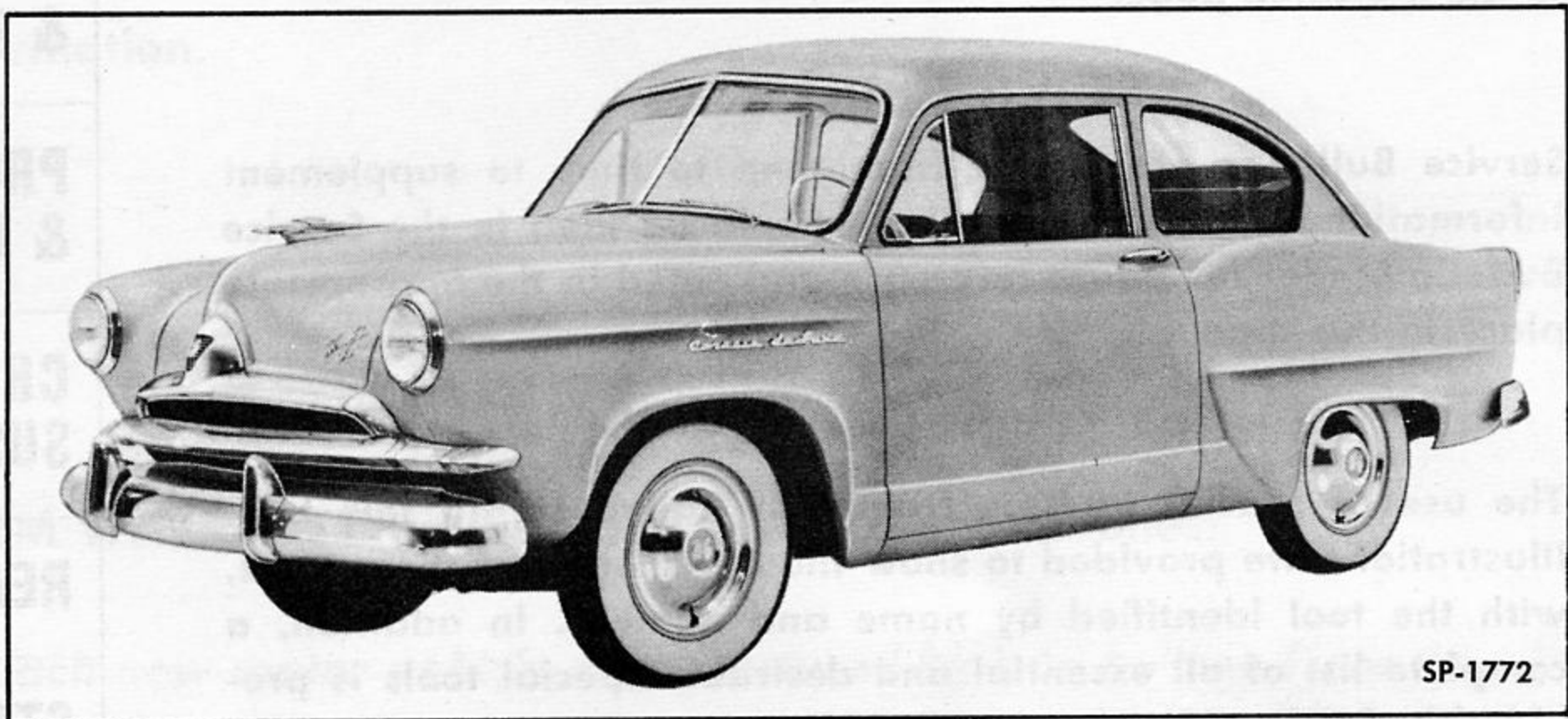
| | | |
|--|-----------|------------|
| GENERAL INFORMATION | 0 | 1 |
| ENGINE TUNE-UP | 1A | 7 |
| ENGINE REPAIR | 1B | 13 |
| FUEL | 2 | 39 |
| EXHAUST | 3 | 51 |
| COOLING | 4 | 55 |
| CLUTCH | 5 | 65 |
| TRANSMISSION & OVERDRIVE | 6 | 73 |
| PROPELLER SHAFTS & UNIVERSAL JOINTS | 7 | 91 |
| CHASSIS SUSPENSION | 8 | 95 |
| REAR AXLE | 9 | 109 |
| STEERING | 10 | 119 |
| BRAKES | 11 | 129 |
| WHEELS & TIRES | 12 | 137 |
| FRAME | 13 | 145 |
| BODY & SHEET METAL | 14 | 149 |
| ELECTRICAL | 15 | 169 |
| INSTRUMENTS & ACCESSORIES | 16 | 207 |
| LUBRICATION | 17 | 211 |
| SERVICE TOOLS | 18 | 219 |





SP-1771

Fig. 1—Henry J Models K-513 and K-514



SP-1772

Fig. 2—Henry J Models K-523 and K-524



SP-1773

Fig. 3—Henry J Models K-533 and K-534

SERIAL AND IDENTIFICATION NUMBERS

Delay and confusion can often be avoided if the correct information on engine number, car serial number or body code number is furnished on parts orders and correspondence. This information is also used for car registration and for positive identification of cars. The locations of the identification numbers on Henry J automobiles are shown in Fig. 4. Close up views of

typical numbers and plates are shown in the other illustrations on this page.

The paint number on the body code number plate must be used to obtain paint to match the original color. The trim number on the body code number plate must be used when ordering replacement trim parts from the factory.

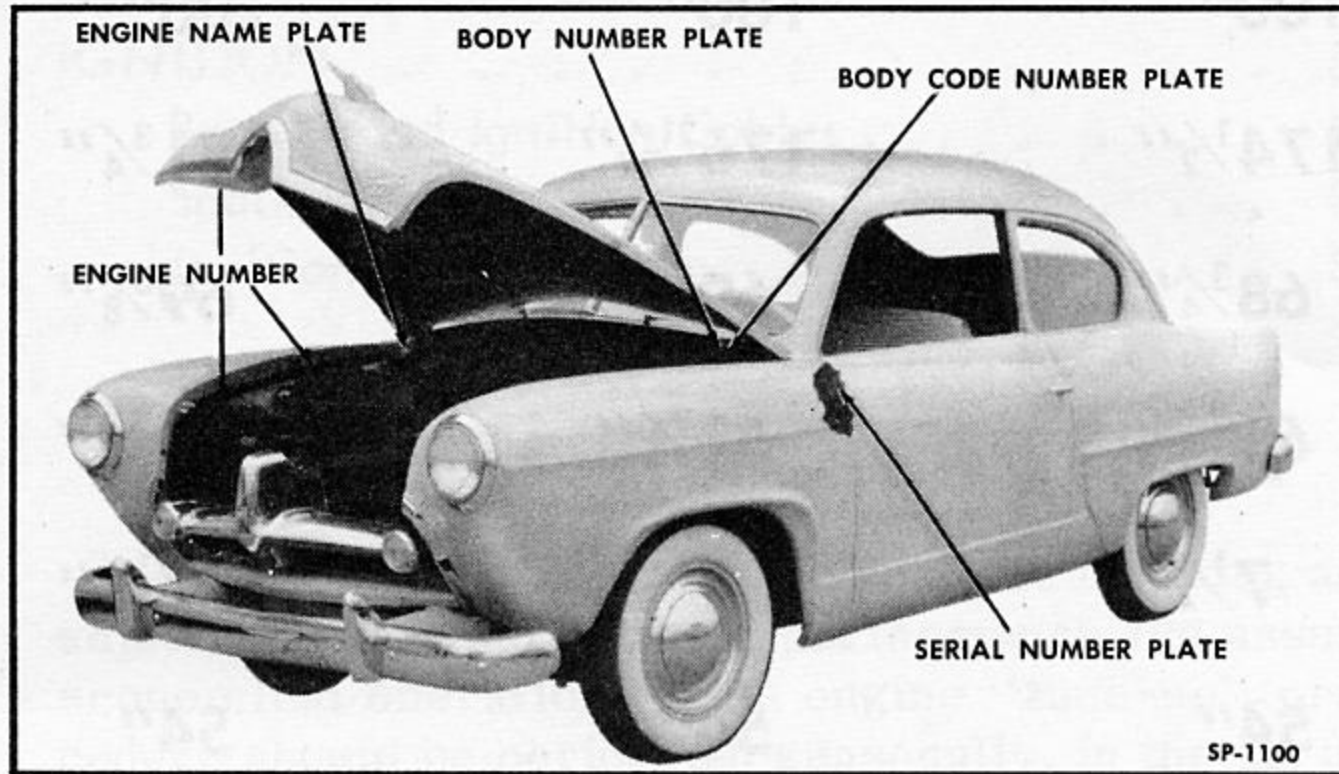


Fig. 4—Location of Identification Numbers

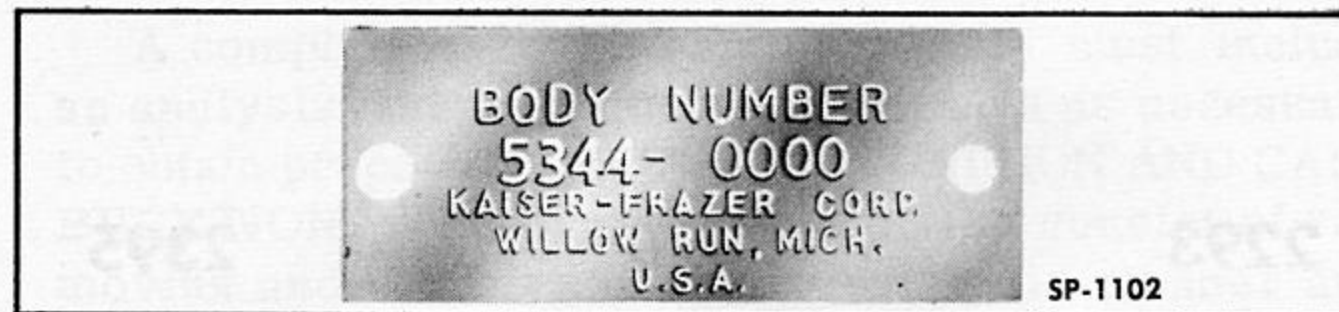


Fig. 5—Body Number Plate

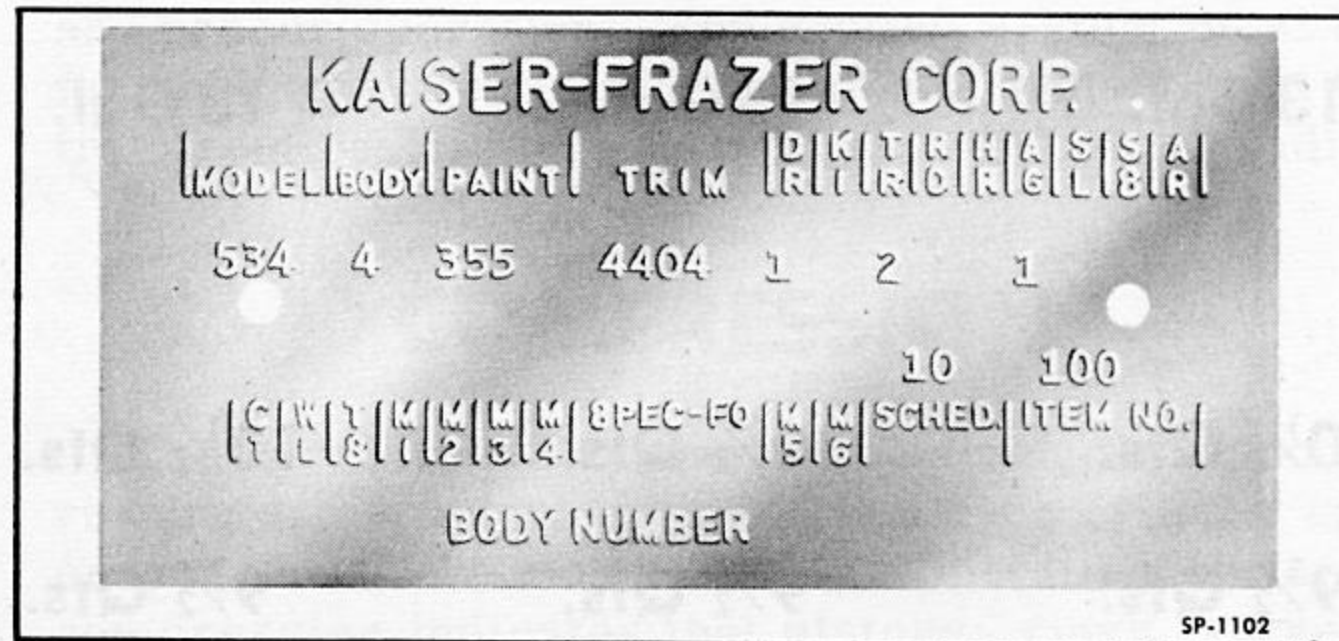


Fig. 6—Body Code Number Plate

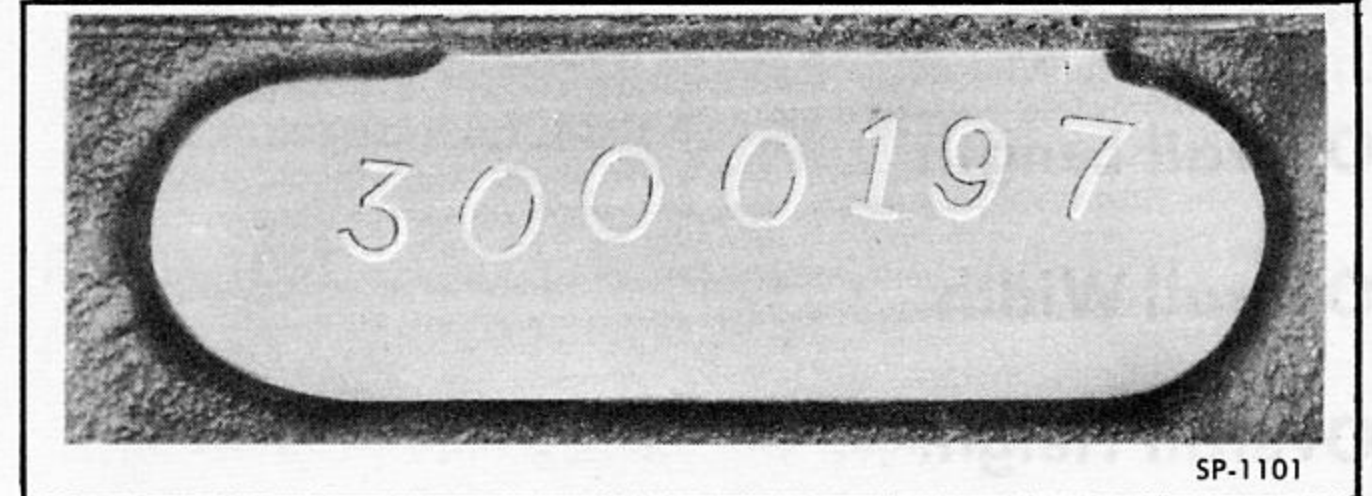


Fig. 7—Engine Number



Fig. 8—Engine Name Plate

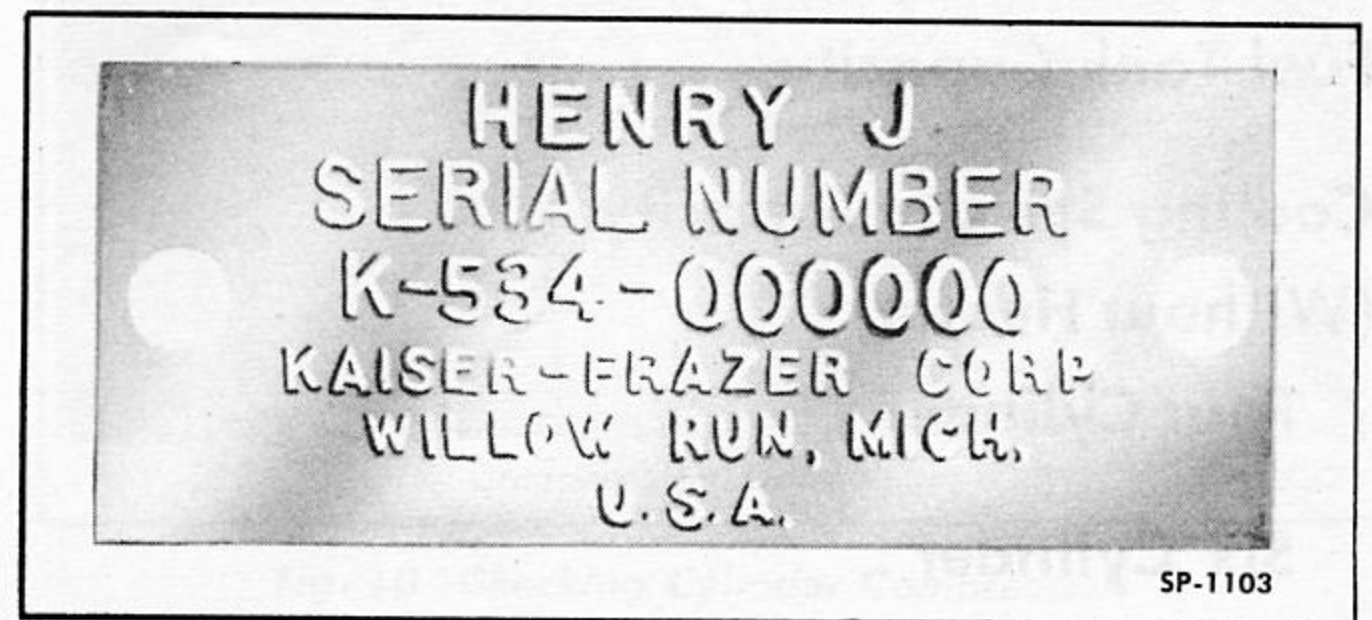


Fig. 9—Serial Number Plate

OTHER IDENTIFICATION NUMBERS

Model or serial numbers, located conspicuously on the unit or on a nameplate attached to the unit, are useful in identifying units or assemblies as referred to in the text of this manual. It is sometimes necessary to indicate these numbers when ordering replacement parts.

The transmission, generator, starting motor, distributor and carburetor are typical units which have separate identification numbers, readily checked by visual examination of the unit.

GENERAL SPECIFICATIONS

| | <u>1951</u> | <u>1952</u> | <u>1953</u> |
|---|----------------------------------|-------------------------------------|----------------------------------|
| Wheelbase..... | 100" | 100" | 100" |
| Overall Length..... | 174½" | 176 ²¹ / ₃₂ " | 181¾" |
| Overall Width..... | 68¾" | 69¾" | 69¾" |
| Overall Height..... | 61 ⁷ / ₈ " | 61 ⁷ / ₈ " | 61 ⁷ / ₈ " |
| Minimum Road Clearance..... | 7½" | 7½" | 7½" |
| Tread (Front and Rear)..... | 54" | 54" | 54" |
| Turning Radius..... | 17½' | 17½' | 17½' |
| License Weight: | | | |
| Four Cylinder..... | 2293 | 2370 | 2395 |
| Six Cylinder..... | 2341 | 2405 | 2445 |
| Fuel Tank Capacity..... | 13 Gal. | 13 Gal. | 13 Gal. |
| Cooling System Capacity (Without Heater) | | | |
| Four Cylinder..... | 10½ Qts. | 10½ Qts. | 10½ Qts. |
| Six Cylinder..... | 9½ Qts. | 9½ Qts. | 9½ Qts. |

ENGINE DATA

General data on the engines used in Henry J automobiles is provided in Section 1-B, "Engine Repair."