PACKARD

Service Counselor

PARTS ★ ACCESSORIES ★ PRODUCT ★ PROFITS

INSTITUTIONAL PROMOTIONAL

APPROVED Packard SERVICE

VOL. 20, NO. 9 SEPTEMBER, 1946

BLUE CORAL CONTEST REPORT

THROUGH SEPTEMBER 15

ZONE RANKING

Zone	*Per Cent of Quota*
Phoenix	252.6
Cincinnati	219.5
Boston	201.1
St. Johnsbury	197.1
Milwaukee	173.0
Buffalo	168.1
St. Paul	166.4
Cleveland	156.1
Reno	148.5
Minneapolis	148.1
Philadelphia	145.6
Portland	144.4
New York	137.7
Los Angeles	136.6
Average	133.5
Atlanta	128.5
Salt Lake City	123.7
Detroit	119.6
San Francisco	118.5
Washington	112.2
Kansas City	109.5
Chicago	107.6
Dallas	106.7
ABOVE QUOTA	
Albany	92.7
Pittsburgh	88.9
St. Louis	78.8
Seattle	78.8

Only four Zones are still below average and we hope the last period reports puts them in the running. Get your final reports in on time and we will go to work on prizes. Who finishes in the money is up to you.

REGIONAL RANKING

SOUTHEASTERN	169.6
EASTERN	149.0
GREAT LAKES	129.5
PACIFIC	127.7
MIDWESTERN	123.1
SOUTHWESTERN	101.6

TUNE UP CHART

A copy of the Packard Tune-Up Specification and Adjustment Chart was enclosed in the Service Manager's copy of the August issue of the Service Counselor. The chart provides a handy ready reference of specifications and adjustments pertaining to servicing the distributor, spark plugs, regulator, carburetor, fuel pump, and tappets. The chart is intended to help the Packard Serviceman, tune-up and carburetor specialist, perform more accurate tune-up jobs.

Additional copies of the Tune-Up Specification and Adjustment Chart may be obtained by requesting them through the Packard Zone.

SERVICE MANAGER'S PERSONAL COPY

OIL PRESSURE GAUGE AND SENDING UNIT

21st Series

Recently we have been receiving reports of instrument panel oil pressure gauges or oil pressure gauge sending units that are either inoperative or that fail to properly register the engine oil pressure.

Most of the oil pressure gauge sending units returned as defective are found to function properly when tested, which indicates that the trouble was in the wiring circuit and was corrected when the unit was changed.

If oil pressure readings are above or below normal, the electrical wiring circuit should first be checked before replacing either the pressure gauge or the gauge sending unit. Loose connections or poor grounds will result in incorrect oil pressure readings.

The gauge sending unit on the engine is of the rheostat type and contains a flexible diaphragm, the movement of which is controlled by engine oil pressure. Therefore, any variation in oil pressure will vary the amount of current flowing to the pressure gauge.

The operation of the oil pressure gauge in the instrument panel is controlled by the amount of current transmitted to the gauge by the sending unit. This pressure gauge unit also incorporates a current bypass to stabilize the movement of the indicator hand.

If the pressure gauge shows a low, high, or an erratic reading, the electrical circuit may be checked in the following manner:

Low Pressure

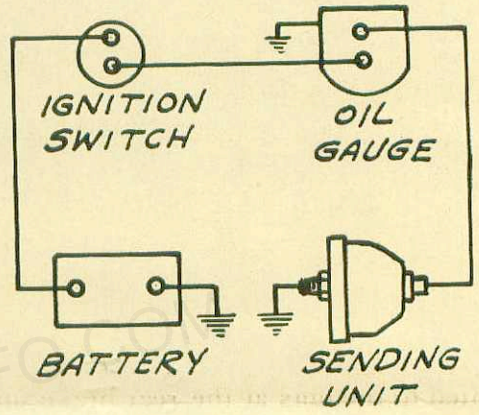
A low oil pressure reading generally indicates a loose wiring connection or a poorly grounded sending unit. This will reduce the amount of current flowing to the pressure gauge and the gauge will then indicate a lower pressure than is actually being transmitted by the sending unit.

If this condition exists, the connections and wiring at both the pressure gauge and the sending unit should be checked for tightness.

High Pressure

A high oil pressure reading usually indicates a poor ground at the oil pressure gauge case. A poor ground at this point will reduce the amount of current flowing through the bypass thereby causing the gauge to indicate a higher pressure than is actually being transmitted by the sending unit.

When this condition exists, the gauge should be checked for tightness in the case since a loose gauge will not provide a proper ground for the electrical circuit. If the gauge is found to be tight there is still the possibility of the gauge not being properly grounded. The simplest correction for this is to place a drop of solder on the back of the gauge to insure positive contact between the gauge and instrument case.



Erratic Pressure

An erratic or fluctuating pressure reading may be the result of either a loose connection or a poor ground and may be corrected by following the corrective measures mentioned in the preceding paragraphs.

Sending Unit

The sending unit can be checked for proper operation by turning on the ignition switch and jumping a wire from the sending unit terminal to the crankcase. If the pressure gauge indicator moves to the extreme limit of its travel, the sending unit is defective and will have to be replaced since it cannot be repaired in the field.

REAR AXLE OIL LEAKS

21st Series

Oil leakage at the differential carrier, or at the rear brake support plates, if not corrected in time, will eventually lead to serious damage to the differential gears and bearings.

Emil

One of the more common causes of oil leakage at these points is that of loose retaining nuts. To guard against the possibility of this condition existing, a new self-locking nut, known as the "Boots Tri-Lok" nut, has been released for production and is also available for Service.

These nuts do not require lock washers, and they can be removed and re-used repeatedly without losing their locking characteristics or damaging the threads of the bolts from which they were removed.

You may occasionally find that an oil leak still persists at the differential carrier retaining nuts even though the nuts are securely tightened. This is caused by the oil working past the copper gasket behind the bolt head, following the bolt, and emerging between the nut and the differential case flange.

This condition can be corrected by removing the retaining nut, installing copper gasket Part No. 237673, and a thin steel washer such as Part No. 221009, between the copper gasket and the nut.

The "Boots Tri-Lok" nut may be ordered under Part No. 395150. When installing these nuts, a torque of 360 to 400 inch pounds should be applied to the nuts at the rear brake support plates and a torque of 350 to 380 inch pounds at the differential carrier.

RAISING CLIPPER STEERING WHEEL

All Clippers

Some owners find it more comfortable to drive with a higher steering wheel than is standard.

This change can be accomplished on the Six and Eight by installing the Super Eight steering column to dash bracket. This bracket is shorter than those used on the Six and Eight and raises the steering wheel approximately one inch.

When this bracket is changed, the steering gear to frame bolts should be loosened before attaching the bracket cap to be sure that the alignment of the gear is correct.

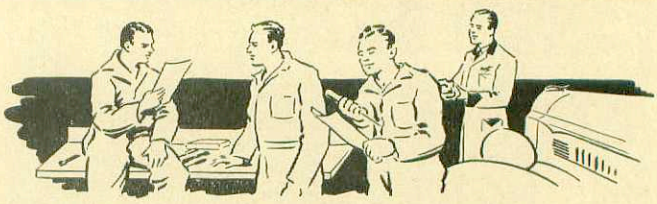
If any strain on the column is evident the bolt holes in the gear should be slotted just enough to permit free entry of the bolt.

The Super Eight column cannot be raised but in some cases the front seat track to floor shim can be removed which will give added clearance between the seat and the steering wheel.

The Super Eight steering column to instrument board bracket may be ordered under part number 384787.

"QUIZ TEST"

HOW MANY DO YOU KNOW— without looking at the answers?



1. The purpose of the vent holes in the distributor cap is:
   (a) to prevent arcing at the contact points. ☐
   (b) to prevent pressure from being built up inside the distributor. ☐
   (c) to provide an opening for oiling the breaker cam. ☐
   (d) to provide ventilation of the cap, and thus help prevent formation of nitric acid corrosion. ☐

2. When soldering electrical connections it is recommended that:
   (a) acid flux be used. ☐ (b) rosin flux be used. ☐
   (c) borax be used. ☐ (d) no flux be used. ☐

3. A sooty or carbon deposit which turns the spark plug insulator to dark brown or black can be an indication of: (a) a mixture that is too rich. ☐
   (b) excessive oil consumption. ☐ (c) too cool type spark plug. ☐

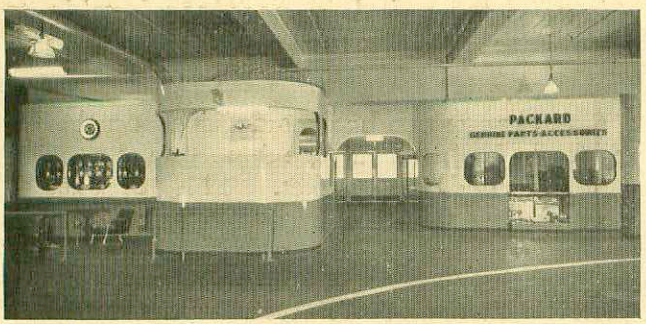
4. A miss in two adjacent cylinders of an engine is usually an indication of:
   (a) a blown cylinder head gasket. ☐ (b) spark plug gap too small. ☐
   (c) valve tappet clearance too great. ☐ (d) an intake manifold leak. ☐
   (e) a lean idle mixture. ☐

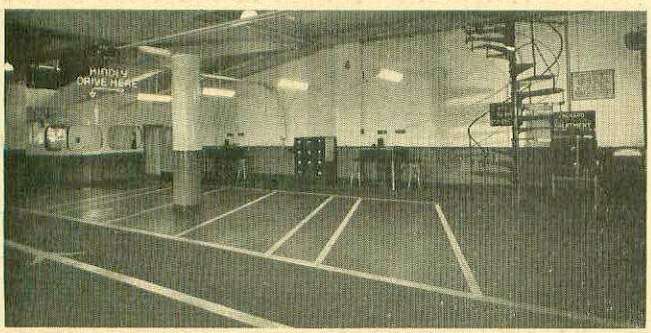
For Answers, See Back Page.

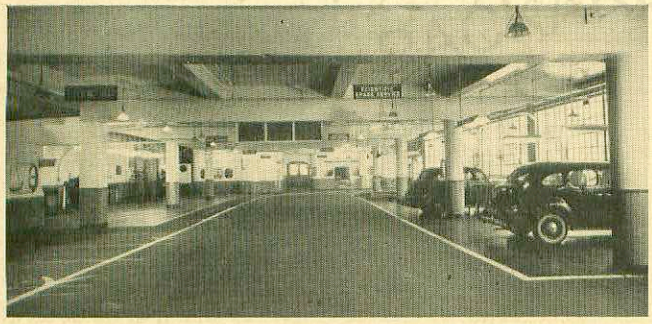
IMPROVED SERVICE FACILITIES IN CHICAGO

A modern and most pleasing appearance has been obtained at Evanston, Ill. with an eye to the most practical use of space. Flow of work and convenience in handling volume has received careful consideration in locating each activity.

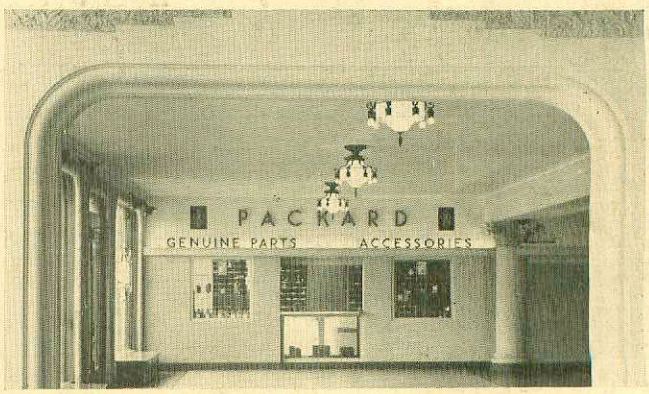
Note particularly the Service Production Control and the Parts and Accessory Departments at the customer entrance in the first picture. No. 2 is the order writing space. No. 3 is a view from the opposite end of the reception floor.

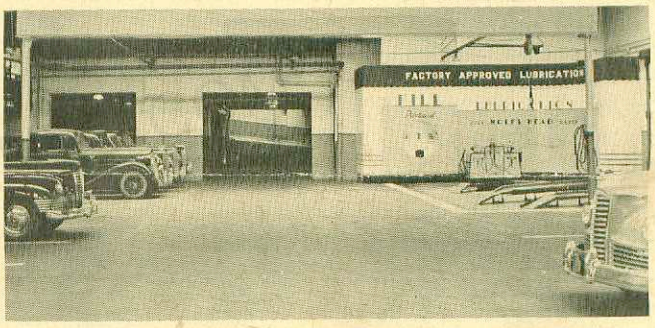






EVANSTON, ILL.





OAK PARK, ILL.

Picture No. 4 shows the beautiful new Parts and Accessory store in the showroom of Oak Park, Illinois, and No. 5, is their lubrication department. An exceptionally fine job at both places.

QUIZ QUESTION ANSWERS

1. ANSWER: (d) The arcing of the distributor between the rotor and the radial contacts creates a nitreous gas, which when condensed, turns to nitric acid. Nitric acid causes corrosion in the distributor. The vent holes allow the gas to escape, and by doing so, help to prevent corrosion.

2. ANSWER: (b) Rosin flux is recommended. Acid flux should never be used, since the acid will cause corrosion of certain metals, and destroys insulators.

3. ANSWER: (a), (b), and (c). Any of these conditions can cause a sooty deposit on the spark plug insulators, which is generally an indication of incomplete combustion.

4. ANSWER: (a) and (d) A cylinder head gasket that is blown through between two cylinders will cause a miss on both cylinders. However, an intake manifold leak can cause a miss in the two related cylinders, at low speeds.

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