PACKARD
Service Counselor
PARTS ★ ACCESSORIES ★ PRODUCT ★ PROFITS
INSTITUTIONAL PROMOTIONAL
APPROVED Packard SERVICE

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BLUE CORAL CONTEST REPORTS

In the first reporting period, nine Zones reported sales ahead of quota for the period. The second reporting period shows thirteen Zones ahead of the quota, and the third period shows eighteen ahead of quota. Of the total quota for the contest, 51.3% has been sold in a period representing 40% of the total number of days of the contest.

Regional Ranking looks like this—

	First & Second Period	*Third Period*
1.	Pacific	Eastern
2.	Eastern	Pacific
3.	Great Lakes	Great Lakes
4.	Mid–Western	Southeastern
5.	Southeastern	Mid-Western
6.	Southwestern	Southwestern

Eastern now leads, Great Lakes is holding third place, Southeastern moves up, and Southwestern still trails. Maybe the Southwest just got off to a slow start, or maybe they are playing dark horse—let's see what happens on the next report.

SPECIAL NOTE:

The contest is set up on the basis of *treatments,* which include the sale of a bottle of Blue Coral and Sealer. Only Blue Coral *Treatments* are to be reported, as indicated on the Dealer and Zone Contest report forms.

June 20 to August 1 Standing

A Zones

Zone	*Per Cent to Quota*
Boston	97.1
New York	63.7
Los Angeles	63.7
Milwaukee	62.9
Cleveland	62.4
Philadelphia	57.2
Atlanta	52.6
Buffalo	50.7
San Francisco	50.6
Pittsburgh	45.9
Cincinnati	42.2
Detroit	39.6
Chicago	39.6
Washington	36.6
Kansas City	36.3
St. Louis	31.4
Dallas	29.2

B Zones

Zone	*Per Cent to Quota*
Salt Lake City	96.7
St. Johnsbury	85.2
St. Paul	73.4
Phoenix	68.4
Portland	65.4
Minneapolis	52.7
Albany	40.0
Reno	30.3
Seattle	28.8

SERVICE MANAGER'S PERSONAL COPY

REAR AXLE SHAFT THRUST BLOCKS

SIX and EIGHT

When installing a differential carrier assembly in a rear axle case, it is very important that the rear axle shaft thrust block be in its proper position to prevent a possible rear end failure.

Prior to installing a carrier assembly, the thrust block should be placed so that the polished faces of the block are toward the outer ends of the rear axle case when the carrier is installed. Packing heavy grease around the thrust block will prevent it from turning while the carrier assembly is being installed.

The block has an elongated pivot hole which permits it to float on the differential pinion pin and transfer the axle shaft thrust to the axle shaft outer bearings when the block is properly positioned.

When the carrier assembly is out of the rear axle case, or during the shipping and handling of a service replacement unit, the thrust block is free to turn, and the assembly can be installed with the thrust block out of its normal position.

If the thrust block is not in a "square" position, or in other words, if the corners of the block are toward the outer ends of the rear axle case, the block may be fractured or broken when the axle shafts are tapped into place.

If the thrust block is "square" but turned 90 degrees from its proper position, the floating distance of the block is reduced due to the elongation of the pivot hole in the block being at right angles to the axle shafts. This will permit the thrust of the axle shafts to be concentrated on the differential pinion pin instead of on the axle shaft outer bearings, if the axle shaft end play is not equally distributed between the two axle shafts.

PRELUBRICATE THAT REPLACEMENT ENGINE!

The trouble-free life of a replacement engine is often determined during the first few minutes of running time. At this time the oil system of the engine has not yet begun to function properly, expecially affecting those parts that are lubricated by splash only.

To prevent scuffing of piston rings and cylinder walls when first starting a replacement engine, (which may have been stored for a period of weeks) the cylinder walls should be coated with oil. This prelubricating can best be done by pouring two teaspoonfuls of light (SAE No. 10) oil into each cylinder through the spark plug holes. The engine should then be turned over several times to distribute the oil before the ignition is turned on.

A word of caution should be given the owner explaining that his replacement engine is a *new* engine requiring exactly the same treatment as a new one.

Journal Sizes
18th, 19th, 20th, and 21st Series

The Factory has received product reports, in which crankshafts were reported to be undersize since the journal diameters were less than the dimensions given in the Mechanical Specifications.

The figures given in the Mechanical Specifications in which fractions of an inch were used, are approximate figures. Exact dimensions are given in decimals.

The following table, showing the exact measurements for standard crankshafts, is given here to act as a guide when measuring crankshaft journals to determine bearing size.

MODEL	MAIN JOURNALS	CONNECTING ROD JOURNAL
2100-30	2.7465 +.0005 −0	2.094 +.0007 −.0003
2101-11	2.7465 +.0005 −0	2.094 +.0007 −.0003
2103-06-26	2.7465 +.0005 −0	2.2500 +.0007 −.0003

CARE OF BALL AND ROLLER BEARINGS

When reconditioning units containing either ball or roller bearings, careful handling of the bearings will often prevent a premature failure of the unit.

A good bearing is frequently ruined by an improper method of disassembly or reassembly. Care in removal and installation will avoid Brinelling or denting the races by the balls or rollers.

When it is necessary to press a ball or roller bearing on or off of a shaft, be sure that the inner race of the bearing is supported to take all of the thrust.

When a bearing in a case or housing is removed or installed, always press or drive against the outer race.

In many cases a well meaning attempt to clean a bearing actually results in damage which may greatly shorten its life.

This is particularly true in the case of the sealed, prelubricated type bearings. These bearings should *never* be immersed in any cleaning solvent since the lubricant packed in the bearing by the manufacturer will be removed, leaving the bearing dry. Immersion of this type bearing in a solvent usually leads to an early failure. Wipe clean with a dry cloth or, if necessary, slightly dampen the cloth with kerosene.

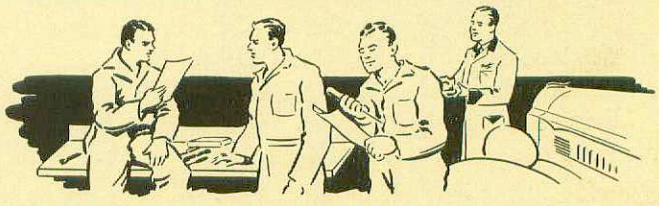
Open type ball and roller bearings should be thoroughly washed in *clean* kerosene or gasoline then blown dry with *filtered* compressed air. Dirty, gritty solvent or an unfiltered air source may make a bearing dirtier than it was before the cleaning attempt was made.

When blowing a bearing dry, hold both the inner and outer races firmly to prevent rotation. Never spin a bearing by directing the air blast against the rollers or balls since a dry bearing spinning at high speed may become scored.

After the bearing is thoroughly cleaned and dried, it should be lubricated. Use the correct lubricant, rotating the bearing while applying the lubricant until every part is thoroughly coated.

"QUIZ TEST"

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



1. In a 19th Series Econo-Drive equipped car, if the ignition cuts out completely and the engine stalls when decelerating in Econo-Drive, the trouble may be:
   (a) The Econo-Drive cable out of adjustment. ☐
   (b) Improper adjustment of the Econo-Drive relay. ☐
   (c) A loose connection of the Econo-Drive solenoid. ☐
   (d) Improper adjustment of the accelerator. ☐

2. On 21st Series cars, the mesh of the steering gear cross shaft roller with the worm is adjusted by:
   (a) The cross shaft adjusting screw. ☐ (b) Removal of shims from under the cross shaft. ☐
   (c) Removal of shims from under the worm cover plate. ☐
   (d) Inserting additional shims under the cross shaft. ☐

3. On new cars that have been in storage, or on display, one of the most frequent causes of sticking valves is a deposit of rust in the exhaust valve guides. This is the result of:
   (a) Long sustained high speed driving. ☐ (b) Overheating of the engine. ☐
   (c) Starting and running the engine for short periods of time. ☐
   (d) Using high octane gasoline. ☐ (e) Running the engine too long. ☐

For Answers, See Back Page.

1935-1941 MASTER PARTS LIST CORRECTION

An omission in the 1935-1941 Master Parts List has been called to our attention.

Index No. 7.100, Fender Assembly, Rear, part No. 342930, should include models 1800-1-3-4-6 and -7 in the model application.

Also, an explanation of the difference between brake and front suspension parts for hearse and ambulance commercial chassis has been requested. For example, Index No. 1.200 Brake Drum and Hub Assembly, part No. 316491, Front, is listed for 120CA, 138CD, 1601A, -2, 1701A Hearse, 1804-5-7-8, 1901A Hearse, 1904-5-7 and -8, while part No. 234734 is listed for 1701A, Ambulance and Bus, 1703A, 1801A, Ambulance and Bus, 1803A, 1901A, Ambulance and Bus, and 1903A. This difference is due to the use of the heavier Super Eight suspension and brakes on the ambulance and bus chassis to allow for heavier loads and greater speed.

IMPORTANT CORRECTION

A rather serious error in the 1935-1941 Master Parts List has been called to the attention of the Factory.

Under Code No. 5.0408, Oil Seal—Crankshaft Bearing (rear), part No. 362010, is specified for models 1803-3A-4-5-6-7-8, superseding part No. 354629. This is incorrect since these parts are not interchangeable.

The correct oil seal (part No. 354629) for the 18th Series engines is of moulded rubber construction, while the 19th, 20th and 21st Series use a braided rope type which cannot be used for 18th Series engines.

All Master Parts Lists should be corrected to specify part No. 354629 for 18th Series Super Eight Engines.

CLIPPER PARTS LIST CORRECTION

Index No. 15.202 Socket Assembly, Cross Tube Part No. 377374, Right and Part No. 377375, Left.

The above items, as listed in the Clipper Service Parts List, are incorrect since both socket assemblies have a right-hand thread and not a RH and LH thread as shown in the Parts List.

They can easily be identified as to being right or left by noting the location of the cross shaft bearing oiler hole. When the sockets are properly installed, the oiler should point toward the rear and center of the car at an angle of approximately 45°.

If the left side assembly were installed on the right side, the oiler would then be pointing toward the front of the car which would be incorrect.

SHOP LIGHT PRICE CHANGE

The garage-man Portable Shop Light is now supplied with a special neoprene oil resistant socket and the price is $24.20 F.O.B. Detroit. Orders with checks made out to Detroit Industrial Products Company should be sent to the Factory Service Department.

QUIZ QUESTION ANSWERS

1. ANSWER: (b). The Econo-Drive "ground out" relay is so adjusted that it will momentarily cut out the ignition, causing the engine to miss during the disengagement of the Econo-Drive. This is necessary to relieve the torque on the solenoid pawl and permit it to be withdrawn. If the opening of the "ground out" relay contacts is delayed too long, the engine will stall. Since the car will "free wheel" when the Econo-Drive disengages, the movement of the car will not start the engine when ignition is restored. See Service Letter 5-1-42.

2. ANSWER: (a). See Service Counselor June 1946.

3. ANSWER: (c). The rust condition, generally confined only to exhaust valves and guides, is caused by the condensation of moisture in the exhaust gases. This condition is most likely to develop after a series of cold starts and stops, during which time the engine does not attain normal operating temperature. It is most likely to occur in cars in which the engine has been run for short periods of time, while in storage or on the show room floor. See Service Counselor, April 1946.

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