PARTS • ACCESSORIES • PRODUCT

SERVICE Counselor

PACKARD MOTOR CAR COMPANY

VOL. 24, NO. 6 JUNE, 1950

Customers

Customers are people, just like you and I. Customers depend upon you but are in no way dependent upon you. Some of us forget that last part. However, you are dependent on customers. Your job and the success of your operation depends upon customers.

Customers are the reason for your job. They are the purpose of your work. They are not just people who interrupt your work. They are not people who come in to wait around for attention nor do they come in just to argue. They come in because they want and need something they think you have to sell.

Customers are people who bring you their wants and needs concerning their Packard cars. They are very important people because no business can succeed without them. Remember too—customers should be handled as important people whether they come, in person, by phone, or by letter.

Your job is to handle their needs and wants, courteously, promptly, and efficiently. People handled this way become steady customers.

A satisfied customer is one who can always tell you right off, the answer to the question "Who waited on you?" Likewise the dissatisfied customer can very seldom answer that question. At first this sounds rather silly but read it again. Actually it makes a lot of sense. It brings up the question of "personal" service and "individual" attention.

It's part of what makes satisfactory service. Often it's the difference between good and bad service. In one case the service man has sold himself completely along with some mechanical or maintenance service. In the other case he has not.

Let's get back to this personal service with individual attention. It's what customers want. It's what makes satisfied customers. Get acquainted with your customers. Handle all of them in such a way that they not only know you but ask for you when they drive in. Mr. Jones is a person with individual problems, not just a customer or a repair order number. Convince him you are a person definitely interested in his problem. He wants to know that you have time for his troubles and that with your ability, experience and the facilities at your command you can solve his problems. When you convince him of this in a friendly, efficient manner he will remember it and he will remember your name.

Personal service means treating customers as persons. Individual attention means attention that is not divided but is concentrated on him. Together they mean getting acquainted with customers and selling yourself. When this is done you will gratify the great desire on the part of car owners for personal and individual service. This type of service is not new but should be re-newed.

Direct Drive Clutch Fails to Disengage

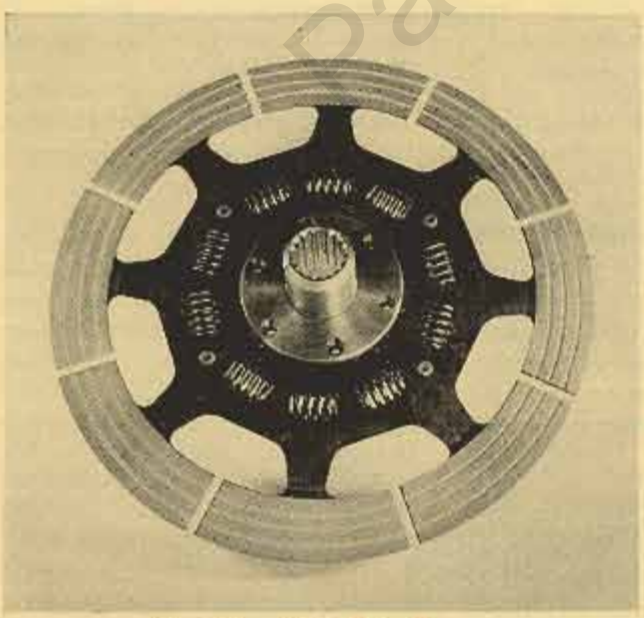
Ultramatic Drive

A service operation has been worked out to provide a more positive disengagement of the direct drive clutch to correct complaints of the clutch "hanging on" and stalling the engine when the vehicle is brought to a stop. This operation, however, should not be performed until other mechanisms, which also will cause this condition, are known to be operating properly.

Possible causes and their corrections are shown below and these should be checked in the sequence as listed:

POSSIBLE CAUSE	CORRECTION
(a) Faulty governor.	(a) Perform governor pressure test. Recondition the governor. Install new parts if necessary.
(b) Sticking direct drive shift valve.	(b) Perform direct drive shift valve pressure test. Free up valve if necessary.
(c) Sticking converter inlet valve.	(c) Perform converter inlet pressure text. Free up inlet valve if necessary.
(d) Excessive reactor shaft end play.	(d) Check end play and change washer if necessary to obtain .010" to .015" end play.
(e) Sticking direct drive clutch piston.	(e) Check piston for sticking. Piston should move freely in splines and rings should have .002" to .010" gap. Free up piston and file rings to obtain this gap if necessary.

If the inspections and pressure tests reveal that the mechanisms are operating properly, two additional annular grooves of the same width as the original grooves ($\frac{1}{16}$" wide) should be cut into the facings on each side of the driven plate. The inner grooves should be cut midway between the original grooves and the inner circumference of the facings. The outer grooves should be cut midway between the original grooves and the outer circumference of the facings. When completed, both facings will have three equally spaced ring-like grooves.



Direct Drive Clutch Plate Grooves

Reworking the driven plate in this manner will permit the oil pressure to release the clutch more quickly.

Replacement Governor Assemblies

Ultramatic Drive

Ultramatic Drive governor assemblies are calibrated to operate with specific rear axle ratios and it is important that the correct governor be installed when a governor requires replacement.

Installing an incorrect governor assembly will result in unsatisfactory direct drive clutch engagement and disengagement.

The governor assembly used with a 3.9 or a 3.92 rear axle carries the marking "3.9 or 3.92 AXLE RATIO" stamped or etched on the outer face of the vent valve flyweight.

The governor assembly used with a 3.54 rear axle has a plain or unmarked flyweight.

The governor assembly used with 4.1 or 4.3 rear axle carries the marking "4.1 or 4.3 AXLE RATIO" on the outer face of the flyweight.

Part numbers of the governor assemblies and their flyweights are listed below. Please mark "22nd and 23rd Series Parts Lists" accordingly.

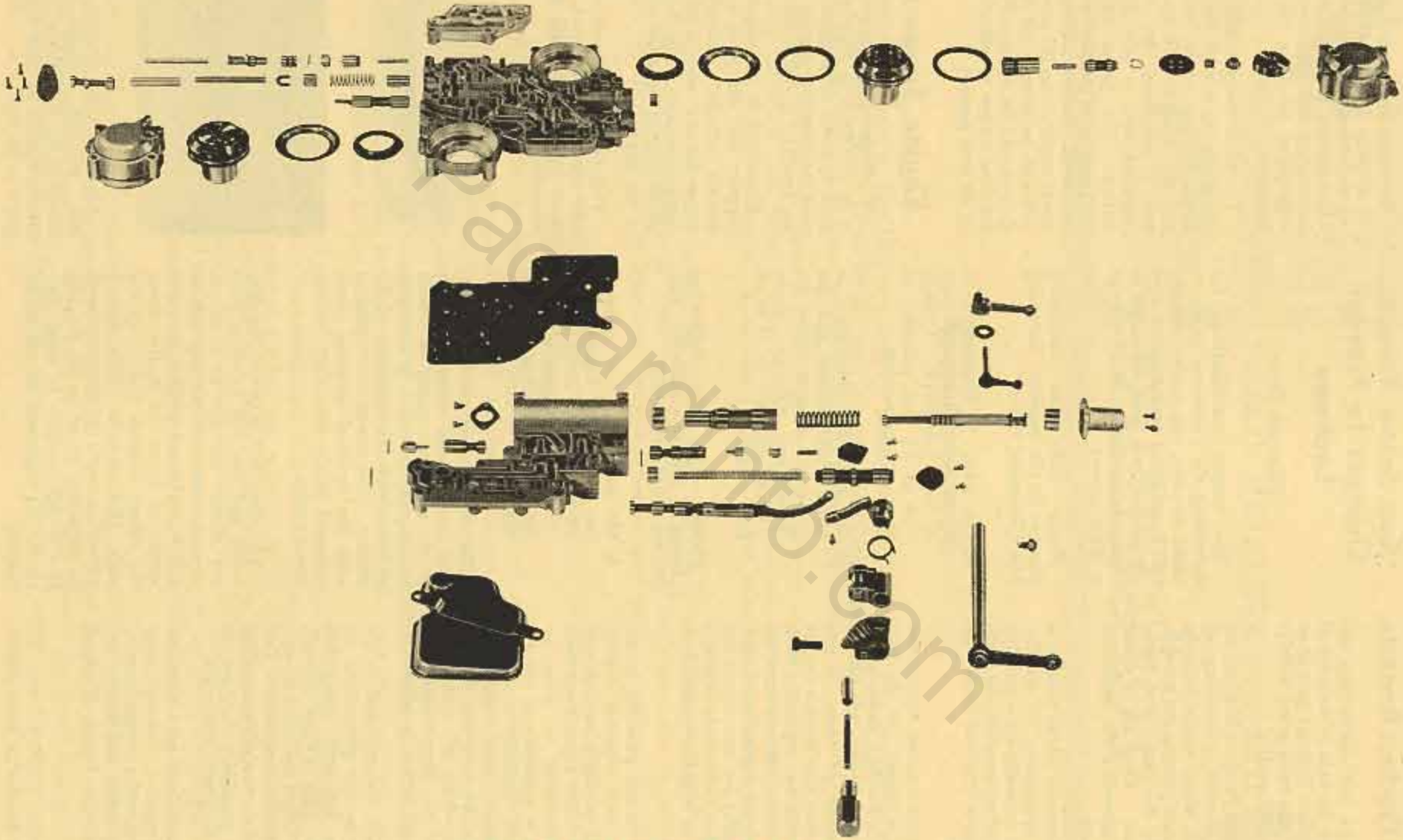
Governor Assy.	Fly-weight	Application
421834	421063	Use only with 3.54 rear axle ratio
423223	423221	Use only with 3.9 and 3.92 rear axle ratios
423224	423222	Use only with 4.1 and 4.3 rear axle ratios

New Type Ultramatic Drive Control Assembly

The exploded view shown may be used for ready reference when disassembling and assembling the present Ultramatic Drive Control assembly.

The early design is illustrated in Service Training Booklet. Changes in this design which affected adjustment procedures are covered in the March, April, and May, 1950, issues of the Service Counselor.

Adjustment procedures as outlined in the Service Counselor also apply to this new type control assembly.



New Type Ultramatic Drive Control Assembly

Service Product Reports

During the last model year response from the field in the form of Service Product Reports sent in to the Factory has been good both as to quantity and quality.

The Service Product Reports are reports of trouble, presenting all known facts which might help the Factory in recognizing the trouble, determining the cause, and devising the cure. They are a direct means of improving the quality of Packard cars.

The importance of any trouble is in direct proportion to its frequency. In considering a possible correction of any trouble, the number of reports received is of first importance.

Don't cover more than one trouble on a report. At the Factory, Service Product Reports are filed by troubles and not by car number, Dealer, or Zone. If you have more than one trouble on the same car, make one report for each different trouble. If you have the same trouble on a number of cars, you need make but one report but list the engine and vehicle numbers of all cars in which the trouble is found.

While it is not possible to acknowledge each separate report, they are all carefully studied and considered. The reports are then grouped according to units involved and a summary of the reports is sent regularly to all department heads. Each department head studies the summary and, on those items which fall within the province of his department, sees that corrective action is taken.

Corrections are reported to the field when service procedures or instructions for field correction are needed. This is done through Service Technical Bulletins or articles in the Service Counselor. You will notice that most of the troubles you report gradually decrease in frequency and finally disappear.

These corrections are a direct result of your reports. For continued improvement, make comprehensive reports of troubles and keep it up. They result in better Packard cars.

The forms, V-482-1, may be obtained at no charge from zones.

Cap Screw Torque Changes to Prevent Leakage

Ultramatic Drive

The torque specifications for tightening the converter pump to clutch housing cap screws and the bell housing to transmission case cap screws have been increased to reduce the possibility of oil leakage at these screws.

Please make the following changes in the booklet "Servicing The Ultramatic Drive."

A. On page 5, illustration in lower right corner and page 6, first paragraph. Change "10 to 12 foot pounds" to *20* to *24* foot pounds.

B. On page 25, illustration in upper right corner and the paragraph directly below the illustration. Change "40 to 45 foot pounds" to *55* to *60* foot pounds.

Please make the following change in Service Counselor, Vol. 24, No. 3, March, 1950.

A. On page 12, third column, last paragraph. Change "15-18 ft. lbs." to *20-24* ft. lbs. Change "high limit of 18 ft. lbs." to "high limit of *24* ft. lbs."

Before removing and disassembling the converter to correct a leak at the converter pump to clutch housing cap screws, it is advisable to first check the tightness of the screws. This can be accomplished with the flywheel housing cover removed using an offset ½-inch box wrench.

The clearance between the converter and the bell housing does not permit the use of a torque wrench; however, the cap screws may be tightened to their specified torque of 20 to 24 ft. lbs. using the offset wrench and a spring scale (fish scale). If a 6-inch wrench is used, the screws should be tightened to 40 to 48 pounds. If a 9-inch wrench is used, they should be tightened to 30 to 36 pounds.

We have had several reports of oil seepage past the bell housing to transmission case cap screws. This seepage, when it exists, usually is confined to the four lower screws which are near the oil pressure passages.

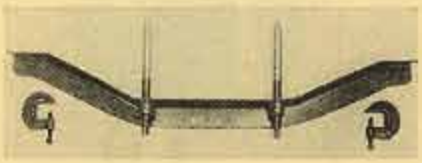
To reduce the possibility of leakage at the cap screws, the attaching flange surfaces of the bell housing and the case should be checked and, if necessary, any roughness removed and a new gasket installed. The upper cap screws then should be installed and snugly tightened. Before adding the four lower screws, coat the *screw threads only* with permatex. All the screws then should be tightened evenly to the new torque specification of 55 to 60 foot pounds.

Engine Support Bar

When transmissions are removed it is necessary to support the engine by some other means of support because the engine supports are attached to the transmission.

Illustrated is a moderate price support bar which is easily and quickly attached, allowing easy access for the removal of all types of transmissions. The long screws allow flexible elevation adjustment of the engine.

This type of support also permits moving the car to any space in the shop with the transmission removed.



All orders for Engine Support Bar, PU-365, should be sent direct to K. R. Wilson, 215 Main Street, Buffalo 3, New York. The price is $9.50.

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