

# Service Counselor

PARTS • ACCESSORIES • PRODUCT

PACKARD MOTOR CAR COMPANY



## Counselor

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### Improving Service Through Repair Orders

There is no record in the Service Department that compares with the Repair Order file for making plans that will result in over-all improvements. The Repair Order file permits analyzing the efficiency of any Service Department. This file tells everything with the exception of expenses. It tells whether it is progressing, how it is functioning and whether it is satisfying owners.

The total count of Repair Orders over a given time tells whether you are getting a fair percentage of the potential business. The amount of money per Repair Order tells the kind of selling job being done when compared to the Zone average.

The number of items per Repair Order also tells the story of selling effort on each customer contact. Too many orders are written with too few items.

A study of the type of services sold by service salesmen should be made. Seasonal items should, of course, be pushed but there is often a tendency to specialize in one type of service. It is desirable to keep all departments busy. If a service salesman constantly skips certain services, it may be he is not too familiar with that particular unit.

Repair Orders may indicate the need for new equipment or a new department. Too many sublet repairs can affect profits.

Repair Orders tell a story about customer satisfaction because come-back jobs mean somebody was disappointed.

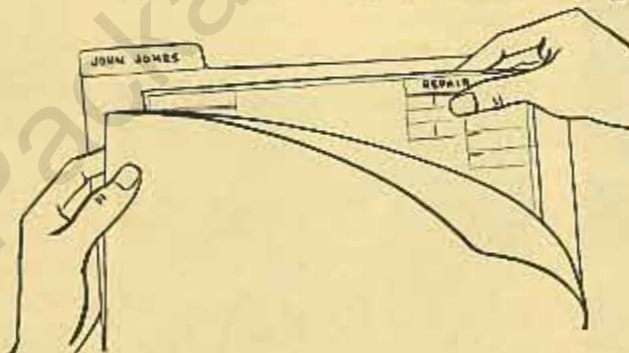
Repair Order count per service salesman tells whether enough time is being spent with each customer.

Repair Orders tell you if flat rate times are being met, if you have enough mechanics and if you have enough service salesmen. Sometimes, they will even tell you if your layout is as good as it should be. If total volume is low

for the number of work spaces you have, it may be a matter of arrangement.

While you were looking over the Repair Orders did you have trouble reading some of them? Maybe the mechanics did too. There is always a chance for an error on one you can't read.

You see, your Repair Order file is a valuable source of information when it comes to looking for places to improve your service. These files deserve some study.





## Rear Quarter Water Leaks

### Body Models 2465-95

Water leaks may be encountered at the rear quarter panels in early 24th Series Club Sedans, body models 2465 and 2495.

When this condition exists, water enters the rear quarter window opening, finds its way between the rear quarter inner panel and the trim panel, and then runs down between these panels to the floor.

Various revisions at the rear quarters have corrected this condition in bodies now being produced. These bodies have a metal tag stamped "WS OK" attached to the front of the body dash panel.

Correcting these leaks, when they exist in early vehicles in service, may be accomplished by installing Rear Quarter Water Shield Kit, part number 436057. Each kit contains two water repellent shields or aprons. Installation instructions and the additional sealing operations involved are as follows:



Fig. 1

Remove the rear seat cushion, rear seat back, rear quarter window inside finishing moulding, and the rear quarter side trim panel. Figure 1 shows the quarter panel before starting the sealing operations and water shield installation.

Using a body sealing "dum-dum", cover the screws and clips and the wheelhouse to inner panel seam, as shown at the points indicated by the arrows in figure 2.

Remove the access opening cover plate. You will note that one side of the plate is "dished." The "dished" side should be toward the outside of the car and the bottom of the "dish" toward the



Fig. 2

inside of the car.

Apply ample rubber cement around the three flanges of the cover on the "dished" side as indicated by the marks on the cover in figure 3.



Fig. 3

Turn the cover around and apply cement along the lower flange as shown in figure 4.



Fig. 4

Apply cement around the access opening flanges as shown in figure 5.

Install the cover plate. The lower flange should be behind the inner panel (toward the outside of the car). Dip the retaining screw threads in rubber cement before installing the screws.

Seal the lower corners of the

cover with "dum-dum" as shown in figure 6.

Apply rubber cement along the face of the panel at the top, at the bottom, and along the sides. It is



Fig. 5

important that cement also be applied around all cut out openings in the panel. See figure 6.

Apply cement on the back of the water shield around the outer

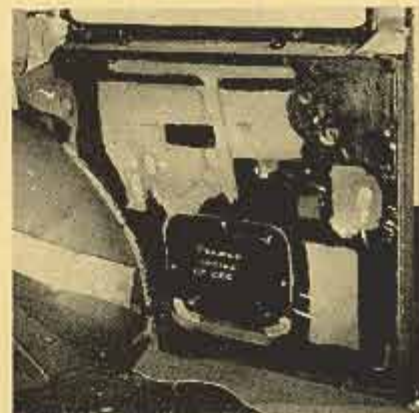


Fig. 6

borders and over those areas which will cover the cut out openings in the panel. Allow the cement to become "tacky" and then install the shield.

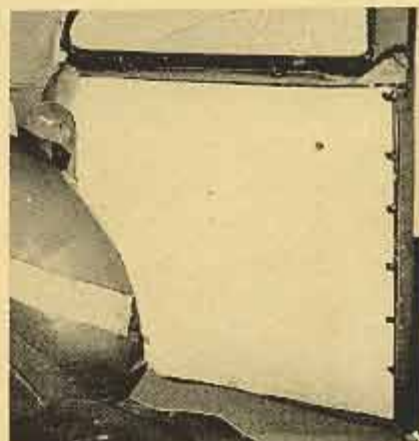


Fig. 7



Apply hand pressure and rub out the shield so that it is thoroughly cemented to the panel around the outer borders and around all cut out openings in the panel. Figure 7 shows the water shield cemented in position.

If the car is equipped with rear compartment ash trays, locate the tray opening and then slit the shield along the lower edge of the opening and along the sides. Do not slit along the top edge. Push the flap into the opening so that it will act as a roof or deflector above the ash tray when installed. See figure 8.

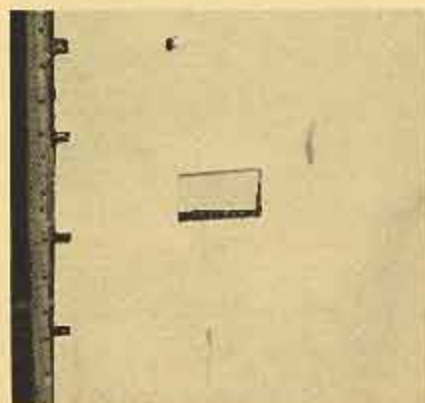


Fig. 8

If the car is not equipped with rear ash trays, do not slit or cut out an opening in the shield.

The trim panel lower fastener openings and the ash tray retaining screw openings may easily be felt behind the shield and the shield punctured with an ice-pick or scratch-awl.

Reinstall those parts which were removed to gain access to the rear quarter.

## Water In Front Parking Lights

### 24th Series

Occasionally you may find an early 24th Series car in which water has accumulated in the front parking lights. This should apply only to very early cars since the source of this condition was corrected early in production.

The parking light wires are enclosed in a rubber tube or hose which is open at its upper end where the wires are attached to their terminals at the upper front corners of the front fender splash panels. Water entering the tube at the top runs down the tube and

accumulates in the parking lights. This was corrected in production by compressing the tube around the wires at the upper end using a "hog-ring" such as that used in coil spring seat cushion constructions.

This correction also may be used on the early vehicles or some other similar correction which will compress the tube around the wires.

## Door Handle Replacement

### 24th Series

Recent revisions in door outside handles strengthened the handle to prevent breakage at the handle retainer slots.

Strengthening the handle also made it necessary to change the lock cylinder spring and spring retainers in the handle. These new springs and retainers are not interchangeable with the early type.

The Factory Parts Warehouse is shipping only the new heavier handle. When the new handle is used to replace the early type handle, the original lock cylinder may be used; however, the spring and spring retainers must be replaced and the late type should be ordered under the following part numbers:

435214 Spring	1 req'd
435212 Spring Retainer—outer	1 req'd
435213 Spring Retainer—inner	1 req'd

## Governor Removal

### 24th Series Ultramatic Drive

The clearance between the governor and the frame "X" member, on 24th Series Ultramatic-equipped vehicles, does not permit removing or installing the complete governor assembly as a single unit.

To remove the complete assembly first take out the governor housing to governor driveshaft retaining screws and remove the housing. The adapter then may be removed by taking out the retaining screws and manipulating the adapter out of the transmission case.

This procedure is reversed when installing a complete governor assembly. The specified torque for tightening the adapter screws

is  $7\frac{1}{2}$  to  $8\frac{1}{2}$  ft. lbs. and the governor housing screws 6 to  $7\frac{1}{2}$  ft. lbs. These screws should be pulled up evenly and care should be exercised to prevent overtightening and possible housing distortion. After tightening the housing retaining screws, check the movement of the valves in the housing.

## Fan Belt Adjustment

### 24th Series

The fan belt adjustment procedure for 24th Series vehicles differs from that used prior to this model.

On previous models, the proper belt tension is determined by applying finger pressure to obtain approximately  $\frac{1}{2}$ -inch deflection of the belt between the generator and water pump pulleys. This deflection method has been found to be inaccurate when applied to 24th Series design belts and the following torque method should be followed to obtain proper belt tension.

This procedure requires a Fan Belt Adjusting Tool J-4714. Operations 4, 5, and 6 are performed from the underside of the car; however, it is not necessary to raise the front end of the car.



Fig. 1

1. Loosen the two generator bracket to generator screw nuts two or three turns.
2. Loosen the generator adjusting strap to generator screw.
3. Loosen the generator adjusting strap to water pump screw.
4. Place the tool J-4714 over the head of the generator bracket to generator front screw and rotate the tool clockwise until the arm of the tool contacts



the edge of the generator drive end plate. See figure 1.

5. Using a torque wrench with a  $\frac{7}{8}$ -inch socket over the tool, rotate the wrench clockwise and move the generator outward until 15 ft. lbs. torque is indicated on the scale. See figure 2.
6. The adjusting strap to generator screw should be tightened to hold the generator in this position while maintaining the 15 ft. lbs. torque.
7. Tighten the previously loosened screws and nuts. The torque specifications are: adjusting strap to generator, 15-

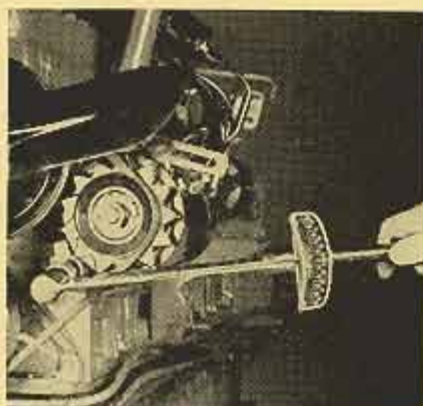


Fig. 2

18 ft. lbs.; adjusting strap to water pump, 25-30 ft. lbs.; generator bracket to generator, 15-18 ft. lbs.

The fan belt should be adjusted before delivery of a car to an Owner, again on the 1,000 mile inspection, and approximately once a year thereafter.

## Ultramatic Linkage Adjustments

### 24th Series

The following linkage adjustment procedures apply to 24th Series Ultramatic-equipped vehicles. The adjustments should be made in the sequence as listed. Adjustments "1" and "2" should be made after the engine has been properly idled at 375 RPM in high range with the choke fully off and the throttle closed.

#### 1. THROTTLE CROSS SHAFT TO CARBURETOR ROD

This adjustment requires the use of a new gauge, PU 364, which differs from the gauge used prior to 24th Series.

After the engine has been warmed up and properly idled, place the new gauge, PU 364, on the milled surfaces on top of the cylinder head and directly ahead of the bracket supporting the cross shaft.

When the carburetor throttle rod is properly adjusted, the end of the short bend at the rear end of the rod will protrude through the hole in the cross shaft lever and enter the hole in the gauge. See figure 1.

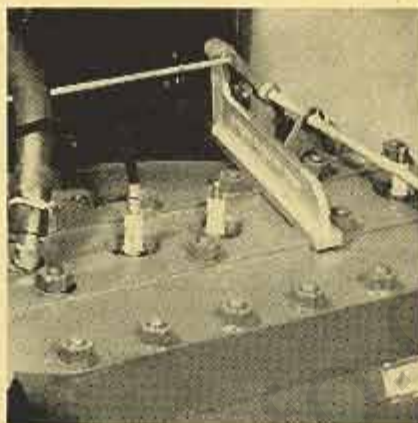


Fig. 1

The rod can be lengthened or shortened by loosening the lock nut and turning the spring-loaded throttle over-ride.

This adjustment determines the proper length of the throttle rod and the correct angle of the cross shaft lever.

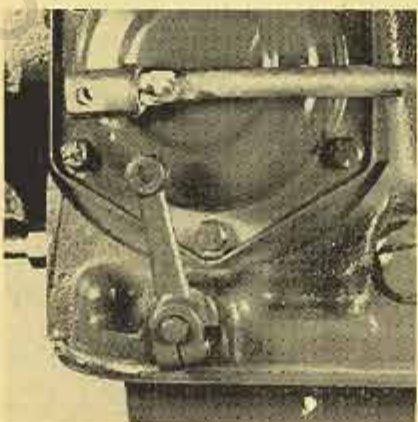


Fig. 2

#### 2. THROTTLE VALVE LEVER

- a. Disconnect the relay rod from the throttle valve lever at the right rear side of the transmission. See figure 2.
- b. Loosen the lever clamp screw enough so that the lever will

rotate the shaft but still turn on the shaft.

- c. Rotate the lever forward (toward front of car) until it is horizontal.
- d. Rotate the lever in the opposite direction (toward rear of car) until the valve is closed and against the throttle valve spring. Do not compress the spring.



Fig. 3

- e. Without compressing the spring rotate the lever still further toward the rear until a piece of rod or a pin  $\frac{3}{16}$ " in diameter can be inserted through the holes in the lever and the relay rod. See figure 3. Continue rotating the lever toward the rear until the pin becomes snug in the holes.



Fig. 4

- d. Tighten the lever clamp screw and then connect the relay rod using the clevis pin which was previously removed.

#### 3. ACCELERATOR RELAY ROD TO CROSS SHAFT LEVER

With wide open throttle, adjust the relay rod to obtain .031 inch clearance between the kickdown stop plunger and the cam on the cross shaft lever. See figure 4.