

PACKARD

Service Counselor

PARTS * ACCESSORIES * PRODUCT * PROFITS

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How a Service Manager Figures

Since the service manager is directly responsible for getting sufficient service volume, he has the double job of producing service that can be sold and then selling it.

Most of the fixed expense of the entire operation must be covered by service department gross profit. This means that both shop space and productive time must be sold; otherwise, they become expense and you can't make a profit out of unsold expense.

The service manager multiplies the number of work stalls in the shop by the number of work hours in the week and by the customer labor rate. He deducts 15% for unapplied time. The result is the number of dollars it is possible for him to take in for the week. He calls this shop potential. He checks this figure against the mechanic hours he has available because he sells mechanic hours, not just space. To get this figure he multiplies the number of work hours in the week by the number of productive men by the customer labor rate. Again he deducts 15% for unapplied time. This figure, which he calls his labor potential, can be increased or decreased. His shop potential can not be changed except by adding more building or rearranging.

Thus the service manager can tell how much space and how many hours he can sell but he can't tell exactly how many customers are coming in nor how many hours of work they will buy. He can figure it closely if he keeps the right records. He must have answers to these questions:

Total number of owners in area?

Average number of items per repair order?

Number of 5-year owners?

Average labor sale per repair order?

Number of customers served last month?

Average parts sale per repair order?

These figures analyzed will tell him if his business is increasing or decreasing, and by watching them, he will know about what business he can expect next month. They will tell him when he needs extra effort from the service salesmen and extra effort on owner follow-up.

There are other figures he will be watching too. He won't let his sublet or outside work exceed 2% of his customer labor sales. He will see if service salesmen are averaging about 20 orders per day. He will be watching all his expenses so they don't eat up too much profit.

You see, a service manager has a lot of figuring and planning to do. A good service manager can figure pretty accurately so if each man, productive and non-productive, does his part, that profit figure is going to show up as planned. That makes the dealer happy, keeps the shop going and makes the customers happy too.

When things are carefully planned and everybody does their work right, work flows smoothly and comes out right. That makes for good service.

Servicing the Ultramatic

Packard Ultramatic Drive Fluid should be used or any type "A" automatic transmission fluid which has an AQ-ATF number embossed on the top of the can may be used.

The fluid level in the Ultramatic Drive should be checked every 1000 miles and, if necessary, sufficient fluid to maintain the level at the full mark on the dipstick should be added.

The fluid level dipstick, which is attached to the filler cap, is located on the left-hand side of the unit (figure 1) and is reached from under the car. It is removed by turning the cap $\frac{1}{2}$ turn counter-clockwise, then withdrawing the dipstick.

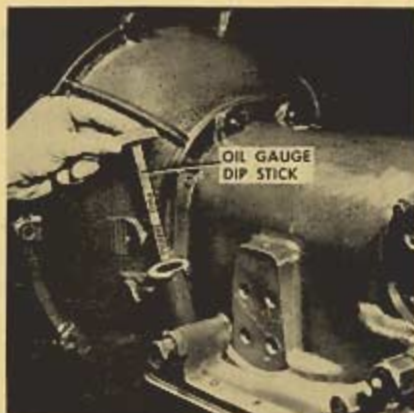


Fig. 1

Checking the Fluid Level

The fluid level should be checked with the unit thoroughly warmed up. Allow the engine to idle with the selector lever in the neutral position at 800 r. p. m. for at least one minute before checking.



Fig. 2

Stop the engine, clean dirt from the area around the filler cap and remove the cap and stick assembly. The level should be checked within five minutes after the engine is stopped.

If fluid is necessary, add the required amount of fluid using an oil gun having a curved spout. See figure 2.

If an oil pump or gun is not available, the filler hole plug in the upper rear end of the unit may be reached through the floor by folding over the rear corner of the front floor mat and removing the oil filler hole cover from the floor transmission cover. Be sure to recheck oil level after filling and running engine.

Draining and Refilling

The Ultramatic Drive should be completely drained and refilled with the specified fluid every 10,000 miles. The refill capacity of the unit is approximately 12 quarts.



Fig. 3

Draining the Unit

Remove the flywheel lower cover and turn the flywheel until one of the converter drain plugs is at the bottom. Loosen this plug but do not remove since it is to act as an air vent only.

Rotate the flywheel 180° and remove the other converter drain plug. Remove the drain plug from the bottom of the Ultramatic Drive oil pan. See figure 3. After it is completely drained reinstall the two plugs which were removed and rotate the flywheel 180° and tighten the loosened plug. Reinstall the flywheel lower cover.

Refilling the Unit

Remove the filler cap and dipstick and put in 7 quarts of fluid

using an oil gun with a curved spout. The last quart must be put in more slowly than the previous six quarts.

Start the engine and allow it to run for about two minutes at 800 r. p. m. with the selector lever in the neutral position. Stop the engine and add about 5 quarts to bring the fluid up to the level mark on the dipstick. Avoid overfilling. Start and operate engine at 800 r. p. m. for one minute—recheck the fluid level.

Reinstall filler cap and dipstick.

Station Sedan Refinishing Materials

The following corrections should be made in this article published in the March 1, 1949 Service Counselor.

The correct part number for the two-part cement used for filling and repairing cracks in the wood or wood joints is 3-m Exp. 55554.

Part No. 401803 for Presstite No. 427 Sealer should be cancelled. The correct number is 417490 for a gallon and 417491 for a quart can.

Dealers should order from Zones and Zones may order this material direct from the Factory Parts Warehouse.

New Leaf for Sagging Springs

2201-02-2301

A new rear spring leaf has been released for use in the liner type springs when a complaint of bottoming or sagging is received. The new leaf will raise the rear end of the car approximately $\frac{3}{4}$ inch.

When complaints of this nature are received the spring should be disassembled and the second leaf removed. Replace with the new service leaf using new liner inserts if necessary.

Use of this leaf eliminates the necessity of installing new springs.

The new leaf is carried under part number 410732.

Rear Axle Lubricant

The rear axle lubricant, used in production, contains ingredients which give it the properties of a break-in oil.

This lubricant also is available

for Service and should be used whenever a differential carrier is replaced or when a new ring gear and pinion set is installed.

It is not necessary to drain the lubricant after the break-in period and regular SAE 90 hypoid gear oil may be added to maintain the proper oil level.

This lubricant is available in 2-quart cans under part number 410707 packed 10 to a case.

Cleaning Choke Screens

Frequently complaints of high fuel consumption and a lack of performance during warm-up are received after a car has been driven 10 to 15 thousand miles.

These complaints are often due to the carburetor choke screens having become filled with dust. When the choke screen is clogged the choke will not open since the flow of hot air over the choke thermostat is either restricted or shut off.

The choke thermostat housing should be removed every 10,000 miles and the screen taken out and thoroughly cleaned. The thermostat should be properly adjusted when the housing is reinstalled.

Cleaning Conv't. Tops

23rd Series

The 23rd Series convertible tops are made from a new material which permits the use of dry cleaning solvents for removing spots. Any material which can be safely used on upholstery may be used for top cleaning.

Solvent type cleaning materials cannot be safely used on 22nd Series convertibles. The only safe material for use on these cars is soap and water.

Differential Pinion Bearing Preload

The differential pinion bearing preload specifications recently were changed in production and the new specifications should be followed when adjusting bearing preload in the field.

Formerly, a torque of 25 to 30

inch pounds was specified to rotate the pinion shaft in the differential case after the bearing sleeve had been buckled. This torque was increased and 30 to 35 inch pounds now is specified.

When adjusting bearing preload, it is advisable to tighten the flange retaining nut to obtain the high limit of 35 inch pounds. This will insure proper preloading in the event that the preload drops slightly after the car is again returned to service.

Please make this torque change on pages 19 and 37 of the Service Manual, Section II, "Reconditioning the Rear Axle."

What is a Zone Service Representative?

He is just an average sort of fellow trying, like you, to make a living. He is out hustling around calling on Dealers for two reasons. His job is to protect Packard products and to help Dealers make a profitable operation.

He doesn't know it all, even about service. He has had a lot of training and is in a position to discuss mechanical problems, shop methods, new tools and equipment, and mechanics' training. He can help with shop layout for increased efficiency. He can improve your merchandising plans and help with your customer promotion work.

He calls on a lot of Dealers and picks up ideas that are working for others. He will learn some things from your operation. He sees by comparison what may help you. He doesn't have all the answers but he can get them. He can be a big help on any service problem.

Spend some time with him—get to know him. Ask him for suggestions, recommendations and even criticisms on your operations. Take advantage of his experiences and training. Then show him that new method you worked out in your shop. Tell him what you did to get that extra volume last month. See how much you can help him and we will bet you will be surprised how much he can help you.

J. A. Carr Manager of Parts and Service Department



J. A. Carr has been promoted to manager of the parts and service department.

He returns to the factory after serving in an executive capacity in the company's Midwestern Region since early this year. Prior to taking the field position, he had been service promotion manager since November, 1947.

Karl M. Greiner, Packard vice-president and general sales manager, said, "The parts and service department is a key activity, important alike to our owners, dealers and the factory. Carr's 28-year background in the automobile industry thoroughly qualifies him for his new responsibilities."

Carr started as a mechanic in Moline, Ill., in 1921, after earning a diploma in business administration from a Davenport, Ia., business college. His education was interrupted by World War I during which he served in the U. S. Navy.

From 1926 until 1937, when he joined Packard as assistant regional manager at Kansas City, he held various industry field posts in parts and service merchandising. In 1939, he took another industry post, three years later becoming technical automotive advisor to the U. S. Army ordnance department at Camp Pickett, Va.

Carr rejoined Packard in 1944, entering the department he now heads as coordinator of field service programs.

MECHANICAL SPECIFICATIONS AND ADJUSTMENTS

23rd SERIES—7 PASS. SEDAN—LIMOUSINE—HEARSE—AMBULANCE

Items on these vehicles which differ from Specifications in Service Counselor, Vol. 23, No. 5.

MODELS	SUPER EIGHT 2322	CUSTOM EIGHT 2313
BRAKES		
Effective Area	208.25 sq. in.	260 sq. in.
Effective Area Hand Brake	98 sq. in.	130 sq. in.
Lining Size and Material		
Primary—Marshall	4112	4112 Bonded
Front	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 11 $\frac{1}{2}$ "	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 13"
Rear	2" x $\frac{3}{4}$ " x 11 $\frac{1}{2}$ "	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 13"
Secondary—Marshall	9051	9032 Bonded
Front	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 13"	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 13"
Rear	2" x $\frac{3}{4}$ " x 13"	2 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 13"
Wheel Cylinder Size		
Front	1"	1 $\frac{1}{4}$ "
Rear		
CLUTCH		
Type		Single Dry Plate
Pedal Free Play		1 $\frac{1}{2}$ "—1 $\frac{3}{4}$ "
Facing Material		U. S. Asbestos, Woven
Size Facing		7" x 11" x .125"
Throw-Out Bearing		Prelubricated Ball
Clutch Spring Pressure		175 lb. at 1.562"
Number of Springs		9
Vibration Neutralizer		Yes
COOLING SYSTEM		
Fan Belt	49.2" x $\frac{3}{4}$ " x 40"	
ELECTRICAL		
Battery Make		Willard SW-10-150
Capacity		150 hr.
Plates		21
Generator—Make and Type	Auto-Lite GGW-6001E	Auto-Lite GGJ-4804A
Generator Cut-In Speed—Cold	Delco 1102715	650 rpm
Generator Output—Maximum	920 rpm Auto-Lite	50 Ampere
Generator Voltage Regulator	880 rpm Delco	Auto-Lite VBA-4103A
Overdrive Fuse	40 Ampere	SFE 30 Ampere
Horn—Location	Auto-Lite VRP-4402C	
ENGINE	Delco 1118360	
Engine Rev. per Mile—Std. Ratio	Radiator Cradle Support	
VALVES		
Exhaust Pipe Diameter		
Muffler Size	2867	3083
FRAME		
Type	2 $\frac{3}{4}$ "	5 $\frac{1}{2}$ " x 47 $\frac{3}{4}$ "
Thickness	4 $\frac{1}{2}$ " x 8 $\frac{1}{4}$ " Oval x 35"	
FRONT SUSPENSION	Taper Pressed Steel Double Drop-Side Rail Box	Taper Pressed Steel Double Drop-Side Rail Box
Steering Knuckle Pin Bearings—Lower	Sectioned Entire Length	Sectioned at Front and Rear
Caster	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "
Knuckle Pin Angle	Neg. 2° plus or minus $\frac{1}{2}$ "	1.063° x 1.1875° x 1.250° OD
Tread	60 $\frac{1}{16}$ "	2" 30"
REAR AXLE		59 $\frac{11}{16}$ "
Axle Housing	Pressed Steel Banjo Type	
Oil Capacity	6 pt.	
Tread	60 $\frac{11}{16}$ "	63 $\frac{11}{16}$ "
Standard Gear Ratio	4.09 to 1	4.54 to 1
Number Teeth—Gear and Pinion	45—11	50—11
Universal Joints	"Mechanics" Roller Bearing Type	"Mechanics" Roller Bearing Type
Number Required	3—Double Shaft	3—Double Shaft
SPRINGS		
Front—Coil	2450 x 120	2700 x 172 (right and left)
		Air Cond. Amb. Only
		Right—2900 x 172
		Left—3150 x 172
		Amb. and End Loader Hearse Only
		Right—1900 x 225
		Left—2000 x 225
		Three Way Loader Hearse Only
		Right—2000 x 225
		Left—2100 x 225
		Air Cond. Amb. Only
		Right—2200 x 250
		Left—2350 x 250
Rear—Leaf	1350 x 155	
STEERING GEAR		
Minimum Turning Radius	24 $\frac{1}{2}$ ft.	28 ft.
TRANSMISSION		
Type		Selective—Silent—Synchronized
Number of Forward Speeds		5
Engine to Rear Wheel Ratio	Std. O.D.	Std. O.D.
Overdrive		
Direct	4.09 3.15	4.54 3.39
Second	6.25 4.36	6.94 4.7
First	9.93 6.67	11.03 7.18
Reverse	12.94 10.59	14.36 11.41
Oil Capacity—Std. Trans.		14.87
Oil Capacity—O.D. Unit		2 pt.
Oil Level Plugs		1 $\frac{1}{2}$ pt.
Gear Teeth		1 $\frac{1}{2}$ "—14 Pipe
WHEELS		Helical
Size of Tire	15 x 8.20—4 Ply	16 x 7.50—6 Ply.
Recommended Tire Pressure (Cold)		
Front	26 lb.	30 lb.
Rear	26 lb.	40 lb.
CAR DIMENSION		
Wheelbase	141"	156 $\frac{1}{4}$ "
Overall Length—Bumper to Bumper	225 $\frac{11}{16}$ "	250 $\frac{3}{4}$ "
Overall Height Loaded	64 $\frac{11}{16}$ "	