

PACKARD

# Service Counselor

PARTS \* ACCESSORIES \* PRODUCT \* PROFITS

INSTITUTIONAL



PROMOTIONAL

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## How To Reduce Your Income Tax ..... and Your Income

### Six Simple Steps We Do NOT Suggest

What is the best way to lose a Service Department Customer?

Owner letters reveal the following tried and true methods still will drive Owners away faster than good advertising, fair prices, and conscientious workmanship will bring them in.



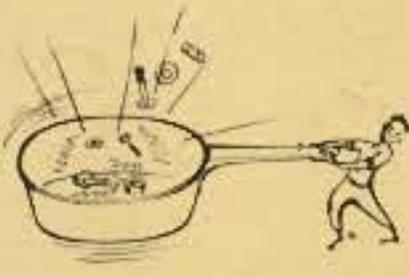
... mess up the upholstery or trim.



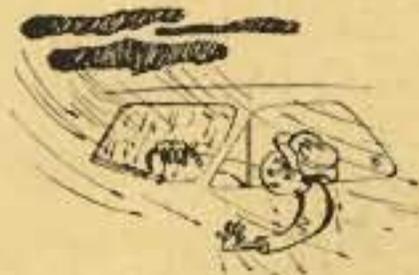
... return car to Owner with dirty windshield.



... leave grease on the steering wheel or driving controls.



... leave a few bolts and nuts or a couple of tools in the pan or trunk compartment to rattle.



... fail to reconnect the windshield wipers.



... use dirty water or sponge on wash rack to scratch the paint.

If you're sure you are making too much money, any or all of these are sure bets to cut down your Service Department volume.

And your income!

# 1948—TUNE-UP SPECIFICATIONS AND ADJUSTMENTS—1948

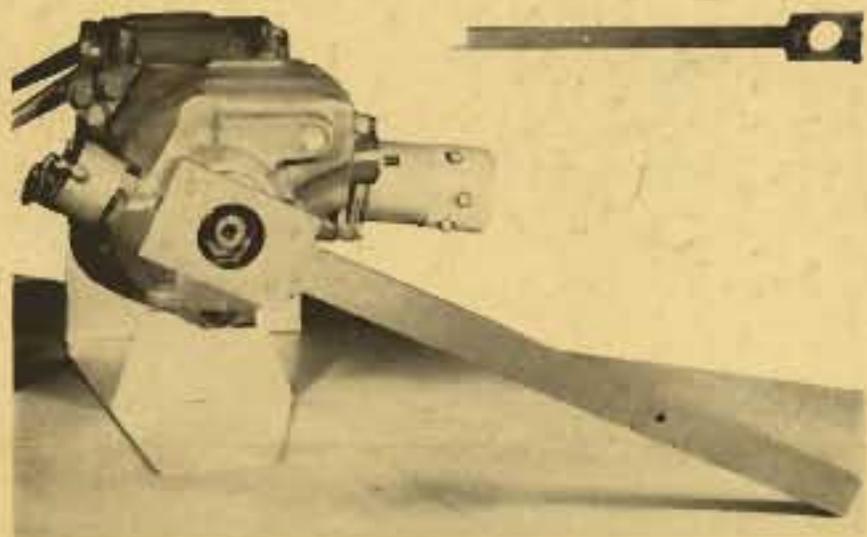
## CARBURETOR, FUEL PUMP and TAPPETS

	TAXICAB SIX	EIGHT & DELUXE EIGHT	SUPER EIGHT	CUSTOM EIGHT
<b>CARBURETOR</b>				
Make	Carter	Carter	Carter	Carter
Model	WAI-530S	WDO-644S	WDS-643S-SA	WDO-531S
Float Level	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{1}{2}$ "	$\frac{1}{2}$ "
Measured From	Seam	Top	Top	Top
Metering Rod Gauge	T109-102	T109-113	T109-113	T109-113
Metering Rod				
Economy Step	.076"	.064"	.0655"	.0665"
Middle Step Tapers to	.065"	.060"	.0585"	.060"
Power Step	.040"	.050"	.051"	.056"
Main Metering Jet	.1015"	.0846"	.09055"	.09055"
Low Speed Jet	No. 65	No. 70 (early)	No. 70	No. 70
By-Pass Jet	No. 55	No. 69 (late)	No. 52	No. 52 (early)
Economizer Jet	.073"	No. 50	No. 50	No. 53 (late)
Idle Bleed	No. 50	No. 54	No. 52	No. 50
Pump Adjustment	$\frac{1}{8}$ "	$\frac{3}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{16}$ "
Anti-Percolator Adjustment	.005"-.015"	.015"	.015"	.015"
Fast Idle Adjustment	$\frac{1}{8}$ "	.020"	.026"	.023"-.028"
Unloader Adjustment	$\frac{1}{8}$ "	$\frac{1}{16}$ "	$\frac{1}{16}$ "	$\frac{1}{16}$ "
Lockout Adjustment	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "
Idle Adjustment—turns out	$\frac{1}{2}$ to $1\frac{1}{2}$	$\frac{3}{8}$ to $1\frac{3}{8}$	$\frac{3}{8}$ to $1\frac{1}{4}$	$\frac{1}{2}$ to $1\frac{1}{2}$
Choke Adjustment	On Index	On Index	On Index	On Index
<b>FUEL PUMP</b>				
Make	AC	AC	AC	AC
Type	Vac. Booster	Vac. Booster	Vac. Booster	Vac. Booster
Model	1523867	1523867	1523867	1539116
Capacity—45 sec	1 pint	1 pint	1 pint	1 pint
Pressure—psi	4 to 4 $\frac{3}{4}$			
Inlet Side	Rear	Rear	Rear	Forward
Outlet Side	Forward	Forward	Forward	Rear
Fuel Tank Capacity—gal	17	17	20	20
<b>TAPPETS</b>				
Clearance—hot				
Inlet	.007"	.007"	.007"	.007"
Exhaust	.010"	.010"	.010"	.010"
				Hydraulic
				Hydraulic

# ELECTRICAL

	TAXICAB SIX	EIGHT & DELUXE EIGHT	SUPER EIGHT	CUSTOM EIGHT
<b>BATTERY</b>				
Auto-Lite	PN-15-ZR	PN-15-ZR	PN-15-ZR	PN-15-ZR
Willard	SW-1D-100	SW-1D-100	SW-1D-100	SW-1D-100
Ampere Hours Capacity	100	100	100	120
Number of Plates	15	15	15	17
<b>STARTING MOTOR</b>				
Make	Auto-Lite	Delco-Remy	Delco-Remy	Auto-Lite
Model	MCH-6003	1107943	1107943	MAX-4052
Stalled Torque—ft-lb	18	16	16	45.9
Running Free—amperes	65	60	60	77
Cranking Engine—amperes	150—200	175—225	175—225	200—250
Brush Spring Tension—oz	42—53	42—53	42—53	42—53
<b>GENERATOR</b>				
Make	Auto-Lite	Delco-Remy	Delco-Remy	Auto-Lite
Model	GEG-4823E	1102699	1102699	GDZ-4801G
Maximum Output @ 8 volts	40 amperes	35 amperes	35 amperes	35 amperes
Field Current—amperes	1.60—1.78	1.75—1.9	1.75—1.9	1.60—1.78
Brush Spring Tension—oz	6.4—68	25	25	35—53
<b>REGULATOR</b>				
Make	Auto-Lite	Delco-Remy	Delco-Remy	Auto-Lite
Model	VRP-4402B	1118278	1118278	VRP-4402A
Circuit Breaker				
Air Gap	.031"-.034"	.020"	.020"	.031"-.034"
Contact Gap	.015"	.020"	.020"	.015"
Close—volts	6.4—7.0	6.2—6.7	6.2—6.7	6.4—7.0
Current Regulator				
Air Gap	.048"-.052"	.080"	.080"	.048"-.052"
Contact Gap	.012"	—	—	.012"
Amperes	39—41	3.4—3.6	3.4—3.6	3.4—3.6
Voltage Regulator				
Voltage	7.2—7.4	7.2—7.4	7.2—7.4	7.2—7.4
Preferred	7.4	7.4	7.4	7.4
<b>DISTRIBUTOR</b>				
Make	Auto-Lite	Delco-Remy	Delco-Remy	Auto-Lite
Model	IGC-4505	1110811	1110811	IGT-4203
Breaker Contact Gap	.020"	.017"	.017"	.017"
Cam Dwell Angle	38°	31°	31°	27°
Breaker Spring Tension—oz	17—20	17—20	17—20	17—20
Ignition Timing—bdc	6°	6°	6°	6°
Condenser Capacity—mfd	.28—.52	.18—.25	.18—.25	.20—.25
Vac. Advance (max.)—deg	7.5	7	7	5.5
Gov. Advance (max.)—deg	10	9	9	12
<b>SPARK PLUGS</b>				
Auto-Lite	P-4	P-4	P-4	P-4
AC	104	104	104	104
Champion	Y4A	Y4A	Y4A	Y4A
Size	10mm	10mm	10mm	10mm
Gap	.028"	.028"	.028"	.028"

## Special Tool To Help Mechanic Tighten or Loosen Universal Joint Flange Nuts



Tightening or removing the universal joint flange nut is a difficult job at times because the universal joint turns and there is no satisfactory way of holding it with ordinary tools.

A special Universal Joint Flange Holding Tool has been designed to secure to flange while removing or tightening the flange nut on the overdrive or rear axle.

The tool may be used to hold the overdrive flange or the rear axle flange whether the unit is on or off the car and makes it easy either to remove a flange nut or pull it down to proper tension.

The hole in the holding tool is large enough to permit the use of the Universal Joint Flange Nut Socket Wrench J-2571-A on the flange nut. The holding tool is bolted into place which eliminates any danger of slipping or falling out of position.

Position of the bolts which hold the tool in place is shown in the small picture of the tool (in upper right corner of illustration.)

This tool will fit all Clipper Models, all 22nd Series cars, and many older models.

It may be ordered directly free from the Kent Moore Organization, Inc., General Motors Building, Detroit 2, Michigan. Tool number, J-2659; price, \$10.80.

## Carburetor Metering Rods Changed To Improve Custom Eight Performance

To smooth out engine performance during warm up and at low speed, a change in carburetor metering rods in the Custom Eight has recently been made in production. The new metering rods also increase gas mileage.

The new rods may be installed to advantage in 1948 Custom Eights produced prior to the change and in all Super Eights prior to the 22nd Series.

Cars in which the new rods have been installed may be identified as follows:

1—A round hole was punched in the brass identification tag on the carburetor when metering rods were changed in the Packard Factory.

2—The model number on carburetors equipped with new rods by Carter Carburetor Corporation is 531-S-A.

The new metering rods may be ordered for service under part number 410239.

When installing these rods, inspect the bypass bleeder plugs. If the original plugs have been replaced or altered, install new plugs, part number 393832.

### IMPORTANT!

The brake master cylinder on every new car must be completely filled with hydraulic brake fluid before the car is delivered to the Owner.

All cars as shipped from Factory have brake cylinders only partially filled. This is a precautionary measure taken to reduce the possibility of damage to paint and trim from fluid leakage during shipment.

Therefore, to assure good brakes and to prevent entrance of air into the hydraulic system, Dealers should completely fill the master cylinders before the cars are driven.

Also check the spring in the automatic choke thermostat. If a "G" type spring has been installed, replace it with a standard "M" type coil and housing assembly, part number 393972 before changing rods.

To facilitate identification, punch a round hole in the brass tag on the carburetor after installing the new metering rods.

### Correction

Engine torque developed by the 22nd Series Super Eight Engine is 266 pounds at 2000 rpm, not 226 pounds as stated in Mechanical Specifications on page 88 of the *Service Counselor*, October 15, 1947.

On page 89, length of Crankpin for the Custom Eight should be  $1\frac{3}{4}$  inch.

### Oversized Engines

The practice of installing .020-inch oversize engines in new cars is common throughout the industry. The oversize bore in no way affects the performance of the car and these engines may be expected to give service equal to those with the standard size bore. Such engines are identified by a star following the engine number.