

PARTS . ACCESSORIES . PRODUCT

PACKARD DIVISION

OF

STUDEBAKER-PACKARD CORPORATION



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# 55th Series Engine Training Schools Opens at South Bend, Ind.

The first Packard V-8 Engine Schools were held in March at the Service School in South Bend, Indiana. Zone Service personnel who attended were from Canada, Detroit, Chicago, Minneapolis, Memphis, St. Louis, Kansas City, Cincinnati, Pittsburgh, Dallas, Syracuse and Export.

The gentleman in the dark suit in the center of the picture is Mr. Roy B. Bender, General Service Manager. Studebaker-Packard Corporation. At the extreme left in the picture is Mr. A. S. Kidder who conducted the training.

As the V-8 Engine is quite new to most Packard Servicemen, several engines were supplied so that small groups could completely tear down, inspect, study all parts and reassemble the unit.

Factory trained Instructors are now conducting schools at Dealerships.





V-8 Engine School-Raleigh, N. C. Instructor: G. H. Yeager



V-8 Engine School—St. Louis Zone Instructors: Gene Bunz and Harold Seiter

### Caribbean Carburetors

55th Series

The Packard "Caribbean" is equipped with two Rochester Model 4GC Carburetors. Externally, there are only two differences in appearance—the idle speed stop screws and the fast idle cams.

The following lists the identification points, specifications and a step-by-step outline of the correct linkage and idle adjustments for this twin 4-barrel carburetor installation.

#### IDENTIFICATION

The front carburetor has an idle speed stop screw "A" (Fig. 1) with an elongated head. The rear car-

buretor has an idle speed stop screw "B" with an ordinary screw head.

The front carburetor has a fast idle cam "C" with three steps while the cam "D" on the rear carburetor has only one step.

#### **ADJUSTMENTS**

For proper engine performance, it is very important that the linkage and engine idle be properly adjusted. Before adjusting the carburetor linkage and idle, check for proper adjustment of the throttle valve lever on the transmission and the accelerator pedal rod lever under the floor board.

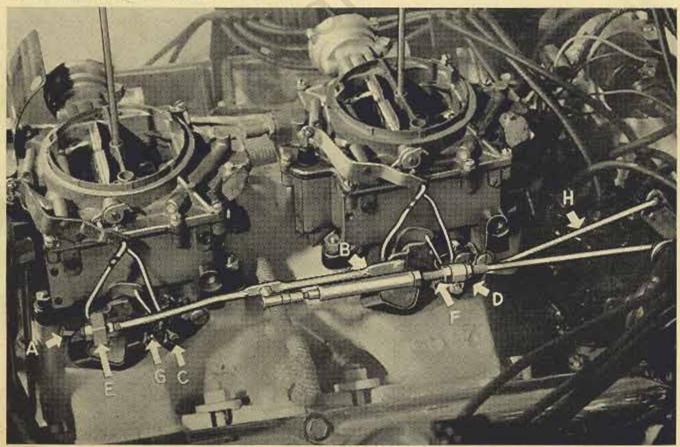


Fig. 1

- 1. Loosen the two jam nuts next to the pin "E" (Fig. 1) several turns.
- Loosen the two jam nuts several turns at the forward end of the transmission throttle rod "H."
- Back out the front and rear carburetor idle speed screws "A" and "B" until the throttle valves are closed.
- 4. While holding the front carburetor throttle lever tightly closed, adjust the jam nuts at pin "E" so that the pin works freely in the throttle lever and then tighten the jam nuts.

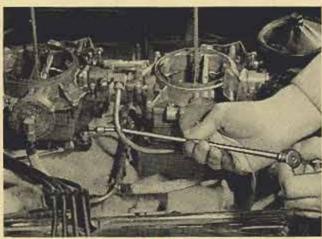


Fig. 2

- Turn in the idle speed screw "A" on the front carburetor until it makes contact and then turn it in one additional turn.
- 6. Turn the four idle mixture needles (two each carburetor Fig. 2) all the way in and then back them out one complete turn. The special tool shown will aid in the idle mixture needle adjustments.
- 7. After the engine is warmed up, adjust the front carburetor idle speed screw "A" to obtain 400 engine RPM with the transmission selector lever in drive position. NOTE: The rear carburetor idle speed screw "B" is not used, therefore, leave it at the position described in item 3.
- 8. Adjust the idle mixture needles to obtain a smooth idle. This can usually best be done by turning each needle into its lean "drop-off" point (as noticed by a drop in tachometer and vacuum gauge readings), counting the turns while turning the needle out to its rich "drop-off" point, then returning the needle to a position midway between the two "drop-off" points. Repeat with each needle. Suggested sequence: right rear, right front, left front, left rear. Adjust for the highest possible RPM and vacuum readings. Readjust front carburetor idle speed screw "A" to 400 engine RPM if necessary.
- Raise the rear carburetor fast idle cam "D" so that the adjusting screw "F" rests on the high step on the cam. Adjust the fast idle screw to obtain 2300-2350 engine RPM and then drop the cam away from the screw.
- 10. Raise the front carburetor fast idle cam "C" so that the adjusting screw "G" rests on the high step on the cam. Adjust the fast idle screw to obtain 1850 engine RPM and then drop the cam away from the screw.

NOTE: Due to inaccessibility of the fast idle screws on both carburetors at low idle position, it will be necessary to shut off the engine and partially open the throttle to adjust the fast idle screws.

- 11. With the engine idling at 400 RPM, apply a slight forward pressure on the transmission throttle rod "H" and move the rear jam nut up to the adjuster, move the front jam nut up to the adjuster and tighten. Make sure that the alignment of the adjuster is such that it does not bind when opening and closing the accelerator.
- Install the air cleaners and readjust the idle speed and idle mixture if necessary.

#### SPECIFICATIONS

	Front	Rear
Make and Type	Rochester 4GC	Rochester 4GC
Bore Size	1-5/16' Four Barrel	1-5/16" Four Barrel
Main Venturi	Pri. 1-1/64", Sec. 57/64"	Pri. 1-1/64*, Sec. 57/64*
Float Setting	15%	15%
Float Drop	234"	21/4"
Measured From	Float Bottom to Cover Gasket	Float Bottom to Cover Gasket
Main Metering Jet	Pri049", Sec044"	Pri049", Sec044"
Idle Tube	Pri030"	Pri030°
Idle Needle Hole	.040"	.040"
Pump Discharge Jets	.028"	.028"
Idle Adjustment	DAMES AND STREET	4.307449
Turns Out	1 to 1½	1 to 1½
Idle Speed—400 Eng. RPM Shift Lever in Drive	400 RPM	400 RPM
Choke Adjust-	0.70/07/140 - 27	TELEVISION OF
ment	1 Notch Lean	1 Notch Lean
Pump Rod Adjustment	1-3/32"	1-3/32"
Choke Rod Adjustment	.052"	.035"
Unloader Adjust- ment	.150"	.150°
Idle Vent Adjust- ment	.063*	.063*
Fast Idle Adjust- ment	.020*	.030°
Secondary Lock- out Adjustment	.015*	.015*
Secondary Con- tour Adjustment	.015"	.015"
Fast Idle RPM	1850 RPM	2300 RPM

#### STARTING THE ENGINE All 55th Series

- a. Position gear shift or selector lever in neutral or park position.
- Engine Cold—Depress accelerator pedal to floor once, then release (this presets automatic choke and throttle).

Engine Warm-Hold accelerator approximately one-third open.

- Turn ignition key clockwise to crank engine. Release pressure on key when engine starts.
- d. If engine does not start in reasonable time, hold accelerator pedal to floor (without pumping) while continuing to crank the engine.

Figure 3 illustrates the handy idle mixture adjusting screw tool and may be ordered under Tool No. J-6044, direct from the Kent-Moore Organization, Inc., 3044 W. Grand Blvd., Detroit 2, Michigan. Price \$6.95.



Fig. 3

NOTE: Export Dealers may order from the Studebaker-Packard Corp., Export Division, 635 South Main Street, South Bend, Indiana.

### Power Steering Pump Pressure Gauge Fittings

55th Series

Two new fittings are required to attach the Pressure Gauge, PK-13, when checking the pressure on 55th Series power steering pumps.



Fig. 1

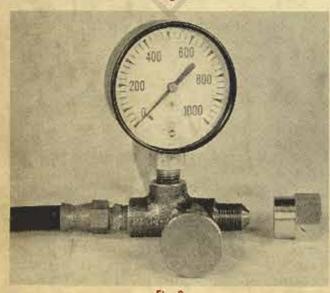


Fig. 2

With the fittings installed as shown in figures 1 and 2, the pump pressure can be checked as described in your Serviceman's Training Book "Packard Power Steering."

See your Service Counselor Vol. 29, No. 4, April 1955, for identification of the pumps and the desired pressures.



The new fittings are listed as PK-13E and PK-13H Power Steering Pressure Gauge Fittings and should be ordered direct from K. R. Wilson, Inc., Arcade, New York, price \$2.50.

NOTE: Export Dealers may order from the Studebaker-Packard Corporation, Export Division, 635 South Main Street, South Bend, Indiana.

# "Tips From The Editor" ERRATIC INSTRUMENT GAUGES

55th Series

The 55th Series instrument panel gauges, generator and oil indicator lights are protected by a 7½ ampere fuse located in the main fuse block marked INSTRUMENTS. The ammeter and oil pressure gauges on the Packard Line are not connected in this fuse circuit.

Some of the indications of a blown fuse are:

- 1. Temperature and fuel gauges read incorrectly.
- Generator charge indicator light very dim or does not go out with increase in engine speed.
- Oil pressure indicator lamp does not light with ignition switch on-engine not running.

If erratic operation of instrument panel gauges is encountered, check the 7½ amp. fuse for being blown.

## Throttle Linkage Adjustment

Please refer to your Serviceman's Training Book "55th Series Mechanical Changes," Page 13.

Step No. 5, in the linkage adjustment reads "Apply a slight rearward movement, etc." Change the word rearward to forward.

This correction should also be made on page 53 in the Twin Ultramatic Section of your new 55th Series Service Manual when it is received.