

# Packard—Chicago

## Service Bulletin

No. 29

Date 9-10-34

To: BRANCH MANAGERS AND ALL DEALERS:

Subject: SERVICE TECHNICAL DISCUSSION

I am summarizing below a number of service problems that we discussed at the factory meeting on August 31st. This information should be passed on to your Service Manager and Shop Foreman.

### BODY HEAT

See Service Letter #14, Volume 8 - method of testing and correcting. Use furanco cement, dumb dumb putty or any other sealer which will not harden and fall out. Wrapping exhaust mufflers and tail pipes will accomplish nothing. Covering under floor and seat bottoms with insulating material will help only after openings have been closed. A small opening, no larger than a pencil lead, may be the source of the trouble. More wood is used in the Twelfth Series floor and body construction and openings are being watched more carefully. No trouble is anticipated.

### STICKING VALVES

Sticking valves have been found to be caused by the residue left from burnt oil and gum in gasoline which adheres to that portion of the valve stem traveling in the upper part of the stem guide. It has been found that the use of twenty gallons of gasoline having a high content of gum may cause the valves to stick. Milling off the tops of exhaust valve guides to one quarter inch from the block will aid as a preventive. Twelfth Series cylinder blocks are now cast to enclose the upper portion of the guide where the trouble occurred, increasing valve cooling and lowering the deposit of residue that formerly accumulated on the valve stems and in the top portion of the guide.

### DOUBLE COILS

Shorting due to water. See Technical Letter #15, Volume 8. All cars should have insulating rubber grommet cap installed to prevent coil failure. Remove high tension terminal,

**Make every owner a salesman.**

#2. Service Bulletin #29.  
September 10, 1934.

cover groove with cement, keep binding post clean, replace wire, install rubber insulator and coil cap. New coil caps are now made heavier to prevent breakage. It is not necessary to renew a double coil when one of the primary posts goes dead or has an open circuit. Switch them in holder so that distributor leads will hook up. Twelfth Series now has single coil which has been found to have the equivalent of double coils at a reduced amount of current consumption.

RADIO - 12TH SERIES - Holes are punched in metal dash. Holes should be drilled thru composition insulating material. Installation should be made in one hour or less. Radio resembles a Philco No. 9 but has several exclusive features built into set for Packard and not incorporated in other sets they make.

CARBURETOR - 12TH SERIES TWIN - Carburetor has larger venturi tube. Engineers do not recommend installation on Eleventh Series Twin.

ELECTRIC CLOCK - 12TH SERIES - Clock will stop when electrical circuit is broken, such as when changing batteries. To start, reset clock in conventional manner.

STARTIX Use red label startix with red label generator. If this is not done Startix control will burn out. Twelfth Series generator regulators have been changed to prevent startix cutting in at low speeds and are marked with identifying initial "A" stamped on base.

CYLINDER HEAD - 12TH SERIES - Greater care must be exercised in handling to prevent damage to finished surfaces, material is comparably soft. When installing use only 12th Series gaskets which can also be used on 11th Series. However, 11th Series gaskets should not be installed on 12th Series cars. When replacing head it is important, in order to avoid distorting or fracture, that the head nuts be tightened in proper sequence. Start with the center row of studs, tightening center stud nut first, then continue in center row forward and then backward. After center row has been tightened begin half way to tighten both outside rows. Tighten two stud nuts on one side, then cross over and tighten two more on opposite side, repeat operation and work forward, then backward until all nuts are tightened.

#3. Service Bulletin #29.  
September 10th, 1934.

ROD BEARINGS - 12TH SERIES - Removable. Sizes standard, one, two, three and ten thousandths undersize. Steel back with bearing surface of 45% copper, balance lead alloy composition. Clearance minimum one and seven thousandths, maximum two and one quarter thousandths; try and hold to two thousandths. Bearing shells should have a three thousandths pinch when connecting rod cap is tightened. Should not be used on crank pins over one and five thousandths out of round. In fitting, use two thousandths shim stock and fit to high point if shaft is out of round. On cars previous to Tenth Series it is not advisable to install 10th or 11th Series rods unless the shaft is new or in excellent condition.

AUTOMATIC CHOKE THERMOSTAT - 12TH SERIES - Choke is now enclosed in recess built in manifold. A few of first cars set six notches rich from zero mark, standard setting now eleven notches.

BUMPER - FRONT & REAR BAR - 12TH SERIES - Any cars not so equipped should have same installed as soon as possible.

CLUTCH PEDAL ADJUSTMENT - 12TH SERIES - To adjust, shorten or lengthen stud connection which attaches vacuum control valve to linkage. Check clearance with motor shut off and vacuum released.

OIL CLEANER - AUTOMATIC - 12TH SERIES TWIN - Clean out sump below cleaner every 10,000 miles by removing drain plug.

SHOCK LINKS - 12TH SERIES - Not interchangeable with earlier models.

AIRCLEANERS - Recoat with #50 oil after cleaning.

BRAKE SELECTOR Selector has been removed from instrument board. Three positions for leverage now located in brake pedal arm linkage.

CAR SPEED Track timing with and against wind - Packard Eight - 83 to 88 miles, Super Eight - 91 to 96 miles, Twelve - 96 to 105 miles per hour.

DOOR HINGES Pins - hollow type, have oil reservoir, fill by removing screw cap in top.

WINDSHIELD WIPERS Sticking may be caused by rubber bushing on outer end of shaft, misalignment of connecting links with motor, slide valve not opening fully, bumping up against header panel. To adjust speed turn knob.

#4. Service Bulletin #29.  
September 10th, 1934.

SUN VISORS - If loose, remove, add washers to increase tension on springs and replace.

CURTAINS - Curtains are right and left hand. To remove loosen lining strip on forward side, remove bracket and curtain by pulling forward.

REFERENCE BOOK On mechanical information. This is a new book recently made up by the factory condensing information given in former Service Letters and Parts Information Books. All Shop Foremen and Service Departments should have one for quick reference.

CRANKCASE OIL CAPACITY - We will continue to use eight quarts in Standard Eight, ten quarts in Super Eight and Twelve.

MOTOR OIL RECOMMENDATION - Change to SAE 10-W zero about December 1st, 1934 - all models.

SPRING SHACKLE ADJUSTMENT - 12TH SERIES - Front of front springs. Four concave washers used, tighten fully, back off one half turn. A little difficulty may be experienced at this point with rattle and very shortly a change may be recommended to a new style rubber compression washer to replace concave.

RETURN GOODS CLAIMS - Do not assume responsibility for credit on material returned without authorization. Claims are being watched more carefully. When in doubt get in touch with Mr. Dolansky at 37th Street.

WARRANTY LABOR CLAIMS - They will not be passed unless more detailed information is given. Itemize description of work performed and follow operations listed in flat rate manual as closely as possible.

CARBURETORS - LEAKING - With motor running and with the aid of a small flash light, examine economizer jets for leaking at spray nozzles, also where they protrude thru shell body of carburetor. If leaking from nozzle see that valve pin is free at bottom of accelerating well. If leak is around the outside of nozzle at body, tighten jet. Should leak continue, remove jet and file off or chamfer end which has screw driver slot, replace and seat tight. Check float chamber gas level. Check needle valve and seat, polish end of needle valve that contacts float lever, blow out all jet passages with air.

#5 - Service Bulletin #29.  
September 10, 1934.

SPRINGS - Noise created by shift of leaves on rear of front. Make up short clip installing with bolt on bottom side of leaves, pull up so that clip tightens in wedge shape. Also check and tighten if loose bracket on left side of motor which prevents forward and backward shift. Tighten brace rod on right hand side from rear motor cradle to frame. Make sure bolt on frame side is pulled up tight. A loose bolt at this point will create a noise similar to that caused by spring leaf shift. Twelfth Series cars will have heavier spring cover section incorporated at rear of front and rear of rear springs.

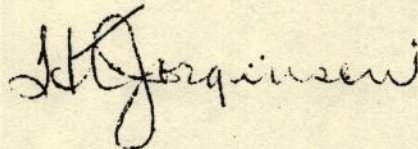
RADIATOR ANTI-FREEZE - 12TH SERIES - We recommend Prestone. Glycerine can be used. Emulsifying oil recommended with Anti-Freeze. With clear water use capsule of dichromate which will prevent minerals in water from attacking aluminum heads.

BREAKING IN OILS - Not recommended because a great many of them contain acids which would be injurious to our lead copper rod bearings.

PISTON RINGS - 12TH SERIES - Perfect circle. Top groove one eighth inch #70, second groove same, third - one eighth inch #85 and bottom 5/32 inch #85. Above set up as fitted to alloy pistons not having struts.

DOUBLE COILS - Coils shorted having burnt track in Bakelite. In some cases a satisfactory repair can be made by cleaning out burnt track, making a good bond for Bakelite cement. Let cement dry thoroughly and renew high tension lead to coil.

UNIVERSAL JOINTS - Lubrication - Refer to Service Letter Volume 8, #11, 12th Series lubrication self-contained except front spline. At a later date you will be advised when to remove, dismantle and repack. Temporary figure 25,000 miles.



H. T. Jorgensen,  
Service Manager.

HTJ.MK..