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TO BE NOTED AND INITIALED BY	

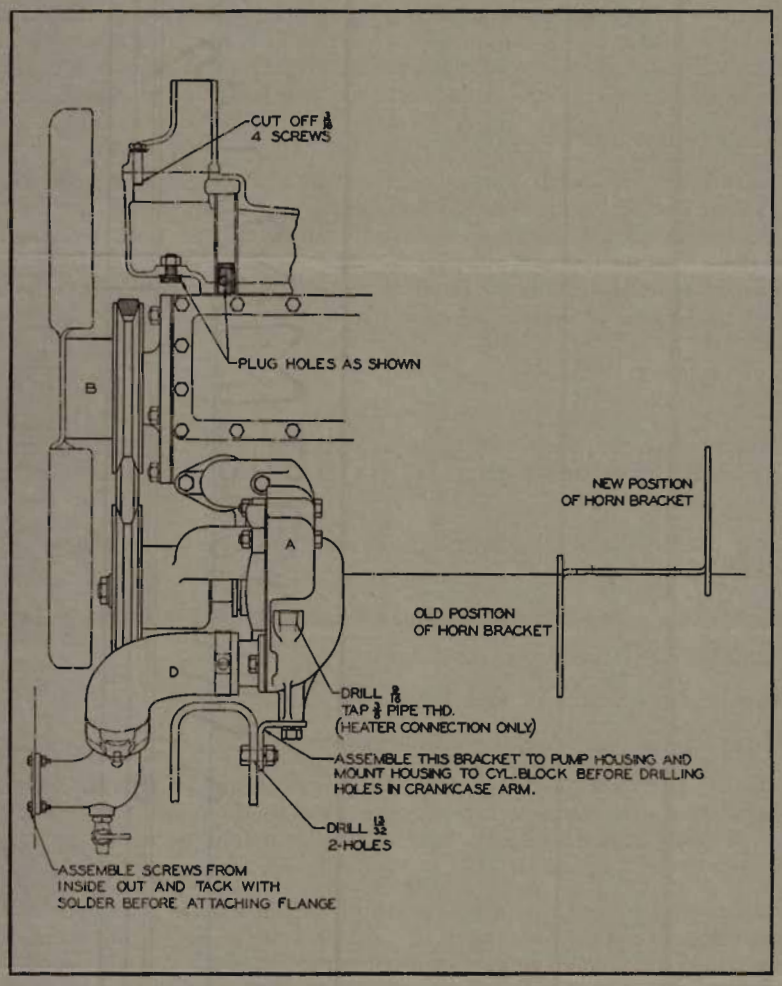
PACKARD MOTOR CAR COMPANY

DETROIT MICHIGAN

September 25, 1930

To Packard Distributers and Dealers

Subject: WATER PUMP CHANGE OVER EQUIPMENT



Gentlemen:

In spite of the changes which have been made in the 626 water pump we have still encountered a certain amount of leakage in cars which are driven at high speeds.

A new water pump equipment has accordingly been developed for this model. The pump is mounted at the lower forward end of the cylinder block on the left side, since in this location the space is not restricted and it is possible to develop a unit which has proven itself satisfactory in long and severe tests.

The new pump should be ordered as follows:

1—97798 Water Pump Equipment.

All orders for Sixth series water pumps will in the future be filled with this equipment. The net price of the equipment has been fixed at $10.00, which is a figure less than our actual factory cost, and we ask that our Distributers furnish them to their Dealers at the same price, foregoing their parts profit just as we are actually supplying the material at less than our cost.

In any cases where trouble is being experienced with a Sixth series water pump the new equipment may be supplied and if a notation to this effect is made on the claim tag accompanying the pump removed our credit will exactly offset our charge for the change over equipment. We are willing to allow this credit in any case where the Distributer or Dealer is willing to take care of the labor in connection with the installation.

If the change over equipment is desired by an owner who has not had trouble with his present pump, or who simply desires the new construction, it is expected that he will be charged for both labor and material, and in this case the old pump will not, of course, be subject to credit. We suggest an installed price to the customer of $20.00.

The instructions outlined below cover the installation of the equipment, and by consulting the illustration and the text we believe that the work may be performed without difficulty.

INSTALLATION

1. Remove radiator.
2. Remove radiator lower water outlet from radiator by cutting off the four rivets and heating with a torch. Fasten new outlet in place with four special fillister head screws that have a hole drilled crosswise through the end. Insert a fine wire in this hole in the end of the screw and pull the screws through the rivet holes with the head on the inside of the radiator. Hold the wire tight and tack the screws in place with solder. Place the outlet casting over the four studs formed by the inserted screws and bolt up tight. Sweat the new elbow in place with a torch, and solder around the edge of the flange with a soldering iron.

(over)

3. Remove old water pump, vibration damper and crankcase oil filler.

4. Remove horn bracket. Turn bracket around and upside down so that it will be at the rear of the crankcase oil filler. It will be necessary to bend bracket slightly so that horn will clear crankcase oil filler in the new position.

5. Replace horn wires. Horn wires will be too short and it will be necessary to cut wire casing and lengthen the wires as needed. Tape up casing.

6. Remove water inlet elbow from left side of cylinder block and attach new water pump assembly "A". A cap screw and stud with an acorn nut are supplied for this purpose. A copper asbestos gasket is furnished for use under the acorn nut to prevent water leaks at this point. There is a support bracket attached to the bottom side of the water pump assembly which should be squared up with the crankcase arm and two $\frac{13}{32}$" holes drilled through the crankcase arm using this bracket as a templet. Assemble the two bolts that are supplied with the heads on the inside of the crankcase arm.

7. Assemble the new fan belt and the old vibration damper.

8. Install new fan pulley and support assembly "B" with special gasket that is supplied for use between the support and the cylinder. There are two adjustments for taking up wear in the fan belt. The fan support slides upward and the water pump rotates with an eccentric motion outward. Therefore, when making this installation adjust the fan support as high up as possible, so that the water pump adjustment which is easily accessible can be used to take up the normal stretch of the fan belt.

9. Assemble fan.

10. Remove cylinder head.

11. Remove cylinder head thermostat. (Not required with new pump.) Close thermostat anchor hole with bolt and copper washer as supplied. Drive brass plug "C" in thermostat by-pass tube in cylinder head.

12. Replace thermostat housing, omitting thermostat. The four cap screws must be shortened $\frac{3}{16}$" to compensate for the removal of the thermostat flange.

13. Replace cylinder head.

14. Connect water hose "D" to lower radiator outlet and replace radiator.

15. Fill cooling system and make final inspection on car to check for water leaks.

16. Stamp motor number on crankcase arm so that it will be visible with pump in its new location.

17. Pump assemblies are shipped with water pump adjusted to the low point of the eccentric. When pump has been adjusted to the high point of the eccentric to compensate for fan belt wear it will then be necessary to transpose the pipe plug and oil cup so that the oil cup will be in an upright position.

18. If car is equipped with a hot water heater connecting to the water inlet flange that is removed from the cylinder block to make this installation, it will be necessary to drill and tap a $\frac{3}{8}$" pipe thread in boss on lower section of water pump body and attach hose connections.

Yours very truly,

PACKARD MOTOR CAR COMPANY.

T A Stalker

T. A. Stalker,
Manager Technical Department.

(e)4800
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