

Buck

PACKARD MOTOR CAR COMPANY

DETROIT MICHIGAN

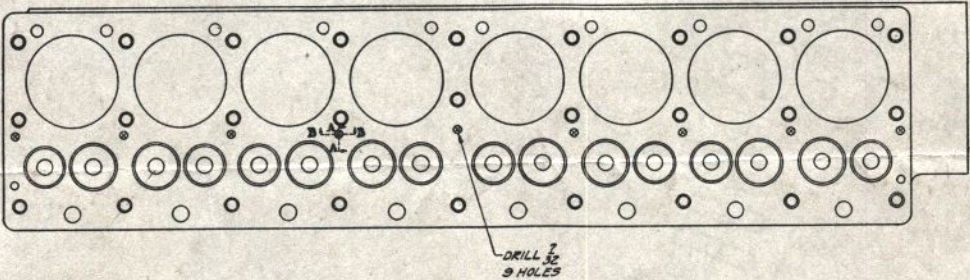
March 21, 1933

REFER TO THIS LETTER BY NUMBER

TO BE NOTED AND INITIALED BY	

To Packard Distributers and Dealers.

Subject: CYLINDER BLOCK WATER PASSAGES.



Gentlemen:

Improved cooling around the valve seats of the Tenth series cars has been provided by a series of holes in the cylinder block which permit the water to pass from the pockets around the valves into the cylinder head.

These holes can easily be drilled in the field, and all cylinder head gaskets for motors, starting with the

Fourth series, are provided with the extra holes to permit the blocks and heads to be drilled as the opportunity develops.

The new gasket may be used as a marking template to locate the holes, using a $\frac{7}{8}$ " drill as illustrated. Care must be taken in the drilling operation, because the drill comes out on the side of a web as it enters the water jacket, and it may be broken unless it is firmly held. If a small portable drill is used it may be found advisable to start the hole with an ordinary drill and finish to a depth of $\frac{1}{2}$ " with an end mill. The end mill is not subject to breakage.

After the cylinder block has been drilled, it is, of course, necessary to provide similar passages in the head, and the gasket should again be used as a marking template. The ferrules around the new water holes should be coated with a material similar to Prussian Blue, and with the gasket in place on the block, the cylinder head should be pulled down tightly enough so that an impression of the ferrules will be made on the under face of the head. A $\frac{7}{8}$ " drill should also be used for the holes in the head.

These additional water passages have been found so effective in reducing valve seat temperatures, that the holes have been added to the cylinder blocks and cylinder heads in our service stock. We suggest that the same procedure be followed in the field, because it will prevent the high temperatures which sometimes cause the block to crack between the valve seat and the cylinder bore.

Yours very truly,

PACKARD MOTOR CAR COMPANY.

T. A. Stalker

T. A. STALKER,

Mgr. Technical Department.

TAS:N