

PACKARD MOTOR CAR COMPANY

DETROIT MICHIGAN

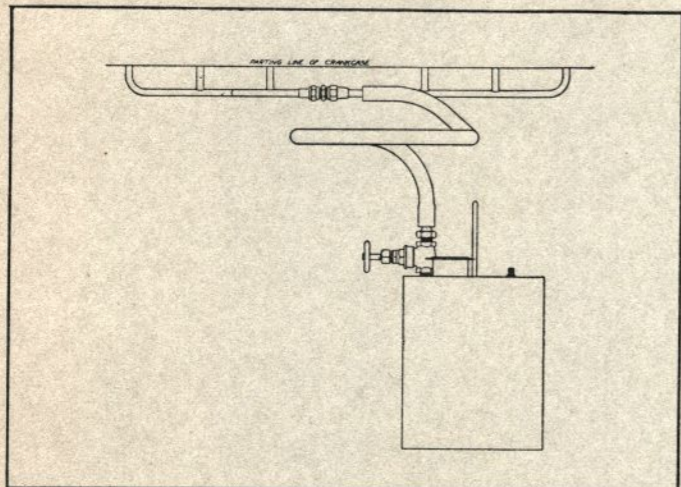
January 13, 1923

REFER TO THIS LETTER BY NUMBER

TO BE NOTED AND INITIALED BY

To Packard Distributers.

Subject, Oil Test Tank for Motor Lubricating System



In order to properly check the condition of the motor bearings, it is essential that every repair shop be equipped with an oil test tank such as is shown in the illustration. These tanks are carried in service stock under Pc. No. ST-109, and we are prepared to furnish them for \$14.00 net.

The test tank should be used in making a motor inspection, as it is possible to determine very accurately the condition of the bearings. It is very valuable in correcting over-oiling, because it tells the mechanic whether the difficulty lies in the fit of the bearings or in the pistons and rings. It should also be used for checking bearing work after a motor overhaul.

In making a test with this tank, the following procedure should be observed:

1. Drop bottom half of crankcase.
2. Disconnect oil manifold from oil pump.
3. Fill test tank 2-3 full of oil out of motor, unless it is so thin as to be of little value in making the test.
4. Connect test tank hose to motor oil manifold.
5. Keep tank pumped up to 30 pounds minimum pressure.
6. Gauge on instrument board should register approximately same as gauge on test tank, except when cylinders 1 and 6 are on upper dead center, as in this position there is a direct flow of oil thru camshaft to lubricate the front end chain and sprockets.
7. Crank motor over by hand crank.
8. Flow of oil from connecting rods and main bearings should be in drops before reaching floor (equivalent to approximately 20 to 60 drops a minute).

In refitting the main and connecting rod bearings, they should be set up with a minimum clearance of .001", and if this is done, the crank shaft may be turned over freely with the hand crank after all main and connecting rod caps are drawn up and the cotter pins in place. It will thus be seen that by the use of the hand crank and the oil test tank, a positive check can be obtained on the condition of all bearings, the hand crank checking for tight bearings, and the test tank indicating when the bearings are too loose.

Yours very truly,

PACKARD MOTOR CAR COMPANY.

H. N. Davock

H. N. DAVOCK, Manager,
Technical Service Department.