REFER TO THIS LETTER BY NUMBER

## PACKARD MOTOR CAR COMPANY

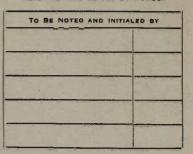
## DETROIT MICHIGAN

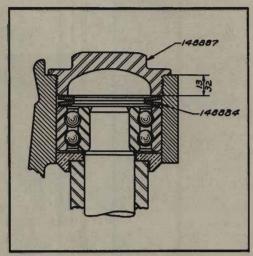
May 18, 1927.

To: Packard Distributers and Dealers.

Subject,

STEERING KNUCKLE BALL BEARINGS





It has been the practice to assemble the front steering knuckle ball bearings rather snugly by means of shims under the upper plug, but we find that it is possible to impose an excessive thrust load on the bearings by this method, so that the ball races may become pitted or cracked.

This, of course, causes an unsatisfactory steering condition, and, to eliminate any possibility of this occurring, two concave spring washers have been designed to be used in place of the shims. These washers will prevent the bearings from being assembled with too much thrust load.

Two washers, piece number 148884, and a new plug, piece number 148887, are required for each knuckle and, after all shims have been removed, the washers should be assembled

with the convex faces toward each other, as shown in the illustration, and the plug pulled down firmly.

When present stock is exhausted the Service Division will supply only the new plug, which will, of course, necessitate the installation of the washers. The present plug can be reworked into the new design by cutting 3/16 off the threaded portion, which should then measure 13/32 from face of flange to the end.

## OIL ON FRONT BRAKE SHOES

The presence of oil on the lining of the front brake shoes will cause these brakes to chatter, and the lining must be kept free from all lubricants in order to obtain a satisfactory result.

In those cases where oil collects on the shoes it will be found that it has escaped from the chassis lubricator line at the point where the brake operating shaft is carried in the support plate. This leakage is due to the fact that oil which lubricates the steering cross tube ball joints sometimes finds itself unable to escape with the result that the repeated operation of the chassis lubricator system causes the line to fill up with oil and finally overflow at the point mentioned above.

We are now drilling an oil relief hole in each of the cross tube ball joint sockets, in order that the lubricant which enters the socket may escape instead of backing up into the brakes. The easiest way to accomplish this result in cars already in service is to remove the ball socket cover and file a groove across the gasket surface on the under side of the cover, as this will permit the oil to escape in the same manner.

Brakes which have become soaked with oil should be thoroughly cleaned and the oil removed as completely as possible. This can best be done by washing the surface with kerosene and drying with a blow torch, taking care not to apply enough heat to burn the lining.

Yours very truly,

PACKARD MOTOR CAR COMPANY

H. M. Barrek

H. N. DAVOCK, General Service Manager.