

PACKARD MOTOR CAR COMPANY

DETROIT MICHIGAN

January 29, 1934

To PACKARD DISTRIBUTERS AND DEALERS

Subject SHOCK ABSORBERS

TO BE NOTED AND INITIALED BY	

Gentlemen:

Shock absorber noise may develop either in the linkage or in the shock absorbers themselves.

It is easy to check the shock absorber links, and these should first be inspected before any work is done on the shock absorber units. The Standard Eight uses a link having a clevis connection at the upper end, while the link in the Super Eight and Twelve has a ball joint at each end.

The clevis type of link is described in the Service Letter dated January 15. Play in this link can be detected by shaking it with the hand, and can be corrected by using the material described in the Service Letter.

The ball joint link may develop a rattle if the ball is excessively loose, and the fit of the ball can be checked by disconnecting the link. When it is in a vertical position there should be enough tension in the ball joint to hold the joint horizontal, and if it falls of its own weight, it is likely to rattle in service. The latest type of ball joint links can be identified by a smaller grinder mark at each end of the joint, and the units carrying this mark have operated very successfully.

If the noise you are endeavoring to correct is in the shock absorber, it may be caused by end play in the cross shaft, and this play can now be easily eliminated. The shock absorber should first be taken off and the side plate removed. The bushing surrounding the exposed end of the shaft should be driven inward until it contacts with the cam at the center of the shaft. This will prevent the shaft from moving endwise. A 1/8" spacer should then be used between the outer end of the bushing and the side plate, in order to hold the bushing in position.

We are prepared to furnish these spacers as follows:

219976 Shock Absorber Cam Bushing Spacer

Make sure, after the spacer is installed, it does not project beyond the face of the shock absorber housing, because this would cause the shaft to bind when the plate is replaced.

In replacing the plate be sure that the gasket is in good condition, and that the surfaces are clean, so there will be no possibility of an oil leak. It will be advisable to carry a supply of gaskets on hand so that any which are torn in the removal of the plate may be replaced.

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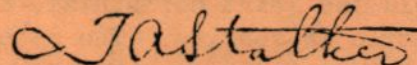
The cars which we are now shipping are equipped with shock absorbers in which this end play has been eliminated. The bushing has been lengthened so that it bears against the cam at its inner end and against the side plate at the outer end. These units are identified by the letter "N" stamped on the side of the lever where it surrounds the end of the shaft. We suggest that when spacers are installed the levers be stamped in this way.

The shock absorber can easily be refilled with oil while the above work is performed. Fill the shock absorber body while the plate is off, working the arm to the ends of the stroke to expel any air in the passages. After replacing the plate turn the shock absorber to an upright position, and remove the oil level plug to permit the drainage of the surplus oil. This will prevent the building up of high pressures inside the shock absorber as the oil becomes heated.

We believe that the steps outlined above will satisfactorily handle the situation. At low temperatures a reduced amount of noise may still remain in the shock absorbers, but this will in most cases disappear as the weather becomes warmer or when the oil in the shock absorber becomes sufficiently heated.

Yours very truly,

PACKARD MOTOR CAR COMPANY



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