

# Packard SERVICE TECHNICAL Bulletin

56T-10  
Dealer 8  
February 16, 1956

To: ZONES AND DEALERS

Subject: VIBRATION PERIOD 58-62 M.P.H. - PATRICIAN AND 400 MODELS  
55TH AND 56TH SERIES

There exists in some of the models included in the above subject the disturbance mentioned. While it will not cause any harm or failures, nevertheless, it is not only annoying but occurs at one of the most popular driving speeds. Many states have a maximum daylight speed law of 60 M.P.H.

In some cases a satisfactory result may be obtained by installing  $1/8$  to  $1/4$  inch shims at the forward side of the rear axle U-bolt at the torque arms. The shims are placed on the forward side, to raise the nose of the differential, between the sleeve of rubber bushings and the flange of the rear housing. The 55th Series requires a full shim with a  $9/16$  inch hole and an approximate O.D. of  $2 \frac{3}{8}$  inches. The U-bolt must be removed to install them. As the 1956 models have a steel washer over the top of the rubber bushing and sleeve, shims with slotted holes may be slipped into place between the housing flange and bushing top washer, when the U-bolts are loosened to permit their insertion. It is not necessary to remove the U-bolts completely.

If the results obtained are still not satisfactory install a new ring gear and pinion set to provide a 3.07:1 ratio. It will also be necessary to provide the correct speedometer pinion and adapter for the 3.07 ratio. All parts required are listed under their respective part numbers in the Parts Book. Follow the Service Manual for the installation of the ring gear and pinions. The 1956 Rear Axle Service Tools are required for the change over of gears in this unit and the job should not be attempted without them.

Our experience with the shims produced the following results . . . reduced the range of its duration, moved it to the low side of the former total range covered and greatly reduced the density. In the case of a field complaint, if results as mentioned are similar, following the installation of shims, it may satisfy many customers. We firmly believe it is worth a try.

If it is necessary to install the 3.07:1 gear ratio and you have previously installed the shims, they may be left in place. The results we obtained from this ratio were excellent in the 58 to 62 M.P.H. range and there was no doubt as to the acceptability, the moving of the period to the 70 M.P.H. range was not nearly as noticeable as the former period was in the lower M.P.H. range. Neither the density nor the range was as objectionable at 70 M.P.H. as it was when it occurred at 58 to 62 M.P.H.

We suggest you do not go to the extent of promising complete elimination of this condition but let your approach be that satisfactory and acceptable results will be obtained through what is proposed to be done. The selling of the fact that the noise will do no harm and that it may be reduced to a satisfactory, acceptable level, will not lead to a high expectancy; over-promising, on the other hand, may lead to a negative acceptance regardless of the results obtained.

Positive handling of such complaints, along with the right kind of selling as to the results, without overdoing it, will definitely close practically all of them satisfactorily.

RING GEAR AND PINION SET 3.07:1 ratio

Part No. 902578	5580
Part No. 6484505	5680

Speedometer Pinion, part number 450317, and Adapter, part number 450517, are required for either model.

Very truly yours,

*T. W. Nertney*  
T. W. Nertney  
Service Technical Manager

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