

This Bulletin cancels
Service Bulletin S3/F1
dated 1.1.64.

FOR INFORMATION

PROPELLER SHAFT CENTRE BEARING SQUEAL - S3 CARS

APPLICABLE TO:

All S3 series cars.

DESCRIPTION

During the winter months the propeller shaft centre bearing can emit a loud squealing noise soon after starting from rest when the bearing is still cold.

The bearing is very lightly loaded and it is almost certain that this noise is caused by the balls skidding instead of rolling in the tracks. One simple way of ensuring that the balls do roll, is to load them lightly in an axial direction against the tracks by twisting the bearing as described below.

Retailers and Service Personnel can cure the noise with the least delay and inconvenience to the customer by applying a small pre-load to this bearing. It should be stressed, that the application of a small pre-load does not in any way have a detrimental effect on the bearing.

It is recommended that action should be taken in the event of a customer complaint or if a customer has previously recorded a complaint of centre bearing squeal.

PROCEDURE

Place the car on a ramp or over a pit.

Remove the split pin which locks the nut securing the centre bearing mount to the chassis frame. Slacken the nut sufficiently to allow the mount to twist about its retaining bolt.

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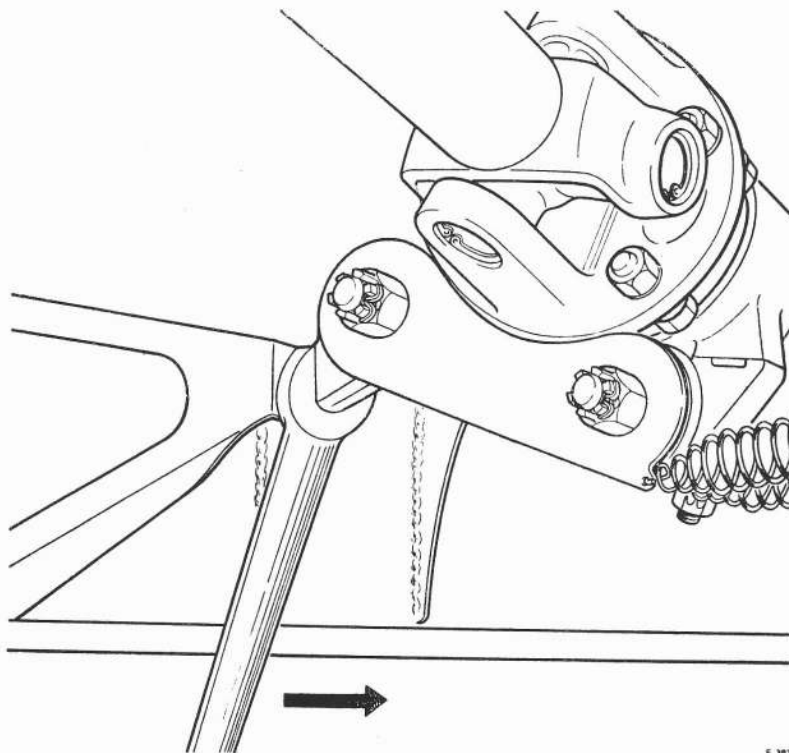


Fig.1 Anti-squeal setting of the centre bearing housing

Using a $\frac{3}{4}$ in. A/F open ended spanner, twist the centre bearing mount about its retaining bolt (see Fig.1) until all the clearance has been taken up in the bearing. This is a very delicate operation, and can be carried out as follows

Hold the spanner between the forefinger and thumb and gently rock the mount to and fro, watching the gap between the forward end of the centre bearing housing and the flange on the propeller shaft. When the spanner is at one end of this rocking motion, all the bearing clearance will have been taken up. Increase the forefinger pressure on the spanner to apply a very light pre-load to the bearing, and retighten the nut to lock the mount in this position. The mount can be twisted forwards or backwards; either way effectively loads the balls against the race tracks.

Using a new split pin, secure the nut.

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Alternatively a known amount of pre-load can be applied using a spring balance. With the split pin removed and the nut slackened as before, apply a spanner to the mount as shown in Figure 1. A torque of not more than 4 lb.ft. will impart the correct pre-load to the bearing. Therefore a load of 4 lb. should be applied through the spring balance at a distance of 12 in. from the base of the spanner jaw (or 5 lb. at 9 in. or 8 lb. at 6 in. and so on).

IDENTIFICATION

When the bearing has been pre-loaded, both spring plates of the mounting assembly should be marked with a yellow paint stripe to indicate that this action has been carried out.
