BSA

DEALER PARTS and SERVICE BULLETIN

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= SUBJECTS =

"A" MODEL LOWER END RE-FITTING

The importance of knowledgeable and quality workmanship in big-end refitting of "A" models is not always understood by mechanics performing this most important and critical operation. This is particularly true in reference to the proper drawing up of the connecting rod nuts and three inflexible rules should always be observed:

1. CONNECTING ROD BOLTS AND NUTS SHOULD NOT BE RE-USED.

2. NEW BOLTS AND NUTS SHOULD BE FITTED EACH TIME A LOWER END OPERATION IS PERFORMED.

3. NUTS SHOULD BE CAREFULLY DRAWN UP WITH AN ACCURATE TORQUE WRENCH TO AN EXACT SETTING OF 22 POUNDS.

The torque wrench setting should be carefully checked before drawing down the nut as the self-locking nut, once drawn up SHOULD NOT BE SLACKENED. If over-torqued it must be replaced, hence the necessity for verifying the wrench torque setting BEFORE drawing down the nut.

Self-locking nuts are a standard engineering principle of unquestioned merit when properly used. As contrasted to the earlier castellated, cotter-pin type they have the merit of accuracy without the necessity of compromising by over-tightening or slackening to match the nearest cotter-pin hole.

Torque settings are specific settings that take into consideration the strength and bulk of the material being compressed and the precise elongation characteristics of the bolts and nuts. Insufficient or "under-poundage" torquing may result in a slack fit that will leave the component too loose for proper service. Over-torquing or "excess-poundage" (the commonest fault) may result in deforming the connecting rod structure with the possibility of later bearing failure. Even a few pounds excess - say 25 instead of the specified 22 - may result in distortion, hence the stressing of the need for adequate tools and accuracy in fitting. The lower end operation should NEVER be done with a standard type socket wrench.

In small journal rods of the earlier type some difficulty may be encountered in fitting self-locking nuts because of inadequate clearance for insertion of a thin wall socket and in such cases it is recommended that a small mill-end rotary file be used to indent the rod cap sufficiently to permit torque wrench socket clearance.