

SERVICE INSTRUCTION

DATE: March 6, 2001

Service Instruction No. 1458B
(Supersedes Service Instruction No. 1458A)
Engineering Aspects are
FAA Approved

SUBJECT: Connecting Rod Bolts

MODELS AFFECTED: All Textron Lycoming reciprocating aircraft engines.

TIME OF COMPLIANCE: Whenever new connecting rods and/or new connecting rod bolts are being installed.

Refer to Figure for proper installation of connecting rod bolts.

When installing connecting rod bolts:

TORQUE BOLTS: Torque bolts must be tightened using a calibrated torque wrench. If a torque bolt yields before reaching the specified torque value (40 ft.-lbs.), the bolt must be returned to Textron Lycoming.

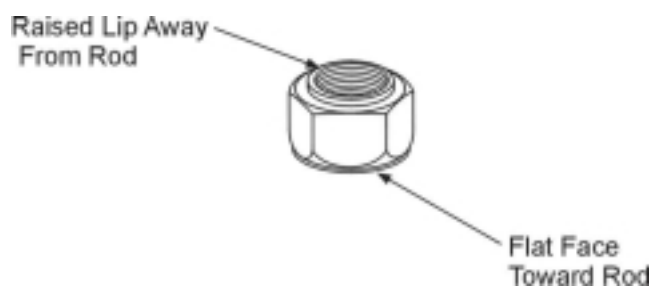
STRETCH BOLTS: If 35 ft.-lb. of torque fails to give minimum stretch (2.255 length) additional torque can be applied until proper stretched length results. If 35 ft. lb. results in an over-stretched bolt (greater than 2.256 length) it must be replaced. Considering possible variables in the joint that could increase the torque required to achieve specified stretch, including thread irregularities and possible dirt, a maximum torque of 55 ft.-lb. is hereby recommended for assembling connecting rods with stretch bolts. The recommended range of torque for assembling connecting rods with stretch bolts is the following (thread lubrication with Loctite 51168 Food Grade Anti-Seize Lubricant is a requirement to fall within specified stretch limits):

Initial Torque: 35 ft.-lb.
Maximum Torque: 55 ft. lb.

If proper stretched length (2.2550/2.2560) is not achieved within these values, the bolt must be discarded and replaced.

CAUTION

THE CONNECTING ROD BOLT CANNOT BE TIGHTENED CORRECTLY IF THE NUT IS INSTALLED UPSIDE DOWN. THE RAISED EDGE, OR LIP ON THE ONE FACE OF THE NUT MUST BE ON THE FREE END OF THE BOLT; THE FLAT FACE MUST BE IN CONTACT WITH THE ROD. SEE FIGURE.



Connecting Rod Bolt Nut

NOTE

Textron Lycoming recommends the use of Genuine Textron Lycoming Parts only; however, if other than Lycoming parts are used the person installing the parts must refer to the PMA Part Manufacture Installation procedures for the part being installed.

NOTE: Revision "B" adds new torque requirements for stretch bolts.