



## SERVICE BULLETIN #58

DATE: May 2, 2003

SUBJECT: Nose Gear Piston Rod Bearing

APPLICABILITY: Series 5 (Vixen, Voyager), Series 6 and Series 7 Tricycle Gear

COMPLIANCE: Prior to next flight

FROM: SkyStar Aircraft Engineering

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SkyStar Aircraft routinely conducts engineering reviews of Kitfox components and looks into known, operational, component history. This is done to determine if production improvements can be made that will increase component service life. It has come to our attention that some builders during the construction or replacement process may not have modified the nose gear piston rod bearing correctly. This could cause binding of the nose gear piston during operation and lead to failure of the nose gear and engine mount components.

**ACTION:** Prior to the next flight the nose gear shock mount assembly and associated parts must be inspected in accordance with this service bulletin. Any discrepancies must be replaced or repaired in accordance with 43-13-1A, 2B.

- Remove the nose gear shock mount assembly.
- Inspect the engine mount weldment for any fatigue cracking in and around the attachment for the shock mount.
- Inspect the piston rod end for any wear or bending.
- Inspect the nose gear piston for any bending or any cracks along the flange.
- Inspect the rod end bolt

Satisfied that no damage has occurred and all parts are in working order, now check for any binding in the piston rod assembly during operation of the nose gear strut.

- Without installing the elastomers and friction washers, guide the nose gear piston back into the engine weldment.
- Attach the nose gear piston to the nose gear.
- Using figure 1 as a reference, move the piston & strut assembly through the operating range of the nose gear piston. There should be no binding when the piston is moving in this range. If there is any binding, then additional modification to the piston rod bearing is required per figure 2-1. Continue this process until no binding is present.



## SERVICE BULLETIN #58

Satisfied the nose gear piston does not bind within its operational range then re-assemble the shock mount per figure 2. Do not forget the liquid thread lock, torque specifications and to grease the rod bearing.

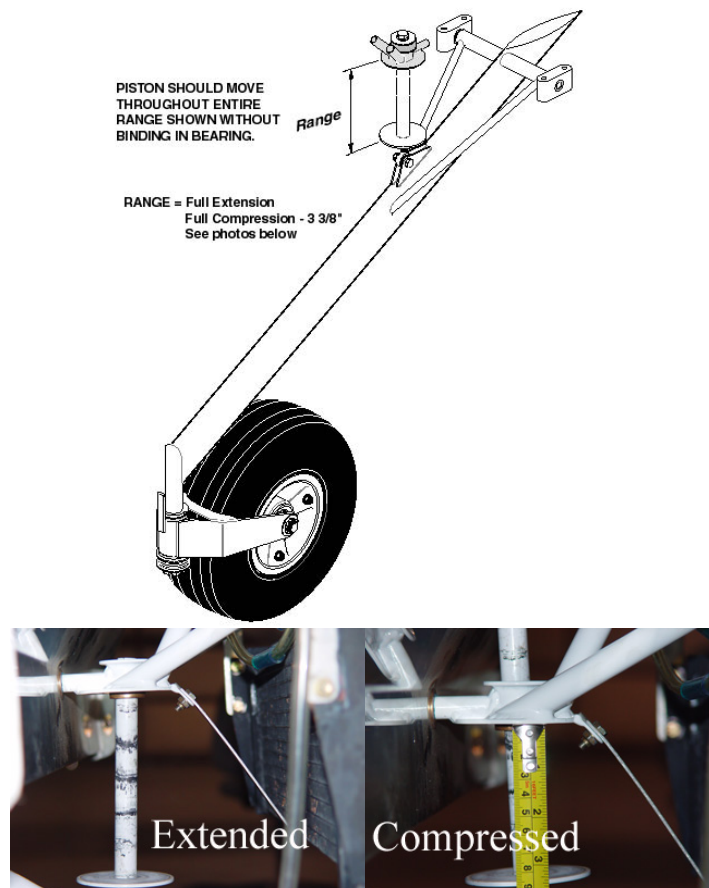


Figure 1



## SERVICE BULLETIN #58

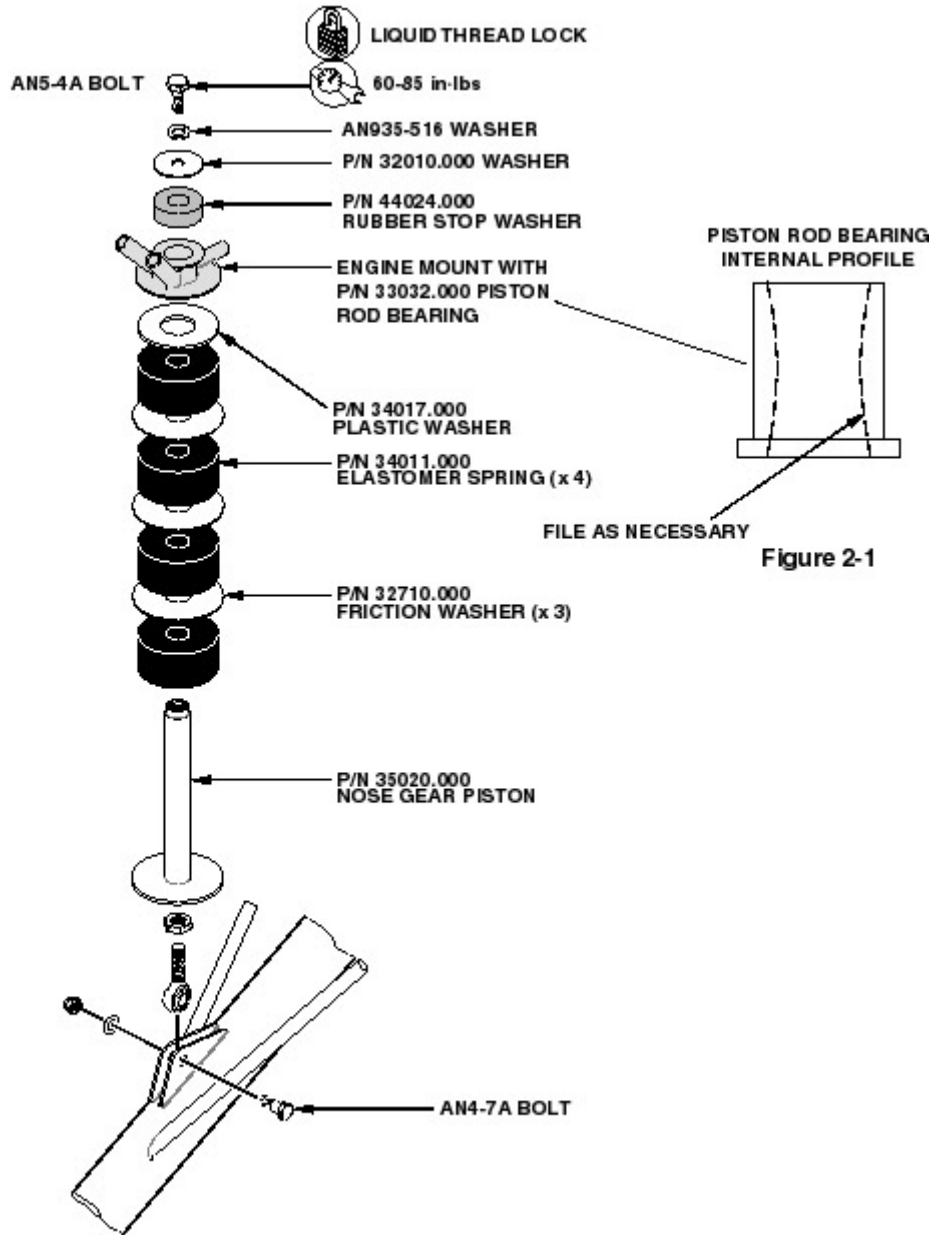


Figure 2