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TO ALL EXEC OWNERS

EXEC ADVISORY BULLETIN A-23

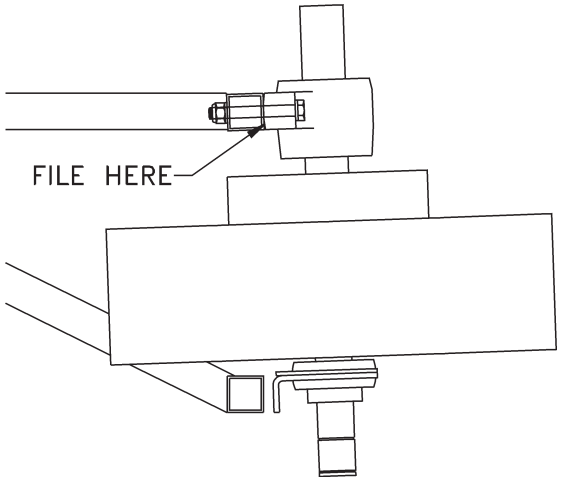
History: The secondary drive unit and related components must be installed correctly to achieve maximum reliability and longevity.

It has come to our attention that some builders have over-tensioned the main drive chain upon installation, in an attempt to avoid having to re-adjust it in the future. We must emphasize that this is a very unsafe practice. Our engineering studies have confirmed that over-tensioning the main drive chain and/or the main drive belts will cause undue stress on the secondary shaft and bearings. This can lead to overheating of the bearings, premature bearing failure, and subsequent failure of the secondary shaft.

Action: Review the installation and tensioning procedures below, and add a temperature strip to the upper secondary bearing housing.

1. Level the helicopter so that the square drive mount tubes of the airframe are level both fore/aft and laterally.

2. The large secondary pulley must be level fore/aft and laterally. The secondary should fit against the airframe at the upper and lower mounting locations without having to be forced in place by tightening the bolts. If this cannot be achieved by shimming, file the upper bearing housing at an angle for the correct fit. (See drawing below.) DO NOT FORCE THE UNIT TO FIT AGAINST THE AIRFRAME BY TIGHTENING THE BOLTS OR DAMAGE TO THE SHAFT AND BEARINGS MAY RESULT.

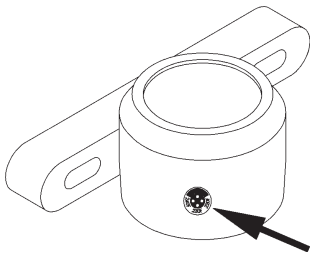


(continued)

3. Tension of the drive chain is adjusted by adding shims equally between the airframe and the upper and lower bearing housings. (The drive pulley must remain level with reference to the drive mount tubes of the airframe.) Pull 10 pounds with a spring scale and measure the deflection of the chain. It should move 1/2 inch. DO NOT OVER-TIGHTEN THE CHAIN, OR DAMAGE TO THE SECONDARY SHAFT AND BEARINGS MAY RESULT.

4. Tension of the main drive belts is adjusted by moving the engine towards the front or rear. Disconnect the rod end on the clutch arm casting and move the idler pulley so that it does not touch the belts. Pull one drive belt 7 pounds with a spring scale and measure the deflection. It should move 1/2 inch. DO NOT OVER-TIGHTEN THE MAIN DRIVE BELTS, OR DAMAGE TO THE SECONDARY SHAFT AND BEARINGS MAY RESULT.

5. Install a temperature strip on the upper bearing housing of your secondary drive unit as shown in the illustration below. (Clean the area of the housing with acetone or other solvent so that the strip will adhere properly.) The heat sensitive "dots" on the strip will darken if the indicated temperature is exceeded. Check the temp strip during every post-flight inspection.



There are two different types of upper bearing housings,and each operates at a different temperature range. Verify the correct temperature range by checking the serial number on the end of the secondary shaft:

SERIAL NUMBER	BEARING TYPE	NORMAL RANGE	HIGH LIMIT
UP TO 5280 5290, 5291, 5292 5302, 5303	3 BEARING	210° TO 220°	240°
5281 TO 5289 5293 TO 5301 5304 AND ABOVE	2 BEARING	170° TO 190°	200°

There is usually a slight temperature increase after adding grease to the bearings, but this should not cause the temperature to climb above normal. IF THE TEMPERATURE REACHES OR EXCEEDS THE HIGH LIMIT AT ANY TIME DURING OPERATION, IT IS AN INDICATION THAT THERE IS A PROBLEM. THE PROBLEM SHOULD BE IDENTIFIED AND CORRECTED BEFORE FLIGHT IS CONTINUED. CONTACT ROTORWAY CUSTOMER SERVICE FOR FURTHER ASSISTANCE.

Temp strips are available from our parts department for $2.00 each. Order Temp Strip 170°-200° (P/N E08-5200) or Temp Strip 210°-240° (P/N E08-5201).