

July 1, 1998

TO ALL EXEC, EXEC 90, AND EXEC 162F OWNERS

ADVISORY BULLETIN A-32

History: It has come to our attention that some builders are not following the correct procedures when installing the secondary drive unit. Improper installation can cause undue stress on the bearings and shaft, which could lead to premature failure of these components.

Action: The following procedures are to help clarify the installation of the secondary drive unit and shims. (Refer also to Section 11 of the Construction Manual, and Print E23-2000.) The emphasis here is to make sure that when the bolts are tightened, they do not cause any binding, pressure or stress that would affect the shaft.

1. The airframe must be level fore/aft and laterally at the square drive mount tubes. Place shims under the skids to achieve this.
2. Place the secondary drive unit on the airframe, with the lower bearing and flange removed. Install and tighten the two bolts through the upper bearing housing.
3. If the pulley is not level, remove the bolts and file the surface of the upper bearing housing as necessary where it contacts the airframe tube. Usually this requires only a slight amount of filing. The pulley must be level when the bolts are tight.
4. Install the lower bearing and flange on the shaft. If necessary, add shims at the upper mounting location to move the lower flange away from the airframe tube. Use the lock ring on the bearing to hold the flange in the proper up or down location. The top of the flange should be even with the top of the square tube. When the flange is in the right position, tighten the two clamping bolts that hold the halves of the flange together. If there is any gap between the flange and the airframe, install shims as required to achieve a snug fit. Do not try to eliminate the gap by tightening the bolts. After the shims are in place, install and tighten the mounting bolts.
5. When the secondary unit is installed and all bolts are tightened, the pulley must remain level. Add shims equally at upper and lower locations as necessary to achieve correct chain tension.

Note: If the secondary is already installed in your helicopter when you receive this bulletin, review the procedures above and use them as guidelines to verify that it was installed correctly. Make sure the chain and belts are under no tension before performing this check. Verify that the pulley remains level with the upper bolts tight and the lower bolts and shims removed.