

SERVICE LETTER #35

DATE: 6 June 1990

TO: All R22 Owners and Service Centers

SUBJECT: Alignment of Vee Belt Sheaves

ROTORCRAFT AFFECTED: All R22 Helicopters

BACKGROUND: Tests conducted by the RHC factory indicate that most vee belt problems and failure of the fan shaft bearing or upper actuator bearing are caused by misalignment of the vee-belt sheaves. A new alignment procedure and tool MT331-4 is now available.

COMPLIANCE PROCEDURE:

Complete the following alignment check within the next 50 flight hours and at every 100 hour inspection thereafter.

1. Check Lateral Clutch Centering as follows:

- a) Fully engage clutch actuator.
- b) Check sheave alignment on left and right sides per Figure 1 on reverse side.
- c) The clutch lateral centering strut may be adjusted to meet the requirements shown in Figure 1, but the following clearances must be maintained:
 - 1) Minimum .030 between clutch actuator motor and steel tube frame.
 - 2) Minimum .25 between V-belts and right side frame guard tube.

2. Check Sheave Alignment as follows:

- a) Check engine ring gear to frame limits per Section 6.130 of the R22 Maintenance Manual.
- b) Fully engage clutch actuator.
- c) Check sheave alignment on left and right sides per Figure 1 on reverse side.
- d) If the measured gaps are not in tolerance, the upper sheave must be shimmed by adding or removing AN 960-516L washers at the forward flex plate, or by shimming the engine forward or aft per Section 6.130 of the R22 Maintenance Manual. Note: A maximum of one AN960-516L washer may be installed between the flex plate and either or both yokes. When a yoke is shimmed, both arms must have a washer.
- e) If the above shimming is not sufficient, a longer or shorter A907 yoke must be installed.
- f) Whenever the upper sheave is shimmed, the intermediate flex plate shims must be checked per Section 7.330 of the R22 Maintenance Manual.

(over)

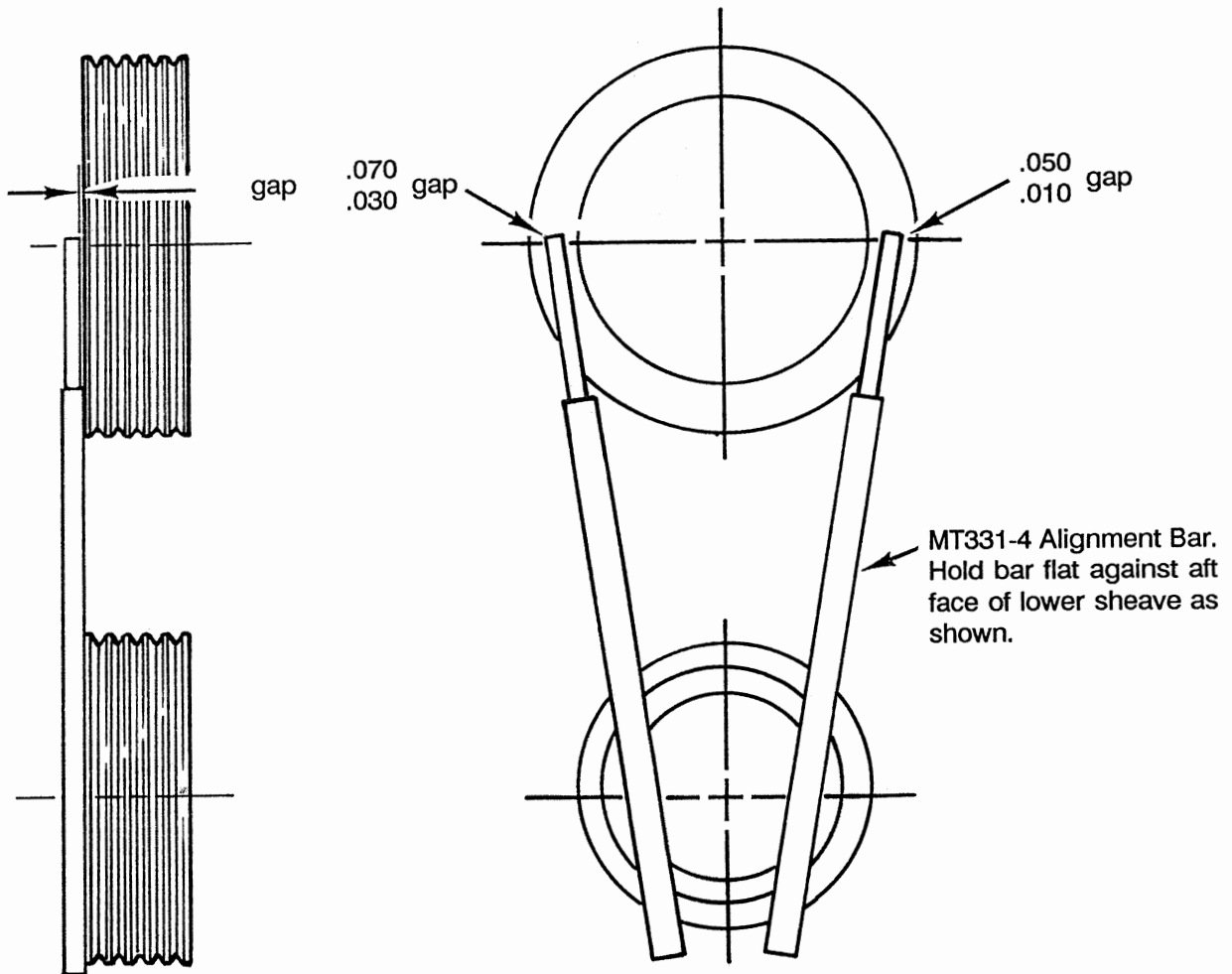


Figure 1
View Looking Forward