

SERVICE BULLETIN NO.: DA20-24-01, Rev. 0**DATE ISSUED:** March 9, 1996**TITLE:** Alternator Belt**Page:** 1 of 2**1. ATA CODE:** 2410**PLANNING INFORMATION****2. EFFECTIVITY:** DA 20 Katanas Serial Numbers 10001 through 10032, or any DA 20 fitted with alternator ROTAX P/N 887 250.**3. GENERAL:**

This Bulletin describes replacement of the alternator belt for aircraft equipped with alternator ROTAX P/N 887 250 and alternator belt ROTAX P/N 980 580 (identified as MF1275, on belt). The original belts may stretch, such that proper tightening results in alternator contact with the cowling. The replacement belt is shorter and therefore eliminates the potential problem of cowling/alternator interference. Modification or replacement of the lower mounting bracket is required.

4. COMPLIANCE: Optional**5. APPROVAL:** Engineering data referenced or contained in this bulletin is Transport Canada approved.**6. LABOR REQUIRED:** 1 hour**7. MATERIAL:** Alternator Belt, Gates Part Number 10A0685**8. SPECIAL TOOLS:** 3/8 drive torque wrench with a 9/16 flex socket.**9. REFERENCES:** Maintenance Manual DA 20 Katana**10. ACCOMPLISHMENT INSTRUCTIONS:**

10.1 Ensure battery master switch is set to OFF and ignition key is removed.

10.2 Remove upper and lower cowling, refer to Maintenance Manual sub-chapter 71-10.

10.3 Remove propeller Assembly from aircraft engine.

10.3.1 Prepare a container or bucket and position it below the propeller hub to catch oil.

10.3.2 Remove six prop nuts and washers behind the engine flange using a 3/8 drive torque wrench with a 9/16 flex socket. DO NOT remove the studs from the propeller hub.

SERVICE BULLETIN NO.: DA20-24-01, Rev. 0**DATE ISSUED:** March 9, 1996**TITLE:** Alternator Belt**Page:** 2 of 2**11. ACCOMPLISHMENT INSTRUCTIONS (cont'd)**

- 10.3.3 Pull the propeller slowly forward and allow the oil to drain into the prepared container.
- 10.3.4 When the oil flow stops, remove the propeller from the engine shaft.
- 10.4 Remove Alternator.
 - 10.4.1 Cut lock wire and remove both M8 bolts attached to the lower alternator mounting bracket, refer to figure 1.
 - 10.4.2 Supporting alternator, cut lock wire and remove M10 bolt on upper mounting bracket.
- 10.5 Modify lower alternator mounting bracket in accordance with figure 2, or, if fitting a new bracket, discard.
- 10.6 Remove existing alternator belt.
- 10.7 Install new alternator belt, Gates Part Number 10A0685, over drive pulley and alternator pulley.
- 10.8 Reinstall M10 bolt on upper alternator mounting bracket.
- 10.9 Reinstall modified lower alternator mounting bracket, or install new alternator bracket Diamond P/N 20-7100-01-05.
- 10.10 Reinstall propeller, refer to Maintenance Manual Chapter 61.
- 10.11 Torque M8 bolts on lower mounting bracket to 22 Nm [16.5 ft.lbs] and M10 bolt on upper mounting bracket to 35 Nm [26.3 ft.lbs] so that the belt tension allows for a deflection of 5 mm [0.2 in] when a force of 3 kg [6.5 lbs] is applied at its midpoint.
- 10.12 Replace lock wires.

NOTE: Tighten alternator bracketry hardware sequentially so as not to preload any bracketry components.

11. WEIGHT AND BALANCE: Negligible**12. ELECTRICAL LOAD DATA:** None**13. CREDIT:** A parts credit and labor allowance of 1 hour will be issued upon receipt of a completed warranty application form.

To obtain satisfactory results, procedures specified in this service information letter must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. cannot be responsible for the quality of work performed in accomplishing the requirements of this service information letter.