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| TITLE | AX2000 EXHAUSTSUPPORT BOLT, AX2000 TRIM TAB HORN, STEERING LINKS. |
| CLASSIFICATION | PEGASUS AVIATION CONSIDER THIS BULLETIN TO BE COMPULSORY. |
| COMPLIANCE | INSPECT BEFORE FLIGHT, ACTION WITHIN 25 HOURS OR IF INSPECTION PROVES UNSATISFACTORY, BEFORE FURTHER FLIGHT. |
| APPLICABILITY | AX2000 |

1) EXHAUST SILENCER SUPPORT BOLT IN THE KEEL

INTRODUCTION

The vertical bolt connecting the silencer support channel to the keel has broken on two AX2000 aircraft. The bolt is installed upside down in the original design. The saddle under the exhaust mounting channel is also of small diameter. Sideways vibration of the exhaust therefore causes leverage on the bolt threads, so the bolt fails in fatigue.

The consequences of a failed vertical bolt are that the exhaust post could possibly slide off the top of the keel, enabling the hot exhaust to contact the dacron centre section cover and possibly the battery.

Minor modification AX186 has been introduced to turn the bolt to the head-up orientation and to specify a larger diameter plastic saddle under a larger exhaust mount channel. These measures are to improve the fatigue strength, reduce the loads in the bolt and make failure at the threaded end less critical.

ACTION

Remove the exhaust post from the channel and the transverse bolt from the nosewheel tube. Remove the top two ty-wraps from the windscreen. Ask an assistant to apply a downward load on the tail whilst observing the nosewheel tube. A gap will open up enabling the vertical bolt to be extracted.

The bolt should be replaced, inserted head upwards, using a larger diameter saddle and a larger exhaust channel. Tighten the M6 nyloc nut and washer, taking care not to crush the keel. The assistant should then apply an upward load on the tail, gently until the nosewheel bolt hole lines up. Replace the bolt. Replace the exhaust post and plastic washers. Replace screen ty-wraps.

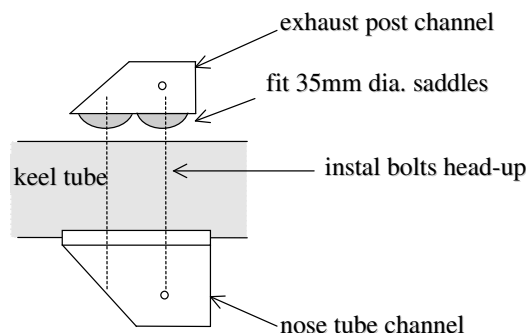


Figure 1.

2) TRIM TAB HORN



INTRODUCTION

The trim tab horn is specified on the drawings to be a tight press fit into the trim tab tube and nylon end bung. This tube has been found slightly loose on two recent production aircraft. Looseness of the horn tube enables fretting of the parts, causing increased play in the system and possible eventual breakage of the horn. Disconnection of, or excessive play in the trim tab invites the risk of elevator flutter.

ACTION

Inspect for looseness of the horn tube. If any is apparent, remove the M5bolt and horn rod end bolt. Clean and inspect the horn tube in the joint area. Replace if any fretting damage is apparent.

Reassemble using Loctite 648 engineering adhesive, reassemble and tighten the M5 bolt and the rod end connection. Check operation of the linkage through the range of elevator movement and tab movement, ensuring the locknuts on the rod ends are secure.

Inspect the area subsequently as part of the normal preflight check.

3) STEERING LINK ADJUSTMENT.

INTRODUCTION

Some AX2000 aircraft have been found to have the starboard nosewheel steering link adjusted excessively long, with the possibility of the rod ends having too few (less than 5) threads into the pushrod. Insufficient engagement of the rod end fitting reduces strength of the nosewheel steering linkage.

ACTION

Inspect for engagement of threads. If the starboard link appears adusted rather long, set up as follows: Shorten the starboard link until the rudder pedals line up (i.e. so that the pilot's legs are the same length) with the nosewheel held straight. Tighten the locknuts.

It will then be found that the right hand rudder cable is slack - adjust the rudder turnbuckle until the free play in the rudder just disappears. Over tensioning loads the fuselage and cables unnecessarily. Check full and free movement and wire lock the turnbuckle.

After completion of ALL of the above work, the aircraft MUST be signed off by a BMAA or Factory approved inspector, entering "SB 2015 complied with" in the aircraft technical log.

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