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SERVICE BULLETIN

ATL-SB-2

Date of Issue:	19 May 2000	
Applicability:	Propeller Models:	AP308 fitted with Warp Drive blades.
	Serial Numbers:	All up to and including No 32.
Compliance:	Initial:	At next periodic inspection, Or within 25 hours.
	Subsequent:	Nil

SUBJECT: PREVENTION OF WATER INGRESS INTO HUB

Reference: Airmaster AP308 Propeller Owner's Manual

Reason

1. Airmaster propellers with Warp Drive blades may suffer from water ingress while the propeller is stationary, by the entry of rainwater through the blade ferrules. Water is able to pass down the shank of the Warp Drive blade, through the gaps between the blade retention sleeves into the ferrule. Through the open inner end of the ferrule, the water is then able to enter the hub.

Materials and Parts Required

2. A neutral cure, flexible, non-slumping sealant. Suitable products include RTV silicone rubber sealant such as Dow Corning 737, or two-part rubber sealant such as PRC-1440, Class B.

Caution: Do not use an acid cure sealant such as some bathroom sealants. Acid cure sealants produce acetic acid as they cure, causing corrosion in aluminium.

Action

Disassembly

3. Using the special C-spanner and three 10-32 screws provided, remove blade assemblies from hub. Clean dirt and remove excess grease from blade assemblies, bearings and blade bores in hub.

Note: Do not remove the blades from the ferrules. Such action would require that the blade angle be set up again.

Propeller Hub

4. Inspect interior of propeller hub and pitch change mechanism for evidence of water ingress. If water has been present within hub conduct periodic inspection and maintenance in accordance with Owner's Manual, section 5.1.2.

Note: If damage is detected beyond what is acceptable, contact the manufacturer for advice.

Blade Assemblies

5. Remove all grease from the inner surface of the cam-follower attachment spigot with a clean rag and a suitable solvent.

6. Using a suitable gun or nozzle inject sealant into the opening at the inner end of the cam-follower attachment spigot so that it enters the cavity formed by the butt of the blade, the blade ferrule and the cam-follower attachment spigot. See the following diagram for details of this.

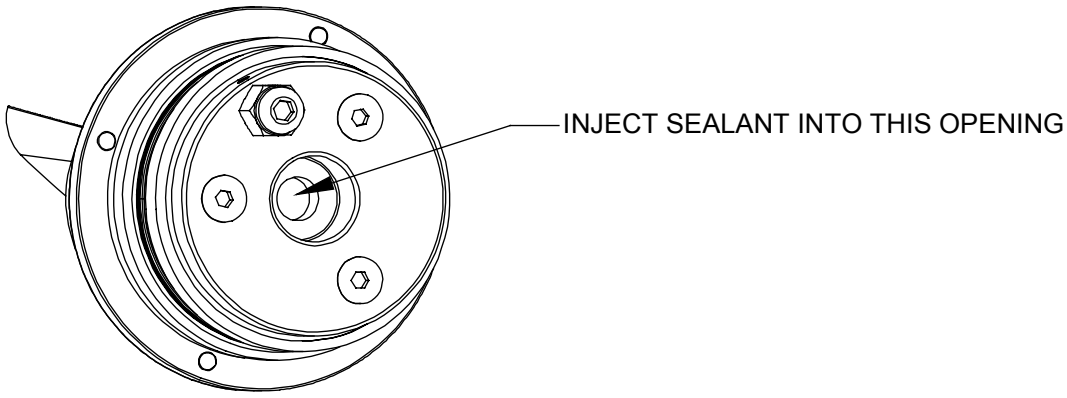

Figure 1 – Position of Sealant in Blade Assembly

7. Allow sealant to cure.

8. Re-lubricate face of cam-follower attachment spigot, bearings, and threads of blade retention nuts.

Reassembly

9. Reassemble blade assemblies into hub.

10. Using the special C-spanner and three 10-32 screws provided, tighten blade-retention nut to achieve 8ftlb (10.5Nm) torque.

Note: See the Owner's manual, section 2.2.2 for more details on installing blade assemblies into hub.

Hub Assembly

11. If the propeller is not fitted with a spinner, water may also gain entry to the hub through the wire holes at the base of the hub. In this case, also apply a small amount of sealant around the wires where they exit the hub.

Recording

12. Record completion of service bulletin ATL-SB-2 in propeller logbook.