

Revision	Change	Approved	Date
1	Initial release		1 Nov 22
1a	Detail added for inspection of thrust bearing washer		6 April 23



SERVICE BULLETIN

APL-SB20

Date of Issue: 1 Nov 2022

Applicability: Propeller Models: AP431/3CTF-WWR66U used on ULPower 350iS engine
Serial Numbers: 1111,1345, 1354,1355,1427, 1468, 1567, 1572, 1843

Compliance: Initial: Immediate
Subsequent: Inspection every 25hrs

SUBJECT: HUB AND BLADE THRUST BEARING INSPECTION

Reason

Airmaster has received a report of a hub structural failure on propeller model AP433CTF-WWR66U used on a ULPower 350iS engine.

As part of the investigation into the possible cause to this failure, Airmaster is requesting:

- An immediate inspection of all other in-service propellers of the same type on the same engine.
- Feedback on the accumulated hrs of said propellers/engines.
- Visual confirmation of the propeller condition.

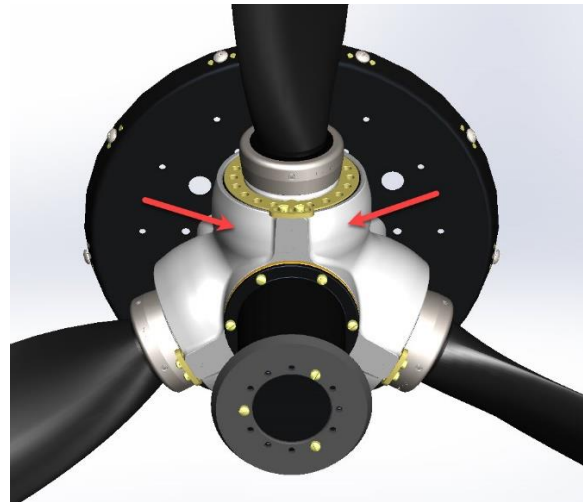
Compliance

- Inspect propeller hub and blade retention assembly in accordance with the operators manual OM3R5 section 11.2.2 Periodic Inspection and Lubrication, and check the following:

a. Hub Inspection

⚠ Caution Pay particular attention to the area around the top of each blade boss, ~0.75in(20mm) from the face of the boss.

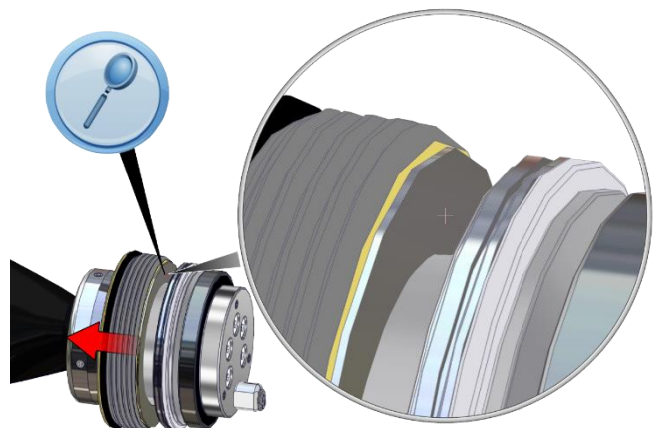
📌 Note A crack will appear as a thin red line in the white paint running around the circumference of the boss.



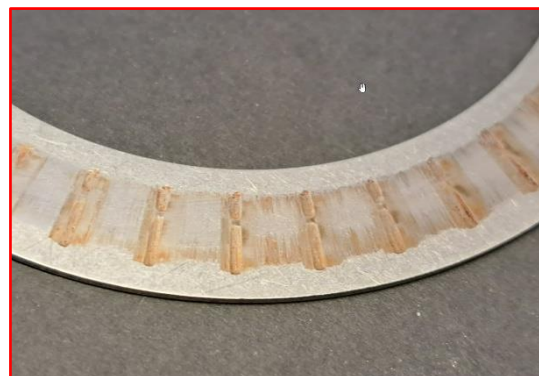
b. Blade Bearing Inspection

- Slide retention nut towards ferrule nut and separate top thrust bearing washer from thrust bearing pack.
- Wipe grease off washer (use clean rag or cotton bud).
- Inspect surface of thrust bearing washer and check for damage or unacceptable wear as shown below.

📌 Note Damage will appear as indentations in the bearing washer surface. Please send a photo showing condition.

**Unacceptable** condition:

- Heavy indentations visible.



Unacceptable condition:

- Light indentations visible.

**Acceptable** condition:

- Normal wear pattern, no indentations visible.



2. If a crack is detected (or suspected), or if bearing damage is evident, the propeller should be removed from service and returned to Airmaster Propellers Ltd (New Zealand) for inspection. There is no charge for this service (shipping charges still apply).
3. If no cracks are found and no bearing damage is evident, then this information should be relayed to Airmaster propellers, along with the following:
 - a. Customer contact information, Hub serial, Hrs in service.
 - b. Photo of bearing condition.

Note An inspection record form to convey this information is supplied at the end of this document.

Subsequent Actions

4. Visual inspections of the exterior of the hub shell and thrust bearing should be carried out every 25hrs until further notice.

Note This service bulletin only applies to model AP431/AP433 used on ULPower 350iS engines. No other propeller / engine combinations are affected.

Revision	Change	Approved	Date
1	Initial release		
1a	Added Model Number & Blade Inspection Result		



Airmaster Propellers Ltd
20 Haszard Rd, Massey
PO Box 374, Kumeu
Auckland, New Zealand

Ph: +64 9 833 1794
Fax: +64 9 833 1796
Email: sales@propellor.com
Web: www.propellor.com

INSPECTION RECORD

Inspection

Propeller Serial Number: _____

Propeller Model Number: AP_____

Current Operating Hours: _____

Inspection Performed by: _____

Signature: _____

Inspection Date: _____

Inspection Results (Hub): Crack Detected?

Yes / No

Inspection Results (Blade): Condition of Thrust Bearing Washer?

Acceptable / Not Acceptable

Customer Information

Customer Name: _____

Customer Address: _____

Customer Ph: _____

Customer Email: _____