



## THE GLIDING FEDERATION OF AUSTRALIA

# GFA AD 562

(ISSUE 1)

## GFA AIRWORTHINESS DIRECTIVE

**TYPE AFFECTED:** Fischer "TOP" engines, all models and variants, all serial numbers.

**SUBJECT:** Variations in propeller blade thickness.

**BACKGROUND:** Swelling of the inner foam core results in an increase in propeller blade thickness, leading to severe vibration and loss of thrust.

**DOCUMENTATION:** Luftfahrt-Bundesamt (LBA) Airworthiness Directive No 2001-345 and Fischer + Entwicklung Service Bulletin No 32.110/25/1 form part of this AD.

**ACTION REQUIRED:**

1. Before further flight with TOP engine, carry out inspection of propeller blade thickness in accordance with SB 32.110/25/1;
2. At each pre-flight check of TOP unit, carry out blade inspection as stated above;
3. If blades exceed the limit of thickness stated in SB 32.110/25/1, the engine must not be used until the blades are replaced. In accordance with the LBA AD, notify GFA if blades need to be replaced.

**WEIGHT AND BALANCE:** Not affected.

**COMPLIANCE:** The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

*[Signature]*  
*[Signature]*



CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION  
OF AUSTRALIA



**Airworthiness  
Directive  
2001-345**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
GERMANY

**Fischer + Entwicklungen**

**Effective Date: 13 December 2001**

**Affected:**

Kind of aeronautical product:	Propeller
Manufacturer:	Fischer + Entwicklungen, 84034 Landshut, Germany
Type:	TOP
Models affected:	all models and variants
Serial numbers affected:	all
German Type Certificate No.:	32.110/25

**Subject:**

Propeller blade airfoil thickness

**Reason:**

On some "TOP"- propellers a significant increase of the blade airfoil thickness was established due to swelling effects of the inner foam core. A deterioration of the airfoil thickness may lead to severe vibration and reduction in propeller thrust. The actions specified by this AD are intended to detect propeller blade swelling which could result in severe vibration and reduction in propeller thrust.

**Action:**

The following actions are required by this Airworthiness Directive in order to address this problem:

1. Inspection of the propeller blade airfoil thickness.
2. Repetitive inspections of the propeller blade airfoil thickness.
3. Replacement of damaged propeller blades.
4. Information of the local authority if the propeller blades have to be replaced as a result of the mentioned problems.

All necessary actions must be carried out on the basis of the mentioned manufacturer service bulletin.

**Compliance:**

For the mentioned actions the following compliance times have been laid down:

1. Before the next flight.
2. With each preflight check.
3. Before the next flight after the increase of the blade airfoil thickness has been determined.
4. Immediately after the increase of the blade airfoil thickness has been determined.

**Technical publication of the manufacturer:**

Fischer + Entwicklungen Service Bulletin SB No. 32.110/25/1 dated 29 October 2001. This Service Bulletin becomes herewith part of this AD and can be obtained from:

Fischer + Entwicklungen  
Attn. Mr. Roland Bauer  
Müller-Armack-Strasse 4  
84034 Landshut  
Phone +49-(0)871-93248-0  
Facsimile +49-(0)871-93248-22  
GERMANY

Enquiries regarding this Airworthiness Directive should be referred to Mr. Martin Borsum, Airworthiness Directive Section at the above address,  
fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German Issue!

Subject: Propeller blade airfoil thickness

Effectivity: "TOP"-propellers, all serial numbers

TC-No.: 32.110/25 (former 5004)

Urgency: before next flight or starting the engine and then with each preflight check

Reason: At some "TOP"- propellers a remarkable increase of the blade thickness was found, which leads to a decrease of max. RPM and severe reduction of the propeller thrust.

Action: At 200 mm (7.87") distance from the propeller-blade folding axis the maximum thickness of the cross-section has to be measured by a slide gauge. The thickness has to be 16,6 mm (0.65"). If the thickness is more than 17,5 mm (0.69"), this blade or the complete propeller must not be operated any longer and has to be replaced.

Remark:  
The replacement of propeller blades has to be carried out by the manufacturer.

Material: Not affected

Weight and Balance: Not affected

Release MPL

Date:  
29.10.2001Release  
29.10.2001

LBA approved:

Date:

Page-No.: 1

of 1  
rahmen.doc