

AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: All types fitted with Top engines.

SUBJECT: Operational safety aspects of the Top engine.

BACKGROUND: Operators of Top engines need to ensure that the instructions in the Flight Manual Supplement are strictly adhered to. Failure to do this has caused an engine failure.

DOCUMENTATION: Fischer + Entwicklungen Service Bulletin 5004/3 -

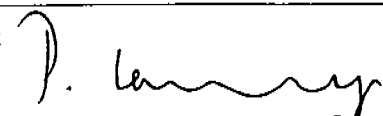
ACTION REQUIRED: Gliders fitted with a Top engine must at all times operate within the limitations set down in the manufacturers Service Bulletin 5004/3 which forms part of this AD and the Flight Manual Supplement.

WEIGHT AND BALANCE: Not Affected

IMPLEMENTATION: It is the responsibility of the pilot to operate the aircraft within the Manufacturers specifications.

COMPLIANCE: The requirements of this Airworthiness Directive are mandatory. This Directive is issued pursuant to the Australian Civil aviation Regulations under the delegated authority of the Civil Aviation Authority (CEO42/90).

SIGNED:



CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

**THE GLIDING FEDERATION
OF AUSTRALIA**

Fischer-Verkehrstechnik GmbH & Co. KG Sonnenberg 58 D-8300 ALTDOERF Nr. Telefon 0871/32099 (No.)		Technische Mitteilung (Service Bulletin) 5004/3	EB Nr. I-EC 39
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6. At all times avoid extended idling. Idling in flight causes rather high idle RPM while minimal lubrication is available.

Landing with the engine running is not permitted. At approach speed the idle RPM is especially high, the lubrication becomes insufficient. Idling up to appr. 10 sec. before engine shutdown is o.k.

7. Do not change anything on the fuel supply and carburetor system. Unauthorised modifications to the carburetor jets may cause a too lean fuel/air mix. This can increase the exhaust gas temperature by up to 130°C and cause engine failure or engine pre-damage.

An excessive exhaust gas temperature is not obvious to the pilot and not related to the indicated cylinder head temperature.

8. If the engine runs well at normal RPM on full throttle and does not idle normally at appr. 1000 rpm but only at higher speeds (appr. 2500 rpm) and with the choke on, then the fuel/air mix is too lean. The EGT is too high. Do not use the engine, immediately notify manufacturer or agent.

9. If the engine fails to reach normal full throttle RPM or shows unexplained loss of power or makes unusual noises (even for a short time only) stop engine as soon as possible and notify manufacturer or agent.

10. At each Daily Inspection turn engine by hand and watch for signs of unusual friction, resistance or noise.

11. At each engine start check for correct operation of the ignition delay. The engine must fire only 2-3 seconds after the starter button has been pressed. Otherwise contact manufacturer or agent immediately. The folding propeller can be damaged if it is unfolded suddenly by the firing engine and not slowly by the starter motor. This is dangerous and expensive.

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Gegenstand (Subject): Operational safety of the TOP engine for gliders

Betroffene Geräte: TOP, Kiwi TOP, ASW 24 TOP (Effectivity)

Geräte-Nr.: 5004 all models (TC-No.)

Dringlichkeit (Accomplishment): Immediately, before next flight or engine start

Vorgang (Reason): Operators of TOP engines have repeatedly ignored instructions in the manuals. This has caused a potentially dangerous engine failure.

Maßnahmen (Instructions): 1. Be sure the fuel/oil mix is as specified in the manuals. Mix is one part oil with 33 parts fuel. min. 97 RON (Research Octane Number)

fuel types: automotive 'Super' leaded, (HOGAS) or AVGAS 100 LL approved

two-stroke oil: High performance two-stroke oil meeting specifications TSC-3. A predominantly synthetic, selfmixing two-stroke oil to TSC-3 must be used from now on. (e.g. Castrol TTS).

2. Until further notice do NOT use unleaded automotive petrol, use AVGAS 100 LL or leaded 'SUPER' petrol (HOGAS). Separation of oil and fuel has been observed after extended periods of standing due to special additives in unleaded fuel. In any case the fuel/oil mix must be thoroughly mixed after standing for more than a few weeks.

3. As the engine does not start well on stale mix, empty the tank before extended periods without engine use. Use fresh mix when resuming operations.

4. ONLY Champion RCJ6V sparkplugs must be used. No other type is approved, even if of the same heat range. Keep a set of spare sparkplugs handy.

5. Strictly adhere to the limits of RPM and CHT, watch RPM especially during air restarts.

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Masse und
Schwerpunktlage : Not affected
(Weight and
Balance)

Hinweise : This Technical Note applies additionally to all
(Remarks) : other instructions in the manuals, they are essen-
tial for safe operations.

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