

M.I.C.M. - C.N.I.A.R.
INTREPRINDEREA DE CONSTRUCTII AERONAUTICE
2200 B R A S O V

MANDATORY SERVICE BULLETIN

IS-28M2/80HP/E0-2

APPROVED BY :

DEPARTMENT OF CIVIL AVIATION

with no. 2639 / 06.03.1985

PRODUCT :

IS-28M2/80HP motor glider

OBJECT :

Increase of safe and service life and increase of safe life between overhauls to the IS-28M2 engine, from 650 to 850 operating hours.

COMPLIANCE :

Endurance studies of the manufacturing plant and servicing experience.

Technical communication 9.3 from LIMBACH MOTORENBAU;

DATE : 10.02.1985

IS-28M2/80HP/E0-2

1. PLANNING INFORMATION

A. Applicability

This bulletin is applied to all the IS-28M2/80HP motor gliders.

B. Reason

Increase of motor gliders safe life

C. Description

The bulletin modifies the total safe and service life of the motor gliders, as follows :

- total safe life : 4000 flight hours (25,000 landings)
- total service life : 20 years
- safe life until the first overhaul and between overhauls : 750 flight hours (6000 landings) ;
- service life until the first overhaul and between overhauls : 6 years.

The safe life of the L2000E0 engine between overhauls is also increased, from 650 to 850 operating hours.

D. Compliance

- Technical communication no. 9.3 of 28.07.1984 from LIMBACH MOTORENBAU.
- Endurance studies of the manufacturing plant and experience accumulated during the IS-28M2/80 HP motor gliders servicing.

E. Accomplishment

The bulletin shall be applied by :

- the user, to the motor gliders under servicing
- the manufacturing plant to the motor gliders under stockage or manufacturing.

F. Material-Cost and Availability

None.

G. Tooling

None.

H. Weight and Balance

Not affected.

I. References

Studies compiled by the manufacturing plant concerning servicing of the IS-28M2 motor gliders and Limbach engines.

J. Documents affected

The IS-28M2/80HP Flight and Maintenance Manual, 1st issue is amended by the pages appended to the present bulletin.

2. USING INSTRUCTIONS

A. Work preparation

None.

B. Application

The modified pages shall be inserted in the IS-28M2/80HP Flight and Maintenance Manual, 1st issue.

C. Servicing instructions

The following shall be complied with during servicing :

- total safe and service life ;
- safe and service life between overhauls ;
- safe life between the engine overhauls.

3. MATERIAL INFORMATION

A. Material list

None.

B. Tooling list

None.

C. Supply indications

None.

4. IDENTIFICATION

The bulletin application shall be registered in the motor glider log book.

5. APPENDICES

- Amendment no.5 to the IS-28M2/80HP Flight and Maintenance Manual, 1st issue.

REVISION RECORD CONTINUATION SHEET

All Revisions in the text are indicated by a marginal vertical line and the revision number

Rev. No.	No. of Pages	Description of Revision	Revision Date	Date Incorporated	Signature
1.	5.10.1- 5.10.12	Dittel FSG60M Radio Installation (optional)			
2.	P.V.1.A II.A 3.26.A	Landing overshoot	5.10.82		
3.	P.V.1.B. 3.21.A 4.4.A	Flying controls inspection	20.11.82		
4.	2.8A 2.12A 3.7A 3.13.A 3.14A	R.p.m. limitation application of S.B.E4.A Hoffmann	08.09.83		
5.	P.V.1.C 4.17A; 4.19A; A.1.2.A	Safe life increasing	20.02.85		
6.	2.8.B; 3.13B 4.24.A	Application of S.B. E4 C with Revision no.1 issued by Hoffmann	20.02.85		
7.	2.9A	Adding other types of engine oil	28.05.85		
8.		Only for Romania			
9.	P.V.1.F 1.1.A 3.8.A 4.18.A A.2.1.A A.2.4.A	Mounting of the 160 BT blade. Application of S.B. no.1W/18.12.91 Hoffmann	19.05.92		
10.	P.V.1.G 1.7.A 4.28.A	Flap control modifi- cation			

instruments and indicators are reading accurately. Such checks may be accomplished in situ by a check calibration (using test equipment) or by a comparison check with an instrument of known accuracy.

4.2.3.5. Monthly Battery Inspection

The battery must be inspected every 4 weeks and the acid level topped up with distilled water as required. The correct electrolyte level is 15 mm above the battery plates.

Check out of service batteries in accordance with Appendix 5.

Check battery compartment drain and vent, pour a small amount of clean water through each in turn, and ensure that water passes freely through the complete system. Reconnect battery vent and leave battery compartment clean and dry.

The battery must always be kept clean and dry. Refer manufacturers for correct action on battery acid neutralisation after spillage on or in aircraft.

When refitting, the terminals must be cleaned and lubricated with an acid-proof lubricant grease. When closing aircraft battery-cover, any possibility of a foul causing a short-circuit must be avoided.

4.2.3.6. Inspection-revision at 400 hours

When performing the inspection-revision at 400 hours all the operations of the 100 hours inspection shall be carried out, as well as the following:

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|---|---------------|---|
| 5 | <u>Engine</u> | - According to the servicing manual of the LIMBACH L 2000 EO engine. We specify that the LIMBACH firm established the engine safe life to 850 hours of operation. |
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4.3.2. General Inspection

4.3.2.1. General

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The time between general inspection is established, for the moment, to 750 flight hours, 6 years or 6000 landings. The total safe life is 4000 flight hours, 25000 landings and 20 years, respectively.

4.3.2.2. General inspection at 750 hours

When performing the 750 hours inspection carry out the operations mentioned below. When carrying out these operations follow the indications given in the repair manual.

Engine In accordance with the operating manual of Limbach L2000 EO engine.

Propeller In accordance with the Hoffmann HO-V-62-R propeller operating and maintenance manual.

Landing gear Dismantle and inspect in accordance with manufacturer's repair manual, all worn parts are to be replaced.

Fuselage Inspect fuselage stressed structure and fittings to wing and tailplane in accordance with the manufacturer's repair manual.

Replace instruments panel shock absorber mounts.

Rigging Pins Check all rigging pins and bores for excessive wear, see manufacturer's repair manual "Appendix 1".

Wing Inspect main spar and wing fittings in accordance with manufacturer's repair manual.

Ground Run Check (Cont'd)

will depend on the type of propeller fitted.)

50 Hour Inspection

25 hour inspection plus the following:

- Inspect the fuses and connections and their security to the engine.
- Inspect alternator drive V - belt state and tension.

NOTE: Adjustment to carburettor is not permitted.

It is recommended that the spark plugs are changed after 250 hours of operation.

Refer to the engine manufacturer's manual for details of 100 hour and 500 hour inspections.

5 | For this engine the manufacturer established a safe life of 850 hours of operation.