

MANDATORY SERVICE BULLETIN MSB 42-103/1 SUPERSEDES MSB 42-103

I <u>TECHNICAL DETAILS</u>

I.1 Category

Mandatory.

I.2 Airplanes affected

Type:DA 42, DA 42 MSerial numbers:all Serial Numbers with Dual Flywheel Mass (MÄM 42-764) installed

I.3 Date of effectivity

24-Mar-2014

I.4 <u>Time of Compliance</u>

Before next flight after the date of effectivity.

NOTE: Prior compliance with MSB 42-103 does not preclude compliance with this MSB.

I.5 <u>Subject</u>

Amendment of Engine Starting Procedure

ATA-Code: 71-00

I.6 <u>Reason</u>

One case of a broken gearbox drive shaft was reported to the engine manufacturer Technify Motors GmbH. Initial investigation by the engine manufacturer suggested a possible overload of the gearbox drive shaft due to restart in flight by windmilling. Further detailed investigation has shown that overload of the gearbox drive shaft was most likely caused by the electric starter being released too early rather than a windmilling restart.

The emergency procedure of the DA 42 AFM for restart in-flight is amended to re-include restart in flight by windmilling and to describe the improved starting procedure.

The normal operating procedure of the DA 42 AFM for starting the engine is amended to describe the improved starting procedure.

This Service Bulletin will be updated pending further investigation results.

I.7 <u>Concurrent Documents</u>

Technify Motors GmbH Service Letter SL TM-125-1003 Revision 1.

I.8 Approval

The technical content of this document has been approved under the authority of DOA ref. EASA.21J.052.



I.9 Accomplishments / Instructions

For all airplanes equipped with TAE 125-02-99 and a Dual Flywheel Mass installed: Insert TR-MÄM 42-764/c, containing the amended starting procedures, into the AFM.

NOTE: This can be carried out by the pilot or any other person with adequate knowledge. The completion of work must be recorded in the aircraft log.

I.10 Mass (Weight) and CG

No change.

II PLANNING INFORMATION

II.1 Material and Availability

None.

II.2 Special Tools

None.

II.3 Labour Effort

Negligible.

II.4 Credit

None.

II.5 <u>Reference Documents</u>

DA 42 Airplane Flight Manual, Doc. No. 7.01.05-E, latest effective issue or DA 42 Airplane Flight Manual with GFC 700 Installed, Doc. No. 7.01.06-E, latest effective issue

III <u>REMARKS</u>

- 1. All work must be done by a person with adequate knowledge.
- 2. Completion of all work must be recorded in the log book.
- 3. In case of doubt contact Diamond Aircraft Industries GmbH.



Diamond Aircraft Industries GmbH N. A. Otto-Straße 5 2700 Wiener Neustadt Austria DAI MSB 42-103/1 Page 3 of 3 19-Mar-2014

EXECUTION REPORT TO SERVICE BULLETIN MSB 42-103/1

AIRPLANE INFORMATION

Airplane Serial Number

Airplane Registration

Airplane Operator

Hours of operation of airplane

No. of landings

Hours of operation-engine

Typical operation of airplane

private, club, training, other _____

Date, Name, Sign

Please fax the completed form to Fax No. +43-2622-26700-1369 or e-mail to airworthiness@diamond-air.at