
OPTIONAL SERVICE BULLETIN NO. OSB D4-111 REV. 0

I TECHNICAL DETAILS

I.1 Category

Optional.

I.2 Airplanes Affected

Type: DA 40 D

S/N: All equipped with the Garmin G1000 avionics system and TAE 125-02-99 engines installed

I.3 Date of Effectivity

20 January 2022

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Installation of a new production TAE 125-02-99 engine (S/N 02-02-06000 and subsequent).

I.6 Reason

Continental Aerospace Technologies GmbH has introduced the following changes into the TAE 125-02-99 engine: A new cylinder head cover, updated features to secure the fuel return line, the replacement of the cyclone oil separator with a centrifugal separator, and a new vacuum pump. These changes are contained in the engine assembly, and should not affect the physical installation of the engine onto the airplane. This service bulletin describes the physical differences between the new and old production engines, and allows for the retrofit of the new production TAE 125-02-99 engine on G1000-equipped DA 40 D aircraft equipped with old production TAE 125-02-99 engines.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information and instructions contained in this document relate to Design Change Advisory No. MÄM 40-1105, which has been approved as part of the type design.

I.9 Accomplishment/Instructions

See WI-OSB D4-111, latest effective issue.

I.10 Mass (Weight) and CG

This installation results in an engine mass increase of approximately 400 g, with a negligible effect on the center of gravity position.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-OSB D4-111, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 4 hours will be required to accomplish this service bulletin.

This estimate is for direct labour performed by a technician, and it does not include setup, planning, familiarization, cure time, part fabrication, or tool acquisition.

II.4 Credit

None.

II.5 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective issue.

III REMARKS

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, in particular which is not especially described in this service bulletin, must be done in accordance with the referenced maintenance manual.
3. Completion of all work must be recorded in the logbook.
4. In case of doubt, contact Diamond Aircraft Industries Inc.



**EXECUTION REPORT TO
SERVICE BULLETIN
OSB D4-111 REV. 0**

AIRPLANE INFORMATION

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of Operation of Airplane _____

No. of Landings _____

Hours of Operation of Engine _____

Typical Operation of Airplane _____
(private, club, training, other)

Date, Name, Signature

Please e-mail the completed form to Techpubs@diamondaircraft.com.

WORK INSTRUCTION WI-OSB D4-111 REV. 0

I GENERAL INFORMATION

I.1 Subject

Installation of a new production TAE 125-02-99 engine (S/N 02-02-06000 and subsequent).

I.2 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective issue.

I.3 Remarks

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, in particular which is not especially described in this work instruction, must be done in accordance with the referenced maintenance manual.
3. In case of doubt, contact Diamond Aircraft Industries Inc.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

II.3 Material

Contact Continental Aerospace Technologies with your engine serial number.

III INSTRUCTIONS

1. Remove the engine as per AMM Section 71-01-00.

NOTE: The differences between the older and newer production engines are largely contained in the engine assembly. Install the new production engine in accordance with AMM Section 71-01-00. Refer to the figures for an overview of the physical differences on the new engine.

2. Install the new engine as per AMM Section 71-01-00.
3. Clean working areas, and check for foreign objects.
4. Check all altered, replaced, and repaired parts for proper function.
5. Test all systems in working areas for proper function.
6. Determine the new empty weight and center of gravity.
7. Make all necessary entries in the logbooks.
8. Submit the execution report to Techpubs@diamondaircraft.com.

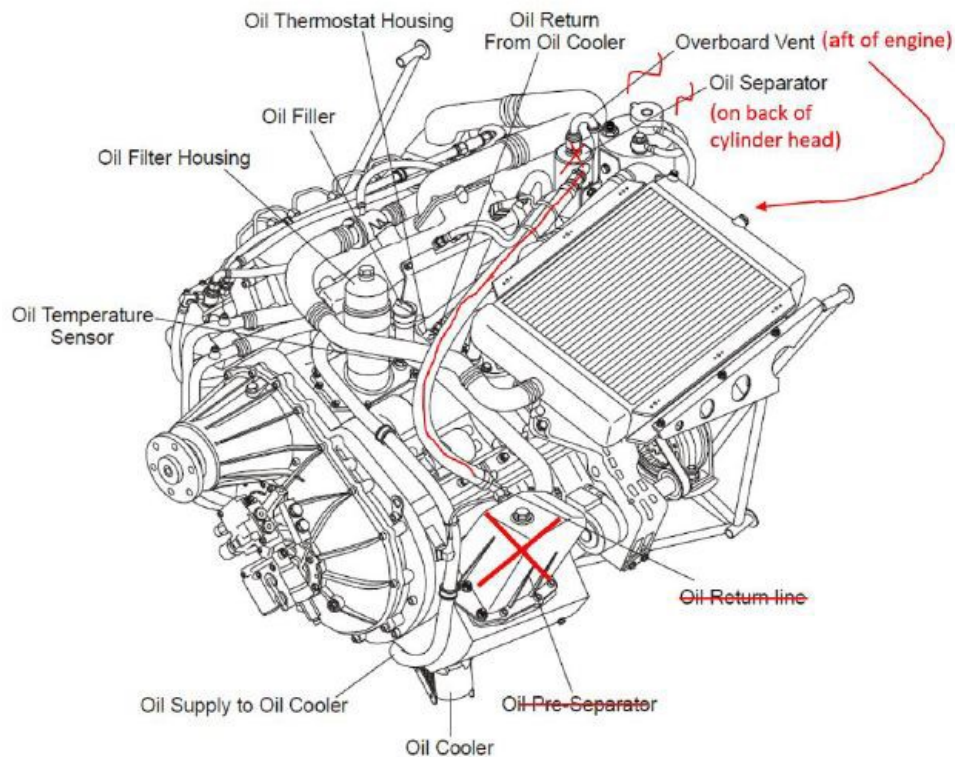


Figure 1. Changes to the oil system on the new production engine.

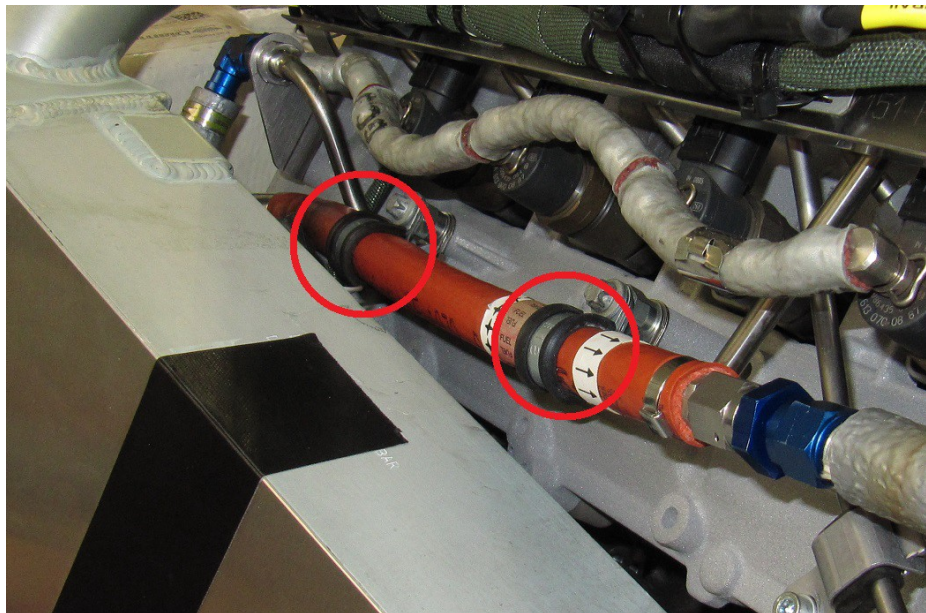


Figure 2. Changes to the fuel supply line security.

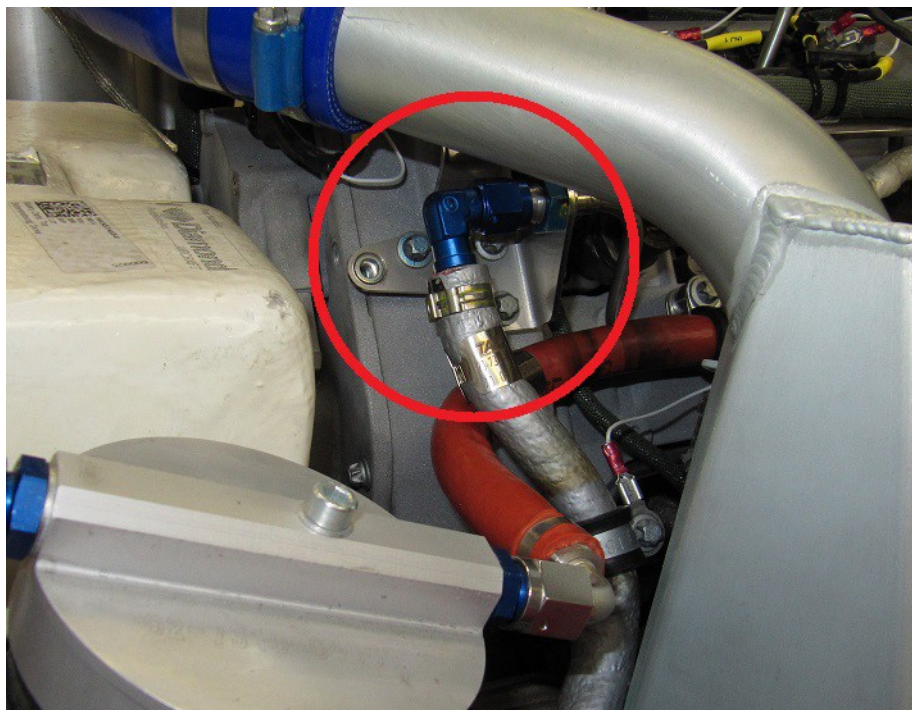


Figure 3. New bracket near the fuel filter.

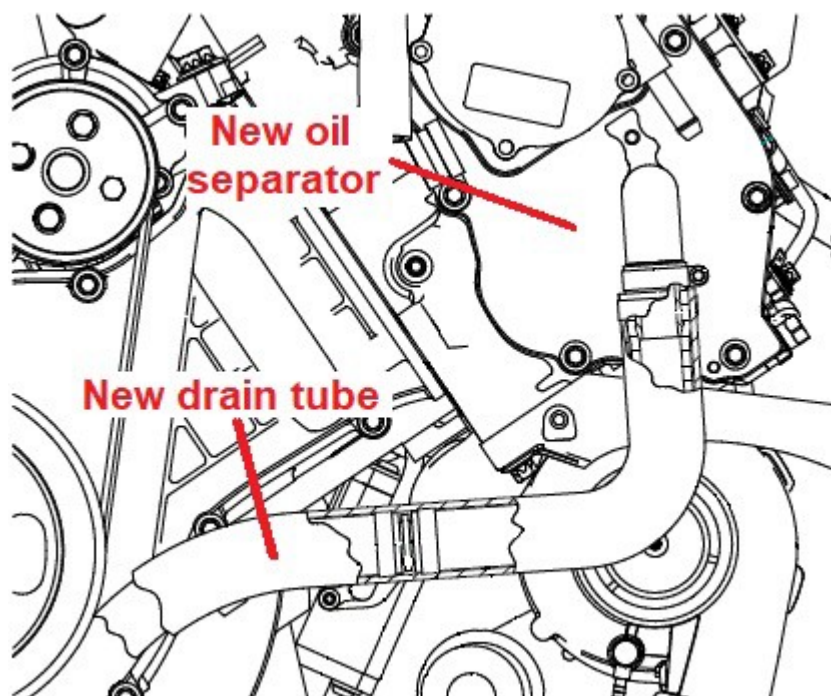


Figure 4. New production oil separator and drain tube at the aft rear of the engine (looking forward).

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this service bulletin if it is not incorporated.

If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner, and send the name of the current owner to Diamond Aircraft at the address below.

Diamond Aircraft Industries Inc.
1560 Crumlin Sideroad, London, Ontario, Canada
N5V 1S2

Customer Support:
Phone: (519) 457-4041, Fax: (519) 457-4045
E-mail: support-canada@diamondaircraft.com

Technical Publications:
E-mail: Techpubs@diamondaircraft.com