

OPTIONAL SERVICE BULLETIN NO. OSB 40-099 REV. 2
SUPERSEDES OSB 40-099 REV. 1

I TECHNICAL DETAILS

I.1 Category

Optional.

I.2 Airplanes Affected

Model: DA 40

S/N: All with G1000 or G1000 NXi systems equipped.

I.3 Date of Effectivity

03 August 2023.

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Replacement of EGT thermocouple assembly with alternate thermocouple assembly.

ATA code: 77-40

I.6 Reason

Diamond Aircraft has approved an alternate EGT thermocouple assembly for the DA 40. This service bulletin describes the replacement of the EGT thermocouple assembly (P/N A002BG) with the alternate EGT thermocouple assembly (P/N DA4-7720-00-01) on aircraft in service.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information and instructions contained in this document relate to Design Change Advisory MÄM 40-1156, which has been approved as part of the type design.

I.9 Accomplishment/Instructions

See WI-OSB 40-099, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-OSB 40-099, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 1 hour will be required to accomplish this service bulletin.

NOTE: This estimate is for the installation of one thermocouple assembly.

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 40-099 REV. 2

AIRPLANE DATA

Airplane serial number _____
Airplane registration _____
Airplane operator _____
Hours of operation of airplane (TSN) _____
Typical operation of airplane private, club, training, other: _____

MAINTENANCE DATA

Date of maintenance _____
Maintenance carried out by _____
During scheduled inspection?

Yes	No
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Name Signature Date

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

WORK INSTRUCTION WI-OSB 40-099 REV. 2
SUPERSEDES WI-OSB 40-099 REV. 1

I GENERAL INFORMATION

I.1 Subject

Replacement of EGT thermocouple assembly with alternate thermocouple assembly.

ATA code: 77-40

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

Item	Quantity	Part Number	Description
1	1	DA4-7720-00-01	Thermocouple assembly
2	1	DA4-7720-00-03SB	Thermocouple adapter harness
3	10	PLT-2-SM-76	Cable tie

NOTE: The part numbers and quantities shown in the table are representative of a replacement for a single probe.

III INSTRUCTIONS

WARNING: MAKE SURE THE ENGINE IS SAFE BEFORE YOU DO ANY WORK ON IT. IF THE ENGINE STARTS, THE PROPELLER CAN CAUSE INJURY OR DEATH.

1. Make sure the engine is safe as follows:
 - A. The ignition switch is set to OFF.
 - B. Set the ALT/BAT switch to OFF.
 - C. The throttle is set to IDLE.
 - D. The mixture control is set to LEAN CUT-OFF.
2. Remove the engine cowlings. Refer to AMM Section 71-10.
3. Disconnect the airplane battery. Refer to AMM Section 24-31.
4. Disconnect the electrical connector from the EGT probe that needs replacement. Refer to Figure 1.
5. Release the clamp that holds the EGT probe in position. Refer to Figure 1.
6. Remove the EGT probe from the aircraft.
7. Put the new EGT thermocouple assembly (item 1) in position and tighten the clamp.
8. Connect the thermocouple adapter harness (item 2) to the new EGT thermocouple assembly (item 1) electrical connector and the engine harness thermocouple connection.
9. Secure thermocouple wires to existing engine harness using cable ties (item 3).
10. Connect the airplane battery. Refer to AMM Section 24-31.
11. Install the engine cowlings. Refer to AMM Section 71-10.
12. Do a test of the EGT indicating system. Refer to AMM Section 77-40, Subsection (D), Step (9).
13. Clean working areas, and check for foreign objects.
14. Check all altered, replaced, and repaired parts for proper function.
15. Test all systems in working areas for proper function.
16. Make all necessary entries in the logbooks.
17. Submit the execution report to Techpubs@diamondaircraft.com.

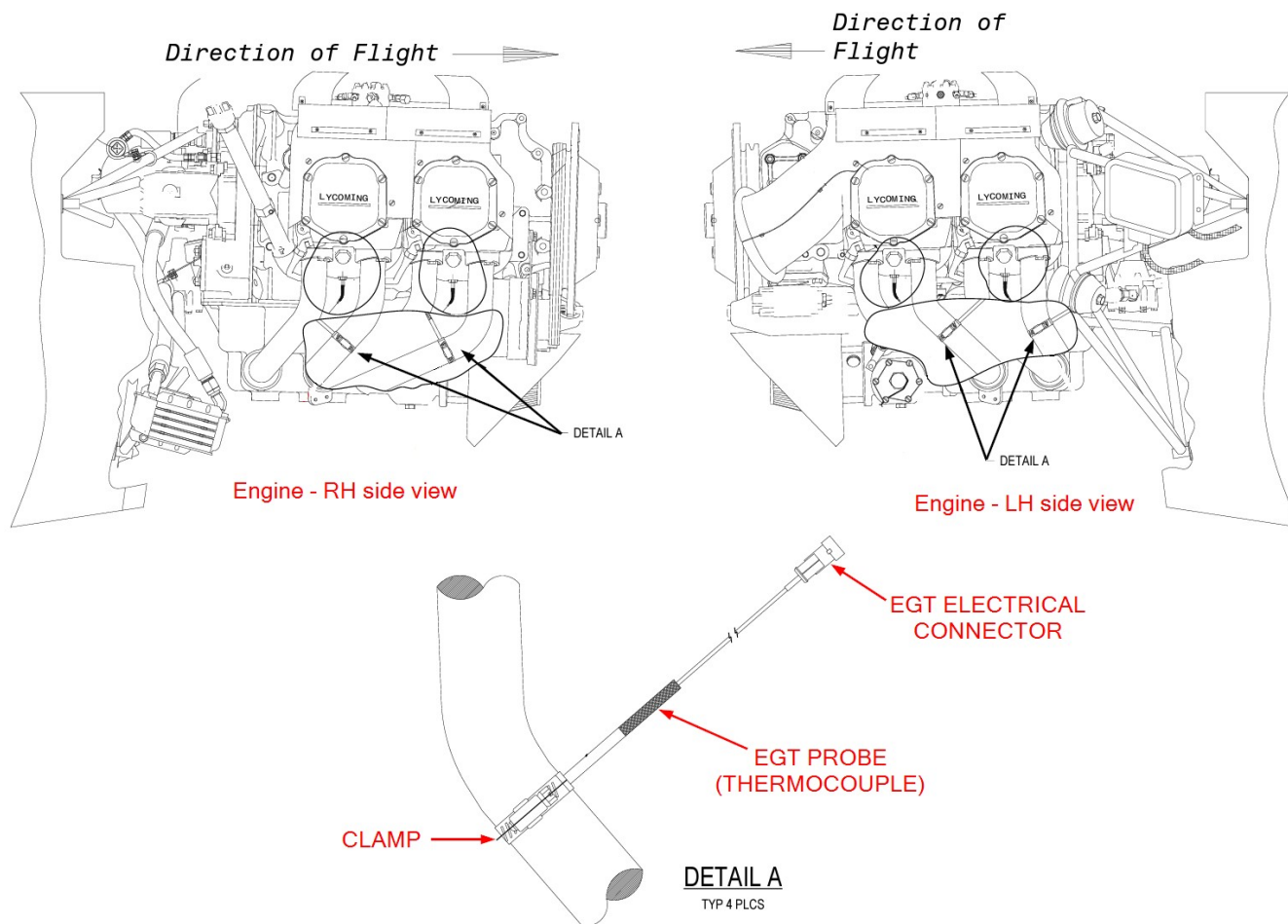


Figure 1. EGT probe (Thermocouple)

Diamond Aircraft Industries
WORK INSTRUCTION
Model DA 40



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.

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