

RECOMMENDED SERVICE BULLETIN

RSB D4-083

I TECHNICAL DETAILS

I.1 Category

Recommended.

I.2 Airplanes affected

Type: DA 40 D
Serial numbers: 40.080, 40.084,
D4.001 through D4.399
40.DS001 through 40.DS040

I.3 Date of effectivity

12-Jan-2011

I.4 Time of Compliance

At holder's discretion.

I.5 Subject

Installation of a water separator in the MAP-lines of the ECU.

ATA-Code: 76-00

I.6 Reason

In case of operation in a rather humid climate condense water can accumulate in the MAP-lines. To prevent possible damage to the MAP-sensor it is highly recommended to install the water separator in the MAP lines.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information or instructions contained in this document relate to the Design Change Advisories No. MÄM 40-474 and MÄM 40-479, which have been approved under the authority of EASA Design Organization Approval ref. EASA.21J.052.

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

I.9 Accomplishments / Instructions

Comply with WI-RSB D4-083, latest effective issue.

I.10 Mass (Weight) and CG

Negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-RSB D4-083, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 1,5 hours.

II.4 Credit

None.

II.5 Reference Documents

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

III REMARKS

1. All measures must be carried out by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All works, particular those that are not especially described in this Service Bulletin, must be carried out in accordance with the referenced Maintenance Manual.
3. Accomplishment of the measures must be confirmed in the log book.
4. In case of doubt contact Diamond Aircraft Industries GmbH.

**EXECUTION REPORT TO
SERVICE BULLETIN
RSB D4-083**

AIRPLANE DATA

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

WORK INSTRUCTION

WI-RSB D4-083

INSTALLATION OF MAP LINE WATER SEPARATOR

I GENERAL INFORMATION

I.1 Subject

Installation of a MAP line water separator.

I.2 Reference Documents

Diamond Aircraft DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective revision.

I.3 Remarks

- a) The work must be carried out by a certified aircraft service station or a certified aircraft maintenance mechanic.
- b) All works, particular those are not especially described in this work instruction, must be carried out in accordance with the referenced maintenance manual.
- c) For conversion factors between SI units and US/Imperial units refer to AMM Chapter 02.
- d) It is recommended to print this Work Instruction in color.
- e) In case of doubt, contact Diamond Aircraft Industries GmbH.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

II.3 Material

For airplanes with engine TAE 125-01 installed:

Quantity	Part Number	Description
2	D60-7614-40-00	Water Separator Assembly
1	D4D-7153-14-00_1	Manifold pressure tube A
1	D4D-7153-12-00_1	Manifold pressure tube B
4	PLT1MM30	Cable Tie
2	MS21919WDG4	Clamp
2	13.8 GER	Oetiker I-ear clamp
2	DIN 963A-M4X8	Countersunk head screw

For airplanes with engine TAE 125-02-99 installed:

Quantity	Part Number	Description
2	D60-7614-40-00	Water Separator Assembly
1	D4D-7153-14-00_2	Manifold pressure tube A
1	D4D-7153-12-00_2	Manifold pressure tube B
6	PLT1MM30	Cable Tie
1	MS21919WDG4	Clamp
2	13.8 GER	Oetiker I-ear clamp
1	DIN 963A-M4X8	Countersunk head screw

Material is available from Diamond Aircraft Industries.

III INSTRUCTIONS

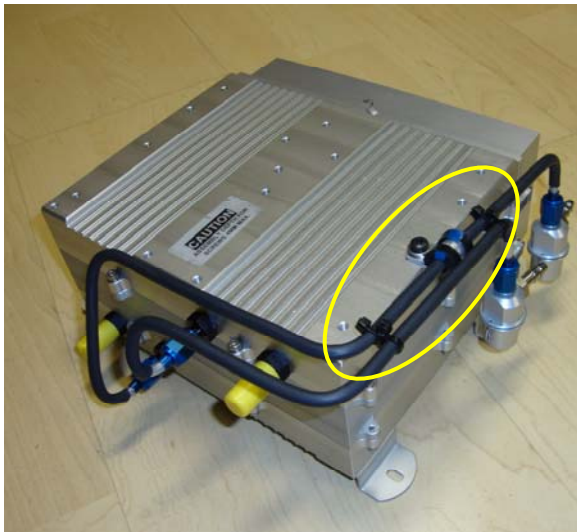
1	Remove the pilot seat in accordance with the AMM.
2	Disconnect the passenger floor heating hose from the foot well lining.
3	If engine TAE 125-02-99 is installed, remove the glow control box from the ECU.
4	Disconnect the MAP lines from the ECU A and B.
5	Remove the MAP tubes from the MAP hose.

6 Connect the water separator assembly's to the MAP hoses with an 13,8 Oetiker I-ear clamp.

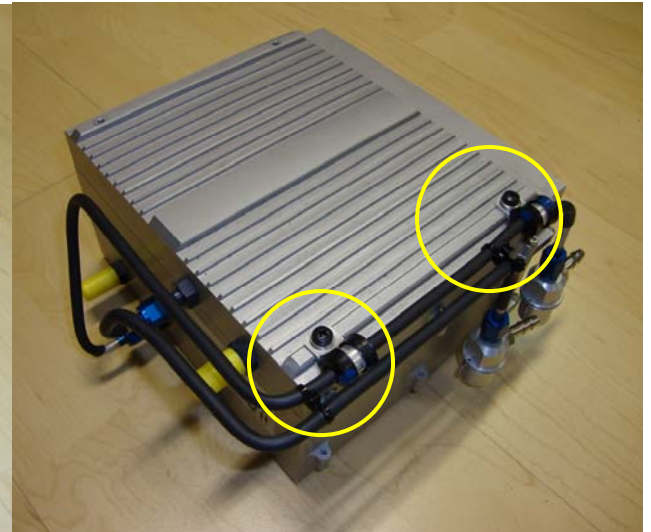
7 Install the manifold pressure adapter tubes A and B.

- Connect the manifold pressure adapter tubes A and B with the water separators.
- Connect the manifold pressure adapter tubes A and B on the ECU fittings.
- If engine **TAE 125-02-99** is installed: Install the clamp MS21919WDG4 with the DIN 963A-M4X8 screw with the Tube A on the ECU (use Loctite 263) and fix the tubes with cable tie acc. too picture 1.
- If engine **TAE 125-01** is installed: Install two clamps MS21919WDG4 with DIN 963A-M4X8 screws on the ECU (use Loctite 263) and fix the tubes with cable tie acc. to picture2

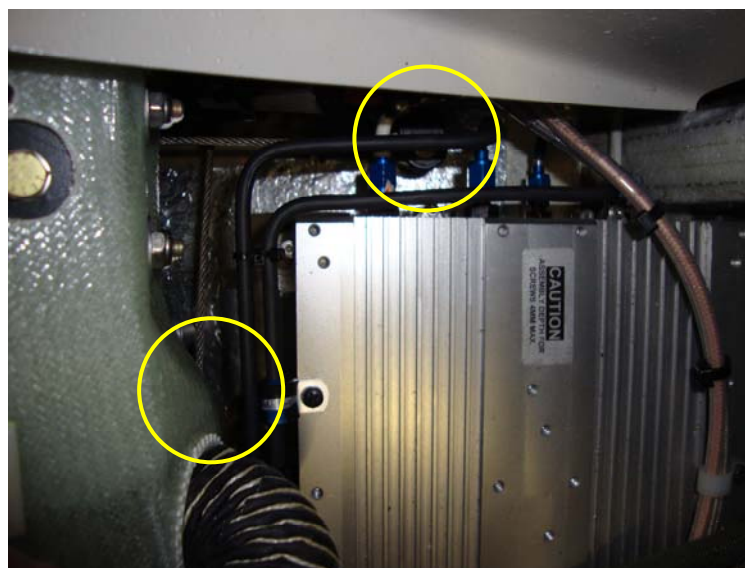
NOTE: If necessary bend the manifold pressure adapter tubes for an optimized routing on the ECU. Make sure that the manifold pressure adapters' tubes have no contact to the rudder bell crank and rudder cables in all position acc. to picture 3.



Picture 1



Picture 2



Picture 3

8	If engine TAE 125-02-99 is installed, install the glow control box on the ECU.
9	Install the passenger floor heating hose from the foot well lining.
10	Clean working area, check for foreign objects.
11	Install the pilot seat in accordance with the AMM.
12	Clean working area, check for foreign objects
13	Check all altered, replaced, repaired parts for proper function.
14	Test all systems in working area for function.
15	Make all necessary entries in the airplane logs.