

# RECOMMENDED SERVICE BULLETIN

## RSB 42-036/2

supersedes RSB 42-036

### **I TECHNICAL DETAILS**

#### **I.1 Category**

Recommended

#### **I.2 Airplanes affected**

Type: DA 42  
Serial Numbers: 42.004 through 42.427  
42.AC001 through 42.AC151  
42.M001 through 42.M026

#### **I.3 Date of effectivity**

18-Apr-2016

#### **I.4 Time of Compliance**

At owner's discretion

**NOTE:** Compliance with RSB 42-036 does NOT constitute compliance with RSB 42-036/1 or with RSB 42-036/2.

#### **I.5 Subject**

Installation of a water separator in the Manifold Air Pressure (MAP) lines of the ECU.  
ATA-Code: 76

#### **I.6 Reason**

In case of operation of the DA42 in a rather damp climate, condensed water can accumulate in the MAP-lines. To prevent possible damage of the MAP-Sensor, it is highly recommended to install the water separator in the MAP-lines.

Revision 1:

DAI now has improved the water separator design. An additional membrane provides improved protection of the ECU MAP-sensors from moisture. From now on the improved water separator design is available. DAI recommends replacement of already installed water separators by the new design at the next opportunity.

Revision 2:

The range of affected serial numbers was increased to cover also airplanes that were equipped with the initial water separator design during manufacturing.

**I.7 Concurrent Documents**

None

**I.8 Approval**

The technical information or instructions contained in this document relate to the Design Change Advisory No. MAM 42-914, which has been approved under the authority of DOA No. EASA.21J.052.

The technical content of this document has been approved under the authority of DOA No. EASA.21J.052.

**I.9 Accomplishment / Instructions**

See WI-RSB 42-036, latest effective issue.

**I.10 Mass (Weight) and CG**

Negligible

**II PLANNING INFORMATION****II.1 Material & Availability**

See WI-RSB 42-036, latest effective issue.

**II.2 Special Tools**

None

**II.3 Labor effort:**

Approx. 2 hours

**II.4 Credit**

None

**II.5 Reference Documents**

DA 42 Series Airplane Maintenance Manual Doc. No. 7.02.01, 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 that 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 log book.
4. In case of doubt contact Diamond Aircraft Industries GmbH.



## EXECUTION REPORT TO SERVICE BULLETIN RSB 42-036/2

### AIRPLANE INFORMATION

Airplane Serial Number \_\_\_\_\_

Airplane Registration \_\_\_\_\_

Airplane Operator \_\_\_\_\_

Hours of operation of airplane \_\_\_\_\_

No. of landings \_\_\_\_\_

Hours of operation-engine LH \_\_\_\_\_

RH \_\_\_\_\_

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

# WORK INSTRUCTION

## WI-RSB 42-036

### „INSTALLATION OF WATER SEPARATOR, ECU “

#### **I GENERAL INFORMATION**

##### **I.1 Subject:**

Installation of a water separator in the Manifold Air Pressure (MAP) lines of the ECU.

##### **I.2 Reference Documents:**

DA42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

##### **I.3 Remarks:**

- a) All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic. In case of doubt, contact Diamond Aircraft.
- b) All work, in particular that which is not especially described in this work instruction, has to be done in accordance with the referenced maintenance manual.
- c) In case of doubt, contact Diamond Aircraft.

#### **II DRAWINGS, SPECIAL TOOLS & MATERIALS**

##### **II.1 Drawings:**

None


##### **II.2 Special Tools:**

None

##### **II.3 Material**

Qty	Description	Part Number
4	Water Separator Assembly	D60-9076-14-01
4	Connecting Adapter 90°	E934103

### III INSTRUCTIONS

1	Remove LH ECU-compartment access cover.
2	Open hose clamps on both MAP lines and remove MAP-lines.
3	<p>If no water separators have been installed before:</p> <ul style="list-style-type: none"> <li>• Remove both connector fittings from the fittings of ECU A and B on the ECU housing.</li> <li>• Install new 90° connector fittings E934103 onto the fittings of ECU A and B on the ECU housing.</li> <li>• Adjust the 90° connector fittings downwards.</li> </ul>
4	<p>If water separators are already installed:</p> <ul style="list-style-type: none"> <li>• Disconnect water separators from the 90° connector fittings.</li> <li>• Make sure that 90° connector fittings are oriented downwards.</li> </ul>
5	Install water separators D60-9076-14-01 onto the 90°connector fittings, refer to picture 1.
6	<p>Connect both MAP lines to the water separators tighten hose clamps, refer to picture 1.</p>  <p style="text-align: center;">Picture1: Installed Water separators and connector fittings.</p>
8	Clean working area and check for foreign objects.
9	Install ECU-compartment access cover.



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10	Perform items 1 to 9 for RH side.
11	Perform engine ground test i.a.w. AMM, Section 05-20.
12	Make appropriate entries into aircraft log.