

# MANDATORY SERVICE BULLETIN

## NO. MSB D4-081

### **I TECHNICAL DETAILS**

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

Mandatory

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

Type: DA 40 D with conventional cockpit (non Garmin G1000)

Serial Numbers: all serial numbers on which non scheduled maintenance work (additional installations, cable harness modification, removal and installation of the whole panel and so on) was carried out on wiring behind the instrument panel.

#### **I.3 Date of Effectivity**

01-Apr-2011

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

Within the next 200 flight hours from the date of effectivity but not later than 01-Apr-2012.

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

This Service Bulletin describes the inspection of the wiring behind the instrument panel.

ATA-Code: 24-00

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

During improper maintenance work on the electric system of a DA 40 D the ring terminal of the cable coming from the battery bus was bent and attached to the ECU

bus in such a way so that interference between the cable and the instrument panel cover was present. Chafing of the cable at the instrument panel cover resulted in a local arcing and smoke formation.

### **I.7 Concurrent Documents**

None

### **I.8 Approval**

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

### **I.9 Accomplishment/Instructions**

Comply with Work Instruction WI-MSB D4-081, latest effective issue.

Make all necessary entries in the airplane logs.

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

Mass and Center of Gravity are not affected.

## **II PLANNING INFORMATION**

### **II.1 Material & Availability**

See WI-MSB D4-081, latest effective issue.

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

None.

### **II.3 Labour Effort**

Approx. 1 hour

#### **II.4 Credit**

No Credit.

#### **II.5 Reference Documents**

WI-MSB D4-081, latest affective issue.

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 MSB D4-081

### 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, Sign

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

# WORK INSTRUCTION

## WI-MSB D4-081

„Inspection of the wiring behind the instrument panel“

### **I GENERAL INFORMATION**

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

This Service Bulletin describes the inspection of the wiring behind the instrument panel cover.

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

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

#### **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 that are not especially described in this work instruction, must be carried out in accordance with the referenced maintenance manual.
- c) In case of doubt, contact Diamond Aircraft Industries GmbH.

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

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

None.

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

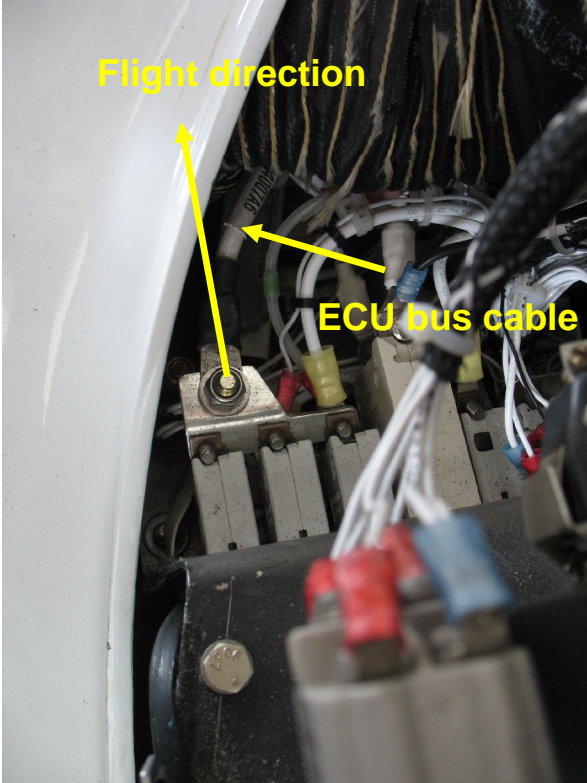
None.

**II.3 Material:**

None

**III INSTRUCTIONS**

1	To ensure that maintenance work is carried out correctly so that a safe operation of the aircraft is guaranteed only certified maintenance personnel with appropriate qualifications is allowed to perform maintenance work on this aircraft. Refer to AMM, Section 24-33, Maintenance Practices, Electrical Safety and AMM, Section 05-20, General.
<b>Warning: Incorrect maintenance work on the electrical system of the aircraft and disrespect of commonly preassumed skills of certified maintenance personnel can cause severe damage of components or even fire.</b>	
2	Disconnect the main battery for maintenance. Refer to AMM, Section 24-34.
3	Remove the instrument panel cover. Refer to AMM, Section 25-10.
4	Ensure that the wiring behind the instrument panel is correctly attached. Refer to AMM, Section 05-20, Cockpit

5	<p>Ensure that there is sufficient clearance between the ECU bus cable and the instrument panel cover. The ring terminal of the ECU bus cable must be orientated parallel to the flight direction or slightly to the right.</p> 
6	<p>Inspect the entire wiring for signs of chafing or damage. If damaged cables are found replace the damaged cables and eliminate the root cause.</p>
7	<p>Install the instrument panel cover. Refer to AMM, Section 25-10</p>
8	<p>Connect the main battery. Refer to AMM, Section 24-34.</p>
9	<p>Clean working area and check for foreign objects.</p>
10	<p>Perform functional check of altered, repaired and new parts</p>
11	<p>Test all systems in working area for function.</p>
12	<p>Make necessary entries into aircraft logs.</p>