

RECOMMENDED SERVICE BULLETIN

NO. RSB 42-072/2

SUPERSEDES RSB 42-072/1

I TECHNICAL DETAILS

I.2 Category

Recommended.

I.3 Airplanes affected

Type: DA 42 / DA 42 M powered by TAE engines
Serial Numbers: 42.004 through 42.307,
42.309 through 42.321,
42.324 through 42.347,
42.349, 42.351,
42.353 through 42.357,
42.359 through 42.386,
42.388, 42.394, 42.396, 42.399,
42.405 through 42.408, 42.416,
42.M001 through 42.M007,
42.M009, 42.M010, 42.M017
42.AC001 through 42.AC120
42.AC122 through 42.AC132

I.4 Date of Effectivity

10-Sep-2009.

I.5 Time of Compliance

At holder's discretion.

I.6 Subject

Application of an improved sealant on the fire sensors or replacement by a sealed fire sensor

ATA-Code: 26-10

I.7 Reason

During flight in heavy rain the fire sensor was in a few cases triggered inadvertently. The application of an improved sealant onto the insulation washers between the contact plates of the fire sensors will improve water resistance. As alternative the engine overheat detector can be replaced by a sealed fire sensor.

NOTE:

It is highly recommended to take measures to prevent inadvertent fire sensor triggering.

I.8 Concurrent Documents

None.

I.9 Approval

The technical information or instructions contained in this document relate to the Design Change Advisory No. MÄM 42-377, which has been approved under the authority of EASA Design Organization Approval No. EASA.21J.052.

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

I.10 Accomplishment/Instructions

Alternative 1:

Comply with WI-RSB 42-072, latest effective issue.

WI-RSB 42-072 is attached to this Service Bulletin.

Alternative 2:

1. Replace the fire sensors on each engine installation i.a.w. AMM Section 26-00 by P/N X2003-506.
2. Make all necessary entries in the airplane logs.

I.11 Mass (Weight) and CG

Mass and Center of Gravity are not affected.

II PLANNING INFORMATION

II.2 Material & Availability

Alternative 1:

See WI-RSB 42-072, latest effective issue.

WI-RSB 42-072 is attached to this Service Bulletin.

Alternative 2:

Quantity	Part No.	Description
2	D60-9026-16-03 / X2003-506	Engine Overheat Detector

Materials are available from Diamond Aircraft Industries.

II.3 Special Tools

None.

II.4 Labor Effort

Approx. 1 hour.

II.5 Credit

None.

II.6 Reference Documents

DA 42 Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

WI-RSB 42-072, latest effective issue.

III REMARKS

- 1) All measures must be carried out by a certified aircraft maintenance station or a certified aircraft mechanic.
- 2) All works, particular those that are not especially described in this service bulletin, must be carried out in accordance with the reference 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 42-072/2

AIRPLANE DATA

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 _____

Alternative 1:

Alternative 2:

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 42-072

„Fire Sensor Water Protection“

I GENERAL INFORMATION

I.1 Subject:

Application of lacquer onto fire sensor insulation washers.

I.2 Reference Documents:

Diamond Aircraft DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, 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:

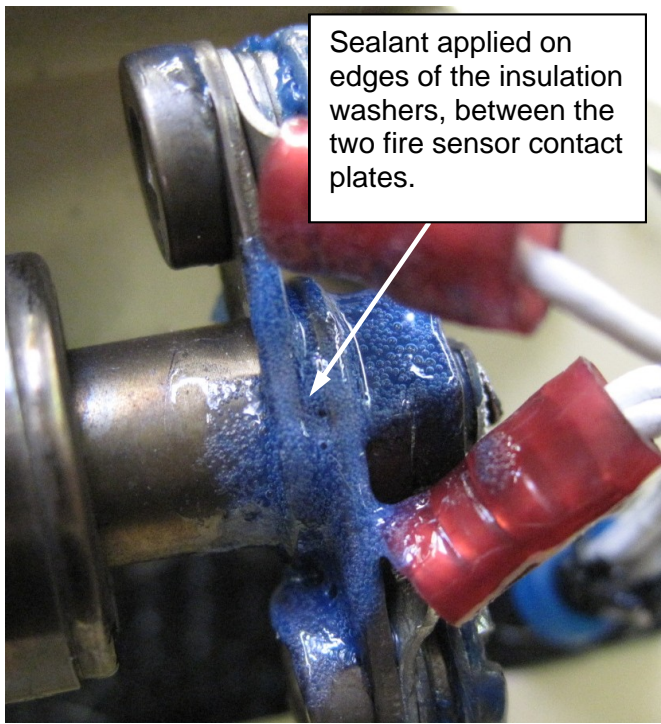
None.

II.3 Material:

Quantity	Part No.	Description
1	RTV8262 or 155-8156	Silicone Rubber Compound or APL (Acrylic Protective Lacquer)
1	N/A	Isopropyl alcohol based cleaner (commercial) (e. g. Brekutex-Spray "m" or similar)

Materials are available from Diamond Aircraft Industries.

III INSTRUCTIONS

1	Remove the upper and lower cowling on LH and RH engine.
2	<p>Clean the rear of the fire sensors with an Isopropyl alcohol based cleaner (in particular the area of the insulation washers of the sensors).</p> <p>CAUTION: When handling chemicals always obey the Health and Safety instructions given by the manufacturer.</p>
3	Let the cleaned area dry for about 30 minutes.
4	<p>Apply the sealant onto the edges of the insulation washers of the fire sensors. Ensure that the washers are covered with the sealant completely. This will make the fire sensor water resistant and therefore avoiding inadvertent fire sensor triggering. See picture below.</p> <div data-bbox="507 1267 1171 1989" data-label="Image">  <p>Sealant applied on edges of the insulation washers, between the two fire sensor contact plates.</p> </div> <p>CAUTION: When handling chemicals always obey the Health and Safety Instructions given by the manufacturer.</p>

5	Let the sealant dry for at least 24 hours before engine operation.
6	Perform functional check of the fire sensor as described in the preflight inspection of the AFM (latest revision).
7	Make necessary entries into aircraft logs.