

RECOMMENDED SERVICE BULLETIN

NO. RSB-42-041/1

SUPERSEDES RSB-42-041

I TECHNICAL DETAILS

I.1 Category

Recommended

I.2 Airplanes affected

Type: DA 42

Serial Numbers: 42.004 up to and incl. 42.231, if TAE 125-01 Engine is installed.

42.AC001 up to and incl. 42.AC064, if TAE 125-01 Engine is installed.

I.3 Time of Compliance

at owners discretion.

I.4 Subject

Welding reinforcement of the cabin heat exchanger (RH-engine) and defrost heat exchanger (LH-engine), P/N D60-2140-10-00.

ATA-Code: 75

I.5 Reason

Minor leakage may occur on the pipe in- and outlet of the cabin- and defrost heat exchanger. Therefore a welding reinforcement of the pipes on the heat exchanger is recommended with this service bulletin.

I.6 Concurrent Documents

None

I.7 Approval

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

I.8 Accomplishment / Instructions

WI-RSB-42-041, latest effective issue must be complied with.

I.9 Mass (Weight) and CG

Negligible

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

The Work Instruction WI-RSB-42-041 and appropriate necessary materials are available through DAI.

II.2 Special Tools

None

II.3 Credit

The Labor effort of 3 hours, if airplane is in warranty and warranty application, the attached execution report and work report will be sent to Diamond Aircraft Ind. until 15-Aug-2007.

II.4 Labor effort:

Approx. 3 hours

II.5 Reference Documents

DA 42 Series Airplane Maintenance Manual Doc. No. 7.02.01, latest effective issue
WI-RSB-42-041, latest effective issue.

III REMARKS

1. All measures must be carried out by a certified aircraft station or a certified aircraft mechanic. In addition, the welding has to be carried out by certified welding staff.
2. Accomplishment of the measures must be confirmed in the log book.
3. In case of any doubt, contact Diamond Aircraft Industries.

EXECUTION REPORT
for RSB 42-041/1**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 _____

Date, Name, SignPlease fax the completed form to Fax No. **43-2622-26700-369 or e-mail to
airworthiness@diamond-air.at

WORK INSTRUCTION

WI-RSB-42-041

„WELDING REINFORCEMENT OF THE CABIN HEAT EXCHANGER TUBE“

I GENERAL INFORMATION

I.1 Subject:

Modification of the cabin heat exchanger (RH) and defrost heat exchanger (LH),
P/N D60-2140-10-00 by a welding reinforcement around the inlet and outlet tube.

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. In addition, the welding has to be carried out by certified welding staff. In case of doubt, contact Diamond Aircraft.
- b) All works, particularly those that are not especially described in this work instruction, have to be carried out in accordance with the referenced maintenance manual.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings:

None



II.2 Special Tools:

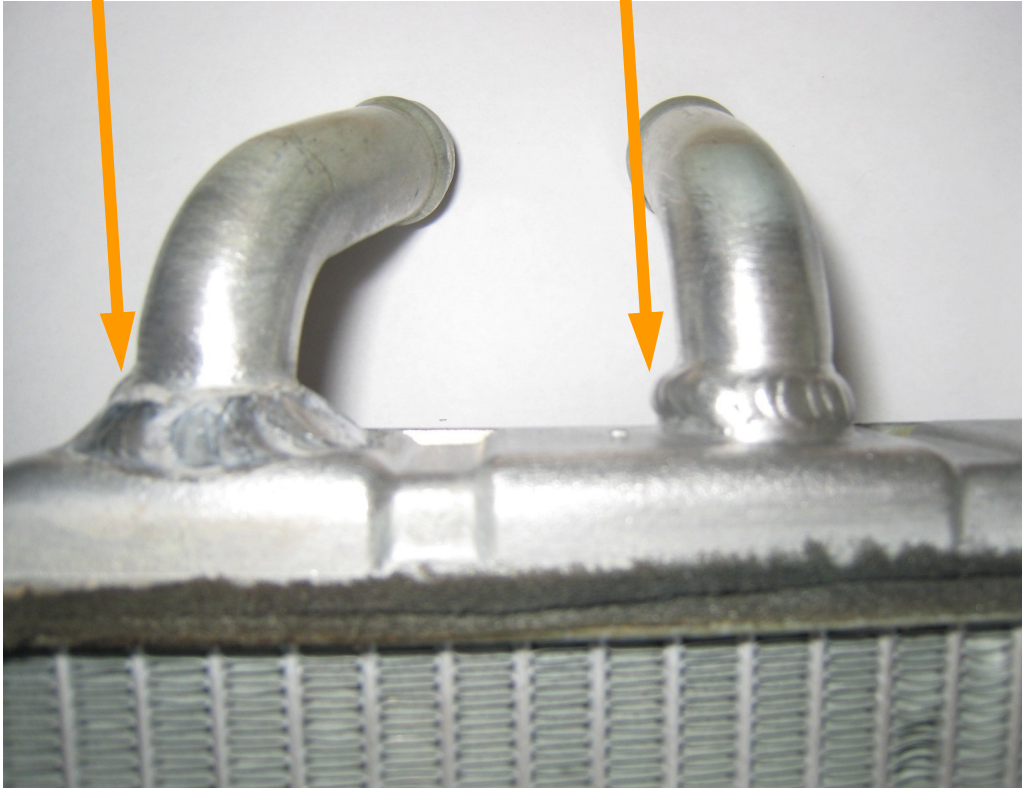
None

II.3 Material

Qty	Description	Part Number
4m (4 pcs.)	Welding filler, mat. 3.3556, SG-AlMg5, 1.6mm	N000181
alt. 4m (4 pcs.)	Welding filler, mat. E4043 1/16"	E4043-1-16

III INSTRUCTIONS

1	Remove the cabin heat exchanger (RH-engine) and defrost heat exchanger (LH-engine) , P/N D60-2140-10-00 acc. to AMM, Section 75-00-00, item 3.
2	Clean welding area around pipes thoroughly.
3	<p>Make a welding reinforcement on both pipes according to the following pictures.</p> <p>Welding Method: WIG (141), TIG Welding Filler Metal: see item II.3 Assessment Group: II Safety Class: II Allowable variation: acc. DIN8570B Welding specification complying with DIN 65 118, Section 1.</p> <p>Note: The pictures are showing one pipe with the current design, and one pipe with a welding reinforcement. The reinforcement has to be carried out on both pipes.</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>current design</p>  </div> <div style="text-align: center;"> <p>modified design</p>  </div> </div>

4	<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> modified design current design </div> 
5	Install cabin heat exchanger according to AMM, Section 75-00-00, item 3 and 4.
6	Carry out a Cooling Pressure Test according to AMM, Section 75-00-00, item 5.
7	Clean working area, check for foreign objects.
8	Check new installed items and all systems in working area for proper function.
9	Make appropriate entries into aircraft log.