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Approved Type Design Document

This document may only be revised in accordance with the procedure defined in Chapter 6 of the Aquila Design Organisation Handbook.
The Approval is granted for the following applications:

Type	Model	Date	Office of Airworthiness
AT01	---	12.01.2009	P. Ellw-

The technical content of this document is approved under the authority of DOA-No. EASA.21J.025.

12.01.09

Date, Signature Office of Airworthiness

Prepared/amended:	Verified:	Approved:	Date of issue:	Supersedes issue:
Döring	Just	Ellwanger	12.01.2009	--- (First Release)

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1   General Information

This Work Instruction describes the replacement of the fuel-return hose on AT01 model in relation with the Service Bulletin SB-AT01-012.

2   Data and Required Utilities

2.1   Required/Applicable Documents

The following documents are required for the retrofit/ installation of the SB-AT01-012:

Pos.	Document Number	Type of Document and Title
1	WI-SB-AT01-012	Work Instruction

2.2   Tools

The following tools are required for the retrofit/ installation:

Pos.	Description	Pos.	Description
1	ground cable		
2	phillips screwdriver		
3	fork-wrench metric size 10, 12, 17		
4	tie-wrap-cutter		

2.3   Equipment and Devices

The following equipment and devices are required for the retrofit/ installation:

Pos.	Equipment/Device No.	Description
		- none -

2.4   Measuring Equipment

Required measuring Equipment:

Pos.	Description
	- none -

2.5   Material

The following materials are required for the retrofit/ installation of the SB-AT01-012:

Pos.	Quantity	P/N	Description
1	1	AT01-8020-007B A.03	fuel return hose
2	2	AT01-7080-014	copper ring
3	2	AT01-4530-942	tie-wrap
4	1	AT01-1800985_M6	self locking nut M6

3   Implementation and Certification of the Retrofit/Installation

The repair has to be conducted by an approved Maintenance Organisation and has to be certified in accordance with EU-Regulation 2042/2003.

4   Accomplishment of the Retrofit/Installation

4.1   Prearrangements

1.) Aircraft grounding
2.) remove the upper cowling
3.) close fuel selector valve
4.) dump fuel at the front drainer

4.2   Work Instructions

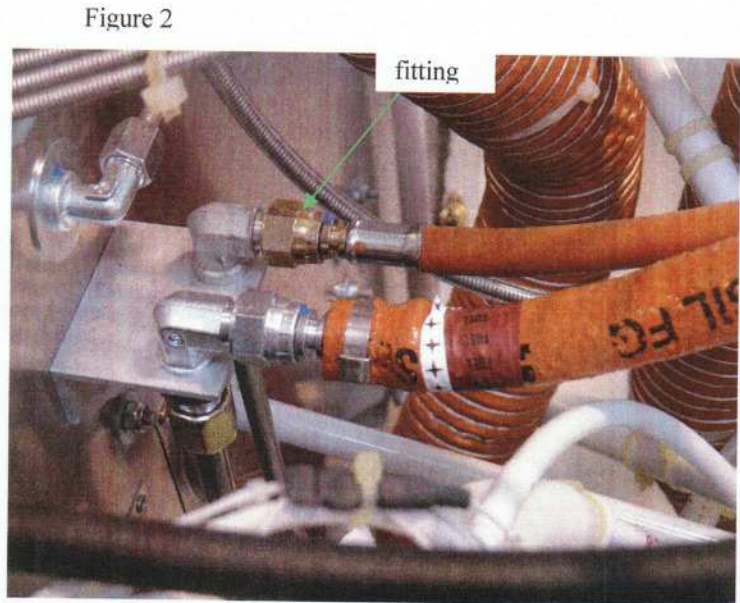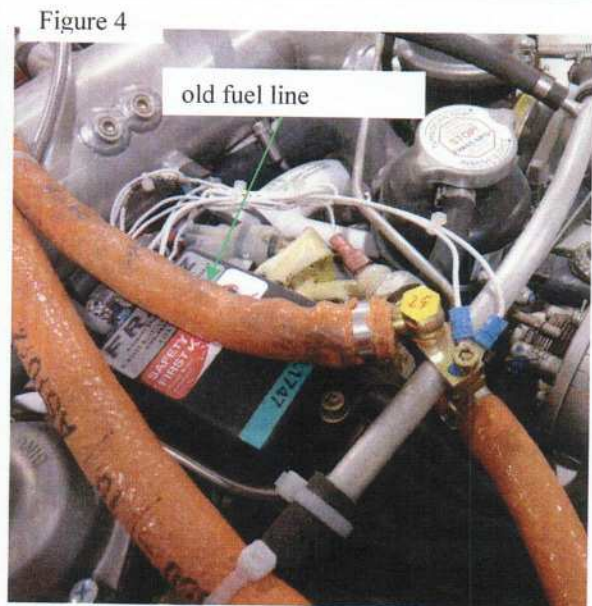| No.	Work Step	Description	Signature Mech.	Sign. Inspect.
1	Removal	remove cable tie		
2	Removal	remove the screw from the hose clamp (Figure 1)		
3	Removal	screw off the fuel line fitting from the fire wall (Figure 2)		
4	Removal	unscrew banjo screw from the t-piece. (Figure 3)		
5	Install	Install the new fuel return line in reverse order. It is important to use new copper rings (AT01-7080-014) at the banjo screw. (Figure 3)		
6	Install	tightening torque for the banjo screw: 10Nm		

Figure 1

screw with self locking nut

new fuel line

Figure 2

fitting

Figure 3

banjo bolt

copper ring

Figure 4

old fuel line

4.3 Final Inspection and Functional Testing

No.	Work Step	Description	Signature Mech.	Sign. Inspect.
1	leakage test	switch on the battery switch		
2	leakage test	switch on the fuel pump		
3	leakage test	visual inspection of leakage on the juncture of the fuel return line		
4	engine ground run	perform ground run. repeat leakage test		