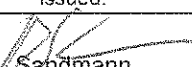
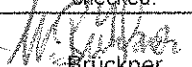


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The technical content of this document is approved under the authority of DOA-No. EASA.21J.025.				
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issued:  Sandmann	checked:  Brückner		date of issue: 13.02.2013	supersedes : A.01 (25.01.2013)

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1 General Information

This retrofit instruction is meant for the exchange of a defect, no longer available oil pressure sensor against a new sensor type. Already in SI-AT01-010 and attached UA-AT01-7900-203 the exchange of a resistance type sensor / gauge combination with a piezo electrical sensor and suitable gauge was published. Unfortunately this sensor type is now no more deliverable too, but can be exchanged according to ROTAX SI-912-020R6.

New Version (Keller M10x1)	Old Version (Honeywell)	Old Version (resistance)
		

2 Data and Tooling

2.1 Applicable Documents

For the Retrofit/Installation of the new oil pressure sensor the following documents are applicable:

Pos.	Doc No.	Doc Title
1	SI-AT01-016	oil pressure sensor "Keller M10x1"
2	SI-912-020R6	Running Modifications on ROTAX Engine Type 912/914 Series
3	SI-AT01-010	Oil Pressure Sensor and Gauge (if applicable)
4	UA-AT01-7900-203	

2.2 Tools


The following tools are required for the retrofit/installation:

Pos.	Description
1	standard mechanic tools
2	standard elektrik tools
3	crimp tool for round contacts (AMP 163305)

2.3 Measuring Equipment

Required measuring equipment:


Pos.	Description
1	torque wrench

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2.4 Material

The following material is required for performing the retrofit/installation:

Pos.	Quantity	P/N	Description
0	1	AT01-9610-011	Retrofit Kit oil pressure sensor (SI-AT01-016) consists of: Pos. 1 to 10
1	1	AT01-7080-203	ROTAX (686250) oil pump housing with sensor
2	1	AT01-7080-205	ROTAX (864250) wire assy. for oil pressure sensor
3	1	AT01-4530-596	plug housing male 3pol.
4	1	AT01-4530-597	plug housing female 3pol. (optional)
5	2	AT01-4530-599	crimp contact socket (optional)
6	2	AT01-4530-598	crimp contact pin
7	1	AT01-4520-463	Cobra hose clip 13/8
8	n. Bed.	AT01-4530-941/942	cable ties, heat resistant 100x2,5 / 200x4,5mm
9	2	AT01-4530-898	heat shrink marking tubes (7032Ba20 / 7032C20)
10	60mm	AT01-4520-309	Firesleeve 2650-9
11	n. Bed.	keine	Loctite 5910 (for sealing the connector 7080-205)
12	(1)	AT01-7080-201	alt. for Pos. 1: ROTAX (456180) oil pressure sensor "Keller"
13	(1)	AT01-7080-202	alt. for Pos. 2: ROTAX (881302) connector set for oil pressure sensor
14	(2,5m)	AT01-4530-120	alt. Pos. 2: 2,5m wire AWG 20

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3 Implementation and Certification

The repair has to be conducted by an approved Maintenance Organization and has to be certified in accordance with EU-Regulation 2042/2003 or applicable local law.

4 Accomplishment of the Retrofit/Installation

4.1 Work Instruction


No.	Work Step	Description	Sign. Mech.	Sign. Inspect.
1	Disconnect Battery	pull of fuse „Instruments 2“ pull of fuse „BAT“ pull of fuse „ALT / ALT 1“ disconnect Battery		
2.	Removal of the defect oil pressure sensor	remove Cowling (upper and lower) remove cables at oil pressure sensor and unscrew it with suitable tool		
3.	Mounting the new oil pressure sensor	Mount new sensor according to ROTAX SI-912-020R6 Attention: Torque limitation!		
4	cable connection to oil pressure sensor	Remove black insulation cap from connector (not heat resistant), seal it according to ROTAX SI-912-020R6 and have it cured properly. Afterwards route cable back through the hose from the bottom side, plug in the connector, pull over the firesleeve and secure it with a Cobra hose clip on exhaust pipe side and by cable tie on oil pump side (see pic. 1). Pay attention to chafing free routing.		
5	connection to engine harness Pin 1 = red Pin 2 = white Pin 3 = free	Cut cable to length, free wires from cable on 10cm and add marking tubes to the wires. Strip off insulation and crimp on contacts (pin or socket). Put contacts into plug- / socket housing. (see pic. 2) Connect plug- / socket.		

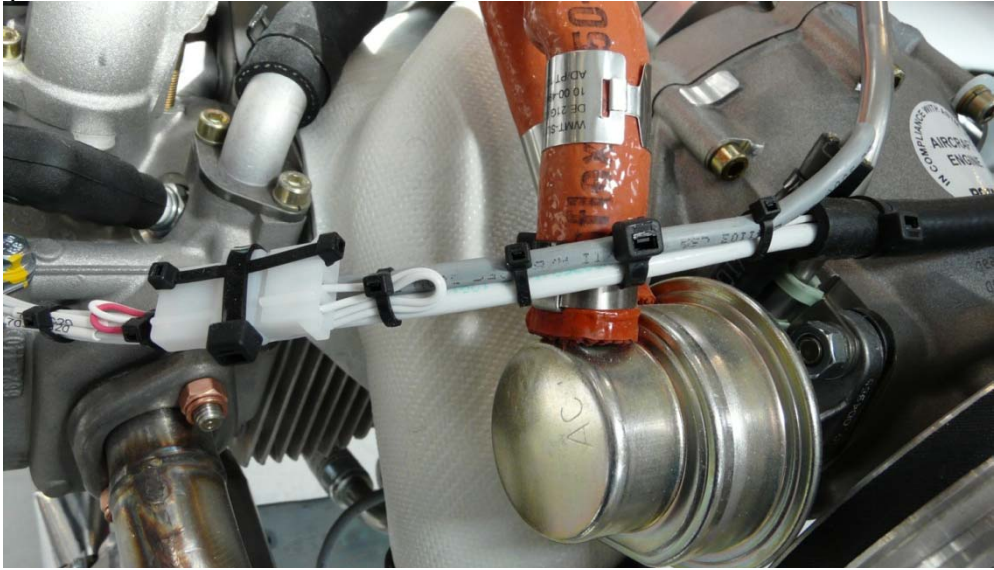
picture 1

picture 2



cable from oil pressure sensor

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No.	Work Step	Description	Sign. Mech.	Sign. Inspect.
picture 3 				
5.1		attach wires to existing harness route and fix it with cable ties (see pic. 3)		

4.2 Final Inspection and Functional Testing

No.	Work Step	Description	Sign. Mech.	Sign. Inspect.
1.	functional testing	connect battery push fuse „ALT / ALT 1“ push fuse „BAT“ push fuse „Instruments 2“ ALT 1 / BAT- switch „ON“ the oil pressure gauge indicator should level off at „0“		
2.	cowling	install cowling		
3.	engine ground run	check for valid indication of oil pressure gauge		
4.	Certification / Approval	certify implementation of SI-AT01-016 and approval within the A/C's log book		