



Recommended Service
Bulletin
No. RSB-AE50R-005/2

Austro Engine GmbH
Rudolf-Diesel-Strasse 11
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RECOMMENDED SERVICE BULLETIN

No. RSB-AE50R-005/2
SUPERSEDES MSB No. RSB-AE50R-005/1

1. BASIC INFORMATION

1.1. SUBJECT

Carburetor cap Retrofit

1.2. ENGINES AFFECTED

Type: AE50RAB

Serial numbers: all

1.3. REASON

This RSB ensures the usability of the new carburetor cap design in case of retrofit for the engine serial numbers defined under chapter 1.2.

1.4. TIME OF COMPLIANCE

Not applicable.

1.5. CONCURRENT DOCUMENTS / REFERENCES

WI-RSB-AE50R-005 in the latest effective revision

1.6. OTHER PUBLICATIONS AFFECTED

None.

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2. TECHNICAL DETAILS

2.1. ACCOMPLISHMENT / INSTRUCTIONS

WI-RSB-AE50R-005, latest effective issue is recommended to be complied with.

2.2. ILLUSTRATIONS

None.

2.3. MASS (WEIGHT)

None.

2.4. APPROVAL STATEMENT

The technical information or instructions contained in this document relate to the Basic Type Design which has been approved by EASA and to the Design Change Report No. MDC-E1-093b which has been approved under the authority of DOA No. EASA.21J.399.

The technical content of this document has been approved under the authority of DOA No. EASA.21J.399.

3. PLANNING INFORMATION

3.1. MATERIAL & AVAILABILITY

Carburetor cap	R1B-31-100-302-030
Cap screw	ISO4762-M5x12-8.8-ZP
Cap screw - sealing ring	DIN7603-A5, 5x8-AI
Stop nut (2x)	R1B-31-000-805
Securing wire Ø1 mm	

3.2. SPECIAL TOOLS

Calibrated pressure gauge

3.3. LABOR EFFORT

Approx. 30 min.

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3.4. CREDIT

Not applicable.

4. REMARKS

NOTE:

- All measures must be carried out by a certified engine station and certified engine mechanic.
- The accomplishment of the instructions shown under chapter 2.1 must be confirmed in the respective engine log book.
- The accomplishment of the instructions must be carried out within the time of compliance according chapter 1.4.
- In case of doubt please contact the Austro Engine GmbH – After Sales Support (e-mail: service@austroengine.at; Tel: +43 2622 23000 2525).

5. EXPLANATORY NOTES

5.1. SYMBOL EXPLANATION



WARNING: Disregarding these safety rules can cause personal injury or even death



CAUTION: Disregarding these special instructions and safety measures can cause damage to the engine or other components.



NOTE: Additional note or instruction for better understanding of an instruction

6. APPENDIX

None.

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Work Instruction
No. WI-RSB-AE50R-005/1

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WORK INSTRUCTION

WI-RSB-AE50R-005/1

SUPERSEDES WI-RSB-AE50R-005

"EXCHANGE OF CARBURETOR CAP"

I GENERAL INFORMATION

I.1 Subject:

All AE50R engines that are affected by service bulletin RSB-AE50R-005/2.

I.2 Reference documents:

None.

I.3 Remarks:

None.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings:

Not applicable.

II.2 Special Tools:

Calibrated pressure gauge

II.3 Materials:

See RSB-AE50R-005/2.

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III INSTRUCTIONS

III.1 Disassembly of the carburetor

Release the two stop nuts [1] securing the carburetor to the engine housing and detach the carburetor from the engine housing. Close the remaining openings to prevent moisture from invading the engine housing.

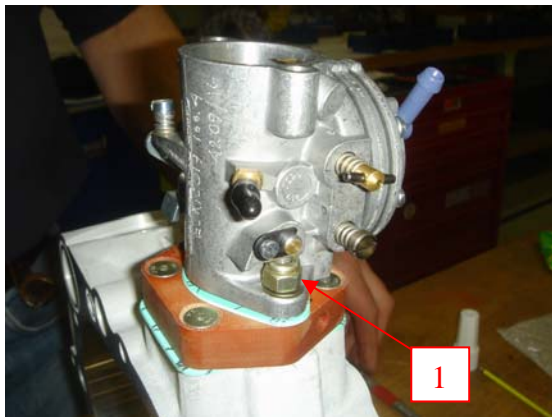


Figure 1 Disassembly of the carburetor assembly

III.2 Disassembly of carburetor cap:

Place the carburetor on a clean work surface as shown in Figure 2. Use a slotted screw driver to release the screw [2] fixing the carburetor cap as shown in Figure 3.

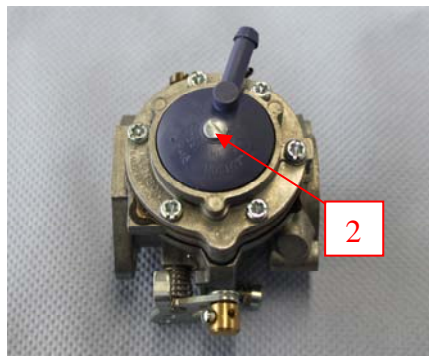


Figure 2 Assembled carburetor

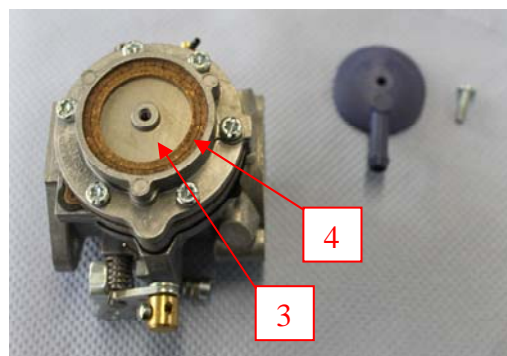


Figure 3 Disassembled carburetor cap

Further remove the filter screen [3] and the cork sealing [4]. As they will be used for assembly again, ensure that they are not damaged or soiled until the subsequent assembly.

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III.3 Modification of the carburetor:

The carburetor filter cap has to be modified to be able to use the new carburetor cap design. Therefore drill a $\varnothing 4,2$ mm bore 7 mm deep into the middle thread as shown in Figure 4 and cut a M5 thread to the depth of 6mm. Further drill a $\varnothing 1,5$ mm securing wire hole as shown below.

Ensure throughout the whole process that chips are prevented from entering the openings of the carburetor.

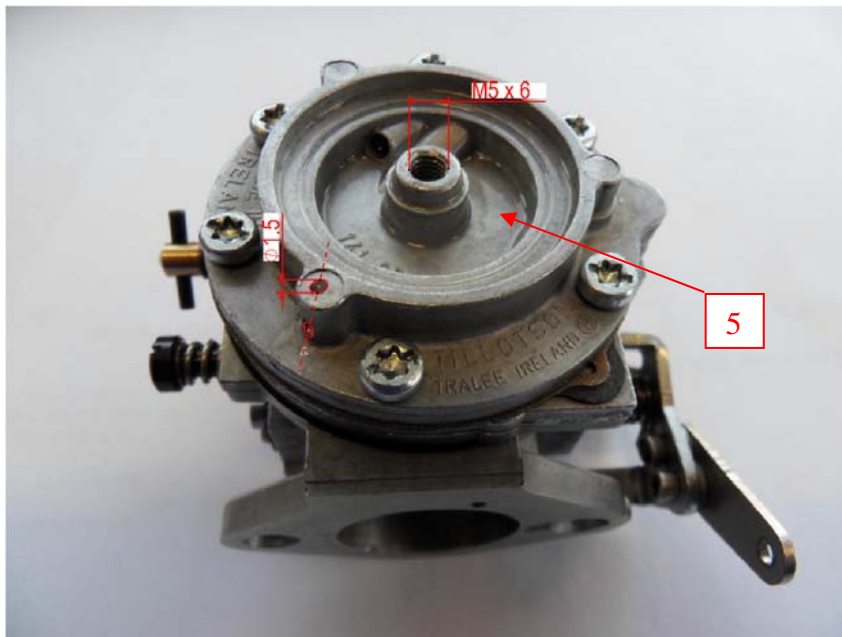


Figure 4 Modification of Carburetor filter cap

III.4 Assembly of the carburetor:

Clean the area [5] before proceeding using air pressure.

Place the filter screen on the carburetor filter cap and the cork sealing (see Figure 5 and Figure 6)



Figure 5 Filter screen mounting



Figure 6 Cork sealing mounting

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Install the new carburetor cap and mount it with the cap screw and cap screw – sealing ring hand tight to the carburetor as shown in Figure 7.
Secure the cap with securing wire according to Figure 7 in accordance with standard maintenance procedures.

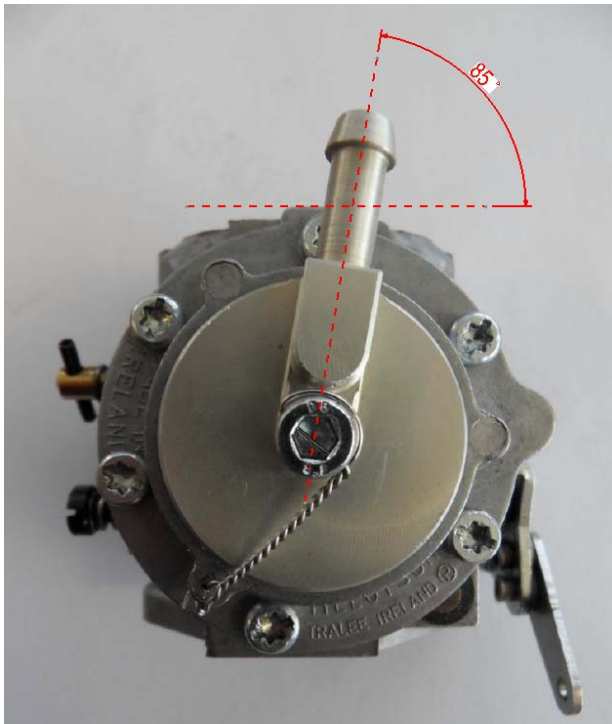


Figure 7 Carburetor cap installation

III.5 Pressure test of the carburetor

When the assembly is completed the carburetor is to be pressure tested as follows:

- Connect a pressure test line to the tube of the carburetor cap and secure it with a clamp
- Apply pressure to the carburetor with a calibrated pressure gauge
- The valve should be fully open at 0,72 bar (10,5 PSIG)
- The valve should seal at a minimum pressure of 0,45 bar (6,6 PSIG)

For installation only a carburetor with a successful conducted pressure test must be used.

III.6 Installation of the carburetor

Reopen all engine openings regarding the carburetor installation. Then mount the carburetor to the engine using the two stop nuts hand tight.

IV Appendix

None

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