

# SERVICE BULLETIN

## USE OF THE ROTAX® SUPPLIED AIRBOX FOR ALL ROTAX® ENGINE TYPES 912 UL (SERIES) SB-912-044UL R1

### OPTIONAL

#### Symbols used:

Please, pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ **WARNING:** Identifies an instruction, which if not followed, may cause serious injury or even death.
- **CAUTION:** Denotes an instruction which if not followed, may severely damage the engine or could lead to suspension of warranty.
- ◆ **NOTE:** Information useful for better handling.

| || A revision bar outside of the page margin indicates a change to text or graphic.

#### 1) Planning information

##### 1.1) Engines affected

All versions of the engine type:

912 UL all

if they are to be operated or retrofitted with the genuine ROTAX® airbox part no. 867756 or part no. 667355. In case of doubt, contact your aircraft manufacturer.

- ◆ **NOTE:** Engine types 912 ULS, 912 ULSFR are not affected, as the airbox has been available for these types since the beginning of serial production.

For complete instructions and compliance to this Service Bulletin refer to Service Bulletin SB-912-044, latest edition section 1.2 onward.

- ◆ **NOTE:** Section 1.6) Approval: Is not required for engines of the type UL (series).  
Section 3) Accomplishment: In addition: persons with adequate type-specific training.

# SERVICE BULLETIN

## USE OF THE ROTAX® SUPPLIED AIRBOX FOR ALL ROTAX® ENGINE TYPES 912 A/F (SERIES) SB-912-044 R1

### OPTIONAL

#### Symbols used:

Please, pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ **WARNING:** Identifies an instruction, which if not followed, may cause serious injury or even death.
- **CAUTION:** Denotes an instruction which if not followed, may severely damage the engine or could lead to suspension of warranty.
- ◆ **NOTE:** Information useful for better handling.

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#### 1) Planning information

##### 1.1) Engines affected

All versions of the engine type:

- 912 A all
- 912 F all

if they are to be operated or retrofitted with the genuine ROTAX® airbox part no. 867756 or part no. 667355. In case of doubt, contact your aircraft manufacturer.

- ◆ **NOTE:** Engine types 912 S are not affected, as the airbox has been available for these types since the beginning of serial production.

##### 1.2) Concurrent ASB/SB/SI and SL

none

##### 1.3) Reason

Standardization of the engine type 912 Series.

##### 1.4) Subject

Use of the ROTAX® supplied airbox for all ROTAX® engine types 912 A/F (Series).

##### 1.5) Compliance

Optional if retrofitting is being done.

##### 1.6) Approval

The technical content is approved under the authority of DOA No. EASA.21J.048.

##### 1.7) Manpower

Estimated man-hours:

engine installed in the aircraft - - - manpower time will depend on installation and therefore no estimate is available from the engine manufacturer.

**1.8) Mass data**

change of weight - - - approx. 1.3 kg (2.87 lbs).  
moment of inertia - - - negligible effect.

**1.9) Electrical load data**

no change

**1.10) Software accomplishment summary**

no change

**1.11) References**

In addition to this technical information refer to current issue of

- Operators Manual (OM)
- Illustrated Parts Catalog (IPC)
- Installation Manual (IM)
- all relevant Service Bulletins (SB)
- Maintenance Manual (MM)

◆ NOTE: The status of Manuals can be determined by checking the table of amendments of the Manual. The 1<sup>st</sup> column of this table is the revision status. Compare this number to that listed on the ROTAX WebSite: [www.rotax-aircraft-engines.com](http://www.rotax-aircraft-engines.com). Updates and current revisions can be downloaded for free.

**1.12) Other publications affected**

none

**1.13) Interchangeability of parts**

not affected

## 2) Material Information

### 2.1) Material - cost and availability

Price and availability will be supplied on request by ROTAX® Authorized Distributors or their Service Center.

### 2.2) Company support information

none

### 2.3) Material requirement per engine

parts requirement:

Fig.no.	New p/n	Qty/engine	Description	Old p/n	Application
-	867756 or 667355	1	airbox assy.		ROTAX® 912
	consisting of:				
-		1	airbox assy. with drip trays		ROTAX® 912
-	853595	4	hose clamp 59	-	airbox
-	851060	4	hose clamp 60	-	airbox
-	851370	4	clamp 8	-	carb. ventilation
-	853010	1	cable clamp 32/M6	-	engine suspension frame
-	860660	200 mm	hose 4x7	-	airbox
-	860660	200 mm	hose 4x7	-	airbox
-	860985	2	vent hose 35 mm	-	carb. ventilation
-	960151	1	rubber buffer 20x15xM6	-	airbox
-	927941	1	washer 6.0/12/1	-	airbox
-	842040	1	lock nut DIN 985-M6	-	airbox

### 2.4) Material requirement per spare part

The drip trays including attachment material are also available under part no. 874680 as a spare part.

### 2.5) Rework of parts

none

### 2.6) Special tooling/lubricant-/adhesives-/sealing compound

Price and availability will be supplied on request by ROTAX® Authorized Distributors or their Service Centers.

parts requirement:

Fig.no.	New p/n	Qty/engine	Description	Old p/n	Application
-	899785	as required	LOCTITE® 221		airbox

■ CAUTION: In using these special tools observe the manufacturers specifications.

### 3) Accomplishment / Instructions

#### Accomplishment

All the measures must be taken and confirmed by the following persons or facilities:

- ROTAX® -Airworthiness representative
- ROTAX® -Distributors or their Service Centers
- Persons approved by the respective Aviation Authority

▲ **WARNING:** Proceed with this work only in a non-smoking area and not close to sparks or open flames. Switch off ignition and secure engine against unintentional operation. Secure aircraft against unauthorized operation. Disconnect negative terminal of aircraft battery.

▲ **WARNING:** Risk of scalds and burns! Allow engine to cool sufficiently and use appropriate safety gear while performing work.

▲ **WARNING:** Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one.

◆ **NOTE:** All work has to be performed in accordance with the relevant Maintenance Manual.

#### 3.1) Instructions

▲ **WARNING:** Always allow the engine to cool down to ambient temperature before starting work. Otherwise you risk getting severely burned or scalded!

##### 3.1.1) Disassembly of any aircraft-specific air intake systems or filters

1. Loosen the clamps on the air filters and remove the filters.
2. Refer to the aircraft manufacturer's instructions to remove any aircraft-specific air intake systems.

##### 3.1.2) Change of main jet settings

See fig. 1.

1. Check the existing main jet of carburetors 1/3 and 2/4, depending on the model of the installed airbox change if necessary the main jet (1) (see table section 3.3) according to the latest Maintenance Manual.
2. Set the position of the jet needle (2) of the carburetors 1/3 and 2/4 to position 3 according to the latest Maintenance Manual.

■ **CAUTION:** The jet needle position described above is the basic adjustment for the airbox part no. 867756 and airbox part no. 667355.

##### 3.1.3) Pre-installation

See fig. 2

◆ **NOTE:** The airbox has been pre-assembled as much as possible.  
(see fig. 2 and fig. 3, drawing shows asymmetrical drip trays)

1. Attach the two symmetrical drip trays (5) to the drip tray holder with hex. screws M5x12 (6) and washer and nut M5 (7).

### 3.1.4) Attaching to engine

1. Put pre-assembled airbox (4) in position with the connection tubes (8) and 2 hose clamps (9) each as far they go on the connections of the carburetor (10). Afterwards adjust airbox such that it is positioned parallel to the engine suspension frame/ignition housing and is level.

■ **CAUTION:** If original ROTAX® engine suspension frame is not used, a suitable support of the airbox must be installed.

2. Attach the airbox with the 2 hose clamps (9).
3. Slightly coat threads of rubber buffer (11) with LOCTITE® 221 film and screw into airbox at the front. Tightening torque 3 Nm (27 in.lb).
4. Slide cable clamp (12) on engine suspension frame and connect to rubber buffer (11) of airbox. Screw on lock nut (13) with washer (14).
5. Slide vent hose (15) onto float chamber ventilation connections of both carburetors as far as they will go and attach with clamps (16). The other end of the hose is to be connected to the air fittings (17) on the airbox.

◆ **NOTE:** Make sure that the air connections of the airbox are correctly connected for fresh air and pre-heated air (see fig. 2).

- Restore aircraft to original operating configuration.
- Connect negative terminal of aircraft battery.

### 3.2) Test run

Conduct test run including ignition check and leakage test.  
The execution of the Service Bulletin must be confirmed in the logbook.

### 3.3) Summary

These instructions (section 3) have to be conducted in compliance with section 1.5.

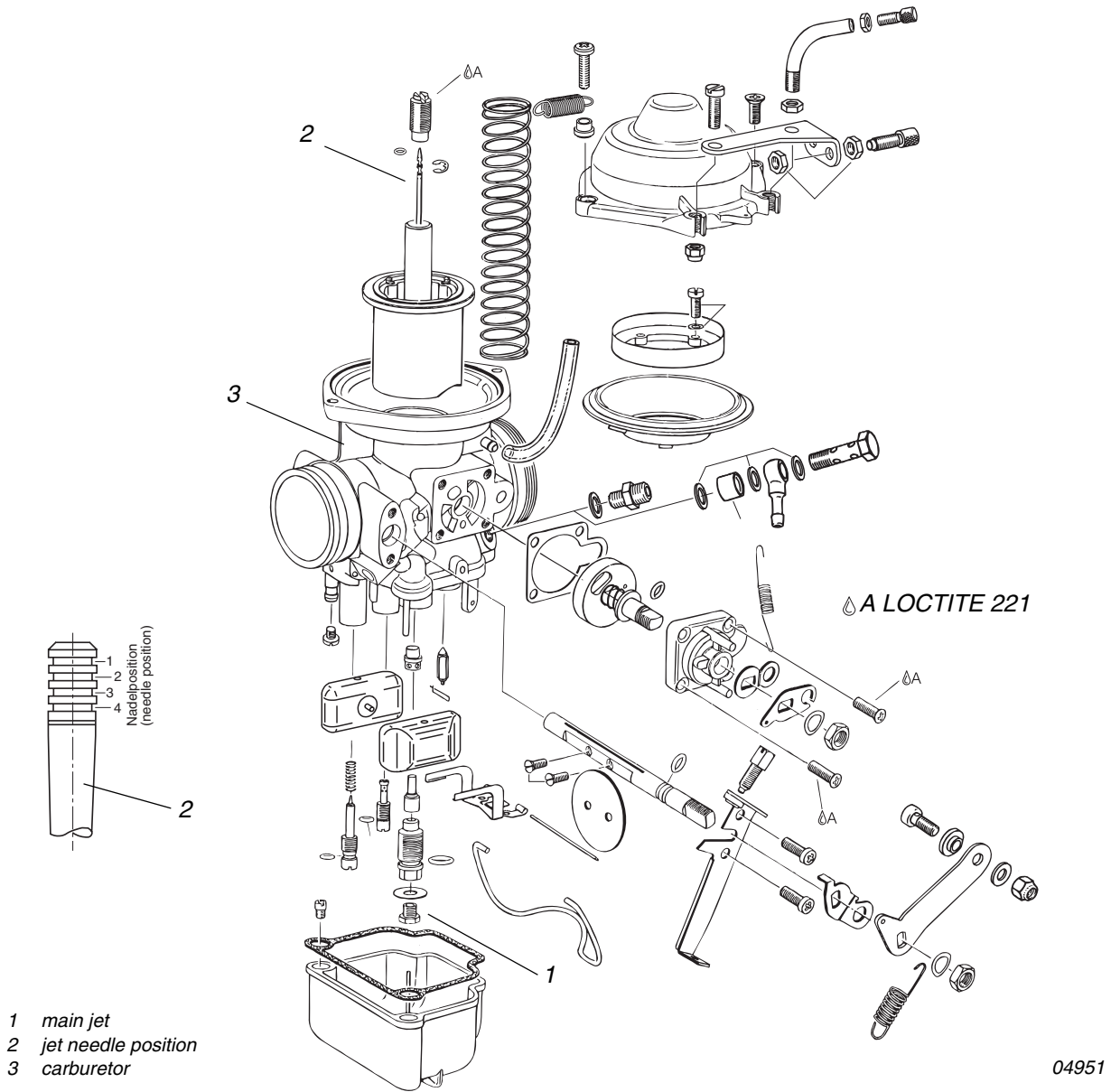
airbox part no. 867756	airbox part no. 667355
155 main jet	158 main jet

▲ **WARNING:** Non-compliance with these instructions may cause engine damage, personal injury or death!

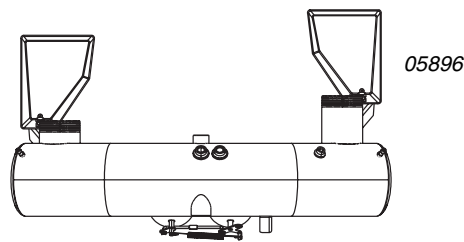
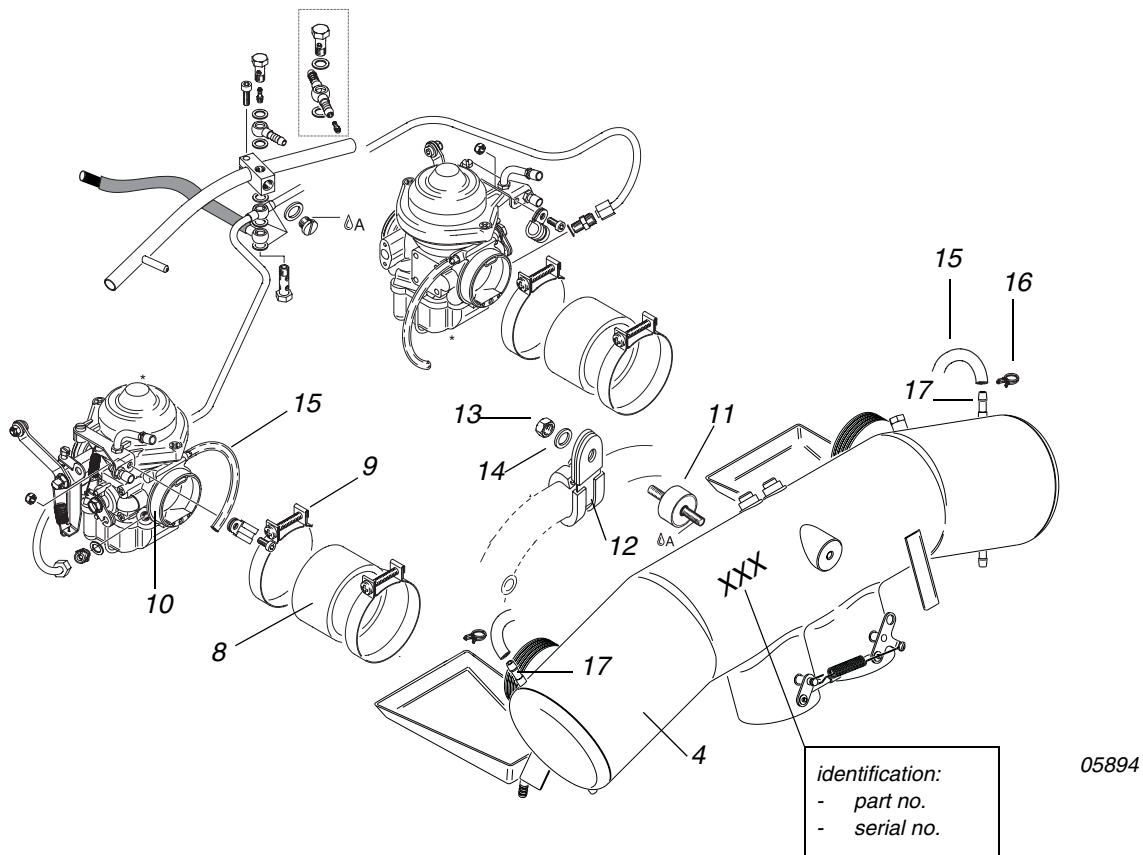
Approval of translation to best knowledge and judgement - in any case the original text in German language and the metric units (SI-system) are authoritative.

#### 4) Appendix

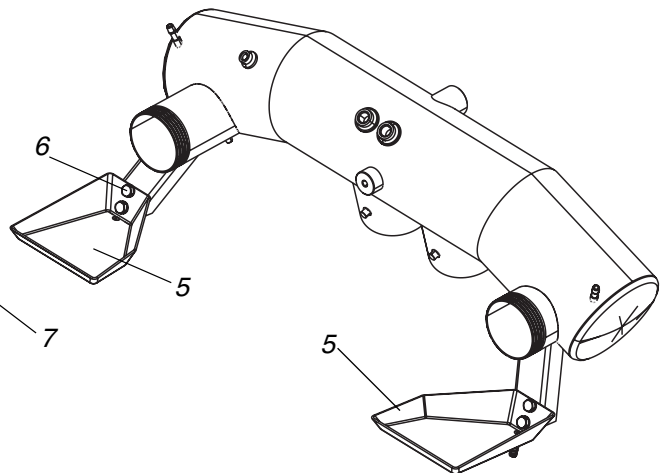
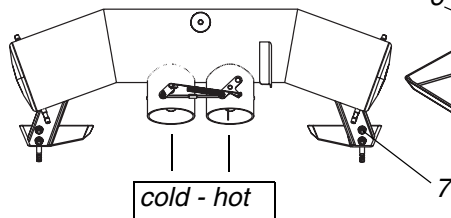
the following drawings should convey additional information:



**Fig. 1**  
**carburetor**



- 4 airbox
- 5 drip tray
- 6 countersunk screw M5x12
- 7 nut M5
- 8 connection tubes
- 9 hose clamps
- 10 carburetor
- 11 rubber buffer
- 12 slide cable clamp
- 13 lock nut
- 14 washer
- 15 vent hose
- 16 clamps
- 17 air fittings (airbox)

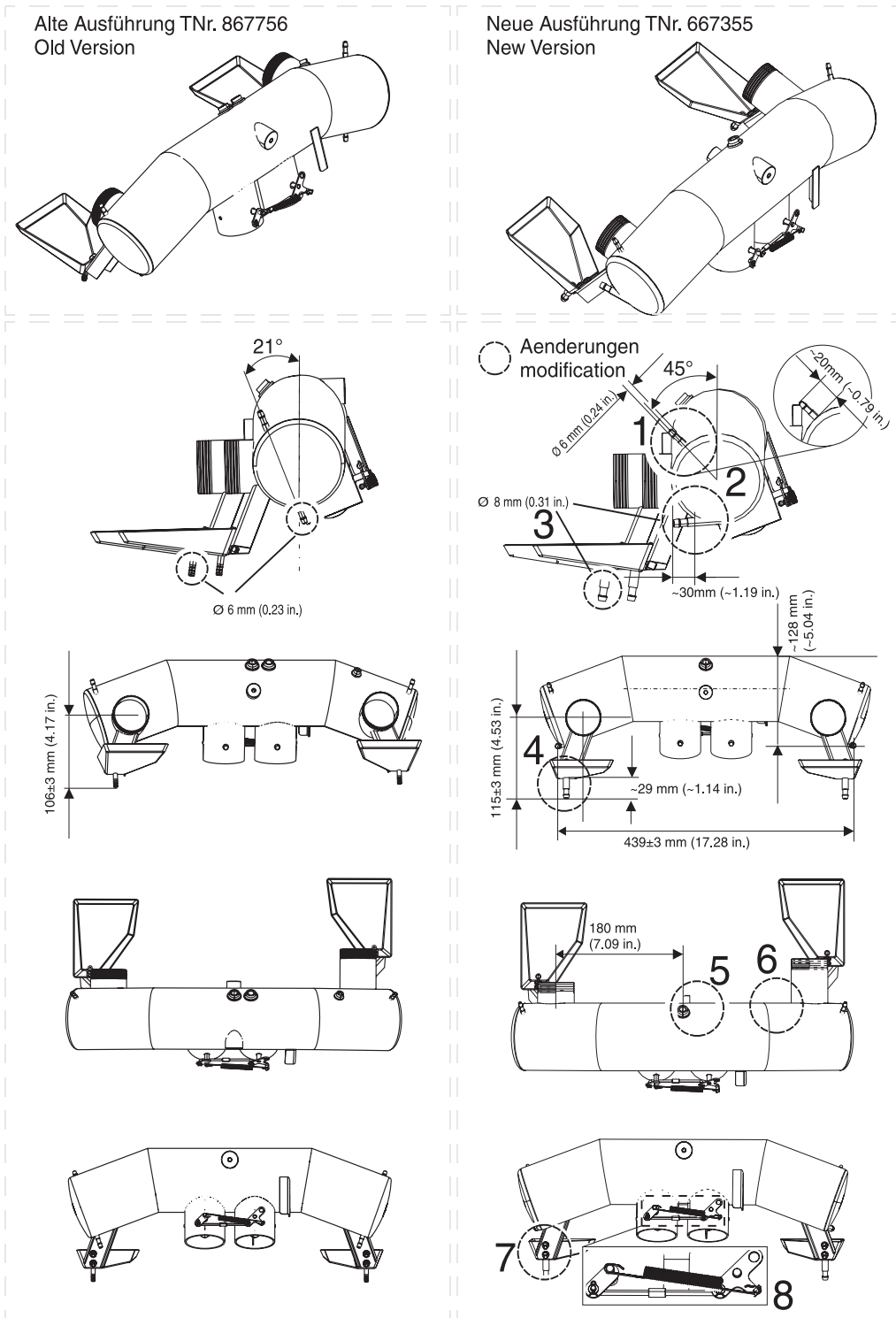


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◆ Note: Graphic shows the connections for the pre-heating and the carburetor of both versions.

**fig. 2**  
**airboxes**





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**fig. 3**  
**airboxes**

◆ Note: The illustrations in this document show the typical construction. They may not represent full detail or the exact shape of the parts which have the same or similar function. Exploded views are no technical drawings and are for reference only. For specific detail, refer to the current documents of the respective engine type.