

SERVICE BULLETIN
CHECKING OR REPLACEMENT
OF THE FUEL PUMP ASSEMBLY PART NO. 996 596
ON ROTAX® ENGINE TYPE 912 (SERIES)
SB-912-031

MANDATORY

Repeating symbols:

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.

1) Planning information

1.1) Engines affected

All versions of the engine type:

- 912 A (Series)* from S/N 4,410.419 to S/N 4,410.465
- 912 F (Series) from S/N 4,412.808 to S/N 4,412.815
- 912 S (Series) from S/N 4,922.504 to S/N 4,922.743

* if the engine is equipped with the genuine ROTAX® fuel pump part no. 996 596. In case of doubt contact the aircraft builder.

All pumps delivered as spare part:

- fuel pump part no. 996 596 from S/N 99.0101 to S/N 01.0440

1.2) Concurrent SB/SI and SL

none

1.3) Reason

It has been noticed that leaking at the hose nipple (1) is feasible.

1.4) Subject

Checking or replacement of the fuel pump assembly part no. 996 596.

1.5) Compliance

- Within the next 10 hours of operation, but at the latest by December 1st, 2001 the „checking of the fuel pump assembly part no. 996 596“ must be conducted according to the following instructions in section 3.
- Every 100 hours of operation check the fuel pump assembly part no. 996 596 as per the following instructions section 3.

1.6) Approval

The technical content of this Service Bulletin has been approved by ACG.

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 - - - none.
moment of inertia - - - unaffected.

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

- Illustrated Parts Catalog (IPC)
- Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

In case of replacement take care of the following:

- Remove the fuel pump assembly part no. 996 596, if necessary, according to following instructions and send it to a ROTAX[®] authorized distributor or Service Center.

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**Shipping cost, down time, loss of income, telephone costs etc. or cost of conversion to other engine versions or additional work, as for instance simultaneous engine overhaul is not covered in this scope and will not be borne or reimbursed by ROTAX[®].**2.3) Material requirement per engine**

For the replacement of the fuel pump assembly part no. 996 596 the following parts are required:

Fig.no.	New p/n	Qty/engine	Description	Old p/n	Application
	950 141	4	gasket ring		hose nipple
	996 597	1	fuel pump assy.		ROTAX [®] 912 (Series)

2.4) Material requirement per spare part

none

2.5) Rework of parts

none

2.6) Special tooling/lubricant-/adhesives-/sealing compound - Price and availability

none

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:** Carry out work on a cold engine only.

▲ **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.

3.1) Checking of the fuel pump assy. part no. 996 596:

See fig. 1 and 2.

3.1.1) Inspection for cracks:

- Inspection of fuel pump assy. (2) inclusive feeding line (3) and pressure line (4) for cracks.
- If cracks are detected, the fuel pump assy. part no. 996 596 must be replaced without delay by the fuel pump assy. part no. 996 597.

3.1.2) Check for leakage:

- Conduct leakage test of fuel pump assy. (2) inclusive feeding line (3) and pressure line (4) for leakage:

a) an additional electric fuel pump is installed:

- Conduct leakage test of fuel pump assy. (2) inclusive feeding line (3) and pressure line (4) for leakage. Therefore admit at least 0,2 bar to max. 0,4 bar pressure on the fuel system by the additional electric fuel pump or suitable equipment.

■ **CAUTION:** The fuel pressure has to be monitored, e.g. already installed cockpit instrument or ROTAX fuel pressure gauge kit.

▲ **WARNING:** For the stated checking, connection of the aircraft battery will be necessary for a short duration. Remove first all 8 spark plug connectors from the spark plugs, switch off ignition and remove fuse of starter. The engine must not be started.

- If leakage is detected, the cause of failure has be found and if necessary the fuel pump assy. part no. 996 596 must be replaced without delay by the fuel pump assy. part no. 996 597.

b) an additional electric fuel pump is not installed:

- Conduct leakage test of fuel pump assy. (2) inclusive feeding line (3) and pressure line (4) for leakage. Therefore a test run and leakage test has to be performed.
- If leakage is detected, the cause of failure has be found and if necessary the fuel pump assy. part no. 996 596 must be replaced without delay by the fuel pump assy. part no. 996 597.

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

3.2) Test run (if maintenance work has been carried out)

Conduct test run including ignition check and leakage test in accordance with the current Maintenance Manual of the respective engine type.

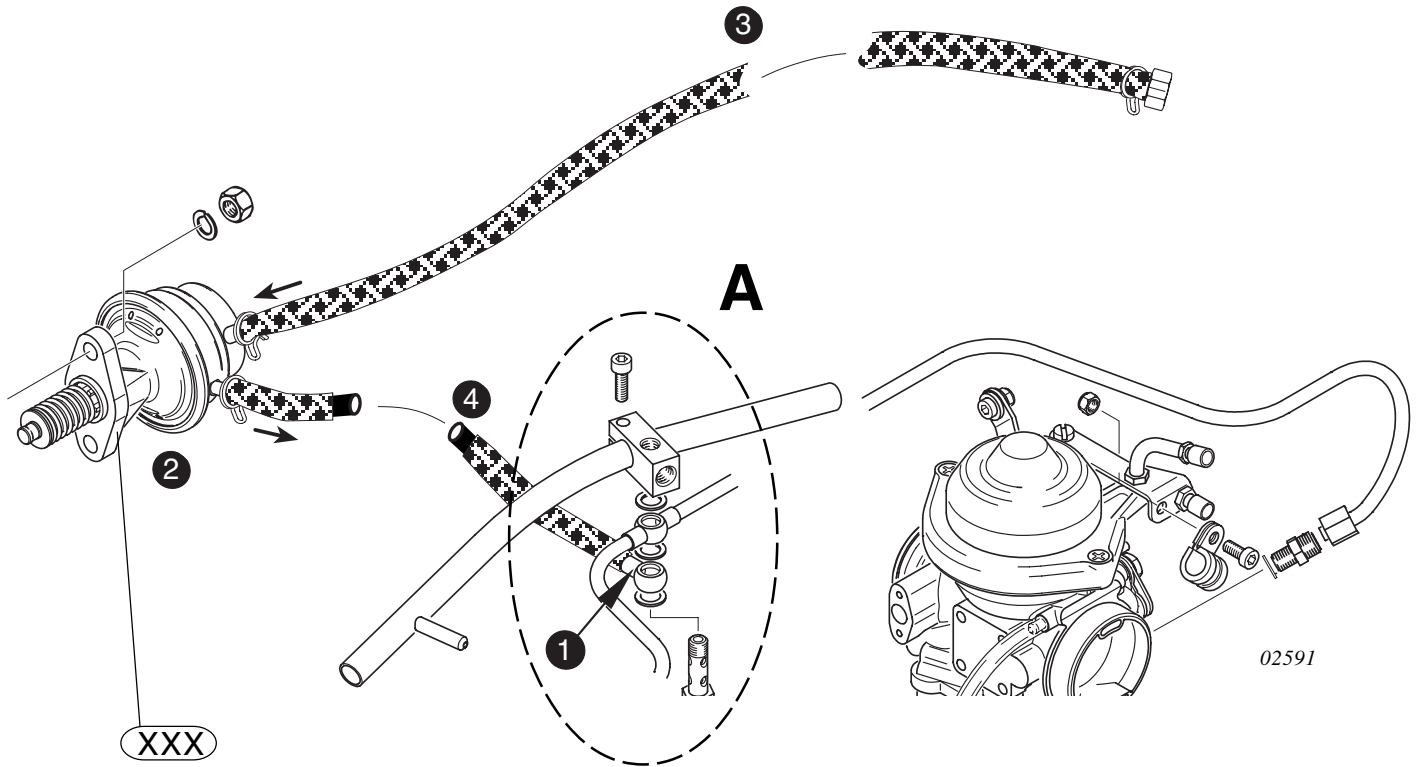
3.3) Summary

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

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

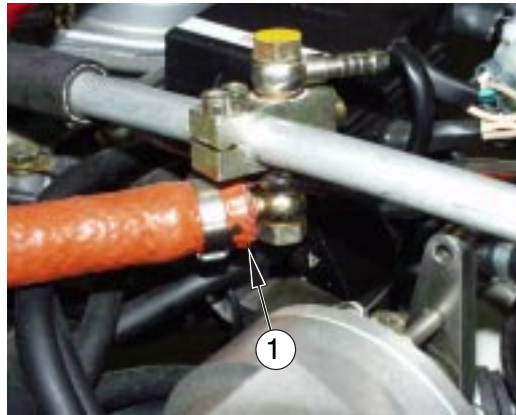
The following drawings should convey additional information:



XXX

Bild / Fig. 1

Detail A



05135

Bild / Fig. 2

◆ 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.