

SERVICE INSTRUCTION

Maintenance information on plug screw M22x1.5 part no. 940520 for ROTAX 912 i Series

ATA System: 72-00-00 Engine

1) Planning information

To obtain satisfactory results, procedures specified in this publication must be accomplished with accepted methods in accordance with prevailing legal regulations.

BRP-Rotax GmbH & Co KG cannot accept any responsibility for the quality of work performed in accomplishing the requirements of this publication.

1.1) Applicability

All engines of type:

Engine type	Serial number
912 iS	all
912 iS Sport	all
912 iSc Sport	all

if they are equipped with the plug screw M22x1.5 part no. 940520. In case of doubt, contact your aircraft manufacturer.

1.2) Concurrent

none

1.3) Reason

The 912 i Series engines have an aluminum plug screw in the crankshaft (M22x1.5 part no. 940520). This plug screw protrudes through the ignition housing and a T60 (Torx) tool is used to install and remove the plug screw. Field reports indicate the plug screw has been incorrectly used for rotating the crankshaft.

As result the plug screw might detach (in worst case) and can cause oil leakage with consequent engine oil loss and engine seizure.

1.4) Subject

Maintenance information on plug screw M22x1.5 part no. 940520 for ROTAX 912 i Series

1.5) Compliance

- to be understood and considered for next maintenance

1.6) Approval

The technical content of this document is approved under the authority of DOA ref. EASA.21J.048.

1.7) Labor time

Estimated labor hours:

engine installed in the aircraft - - - labor 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 modifications

no change

1.11) References

In addition to this technical information refer to current issue of

- Illustrated Parts Catalog (IPC)
- Installation Manual (IM)
- Maintenance Manual (MM) Heavy
- Maintenance Manual (MM) Line

NOTE:

The status of the Manuals can be determined by checking the table of amendments. The 1st column of this table shows the revision status. Compare this number to that listed on the ROTAX WebSite: www.FLYROTAX.com. Updates and current revisions can be downloaded for free.

1.12) Other Publications affected

- not affected

1.13) Interchangeability of parts

none.

2) Material Information

2.1) Material- cost and availability

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

2.2) Company support information

none

2.3) Material requirement per engine

parts requirement:

Part no.	Qty/ engine	Description	Application
250055	1	O-ring 18x2.5	Sealing of the plug screw
950141	1	Gasket ring A8x13	Sealing of the thread bolt

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

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

Part no.	Description	Application
xxxxxx	T60 Torx socket	Removal of plug screw
240880	Thread bolt M8x50	Crankshaft locking screw

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3) Accomplishment/Instructions

NOTE: Before maintenance, review the entire documentation to make sure you have a complete understanding of the procedure and requirements.

Accomplishment

All measures must be implemented and confirmed by at least one of the following persons or organizations:

- ROTAX® - Distributors or their independent Service Centers
- Persons with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Heavy Maintenance) are entitled to carry out this work.

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

Safety notice

⚠ 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.

3.1) Instructions

NOTICE DO NOT use the plug screw for turning the crankshaft (engine) under maintenance conditions. If this has been done or it shows to be loose the plug screw M22x1.5 part no. 940520 needs to be removed and installed as described in the following steps.

NOTICE The plug screw is aluminum. Ensure full and secure insertion of T60 Torx socket to reduce the possibility of damaging the plug screw.

See Fig.1

Step	Procedure
1	Lock the crankshaft, see Maintenance Manual Line chapter 12-20-00.
2	Use a proper Torx socket to remove the plug screw.
3	Clean the thread of crankshaft and plug screw from residues.
4	Install and tighten plug screw with a new and greased O-ring. Tightening torque 35 Nm (26 ft. lbs).
5	Loosen the crankshaft, see Maintenance Manual Line chapter 12-20-00.

- See latest Maintenance Manual (Line), maintenance checklist. The plug screw M22x1.5 part no. 940520 itself needs to be visually checked for tight fit at each every 100 h of operation or at next maintenance event.
- Connect negative terminal of aircraft battery.

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3.2) Test run

Conduct engine test run including ignition check and leakage test, see also chapter 12-20-00 current issue of Maintenance Manual Line for the relevant engine type.

3.3) Summary

These instructions (section 3) have to be followed in accordance with the deadlines specified in section 1.5.

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

Translation into other languages might be performed in the course of language localization but does not lie within ROTAX® scope of responsibility.

In any case the original text in English language and the metric units are authoritative

3.4) Enquiries

Enquiries regarding this Service Instruction should be sent to the ROTAX® authorized distributor of your area.

A list of all distributors is provided on www.FLYROTAX.com.

4) Appendix

the following illustration should convey additional information:

- 1 Plug screw M22x1.5
- 2 O-ring 18x2.5
- 3 Support bearing

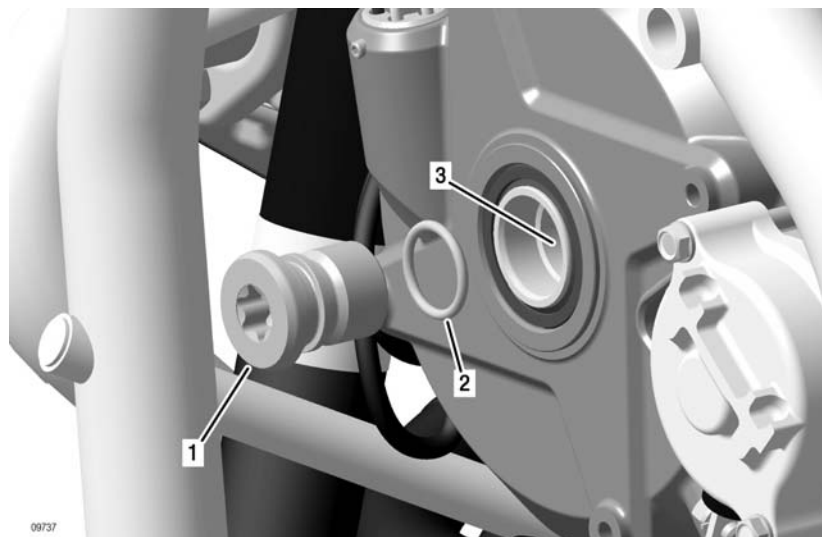


Fig. 1
Plug screw M22x1.5

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 **not technical drawings** and are for reference only. For specific detail, refer to the current documents of the respective engine type.