

SERVICE INSTRUCTION - PAC

Introduction of an optional governor cable kit for ROTAX® Aircraft Engines

ATA System: 61-20-00 Hydraulic governor

1) Planning information

“PAC” Service Instruction Documents provide detailed information on non-certified ROTAX® Aircraft Engine Parts and Accessories. Referenced parts and accessories are provided without EASA certification or ASTM compliance. Certification / Compliance of referenced Parts and Accessories must be completed by the aircraft OEM.

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

Refer to the latest issue of the relevant Illustrated Parts Catalog.

NOTICE

The governor cable kit is not a part of the Engine Type Design. The governor cable kit has been tested and released by BRP-Rotax, but is not certified.

The correct function in conjunction with the entire system and the certification of the governor cable kit is the responsibility of the aircraft manufacturer and must be carried out jointly with the aircraft.

1.2) Concurrent ASB/SB/SI and SL

None.

1.3) Reason

In the course of continuous development and standardization, a new governor cable kit (part no. 481485) has been introduced as an optional extra part.

This optional governor cable kit allows the convenient connection of an appropriate governor actuation cable to the intake manifold.

1.4) Subject

Introduction of an optional governor cable kit for ROTAX® Aircraft Engines.

1.5) Compliance

NONE - For Information Only.

1.6) Approval

None.

1.7) Labor time and credit

Estimated labor hours:

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

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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

- Operators Manual (OM)
- Illustrated Parts Catalog (IPC)
- Installation Manual (IM)
- Maintenance Manual Line (MML)
- Maintenance Manual Heavy (MMH)

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

None.

1.13) Interchangeability of parts

- All parts are interchangeable

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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

- Any possible support by BRP-Rotax will be provided on request by ROTAX® Authorized Distributors or their independent Service Centers.

2.3) Material requirement and credit per engine

Parts requirement:

| Fig.no. | part no. | Qty/ engine | Description | Application |
|-------------|----------|----------------|--------------------|----------------------------------|
| 4 | 481485 | 1 | Governor cable kit | Intake manifold / governor cable |
| consist of: | | | | |
| | 947550 | 2 | Flange bushing | Intake manifold / governor cable |
| | 240153 | 1 | Allen screw M5x10 | Intake manifold / governor cable |
| | 927573 | 1 | Washer 5.3 | Intake manifold / governor cable |

2.4) Material requirement and credit per spare part

None.

2.5) Rework of parts

None.

2.6) Special tooling/lubricants- /adhesives- /sealing compounds

None.

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3) Accomplishment/Instructions

- ROTAX® reserves the right to make any amendments to existing documents which might become necessary due to this standardization, at the time of next revision or issue.

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® - Authorized 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.

3.1) Installation - related information

For information on intake manifold 1/3 (cylinder side), governor pivot point and governor actuation see relevant Installation Manual Chapter 10-10-00 and 61-00-00.

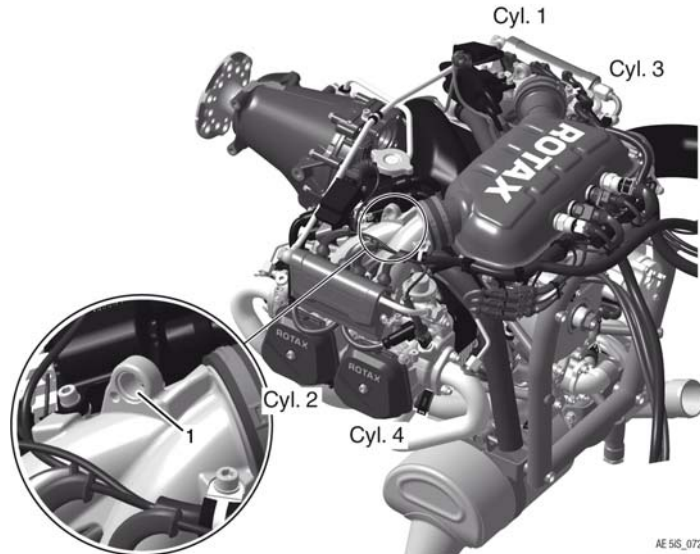
NOTICE

Observe the governor and governor aircraft manufacturer's installation instructions and specifications.

3.2) Operation - related information

Regarding proper operation of your governor see the aircraft manufacturer's instructions for continued airworthiness.

Fig. 1. TYPICAL



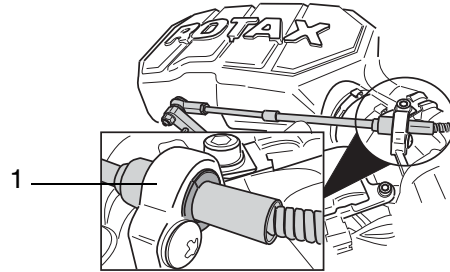
1 Position for the governor cable kit on intake manifold 2/4 (cylinder side).

Depending on the design/construction of the governor, one of the flanges from intake manifold can be used (Fig. 2) for the installation of a support.

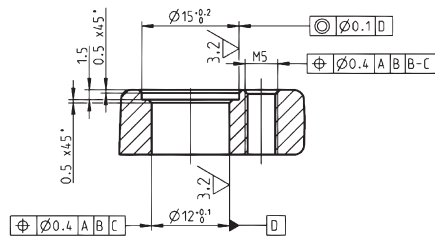
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Fig. 2. TYPICAL

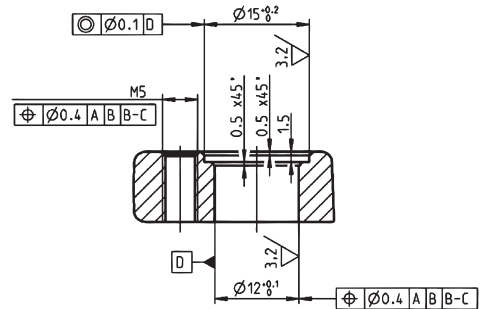
1 Flange from intake manifold 2/4



Detail: Flange from intake manifold 2/4



Detail: Flange from intake manifold 1/3



3.3) Maintenance (Line) - related information

| Points of inspection | Interval Operating hours | | Chapter Reference |
|--|--------------------------|----------|---|
| | 100 h | 200 h | |
| Check for chafing or wear on the governor arm, governor cable, bushing halves and intake manifold connection point | | X | See relevant Maintenance Manual (Line) for the respective engine type and its periodical maintenance information. NOTE: Observe the governor and governor cable manufacturer's installation instructions and specifications. |

3.4) Maintenance (Heavy) - related information

Safety information



WARNING Follow the general safety instructions during all work on the engine and the assemblies around it.



NOTICE Follow the governor manufacturer's instructions for maintenance, inspection and repair.

3.4.1) Preparation

- General visual inspection. See relevant Maintenance Manual Line for respective engine type.

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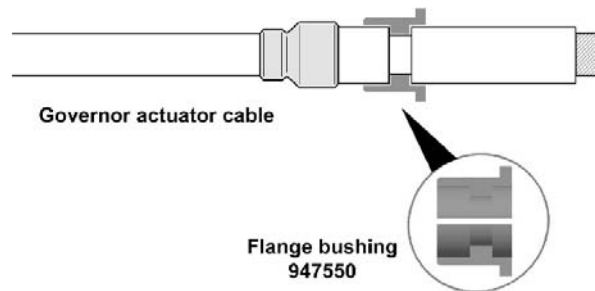
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3.4.2) Governor cable kit - installation

See Fig. 3.

| Step | Procedure |
|------|---|
| 1 | Place the governor flange bushing onto the governor actuator cable, seating the inner bushing lip into the machined slot on the governor cable ferrule. |

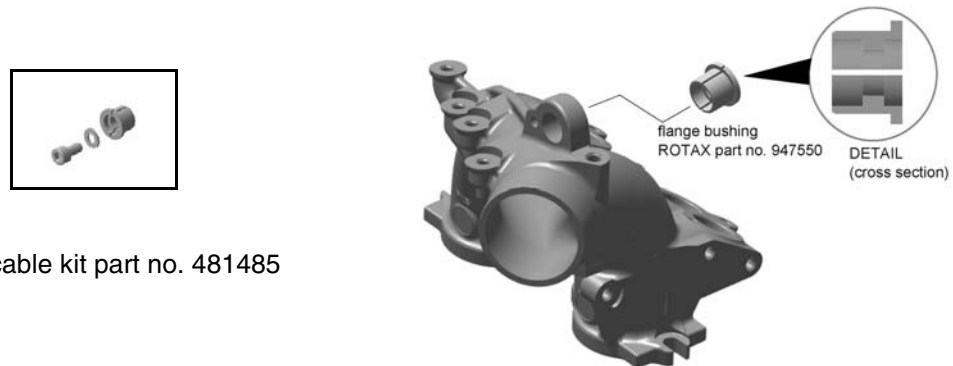
Fig. 3.



See Fig. 4.

| Step | Procedure |
|------|--|
| 2 | Place the governor actuator cable with bushing halves in place through the cast engine lifting bore on intake manifold 1/3 and attach to governor arm. |

Fig. 4. TYPICAL



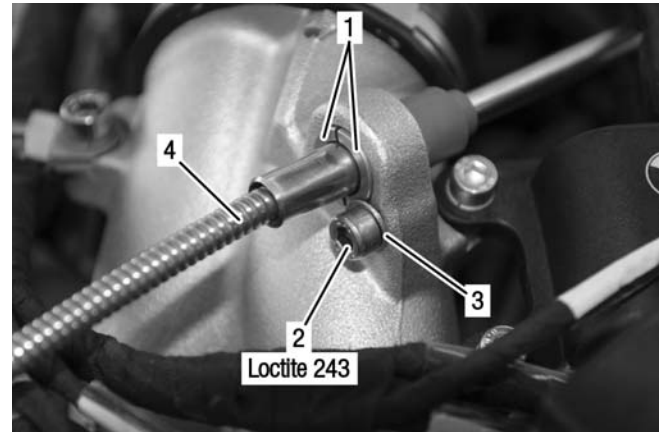
See Fig. 5.

| Step | Procedure |
|------|---|
| 3 | The bushing is designed to be held in place with an Allen screw M5x10 and the washer 5.3. Secure the Allen screw M5x10 with LOCTITE 243. Tightening torque 5 Nm (44 in.lb). |

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Fig. 5. TYPICAL

- 1 Governor flange bushing
- 2 Allen screw M5x10
- 3 Washer 5.3
- 4 Governor actuator cable



- Connect negative terminal of aircraft battery.

3.5) Check of governor

Operational test of the governor as per specification of the Flight Manual and governor manufacturer.

3.6) Test run

Conduct test run including Lane check, leakage test. See chapter 12-20-00 of the latest Maintenance Manual Line for the respective engine type.

3.7) Summary

The execution of the Service Instruction - PAC must be confirmed in the logbook.

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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.

3.8) Inquiries

Inquiries regarding this Service Instruction - PAC should be sent to the ROTAX® Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors or their independent Service Centers is provided on www.flyrotax.com.

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.