

Issues

**MANDATORY BULLETIN No. SPORTSTAR RTC -068a SR
SAFETY RELATED**

- 1. CONCERNING:** All SportStar RTC airplanes.
- 2. REASON:** Unification of the strength class of the fastening bolts in the joint of the engine and the engine mount hinges and the resulting minimization of the possibility that these bolts will be accidentally interchanged.
- 3. REQUIRED ACTIONS:**
 1. Replace the fastening bolts in accordance with the bulletin text.
 2. Record the replacement in the Aircraft Logbook.
- 4. LATEST DAY OF THE ACTION:** Within 30 calendar days of the issue of this bulletin or during the next scheduled service inspection, whichever occurs first.
- 5. CARRIED OUT BY:** Organizations authorized for maintenance / repairs of this type of airplane in accordance with Part ML, or Part 145, or Part CAO or the relevant authorized person.
- 6. COSTS COVERED BY:** Airplane owner/operator.
- 7. NECESSARY MATERIAL:** In accordance with the bulletin text.
- 8. WORK PROCEDURE:** In accordance with the bulletin text.
- 9. APPENDICES:** None.

Valid from: March 16, 2023

1. Work procedure

1.1 Necessary tools

Name	Designation	Quantity
Workshop crane	Load capacity min. 150 kg	1 pc
Suspension straps	Load capacity min. 150 kg	3 pcs
Hand electric drill		1 pc
Drill bit	ø 2,1 mm	1 pc
Torque wrench	20-100 Nm	1 pc
Pincers		1 pc
Adjustable pliers		1 pc
Allen wrench	No. 5	1 pc
Flat screwdriver		1 pc
Marking pin		1 pc

1.2 Necessary material (in accordance with RTC-068A)

Name	Designation	Nomencl.	Quantity
Bolt M10-35		S6 66-01 21	3 pcs
Plug		SG6 04-03 21	4 pcs
Cable tie	3,6x142 mm	060333	20 pcs
Cable tie	4,8x368 mm	060371	20 pcs
Cotter pin 2x32		039651	4 pcs

The material will be supplied by the airplane manufacturer.

1.3 Work procedure

- 1.3.1 Replacement of bolts in the joint of the engine and the engine mount hinges
 - 1.3.1.1 Switch the electrical network on.
 - 1.3.1.2 Turn the fuel cock control to the **OFF** position.
 - 1.3.1.3 Remove the upper engine cowling in accordance with the procedure specified in the Airplane Maintenance Manual for SportStar RTC (Doc. No. ERTC021-10-AS), Section 71-10.
 - 1.3.1.4 Disconnect the battery.
 - 1.3.1.5 Cut the cable ties on the engine wiring to gain access to the bolts of the engine on the engine mount hinges.
 - 1.3.1.6 Remove any hoses or devices that prevent access to the bolts of the engine on the engine mount hinges. If any hose is removed, ensure that its filling is drained cowling in accordance with the procedure specified in the Airplane Maintenance Manual for SportStar RTC (Doc. No. ERTC021-10-AS), Section 12.

- 1.3.1.7 Secure the ends of the removed hoses with suitable plugs against the ingress of dirt.
- 1.3.1.8 Hang the engine (3, Fig. 1) on the workshop crane (1) using the suspension strap (2). The engine (3) is now secured against falling.
- 1.3.1.9 Remove the cotter pins and plugs (5, 7, Fig. 3) from the bolts (1, 2, 3, 4, Fig. 2) in the joint of the engine and the engine mount hinges.

CAUTION

**THREADS OF BOLTS TIGHTENED WITH A TORQUE
WRENCH MUST NOT BE GREASED!**

- 1.3.1.10 Remove the bolt (1) from the joint of the engine and the engine mount hinges. Immediately replace the removed bolt with a new one and tighten it slightly.
- 1.3.1.11 Remove the bolt (2) from the joint of the engine and the engine mount hinges. Immediately replace the removed bolt with a new one and tighten it slightly.
- 1.3.1.12 Remove the bolt (3) from the joint of the engine and the engine mount hinges. Immediately replace the removed bolt with a new one and tighten it slightly.
- 1.3.1.13 Tighten the bolt (4) in the joint of the engine and the engine mount hinges using a torque wrench with a torque of 40 Nm. This bolt is the only one that is not replaced, but the tightening torque value is changed from 35 Nm to 40 Nm.
- 1.3.1.14 Tighten the bolts (1, 2, 3) in the joint of the engine and the engine mount hinges using a torque wrench with a torque of 40Nm.
- 1.3.1.15 Put the plugs (5, Fig.3) on the bolts (4), (1, 2, 3, 4, Fig.2).
- 1.3.1.16 Mark the plugs (5, Fig. 3) with a marking pin in accordance with the holes in the engine mount hinges (2) on both sides.
- 1.3.1.17 Remove the plugs (5) from the bolts (4) and drill through them with a $\varnothing 2,1$ mm drill bit in accordance with the marks made by the marking pin.
- 1.3.1.18 Put the plugs (5) back on the bolts (4) so that they align with the holes in the engine mount hinges (2).
- 1.3.1.19 Use the cotter pins (7) to secure the bolts (4) with the plugs (5) in the joint of the engine and the engine mount hinges (2).
- 1.3.1.20 Release the engine from the mounting crane (Fig. 1).
- 1.3.1.21 Remove all plugs from hoses or devices.
- 1.3.1.22 Attach all hoses which were previously removed to gain access to the bolts.
- 1.3.1.23 Attach new cable ties to the engine wiring if they were previously cut to gain access to the bolts.
- 1.3.1.24 Refill operating fluids (coolant, oil) if they were drained while accessing the bolts of the engine mount hinges (4, Fig. 3) cowlings in accordance with the procedure specified in the Airplane Maintenance Manual for SportStar RTC (Doc. No. ERTC021-10-AS), Section 12.
- 1.3.1.25 Install the lower engine cowlings in accordance with the procedure specified in the Airplane Maintenance Manual for SportStar RTC (Doc. No. ERTC021-10-AS), Section 71-10.



- 1.3.1.26 Connect the battery.
- 1.3.1.27 Install the upper engine cowling in accordance with the procedure specified in the Airplane Maintenance Manual for SportStar RTC (Doc. No. ERTC021-10-AS), Section 71-10.
- 1.3.1.28 Switch the electrical network on.
- 1.3.1.29 Carry out the engine test, check oil pressure and oil system leaks.

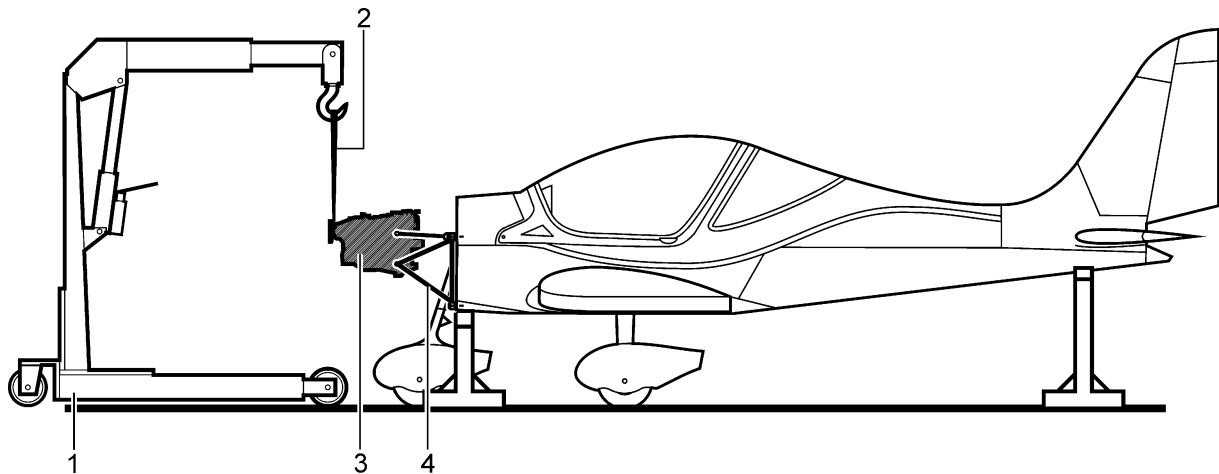


Fig. 1 – Securing the engine against falling

Legend to Fig. 1

- | | | | |
|---|------------------|---|--------------|
| 1 | Workshop crane | 3 | Engine |
| 2 | Suspension strap | 4 | Engine mount |

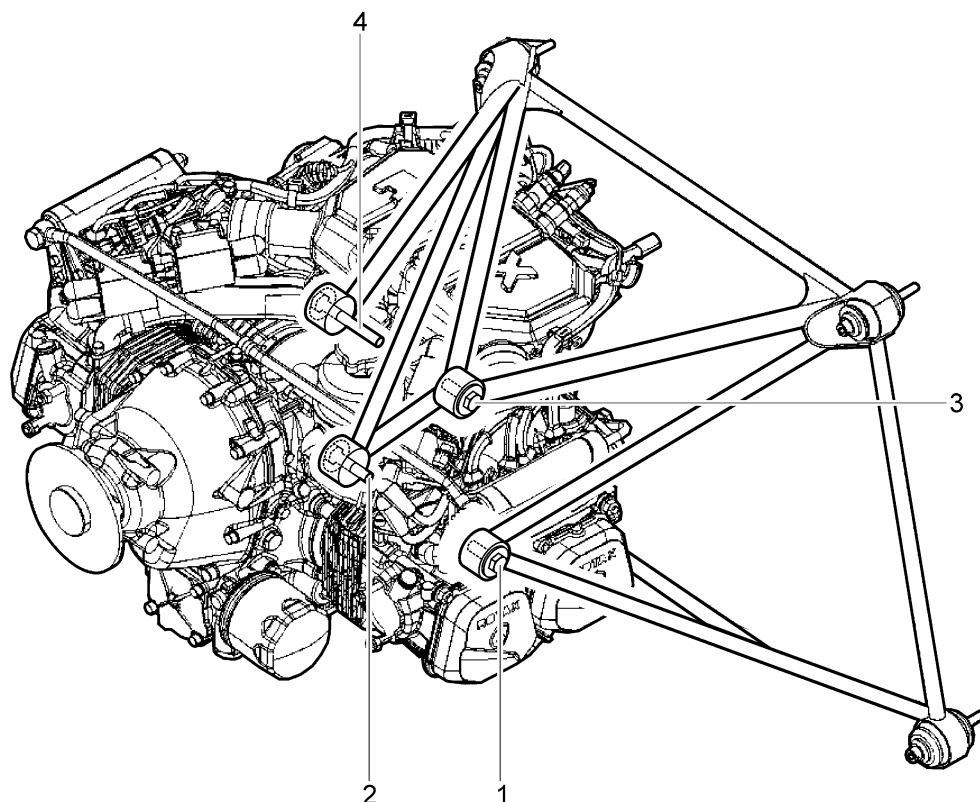
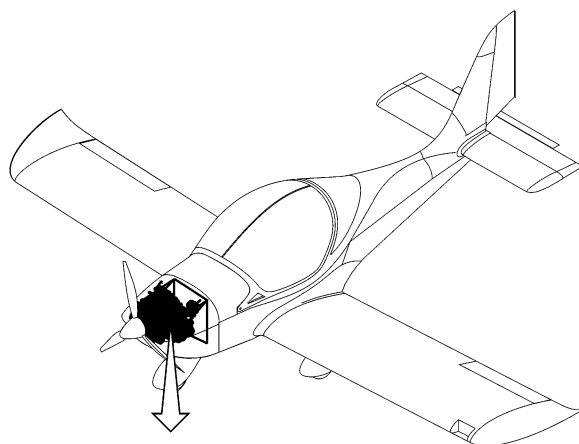


Fig. 2 – Engine mount – position of fastening bolts

Legend to Fig. 2

- 1 Bolt M10-35
- 2 Bolt M10-35

- 3 Bolt M10-35
- 4 Bolt M10-110

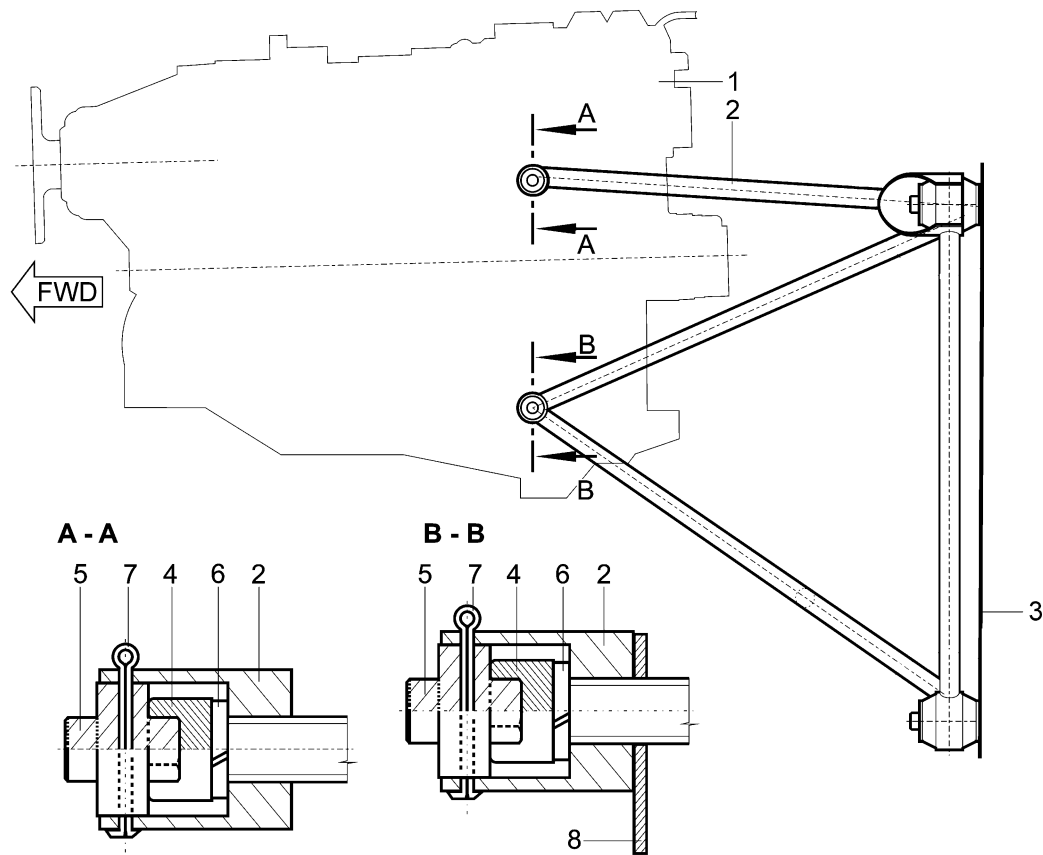


Fig. 3 – Engine suspension

Legend to Fig. 3

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|---|----------------------|---|----------------------------|
| 1 | Engine | 5 | Plug (4 pieces) |
| 2 | Engine mount | 6 | Lock washer (4 pieces) |
| 3 | Firewall | 7 | Cotter pin (4 pieces) |
| 4 | Bolt M10 (3+1 piece) | 8 | Muffler attachment bracket |

2 Influence on airplane documentation

2.1 Accompanying technical documentation

Not affected.

2.2 Operation technical documents

The authorized person will carry out the record in the Aircraft Logbook after the bulletin implementation: „**Bolt replacement was performed in accordance with the Mandatory bulletin No. RTC 068a SR**“, and he will add the date and signature.

3 Influence on weight and balancing

Not affected.