

Inspection / Replacement Nose Gear Rubber Damper

MANDATORY

Repeating symbols:

- ❖ **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 aircraft or could lead to suspension of warranty
- **NOTE:** Information useful for better handling

1. Planning information

1.1 Reference

- Gyroplanes Calidus
- Serial numbers (Werk-Nr.) C00149 to C00235
- Gyroplanes Calidus where a replacement of the rubber damper has been accomplished until and including August 2012

1.2 Reason

When operated on rough ground with high load on the nose gear the rubber damper of the nose gear may slip over the stop disc, causing the nose gear to 'retract' and disengage from its bearing seating. This will cause a loss of tension in the nose wheel control cables which will render the aircraft difficult to control with the nose wheel on ground.

1.3 Subject

Inspect the configuration state of the rubber damper and replace with improved component, if necessary.

1.4 Compliance

Prior to next flight

1.5 Approval

The technical content is approved under the authority of AutoGyro GmbH

1.6 Manpower

- Inspection: 0.1 h
- Accomplishment: 2 h

Manufacturer Bulletin 02/2012

1.7 Mass data

none change

1.8 Electrical load data

none change

1.9 References

In addition to this technical information refer to current issue of AutoGyro Parts catalog www.auto-gyro.de

1.10 Other publications affected

none

1.11 Interchangeability of parts

Affected parts cannot be re-used and must be marked accordingly and/or discarded.

2. Material Information

2.1 Material – cost and availability

Price and availability will be supplied on request by AutoGyro GmbH
After sending back the spare part, AutoGyro GmbH will refund the spare part cost

2.2 Material requirement per gyro

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

2.3 Material requirement per spare part

Nose gear rubber damper with vulcanized metallic discs at both ends
C.FA16.16 (Calidus)

2.4 Rework of parts

none

2.5 Special tooling/lubricant-/adhesives-/sealing compound

S.VB6007 Lagermeister WHS 2002 Fett
S.VB6011 Loctite 243 (blue)

3. Accomplishment / Instructions

3.1 Determination of Necessity

Determine the configuration state of the rubber damper. In case a rubber damper with vulcanized metallic discs (see Fig. 1) is installed no further action is required. Otherwise the nose gear rubber damper has to be replaced as instructed below.

3.2 Instructions

The following work can be performed by the operator, a proficient person charged by the operator, or AutoGyro GmbH. Illustrations see Fig. 2 and 3.

1. Unload/lift nose gear. In order to do so lift at the jacking point at the fuselage belly right behind nose wheel, using a soft non-slip lining.
2. Remove bolt (1) and washer (2).
3. Pull control linkage (3) from square shaft. Caution: Hold wheel assembly and prevent from falling out.
4. Pull out front wheel assembly. Note that bushings (5) and (7) remain in the fuselage.
5. Remove rubber damper (8) and mark unserviceable.
6. Install new rubber damper.
7. Apply AG-GRS-01 on the tube, but not on the threads. Install nose wheel assembly in reverse order. Make sure wheel assembly is installed so that angled fork faces forward, i.e. extends to the front.
8. Install control linkage (3) and washer (2).
9. Apply AG-BAS-02 to inner threads of nose gear assembly and install bolt (1).
10. Torque bolt (1) with 40 Nm.
11. Perform a functional test of the nose wheel steering with the nose wheel normally loaded.

3.3 Test run

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3.4 Summary

These instructions (section 3) have to be conducted in accordance with section 1.4.

The execution/completion of the mandatory Service information must be annotated in the aircraft logbook

4. Illustrations



Fig. 1: Rubber damper with volcanized metallic discs ,old' rubber damper (to be replaced)

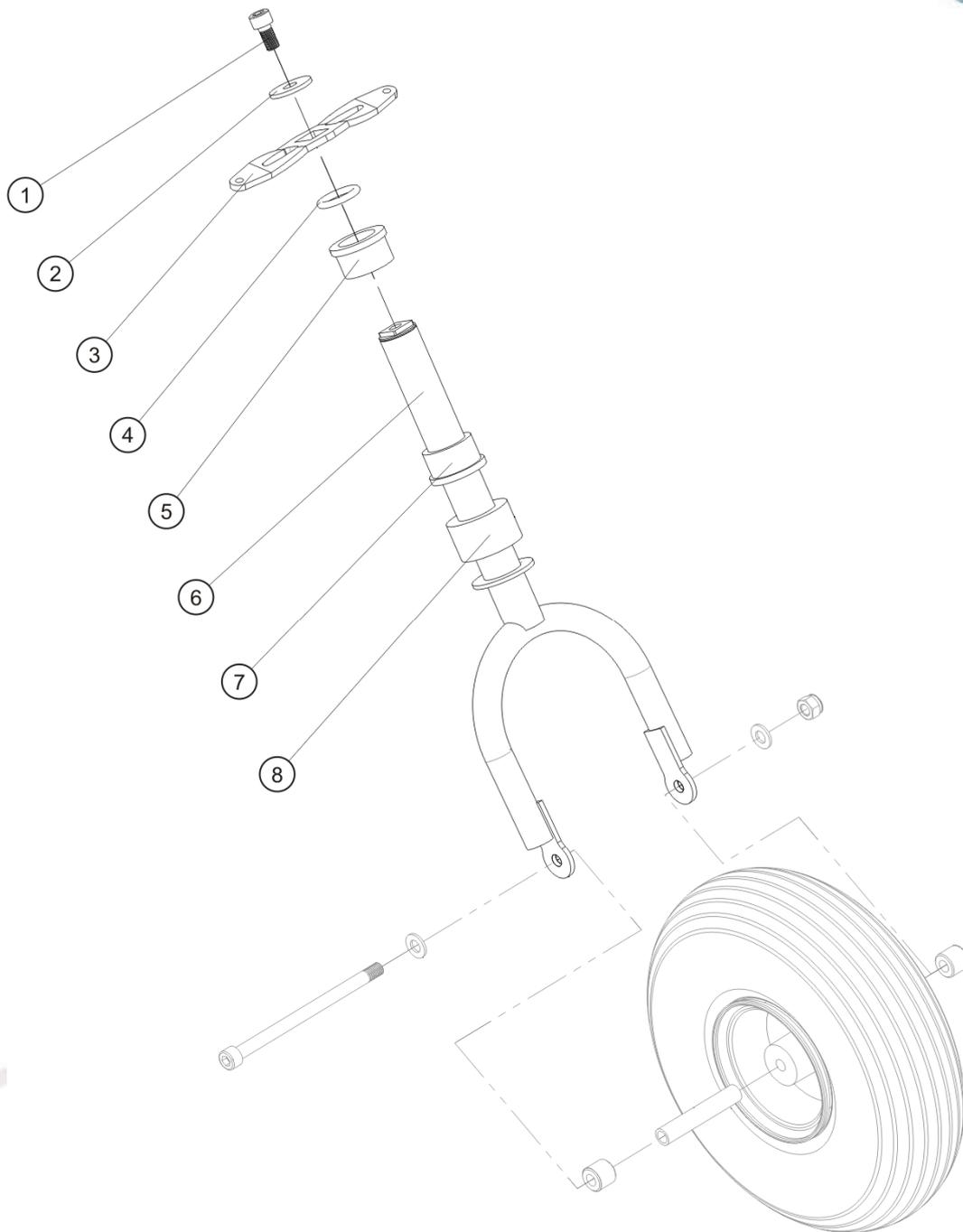


Fig. 2: Installation on Calidus