

MANDATORY SERVICE BULLETIN

MSB 42-133

MSB 42NG-072

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type: DA 42, DA 42 M, DA 42 NG, DA 42 M-NG

Serial numbers: 42.004 through 42.427
42.AC001 through 42.AC151
42.M001 through 42.M027
42.N001 through 42.N248
42.NC001 through 42.NC006
42.MN001 through 42.MN054

I.3 Date of effectivity

07-Feb-2018

I.4 Time of Compliance

Within 200 flight hours, but not later than 28-Feb-2019.

I.5 Subject

Inspection of upper rudder bearing installation.

ATA-Code: 27-20

I.6 Reason

During production cases of a missing retaining ring and spacer on the upper rudder bearing installation have been identified, which were delivered fully assembled from the supplier. The bearing is installed with a press fit, but the retaining ring is the ultimate safeguard against movement of that bearing. Document review only could not assure full certainty of all airplanes being delivered with the retaining ring and spacer installed.

This Service Bulletin prescribes inspection of the upper rudder bearing installation and installation of the retaining ring and spacer if missing on potentially affected airplanes.

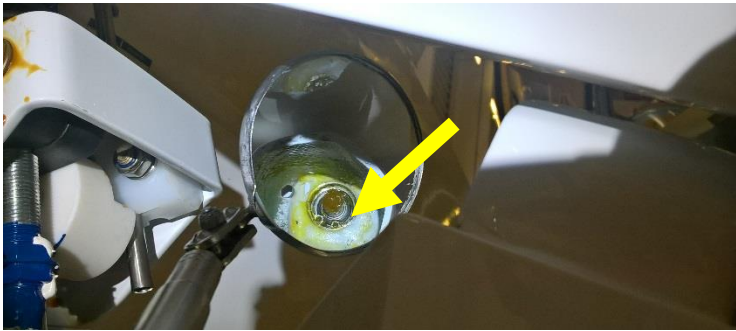
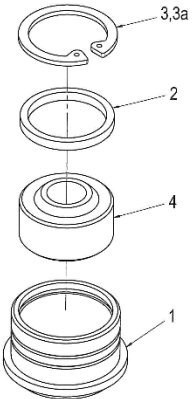
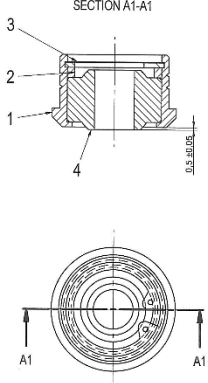
I.7 Concurrent Documents

None.

I.8 Approval

The technical content of this document has been approved under the authority of DOA ref. EASA.21J.052.

I.9 Accomplishments / Instructions

1	Remove the fairing for the horizontal stabilizer i.a.w. AMM section 55-10.
2	<p>Inspect upper rudder bearing installation for presence of retaining ring and spacer from the top side.</p> <ul style="list-style-type: none"> • Use an inspection mirror. • If necessary clean area from grease using a lint free towel. • Refer also to the picture below. 
3	<p>If retaining ring is missing, install spacer ring and retaining ring. Refer to figure below.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="268 1574 678 1794" style="width: 45%;"> <p>(1) rudder bearing sleeve – permanently installed,</p> <p>(2) spacer ring,</p> <p>(3,3a) retaining ring,</p> <p>(4) bearing.</p> </div> <div data-bbox="922 1339 1417 1809" style="width: 50%;"> <p style="text-align: center;">EXPLODED VIEW N.T.S. FOR REFERENCE ONLY</p>  <p style="text-align: center;">SECTION A1-A1</p>  </div> </div>
4	Clean working areas, check for foreign objects.
5	Grease upper rudder pivot bearing i.a.w. AMM section 12-20.
6	Make sure rudder is free to move.

7	Install the fairing for the horizontal stabilizer i.a.w. AMM section 55-10.
8	Make sure that all altered, replaced, repaired parts are in proper function.
9	Do all necessary entries in the aircraft logs.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

Qty	Part Number	Description
1*	DIN 472-19-A2 or BN 683-19-A2	Retaining Ring
1*	D60-5312-60-31	Spacer Ring

* if required

Material is available from Diamond Aircraft Industries.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 0.5 hours for inspection.

II.4 Credit

None.

II.5 Reference Documents

DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

DA 42 NG Airplane Maintenance Manual, Doc. No. 7.02.15, latest effective issue.

III REMARKS

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, particular that which is not especially described in this Service Bulletin, must be done in accordance with the referenced Maintenance Manual.
3. Completion of all work must be recorded in the log book.
4. In case of doubt contact Diamond Aircraft Industries GmbH.

**EXECUTION REPORT TO
SERVICE BULLETIN
MSB 42-133
MSB 42NG-072**

AIRPLANE INFORMATION

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of operation of airplane _____

No. of landings _____

Hours of operation – engine LH _____

Hours of operation – engine RH _____

Typical operation of airplane private, club, training, other _____

Retaining ring missing: no yes _____
Date, Name, SignPlease e-mail the completed form to executionreports@diamond-air.at