

MANDATORY SERVICE BULLETIN

MSB 42-136/1

MSB 42NG-078

SUPERSEDES MSB 42-136

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type: DA 42, DA 42 M

DA 42 NG and DA 42 M-NG that were converted from DA 42 or DA 42 M

Serial numbers: all serial numbers

I.3 Date of effectivity

24-Jan-2019

I.4 Time of Compliance

For NLG (nose landing gear) legs with

- less than 1800 hours TSN (time since new) at the date of effectivity: before exceeding 2000 hours TSN and every 200 flight hours thereafter.
- more than 1800 hours TSN at the date of effectivity: within 200 flight hours but not later than 31-Jan-2020 and every 200 flight hours thereafter.

I.5 Subject

Inspection of NLG actuator attachment lever.

ATA-Code: 32-20

I.6 Reason

Diamond Aircraft Industries has received one report of a failure of the NLG actuator attachment lever. After the failure, when retracting the landing gear, the NLG actuator, which was not connected to the NLG leg anymore, interacted with the rudder / NLG control rods in such a way, that the rudder was forced into left hand deflection. After lowering the landing gear the rudder regained full control. The investigation has shown that the actuator lever failed because a crack that had developed over a longer time period, was not identified during scheduled maintenance. In order to avoid further similar failures, this Service Bulletin prescribes inspection of the NLG actuator attachment lever.

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

See WI-MSB 42-136 / WI-MSB 42NG-078, latest effective issue.

I.10 Mass (Weight) and CG

Mass and Center of Gravity are not affected.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 42-136 / WI-MSB 42NG-078, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 0.25 hours for inspection of the NLG actuator attachment lever.

II.4 Credit

None.

II.5 Reference Documents

DA 42 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 42-136/1
MSB 42NG-078**

AIRPLANE INFORMATION

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of operation of airplane _____

No. of landings _____

Hours of operation-engine LH _____

RH _____

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

Crack in NLG actuator attachment lever found: no
 yes_____
Date, Name, SignPlease e-mail the completed form to
executionreports@diamond-air.at

WORK INSTRUCTION

WI-MSB 42-136

WI-MSB 42NG-078

I GENERAL INFORMATION

I.1 Subject

Inspection of nose landing gear (NLG) actuator attachment lever.

I.2 Reference Documents

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

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

I.3 Remarks

- a) All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
- b) All work, in particular if not described in this work instruction, must be done in accordance with the referenced maintenance manual.
- c) For conversion factors between SI units and US/Imperial units refer to AMM Chapter 02.
- d) In case of doubt, contact Diamond Aircraft Industries GmbH.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

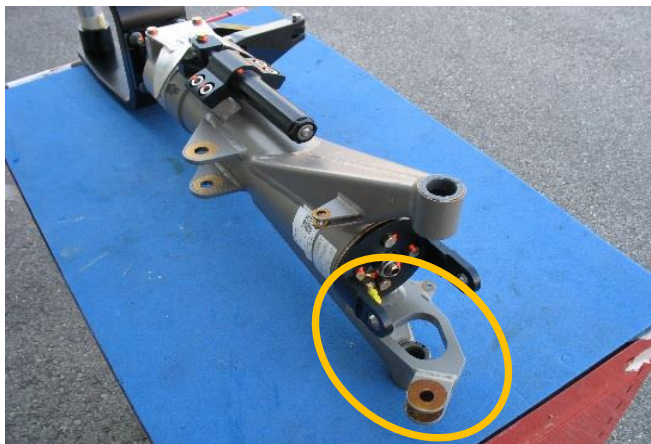
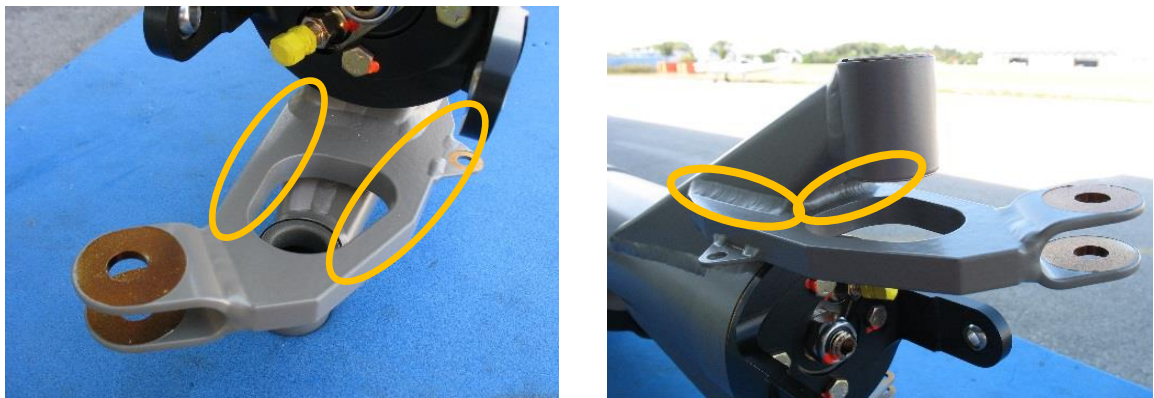
II.1 Drawings

None.

II.2 Special Tools

None.

III INSTRUCTIONS

	<p>Note: For better illustration, the examination process of the NLG actuator attachment lever is shown on a NLG leg that was removed from the airplane. It is not necessary to remove the NLG leg from the aircraft for examination of the NLG actuator attachment lever.</p>
<p>1</p>	<p>Clean the NLG actuator attachment lever.</p> 
<p>2</p>	<p>Examine the NLG leg actuator attachment lever for cracks and damage in the area as indicated in the pictures.</p> 
<p>3</p>	<p>If cracks or damage are found, replace NLG leg with a new part in accordance with AMM, section 32-20.</p>
<p>4</p>	<p>Clean working areas, check for foreign objects.</p>
<p>5</p>	<p>Check all altered, replaced, repaired parts for proper function.</p>
<p>6</p>	<p>Test all systems in working area for function.</p>
<p>7</p>	<p>Make all necessary entries in the airplane logs.</p>