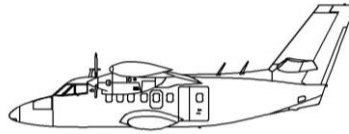




Aircraft Industries



MANDATORY BULLETIN

SB No.: L-420/021a Revision 2

An Airworthiness Directive AD 2019-0308 is issued by the EASA

Applicability: All nose landing gear legs P/N 2 143 900 (or 3 259 900, or 3 259 900-7) if L3 223 016 pin secured by retaining bolt is installed on the L-420 airplanes.

Subject: Nose landing gear inspection and eventually replacement of the L3 223 016 pin with the new L3 223 316 pin of the lever assembly of the nose landing gear steering. Prescription the torque for installation of the retaining bolt.

Revision 2: AD number notification.

Reason: Using of modified pin to prevent falling out from the nose landing gear steering.

Compliance Time: January 31, 2020

To be carried out by: Approved maintenance organisation or personel.

Material costs to be covered by: Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic.

Work costs to be covered by: Operator.

Necessary material to be delivered by: Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic against an order.

Bulletin becomes effective: On the day of the release.

Total No. of pages: 6

Note: Bulletin L-420/021a Revision 2 supersedes previous bulletin L-420/021a Revision 1.

Released: Pavel Jurák
Head of Airworthiness dept.

The technical content of this document is approved under the authority of DOA ref. EASA.21J.119.

Date of release: January 6, 2020

1. INSTRUCTIONS FOR PLANNING

A. CONCERNS

1. Airplane type

L-410

2. Model / Variant / S/N

L-420

3. Special qualifications for implementation

No required

4. Special new equipment

Not required.

B. REASON

Using of modified pin to prevent falling out from the nose landing gear steering. Malfunction of the steering on the nose landing gear was reported by L-410 operators. Investigation determined that the malfunction was due to loss of the vertical pin further to a cracking of the retaining bolt on the nose landing gear control.

This condition, if not detected and corrected, could lead to reduced control of the aeroplane by the nose landing gear on the ground i.e. during taxiing, take-off and landing phases of the flight. During these phases of the flight is possible direction control the aeroplane by rudder on differential braking only.

C. DESCRIPTION

Visual inspection of the nose landing gear leg steering console assembly.

Removal of original pin and installation of the new pin if required.

D. APPROVAL

This bulletin has been elaborated based on data of design change No. P-410-Z 0207.

E. MAN-HOURS

Supposed Man-hours: 1.5 M-hours

F. MATERIAL - AVAILABILITY

1. New equipment

Not required.

2. Installation parts

Will be delivered by the airplane manufacturer Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic against an order.

3. Costs

Material: To be covered by the AI, a.s., 686 04 Kunovice, Czech Republic.

Work: To be covered by the operator.

G. SPECIAL TOOLS

Not required.

H. WEIGHT AND BALANCE

Influence of the replacement on the empty airplane weight and balance is negligible.

I. USED DOCUMENTATION

1. Drawings:

2 143 900 Nose landing gear leg (see Attachment 1 of this bulletin)

2. Maintenance Manual, Doc. No. Do-L410-1233.2, chap.:

32-50-00

J. AMENDED DOCUMENTATION

AFM not affected.

MS not affected.

MM not affected.

WM not affected.

2. INSTRUCTION FOR IMPLEMENTATION

A. VISUAL INSPECTION

- Visual inspection of the L3 223 016 pin securing.

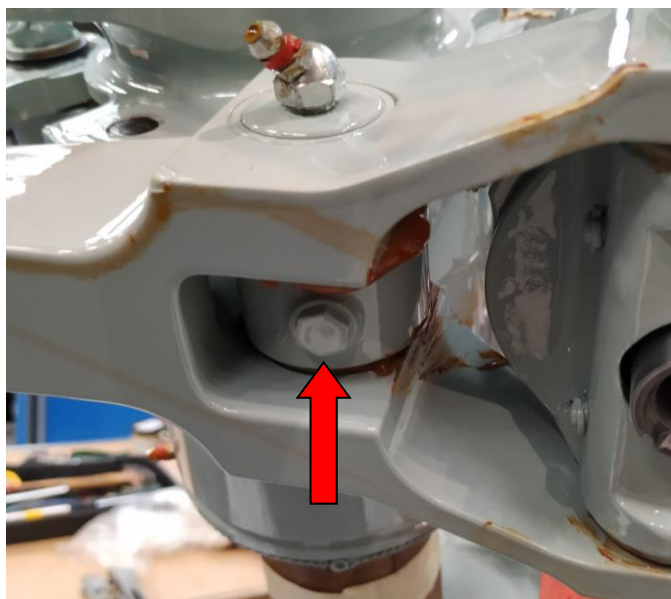


Figure 1 - L3 223 016 pin without head secured with a retaining bolt

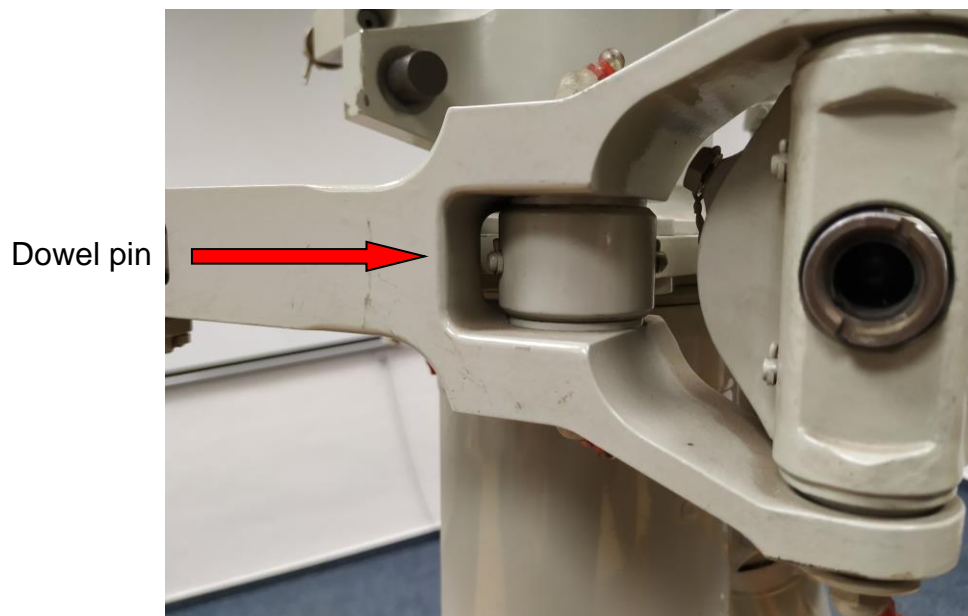


Figure 2 - L3 245 016 pin without head secured with a dowel pin

Result of the visual inspection:

If the L3 223 016 pin without head and secured with retaining bolt is installed (refer to the Figure 1), perform the L3 223 016 pin replacement according the point 2.B., C. of this bulletin.

If the L3 245 016 pin without head and secured with dowel pin is installed (refer to the Figure 2) record the inspection of the nose landing gear into the log book according to the point 4.b) of this bulletin.

B. DISASSEMBLY

- Remove the grease nipples.
- Heat the retaining bolt secured with Loctite 270 adhesive on the lever assembly see Figure 1 to 250°C with a hot air gun.
- Unscrew the retaining bolt.
- Remove the original pin pos. 16.

C. ASSEMBLY

- Check the surface of the sliding bushes.
- Install the new pin pos. 16, put on washer pos. 142 and secure it with lock ring pos. 143 according to the Dwg. No. 2 143 900. Use material of point 3.A. of this bulletin
- Degrease the threads of the retaining bolt pos. 106 and pin pos. 16.
- Apply Loctite 270 on the retaining bolt thread, according to the technical sheet. Screw on the retaining bolt to the pin and tighten it, use torque 8 Nm!
- Install back the grease nipples.

D. TESTS

1. Ground Tests

- Check of the function of MANUAL nose landing gear steering according to the MM, chap. 32-50-00, page 302.

2. Flight Tests

Not required.

E. FINALISATION WORK

- Grease the new pin with AEROSHELL grease 22 or equivalent after Loctite 270 hardening.
- Repair the damaged paint with primer for metal (one layer) and synthetic top coat (two layers).

3. NECESSARY MATERIAL

A. INSTALLATION PARTS DELIVERED BY THE AIRPLANE MANUFACTURER



Figure 3 – Set of the Spare parts

Pos.	AI Identifier	P/N	Name	Pcs/Acft
-	96274150	2143801	Set of the spare parts	1

B. MATERIAL SUBJECT TO SPECIAL CONDITIONS DURING TRANSPORT

To be ensured by the operator

Pos.	AI Identifier	Name	Qty/Acft
-	82177499	Loctite 270	2 g

4. RECORD IN THE AIRPLANE LOGBOOK

L-420/021a Revision 2 Mandatory service bulletin was performed and after visual inspection:


- a) L3 223 016 pin secured with retaining bolt was replaced by L3 223 316 pin.
- b) L3 245 016 pin secured with dowel pin remains installed.

Mandatory bulletin was:

Elaborated: Lukáš Popelka


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Checked: Ing. Pavel Ulrich


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