



Aircraft Industries



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# SERVICE BULLETIN

SB No. **L-410/005b**

Aeroplane Type: **L-410**

Revision No. **IR**

Date of Issue: **Jun 18, 2020**

The technical content of this document is approved under the authority of DOA No. EASA.21J.119

**Classification:** Recommended

**Subject:** Inspection and possible replacement of the bracket in the power steering of the nose landing gear.

**Supersedure:** N/A

## 1. PLANNING INFORMATION

### A. APPLICABILITY

L 410 UVP-E, E9, E20, L-420.

L 410 UVP with the 3 259 900-7 nose landing gear leg installed in accordance with the IB L410UVP/137b, 137b Revision 1.

### B. CONCURRENT REQUIREMENTS

There are no special requirements.

### C. REASON

Crack in the bracket 3 245 092 0 (2 123 092).

### D. COMPLIANCE TIME

During next periodic maintenance check 1.

### E. MANPOWER

Expected work:

Inspection: 1 Nhod

Replacement: 10 Nhod

### F. MATERIAL

Supplied by Aircraft Industries a.s., 686 04 Kunovice, Czech Republic to order.

**G. NEW EQUIPMENT**

Not necessary.

**H. SPECIAL TOOLS**

They are not needed.

**I. EXPENSES**

Paid by the operator.

**J. WEIGHT AND BALANCE**

No influence.

**K. REFERENCE DOCUMENTS**

**1. Maintenance Manual, Doc. No. Do-L410-1232.2, chap.:**

007.00.00      020.20.00      024.30.04      024.40.00      032.20.00      032.50.00

**2. Other documentation**

Appendix 1 Drawing of the nose landing gear.

**L. AFFECTED DOCUMENTS**

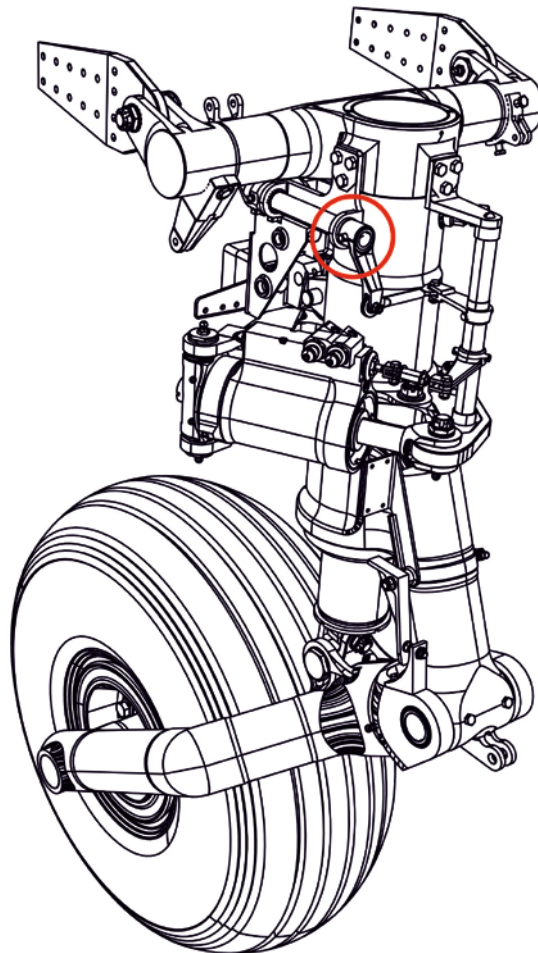
AFM Not affected.  
MS Not affected.  
MM Not affected.  
WM Not affected.

**2. IMPLEMENTATION INFORMATION**

**A. INSPECTION**

Open the front covers of the nose landing gear according to the procedure in the PTP aircraft chap. 032.20.00.

Using a 6x magnifying glass, check for cracks in the nose thruster power steering bracket type no. 3 245 092 0 (order no. 2 123 092) pos. 92 on the drawing of the nose landing gear in Annex 1, in the area as show in the figure below. Cracks on the bracket are not permitted.



If no cracks are found on the bracket, make an entry in the Aeroplane Book in accordance with Part 4 of this bulletin.

Close the front covers of the bow landing gear according to the procedure in the PTP aeroplane chap. 032.20.00.

The aeroplane release for operation.

If cracks are found on the bracket, replace the bracket according to section 2.B. of this bulletin.

## **B. REPLACEMENT OF THE BRACKET**

### **1 Preparatory work**

Disconnect the external power supply socket according to the procedure in the PTP aeroplane chap. 024.40.00.

Remove the batteries from the aeroplane according to the procedure in the PTP of the aeroplane chap. 024.30.04.

Lift the front part of the aeroplane according to the procedure in the PTP of the aeroplane chap. 007.00.00.

### **2 Disassembly**

Perform according to the pictures below and the drawing of the nose landing gear leg in Appendix 1:

1. Remove the screw type no. 3 245 040 0 (order no. 2 123 040) pos. 40 according to Fig. 1 and disconnect the connecting rod 3 245 910 0 (2 123 910) pos. 290 from the lever 3 245 095 0 (2 123 095) pos. 95.



Fig. 1

2. Remove the connection in the power steering control route as shown in Fig. 2 and disconnect the lever 3 246 260 0 (1 133 260) pos. 260.



Fig. 2

3. According to Fig. 3 unlatch and remove the screws M6x10 pos. 113 to fasten the bracket assembly 3 245 092 0 (2 123 092) pos. 92.



Fig. 3

4. According to Fig. 4 Remove the bracket assembly 3 245 092 0 (2 123 092). Hold the pins 5x12 pos. 141 with pliers and remove the pins by tapping with a hammer on the pliers.



Fig. 4

5. According to Fig. 5, remove from the bracket assembly 3 245 092 0 (2 123 092) cotter pins 1,6x16 rust 132, lever 3 245 073 0 (2 123 073) pos. 260.



Fig. 5

6. According to Fig. 6, remove from the bracket assembly 3 245 092 0 (2 123 092) pins 1,6x16 pos. 132, lever 3 245 073 0 (2 123 073) pos. 95.



Fig. 6

7. According to Fig. 7, remove the bracket assembly 3 245 092 0 (2 123 092) the housing 3 245 462 0 (2 123 462) pos. 462.



Fig. 7

8. According to Fig. 8, remove the bracket assembly 3 245 092 0 (2 123 092) the tube 3 245 463 0 (2 123 463) pos. 463.



Fig. 8

### 3 Assembly

1. For pins 5x12 pos. 141 removed in point B.2.4, adjust the cylindrical part from one side to the tip at an angle of 90°. Modified pin mount cylindrical portion back to the undercarriage leg (tip out).
2. According to Fig. 4, 5, 6, 7, 8 - assemble the assembly new bracket 3 245 092 0 (2 123 092). Use new bracket 3 245 092 0 (2 123 092) pos. 92 from point 3.A, new sleeves 3 245 462 0 (2 123 462) pos. 462 from point 3.A, original pipe 3 245 463 0 (2 123 463) pos. 463, original lever 3 246 260 0 (1 133 260) pos. 260, original lever 3 245 095 0 (2 123 095) pos. 95, original pins 3 245 073 0 (2 123 073) pos. 73 and new cotter pins 1,6x16 pos. 132 from point 3.A.
3. According to Fig. 3, 2 fasten the assembly of the new bracket 3 245 092 0 (2 123 092) with M6x18 screws from point 3.A and connect the connection in the power steering control path with the original lever 3 246 260 0 (1 133 260) pos. 260. On the bearing surface of the new bracket 3 245 092 0 (2 123 092), press the position of the tips of the modified pins 5x12 pos. 141.
4. According to Figs. 2, 3 disconnect link in the route control servo lever 3 246 260 0 (1 133 260) pos. 260 and assembly new bracket 3 245 092 0 (2 123 092) remove.
5. In marked positions on the abutment surface of the new bracket 3 245 092 0 (2 123 092) pos. 92 drill and retract  $\varnothing 5H7$  holes.
6. According to Fig. 4, replace the modified pins with tips 5x12 pos. 141 with new ones from point 3.A.
7. According to Fig. 3 Install the new bracket 3 245 092 0 (2 123 092). Use the original M6x10 screws pos. 113. Secure the screws with the wire from point 3.A.
8. According to Fig. 2, connect the connection in the power steering control path with the original lever 3 246 260 0 (1 133 260) pos. 260.
9. Connect the original connecting rod 3 245 910 0 (2 123 910) pos. 290 to the original lever 3 245 095 0 (2 123 095) pos. 95 as shown in Fig. 1. Use the original connecting material and new 1x10 cotter pins from point 3.A.

### C. TESTS

#### 1. Ground Tests

Inspection the return movement of the nose wheel to the neutral position according to the procedure in the PTP of the aeroplane chap. 032.20.00.M.

Inspection the function of the foot and manual control of the nose wheel according to the procedure in the PTP of the aeroplane chap. 032.50.00.E.

#### 2. Flight Tests

Not required.



#### D. COMPLETION WORK

Carefully clean all areas where assembly work has been carried out of material residues and dirt.

Repair damaged coatings according to the procedure in the PTP aeroplane chap. 020.20.00.

Start the aircraft according to the procedure in the PTP of the aeroplane chap. 007.00.00.

### 3. BILL OF MATERIAL

#### A. MATERIAL DELIVERED BY THE AEROPLANE MANUFACTURER

Pos.	Nomenclature	Name	Pcs/Arpln
92	9811 0983	Bracket 3 245 092 0 (2 123 092)	1
462	9811 0984	Bushing 3 245 462 0 (2 123 462)	2
141	3476 0512	Pin 5x12 ČSN 022150.1	2
132	3610 6436	Cotter 1,6x16 DIN 94	4
133	3610 0110	Cotter 1x10 ČSN 021781.04	1
	1951 1001	Wire 1,0 ČSN 426406	1 m
	0503 0704	Screw M6x18 ČSN 021207.64	3

### 4. RECORD IN THE AEROPLANE LOGBOOK

The inspection of the bracket in the power steering of the nose landing gear was performed according to the service bulletin L-410/005b.

Detected condition: Cracks on bracket not found.

Or Cracks on bracket found.

The bracket in the power steering of the nose landing gear has been replaced according to service bulletin L-410/005b.

Date: .....

Accomplished by: .....

(name and signature of authorised staff)