

P/N Detail Print

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AC: N48901 Position: ONLY

P/N: 1173B0000-03

P/N S/N: SP654-01

AUXILIARY DRAG STRUT, NLG

Batch: 2200436

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG AUXILIARY DRAG STRUT A:	NOSE LANDING GEAR REPLACEMENT REQUIRED; PLANNING NOTE: CREATE UNSCHEDULED TASK CARDS FOR NOSE GEAR REMOVAL/INSTALLATION					0:00	0	0	06/26/2014				TERMINATED
NLG AUXILIARY DRAG STRUT R	NLG AUX DRAG STRUT RESTORATION	20000	4380			6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

P/N: 1173-0001

P/N S/N: AR007R096

HINGE POINT BOLT, AUX DRAG STRUT NLG

Batch: 2199642

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG HINGE POINT BOLT	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1173A0100-02

P/N S/N: AR003A117

LOWER AUXILIARY DRAG STRUT ASSY, NLG

Batch: 2198917

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG LOWER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1173A0200-01

P/N S/N: AT008A008

UPPER AUXILIARY DRAG STRUT ASSY, NLG

Batch: 2200367

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG UPPER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

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■ P/N: 1173A0700-01

P/N S/N: SP1322-01

Control Items	Description
NLG DOWNLOCK SPRING 60K	(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 60000 FC
NLG SPRING RESTORE	NLG SPRING CARTRIDGE RESTORATION
TSI	
TSN	

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199198

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

■ P/N: 1173A0700-01

P/N S/N: SP1323-01

Control Items	Description
NLG DOWNLOCK SPRING 60K	(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 60000 FC
NLG SPRING RESTORE	NLG SPRING CARTRIDGE RESTORATION
TSI	
TSN	

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199199

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

■ P/N: 2000A0830K01

P/N S/N: KC10045

Control Items	Description
NLG CARDAN JOINT	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

CARDAN JOINT, AUX DRAG STRUT NLG

Batch: 2303079

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	14563	1475	0:00	45437	0	OPEN
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

■ P/N: AK-1173-0011

P/N S/N: XJTNSN01

Control Items	Description
TSI	
TSN	

AXLE, AUXILIARY DRAG STRUT NLG

Batch: 2303080

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

P/N Detail Print



■ P/N: AK-1173-0011

P/N S/N: XJTNSN02

AXLE, AUXILIARY DRAG STRUT NLG

Batch: 2303078

Control Items	Description
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

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AC: N48901 Position: ONLY

■ P/N: 1172C0000-02

P/N S/N: SP649-01

MAIN DRAG STRUT, NLG

Batch:

2194604

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG DRAG STRUT REST	NLG MAIN DRAG STRUT RESTORATION		20000	4380		6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

■ P/N: 1172-0001

P/N S/N: AR003R032

HINGE POINT BOLT, MAIN DRAG STRUT NLG

Batch:

2194239

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT HINGE B(	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1172-0037

P/N S/N: AR010P197

PINTLE PIN, MAIN DRAG STRUT NLG

Batch:

2193640

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1172-0037

P/N S/N: AR010P202

PINTLE PIN, MAIN DRAG STRUT NLG

Batch:

2194014

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

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■ P/N: 1172-0066

P/N S/N: AR003D148

Control Items Description
ACT BOLT LIFE 60K UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

■ P/N: 1172A0200-01

P/N S/N: AT003E007

Control Items Description
NLG MAIN DRAG STRUT BOTTOM (LIFE LIMITED PART) NLG LOWER DRAG STRUT
LIFE

TSI

TSN

■ P/N: 1172A0600-01

P/N S/N: AT009A009

Control Items Description
NLG MAIN DRAG STRUT TOP STA (LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

ACTUATOR ATTACH BOLT, MAIN DRAG STRUT, NLG

Batch: 2193943

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				0:00	0	0				TERMINATED
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

BOTTOM STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2200822

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

TOP STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2193337

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	



JSX
5616 Haven St. Suite A, ATTN: JSX PARTS
Las Vegas, NV, US, 89119
AMO: Attn. Parts

N36915
EMB-145LR

Airframe Entry - Aircraft SN: 145421

Package / Inspection

32-20-01-900-001-A00

LANDING GEAR - Restore Nose Landing Gear (NLG) Strut, including Torque Link, Steering Cuff, Sliding Tube and Web Assy components; and their attaching parts. NOTE: Or 20000 FC, whichever occurs first. - [RST], Satisfactory (PN: 1170S0000-01, SN: 00245)

Compliance

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

Part

322000-0401

NLG LEG STRUT Liebherr - Steering Cuff

Compliance

11-Dec-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170A3200-01

OFF SN: L1167

Reason for Removal: Convenience

ON PN: 1170A3200-01

ON SN: 0186

Condition: Overhauled TSN: 37,322 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0110

NLG LEG STRUT LIEBHERR - Assembly

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170C0000-08

OFF SN: 00116

Reason for Removal: Convenience

ON PN: 1170S0000-01

ON SN: 00245

Condition: Overhauled

322000-0301

NLG LEG STRUT Liebherr - Wheel axle

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170-1403

OFF SN: L613

Reason for Removal: Convenience

ON PN: 1170-1402

ON SN: L660

Condition: Overhauled TSN: 31,567 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0501

Upper, NLG LEG STRUT Liebherr - Torque Link

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170-0301

OFF SN: 2273

Reason for Removal: Convenience

ON PN: 1170-0301

ON SN: L3558

Condition: Overhauled TSN: 8,594 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0502

Lower, NLG LEG STRUT Liebherr - Torque Link

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170-0301

OFF SN: 2270

Reason for Removal: Convenience

ON PN: 1170-0301

ON SN: 1548

Condition: Overhauled TSN: 28,571 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0601

Upper, NLG LEG STRUT Liebherr - Torque Link pin

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170-0001

OFF SN: 0034

Reason for Removal: Convenience

ON PN: 1170-0001

ON SN: 0383

Condition: Overhauled TSN: 37,322 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0602

Lower, NLG LEG STRUT Liebherr - Torque Link pin

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1170-0001

OFF SN: 0019

Reason for Removal: Convenience

ON PN: 1170-0001

ON SN: 0376

Condition: Overhauled TSN: 37,322 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322000-0801

NLG LEG STRUT Liebherr - Main fitting

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 2233-0103

OFF SN: 1132

Reason for Removal: Convenience

ON PN: 2233-0103

ON SN: 1320

Condition: Unserviceable TSN: 4,613 Ldg

Technician:
Date:

Name & Certificate:

Signature:

Inspector:
Date:

Name & Certificate:

Signature:



JSX
5616 Haven St. Suite A, ATTN: JSX PARTS
Las Vegas, NV, US, 89119
AMO: Attn. Parts

N36915
EMB-145LR

Airframe Entry - Aircraft SN: 145421

Package / Inspection

32-20-02-900-001-A00

NLG, LANDING GEAR - Restore NLG Main Drag Strut NOTE: Or 20000 FC, whichever occurs first. - [RST], Satisfactory (PN: 1172C0000-02, SN: SP649-01)

Compliance

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

Part

322001-0201

Bottom, NLG MAIN DRAG STRUT Liebherr - Main drag strut stay

Compliance

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172-0201

OFF SN: AP010H106

Reason for Removal: Convenience

ON PN: 1172-0201

ON SN: AT003E007

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322001-0301

No.1, NLG MAIN DRAG STRUT Liebherr - Pintle pin

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172-0037

OFF SN: AL003X046

Reason for Removal: Convenience

ON PN: 1172-0037

ON SN: AR010P197

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322001-0302

No.2, NLG MAIN DRAG STRUT Liebherr - Pintle pin

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172-0037

OFF SN: AL009E058

Reason for Removal: Convenience

ON PN: 1172-0037

ON SN: AR010P202

Condition: Overhauled TSN: 31,835 Ldg, 31,835 Hrs. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322001-0401

NLG MAIN DRAG STRUT Liebherr - Hinge point bolt

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172-0001

OFF SN: HM047

Reason for Removal: Convenience

ON PN: 1172-0001

ON SN: AR003R032

TSN: 31,835 Ldg

322001-0501

Top, NLG MAIN DRAG STRUT Liebherr - Main drag strut stay

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172-0601

OFF SN: AP008C066

Reason for Removal: Convenience

ON PN: 1172-0601

ON SN: AT0099A009

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322002-0101

NLG, NLG MAIN DRAG STRUT LIEBHERR

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1172C0000-02

OFF SN: SP252-99

Reason for Removal: Convenience

ON PN: 1172C0000-02

ON SN: SP649-01

Condition: Overhauled

Technician:
Date:

Name & Certificate:

Signature:

Inspector:
Date:

Name & Certificate:

Signature:



JSX
5616 Haven St. Suite A, ATTN: JSX PARTS
Las Vegas, NV, US, 89119
AMO: Attn. Parts

N36915
EMB-145LR

Airframe Entry - Aircraft SN: 145421

Package / Inspection

32-20-03-900-001-A00

LANDING GEAR - Restore NLG Auxiliary Drag Strut NOTE: Or 20000 FC, whichever occurs first. - [RST] (PN: 1173B0000-03, SN: SP654-01)

Compliance

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

Part

322004-0101

NLG AUXILIARY DRAG STRUT Liebherr – Upper

Compliance

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173-0201

OFF SN: AL002V018

Reason for Removal: Convenience

ON PN: 1173-0201

ON SN: AT008A008

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0201

NLG AUXILIARY DRAG STRUT Liebherr – Lower

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173-0101

OFF SN: AL004T007

Reason for Removal: Convenience

ON PN: 1173-0101

ON SN: AR003A117

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0301

NLG AUXILIARY DRAG STRUT Liebherr - Hinge point bolt

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173-0001

OFF SN: AL011R136

Reason for Removal: Convenience

ON PN: 1173-0001

ON SN: AR007R096

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0401

NLG AUXILIARY DRAG STRUT Liebherr - Cardan joint

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 2000A0830K01

OFF SN: KC1716

Reason for Removal: Convenience

ON PN: 2000A0830K01

ON SN: KC10532

Condition: New TSN: 0 Ldg, 0 Hrs. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0601

No.1, NLG AUXILIARY DRAG STRUT Liebherr - Downlock Spring

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173A0700-01

OFF SN: HP16925

Reason for Removal: Convenience

ON PN: 1173A0700-01

ON SN: SP1322-01

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0602

No.2, NLG AUXILIARY DRAG STRUT Liebherr - Downlock Spring

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173A0700-01

OFF SN: HP16926

Reason for Removal: Convenience

ON PN: 1173A0700-01

ON SN: SP1323-01

Condition: Overhauled TSN: 31,835 Ldg. TSO: 0 Ldg, 0 Hrs. TSR: 0 Ldg, 0 Hrs

322004-0701

NLG AUXILIARY DRAG STRUT LIEBHERR

11-Nov-2022, 42,331.1 Hrs, 32,602 Ldg

OFF PN: 1173B0000-03

OFF SN: SP247-99

Reason for Removal: Convenience

ON PN: 1173B0000-03

ON SN: SP654-01

Condition: Overhauled

Technician:

Date:

Name & Certificate:

Signature:

Inspector:

Date:

Name & Certificate:

Signature:



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 9/23/2022

Responsible for content: LAXUG 616/ Erica Arellano

Activity-related document
IQ MOVE Document No.: 35383 (Rev. 4)

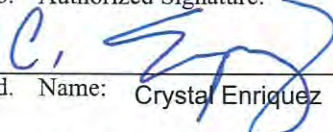


Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48801
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158284	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE		Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O.: 660041940 / / / RO-3180-145501	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	MAIN DRAG STRUT	1172C0000-02	1	SP649-01	OVERHAULED		
12. Remarks: Life Details: TSN: 40943:45 CSN: 31835 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-15 REV.6 (DATED 03MAY2013) AND CRM 32-21-15-R REV.0 (DATED 03MAY2013) ALL COMPONENTS ARE FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY. SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature: 		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Crystal Enriquez		14e. Date: (dd/mm/yyyy) 19.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NDB Sales Order: 660041940
Receipt Date: Aug 9, 2022
Customer JSX
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1172C0000-02	MAIN DRAG STRUT	SP649-01	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy NONE			CSO	CSN 31835.00	TSO	TSN 40943:45
Warranty	N/A					
Customer Instructions	N/A					

Initial Evaluation Results

NOSE DRAG STRUT DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-10 AND CRM 32-21-10-R

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-15 REV. 6, DATED 03MAY2013, AND CRM 32-21-15-R REV. 0 DATED 03MAY2013

CSO: ZERO
TSO: ZERO

ALL COMPONENTS ARE FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY.

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by U753070

Print by: U753070

Print at: Sep 23, 2022

As shipped Part Number 1172C0000-02

S / N SP649-01

Publication 32-21-15



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report



LIFE LIMIT REPORT

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1172C0000-02	NLG MAIN DRAG STRUT	SP649-01	UNLIMITED	31,835	N/A
1172A0600-01	MAIN DRAG STRUT TOP STAY ASSY.	AT009A009	UNLIMITED	31,835	N/A
1172-0601	MAIN DRAG STRUT TOP STAY	AT009A009	60,000	31,835	28,165
1172A0200-01	MAIN DRAG STRUT BOTTOM STAY ASSY.	AT003E007	UNLIMITED	31,835	N/A
1172-0201	MAIN DRAG STRUT BOTTOM STAY	AT003E007	60,000	31,835	28,165
1172-0066	ACTUATOR ATTACH BOLT, MAIN DRAG STRUT	AR003D148	UNLIMITED	31,835	N/A
1172-0037	PINTLE PIN	AR010P197	60,000	31,835	28,165
1172-0037	PINTLE PIN	AR010P202	60,000	31,835	28,165
1172-0001	HINGE BOLT	AR003R032	60,000	31,835	28,165

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1172C0000-02	SP649-01	31,835	N/A	0	N48901
1172A0600-01	AT009A009	31,835	N/A	0	N48901
1172-0601	AT009A009	31,835	28,165	0	N48901
1172A0200-01	AT003E007	31,835	N/A	0	N48901
1172-0201	AT003E007	31,835	28,165	0	N48901
1172-0066	AR003D148	31,835	N/A	0	N48901
1172-0037	AR010P197	31,835	28,165	0	N48901
1172-0037	AR010P202	31,835	28,165	0	N48901
1172-0001	AR003R032	31,835	28,165	0	N48901

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD

Stamp: 

Date: 9/22/2022



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-146501

. Service Bulletin Report



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accounts payable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority		Order Reason	
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance		Scheduled Or Unscheduled Maintenance	
Line	Item / Description	Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost	
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD	
2	2309-2005-007 MLG Shock Absorber Assy	1281	Overhaul	1	EA	USD	USD	
3	2309-2510-505 MLG MAIN SIDE STRUT ELEB - Lower main side strut	OF6988270--01	Overhaul	1	EA	USD	USD	
4	2309-2600-505 MLG Secondary Side Strut Assy	618	Overhaul	1	EA	USD	USD	
5	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm	OF-9597937-0	Overhaul	1	EA	USD	USD	
6	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD	
7	2309-2005-001 MLG Shock Absorber Assy	022	Overhaul	1	EA	USD	USD	
8	2309-3500-503 MLG Main Side Strut Assembly	482	Overhaul	1	EA	USD	USD	
9	2309-2600-507 MLG Secondary Side Strut Assy	903	Overhaul	1	EA	USD	USD	
10	2309-3037-403 Trailing arm	OF493547-3101	Overhaul	1	EA	USD	USD	
11	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly	00245	Overhaul	1	EA	USD	USD	
12	1172C0000-02 Main Drag Strut Assy	SP649-01	Overhaul	1	EA	USD	USD	
13	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy	SP654-01	Overhaul	1	EA	USD	USD	

Remarks:

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

Purchasing Agent	Authorized Signature	Date
Christian Brand		

Shipping Info:

WILL CALL

Order Info:

Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent

Christian Brand

Shipping Method

WILL CALL

Terms

Order Type

Repair Order

Priority

Scheduled
Maintenance
WP No:
WO No:

Order Reason

Scheduled Or Unscheduled
Maintenance



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

P/N Detail Print

Print Date: 10/15/2020 17:47

Page: 1 of 2



AC: N48901 Position: ONLY

P/N: 1172C0000-02

P/N S/N: SP649-01

MAIN DRAG STRUT, NLG

Batch: 2194604

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG DRAG STRUT REST	NLG MAIN DRAG STRUT RESTORATION		20000	4380		6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

P/N: 1172-0001

P/N S/N: AR003R032

HINGE POINT BOLT, MAIN DRAG STRUT NLG

Batch: 2194239

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT HINGE B	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1172-0037

P/N S/N: AR010P197

PINTLE PIN, MAIN DRAG STRUT NLG

Batch: 2193640

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1172-0037

P/N S/N: AR010P202

PINTLE PIN, MAIN DRAG STRUT NLG

Batch: 2194014

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:47

Page: 2 of 2



P/N: 1172-0066

P/N S/N: AR003D148

ACTUATOR ATTACH BOLT, MAIN DRAG STRUT, NLG

Batch: 2193943

Control Items Description
ACT BOLT LIFE 60K UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				0:00	0	0				TERMINATED
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

P/N: 1172A0200-01

P/N S/N: AT003E007

BOTTOM STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2200822

Control Items Description
NLG MAIN DRAG STRUT BOTTOM (LIFE LIMITED PART) NLG LOWER DRAG STRUT LIFE

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

P/N: 1172A0600-01

P/N S/N: AT009A009

TOP STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2193337

Control Items Description
NLG MAIN DRAG STRUT TOP STAY (LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

ASSEMBLY LOG CARD		
Unit Description	Partnumber	Serial Number
Main Drag Strut	1172C0000-02	SP649-01 ✓

SP aerospace and vehicle systems
Geldrop, The Netherlands

Final Assembly Date	Maximum T.B.O.	hours
		landings
Shelf Life	Ultimate Life	hours
months	63.600	landings

[illegible]

Customer / Principal	Contract Reference Number	SP Production Order Reference
LLI	230100-40	SL5000219

18 DEC 2001
Date Inspection Sign Stamp (PK38A)

Inspection Sign

Stamp

PK38A

When required, please contact S P for additional sheets (fax. 31-40-2809123)

[illegible][illegible][illegible]

TBO = Time Between Overhaul; A/C = Aircraft, OH = Overhaul

Logcard Cover Sheet

MOVING TECHNOLOGY FORWARD

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	serial no.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
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Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	Serial No.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	serial no.	SP649-01
----------------------	-----------------	------------	--------------	------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
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Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	Serial No.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	Serial No.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	serial no.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
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Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD		
Unit Description	Partnumber	Serial Number
Main Drag Strut	1172C0000-02	SP649-01 ✓

SP aerospace and vehicle systems
Geldrop, The Netherlands

Final Assembly Date	Maximum T.B.O.	hours
		landings
Shelf Life	Ultimate Life	hours
months	63.600	landings

[illegible]

Customer / Principal	Contract Reference Number	SP Production Order Reference
LLI	230100-40	SL5000219

18 DEC 2001
Date Inspection Sign Stamp (PK38A)

Inspection Sign

Stamp

PK38A

When required, please contact S P for additional sheets (fax. 31-40-2809123)

[illegible][illegible][illegible]

TBO = Time Between Overhaul; A/C = Aircraft, OH = Overhaul

Logcard Cover Sheet

MOVING TECHNOLOGY FORWARD

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	serial no.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
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Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Main Drag Strut	Partnumber	1172C0000-02	Serial No.	SP649-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Certificates for New Parts

Concessions

Previous Operator Traceability

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Responsible for content: LAXUG 616/ Erica Arellano

Prepared By: May Maryzana Maginde
Digitally signed by
May Maryzana
Maginde
Date: 2022.10.19
14:13:02 -07'00'

Activity-related document
IQ MOVE Document No.: 35383 (Rev. 4)



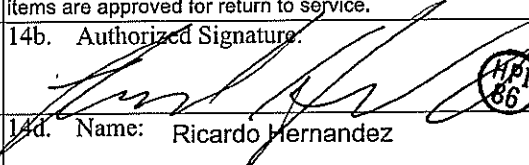
Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Evaluation Report and Airworthiness Release Certificate

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158297	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O.: 660041925 / 51678752 / / RO-3180-145501	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	MAIN SIDE STRUT ASSY-LR	2309-3500-503	1	290	OVERHAULED		
12. Remarks: Life Details: TSN: 43755:56 CSN: 33715 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-10-03 REV 16. DATED 29NOV2019. COMPLIED WITH ELEB-TD 2022-027741 DATED 05SEPT2022. SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA .							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Ricardo Hernandez		14e. Date: (dd/mm/yyyy) 21.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-LSS Sales Order: 660041925
Receipt Date: Aug 9, 2022
Customer JSX
Customer P.O. RO-3180-145501
Urgency
Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	2309-3500-503	MAIN SIDE STRUT ASSY-LR	290	ELEB - EQUIPAMENTOS LTDA DO BRASIL		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			14563.00	33715.00	6408:42	43755:56
Warranty		N/A				
Customer Instructions		OVERHAUL				

Initial Evaluation Results

UNIT RECEIVED IN NORMAL WEAR CONDITION, NO REPORTED MISSING OR DAMAGED PARTS.
LEFT HAND SIDE STRUT TO BE OVERHAULED IAW CMM

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-10-03 REV 16, DATED 29NOV2019
COMPLIED WITH ELEB-TD 2022-027741 DATED 05SEPT2022

CSO: 00:00
TSO: 00:00

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA .

Repair Action Descr. created by	U588484	Print by:	U588484	Print at:	Oct 13, 2022
As shipped Part Number	2309-3500-503	S / N	290	Publication	32-10-03



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Life Limit Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



LIFE LIMIT REPORT

EMB-145 MLG MAIN SIDE STRUT

Sales Order: 660041925			
Mfg P/N:	2309-3500-503	A/C:	N48901
Mfg S/N:	290	MSN:	501
CPN:	N/A	PO:	RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
2309-3500-503	MLG SIDE STRUT ASSY	290	UNLIMITED	33,715	N/A
2309-2510-505	LOWER MAIN SIDE STRUT ASSY	OF6988270/01	UNLIMITED	33,715	REPLACED
2309-2532-001	LOWER MAIN SIDE STRUT	4700381/01	60,000	33,715	REPLACED
2309-2502-501	UPPER MAIN SIDE STRUT ASSY	OF603918-4/06	UNLIMITED	33,715	N/A
2309-2524-001	UPPER MAIN SIDE STRUT	OF435419-0/07	60,000	33,715	26,285
2309-3706-501	SIDE STRUT CARDAN ASSY	OF-6752847/04	UNLIMITED	33,715	N/A
2309-2530-001	SIDE STRUT CARDAN	OF5267655-15	UNLIMITED	33,715	N/A
2309-3515-001	AXLE UPPER	OF-5949017-03	60,000	33,715	26,285
2309-3516-001	CENTRAL AXLE	1219044/001	60,000	14,563	45,437

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
2309-3500-503	290	33,715	N/A	0	N48901
2309-2510-505	1900670/001	0	N/A	N/A	NEW
2309-2532-001	3030165	0	60,000	N/A	NEW
2309-2502-501	OF603918-4/06	33,715	N/A	0	N48901
2309-2524-001	OF435419-0/07	33,715	26,285	0	N48901
2309-3706-501	OF-6752847/04	33,715	N/A	0	N48901
2309-2530-001	OF5267655-15	33,715	N/A	0	N48901
2309-3515-001	OF-5949017-03	33,715	26,285	0	N48901
2309-3516-001	1219044/001	14,563	45,437	0	N48901

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: May Maryzana Maginde Stamp: May Maryzana Maginde

Date: 10/19/2022

Digitally signed
by May Maryzana Maginde
Date: 2022.10.19 14:12:45 -0700



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Service Bulletin Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



Sales Order: 660041925			
Mfg P/N:	2309-3500-503	A/C:	N48901
Mfg S/N:	290	MSN:	501
CPN:	N/A	PO:	RO-3180-145501

[illegible]

PCW - PREVIOUSLY COMPLIED WITH
CW - COMPLIED WITH (THIS VISIT)
PARTIAL - PARTIALLY COMPLIED WITH
N/A - NOT ACCOMPLISHED
N/R - NOT REQUIRED

Prepared by: DANIEL AGUILAR Stamp: DLA2077

Date: 10/4/2022



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Purchase Order (PO, RO, SO)

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority	Order Reason	
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance	Scheduled Or Unscheduled Maintenance	
Line	Item / Description	Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
2	2309-2005-007 MLG Shock Absorber Assy	1281	Overhaul	1	EA	USD	USD
3	2309-2600-505 MLG Secondary Side Strut Assy	618	Overhaul	1	EA	USD	USD
4	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm	OF-9597937-0	Overhaul	1	EA	USD	USD
5	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
6	2309-2005-001 MLG Shock Absorber Assy	022	Overhaul	1	EA	USD	USD
7	2309-3500-503 MLG Main Side Strut Assembly	482	Overhaul	1	EA	USD	USD
8	2309-2600-507 MLG Secondary Side Strut Assy	903	Overhaul	1	EA	USD	USD
9	2309-3037-403 Trailing arm	OF493547-3101	Overhaul	1	EA	USD	USD
10	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly	00245	Overhaul	1	EA	USD	USD
11	1172C0000-02 Main Drag Strut Assy	SP649-01	Overhaul	1	EA	USD	USD
12	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy	SP654-01	Overhaul	1	EA	USD	USD
13	2309-3500-503 MLG Main Side Strut Assembly	OF6988270-01	Overhaul	1	EA	USD	USD

Remarks: TOTAL GEAR COST \$ 246,453.00

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

Purchasing Agent Christian Brand	Authorized Signature	Date
---	----------------------	------

Shipping Info:
WILL CALL

Order Info:
Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No: 9140018430
WP No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent

Christian Brand

Shipping Method

WILL CALL

Terms

Order Type

Repair Order

Priority

Scheduled
Maintenance
WO No:

Order Reason

Scheduled Or Unscheduled
Maintenance



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Certificates for New Parts

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



Packing List #:10104989
/ 01

Date: 22.07.2022

Page:2 / 2

Sold To: 500142

HAWKER PACIFIC AEROSPACE
- 11240 SHERMAN WAY
SUN VALLEY - CA
91352 - US

Ship To: 500142

HAWKER PACIFIC AEROSPACE
- 11240 SHERMAN WAY
SUN VALLEY - CA
91352 - US

Shipping instruction: FedEx Int Priority@ Account: 09152145-8

Shipping Point: Fort Lauderdale Distribution Center

Part Number Description/Comments	Country Origin	Stock Type	Unit	Qty Ordered	Qty Packed	Qty BO	Net Weight
Delivery: 802608768 Customer P.O. 470058621 2309-2510-505 MAIN LOWER SIDE STRUT, ASSY S/N: 1895430/001	BR	N	EA	4	1	3	11,000
Delivery: 802608769 Customer P.O. 470058621 2309-2510-505 MAIN LOWER SIDE STRUT, ASSY S/N: 1900670/001	BR	N	EA	3	1	2	11,000

Country of Origin is defined by I.A.T.A. - TACT rules chapter 1.3.1(1999)
STOCK TYPE: N - NEW R - REPAIRED O - OVERHAUL U - USED
Order Entry: LUILOPEZ

Packing 01 / 01

25 X 8 X 33 "

Gross Weight: 40.000 LB

Net Weight: 33.000 LB



Packing List #:10104989
/01

Date: 22.07.2022

Page:1 / 2

Sold To: 500142

HAWKER PACIFIC AEROSPACE
- 11240 SHERMAN WAY
SUN VALLEY - CA
91352 - US

Ship To: 500142

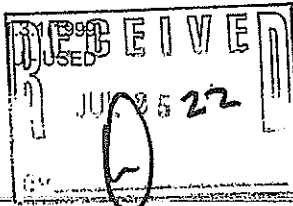
HAWKER PACIFIC AEROSPACE
- 11240 SHERMAN WAY
SUN VALLEY - CA
91352 - US

Shipping instruction: FedEx Int Priority® Account: 09152145-8

Shipping Point: Fort Lauderdale Distribution Center

Part Number Description/Comments	Country Origin	Stock Type	Unit	Qty Ordered	Qty Packed	Qty BO	Net Weight
Delivery: 802595179 Customer P.O. 470058544 502.067-38 RING,RETAINING,INTERNAL	BR	N	EA	2	2	0	0,000
2309-2080-003 BOLT	BR	N	EA	1	1	0	0,000
Customer P.O. 470058545 2301-0101-001 STREAMER, CAUTION TAG	BR	N	EA	5	5	0	0,000
2309-2605-001 WASHER,ADJUSTMENT	BR	N	EA	2	2	0	0,000
Customer P.O. 470058619 P2301-444S043 SCRAPER	US	N	EA	1	1	0	0,000
Customer P.O. 470058621 2309-2510-505 MAIN LOWER SIDE STRUT, ASSY S/N: 1897565/001	BR	N	EA	5	1	4	11,000

Country of Origin is defined by I.A.T.A. - TACT rules chapter
STOCK TYPE: N - NEW R - REPAIRED O - OVERHAUL
Order Entry: LUILOPEZ



Packing 01 / 01

25 X 8 X 33 "

Gross Weight: 40.000 LB

Net Weight: 33.000 LB

5000568406

1 País (Country) BRASIL		2 Título (Title) AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL (BRAZILIAN CIVIL AVIATION AUTHORITY) CERTIFICADO DE LIBERAÇÃO AUTORIZADA (AUTHORIZED RELEASE CERTIFICATE) ETIQUETA DE APROVAÇÃO DE AERONAVEGABILIDADE (AIRWORTHINESS APPROVAL TAG) FORMULÁRIO (FORM) F-100-01 (SEGVÃO 003)			3 Certificado No. (Certificate No./System Tracking Ref.) 2003776370	
4 Empresa (nome e endereço) (Organization Name and Address) Embraer S.A. 276 S.W. 34th Street - Ft. Lauderdale, FL 33315 - COP E-7203-01				5 Ordem de Serviço/Contrato/Nota Fiscal (Work Order, Contract or Invoice) 0070986662		
6 Item (Item)	7 Descrição (Description)	8 Número da Peça (Part Number)	9 Quantidade (Quantity)	10 Número de Série/Lote (Serial/Batch Number)	11 Categoria/Trabalho (Status/Work)	
000001	MAIN LOWER SIDE STRUT, AS	2309-2510-505	1	1900670/001	NEW	
12 Observações (Remarks) Export. MAIN LOWER P/N 2309-2532-001 S/N 3030165 Doc. Ref.(Ref. Document): 0802608769 / 2022.						
Partes com vida limitada devem ser acompanhadas de histórico de manutenção incluindo tempo total/ciclo total/tempo desde que novo. (Limited life parts must be accompanied by maintenance history including total time/total cycles/time since new.)						
13 Certifica que o(s) item(ns) acima identificado (s) foi (foram) fabricados (s) em conformidade aos: (Certifies that the item(s) identified above was (were) manufactured in conformity to): ☒ dados de projeto aprovados e está (ão) em condição segura de operação (approved design data and are in a condition for safe operation) ☐ dados de projeto não aprovado especificados no bloco 12 (non-approved design data specified in block 12)			18 ☐ Retorno ao serviço de acordo com RBAC 43.9 (Return to service in accordance with RBAC 43.9) ☐ Outros regulamentos especificados no bloco 12 (Others regulations specified in block 12) Certifica que, a menos especificado no bloco 12, o trabalho especificado no bloco 11, e descrito no bloco 12, foi executado de acordo com o Regulamento Brasileiro da Aviação Civil - RBAC 43 e, em relação ao trabalho realizado, a(s) peça (s) é (são) aprovada (s) para retorno ao serviço. (Certifies that, unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Brazilian Civil Aviation Regulations - RBAC 43 and in respect to the work performed the part(s) is (are) approved for return to service.)			
14 Assinatura do Representante da ANAC (ANAC Representative Signature) 		15 No. Autorização da ANAC (ANAC Authorization No.) DOI 2020-044 / COP E-7203-01		19 Pessoa Autorizada (Authorized Signature)		
16 Nome (Name) Roginaldo L. Palm		17 Data (Date) 22/JUL/2022		20 No. COM/COA (Certificate Number)		
				21 Nome (Name)		
				22 Data (Date)		
* O INSTALADOR DEVE FAZER VERIFICAÇÃO CRUZADA DA APLICABILIDADE ATRAVÉS DOS DADOS TÉCNICOS APLICÁVEIS (INSTALLER MUST CROSS CHECK ELIGIBILITY WITH APPLICABLE TECHNICAL DATA) RESPONSABILIDADE DO USUÁRIO / INSTALADOR É IMPORTANTE COMPREENDER QUE A EXISTÊNCIA DESTES DOCUMENTOS POR SI SÓ NÃO CONSTITUI AUTOMATICAMENTE UMA AUTORIZAÇÃO PARA INSTALAR A PARTE/COMPONENTE/CONJUNTO. SE O TRABALHO DO USUÁRIO/INSTALADOR É REALIZADO DE ACORDO COM OS REGULAMENTOS NACIONAIS DE UMA AUTORIDADE DE AERONAVEGABILIDADE DIFERENTE DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1, É ESSENCIAL QUE O USUÁRIO/INSTALADOR ASSEGURE QUE A SUA AUTORIDADE DE AERONAVEGABILIDADE ACEITA PARTES/COMPONENTES/CONJUNTOS DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1. AS DECLARAÇÕES NOS BLOCOS 13 E 18 NÃO CONSTITUEM UM CERTIFICADO DE INSTALAÇÃO. EM TODOS OS CASOS, OS REGISTROS DE MANUTENÇÃO DA AERONAVE DEVEM CONTER UM CERTIFICADO DE INSTALAÇÃO EMITIDO DE ACORDO COM REGULAMENTOS NACIONAIS PELO USUÁRIO/INSTALADOR ANTES QUE A AERONAVE POSSA SER LIBERADA PARA VOO. (USER / INSTALLER RESPONSIBILITY) (IT IS IMPORTANT TO UNDERSTAND THAT THE EXISTENCE OF THIS DOCUMENT ALONE DOES NOT CONSTITUTE AUTHORITY TO INSTALL THE PART/COMPONENT/ASSEMBLY.) (WHERE THE USER/INSTALLER WORK IS PERFORMED IN ACCORDANCE WITH THE NATIONAL REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS PARTS/COMPONENTS/ASSEMBLIES FROM THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1.) (STATEMENTS IN BLOCK 13 AND 18 DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES, AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.)						



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

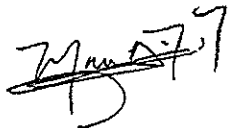
Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Concessions

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

IDR 37145

HAWKER PACIFIC
AEROSPACEFAA Repair Station RJ3R817L
EASA: DE.145.0001

Part Data		Event Data	
Part Description	UPPER MAIN SIDE STRUT ASSY	Repair Order	51680217
P/N	2309-2502-501:005TK	Event	L-00528-LSS
S/N	OF603918-4/06	Sales Order	660041925
Customer S/N		Product (A/C Type)	ERJ-145
Detail P/N	2309-2524-001:005TK	Tail Sign	N48901
Detail S/N	OF435419-0/07	Customer/Operator	101896 JSX
		Customer PO	RO-3180-145501
IDR Details		Additional Data	
IDR Status	CL - Closed	TSN	43756.13 FH
IDR Issue Date	18.Aug.2022	CSN	33715.00 CYC
IDR Close Date	27.Sep.2022	OEM Ref.	32-10-03
		OEM	ELEB
Discrepancy			
LUG (4A) MACHINED UNDERSIZED			
OEM/DER Response			
ELEB-TD 2022-027741		Response date	05.Sep.2022
Customer Response			
NOT REQUIRED FOR JSX		Response date	05.Sep.2022
Engineer / Signature	Date	Inspector / Signature	Date
	SEP 27 2022 Stamp 		SEP-28-22 Stamp M.D 2115

IDR 37145

This Document holds no airworthiness approval and reference to OEM approval is required. The purpose of this document is for transmittal of engineering information within the Part 145 production facility only.



Hawker Pacific Aerospace
11240 SHERMAN WAY
SUN VALLEY, CA 91352-4942



FAA Repair Station RJ3R817L

EASA: DE.145.0001

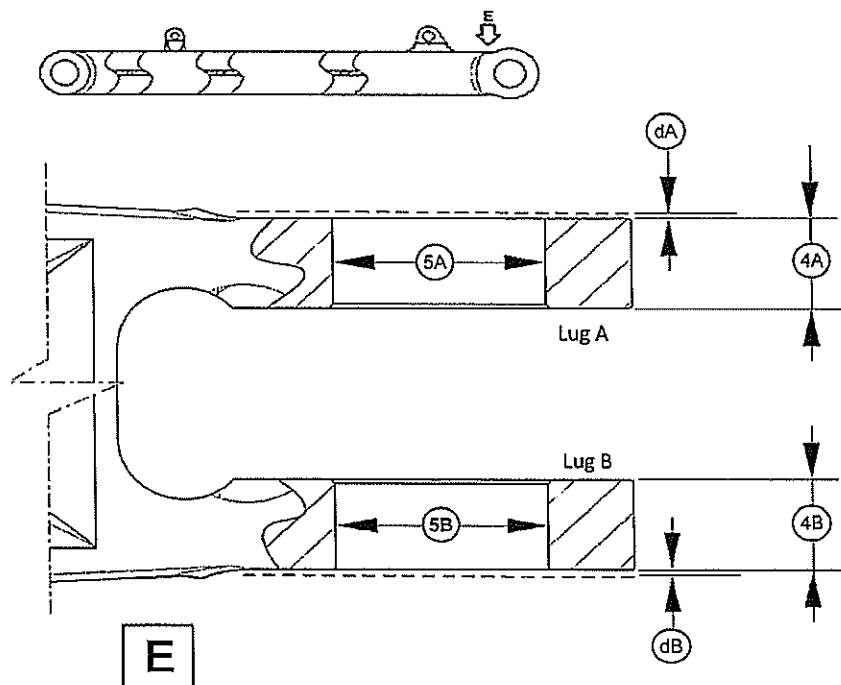
Issue No.: 2

28.SEP.2020

Inspection Discrepancy Report (IDR)

IDR Document No. 37145	Rev. No. 0	Date 9/1/2022	Sales Order No. 660041925	Work Order No. 51680217	
Part Description UPPER MAIN SIDE STRUT ASSY	Part Number 2309-2502-501		Serial Number OF603918-4/06	A/C Type EMB-145	CMM 32-10-03
Detail Part Description UPPER MAIN SIDE STRUT	Detail Part Number 2309-2524-001		Detail Serial Number OF435419-0/17	A/C Tail No. (MSN) N48901	
Description Lug (4A) machined undersize to remove defects. All other dimensions are within CMM limits.					
Proposed Resolution If structurally acceptable, HPA proposes to; - Perform fluorescent penetrant inspection on reworked area - Fabricate and install washer to account for missing material - Complete rest of repair and refinish in accordance with CMM					

REFERENCE #	4A	4B	5A	5B	dA (removed)	dB (removed)
Design Dim.	0.8759 (Note 1)	0.8759 (Note 1)	1.8907 1.8897	1.8907 1.8897	NOT APPLICABLE	NOT APPLICABLE
Repair Limit	MIN 0.8167	MIN 0.8167	1.9379	1.9379	0.0314 MAX	0.0314 MAX
As Received/ Post Rework	0.8300	0.8830	1.9890	1.8903	0.0443	N/A



ALL DIMENSIONS ARE IN INCHES

TODAY'S DATE:	9/1/2022	REPAIR CLASSIFICATION:	Minor
NEED BY/DUE DATE:	9/8/2022	SUBMITTED BY:	HPA Engineering
PART CSN:	33715.00	EMAIL:	eng_configuration@hawker.com
PART TSN:	43756:08	PHONE NUMBER:	+1 (818) 765-6201



**CUSTOMER
SUPPORT**

ELEB Equipamentos Ltda.

Rua Itabaiana, 40 – 12237-540 - São José dos Campos - SP – Brazil

Technical Disposition

ELEB-TD 2022-027741

REV.: /

SUBJECT

EMB-145 MLG Upper Main Side Strut Repair

CONTACT

To: Hawker Pacific Aerospace (HPA)
Phone: +1-818- 765-6201 x 449
jesus.gonzalez-ramirez@hawker.com

From: ELEB Customer Support Engineering
Phone: + 55 12 3935-5313/5456/5216
technicalsupport.eleb@embraer.com.br

IDENTIFICATION

Operator / Customer:	A/C:	A/C S/N / REG:	FH:	FC:
Delux Public Charter - JETSUITEX	EMB-145	145501 (N48901)	N/I	N/I
Part Number:	Part Number S/N:	FH:	FC:	Assembly (NHA) P/N / S/N
2309-2524-001	OF435419-0/17	43756:08	33715.00	2309-2502-501 / OF603918-4/06

REPAIR DATA

Repair Classification: <i>(made by requester)</i>	Minor	Reference:	# B
Permanente Repair?	Yes	Limitation for temporary repair:	Not applicable

RULES

- The technical disposition contained in this document is based solely on the data explicitly reported by the Customer. As no other information was provided by the Customer, ELEB assumes that the area/structural component(s) related to this technical disposition did not have any other previous damage and/or repair incurred to it. Therefore, ELEB disclaims any and all responsibility for incorrect, inaccurate or incomplete information provided by the Customer related to this matter.
- In case of any conflict between this document and any mandatory requirements issued by the Local Regulatory Authority, including but not limited to Airworthiness Directives, the Local Regulatory Authority document/orientation shall prevail.
- The contents herein are intended for information only and do not constitute airworthiness release approval. Any such approval must be given by the owner or operator of the aircraft according to the local regulatory authority procedures.

REFERENCES

- # A: E-mail received from Mr. Jesus Gonzalez Ramirez on September 1, 2022;
- # B: Inspection Discrepant Report # IDR 37145;
- # C: CMM TP 145/1190_32-10-03.

REVISION HISTORY

Rev. 1: First issue.

**ELEB****CUSTOMER
SUPPORT****ELEB Equipamentos Ltda.**

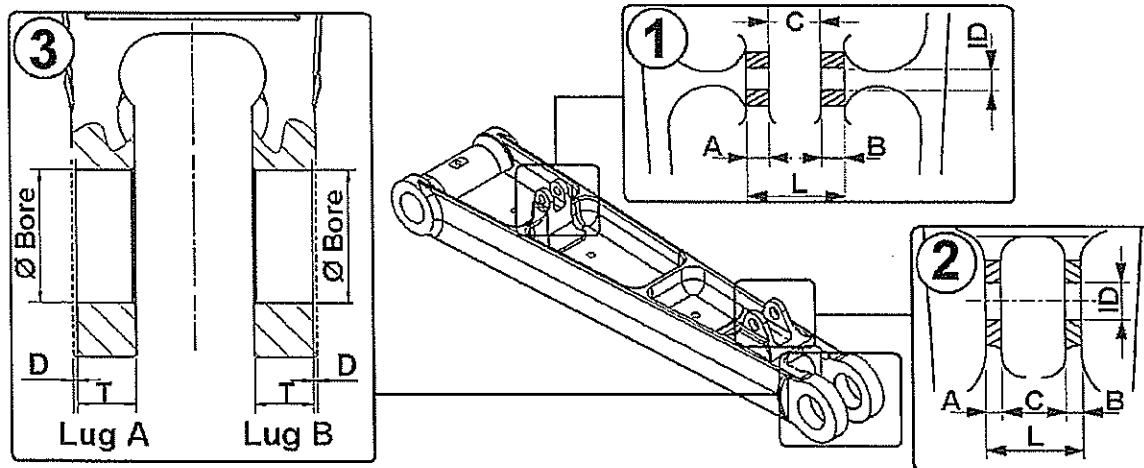
Rua Itabalana, 40 – 12237-540 - São José dos Campos - SP – Brazil

Technical Disposition**ELEB-TD 2022-027741**

REV.: /

DESCRIPTION / REPORT / REQUEST

As reported by HPA through Reference # B, in order to remove corrosion, the MLG Upper Main Side Strut lugs needed to be machined according to dimension shown in the sketch and tables below:



	Area 1 (Unlock Actuator Attach Lug)				
Reference	ID (2x)	Lug A	Lug B	C	L
Repair	Within CMM limits <i>Lug A</i>	Within CMM limits	Within CMM limits	Within CMM limits	Within CMM limits
	Within CMM limits <i>Lug B</i>				
Design/ CMM limit	13.218 mm	8.050 mm (minimum)		19.3 +0.1 mm	35.50 mm (minimum)

	Area 2 (Secondary Side Strut Attach Lug)				
Reference	ID (2x)	Lug A	Lug B	C	L
Repair	Within CMM limits Lug A	Within CMM limits	Within CMM limits	Within CMM limits	Within CMM limits
	Within CMM limits Lug B				
Design/ CMM limit	18.218 mm (maximum)	(6.975) minimum Repair valid only for inner faces		29.0 -0.1 mm Design only	44.85 mm (minimum)

**ELEB****CUSTOMER
SUPPORT****ELEB Equipamentos Ltda.**

Rua Itabaiana, 40 – 12237-540 - São José dos Campos - SP – Brazil

Technical Disposition**ELEB-TD 2022-027741**

REV.: /

Area 3 (Lower Main Side Strut Attach Lug)					
Reference	Machined Length	D (depth)	T (Thickness)	Ø Bore (item 5 as per CMM reference)	Ø Bore (item 4 as per CMM reference)
Repair Lug A	Not Informed	0.0443" (1.125 mm)	0.8300" (21.082 mm)	1.9890" (50.520 mm)	-----
Repair Lug B	Not Informed	Not Machined	0.8830" (22.428 mm)	-----	1.8903" (48.014 mm)
CMM limit	Not Applicable	0.8 mm (maximum)	20.745 mm	50.995 mm (maximum)	
Design	Not Applicable		22.250 mm	48.00 H7 mm	

HPA asks if these repairs can be structurally acceptable to return the component in service.

**ELEB****CUSTOMER
SUPPORT****ELEB Equipamentos Ltda.**

Rua Itabaiana, 40 – 12237-540 - São José dos Campos - SP – Brazil

Technical Disposition**ELEB-TD 2022-027741**

REV.: /

TECHNICAL DISPOSITION

Provided that procedure below is accomplished ELEB's Engineering agrees that the Upper Main Side Strut is structurally and functionality acceptable to return to service:

1. All Areas:

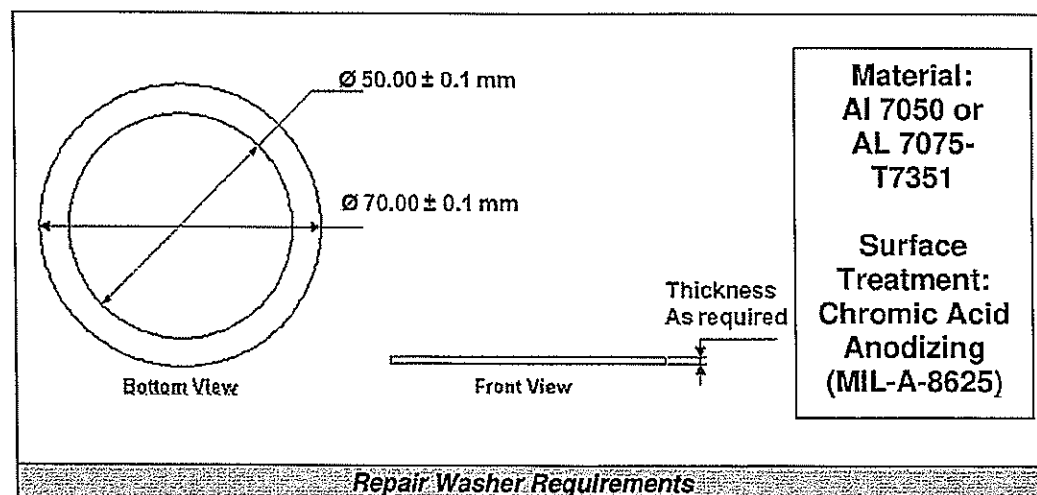
- a) Perform NDT inspections as per CMM TP145-1190_32-10-03, section 501;

Note: Cracks and corrosion are not allowed.

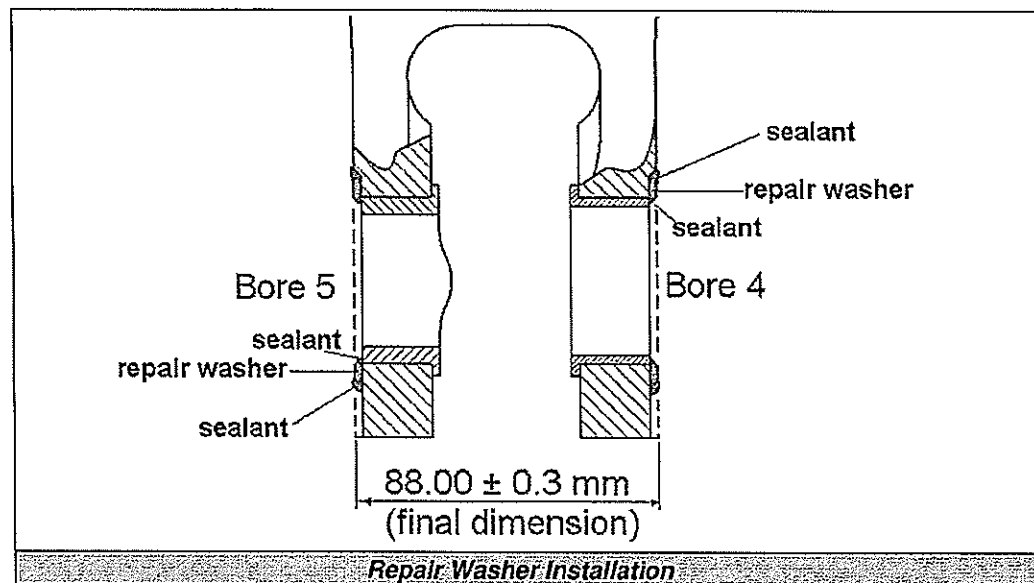
- b) Restore the surface protective coating of the Upper Main Side Strut according to CMM instructions (refer to section 601).

2. Area 3 (Lower Main Side Strut Attach Lug):

- a) Install the oversize bushings according to the CMM TP145-1190_32-10-03, section 601;
- b) To restore the proper fitment in order to achieve the external face to face dimension of 88.00 ± 0.3 mm, a special repair washers must be installed on external side of the lug "A" (CMM reference: bore # 5) and/or lug "B" (CMM reference: bore # 4) according to instructions below (whichever is applicable):
- i. Manufacture the washers according to sketch below:



- c) Bond the washer(s) in the face of the reworked lug(s) according to sketch below. To bond use Loctite 454 (commercial available):



- d) Apply sealant P/S 870B-2 or PR-1826 B2 ALU around the edges of the special washer (see figure above);
- e) Apply varnish P/N 683-3-2/X-310A on the surface of the sealant 24 hours after the sealant application in case you use the sealant P/S870B-2;

3. All Areas:

- a) Refinish the part as per CMM TP145-1190_32-10-03 instructions.



Landing Gear Maintenance Report

E-145 MLG MAIN SIDE STRUT ASSY

Sales Order: 660041925	
Mfg P/N: 2309-3500-503	A/C: N48901
Mfg S/N: 290	MSN: 501
CPN: N/A	PO: RO-3180-145501

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

CUSTOMER: JSX

PART NUMBER: 2309-3500-503

SERIAL NUMBER: 290

Assembly CSN: N/A

Assembly CSO: N/A

Date of Last Overhaul: N/A

Date Removed: N/A

Sub Part details

Part No received	Nomenclature	Actual Serial Number from records	Life Limit	CSN	Cy Rem
2309-2515-001	Shaft		60,000		
2309-3515-001	Shaft	OF-5949017-03	60,000	33,715	26,285
2309-2524-001	Upper Main Side		60,000		
2309-2532-001	Lower Main Side		60,000		
2309-3516-001	Pivot Pin		60,000		
2309-3516-001	Pivot Pin		60,000		

Customer Name Signature James Weaver

Customer Title Chief Inspector

Date Created 10/11/2022

P/N Detail Print

Print Date: 10/15/2020 17:56

Page: 1 of 3



AC: N48901 Position: LH

■ P/N: 2309-3500-503

P/N S/N: 290

MAIN SIDE STRUT ASSY

Batch:

2169128

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
MLG SIDE STRUT REST	UNSCHED - T/C "MAIN GEAR REMOVE"		20000	4380		6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						43755:56	33715	1475	10/01/2016	0:00	0	0	

■ P/N: 2309-2502-501

P/N S/N: OF603918-4/06

MLG MAIN UPPER SIDE STRUT ASSY

Batch:

2169192

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
MLG SIDE STRUT REST	UNSCHED - T/C "MAIN GEAR REMOVE"		20000	4380		18241:14	14563	3230	0:00	5437	1150	OPEN
MLG UPPER MAIN SIDE STRUT	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR REMOVE"		60000			43756:08	33715	3230	0:00	26285	0	OPEN
TSI						18241:14	14563	3230	0:00	0	0	
TSN						43756:08	33715	3230	0:00	0	0	

■ P/N: 2309-2524-001

P/N S/N: OF435419-0/07

MLG MAIN UPPER SIDE STRUT

Batch:

7574535

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
MLG UPPER MAIN SIDE STRUT	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR REMOVE"		60000			43756:08	33715	3230	0:00	26285	0	OPEN
TSI						18241:14	14563	3230	0:00	0	0	
TSN						43756:08	33715	3230	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:56

Page: 2 of 3



■ P/N: 2309-2510-505

P/N S/N: OF6988270/01

Control Items	Description
MLG LOWER MAIN SIDE STRUT	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR R/R"
MLG SIDE STRUT REST	UNSCHED - T/C "MAIN GEAR REMOVE"
TSI	
TSN	

MLG MAIN LOWER SIDE STRUT ASSY

Batch: 2169067

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	33715	1475	0:00	26285	0	OPEN
	20000	4380		10428:38	8416	2101	0:00	11584	2279	OPEN
				43755:56	33715	1475	0:00	0	0	
				43755:56	33715	1475	0:00	0	0	

■ P/N: 2309-2532-001

P/N S/N: 4700381/01

Control Items	Description
MLG LOWER MAIN SIDE STRUT	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR R/R"
TSI	
TSN	

MLG MAIN LOWER SIDE STRUT

Batch: 7578598

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			10428:38	8416	2101	0:00	51584	0	OPEN
				43755:56	33715	3230	0:00	0	0	
				43755:56	33715	3230	0:00	0	0	

■ P/N: 2309-3515-001

P/N S/N: OF-5979017-03

Control Items	Description
MLG MAIN SIDE STRUT SHAFT	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR REMOVE"
TSI	
TSN	
UPR AXL LIFE35K	UNSCHED - T/C "MAIN GEAR REMOVE"

SHAFT, MLG SIDE STRUT

Batch: 2169451

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	33715	1475	0:00	26285	0	OPEN
				43755:56	33715	1475	0:00	0	0	
				43755:56	33715	1475	0:00	0	0	
				0:00	0	0				TERMINATED

■ P/N: 2309-3516-001

P/N S/N: 1219044/001

Control Items	Description
MLG MAIN SIDE STRUT PIVOT PIN	(LIFE LIMITED PART) UNSCHED - T/C "MAIN GEAR REMOVE"
TSI	
TSN	

PIVOT PIN, MLG MAIN SIDE STRUT

Batch: 2108361

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	14563	1475	0:00	45437	0	OPEN
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:56

Page: 3 of 3



■ P/N: 2309-3706-501

P/N S/N: OF-6752847/04

CARDAN ASSY, MLG MAIN SIDE STRUT

Batch:

2169119

Control Items	Description
CRDN S/STRUT LIF60K	UNSCHED - T/C "MAIN GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				0:00	0	0				TERMINATED
				43755:56	33715	1475	0:00	0	0	
				43755:56	33715	1475	0:00	0	0	



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 9/23/2022

Responsible for content: LAXUG 616/ Erica Arellano

Activity-related document
IQ MOVE Document No.: 35383 (Rev. 4)

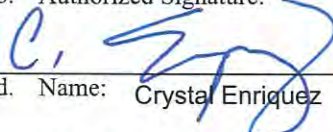


Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48801
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158284	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE		Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O.: 660041940 / / / RO-3180-145501	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	MAIN DRAG STRUT	1172C0000-02	1	SP649-01	OVERHAULED		
12. Remarks: Life Details: TSN: 40943:45 CSN: 31835 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-15 REV.6 (DATED 03MAY2013) AND CRM 32-21-15-R REV.0 (DATED 03MAY2013) ALL COMPONENTS ARE FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY. SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature: 		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Crystal Enriquez		14e. Date: (dd/mm/yyyy) 19.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NDB Sales Order: 660041940
Receipt Date: Aug 9, 2022
Customer JSX
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1172C0000-02	MAIN DRAG STRUT	SP649-01	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy NONE			CSO	CSN 31835.00	TSO	TSN 40943:45
Warranty		N/A				
Customer Instructions		N/A				

Initial Evaluation Results

NOSE DRAG STRUT DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-10 AND CRM 32-21-10-R

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-15 REV. 6, DATED 03MAY2013, AND CRM 32-21-15-R REV. 0 DATED 03MAY2013

CSO: ZERO
TSO: ZERO

ALL COMPONENTS ARE FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY.

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by	U753070	Print by:	U753070	Print at:	Sep 23, 2022
As shipped Part Number	1172C0000-02	S / N	SP649-01	Publication	32-21-15



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report



LIFE LIMIT REPORT

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1172C0000-02	NLG MAIN DRAG STRUT	SP649-01	UNLIMITED	31,835	N/A
1172A0600-01	MAIN DRAG STRUT TOP STAY ASSY.	AT009A009	UNLIMITED	31,835	N/A
1172-0601	MAIN DRAG STRUT TOP STAY	AT009A009	60,000	31,835	28,165
1172A0200-01	MAIN DRAG STRUT BOTTOM STAY ASSY.	AT003E007	UNLIMITED	31,835	N/A
1172-0201	MAIN DRAG STRUT BOTTOM STAY	AT003E007	60,000	31,835	28,165
1172-0066	ACTUATOR ATTACH BOLT, MAIN DRAG STRUT	AR003D148	UNLIMITED	31,835	N/A
1172-0037	PINTLE PIN	AR010P197	60,000	31,835	28,165
1172-0037	PINTLE PIN	AR010P202	60,000	31,835	28,165
1172-0001	HINGE BOLT	AR003R032	60,000	31,835	28,165

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1172C0000-02	SP649-01	31,835	N/A	0	N48901
1172A0600-01	AT009A009	31,835	N/A	0	N48901
1172-0601	AT009A009	31,835	28,165	0	N48901
1172A0200-01	AT003E007	31,835	N/A	0	N48901
1172-0201	AT003E007	31,835	28,165	0	N48901
1172-0066	AR003D148	31,835	N/A	0	N48901
1172-0037	AR010P197	31,835	28,165	0	N48901
1172-0037	AR010P202	31,835	28,165	0	N48901
1172-0001	AR003R032	31,835	28,165	0	N48901

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 9/22/2022



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-146501

. Service Bulletin Report

Sales Order: 660041940

Mfg P/N: 1172C0000-02

A/C: N48901

Mfg S/N: SP649-01

MSN: 501

CPN: N/A

PO: RO-3180-145501

Service Bulletin Report

E145 NLG MAIN DRAG STRUT ASSY

[illegible]

LEGEND:

PCW - PREVIOUSLY COMPLIED WITH

CW - COMPLIED WITH (THIS VISIT)

PARTIAL - PARTIALLY COMPLIED WITH

N/A - NOT ACCOMPLISHED

N/R - NOT REQUIRED

Prepared by: ABIGAIL CRUZ Stamp: 2211 AC

Date: 24-Aug-22



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accounts payable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority		Order Reason	
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance		Scheduled Or Unscheduled Maintenance	
Line	Item / Description	Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost	
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD	
2	2309-2005-007 MLG Shock Absorber Assy	1281	Overhaul	1	EA	USD	USD	
3	2309-2510-505 MLG MAIN SIDE STRUT ELEB - Lower main side strut	OF6988270--01	Overhaul	1	EA	USD	USD	
4	2309-2600-505 MLG Secondary Side Strut Assy	618	Overhaul	1	EA	USD	USD	
5	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm	OF-9597937-0	Overhaul	1	EA	USD	USD	
6	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD	
7	2309-2005-001 MLG Shock Absorber Assy	022	Overhaul	1	EA	USD	USD	
8	2309-3500-503 MLG Main Side Strut Assembly	482	Overhaul	1	EA	USD	USD	
9	2309-2600-507 MLG Secondary Side Strut Assy	903	Overhaul	1	EA	USD	USD	
10	2309-3037-403 Trailing arm	OF493547-3101	Overhaul	1	EA	USD	USD	
11	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly	00245	Overhaul	1	EA	USD	USD	
12	1172C0000-02 Main Drag Strut Assy	SP649-01	Overhaul	1	EA	USD	USD	
13	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy	SP654-01	Overhaul	1	EA	USD	USD	

Remarks:

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

Purchasing Agent	Authorized Signature	Date
Christian Brand		

Shipping Info:

WILL CALL

Order Info:

Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent

Christian Brand

Shipping Method

WILL CALL

Terms

Order Type

Repair Order

Priority

Scheduled
Maintenance
WP No:
WO No:

Order Reason

Scheduled Or Unscheduled
Maintenance



Landing Gear Maintenance Report

E145 NLG MAIN DRAG STRUT ASSY

Sales Order: 660041940	
Mfg P/N: 1172C0000-02	A/C: N48901
Mfg S/N: SP649-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

P/N Detail Print

Print Date: 10/15/2020 17:47

Page: 1 of 2



AC: N48901 Position: ONLY

P/N: 1172C0000-02

P/N S/N: SP649-01

MAIN DRAG STRUT, NLG

Batch: 2194604

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG DRAG STRUT REST	NLG MAIN DRAG STRUT RESTORATION		20000	4380		6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

P/N: 1172-0001

P/N S/N: AR003R032

HINGE POINT BOLT, MAIN DRAG STRUT NLG

Batch: 2194239

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT HINGE B	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1172-0037

P/N S/N: AR010P197

PINTLE PIN, MAIN DRAG STRUT NLG

Batch: 2193640

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N: 1172-0037

P/N S/N: AR010P202

PINTLE PIN, MAIN DRAG STRUT NLG

Batch: 2194014

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG MAIN DRAG STRUT PINTLE F	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR R/R"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:47

Page: 2 of 2



■ P/N: 1172-0066

P/N S/N: AR003D148

ACTUATOR ATTACH BOLT, MAIN DRAG STRUT, NLG

Batch: 2193943

Control Items Description
ACT BOLT LIFE 60K UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				0:00	0	0				TERMINATED
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

■ P/N: 1172A0200-01

P/N S/N: AT003E007

BOTTOM STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2200822

Control Items Description
NLG MAIN DRAG STRUT BOTTOM (LIFE LIMITED PART) NLG LOWER DRAG STRUT LIFE

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

■ P/N: 1172A0600-01

P/N S/N: AT009A009

TOP STAY ASSY, MAIN DRAG STRUT NLG

Batch: 2193337

Control Items Description
NLG MAIN DRAG STRUT TOP STAY (LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Certificates for New Parts

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 10/17/2022

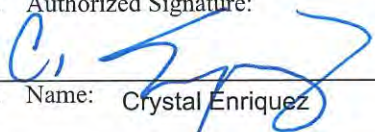


Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

1. Approving Civil Aviation Authority / Country FAA / United States	2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag	3. Form Tracking Number: 158292			
4. Organization Name and Address:  HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice No./P.O.: 660041941 / / / RO-3180-145501			
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	NLG AUX DRAG	1173B0000-03	1	SP654-01	OVERHAULED
12. Remarks: Life Details: TSN: 40943:45 CSN: 31835 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-20 REV.4 (DATED 23NOV2012) AND CRM 32-21-20-R REV.ORIG (DATED 23NOV2012) SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.			14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:	
				 	
13d. Name:		13e. Date:		14c. Approval Certificate No.:	
				RJ3R817L	
				14e. Date: (dd/mmm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES					
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NAD Sales Order: 660041941
Customer JSX Receipt Date: Aug 9, 2022
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	1173B0000-03	NLG AUX DRAG	SP654-01	LIEBHERR AEROSPACE LINDENBERG GMBH	ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO
NONE				31835.00	40943:45
Warranty	N/A				
Customer Instructions	OVERHAUL				

Initial Evaluation Results

AUXILLAY DRAG DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-10 AND CRM 32-21-10-R

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-20 REV 4, DATED 23NOV2012, AND CRM 32-21-20-R REV ORIG, DATED 23NOV2012

CSO: 0:00
TSO: 0:00

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by	U753070	Print by:	U753070	Print at:	Oct 12, 2022
As shipped Part Number	1173B0000-03	S / N	SP654-01	Publication	32-21-20



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report



LIFE LIMIT REPORT

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941

Mfg P/N: 1173B0000-03 A/C: N48901

Mfg S/N: SP654-01 MSN: 501

CPN: N/A

PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1173B0000-03	NLG AUX DRAG STRUT	SP654-01	UNLIMITED	31,835	N/A
1173A0200-01	UPR AUX DRAG STRUT ASSY	AT008A008	UNLIMITED	31,835	N/A
1173-0201	UPR AUX DRAG STRUT	AT008A008	60,000	31,835	28,165
1173A0100-02	LWR AUX DRAG STRUT ASSY	AR003A117	UNLIMITED	31,835	N/A
1173-0101	LWR AUX DRAG STRUT	AR003A117	60,000	31,835	28,165
1173-0001	HINGE POINT BOLT	AR007R096	60,000	31,835	28,165
2000A0830K01	CARDAN JOINT	KC10045	60,000	14,563	REPLACED
1173A0700-01	SPRING ASSY	SP1322-01	UNLIMITED	31,835	N/A
9027A2006-01	SPRING	SP1322-01	60,000	31,835	28,165
1173A0700-01	SPRING ASSY	SP1323-01	UNLIMITED	31,835	N/A
9027A2006-01	SPRING	SP1323-01	60,000	31,835	28,165

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1173B0000-03	SP654-01	31835	N/A	0	N48901
1173A0200-01	AT008A008	31835	N/A	0	N48901
1173-0201	AT008A008	31835	28165	0	N48901
1173A0100-02	AR003A117	31835	N/A	0	N48901
1173-0101	AR003A117	31835	28165	0	N48901
1173-0001	AR007R096	31835	28165	0	N48901
2000A0830K01	KC10532	0	60000	N/A	NEW
1173A0700-01	SP1322-01	31,835	N/A	0	N48901
9027A2006-01	SP1322-01	31835	28165	0	N48901
1173A0700-01	SP1323-01	31835	N/A	0	N48901
9027A2006-01	SP1323-01	31835	28165	0	N48901

Prepared By: DAVID LOUD

Stamp: 

Date: 10/17/2022



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Service Bulletin Report



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority	Order Reason	
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance	Scheduled Or Unscheduled Maintenance	
Line	Item / Description	Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
2	2309-2005-007 MLG Shock Absorber Assy	1281	Overhaul	1	EA	USD	USD
3	2309-2600-505 MLG Secondary Side Strut Assy	618	Overhaul	1	EA	USD	USD
4	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm	OF-9597937-0	Overhaul	1	EA	USD	USD
5	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
6	2309-2005-001 MLG Shock Absorber Assy	022	Overhaul	1	EA	USD	USD
7	2309-3500-503 MLG Main Side Strut Assembly	482	Overhaul	1	EA	USD	USD
8	2309-2600-507 MLG Secondary Side Strut Assy	903	Overhaul	1	EA	USD	USD
9	2309-3037-403 Trailing arm	OF493547-3101	Overhaul	1	EA	USD	USD
10	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly	00245	Overhaul	1	EA	USD	USD
11	1172C0000-02 Main Drag Strut Assy	SP649-01	Overhaul	1	EA	USD	USD
12	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy	SP654-01	Overhaul	1	EA	USD	USD
13	2309-3500-503 MLG Main Side Strut Assembly	OF6988270-01	Overhaul	1	EA	USD	USD

Remarks: TOTAL GEAR COST \$ 246,453.00

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

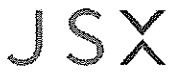
Purchasing Agent Christian Brand	Authorized Signature	Date
--	----------------------	------

Shipping Info:

WILL CALL

Order Info:

Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No: 9140018430
WP No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent	Shipping Method	Terms	Order Type	Priority	Order Reason
Christian Brand	WILL CALL		Repair Order	Scheduled Maintenance WO No:	Scheduled Or Unscheduled Maintenance



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Certificates for New Parts

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving competent Authority / Country Luftfahrt-Bundesamt/ Germany		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number  2101336780																																					
4. Organisation Name and Address D9893 LIEBHERR LIEBHERR-AEROSPACE LINDENBERG GmbH • Pfaenderstr. 50-52 - 88161 • Lindenberg • Germany • Phone: +49 (0) (8381) 46-0 • Fax: +49 (0) (8381) 46 4377				5. Work Order / Contract / Invoice 424473 / 418198																																					
6. Item	7. Description	8. Part No	9. Qty.	10. Serial No	11. Status / Work																																				
1	CARDAN	2000A0830K01	6	KC10528	NEW																																				
2	CARDAN	2000A0830K01		KC10532	NEW																																				
3	CARDAN	2000A0830K01		KC10533	NEW																																				
4	CARDAN	2000A0830K01		KC10540	NEW																																				
5	CARDAN	2000A0830K01		KC10543	NEW																																				
6	CARDAN	2000A0830K01		KC10544	NEW																																				
7	SCREW	1661-0040	2	N/A	NEW																																				
8	SLEEVE	1661-0041	2	N/A	NEW																																				
12. Remarks Purchase Order Number: IDENTCODE: Specific remarks per item: <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Item</th> <th>DMF</th> <th>BatchNo.:</th> <th>Orderpos.</th> </tr> </thead> <tbody> <tr><td>1</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>2</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>3</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>4</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>5</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>6</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>7</td><td>N/A</td><td>R/19</td><td>-</td></tr> <tr><td>8</td><td>N/A</td><td>HM02K</td><td>-</td></tr> </tbody> </table>						Item	DMF	BatchNo.:	Orderpos.	1	N/A	N/A	-	2	N/A	N/A	-	3	N/A	N/A	-	4	N/A	N/A	-	5	N/A	N/A	-	6	N/A	N/A	-	7	N/A	R/19	-	8	N/A	HM02K	-
Item	DMF	BatchNo.:	Orderpos.																																						
1	N/A	N/A	-																																						
2	N/A	N/A	-																																						
3	N/A	N/A	-																																						
4	N/A	N/A	-																																						
5	N/A	N/A	-																																						
6	N/A	N/A	-																																						
7	N/A	R/19	-																																						
8	N/A	HM02K	-																																						
13a. Certifies that the items identified above were manufactured in conformity to: ☒ approved design data and are in a condition for safe operation. ☐ non approved design data specified in block 12.			14a. ☐ Part-145.A.50 Release to Service ☐ Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.																																						
13b. Authorised Signature  STEFAN HUTTERER CERTIFYING INSPECTOR Electronic Signature on File		13c. Approval / Authorisation Number DE.21G.0028		14b. Authorised Signature  STEFAN HUTTERER CERTIFYING INSPECTOR																																					
13d. Name Stefan Hutterer		13e. Date (dd mm yy) 12 Dec 2021		14c. Certificate / Approval Ref. No  STEFAN HUTTERER CERTIFYING INSPECTOR																																					
14d. Name  STEFAN HUTTERER CERTIFYING INSPECTOR		14e. Date (dd mm yy)  STEFAN HUTTERER CERTIFYING INSPECTOR		14f. Date (dd mm yy)  STEFAN HUTTERER CERTIFYING INSPECTOR																																					



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

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AC: N48901 Position: ONLY

■ P/N: 1173B0000-03

P/N S/N: SP654-01

AUXILIARY DRAG STRUT, NLG

Batch:

2200436

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG AUXILIARY DRAG STRUT A	NOSE LANDING GEAR REPLACEMENT REQUIRED PLANNING NOTE: CREATE UNSCHEDULED TASK CARDS FOR NOSE GEAR REMOVAL/INSTALLATION					0:00	0	0	06/26/2014				TERMINATED
NLG AUXILIARY DRAG STRUT R	NLG AUX DRAG STRUT RESTORATION	20000	4380			6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

■ P/N: 1173-0001

P/N S/N: AR007R096

HINGE POINT BOLT, AUX DRAG STRUT NLG

Batch:

2199642

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG HINGE POINT BOLT	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1173A0100-02

P/N S/N: AR003A117

LOWER AUXILIARY DRAG STRUT ASSY, NLG

Batch:

2198917

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG LOWER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1173A0200-01

P/N S/N: AT008A008

UPPER AUXILIARY DRAG STRUT ASSY, NLG

Batch:

2200367

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG UPPER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:48

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■ P/N: 1173A0700-01

P/N S/N: SP1322-01

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199198

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

Control Items

Description

NLG DOWNLOCK SPRING 60K

(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 80000 FC

NLG SPRING RESTORE

NLG SPRING CARTRIDGE RESTORATION

TSI

TSN

■ P/N: 1173A0700-01

P/N S/N: SP1323-01

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199199

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

Control Items

Description

NLG DOWNLOCK SPRING 60K

(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 80000 FC

NLG SPRING RESTORE

NLG SPRING CARTRIDGE RESTORATION

TSI

TSN

■ P/N: 2000A0830K01

P/N S/N: KC10045

CARDAN JOINT, AUX DRAG STRUT NLG

Batch: 2303079

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	14563	1475	0:00	45437	0	OPEN
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

NLG CARDAN JOINT

(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

■ P/N: AK-1173-0011

P/N S/N: XJTNSN01

AXLE, AUXILIARY DRAG STRUT NLG

Batch: 2303080

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

TSI

TSN

P/N Detail Print

Print Date: 10/15/2020 17:48

Page: 3 of 3



■ P/N: AK-1173-0011

P/N S/N: XJTNSN02

AXLE, AUXILIARY DRAG STRUT NLG

Batch:

2303078

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

TSI

TSN

SERVICEABLE RECORD			REMOVAL RECORD			
P/N ON	S/N ON		P/N OFF	S/N OFF		
1173B0000-03	SP566-01		1173B0000-03	SP566-01		
DESCRIPTION	ISO/CSO		LOGPAGE	FLT	TAIL NO.	POSITION
MLG A2 bag str			2945670	4269	48901	NOSE
PO NUMBER	WORK ORDER		APU SERIAL NUMBER	ENGINE SERIAL NUMBER		
100711011K	AL8542					
CONDITION			☒ REPLACED ☐ REMOVED ONLY			
☐ NEW ☒ OVERHAUL ☐ REPAIR ☐ CONT. TIME			☐ TROUBLESHOOTING ☐ INSTALLED ONLY			
☐ ROBBED FROM _____ POSITION _____			REASON <u>T/C</u>			
OTHER _____						
SHELF LIFE ☐ YES ☒ NO EXPIRES _____			ENTERED IN AURA ☒ YES ☐ NO BY <u>B</u>			
INSPECTED BY	EMP NO	DATE	MECHANIC INITIALS	EMP NO	STA	DATE
<u>12.23.11</u>	2070055	12/07/11	<u>[Signature]</u>	703/691	EAH	12-10-11

12.23.11 mp ✓
Yellow Copy - Records White Copy - Records Green Copy - Attached to Removed Part

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 201207361	
4. Organization Name and Address: Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352					5. Work Order/Contract/Invoice Number: XL8542		
6. Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:	
1	NLG AUX DRAG STRUT ASSEMBLY	1173B0000-03	N/A	1.0	SP654-01	OVERHAULED	
13. Remarks: PO# RO1003110115 (PLEASE SEE ATTACHED DOCUMENTATION) CSN:17,272.00 CSO/TSO:ZERO OVERHAULED IAW ELEV CMM CHAPTER 32-21-20 REV. 3 DATED 30MAR2005, EC 3200-01006 REV. L DATED 21JUL2010 AND EC3210-01163 REV. A DATED 01MAR2011. Certifies that the work specified in block 12/13 was carried out in accordance with EASA Part-145 and in respect to that work the component is considered ready for release to service under EASA Part-145 Approval Number: EASA.145.4518.							
14. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.			19. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.				
15. Authorized Signature:		16. Approval/Authorization No.:		20. Authorized Signature: HPI 41 ARIEL GO		21. Approval/Certificate No.: RJ3R817L	
17. Name (Typed or Printed):		18. Date(m/d/y):		22. Name (Typed or Printed): ARIEL GO		23. Date(m/d/y): Nov/16/2011	
User/Installer Responsibilities							
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

HAWKER PACIFIC AEROSPACE

11240 Sherman Way
Sun Valley, CA 91352
USA
TEL (818) 765-6201
FAX (818) 765-8073

FAA REPAIR STATION
RJ3R817L

- FINAL -

WORK ORDER # XL8542
RECEIPT DATE 10/07/2011
CUSTOMER EXPRESSJET AIRLINES
CUSTOMER P.O. RO1003110115
URGENCY NORMAL TAIL# 555

RECEIVING PLANNER WORK ORDER INFORMATION						
QTY	P.O. PART NUMBER	DESCRIPTION				SERIAL NUMBER
1	1173B0000-03	NLG AUX DRAG				SP654-01
MANUFACTURER		CSO	CSN	TSO	TSN	AIRCRAFT TYPE
LIEBHERR-AEROSPACE		17272.00	17272.00	22703.16	22703.16	EMBRAER EMB-145 (ERJ)
COND AS RECV IN REC DEPT						
CUSTOMER REPORTED DISCREP		NONE				
DATE OF LAST REP / OH		REF. WO:				
WARRANTY		N/A				
CUSTOMER INSTRUCTIONS		OVERHAUL A/C#555 A/C#555				

INITIAL EVALUATION RESULTS	
AUXILIARY DRAG STRUT ASSEMBLY RECEIVED IN FAIR CONDITION. COMPONENTS ARE WITHIN CMM LIMITS. UNIT WILL BE OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-21-20, EC 3200-01006, AND EC3210-01163.	
INITIAL TEST	Not Applicable

REPAIR ACTION DESCRIPTION			
WORK ACCOMPLISHED			
OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-21-20 REV 3, DATED 30MAR2005, EC 3200-01006 REV L, DATED 21JUL2010, AND EC3210-01163 REV A, DATED 01MAR2011.			
CSO: ZERO TSO: ZERO			
SEE LIFE LIMIT REPORT FOR PROCURABLE AND NON-PROCURABLE LIFE LIMITED COMPONENTS.			
G.C. 10NOV2011			
AS SHIPPED PART NUMBER	1173B0000-03	S/N	SP654-01
UNIT EXCHANGED FOR P/N	N/A	S/N	N/A
Signature - Certificated Mechanic/Supervisor		Cert #:	3240079
Signature - Certificated Inspector		Cert #:	3500323
		Date:	NOV 16 2011
		Date:	NOV 16 2011

LIFE LIMIT REPORT

11240 SHERMAN WAY
SUN VALLEY, CA 91352HAWKER PACIFIC
AEROSPACEFAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

REMOVAL

A/C #: 555 POS: NLG
DATE: Oct-11 REASON: OVHHPA WO#: XL8542
CUST PO#: RO1003110115
CUST P/N: N/A
MFG P/N: 1173B0000-03
MFG S/N: SP654-01

INSTALL

A/C #: EMB-145
ELIGIBILITY: EMB-145
DATE: Nov-11

NLG AUX DRAG STRUT ASSY

SAFE LIFE LIMITS: MRB-145/1150 Rev. 14 Dated 12-Dec-09, and TR 10-5, 10-6, 10-7, 10-8, 11-1, 12-1

AS RECEIVED BY HPA

DWG REF #	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	1173B0000-03	NLG AUX DRAG STRUT	SP654-01	UNLIMITED	17,272	N/A
A2-11	1173A0200-01 1173-0201	UPR AUX DRAG STRUT ASSY UPR AUX DRAG STRUT	AT008A008	60,000	17,272	42,728
A2-11	1173A0100-02 1173-0101	LWR AUX DRAG STRUT ASSY LWR AUX DRAG STRUT	AR003A117	60,000	17,272	42,728
A2-11	1173-0001	HINGE POINT BOLT	AR007R096	60,000	17,272	42,728
A2-11	KSL113608V	CARDAN JOINT	33ZJ001A-KC0747	60,000	17,272	REPLACED
A2-11	1173A0700-01 9027A2006-01	SPRING ASSY SPRING	SP1322-01	60,000	17,272	42,728
A2-11	1173A0700-01 9027A2006-01	SPRING ASSY SPRING	SP1323-01	60,000	17,272	42,728
+++	1173-0011*	SLEEVE	MD A81730/555-1	UNLIMITED	17,272	REPLACED
+++	1173-0011*	SLEEVE	MD A81730/555-2	UNLIMITED	17,272	REPLACED

AS RELEASED BY HPA

MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	CYCLES SINCE OVH	PREVIOUS OPERATOR
1173B0000-03	SP654-01	17,272	N/A	0	A/C 555
1173A0200-01 1173-0201	AT008A008	17,272	42,728	0	A/C 555
1173A0100-02 1173-0101	AR003A117	17,272	42,728	0	A/C 555
1173-0001	AR007R096	17,272	42,728	0	A/C 555
2000A0830K01	KC10045	0	60,000	0	NEW
1173A0700-01 9027A2006-01	SP1322-01	17,272	42,728	0	A/C 555
1173A0700-01 9027A2006-01	SP1323-01	17,272	42,728	0	A/C 555
AK-1173-0011**	NSN	0	N/A	0	NEW
AK-1173-0011**	NSN	0	N/A	0	NEW

* Part deleted in EMB-145 MRB report based on RBHA/FAR/JAR 25.571.

** FAA PMA (refer to EC3210-01163)

PREPARED BY:

DATE:

NOV 16 2011

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.

ENG REPRESENTATIVE:

DATE:

NOV 16 2011

CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY

IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

QC REPRESENTATIVE:

DATE:

NOV 16 2011

EXPRESS JET

XL8542 OFF 555

NLG AUX DRAG STRUT	HOURS TSN	CYCLES TSN	HOURS TSO	CYCLES TSO	HRS THIS INSTL	CYC THIS INSTL
P/N:1173B0000-03 SERIAL: SP654-01	22,703.16	17,272	22,703.16	17,272	22,703.16	17,272

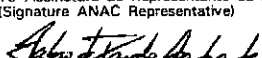
SERIALIZED PART STATUS INFORMATION

PART NUMBER	PART DESCRIPTION	SERIAL	CSI	CSN	CSO	TSI	TSN	TSO
1173A0200-01	AUX LOCKING STRUT, UPPER, NLG	AT008A008	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173A0700-01	SPRING, NLG DOWNLOCKS	SP1322-01	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173A0700-01	SPRING, NLG DOWNLOCKS	SP1323-01	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
KSL113608V	NLG, AUX DRAG STRUT, CARDAN	33ZJ001A-KC0747	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173-0011	NLG, AUX DRAG STRUT, AXLE	MD A81730/555-2	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173A0100-02	NLG LOWER AUX STRUT	AR003A117	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173-0001	NLG, AUX DRAG STRUT,CENTRAL BOLT	AR007R096	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1173-0011	NLG, AUX DRAG STRUT, AXLE	MD A81730/555-1	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16

XL8542



NOV 16 2011

1 País (Country) BRASIL		2 Título (Title) AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL (BRAZILIAN CIVIL AVIATION AUTHORITY) CERTIFICADO DE LIBERAÇÃO AUTORIZADA (AUTHORIZED RELEASE CERTIFICATE) ETIQUETA DE APROVAÇÃO DE AERONAVEGABILIDADE (AIRWORTHINESS APPROVAL TAG) FORMULÁRIO (FORM) SEGVÔO 003				3 Certificado No. (Certificate No./System tracking Ref.) 1100152284		
4 Empresa (Organization) EMBRAER - Empresa Brasileira de Aeronáutica S/A - Brasil 276 S.W. 34th Street - Ft. Lauderdale, FL 33315 - COP E-7203-01				5 Ordem de Serviço/Contrato/Nota Fiscal (Work Order, Contract or Invoice) 0021361056				
6 Item (Item)	7 Descrição (Description)	8 Número da Peça (Part Number)	9 Aplicabilidade* (Eligibility)	10 Quantidade (Quantity)	11 Número de Série/Lote (Serial/Batch Number)	12 Categoria/Trabalho (Status/Work)		
000001	CARDAN JOINT - ALUMINUM	2000A0830K01	EMB-145	1	KC10045	NEW		
13 Observações (Remarks) Export. 0083492346 / 2011. 110800133								
Partes com vida limitada devem ser acompanhadas de histórico de manutenção incluindo tempo total/ciclo total/tempo desde que novo. (Limited life parts must be accompanied by maintenance history including total time/total cycles/time since new.)								
14 Certifica que o (s) item (s) acima identificado (s) foi (foram) fabricados (s) em conformidade aos: (Certifies that article (s) identified above was (were) manufactured in conformity to): ☒ dados de projeto aprovados e está (ão) em condição segura de operação (approved design data and are in a condition for safe operation) ☐ dados de projeto não aprovado especificados no bloco 13 (non-approved design data specified in block 13)			19 ☐ Retorno ao serviço de acordo com RBHA 43.9 (Return to service in accordance with RBHA 43.9) ☐ Outros regulamentos especificados no bloco 13 (Others regulations specified in block 13) Certifica que, a menos especificado no bloco 13, o trabalho especificado no bloco 12, e descrito no bloco 13, foi executado de acordo com o Regulamento Brasileiro de Homologação Aeronáutica - RBHA 43-E, em relação ao trabalho realizado, a (s) peça (s) é (são) aprovada (s) para retorno ao serviço. Certifies that, unless otherwise specified in block 13, the work identified in block 12 and described in block 13, was accomplished in accordance with Brazilian Regulation for Aeronautical Certification - RBHA 43 and in respect to the work performed the part (s) is (are) approved for return to service.					
15 Assinatura do Representante da ANAC (Signature ANAC Representative) 		16 No. Autorização da ANAC (ANAC Authorization No.) 2010C11-06		20 Pessoa Autorizada (Authorized Signature)		21 No. CHE/CHETA (Certificate Number)		
17 Nome (Name) FABIO ANDRADE		18 Data (Date) 26/JUL/11		22 Nome (Name)		23 Data (Date)		
* O INSTALADOR DEVE FAZER VERIFICAÇÃO CRUZADA DA APLICABILIDADE ATRAVÉS DOS DADOS TÉCNICOS APLICÁVEIS (INSTALLER MUST CROSS CHECK ELIGIBILITY WITH APPLICABLE TECHNICAL DATA) <table border="0"><tr><td>RESPONSABILIDADE DO USUÁRIO / INSTALADOR É IMPORTANTE COMPREENDER QUE A EXISTÊNCIA DESTES DOCUMENTOS POR SI SÓ NÃO CONSTITUI AUTOMATICAMENTE UMA AUTORIZAÇÃO PARA INSTALAR A PARTE/COMPONENTE/CONJUNTO. SE O TRABALHO DO USUÁRIO/INSTALADOR É REALIZADO DE ACORDO COM OS REGULAMENTOS NACIONAIS DE UMA AUTORIDADE DE AERONAVEGABILIDADE DIFERENTE DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1, É ESSENCIAL QUE O USUÁRIO/INSTALADOR ASSEGURE QUE A SUA AUTORIDADE DE AERONAVEGABILIDADE ACEITA PARTES/COMPONENTES/CONJUNTOS DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1. AS DECLARAÇÕES NOS BLOCOS 14 E 19 NÃO CONSTITUEM UM CERTIFICADO DE INSTALAÇÃO. EM TODOS OS CASOS, OS REGISTROS DE MANUTENÇÃO DA AERONAVE DEVEM CONTER UM CERTIFICADO DE INSTALAÇÃO EMITIDO DE ACORDO COM REGULAMENTOS NACIONAIS PELO USUÁRIO/INSTALADOR ANTES QUE A AERONAVE POSSA SER LIBERADA PARA VÔO.</td><td>(USER / INSTALLER RESPONSIBILITY) (IT IS IMPORTANT TO UNDERSTAND THAT THE EXISTENCE OF THIS DOCUMENT ALONE DOES NOT AUTOMATICALLY CONSTITUTE AUTHORITY TO INSTALL THE PART/COMPONENT/ASSEMBLY.) (WHERE THE USER/INSTALLER WORK IS PERFORMED IN ACCORDANCE WITH THE NATIONAL REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS PARTS/COMPONENTS/ASSEMBLIES FROM THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1.) (STATEMENTS IN BLOCK 14 AND 19 DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES, AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.)</td></tr></table> Pág. (Page): 173							RESPONSABILIDADE DO USUÁRIO / INSTALADOR É IMPORTANTE COMPREENDER QUE A EXISTÊNCIA DESTES DOCUMENTOS POR SI SÓ NÃO CONSTITUI AUTOMATICAMENTE UMA AUTORIZAÇÃO PARA INSTALAR A PARTE/COMPONENTE/CONJUNTO. SE O TRABALHO DO USUÁRIO/INSTALADOR É REALIZADO DE ACORDO COM OS REGULAMENTOS NACIONAIS DE UMA AUTORIDADE DE AERONAVEGABILIDADE DIFERENTE DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1, É ESSENCIAL QUE O USUÁRIO/INSTALADOR ASSEGURE QUE A SUA AUTORIDADE DE AERONAVEGABILIDADE ACEITA PARTES/COMPONENTES/CONJUNTOS DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1. AS DECLARAÇÕES NOS BLOCOS 14 E 19 NÃO CONSTITUEM UM CERTIFICADO DE INSTALAÇÃO. EM TODOS OS CASOS, OS REGISTROS DE MANUTENÇÃO DA AERONAVE DEVEM CONTER UM CERTIFICADO DE INSTALAÇÃO EMITIDO DE ACORDO COM REGULAMENTOS NACIONAIS PELO USUÁRIO/INSTALADOR ANTES QUE A AERONAVE POSSA SER LIBERADA PARA VÔO.	(USER / INSTALLER RESPONSIBILITY) (IT IS IMPORTANT TO UNDERSTAND THAT THE EXISTENCE OF THIS DOCUMENT ALONE DOES NOT AUTOMATICALLY CONSTITUTE AUTHORITY TO INSTALL THE PART/COMPONENT/ASSEMBLY.) (WHERE THE USER/INSTALLER WORK IS PERFORMED IN ACCORDANCE WITH THE NATIONAL REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS PARTS/COMPONENTS/ASSEMBLIES FROM THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1.) (STATEMENTS IN BLOCK 14 AND 19 DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES, AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.)
RESPONSABILIDADE DO USUÁRIO / INSTALADOR É IMPORTANTE COMPREENDER QUE A EXISTÊNCIA DESTES DOCUMENTOS POR SI SÓ NÃO CONSTITUI AUTOMATICAMENTE UMA AUTORIZAÇÃO PARA INSTALAR A PARTE/COMPONENTE/CONJUNTO. SE O TRABALHO DO USUÁRIO/INSTALADOR É REALIZADO DE ACORDO COM OS REGULAMENTOS NACIONAIS DE UMA AUTORIDADE DE AERONAVEGABILIDADE DIFERENTE DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1, É ESSENCIAL QUE O USUÁRIO/INSTALADOR ASSEGURE QUE A SUA AUTORIDADE DE AERONAVEGABILIDADE ACEITA PARTES/COMPONENTES/CONJUNTOS DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NO BLOCO 1. AS DECLARAÇÕES NOS BLOCOS 14 E 19 NÃO CONSTITUEM UM CERTIFICADO DE INSTALAÇÃO. EM TODOS OS CASOS, OS REGISTROS DE MANUTENÇÃO DA AERONAVE DEVEM CONTER UM CERTIFICADO DE INSTALAÇÃO EMITIDO DE ACORDO COM REGULAMENTOS NACIONAIS PELO USUÁRIO/INSTALADOR ANTES QUE A AERONAVE POSSA SER LIBERADA PARA VÔO.	(USER / INSTALLER RESPONSIBILITY) (IT IS IMPORTANT TO UNDERSTAND THAT THE EXISTENCE OF THIS DOCUMENT ALONE DOES NOT AUTOMATICALLY CONSTITUTE AUTHORITY TO INSTALL THE PART/COMPONENT/ASSEMBLY.) (WHERE THE USER/INSTALLER WORK IS PERFORMED IN ACCORDANCE WITH THE NATIONAL REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS PARTS/COMPONENTS/ASSEMBLIES FROM THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1.) (STATEMENTS IN BLOCK 14 AND 19 DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES, AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.)							

[illegible]

MOVING TECHNOLOGY FORWARD

Logcard Cover Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
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Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
Description												
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Partnumber												
Description												
Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

[illegible]

MOVING TECHNOLOGY FORWARD

[illegible]

Logcard Cover Sheet

ASSEMBLY LOG CARD: PRIMARY COMPONENTS INSTALLATION AND REMOVAL RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

COMPONENT	Batch or Serial No.	Ultimate Life	Acc.Comp.Time		INSTALLATION			REMOVAL		Acc.Comp.Time		Reason for Removal
			Total	since OH	A/C Reg. No.	Date	A/C Landings	Date	A/C Landings	Total	since OH	
Description												
Partnumber												
Description												
Partnumber												
Description												
Partnumber												
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Partnumber												
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Partnumber												
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Partnumber												
Description												
Partnumber												

A/C = Aircraft, OH = Overhaul, Acc.Comp.Time = Accumulated Component Time

When required, please contact S P for additional sheets (fax: 31-40-2809123)

Sheet

ASSEMBLY LOG CARD: COMPONENT MAINTENANCE RECORD

Assembly Description	Aux. Drag Strut	Partnumber	1173B0000-03	Serial No.	SP654-01
-----------------------------	-----------------	-------------------	--------------	-------------------	----------

[illegible]

When required, please contact S P for additional sheets (fax. 31-40-2809123)

Sheet



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Certificates for New Parts

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 10/17/2022

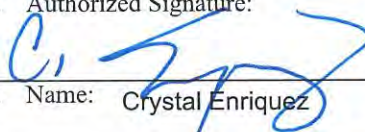


Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

1. Approving Civil Aviation Authority / Country FAA / United States	AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag	3. Form Tracking Number: 158292			
4. Organization Name and Address:	 Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352	5. Work Order/Contract/Invoice No./P.O.: 660041941 / / / RO-3180-145501			
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	NLG AUX DRAG	1173B0000-03	1	SP654-01	OVERHAULED
12. Remarks: Life Details: TSN: 40943:45 CSN: 31835 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-20 REV.4 (DATED 23NOV2012) AND CRM 32-21-20-R REV.ORIG (DATED 23NOV2012) SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.			14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:	
				 	
13d. Name:		13e. Date:		14c. Approval Certificate No.:	
				RJ3R817L	
14d. Name:		14e. Date: (dd/mmm/yyyy)			
Crystal Enriquez		20.Oct.2022			
USER / INSTALLER RESPONSIBILITIES					
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NAD Sales Order: 660041941
Customer JSX Receipt Date: Aug 9, 2022
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	1173B0000-03	NLG AUX DRAG	SP654-01	LIEBHERR AEROSPACE LINDENBERG GMBH	ERJ 140/145
Customer Reported Discrepancy NONE			CSO	CSN 31835.00	TSO 40943.45
Warranty	N/A				
Customer Instructions	OVERHAUL				

Initial Evaluation Results

AUXILLAY DRAG DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-10 AND CRM 32-21-10-R

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-20 REV 4, DATED 23NOV2012, AND CRM 32-21-20-R REV ORIG, DATED 23NOV2012

CSO: 0:00
TSO: 0:00

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by	U753070	Print by:	U753070	Print at:	Oct 12, 2022
As shipped Part Number	1173B0000-03	S / N	SP654-01	Publication	32-21-20



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report



LIFE LIMIT REPORT

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941

Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1173B0000-03	NLG AUX DRAG STRUT	SP654-01	UNLIMITED	31,835	N/A
1173A0200-01	UPR AUX DRAG STRUT ASSY	AT008A008	UNLIMITED	31,835	N/A
1173-0201	UPR AUX DRAG STRUT	AT008A008	60,000	31,835	28,165
1173A0100-02	LWR AUX DRAG STRUT ASSY	AR003A117	UNLIMITED	31,835	N/A
1173-0101	LWR AUX DRAG STRUT	AR003A117	60,000	31,835	28,165
1173-0001	HINGE POINT BOLT	AR007R096	60,000	31,835	28,165
2000A0830K01	CARDAN JOINT	KC10045	60,000	14,563	REPLACED
1173A0700-01	SPRING ASSY	SP1322-01	UNLIMITED	31,835	N/A
9027A2006-01	SPRING	SP1322-01	60,000	31,835	28,165
1173A0700-01	SPRING ASSY	SP1323-01	UNLIMITED	31,835	N/A
9027A2006-01	SPRING	SP1323-01	60,000	31,835	28,165

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1173B0000-03	SP654-01	31835	N/A	0	N48901
1173A0200-01	AT008A008	31835	N/A	0	N48901
1173-0201	AT008A008	31835	28165	0	N48901
1173A0100-02	AR003A117	31835	N/A	0	N48901
1173-0101	AR003A117	31835	28165	0	N48901
1173-0001	AR007R096	31835	28165	0	N48901
2000A0830K01	KC10532	0	60000	N/A	NEW
1173A0700-01	SP1322-01	31,835	N/A	0	N48901
9027A2006-01	SP1322-01	31835	28165	0	N48901
1173A0700-01	SP1323-01	31835	N/A	0	N48901
9027A2006-01	SP1323-01	31835	28165	0	N48901

Prepared By: DAVID LOUD

Stamp: 

Date: 10/17/2022



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Service Bulletin Report

PO: RO-3180-145501



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority	Order Reason	
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance	Scheduled Or Unscheduled Maintenance	
Line	Item / Description	Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
2	2309-2005-007 MLG Shock Absorber Assy	1281	Overhaul	1	EA	USD	USD
3	2309-2600-505 MLG Secondary Side Strut Assy	618	Overhaul	1	EA	USD	USD
4	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm	OF-9597937-0	Overhaul	1	EA	USD	USD
5	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut	247	Overhaul	1	EA	USD	USD
6	2309-2005-001 MLG Shock Absorber Assy	022	Overhaul	1	EA	USD	USD
7	2309-3500-503 MLG Main Side Strut Assembly	482	Overhaul	1	EA	USD	USD
8	2309-2600-507 MLG Secondary Side Strut Assy	903	Overhaul	1	EA	USD	USD
9	2309-3037-403 Trailing arm	OF493547-3101	Overhaul	1	EA	USD	USD
10	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly	00245	Overhaul	1	EA	USD	USD
11	1172C0000-02 Main Drag Strut Assy	SP649-01	Overhaul	1	EA	USD	USD
12	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy	SP654-01	Overhaul	1	EA	USD	USD
13	2309-3500-503 MLG Main Side Strut Assembly	OF6988270-01	Overhaul	1	EA	USD	USD

Remarks: TOTAL GEAR COST \$ 246,453.00

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

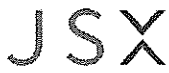
Purchasing Agent Christian Brand	Authorized Signature	Date
---	----------------------	------

Shipping Info:

WILL CALL

Order Info:

Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No: 9140018430
WP No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date
05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent	Shipping Method	Terms	Order Type	Priority	Order Reason
Christian Brand	WILL CALL		Repair Order	Scheduled Maintenance WO No:	Scheduled Or Unscheduled Maintenance



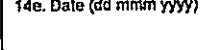
Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Certificates for New Parts

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving competent Authority / Country Luftfahrt-Bundesamt/ Germany		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number  2101336780																																					
4. Organisation Name and Address D9893 LIEBHERR LIEBHERR-AEROSPACE LINDENBERG GmbH • Pfaenderstr. 50-52 - 88161 • Lindenberg • Germany • Phone: +49 (0) (8381) 46-0 • Fax: +49 (0) (8381) 46 4377				5. Work Order / Contract / Invoice 424473 / 418198																																					
6. Item	7. Description	8. Part No	9. Qty.	10. Serial No	11. Status / Work																																				
1	CARDAN	2000A0830K01	6	KC10528	NEW																																				
2	CARDAN	2000A0830K01		KC10532	NEW																																				
3	CARDAN	2000A0830K01		KC10533	NEW																																				
4	CARDAN	2000A0830K01		KC10540	NEW																																				
5	CARDAN	2000A0830K01		KC10543	NEW																																				
6	CARDAN	2000A0830K01		KC10544	NEW																																				
7	SCREW	1661-0040	2	N/A	NEW																																				
8	SLEEVE	1661-0041	2	N/A	NEW																																				
12. Remarks Purchase Order Number: IDENTCODE: Specific remarks per item: <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th>Item</th> <th>DMF</th> <th>BatchNo.:</th> <th>Orderpos.</th> </tr> </thead> <tbody> <tr><td>1</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>2</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>3</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>4</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>5</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>6</td><td>N/A</td><td>N/A</td><td>-</td></tr> <tr><td>7</td><td>N/A</td><td>R/19</td><td>-</td></tr> <tr><td>8</td><td>N/A</td><td>HM02K</td><td>-</td></tr> </tbody> </table>						Item	DMF	BatchNo.:	Orderpos.	1	N/A	N/A	-	2	N/A	N/A	-	3	N/A	N/A	-	4	N/A	N/A	-	5	N/A	N/A	-	6	N/A	N/A	-	7	N/A	R/19	-	8	N/A	HM02K	-
Item	DMF	BatchNo.:	Orderpos.																																						
1	N/A	N/A	-																																						
2	N/A	N/A	-																																						
3	N/A	N/A	-																																						
4	N/A	N/A	-																																						
5	N/A	N/A	-																																						
6	N/A	N/A	-																																						
7	N/A	R/19	-																																						
8	N/A	HM02K	-																																						
13a. Certifies that the items identified above were manufactured in conformity to: ☒ approved design data and are in a condition for safe operation. ☐ non approved design data specified in block 12.			14a. ☐ Part-145.A.50 Release to Service ☐ Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.																																						
13b. Authorised Signature  STEFAN HUTTERER CERTIFYING INSPECTOR Electronic Signature on File		13c. Approval / Authorisation Number DE.21G.0028		14b. Authorised Signature  STEFAN HUTTERER CERTIFYING INSPECTOR																																					
13d. Name Stefan Hutterer		13e. Date (dd mm yy) 12 Dec 2021		14c. Certificate / Approval Ref. No  STEFAN HUTTERER CERTIFYING INSPECTOR																																					
14d. Name  STEFAN HUTTERER CERTIFYING INSPECTOR		14e. Date (dd mm yy)  STEFAN HUTTERER CERTIFYING INSPECTOR																																							
User / Installer Responsibilities This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1. Statements in blocks 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.																																									



Landing Gear Maintenance Report

E145 NLG AUXILIARY DRAG STRUT ASSY

Sales Order: 660041941	
Mfg P/N: 1173B0000-03	A/C: N48901
Mfg S/N: SP654-01	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

P/N Detail Print

Print Date: 10/15/2020 17:48

Page: 1 of 3



AC:

N48901

Position: ONLY

■ P/N: 1173B0000-03

P/N S/N: SP654-01

AUXILIARY DRAG STRUT, NLG

Batch:

2200436

Control Items	Description	SCHEDULE				ACTUAL				REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
NLG AUXILIARY DRAG STRUT A	NOSE LANDING GEAR REPLACEMENT REQUIRED PLANNING NOTE: CREATE UNSCHEDULED TASK CARDS FOR NOSE GEAR REMOVAL/INSTALLATION					0:00	0	0	06/26/2014				TERMINATED
NLG AUXILIARY DRAG STRUT R	NLG AUX DRAG STRUT RESTORATION		20000	4380		6408:42	14563	1475	10/01/2016	0:00	5437	2905	OPEN
TSI						18241:02	14563	1475	10/01/2016	0:00	0	0	
TSN						40943:45	31835	1475	10/01/2016	0:00	0	0	

■ P/N: 1173-0001

P/N S/N: AR007R096

HINGE POINT BOLT, AUX DRAG STRUT NLG

Batch:

2199642

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG HINGE POINT BOLT	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1173A0100-02

P/N S/N: AR003A117

LOWER AUXILIARY DRAG STRUT ASSY, NLG

Batch:

2198917

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG LOWER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

■ P/N: 1173A0200-01

P/N S/N: AT008A008

UPPER AUXILIARY DRAG STRUT ASSY, NLG

Batch:

2200367

Control Items	Description	SCHEDULE				ACTUAL			REMAINING			STATUS
		Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG UPPER AUXILIARY DRAG ST	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"		60000			6408:42	31835	1475	0:00	28165	0	OPEN
TSI						40943:45	31835	1475	0:00	0	0	
TSN						40943:45	31835	1475	0:00	0	0	

P/N Detail Print

Print Date: 10/15/2020 17:48

Page: 2 of 3



■ P/N: 1173A0700-01

P/N S/N: SP1322-01

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199198

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

Control Items

Description

NLG DOWNLOCK SPRING 60K

(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 80000 FC

NLG SPRING RESTORE

NLG SPRING CARTRIDGE RESTORATION

TSI

TSN

■ P/N: 1173A0700-01

P/N S/N: SP1323-01

DOWNLOCK SPRING, AUXILIARY DRAG STRUT NLG

Batch: 2199199

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	31835	1475	0:00	28165	0	OPEN
	20000	4380		6408:42	14563	1475	0:00	5437	2905	OPEN
				40943:45	31835	1475	0:00	0	0	
				40943:45	31835	1475	0:00	0	0	

Control Items

Description

NLG DOWNLOCK SPRING 60K

(LIFE LIMITED PART) DOWNLOCK SPRING LIFE 80000 FC

NLG SPRING RESTORE

NLG SPRING CARTRIDGE RESTORATION

TSI

TSN

■ P/N: 2000A0830K01

P/N S/N: KC10045

CARDAN JOINT, AUX DRAG STRUT NLG

Batch: 2303079

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6408:42	14563	1475	0:00	45437	0	OPEN
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

NLG CARDAN JOINT

(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"

TSI

TSN

■ P/N: AK-1173-0011

P/N S/N: XJTNSN01

AXLE, AUXILIARY DRAG STRUT NLG

Batch: 2303080

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

TSI

TSN

P/N Detail Print

Print Date: 10/15/2020 17:48

Page: 3 of 3



■ P/N: AK-1173-0011

P/N S/N: XJTNSN02

AXLE, AUXILIARY DRAG STRUT NLG

Batch:

2303078

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18241:02	14563	1475	0:00	0	0	
				18241:02	14563	1475	0:00	0	0	

Control Items

Description

TSI

TSN



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Concessions

Certificates for Replaced Parts (with Traceability)

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

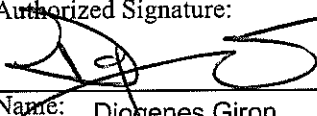
Date: 10/19/2022

Landing Gear Maintenance Report
E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving Civil Aviation Authority / Country FAA / United States		AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158298	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O. No.: 660041929 / 51678439 / / RO-3180-145501	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	STRUT, NOSE LANDING GEAR	1170S0000-01	1	00245	OVERHAULED		
12. Remarks: Life Details: TSN: 47990:54 CSN: 37322 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014 COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: L-6011-ED-0004 DATED 13JUL2010. COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: ED-LLI-10-0069 REV.2 DATED 10NOV2011. POST MODS: M, 1170, -10, -11, -16, -17, -20 SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 21.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NLG Sales Order: 660041929
Customer JSX Receipt Date: Aug 9, 2022
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	1170S0000-01	STRUT, NOSE LANDING GEAR	00245	LIEBHERR AEROSPACE LINDENBERG GMBH	ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO
NONE			14705.00	37322.00	18455:12
Warranty	N/A				
Customer Instructions	OVERHAUL				

Initial Evaluation Results

RECEIVED NOSE LANDING GEAR DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 AND CRM 32-21-09-R

Initial Test N/A

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: L-6011-ED-0004 DATED 13JUL2010.
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: ED-LLI-10-0069 REV.2 DATED 10NOV2011.

CSO: 00:00
TSO: 00:00

POST MODS: M, 1170, -10, -11, -16, -17, -20

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 20, 2022
As shipped Part Number	1170S0000-01	S / N	00245	Publication	32-21-09



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



LIFE LIMIT REPORT

E145 NLG LEG STRUT ASSY

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901

Mfg S/N: 00245 MSN: 501

CPN: N/A

PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1170S0000-01	NOSE LANDING GEAR STRUT	00245	UNLIMITED	37,322	N/A
1170A1400-01	SLIDING TUBE ASSY	178	UNLIMITED	37,322	N/A
1170-1401	SLIDING TUBE	178	60,000	37,322	22,678
1170-1403	WHEEL AXLE	L599	60,000	37,322	REPLACED
1170A3200-01	STEERING CUFF ASSY	0186	UNLIMITED	37,322	N/A
1170-2301	STEERING CUFF	L19700	60,000	37,322	22,678
1170A0300-01	TORQUE LINK ASSY	1368	UNLIMITED	21,974	REPLACED
1170-0301	TORQUE LINK	1368	60,000	21,974	REPLACED
1170A0300-01	TORQUE LINK ASSY	L2509	UNLIMITED	17,601	REPLACED
1170-0301	TORQUE LINK	L2509	60,000	17,601	REPLACED
1170-0001	TORQUE LINK PIN	0376	60,000	37,322	22,678
1170-0001	TORQUE LINK PIN	0383	60,000	37,322	22,678
1170-0002	TORQUE CENTER BOLT	L1863	60,000	15,870	44,130
2233A0100-02	MAIN FITTING ASSY	1123	UNLIMITED	14,705	REPLACED
2233-0103	MAIN FITTING	1123	60,000	14,705	REPLACED

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1170S0000-01	00245	37,322	N/A	0	N48901
1170A1400-01	178	37,322	N/A	0	N48901
1170-1401	178	37,322	22,678	0	N48901
1170-1402	L660	31,567	28,433	0	N11535
1170A3200-01	0186	37,322	N/A	0	N48901
1170-2301	L19700	37,322	22,678	0	N48901
1170A0300-01	1548	28,571	N/A	0	N11535
1170-0301	1548	28,571	31,429	0	N11535
1170A0300-01	L3558	8,594	N/A	0	N11535
1170-0301	L3558	8,594	51,406	0	N11535
1170-0001	0376	37,322	22,678	0	N48901
1170-0001	0383	37,322	22,678	0	N48901
1170-0002	L1863	15,870	44,130	0	N48901
2233A0100-02	1320	4,613	N/A	0	N243JX
2233-0103	1320	4,613	55,387	0	N243JX

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD

Stamp:

Date: 10/19/2022



LIFE LIMIT REPORT

E145 NLG LEG STRUT ASSY

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901

Mfg S/N: 00245 MSN: 501

CPN: N/A

PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1170-0070	DRAG STRUT ATTACH PIN	L00526	60,000	28,476	31,524
1170-0032	PINTLE PIN	L3302	60,000	19,771	40,229
1170-0032	PINTLE PIN	L3304	60,000	19,771	40,229
1170-0071	ACTUATOR ATTACH PIN	L1884	UNLIMITED	8,353	N/A
1170A3500-02	FEEDBACK POTENTIOMETER	01085	UNLIMITED	27,421	N/A

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1170-0070	L00526	28,476	31,524	0	N48901
1170-0032	L3302	19,771	40,229	0	N48901
1170-0032	L3304	19,771	40,229	0	N48901
1170-0071	L1884	8,353	N/A	0	N48901
1170A3500-02	01085	27,421	N/A	0	N48901

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 10/19/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Service Bulletin Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901
Mfg S/N: 00245 MSN: 501
CPN: N/A PO: RO-3180-145501

Service Bulletin Report E145 NLG LEG STRUT ASSY

SERVICE BULLETIN	AD NOTE	EO or REF	DESCRIPTION	ACCOMPLISHMENT STATUS	
145-32-0025	-	1170B-32-01	NLG STRUT INCREASE STEERING ANGLE	PCW	
145-32-0040	-	1170B-32-02	REPLACEMENT OF NLG TARGET LEVER BUSHINGS		N/R
145-32-0067	-	1170C-32-04	INSPECTION OF THE NLG WHEEL AXLE		N/R
145-32-0068	2005-01-05	1170C-32-03	REPLACEMENT OF NLG WHEEL NUT	PCW	
145-32-0076	-	1170C-32-01	NLG STRUT MODIFIED MAIN FITTING		N/R
145-32-0077	-	1170C-32-02	REPLACEMENT OF NLG STEERING CUFF ASSY (ON ATTRITION ONLY)	PCW	
145-32-0081	-	1170A1800-32-01	FEEDBACK POTENTIOMETER MODIFICATION (NEW BEARINGS ONLY ON ATTRITION)		N/R
145-32-0082	-	1170A2900-32-01	FEEDBACK SENSOR MODIFICATION (NEW RELIEF VALVE ONLY ON ATTRITION)		N/R
145-32-0088	-	1170C-32-05	NLG SLIDING TUBE UPPER CAM MODIFICATION	PCW	
145-32-0100	-	1170A3500-32-03	IMPROVEMENT OF FEEDBACK UNIT POTENTIOMETER		N/R
145-32-0101	-	1170C-32-07	INTRODUCTION OF STEEL SLEEVE IN NLG STRUT	PCW	
145-32-0110	-	1170C-32-10	SECOND SUPPLIER OF POTENTIOMETER FOR POTENTIOMETER (ON ATTRITION)		N/R
145-32-0111	-	1170C-32-11	MODIFICATIONS TO THE NLG FOR AIRCRAFT WITH INCREASED WEIGHT (RECEIVED CONFIG.)	CW	

LEGEND:

PCW - PREVIOUSLY COMPLIED WITH
CW - COMPLIED WITH (THIS VISIT)
PARTIAL - PARTIALLY COMPLIED WITH
N/A - NOT ACCOMPLISHED
N/R - NOT REQUIRED

Prepared by: ALEJANDRO CONTRERAS

Stamp:



Date: 10/20/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date

05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority	Order Reason		
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance	Scheduled Or Unscheduled Maintenance		
Line	Item / Description		Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut		247	Overhaul	1	EA	USD	USD
2	2309-2005-007 MLG Shock Absorber Assy		1281	Overhaul	1	EA	USD	USD
3	2309-2600-505 MLG Secondary Side Strut Assy		618	Overhaul	1	EA	USD	USD
4	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm		OF-9597937-0	Overhaul	1	EA	USD	USD
5	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut		247	Overhaul	1	EA	USD	USD
6	2309-2005-001 MLG Shock Absorber Assy		022	Overhaul	1	EA	USD	USD
7	2309-3500-503 MLG Main Side Strut Assembly		482	Overhaul	1	EA	USD	USD
8	2309-2600-507 MLG Secondary Side Strut Assy		903	Overhaul	1	EA	USD	USD
9	2309-3037-403 Trailing arm		OF493547-3101	Overhaul	1	EA	USD	USD
10	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly		00245	Overhaul	1	EA	USD	USD
11	1172C0000-02 Main Drag Strut Assy		SP649-01	Overhaul	1	EA	USD	USD
12	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy		SP654-01	Overhaul	1	EA	USD	USD
13	2309-3500-503 MLG Main Side Strut Assembly		OF6988270-01	Overhaul	1	EA	USD	USD

Remarks: TOTAL GEAR COST \$ 246,453.00

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

Purchasing Agent Christian Brand	Authorized Signature	Date
--	----------------------	------

Shipping Info:

WILL CALL

Order Info:

Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No: 9140018430
WP No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No. Account No. Date
RO-3180-145501 **05-Aug-2022**



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent

Christian Brand

Shipping Method

WILL CALL

Terms

Order Type

Repair Order

Priority

Scheduled
Maintenance
WO No:

Order Reason

Scheduled Or Unscheduled
Maintenance



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Concessions

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

IDR 37116

HAWKER PACIFIC
AEROSPACE

FAA Repair Station RJ3R817L
EASA: DE.145.0001

Part Data		Event Data	
Part Description	SLIDING TUBE ASSY	Repair Order	51679501
P/N	1170A1400-01:D9893	Event	L-00528-NLG
S/N	178	Sales Order	660041929
Customer S/N		Product (A/C Type)	ERJ-145
Detail P/N	1170-1401:D9893	Tail Sign	N48901
Detail S/N		Customer/Operator	101896 JSX
		Customer PO	RO-3180-145501
IDR Details		Additional Data	
IDR Status	CL - Closed	TSN	47990.90 FH
IDR Issue Date	16.Aug.2022	CSN	37322.00 CYC
IDR Close Date	29.Sep.2022	OEM Ref.	32-21-09
		OEM	LIEBHERR
Discrepancy			
DIA (2) I/D & FACES DIA (2) I/D & FACES MACHINED BEYON CMM LIMITS			
OEM/DER Response			
L-6011-ED-0004		Response date	13.Jul.2010
Customer Response			
N/R 9/29/22			
Engineer / Signature	Date 9/29/2022	Inspector / Signature	Date 9/29/22
	Stamp 		Stamp

IDR 37116

This Document holds no airworthiness approval and reference to OEM approval is required. The purpose of this document is for transmittal of engineering information within the Part 145 production facility only.

IDR 37116

HAWKER PACIFIC
AEROSPACE 

FAA Repair Station RJ3R817L
EASA: DE.145.0001

DIA (2) I/D & FACES
DIA (2) I/D & FACES MACHINED BEYON CMM LIMITS

This Document holds no airworthiness approval and reference to OEM approval is required. The purpose of this document is for transmittal of engineering information within the Part 145 production facility only.

LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs	L-6011-ED-0004 Issue 01
	Page 1 / 23	2010-07-13

LIEBHERR-AEROSPACE LINDENBERG GMBH - Design P.O. Box 1363 - 88153 Lindenberg / Germany	FAX: +49 8381 46-4124
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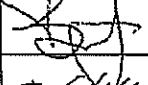
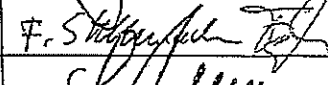
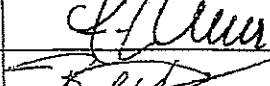
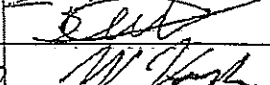
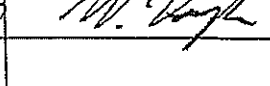
Equipment		
PN:	SN:	Part Name:
1170-1401 2233-0201 2233-0401	ALL	NLG Sliding Tube
Flight Hours:	Flight Cycles:	Ref. Doc:
N/A	N/A	CMM 32-21-10
Part Class:	Additional Information:	
1	none	
Customer		
Customer:	Aircraft model:	Aircraft SN:
ALL CUSTOMERS	EMB 135/145	N/A
Classification of repair		
Repair minor ☒ major ☐ Parts Life Limit not affected ☒ affected ☐		
Identification mark on part:		
Identification no ☐ yes ☒ : ED-0004		
Subject: Decision for Customer Request: ED-LSL-10-0002		
Inspection / Repair procedure for: Sliding Tube assembly: 1170A1400-01 (EMB 145) 2233A0200-01 (EMB 145 XR) 2233A0400-01 (EMB 135)		
This ED describes a chromium repair procedure for the wheel axle bore of the sliding tube and a repair procedure for the surfaces adjacent to wheel axle sleeve. In case the wheel axles cross bore holes have to be machined, repair bushings can be installed. The described procedures may be performed in shop only.		

The released original Document is located in the AER PLM-System. Check the validation level of copy prior use.
Das freigegebene Originaldokument befindet sich im AER PLM-System. Vor der Verwendung ist die Gültigkeit zu prüfen.

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LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs Page 2 / 23	L-6011-ED-0004 Issue 01 2010-07-13
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Rules
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Signatures Incl. Classification Decision				
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Accepted	Design Organisation (TC Holder)			

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1 Problem Description

The common repair procedure for the wheel axle bore is to enlarge the bore in shop and install associated repair axles as described in related CMM documents.

This ED describes how to machine and chromium plate the wheel axle bore to reuse the present wheel axle. It also describes the removal of corrosion on the contact faces between sliding tube and wheel axle sleeve.

In case of corrosion or other damages inside the wheel axle cross bolt holes, repair bushes can be installed as described within this ED

All described repairs for zones 1-3 can be performed in combination or independent as required.

1.1 Repair Zones

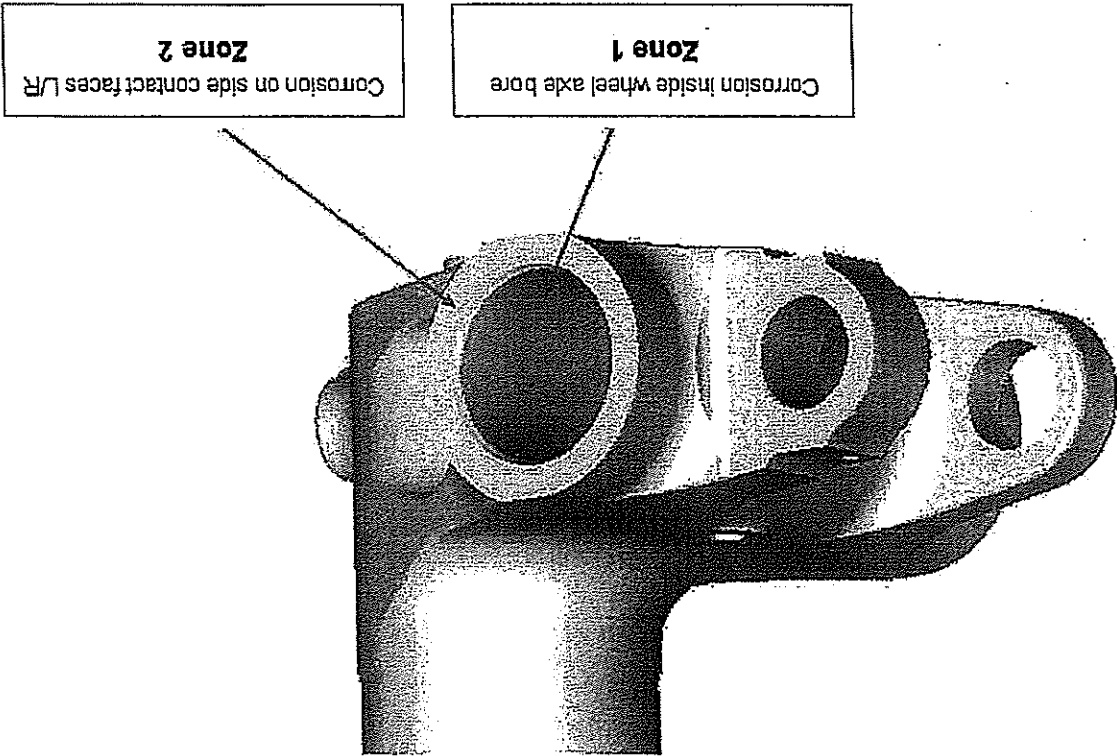


Fig. 1 3D-View: Repair zones 1 and 2

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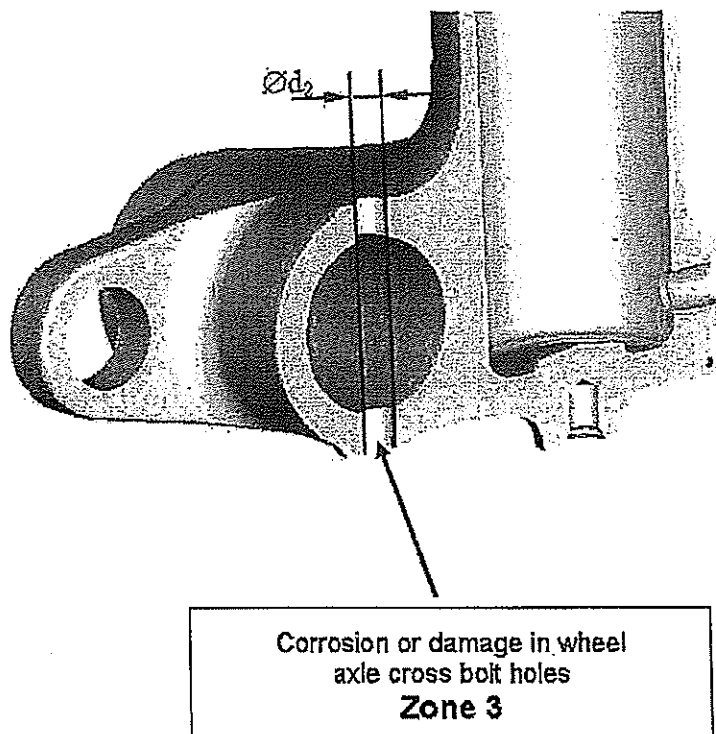


Fig. 2 Sectional View: Repair zone 3

Note: In condition of first delivery status, regularly no bushings are installed in wheel axle cross bolt holes. If the Sliding tube contains bushings in zone 3, a repair has been performed in the past.

1.2 References, further Documentation:

- EMB 135: CMM 32-21-10
- EMB 145: CMM 21-21-09
- EMB 145XR: CMM 32-21-11
- Simplified Drawing (Appendix)

1.3 Stress Report

- Stress Calculation: L-2232-DAC-0006, Issue 02

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1.4 Necessary Parts and Consumables

Affected Parts

Description	Part number	QTY	Material	Rm
Sliding Tube*	1170-1401	1	E35NCD16H	1800-2000 N/mm ²
	2233-0201			
	2233-0401			
Wheel Axle*	1170-1402	1	E35NCD16H	1800-2000 N/mm ²
	1170-1431			
	1170-1403			
	1170-1433			
	2233-0202			
	2233-0230			
Cross hole bush**	1170-1436	2	35NCD16	1230-1370 N/mm ²
	1170-1436RS02			
	1170-1436RS03			
	1170-1436RS04			
	1170-1436RS05			
	1170-1436RS06 (see 3.3, Tab. 5)			

Note: For manufacturing/repair steps of Sliding Tube and wheel axle see applicable CMM documents.

* The part has been heat treated; strictly avoid local temperatures above 190°C (374°F) during repair process. **Non-observant causes a loss of tensile strength.**

**Order one pair of bushings for applied repair step

Consumables

Description	Product Name	QTY
Hard Wax Coating	ARDROX 3302	AR
Repair bushings	(see 3.3, Tab. 5)	2

Find more necessary consumables Materials in related CMM documents.

Special Tools

Please see related CMM documents.

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2 Initial Inspection

2.1 Preparation for repair

Disassembly Sliding Tube in acc to the applicable CMM document.

Before repair, all parts need to be disassembled and cleaned. Remove any paint coating and cadmium plating in acc to applicable CMM documents.

If bushings are installed in the cross bolt holes, they had been installed in a previous repair of Zone 3. In that case remove bushings, cadmium plating and containments.

2.2 Preconditions for repair

- 1) Do a visual surface inspection of the wheel axle bore.

Determine the condition of the Part and perform repair for each zone independently if necessary.

- 2) Measure Dimension $\varnothing d_1$, $\varnothing d_2$ and b , see para 1.1 Fig. 2 and para 2.2, Fig. 3

Perform repair for each zone only if necessary:

Precondition for zone 1:

- a) If $\varnothing d_1$ is within the stated limit in para 2.3, perform repair for zone 1
- b) If $\varnothing d_1$ is out of limit, replace the sliding tube

Precondition for zone 2:

- a) If $\frac{1}{2}b$ is within the stated limit in para 2.3, perform repair for zone 2
- b) If $\frac{1}{2}b$ is out of limit, replace the sliding tube

Precondition for zone 3:

- a) If $\varnothing d_2$ shows corrosion or is not within $\varnothing 9.558 \pm 0.015$ (prior cadmium) perform repair for zone 3.
- b) If $\varnothing d_2$ is out of limit (see para 2.3), replace the sliding tube

After repair, the stated dimensions have to be checked again.

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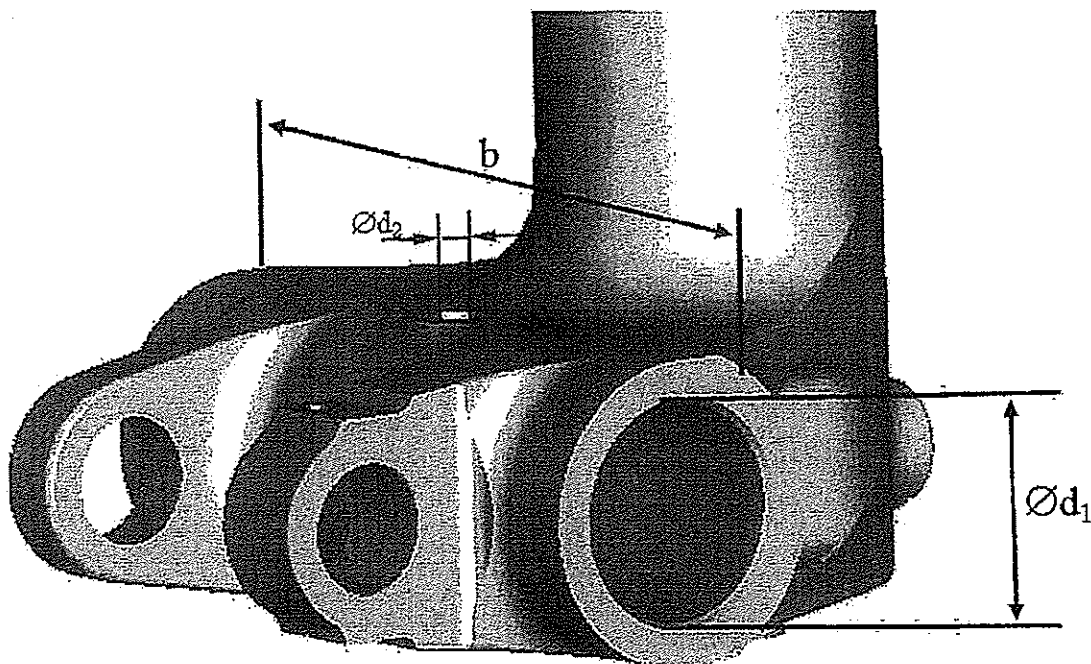


Fig. 3 Dimensions to be checked

- 3) The described repair is applicable for Standard axle and manufacturing step F1.
 Measure and record Ød_1 in acc. to Fig. 3.

Before repair, make sure that the present axle can be reused by comparing Ød_1 with Tab. 1

Repair Step	Dimension	Name	Nominal Dimension*	Wheel Axle
Standard	Ød_1	Bore Diameter	$\text{Ød}_1 = 45.000^{+0.025}_{(1.7717^{+0.00098})}$ mm inch)	P/N 1170-1402 or P/N 1170-1403 or P/N 2233-0202
F1	Ød_1	Bore Diameter	$\text{Ød}_1 = 45.150^{+0.025}_{(1.7776^{+0.00098})}$ mm inch)	P/N 1170-1431 or P/N 1170-1433 or P/N 2233-0230

*all Dimensions prior cadmium plating for new serial parts

Tab. 1 Dimensions of repair steps

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2.3 Limits of repair

Dimension	Name	Repair NOT ALLOWED if:
$\varnothing d_1$	Wheel axle bore	$\varnothing d_1 > 45.325\text{mm (1.7844inch)}$
$\varnothing d_2$	Wheel axle cross bolt hole	$\varnothing d_2 > 13.018\text{mm (0.5125inch)}$
b^*	Thickness	$b < 145.000\text{mm (5.7087 inch)}$ $\frac{1}{2}b < 72.5\text{mm (2.8543inch)}$

Tab. 2 Limits of repair

(All dimensions before plating)

*make sure $\frac{1}{2}b \geq 72.5\text{mm (2.8543inch)}$ in acc. to para 7, Fig. 4.

($\frac{1}{2}b$ is the dimension between face surface and sliding tube shaft)

3 Repair Procedure

MAKE SURE NOT TO FORGET THE MENTIONED NON DESTRUCTIVE TEST PROCEDURES, SHOT PEENING AND THERMAL STRESS RELIEFS IF REPAIRS FOR DIFFERENT ZONES ARE PERFORMED IN COMBINATION!

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3.1 Repair for Zone 1

- 1) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances mentioned in para 7, Fig. 4 and Fig. 5 and enclosed Sketch in Appendix.
- 2) Machining wheel axle bore: The final diameter after machining depends on the used type of wheel axle (see para 3.1, Tab. 3):

FOR THICKNESS OF CHROMIUM COATING CONSIDER FOLLOWING MACHINING (SEE SUBTASKS 8) AND 10)):
THICKNESS min: 0.050mm (0.002inch) for sufficient corrosion protection after final machining

THEREFORE: ENLARGE WHEEL AXLE BORE WITH THE LOWEST POSSIBLE LOSS OF MATERIAL TO $\varnothing d_1$ AS STATED IN TAB. 3.

Type of wheel axle	Min dia.	Max dia.
Standard Axle	$\varnothing d_1 \geq \varnothing 45.110\text{mm}$ (1.7760inch)	$\varnothing d_1 \leq \varnothing 45.325\text{mm}$ (1.7844inch)
Manufacturing Step 1 (FS1)	$\varnothing d_1 \geq \varnothing 45.260\text{mm}$ (1.7819inch)	$\varnothing d_1 \leq \varnothing 45.325\text{mm}$ (1.7844inch)

Tab. 3 Max dia. of wheel axle bore during repair

Surface Quality of wheel axle bore after machining: Ra1.6 or better

- 3) Restore chamfer $2 \pm 0.3 \times 30^\circ$ (0.01181 inch x 30°) on both sides of the wheel axle bore; break all sharp edges and drilling grooves with R0.1-0.3mm (R0.0039inch – R0.01181inch)
- 4) Check part for a previous identification mark with this ED-number.

If part is not marked, apply identification mark on part in acc. to AS 478, Method 2D2 or 3A

Identification mark: **ED-0004**
(for marking area see para 7, Fig. 4 and Fig. 5)

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5) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

6) Perform thermal stress relief at 190+/-5°C for 4h.

7) Apply Shot-peening on repaired areas and identification mark in acc. to MIL-S-13165C:

Shot: Steel
Shot-No.: S230
Shot hardness: 55-59 HRC
Intensity inside: A 0.1 – 0.3mm (0,00394 - 0,01181inch)
Intensity outside: A 0.2 – 0.3mm (0.00787 - 0,01181inch)
Coverage: >100%

8) Apply chromium coating in acc. to MIL-STD-1501 on wheel axle bore.

The thickness of chromium coating should allow good conditions for following machining. Consider final diameter to be reached (see Subtask 10)) and min thickness of chromium coating (see Subtask 2)

End of chromium coating on both sides in middle of chamfer ($2 \pm 0.3 \times 30^\circ$).
(0.0787 ± 0.01181 inch $\times 30^\circ$) Tolerance ± 0.5 mm (0.0197inch) measured from the middle of chamfer.

In area of cross-holes $\varnothing 9.558H7$ or $\varnothing 12H7$ ($\varnothing 0,3763$ inch or $\varnothing 0,47244$ inch), chromium coating has to end with a diameter of $\varnothing 14$ mm to $\varnothing 16$ mm.
($\varnothing 0.55118$ inch to $\varnothing 0.62992$ inch)

Chromium waste on side faces and inside cross-holes prohibited.

9) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4 and Fig. 5

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Depending on the type of wheel axle (see para 2.2, Tab. 1) grind or hone chromium coated bore to:

Type of wheel axle	dia.
Standard Axle	$\varnothing d_1 = 44.980^{+0.025}_{-0.025}$ (1.7709 ^{+0.00098} inch)
Manufacturing Step 1 (FS1)	$\varnothing d_1 = 45.130^{+0.025}_{-0.025}$ (1.7768 ^{+0.00098} inch)

Tab. 4 Manufacturing Steps

THICKNESS OF CHROMIUM PLATING AFTER MACHINING: MIN 0.05mm (0.00197 INCH)

- 10) Round chromium edges and run-outs with R0.1-0.3mm (R0.0039inch – R0.01181inch)
- 11) Perform Non Destructive Test procedures:

NDT – liquid penetrant in acc. to ASTM E1417: Type I, Method D, Sensitivity level 3 or higher, Form a.
- 12) Perform thermal stress relief for min 4h at 190+/-5°C, within 7 days after grinding/honing
- 13) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

3.2 Repair for Zone 2

- 1) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4 and Fig. 5 and enclosed file in Appendix
- 2) It should be preferred to remove corrosion with local blendings, perform Subtask (a). If not possible, machine side faces as described in Subtask (b):
 - (a) Remove corrosion with the lowest possible loss of material.

For each side face, **only one blending per 90° allowed**

The max material removal is defined in para 7.1, Tab. 6. The shape of the local removal has to be in acc. to sketch "B" (please see para 7.1, Fig. 6)

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- (b) Machine both side faces of the sliding tube to remove corrosion.
Machine sliding tube faces with the lowest possible loss of material in acc. to para 7, Fig. 4 and Fig. 5

Restore chamfer $2 \pm 0.3 \times 30^\circ$ (0.01181 inch $\times$ 30°) on both sides of the wheel axle bore; break all sharp edges and drilling grooves with R0.1-0.3mm (R0.0039inch – R0.01181inch)

Additionally local blendings in acc. to Subtask (a) allowed if repair limits can be kept (para 2.3, Tab. 2)

- 3) After machining check dimension $\frac{1}{2}b$ (see para 2.2, Fig. 3) and perform further steps, if it is within the stated limit in para 2.3, Tab. 2. If $\frac{1}{2}b$ is not within the stated limit, replace the part!

- 4) Please note:

No identification mark is needed, if repair is performed for this repair zone only

- 5) Perform thermal stress relief at $190 \pm 5^\circ\text{C}$ for 4h.

- 6) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

- 7) Apply Shot-peening on repaired areas in acc. to MIL-S-13165C:

Shot:	Steel
Shot-No.:	S230
Shot hardness:	55-59 HRC
Intensity inside:	A 0.1 – 0.3mm (0,00394 - 0,01181inch)
Intensity outside:	A 0.2 – 0.3mm (0.00787 - 0,01181inch)
Coverage:	>100%

- 8) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

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3.3 Repair for Zone 3

- 1) Take dimension of $\varnothing d_2$ to determine and record the (next) repair step. Repair may be performed in Steps of 0.2mm between $\varnothing d_2=12\text{mm}$ and $\varnothing d_2=13\text{mm}$
- 2) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4, Fig. 5 and enclosed Sketches in Appendix.
- 3) Enlarge wheel axle cross bolt bore $\varnothing d_2$ to meet the next possible repair step with the lowest possible loss of material. Record performed repair step to purchase repair bushes.

P/N of bushings	nom dia.	min $\varnothing d_2$		max $\varnothing d_2$	
		mm	Inch	mm	Inch
1170-1436	$\varnothing d_2 = \varnothing 12.0 \text{ H7}$	12.000	0.4724	12.018	0.4731
1170-1436RS02	$\varnothing d_2 = \varnothing 12.2 \text{ H7}$	12.200	0.4803	12.218	0.4810
1170-1436RS03	$\varnothing d_2 = \varnothing 12.4 \text{ H7}$	12.400	0.4882	12.418	0.4889
1170-1436RS04	$\varnothing d_2 = \varnothing 12.6 \text{ H7}$	12.600	0.4961	12.618	0.4968
1170-1436RS05	$\varnothing d_2 = \varnothing 12.8 \text{ H7}$	12.800	0.5039	12.618	0.5046
1170-1436RS06	$\varnothing d_2 = \varnothing 13.0 \text{ H7}$	13.000	0.5118	13.018	0.5125

*all dimensions prior cadmium

Tab. 5 Max repair steps of wheel axle cross bolt hole dia.

- 4) Round all sharp edges and drilling grooves with R0.1-0.3mm (0.00394 – 0.01181 inch).

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- 5) Check part for a previous identification mark with this ED-number.

If part is not marked, apply identification mark on part in acc. to AS 478, Method 2D2 or 3A.

Identification mark: **ED-0004**

(for marking area see para 7, Fig. 4 and Fig. 5)

- 6) Perform thermal stress relief at 190+/-5°C for 4h.

- 7) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

- 8) Apply Shot-peening in acc. to MIL-S-13165C on identification area:

Shot: Steel

Shot-No.: S230

Shot hardness: 55-59 HRC

Intensity inside: A 0.1 – 0.3mm (0,00394 - 0,01181inch)

Intensity outside: A 0.2 – 0.3mm (0.00787 - 0,01181inch)

Coverage: >100%

APPLICATION OF SHOT PEENING INSIDE CROSS BOLT HOLES ALLOWED BUT NOT NECESSARY.

- 9) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

3.4 Surface Treatment of Sliding Tube after machining

- 1) Apply cadmium plating in acc. to related CMM documents except chromium plated areas

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3.5 Installation of bushes (only if repair for zone 3 has been performed)

- 1) Decrease temperature of repair bushes in a bath of liquid nitrogen to -195°C (-319°F), Increase temperature of sliding tube to +100°C (212°F)
- 2) Take each bush separate out of the liquid nitrogen bath and quickly install it into the hole in Sliding Tube with appropriate heat shrinking standard tools for bush installations. see para 7.2, Fig. 7
- 3) MAKE SURE THE BUSHINGS DO NOT EXTEND INTO THE WHEEL AXLE BORE AND OUTER SURFACE OF SLIDING TUBE
- 4) Apply ARDROX 3302 on the edges between Sliding Tube and bushes;
see para 7.2, Fig. 7.

4 Reassembling

Do installation/reassembling in acc. to related CMM documents (see para 1.2)

5 Quality inspection

- 1) Do visual inspection of all affected parts during the repair process
- 2) All surfaces have to be cleaned from dirt or waste material.

6 Acceptance Testing on A/C level

Perform airworthiness release approval according to the local regulatory authority procedures of owner or operator of the aircraft.

Remark: A/C release is in responsibility of owner or operator

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7 Sketches

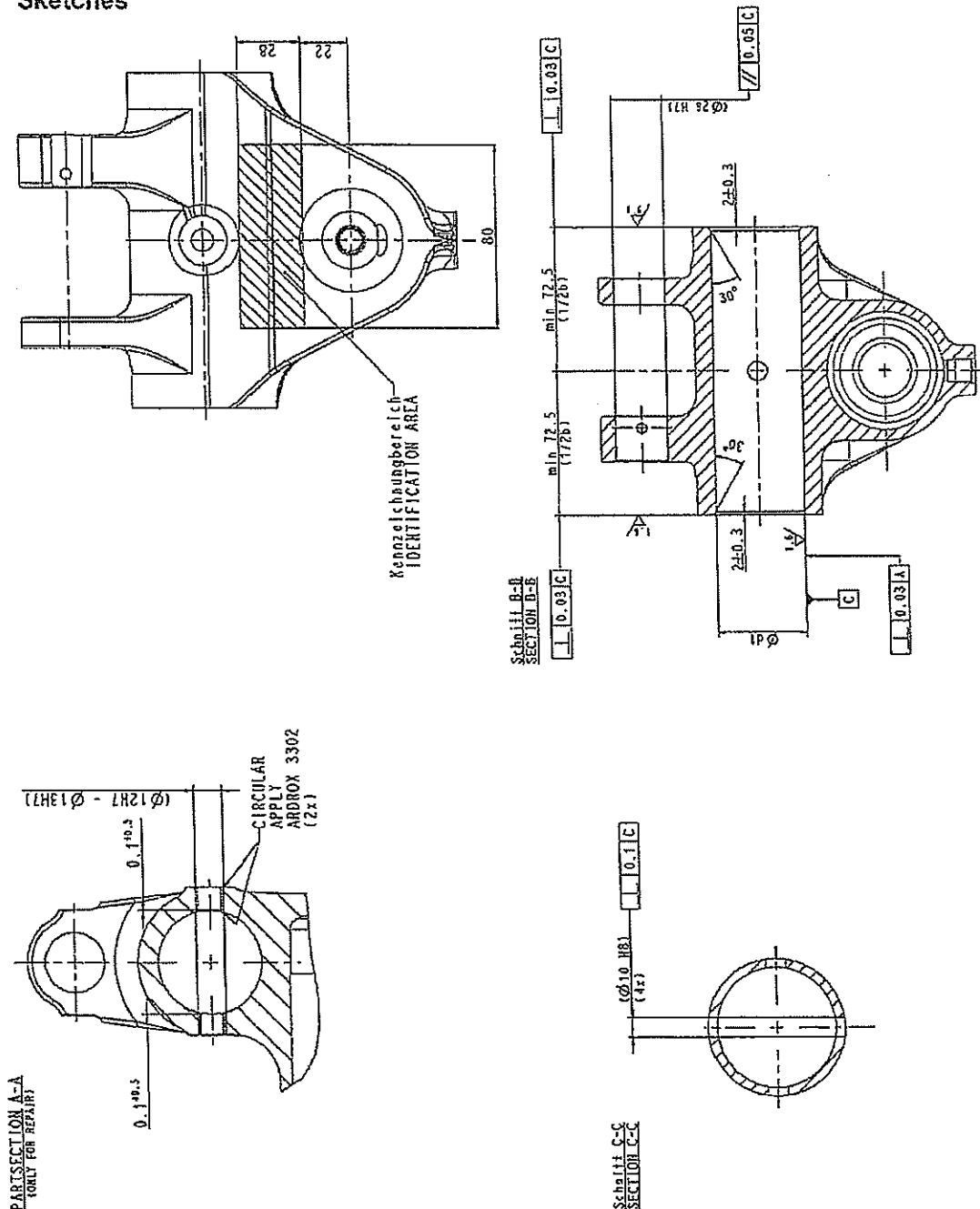
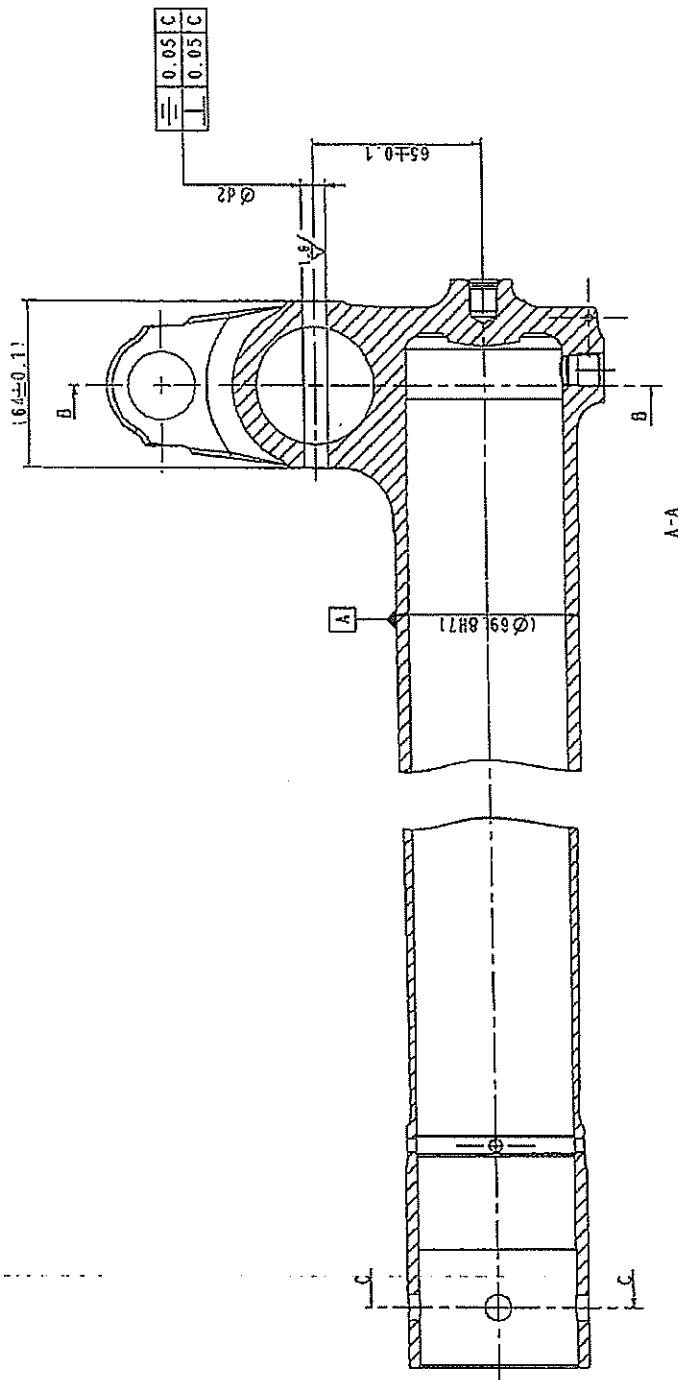


Fig. 4 Sketch 1: Sliding Tube (1/2)

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— CADMIUM PLATED TO LAT 4-3001, CD 10
SHOT PEEN TO MIL S 13165C OVER ALL REPAIRED EXTERNAL AREAS

SHOT PEENING DATA:
GRAIN SIZE: S 230
GRAIN HARDNESS: 55-59 HRC
INTENSITY: 0.2 - 0.3 A EXTERNAL
INTENSITY: 0.1 - 0.2 A INTERNAL
COVERAGE: > 100%

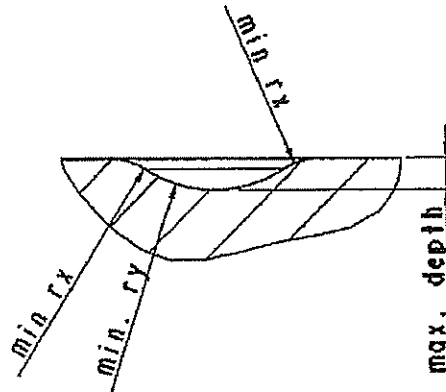
Fig. 5 Sketch 2: Sliding Tube (2/2)

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7.1 Sketch "B" local blending

max. depth:	0.2mm (0.0079 inch)
min. rx:	0.5mm (0.9843inch)
min. ry:	5mm (0.1969 inch)
max length:	12mm (0.4724 inch)
Max width:	6mm (0.236 inch)



Tab. 6 Shape of material removal

ONLY 1 BLENDING PER 90° ALLOWED!

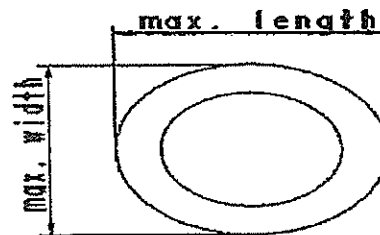


Fig. 6 Shape of removed material

Surface quality of repaired surface **Ra1,6** or better

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7.2 Sketch "C": Installation of bushings

PARTSECTION A-A
(ONLY FOR REPAIR)

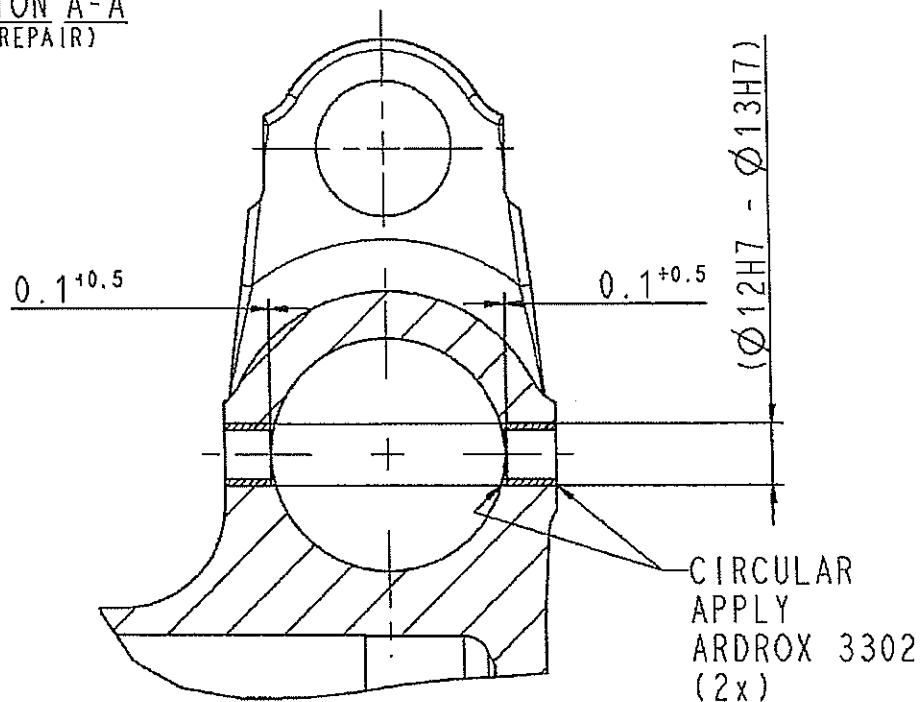
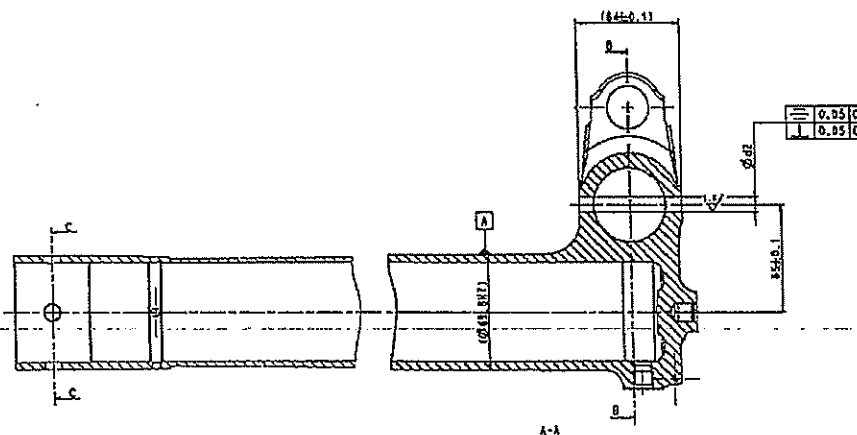
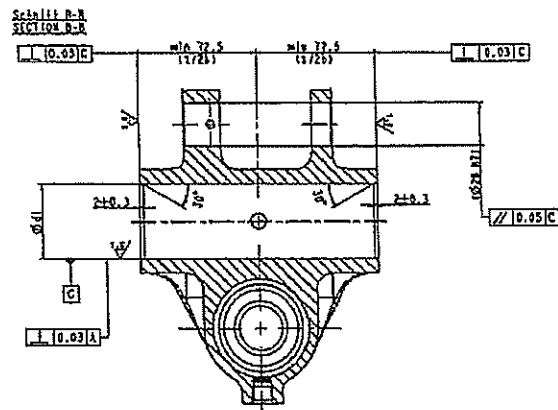
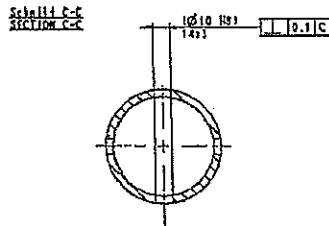
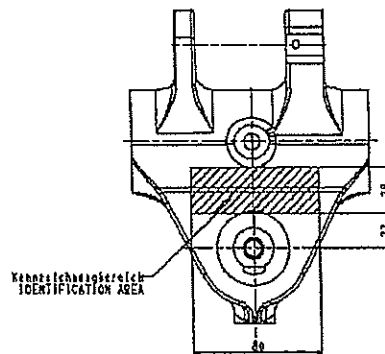


Fig. 7 Installation of bushings

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PARTSECTION A-A
TOGETHER WITH EXPLANATION



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9 AMENDMENT RECORD

ISSUE	Date	REVISION DESCRIPTION
01	2010-07-13	Initial Issue

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IDR 37205

HAWKER PACIFIC
AEROSPACE
FAA Repair Station RJ3R817L
EASA: DE.145.0001

Part Data Part Description WHEEL AXLE P/N 1170-1402:D9893 S/N L660 Customer S/N Detail P/N Detail S/N		Event Data Repair Order 51682545 Event L-00530-NLG Sales Order 660041973 Product (A/C Type) ERJ-145 Tail Sign N11535 Customer/Operator 101896 JSX Customer PO RO-3197-11535	
IDR Details IDR Status CL - Closed IDR Issue Date 26.Aug.2022 IDR Close Date 18.Oct.2022		Additional Data TSN 40852.90 FH CSN 31567.00 CYC OEM Ref. 32-21-09 OEM LIEBHERR	
Discrepancy DIA (5A/5B/5C) O/D MACHINED U/S TO REMOV			
OEM/DER Response ED-LLI-10-0069 Response date 09.Sep.2022 10/11/11  OCT 18 2022			
Customer Response CUSTOMER APPROVAL NOT REQUIRED FOR JSX Response date 09.Sep.2022 10/11/11  OCT 18 2022			
Engineer / Signature 		Inspector / Signature 	
Date OCT 18 2022		Date 10/18/22	
Stamp 		Stamp 	

IDR 37205

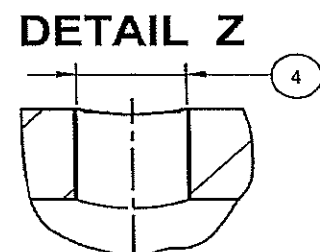
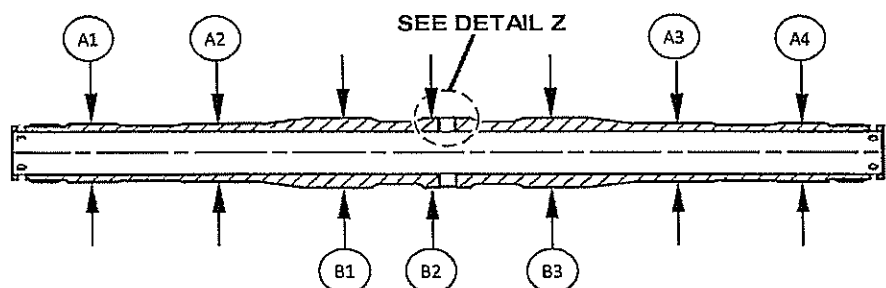
This Document holds no airworthiness approval and reference to OEM approval is required. The purpose of this document is for transmittal of engineering information within the Part 145 production facility only.

Inspection Discrepancy Report (IDR)

IDR Document No. 37205	Rev. No. 0	Date 10/18/2022	Sales Order No. 660041973	Work Order No. 51682545	
Part Description WHEEL AXLE	Part Number 1170-1402		Serial Number L660	A/C Type EMB-145	CMM 32-21-09
Detail Part Description N/A	Detail Part Number N/A		Detail Serial Number N/A	A/C Tail No. (MSN) N11535	
Description Journals (B1, B2, B3) machined undersize to remove corrosion. All other dimensions are within CMM limits.					
Proposed Resolution If structurally acceptable, HPA proposes to - Repair in accordance with ED-LLI-10-0069. - Continue rest of repair and refinish in accordance with CMM					

REFERENCE #	A1	A2	A3	A4
Design Dim.	1.4998 1.4992	1.4998 1.4992	1.4998 1.4992	1.4998 1.4992
Repair Limit	MIN 1.4859	MIN 1.4859	MIN 1.4859	MIN 1.4859
As Received/ Post Rework	1.4871	1.4871	1.4872	1.4867

REFERENCE #	B1	B2	B3	4 (x2)
Design Dim.	1.7731 1.7722	1.7731 1.7722	1.7731 1.7722	0.3760 0.3752
Repair Limit	N/A	N/A	N/A	N/A
As Received/ Post Rework	1.7655	1.7652	1.7654	0.3758



ALL DIMENSIONS ARE IN INCHES

TODAY'S DATE:	10/18/2022	REPAIR CLASSIFICATION:	Minor
NEED BY/DUE DATE:	10/25/2022	SUBMITTED BY:	HPA Engineering
PART CSN:	31567.00	EMAIL:	eng.concessions@hawker.com
PART TSN:	40852:54	PHONE NUMBER:	+1 (818) 765-6201 x199

LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs	ED-LLI-10-0069 Issue 02
	Page 1 / 11	2011-10-28

LIEBHERR-AEROSPACE LINDENBERG GMBH - Design P.O. Box 1363 - 88153 Lindenberg / Germany	FAX: +49 8381 46-4124
---	-----------------------

Equipment:		
PN:	SN:	Part Name:
1170-1402 1170-1431 1170-1432 1170-1403 1170-1433 1170-1434 2233-0202 2233-0230 2233-0231	ALL	Wheel Axle
Flight Hours:	Flight Cycles:	Ref. Doc:
ALL	ALL	32-21-08, 32-21-09, 32-21-10, 32-21-11
Part Class:		Additional Information:
1		none
Customer:		
Customer:	Aircraft model:	Aircraft SN:
All Customers	ERJ 145	ALL
Classification of repair:		
Repair minor ☒ major ☐ Parts Life Limit not affected ☒ affected ☐		
Identification mark on part:		
Identification no ☒ yes ☐ :		
Subject: Decision for Customer Request ER-LSL-10-0145 / -10-0174		
Repair procedure for shop repair: This Engineering Disposition describes a nickel-plating solution for the wheel axle at the sliding tube attachment. Within this ED the described repair procedure (chrome plating) is no longer valid for the affected area. The applicable CMM-chapter will be reworked in one of the next revisions. After full accomplished repair the part can return into service without any restriction.		

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Rules

With this Engineering Disposition Liebherr further complies with its contract obligations with respect to the herein mentioned Aircraft model and the respective product designed, developed and supplied by Liebherr. This document describes a method of repair or rework in general and does not provide an individual appraisal for a maintenance enquiry. The user shall respect all instructions and information provided in this Engineering Disposition and any related CMM, AMM or any other document referenced herein.

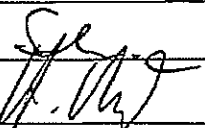
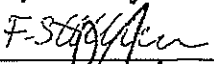
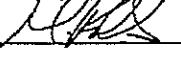
The assigned repair shop shall have the expertise to perform the described repairs. Stated warnings and notes herein are not exhaustive. The assigned repair shop shall comply with all applicable regulations and precautions for occupational safety and the appropriate technical treatment of the materials.

The assigned repair shop shall ensure that all surrounding parts comply with Liebherr delivery conditions and/or repair procedures. Repairs on surrounding parts shall only be performed in accordance with repair procedures provided by Liebherr. Non-Observance of the repair procedures for surrounding parts provided by Liebherr could affect the interchangeability of the parts and possibly lead into a major change!

The included contents do not constitute an airworthiness release approval. Such approval shall be provided by the owner or operator of the aircraft in accordance with the competent regulatory authority procedures.

Dimensions in "inch" are for information only, metric dimensions are generally binding.

Signatures incl. Classification Decision

SIGNATURE-TYPE	ROLE	NAME	DATE	SIGNATURE
Prepare	Originator	Rupert Salein	28/10/2011	
Approved	Airworthiness Engineer - Design	H. Betsch	28/10/11	
Approved	Airworthiness Engineer - Stress	Frank Stellmann	28/10/11	
Approved	Airworthiness Manager	F. Meer	10.11.11	
Approved	Project Leader	E. Lingg	28.10.11	
Approved	Product Support	M. Loh	10.11.11	
Accepted	Design Organisation (TC Holder)			

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LIEBHERR	Engineering Disposition	ED-LLI-10-0069
Aerospace	for repairs	Issue 02
LINDENBERG GmbH	Page 3 / 11	2011-10-28

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1 Introduction

After disassembling of the wheel axle during maintenance the outer diameter could be out of limit for original measurement. This deviation from origin may be affected by wear from wheel axle disassembling or worn cadmium plating.

1.1 Repair Zones

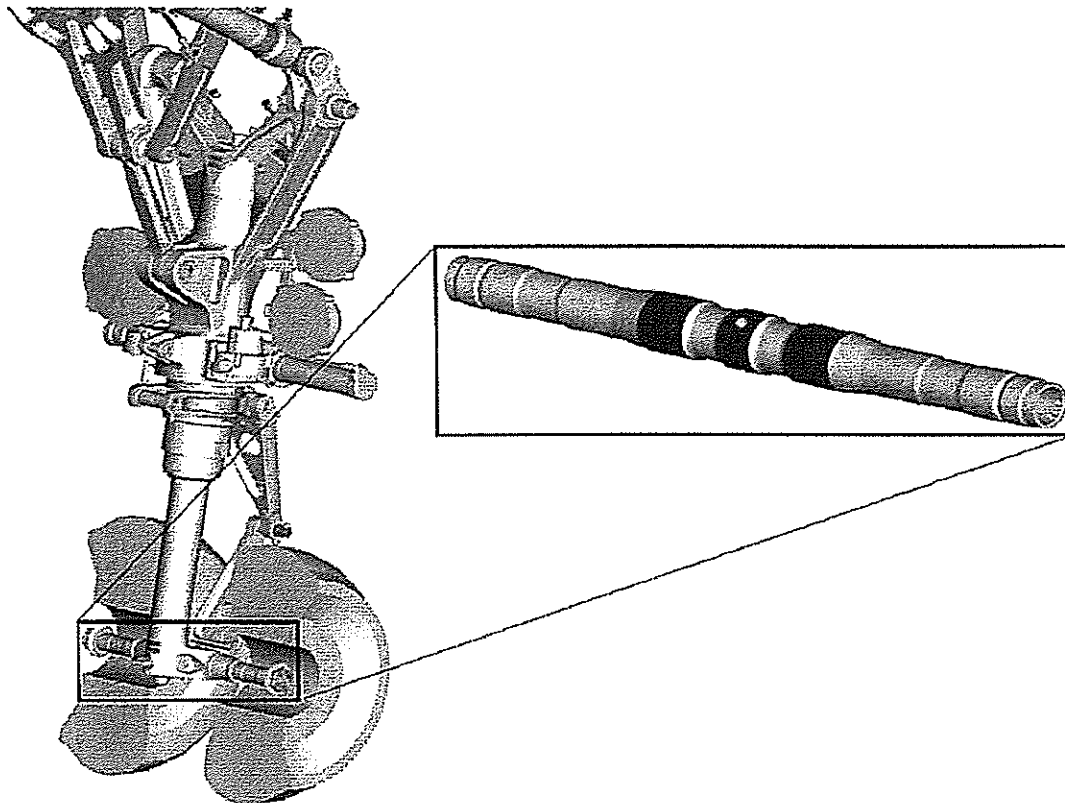


Fig. 1 Repair Zone

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1.2 Applicable CMM Documents

Disassembly/ Assembly, Cleaning, Repair of Paint Finish:

32-21-08, 32-21-09, 32-21-10, 32-21-11

1.3 Stress report

Stress Report: L-2232-DAC-0019 issue 01

1.4 Necessary Parts and Consumables

Affected Parts

Description	Part number	QTY	Material	Rm
Wheel axle	1170-1402, 1170-1431, 1170-1432 1170-1403, 1170-1433, 1170-1434 2233-0202, 2233-0230, 2233-0231	1	E35NCD16H	1800-2000 N/mm ²

Tab. 1 Affected Parts

Consumables

Find consumables; cleaning agent, grease, paint etc. in applicable CMM documents:

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2 Initial Inspection

2.1 Preconditions for Repair

- It is only allowed to perform the repair, if the outer diameter doesn't exceed the limit (see Tab. 2). Otherwise the part must be replaced.

2.2 Repair Limits

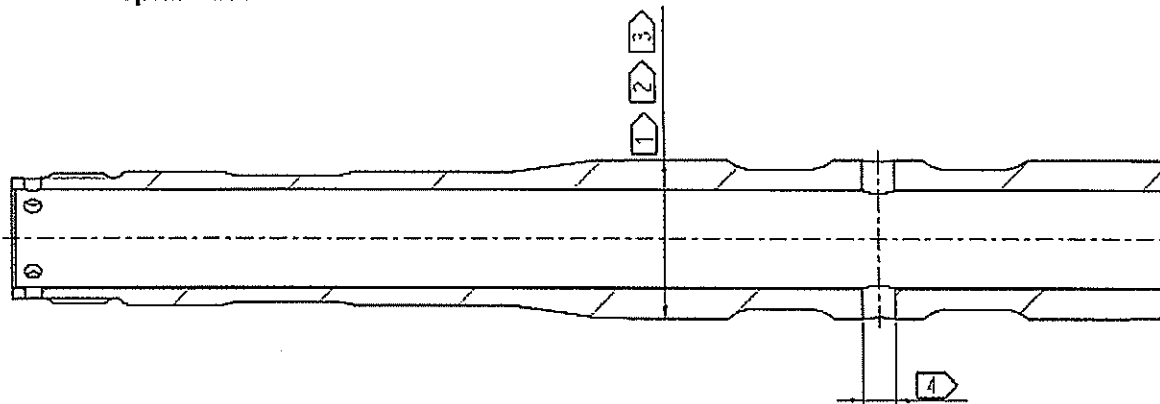


Fig. 2 Repair Limits

	Part-No.	Name	nom. Dimension	Repair NOT ALLOWED if:
1	1170-1402 1170-1403 2233-0202	Wheel axle outer diameter	Pre-Plating Diameter: 45.01 -0.016 mm (1.7720 -0.00063 in.) Post-Plating Diameter: 45.014 $+0.024$ mm (1.7722 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.51$ mm ($\varnothing < 1.752$ in.)
2	1170-1431 1170-1433 2233-0230		Pre-Plating Diameter: 45.160 -0.016 mm (1.7779 -0.00063 in.) Post-Plating Diameter: 45.164 $+0.024$ mm (1.7781 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.65$ mm ($\varnothing < 1.758$ in.)
3	1170-1432 1170-1434 2233-0231		Pre-Plating Diameter: 45.310 -0.016 mm (1.7838 -0.00063 in.) Post-Plating Diameter: 45.314 $+0.024$ mm (1.7840 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.80$ mm ($\varnothing < 1.764$ in.)
4	all Wheel Axles	Locking bolt bore	Pre-Plating Diameter: 9.558 $+0.014$ mm [0.3763 $+0.00055$ in.] Post-Plating Diameter: 9.530 $+0.022$ mm [0.3752 $+0.00087$ in.]	Pre- Plating-Diameter $\varnothing > 9.572$ mm ($\varnothing > 0.3768$ in.)

Tab. 2 Repair Limits

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3 Repair Procedure

Caution:

The part has been heat treated. Strictly avoid local temperatures above 190 °C (374 °F) during repair process.

Non-observant causes a loss of tensile strength

Note:

Repair with the lowest loss of material

3.1 Machining

- 1) Remove complete paint and primer coating ref. to CMM
- 2) Remove Cadmium plating ref to. CMM
- 3) Remove chrome from locking bolt bore.
- 4) Grind all affected surfaces to the same diameter within limits. For the minimal allowed outer diameter see Tab. 2.
- 5) If wheel bearing seats are worn remove chrome plating. Repair chrome plating ref. to CMM.
- 6) Apply NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

3.2 Surface Treatment

- 1) Apply shot peening ref. to AMS-S-13165 or SAE AMS 2430 to reworked areas:

Shot:	Steel
Grain size:	S 230
Grain hardness:	55-59 HRC
Intensity:	0.2 – 0.3 A External
Intensity:	0.1 – 0.2 A Internal
Coverage:	> 100 %

If the chrome plated areas must be reworked, apply shot peening to the complete part (inner and outer surface) except threads, cotter pin bores, and locking bolt bore.

- 2) If necessary, restore sulfuric acid chrome plating in acc. with SAE AMS 2460 ref. to CMM. (Minimal diameter after plating: 38.245 mm (1.5057 in.)). Cover all not affected surfaces.

Grind chrome plating to final diameter: 38.095 $\pm$ 0.015 mm (1.4998 $\pm$ 0.0006 in.)

Minimal thickness of chrome plate: 0.07 mm (0.00276 in.)

For chrome plating run out see CMM.

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- 3) Apply galvanic oversize nickel plating ref. to SAE AMS QQ-N-290B for Sultanate Nickel. Cover all chrome plated and not affected areas.
Grind to pre-plating diameter acc. to Tab. 2.
For nickel plating run out see Fig. 3.
Max. plating thickness: 250 µm
- 4) Apply low embrittlement cadmium plating over all surfaces and plating (except chrome plating) ref. to SAE AMS 2401G. Cover all chrome plated surfaces.
Plating thickness: 10 ⁺¹⁰ µm (0.4 ^{+0.4} µm)
Post-plating diameter acc. to Tab. 2
See Fig. 3 for dimensions.
- 5) Apply Primer and Topcoat. Cover all nickel and chrome plated areas. See CMM.

4 Reassembling

Reassemble the wheel axle ref. to CMM

5 Quality inspection

- 6) Continuously check dimensions, form and positional tolerances during repair procedure.
- 7) Do visual inspection of all affected parts during the repair process
- 8) All surfaces have to be cleaned from dirt or waste material.

6 Part Identification

N/A

7 Acceptance Testing on A/C level

Perform airworthiness release approval according to the local regulatory authority procedures of owner or operator of the aircraft.

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LIEBHERR-AEROSPACE LINDENBERG GMBH
Pländerstrasse 50-52 - 88161 Lindenberg im Allgäu / Germany

8 Technical Drawings/ Sketches

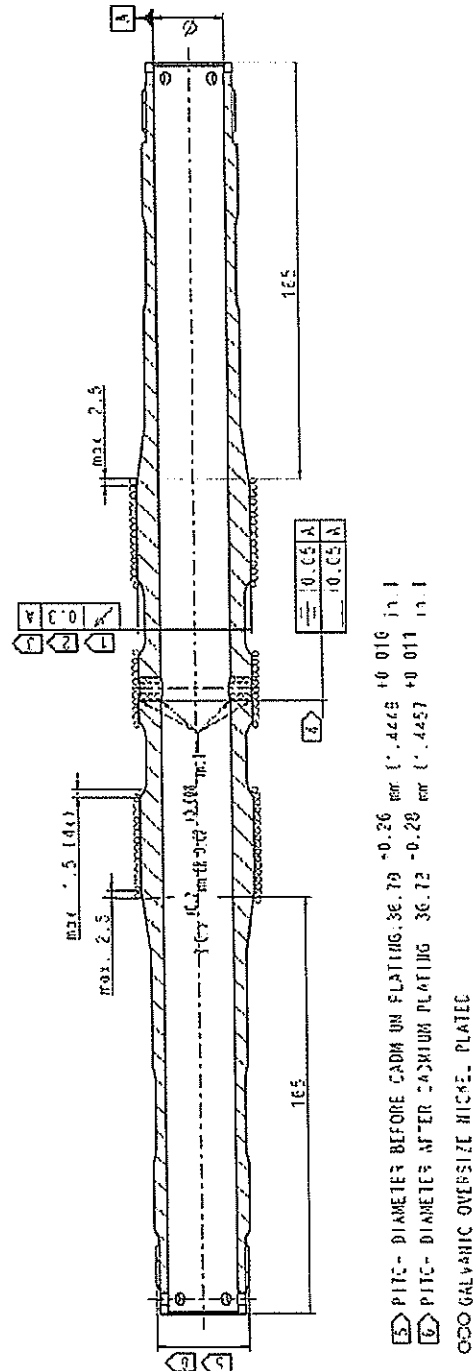


Fig. 3 Details for nickel and cadmium plating

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LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs Page 11 / 11	ED-LLI-10-0069 Issue 02 2011-10-28
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9 AMENDMENT RECORD

ISSUE	Date	REVISION DESCRIPTION
01	2011-10-21	Initial Issue
02	2011-10-28	Page 9 chapter 3.2 subnote 3) & 4): Corrected description

The released original Document is located in the AER PLM-System. Check the validation level of copy prior use.
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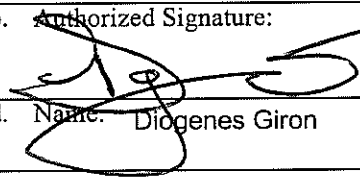
Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Certificates for Replaced Parts (with Traceability)

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158293	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O.: 660041973 / 51682545 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	WHEEL AXLE	1170-1402	1	L660	OVERHAULED		
12. Remarks: Life Details: TSN: 40852:54 CSN: 31567 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATE 19MAR2014. COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION ED-LLI-10-0069 REV.2 DATED 28OCT2011. PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682545 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1170-1402	WHEEL AXLE	L660	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			5629.00	31567.00	7071:52	40852:54
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

WHEEL AXLE RECEIVED IN NORMAL WEAR CONDITION.
PART WILL BE RELEASED FOR OVERHAUL.

IDR 37205 WAS OPEN FOR WHEEL AXLE DUE TO O/D DIA (5A/5/5C) MACHINED U/S.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATE 19MAR2014.
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION ED-LLI-10-0069 REV.2 DATED 28OCT2011.

CSO: 00:00
TSO: 00:00

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 19, 2022
As shipped Part Number	1170-1402	S / N	L660	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

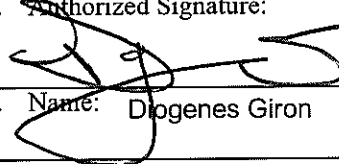
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158294	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352						5. Work Order/Contract/Invoice No./P.O.: 660041973 / 51682557 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	TORQUE LINK ASSY	1170A0300-01	1	1548	OVERHAULED		
12. Remarks: Life Details: TSN: 35956:27 CSN: 28571 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014. NON-PROCURABLE P/N: 1170-0301 PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.			14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.				
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:  		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682557 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	1170A0300-01	TORQUE LINK ASSY	1548	LIEBHERR AEROSPACE LINDENBERG GMBH	ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO
NONE			5629.00	28571.00	7071:52
Warranty	N/A				
Customer Instructions	OVERHAUL				

Initial Evaluation Results

TORQUE LINK RECEIVED IN NORMAL WEAR CONDITION.
ALL DIMENSIONS ARE ACCEPTABLE PER CMM LIMITS.
PART RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014.

NON-PROCURABLE P/N: 1170-0301

CSO/TSO: ZERO

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 3, 2022
As shipped Part Number	1170A0300-01	S / N	1548	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

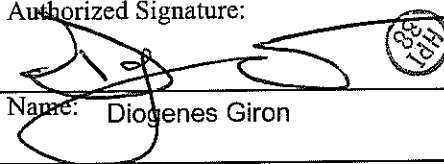
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158295	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352						5. Work Order/Contract/Invoice No./P.O. 660041973 / 51682556 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	TORQUE LINK ASSY	1170A0300-01	1	L3558	OVERHAULED		
12. Remarks: Life Details: TSN: 10811:16 CSN: 8594 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014. NON-PROCURABLE P/N: 1170-0301 PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12. 14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			14b. Authorized Signature: 				
13b. Authorized Signature:		13c. Approval / Authorization No.:		14c. Approval Certificate No.: RJ3R817L			
13d. Name:		13e. Date:		14d. Name: Diogenes Giron 14e. Date: (dd/mm/yyyy) 20.Oct.2022			
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682556 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1170A0300-01	TORQUE LINK ASSY	L3558	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			5629.00	8594.00	7071:52	10811:16
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

TORQUE LINK RECEIVED IN NORMAL WEAR CONDITON.
ALL DIMENSIONS ARE ACCEPTABLE PER CMM LIMITS.
PART RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014.

NON-PROCURABLE P/N: 1170-0301

CSO/TSO: ZERO

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 3, 2022
As shipped Part Number	1170A0300-01	S / N	L3558	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

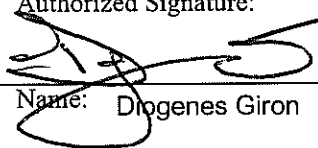
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158296	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O. 660041602 / 51670504 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	FITTING, MAIN ASSY	2233A0100-02	1	1320	OVERHAULED		
12. Remarks: Life Details: CSN: 4613 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014. NON-PROCURABLE P/N: 2233-0103, SN: 1320 PREVIOUS OPERATOR: JSX, A/C: N243JX							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Drogenes Giron		14e. Date: (dd/mmm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: P-00516-NLG Sales Order: 660041602
Repair Order: 51670504 Receipt Date:
Customer JSX
Customer P.O. RO-2844
Urgency Tail # N243JX

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	2233A0100-02	FITTING, MAIN ASSY	1320	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE				4613.00		
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

MAIN FITTING ASSY WAS RECEIVED IN NORMAL WEAR CONDITION.
NO NOTABLE DEFECTS OR DAMAGE NOTED.
WILL BE RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014.

NON-PROCURABLE P/N: 2233-0103, SN: 1320

CSO: 00.00

TSO: 00:00

PREVIOUS OPERATOR: JSX, A/C: N243JX

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Sep 29, 2022
As shipped Part Number	2233A0100-02	S / N	1320	Publication	32-21-09

CUSTOMER: JSX

PART NUMBER: 1170C0000-08

SERIAL NUMBER: 00700

Assembly CSN: 23,972

Assembly CSO: 4,613

Date of Last Overhaul: 4/11/2012

Date Removed: 3-May-22

Sub Part details

Part No received	Nomenclature	Actual Serial Number from records	Life Limit	CSN	Cy Rem
1170-0001	Torque Link Pin	L1029	60,000	7,306	52,694
1170-0001	Torque Link Pin	L1421	60,000	23,972	36,028
1170-0002	Torque Link Central Bolt	L1269	60,000	19,956	40,044
1170-0032	Pintle Pin	L1569	60,000	16,347	43,653
1170-0032	Pintle Pin	L0339	60,000	16,347	43,653
1170-0070	Main Drag Strut Attachment Pin	L821	60,000	23,972	36,028
1170A0300-01 0301	Torque Link	L2240	60,000	17,099	42,901
1170A0300-01 0301	Torque Link	L1949	60,000	17,099	42,901
1170A1400-01 1170-1401	Sliding Tube	L1232	60,000	16,347	43,653
1170-1402	Wheel Axle		60,000		
1170-1403	Wheel Axle	L186	60,000	23,972	36,028
1170-1431	Wheel Axle		60,000		
1170-1432	Wheel Axle		60,000		
1170-1433	Wheel Axle		60,000		
1170-1434	Wheel Axle		60,000		
1170A3200-01 1170-2301	Steering Cuff	L928	60,000	23,972	36,028
2233A0100-02 0103	Main Fitting	1320	60,000	4,613	55,387

Customer Name Signature James Weaver

Customer Title Chief Inspector

Date Created 7/27/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

P/N Detail Print

Print Date: 10/27/2020 08:20

Page: 1 of 4



A/C: N12900

Position: ONLY

■ P/N: 1170C0000-02

P/N S/N: 00245

LEG STRUT ASSY, NLG

Batch:

2147976

SCHEDULE				ACTUAL				REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
TSN				47990:54	37322	4256	01/13/2012	0:00	0	0	
TSI				18455:12	14705	3209	01/13/2012	0:00	0	0	
NLG STRUTRST135/145				24536:15	19771	4256	03/03/2009	0:00	229	124	OPEN

■ P/N: 1170-0001

P/N S/N: 0376

NLG, TORQUE LINK AXLE

Batch:

2146788

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK PIN				47990:54	37322	3210	0:00	22678	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-0001

P/N S/N: 0383

NLG, TORQUE LINK AXLE

Batch:

2152410

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK PIN				47990:54	37322	3210	0:00	22678	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-0002

P/N S/N: L1820

NLG, TORQUE LINK CENTRAL BOLT

Batch:

2315564

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK CENTRAL BOL				24536:15	19771	3210	0:00	40229	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				24536:15	19771	3210	0:00	0	0	

P/N Detail Print

Print Date: 10/27/2020 08:20

Page: 2 of 4



A/C: N12900

Position: ONLY

■ P/N: 1170-0032

P/N S/N: L3302

PINTLE PIN, NLG

Batch: 2359728

Control Items

Description

NLG PINTLE PIN

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0032

P/N S/N: L3304

PINTLE PIN, NLG

Batch: 2315563

Control Items

Description

NLG PINTLE PIN

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0070

P/N S/N: L1585

DRAG STRUT ATTACHMENT PIN, NLG

Batch: 2359727

Control Items

Description

NLG MAIN DRAG STRUT ATTACH I

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0071

P/N S/N: L1489

ACTUATOR ATTACHMENT PIN, NLG

Batch: 2354425

Control Items

Description

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

P/N Detail Print

Print Date: 10/27/2020 08:20

Page: 3 of 4



A/C: N12900

Position: ONLY

■ P/N: 1170A0300-01

P/N S/N: 1458

TORQUE LINK ASSY, NLG

Batch: 7531011

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			36100:24	28923	1407	0:00	31077	0	OPEN
				788:30	741	279	0:00	0	0	
				36100:24	28923	1407	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: 1523

TORQUE LINK ASSY, NLG

Batch: 7514486

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			26758:31	16962	1095	0:00	43038	0	OPEN
				788:30	741	279	0:00	0	0	
				26758:31	16962	1095	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 178

SLIDING TUBE ASSY, NLG

Batch: 2148464

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
	20000	4380		7261:18	5878	1551	0:00	14122	2829	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-1403

P/N S/N: L599

WHEEL AXLE, NOSE

Batch: 2322859

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

P/N Detail Print

Print Date: 10/27/2020 08:20

Page: 4 of 4



A/C: N12900

Position: ONLY

■ P/N: 1170A2300-01

P/N S/N: 0186

NLG, STEERING CUFF ASSY

Batch: 2146901

Control Items

Description

NLG STEERING CUFF

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170A3500-02

P/N S/N: 01085

FEEDBACK POTENTIOMETER

Batch: 2342260

Control Items

Description

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				10808:26	8709	2101	0:00	0	0	
				44189:33	27421	2101	0:00	0	0	

■ P/N: 2233A0100-02

P/N S/N: 1123

MAIN FITTING ASSY, NLG

Batch: 2254554

Control Items

Description

NLG MAIN FITTING 60K

(LIFE LIMITED PART) MAIN FITTING LIFE LIMIT
60000 FC

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			18455:12	14705	3210	0:00	45295	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				18455:12	14705	3210	0:00	0	0	

CUSTOMER: JSX

PART NUMBER: 1170S0000-02

SERIAL NUMBER: 00245

Assembly CSN: N/A

Assembly CSO: N/A

Date of Last Overhaul: N/A

Date Removed: N/A

Sub Part details

Part No received	Nomenclature	Actual Serial Number from records	Life Limit	CSN	Cy Rem
1170-0071	Actuator Attach Pin	L1884	N/A	8,353	
1170-0001	Torque Link Pin		60,000		
1170-0001	Torque Link Pin		60,000		
1170-0002	Torque Link Central Bolt	L1863	60,000	15,870	44,130
1170-0032	Pintle Pin		60,000		
1170-0032	Pintle Pin		60,000		
1170-0070	Main Drag Strut Attachment Pin	L00526	60,000	28,476	31,524
1170A0300-01 1170-0301	Torque Link	L2509	60,000	17,601	42,399
1170A0300-01 1170-0301	Torque Link	1368	60,000	21,974	38,026
1170A1400-01 1170-1401	Sliding Tube		60,000		
1170-1402	Wheel Axle		60,000		
1170-1403	Wheel Axle		60,000		
1170-1431	Wheel Axle		60,000		
1170-1432	Wheel Axle		60,000		
1170-1433	Wheel Axle		60,000		
1170-1434	Wheel Axle		60,000		
1170A3200-01 1170-2301	Steering Cuff		60,000		
2233A0100-02 0103	Main Fitting		60,000		

Customer Name Signature

James Weaver

Customer Title Chief Inspector

Date Created 10/11/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

Customer Documentation Package

Evaluation Report and Airworthiness Release Certificate

Life Limit Report

Service Bulletin Report

Customer Purchase Order (PO, RO, SO)

Concessions

Certificates for Replaced Parts (with Traceability)

Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 10/19/2022

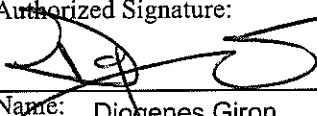
Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Evaluation Report and Airworthiness Release Certificate

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving Civil Aviation Authority / Country FAA / United States		AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158298	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352						5. Work Order/Contract/Invoice No./P.O.: 660041929 / 51678439 / / RO-3180-145501	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	STRUT, NOSE LANDING GEAR	1170S0000-01	1	00245	OVERHAULED		
12. Remarks: Life Details: TSN: 47990:54 CSN: 37322 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014 COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: L-6011-ED-0004 DATED 13JUL2010. COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: ED-LLI-10-0069 REV.2 DATED 10NOV2011. POST MODS: M, 1170, -10, -11, -16, -17, -20 SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 21.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00528-NLG Sales Order: 660041929
Customer JSX Receipt Date: Aug 9, 2022
Customer P.O. RO-3180-145501
Urgency Tail # N48901

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1170S0000-01	STRUT, NOSE LANDING GEAR	00245	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			14705.00	37322.00	18455:12	47990:54
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

RECEIVED NOSE LANDING GEAR DUE FOR OVERHAUL. NO MAJOR DAMAGE EXTERNALLY NOTED.
UNIT WILL BE OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 AND CRM 32-21-09-R

Initial Test N/A

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: L-6011-ED-0004 DATED 13JUL2010.
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION: ED-LLI-10-0069 REV.2 DATED 10NOV2011.

CSO: 00:00
TSO: 00:00

POST MODS: M, 1170, -10, -11, -16, -17, -20

SEE ATTACHMENTS FOR AD/SB STATUS AND LLP DATA.

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 20, 2022
As shipped Part Number	1170S0000-01	S / N	00245	Publication	32-21-09



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Life Limit Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



LIFE LIMIT REPORT

E145 NLG LEG STRUT ASSY

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901

Mfg S/N: 00245 MSN: 501

CPN: N/A

PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1170S0000-01	NOSE LANDING GEAR STRUT	00245	UNLIMITED	37,322	N/A
1170A1400-01	SLIDING TUBE ASSY	178	UNLIMITED	37,322	N/A
1170-1401	SLIDING TUBE	178	60,000	37,322	22,678
1170-1403	WHEEL AXLE	L599	60,000	37,322	REPLACED
1170A3200-01	STEERING CUFF ASSY	0186	UNLIMITED	37,322	N/A
1170-2301	STEERING CUFF	L19700	60,000	37,322	22,678
1170A0300-01	TORQUE LINK ASSY	1368	UNLIMITED	21,974	REPLACED
1170-0301	TORQUE LINK	1368	60,000	21,974	REPLACED
1170A0300-01	TORQUE LINK ASSY	L2509	UNLIMITED	17,601	REPLACED
1170-0301	TORQUE LINK	L2509	60,000	17,601	REPLACED
1170-0001	TORQUE LINK PIN	0376	60,000	37,322	22,678
1170-0001	TORQUE LINK PIN	0383	60,000	37,322	22,678
1170-0002	TORQUE CENTER BOLT	L1863	60,000	15,870	44,130
2233A0100-02	MAIN FITTING ASSY	1123	UNLIMITED	14,705	REPLACED
2233-0103	MAIN FITTING	1123	60,000	14,705	REPLACED

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1170S0000-01	00245	37,322	N/A	0	N48901
1170A1400-01	178	37,322	N/A	0	N48901
1170-1401	178	37,322	22,678	0	N48901
1170-1402	L660	31,567	28,433	0	N11535
1170A3200-01	0186	37,322	N/A	0	N48901
1170-2301	L19700	37,322	22,678	0	N48901
1170A0300-01	1548	28,571	N/A	0	N11535
1170-0301	1548	28,571	31,429	0	N11535
1170A0300-01	L3558	8,594	N/A	0	N11535
1170-0301	L3558	8,594	51,406	0	N11535
1170-0001	0376	37,322	22,678	0	N48901
1170-0001	0383	37,322	22,678	0	N48901
1170-0002	L1863	15,870	44,130	0	N48901
2233A0100-02	1320	4,613	N/A	0	N243JX
2233-0103	1320	4,613	55,387	0	N243JX

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD

Stamp:

Date: 10/19/2022



LIFE LIMIT REPORT

E145 NLG LEG STRUT ASSY

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901

Mfg S/N: 00245 MSN: 501

CPN: N/A

PO: RO-3180-145501

AS RECEIVED BY HPA

MFG P/N	NOMENCLATURE	MFG S/N	SLL*	CSN	REMAINING SLL
1170-0070	DRAG STRUT ATTACH PIN	L00526	60,000	28,476	31,524
1170-0032	PINTLE PIN	L3302	60,000	19,771	40,229
1170-0032	PINTLE PIN	L3304	60,000	19,771	40,229
1170-0071	ACTUATOR ATTACH PIN	L1884	UNLIMITED	8,353	N/A
1170A3500-02	FEEDBACK POTENTIOMETER	01085	UNLIMITED	27,421	N/A

AS RELEASED BY HPA

MFG P/N	MFG S/N	CSN	REMAINING SLL	CSO	PREVIOUS OPERATOR
1170-0070	L00526	28,476	31,524	0	N48901
1170-0032	L3302	19,771	40,229	0	N48901
1170-0032	L3304	19,771	40,229	0	N48901
1170-0071	L1884	8,353	N/A	0	N48901
1170A3500-02	01085	27,421	N/A	0	N48901

*SAFE LIFE LIMITS (SLL) MRB-145/1150 Rev. 21 Dated 16-JUN-2020

Cumulative cycle information for each life limited component or assembly is provided by and recorded under the responsibility of the customer. Safe life limits have been reviewed and verified to approved and/or accepted data. Deviations from the technical publication's safe life limit may be reflected, as dictated by the customer.

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Prepared By: DAVID LOUD Stamp: 

Date: 10/19/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Service Bulletin Report

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

Sales Order: 660041929

Mfg P/N: 1170S0000-01 A/C: N48901
Mfg S/N: 00245 MSN: 501
CPN: N/A PO: RO-3180-145501

Service Bulletin Report E145 NLG LEG STRUT ASSY

SERVICE BULLETIN	AD NOTE	EO or REF	DESCRIPTION	ACCOMPLISHMENT STATUS	
145-32-0025	-	1170B-32-01	NLG STRUT INCREASE STEERING ANGLE	PCW	
145-32-0040	-	1170B-32-02	REPLACEMENT OF NLG TARGET LEVER BUSHINGS		N/R
145-32-0067	-	1170C-32-04	INSPECTION OF THE NLG WHEEL AXLE		N/R
145-32-0068	2005-01-05	1170C-32-03	REPLACEMENT OF NLG WHEEL NUT	PCW	
145-32-0076	-	1170C-32-01	NLG STRUT MODIFIED MAIN FITTING		N/R
145-32-0077	-	1170C-32-02	REPLACEMENT OF NLG STEERING CUFF ASSY (ON ATTRITION ONLY)	PCW	
145-32-0081	-	1170A1800-32-01	FEEDBACK POTENTIOMETER MODIFICATION (NEW BEARINGS ONLY ON ATTRITION)		N/R
145-32-0082	-	1170A2900-32-01	FEEDBACK SENSOR MODIFICATION (NEW RELIEF VALVE ONLY ON ATTRITION)		N/R
145-32-0088	-	1170C-32-05	NLG SLIDING TUBE UPPER CAM MODIFICATION	PCW	
145-32-0100	-	1170A3500-32-03	IMPROVEMENT OF FEEDBACK UNIT POTENTIOMETER		N/R
145-32-0101	-	1170C-32-07	INTRODUCTION OF STEEL SLEEVE IN NLG STRUT	PCW	
145-32-0110	-	1170C-32-10	SECOND SUPPLIER OF POTENTIOMETER FOR POTENTIOMETER (ON ATTRITION)		N/R
145-32-0111	-	1170C-32-11	MODIFICATIONS TO THE NLG FOR AIRCRAFT WITH INCREASED WEIGHT (RECEIVED CONFIG.)	CW	

LEGEND:

PCW - PREVIOUSLY COMPLIED WITH
CW - COMPLIED WITH (THIS VISIT)
PARTIAL - PARTIALLY COMPLIED WITH
N/A - NOT ACCOMPLISHED
N/R - NOT REQUIRED

Prepared by: ALEJANDRO CONTRERAS

Stamp:



Date: 10/20/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Customer Purchase Order (PO, RO, SO)

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No.
RO-3180-145501

Account No.

Date

05-Aug-2022



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent		Shipping Method	Terms	Order Type	Priority	Order Reason		
Christian Brand		WILL CALL		Repair Order	Scheduled Maintenance	Scheduled Or Unscheduled Maintenance		
Line	Item / Description		Serial No.	Transaction Type	Qty	UOM	Unit Cost	Ext. Cost
1	2309-3002-515 MLG LEG STRUT ELEB - Equipped Leg Strut		247	Overhaul	1	EA	USD	USD
2	2309-2005-007 MLG Shock Absorber Assy		1281	Overhaul	1	EA	USD	USD
3	2309-2600-505 MLG Secondary Side Strut Assy		618	Overhaul	1	EA	USD	USD
4	2309-3037-605 MLG LEG STRUT ELEB - Equipped Trailing Arm		OF-9597937-0	Overhaul	1	EA	USD	USD
5	2309-3002-516 MLG LEG STRUT ELEB - Equipped Leg Strut		247	Overhaul	1	EA	USD	USD
6	2309-2005-001 MLG Shock Absorber Assy		022	Overhaul	1	EA	USD	USD
7	2309-3500-503 MLG Main Side Strut Assembly		482	Overhaul	1	EA	USD	USD
8	2309-2600-507 MLG Secondary Side Strut Assy		903	Overhaul	1	EA	USD	USD
9	2309-3037-403 Trailing arm		OF493547-3101	Overhaul	1	EA	USD	USD
10	1170S0000-01 NLG LEG STRUT LIEBHERR - Assembly		00245	Overhaul	1	EA	USD	USD
11	1172C0000-02 Main Drag Strut Assy		SP649-01	Overhaul	1	EA	USD	USD
12	1173B0000-03 NLG AUXILIARY DRAG STRUT Liebherr - Auxiliary Drag Strut Assy		SP654-01	Overhaul	1	EA	USD	USD
13	2309-3500-503 MLG Main Side Strut Assembly		OF6988270-01	Overhaul	1	EA	USD	USD

Remarks: TOTAL GEAR COST \$ 246,453.00

Parts Total	USD 0.00
Taxes	USD 0.00
Freight	USD 0.00
Other	USD 0.00
Order Total	USD 0.00

Purchasing Agent Christian Brand	Authorized Signature	Date
--	----------------------	------

Shipping Info:
WILL CALL

Order Info:
Aircraft: / SN:
Aircraft Model: EMB-145LR
Invoice No: 9140018430
WP No:



Kingman Aviation
7100 Flightline Dr, ATTN: JSX REP
Kingman, AZ, 86401
Phone: 469-791-7344

Repair Order

Order No. Account No. Date
RO-3180-145501 **05-Aug-2022**



Return To Address

Kingman Aviation
7100 Flightline Dr
ATTN: JSX REP
Kingman
AZ
86401
US
Phone: 469-791-7344

Bill To Address

Kingman Aviation
1341 W. Mockingbird Lane
600E
Dallas
TX
75247
US
Phone: 469-791-7335
Email: accountspayable@jsx.com

Vendor / Ship To Address

Hawker Pacific Aerospace
11240 Sherman Wy
Sun Valley
CA
91352

Purchase Agent	Shipping Method	Terms	Order Type	Priority	Order Reason
Christian Brand	WILL CALL		Repair Order	Scheduled Maintenance WO No:	Scheduled Or Unscheduled Maintenance



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Concessions

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

IDR 37116

HAWKER PACIFIC
AEROSPACE

FAA Repair Station RJ3R817L
EASA: DE.145.0001

Part Data		Event Data	
Part Description	SLIDING TUBE ASSY	Repair Order	51679501
P/N	1170A1400-01:D9893	Event	L-00528-NLG
S/N	178	Sales Order	660041929
Customer S/N		Product (A/C Type)	ERJ-145
Detail P/N	1170-1401:D9893	Tail Sign	N48901
Detail S/N		Customer/Operator	101896 JSX
		Customer PO	RO-3180-145501
IDR Details		Additional Data	
IDR Status	CL - Closed	TSN	47990.90 FH
IDR Issue Date	16.Aug.2022	CSN	37322.00 CYC
IDR Close Date	29.Sep.2022	OEM Ref.	32-21-09
		OEM	LIEBHERR
Discrepancy			
DIA (2) I/D & FACES DIA (2) I/D & FACES MACHINED BEYON CMM LIMITS			
OEM/DER Response			
L-6011-ED-0004		Response date 13.Jul.2010	
Customer Response			
N/R 9/29/22			
Engineer / Signature	Date 9/29/2022	Inspector / Signature	Date 9/29/22
	Stamp 		Stamp

IDR 37116

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IDR 37116

HAWKER PACIFIC
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FAA Repair Station RJ3R817L
EASA: DE.145.0001

DIA (2) I/D & FACES
DIA (2) I/D & FACES MACHINED BEYON CMM LIMITS

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LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs	L-6011-ED-0004 Issue 01
	Page 1 / 23	2010-07-13

LIEBHERR-AEROSPACE LINDENBERG GMBH - Design P.O. Box 1363 - 88153 Lindenberg / Germany	FAX: +49 8381 46-4124
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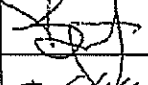
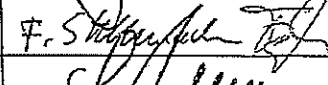
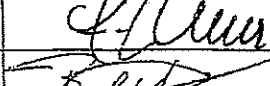
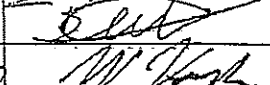
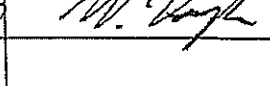
Equipment		
PN:	SN:	Part Name:
1170-1401 2233-0201 2233-0401	ALL	NLG Sliding Tube
Flight Hours:	Flight Cycles:	Ref. Doc:
N/A	N/A	CMM 32-21-10
Part Class:	Additional Information:	
1	none	
Customer		
Customer:	Aircraft model:	Aircraft SN:
ALL CUSTOMERS	EMB 135/145	N/A
Classification of repair		
Repair	minor ☒ major ☐	Parts Life Limit not affected ☒ affected ☐
Identification mark on part:		
Identification	no ☐ yes ☒	ED-0004
Subject: Decision for Customer Request ED-LSL-10-0002		
Inspection / Repair procedure for: Sliding Tube assembly: 1170A1400-01 (EMB 145) 2233A0200-01 (EMB 145 XR) 2233A0400-01 (EMB 135)		
This ED describes a chromium repair procedure for the wheel axle bore of the sliding tube and a repair procedure for the surfaces adjacent to wheel axle sleeve. In case the wheel axles cross bore holes have to be machined, repair bushings can be installed. The described procedures may be performed in shop only.		

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LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs Page 2 / 23	L-6011-ED-0004 Issue 01 2010-07-13
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Rules
With this Engineering Disposition Liebherr further complies with its contract obligations with respect to the herein mentioned Aircraft model and the respective product designed, developed and supplied by Liebherr. This document describes a method of repair or rework in general and does not provide an individual appraisal for a maintenance enquiry. The user shall respect all instructions and information provided in this Engineering Disposition and any related CMM, AMM or any other document referenced herein. The assigned repair shop shall have the expertise to perform the described repairs. Stated warnings and notes herein are not exhaustive. The assigned repair shop shall comply with all applicable regulations and precautions for occupational safety and the appropriate technical treatment of the materials. The contents herein are intended for information only and do not constitute an airworthiness release approval. Any approval shall be provided by the owner or operator of the aircraft in accordance with the competent regulatory authority procedures.

Signatures Incl. Classification Decision				
SIGNATURE-TYPE	ROLE	NAME	DATE	SIGNATURE
Prepare	Creator	Chr. Konzent	13/07/10	
Approved	Airworthiness Engineer - Design	G. BAUDOLF	13/07/10	
Approved	Airworthiness Engineer - Stress	F. Stellmach	13/7/10	
Approved	Airworthiness Manager	F. Meier	13.07.10	
Approved	Project Leader	M. Buth	13/7/10	
Approved	Customer Service	W. Vogler	13.07.10	
Accepted	Design Organisation (TC Holder)			

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1 Problem Description

The common repair procedure for the wheel axle bore is to enlarge the bore in shop and install associated repair axles as described in related CMM documents.

This ED describes how to machine and chromium plate the wheel axle bore to reuse the present wheel axle. It also describes the removal of corrosion on the contact faces between sliding tube and wheel axle sleeve.

In case of corrosion or other damages inside the wheel axle cross bolt holes, repair bushes can be installed as described within this ED

All described repairs for zones 1-3 can be performed in combination or independent as required.

1.1 Repair Zones

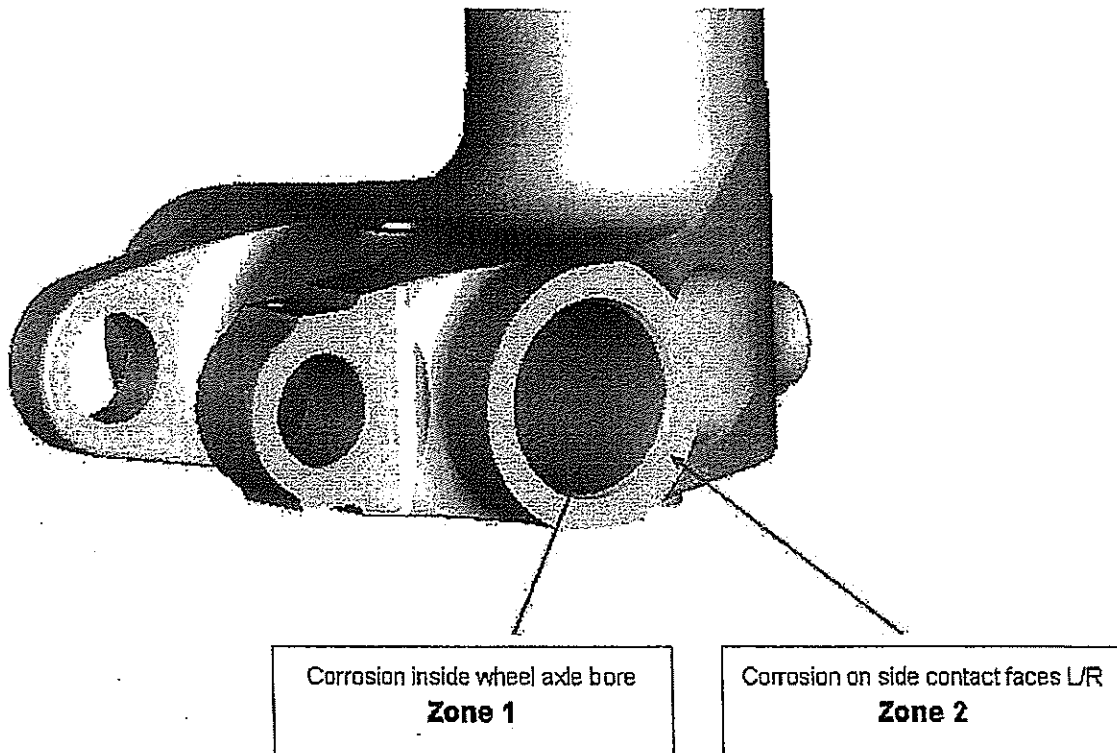


Fig. 1 3D-View: Repair zones 1 and 2

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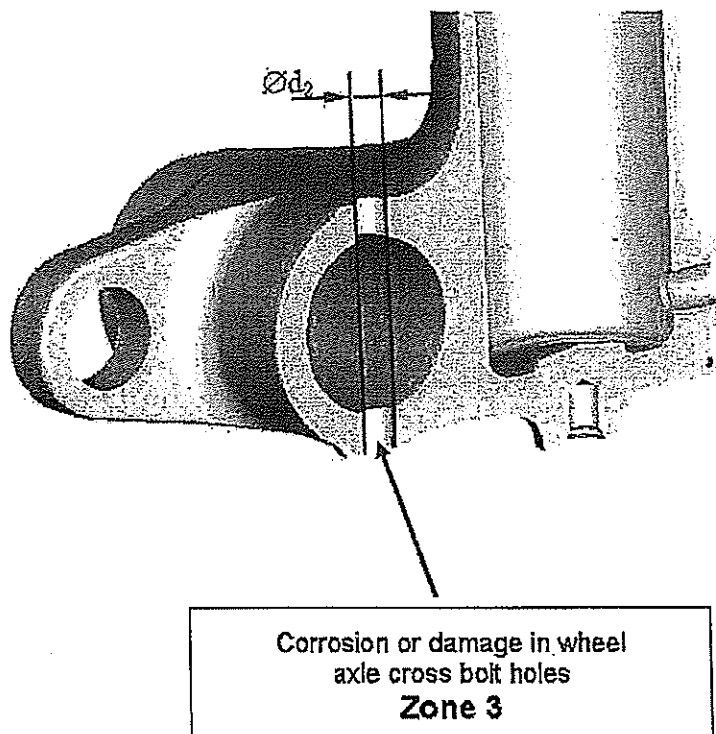


Fig. 2 Sectional View: Repair zone 3

Note: In condition of first delivery status, regularly no bushings are installed in wheel axle cross bolt holes. If the Sliding tube contains bushings in zone 3, a repair has been performed in the past.

1.2 References, further Documentation:

- EMB 135: CMM 32-21-10
- EMB 145: CMM 21-21-09
- EMB 145XR: CMM 32-21-11
- Simplified Drawing (Appendix)

1.3 Stress Report

- Stress Calculation: L-2232-DAC-0006, Issue 02

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1.4 Necessary Parts and Consumables

Affected Parts

Description	Part number	QTY	Material	Rm
Sliding Tube*	1170-1401	1	E35NCD16H	1800-2000 N/mm ²
	2233-0201			
	2233-0401			
Wheel Axle*	1170-1402	1	E35NCD16H	1800-2000 N/mm ²
	1170-1431			
	1170-1403			
	1170-1433			
	2233-0202			
	2233-0230			
Cross hole bush**	1170-1436	2	35NCD16	1230-1370 N/mm ²
	1170-1436RS02			
	1170-1436RS03			
	1170-1436RS04			
	1170-1436RS05			
	1170-1436RS06 (see 3.3, Tab. 5)			

Note: For manufacturing/repair steps of Sliding Tube and wheel axle see applicable CMM documents.

* The part has been heat treated; strictly avoid local temperatures above 190°C (374°F) during repair process. **Non-observant causes a loss of tensile strength.**

**Order one pair of bushings for applied repair step

Consumables

Description	Product Name	QTY
Hard Wax Coating	ARDROX 3302	AR
Repair bushings	(see 3.3, Tab. 5)	2

Find more necessary consumables Materials in related CMM documents.

Special Tools

Please see related CMM documents.

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2 Initial Inspection

2.1 Preparation for repair

Disassembly Sliding Tube in acc to the applicable CMM document.

Before repair, all parts need to be disassembled and cleaned. Remove any paint coating and cadmium plating in acc to applicable CMM documents.

If bushings are installed in the cross bolt holes, they had been installed in a previous repair of Zone 3. In that case remove bushings, cadmium plating and containments.

2.2 Preconditions for repair

- 1) Do a visual surface inspection of the wheel axle bore.

Determine the condition of the Part and perform repair for each zone independently if necessary.

- 2) Measure Dimension $\varnothing d_1$, $\varnothing d_2$ and b , see para 1.1 Fig. 2 and para 2.2, Fig. 3

Perform repair for each zone only if necessary:

Precondition for zone 1:

- a) If $\varnothing d_1$ is within the stated limit in para 2.3, perform repair for zone 1
- b) If $\varnothing d_1$ is out of limit, replace the sliding tube**

Precondition for zone 2:

- a) If $\frac{1}{2}b$ is within the stated limit in para 2.3, perform repair for zone 2
- b) If $\frac{1}{2}b$ is out of limit, replace the sliding tube**

Precondition for zone 3:

- a) If $\varnothing d_2$ shows corrosion or is not within $\varnothing 9.558 \pm 0.015$ (prior cadmium) perform repair for zone 3.
- b) If $\varnothing d_2$ is out of limit (see para 2.3), replace the sliding tube**

After repair, the stated dimensions have to be checked again.

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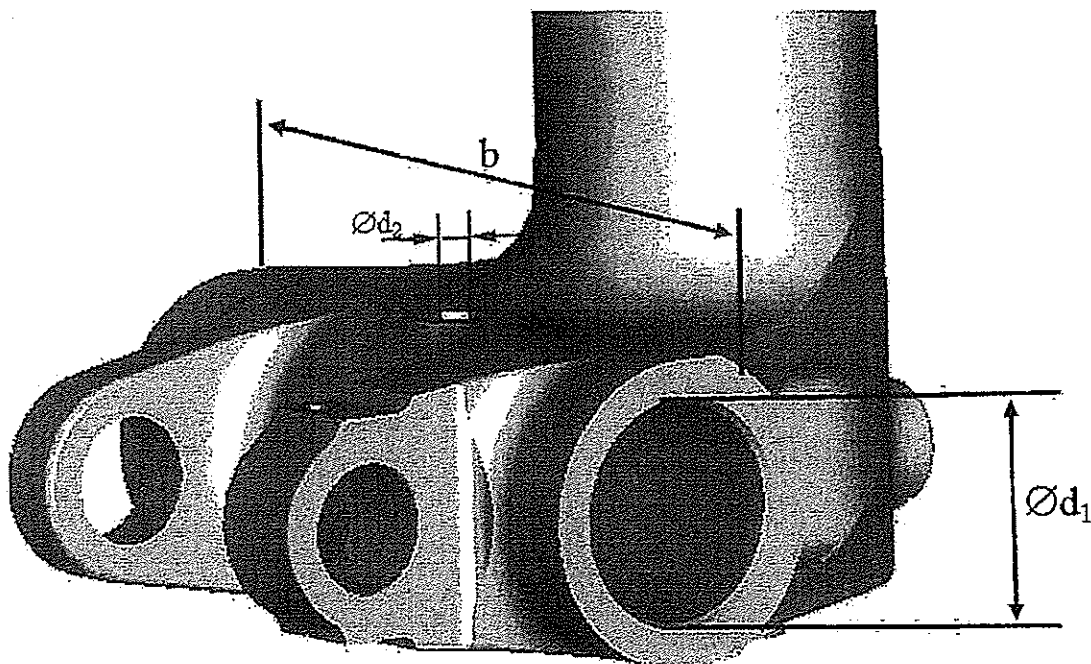


Fig. 3 Dimensions to be checked

- 3) The described repair is applicable for Standard axle and manufacturing step F1.
Measure and record Ød_1 in acc. to Fig. 3.

Before repair, make sure that the present axle can be reused by comparing Ød_1 with Tab. 1

Repair Step	Dimension	Name	Nominal Dimension*	Wheel Axle
Standard	Ød_1	Bore Diameter	$\text{Ød}_1 = 45.000^{+0.025}_{(1.7717^{+0.00098})}$ mm inch)	P/N 1170-1402 or P/N 1170-1403 or P/N 2233-0202
F1	Ød_1	Bore Diameter	$\text{Ød}_1 = 45.150^{+0.025}_{(1.7776^{+0.00098})}$ mm inch)	P/N 1170-1431 or P/N 1170-1433 or P/N 2233-0230

*all Dimensions prior cadmium plating for new serial parts

Tab. 1 Dimensions of repair steps

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2.3 Limits of repair

Dimension	Name	Repair NOT ALLOWED if:
$\varnothing d_1$	Wheel axle bore	$\varnothing d_1 > 45.325\text{mm (1.7844inch)}$
$\varnothing d_2$	Wheel axle cross bolt hole	$\varnothing d_2 > 13.018\text{mm (0.5125inch)}$
b^*	Thickness	$b < 145.000\text{mm (5.7087 inch)}$ $\frac{1}{2}b < 72.5\text{mm (2.8543inch)}$

Tab. 2 Limits of repair

(All dimensions before plating)

*make sure $\frac{1}{2}b \geq 72.5\text{mm (2.8543inch)}$ in acc. to para 7, Fig. 4.

($\frac{1}{2}b$ is the dimension between face surface and sliding tube shaft)

3 Repair Procedure

MAKE SURE NOT TO FORGET THE MENTIONED NON DESTRUCTIVE TEST PROCEDURES, SHOT PEENING AND THERMAL STRESS RELIEFS IF REPAIRS FOR DIFFERENT ZONES ARE PERFORMED IN COMBINATION!

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3.1 Repair for Zone 1

- 1) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances mentioned in para 7, Fig. 4 and Fig. 5 and enclosed Sketch in Appendix.
- 2) Machining wheel axle bore: The final diameter after machining depends on the used type of wheel axle (see para 3.1, Tab. 3):

FOR THICKNESS OF CHROMIUM COATING CONSIDER FOLLOWING MACHINING (SEE SUBTASKS 8) AND 10)):
THICKNESS min: 0.050mm (0.002inch) for sufficient corrosion protection after final machining

THEREFORE: ENLARGE WHEEL AXLE BORE WITH THE LOWEST POSSIBLE LOSS OF MATERIAL TO $\varnothing d_1$ AS STATED IN TAB. 3.

Type of wheel axle	Min dia.	Max dia.
Standard Axle	$\varnothing d_1 \geq \varnothing 45.110\text{mm}$ (1.7760inch)	$\varnothing d_1 \leq \varnothing 45.325\text{mm}$ (1.7844inch)
Manufacturing Step 1 (FS1)	$\varnothing d_1 \geq \varnothing 45.260\text{mm}$ (1.7819inch)	$\varnothing d_1 \leq \varnothing 45.325\text{mm}$ (1.7844inch)

Tab. 3 Max dia. of wheel axle bore during repair

Surface Quality of wheel axle bore after machining: Ra1.6 or better

- 3) Restore chamfer $2 \pm 0.3 \times 30^\circ$ (0.01181 inch x 30°) on both sides of the wheel axle bore; break all sharp edges and drilling grooves with R0.1-0.3mm (R0.0039inch – R0.01181inch)
- 4) Check part for a previous identification mark with this ED-number.

If part is not marked, apply identification mark on part in acc. to AS 478, Method 2D2 or 3A

Identification mark: **ED-0004**
 (for marking area see para 7, Fig. 4 and Fig. 5)

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5) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

6) Perform thermal stress relief at 190+/-5°C for 4h.

7) Apply Shot-peening on repaired areas and identification mark in acc. to MIL-S-13165C:

Shot: Steel
Shot-No.: S230
Shot hardness: 55-59 HRC
Intensity inside: A 0.1 – 0.3mm (0,00394 - 0,01181inch)
Intensity outside: A 0.2 – 0.3mm (0.00787 - 0,01181inch)
Coverage: >100%

8) Apply chromium coating in acc. to MIL-STD-1501 on wheel axle bore.

The thickness of chromium coating should allow good conditions for following machining. Consider final diameter to be reached (see Subtask 10)) and min thickness of chromium coating (see Subtask 2)

End of chromium coating on both sides in middle of chamfer ($2 \pm 0.3 \times 30^\circ$).
(0.0787 ± 0.01181 inch $\times 30^\circ$) Tolerance ± 0.5 mm (0.0197inch) measured from the middle of chamfer.

In area of cross-holes $\varnothing 9.558$ H7 or $\varnothing 12$ H7 ($\varnothing 0,3763$ inch or $\varnothing 0,47244$ inch), chromium coating has to end with a diameter of $\varnothing 14$ mm to $\varnothing 16$ mm.
($\varnothing 0.55118$ inch to $\varnothing 0.62992$ inch)

Chromium waste on side faces and inside cross-holes prohibited.

9) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4 and Fig. 5

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Depending on the type of wheel axle (see para 2.2, Tab. 1) grind or hone chromium coated bore to:

Type of wheel axle	dia.
Standard Axle	$\varnothing d_1 = 44.980^{+0.025}_{-0.025}$ (1.7709 ^{+0.00098} inch)
Manufacturing Step 1 (FS1)	$\varnothing d_1 = 45.130^{+0.025}_{-0.025}$ (1.7768 ^{+0.00098} inch)

Tab. 4 Manufacturing Steps

THICKNESS OF CHROMIUM PLATING AFTER MACHINING: MIN 0.05mm (0.00197 INCH)

- 10) Round chromium edges and run-outs with R0.1-0.3mm (R0.0039inch – R0.01181inch)
- 11) Perform Non Destructive Test procedures:

NDT – liquid penetrant in acc. to ASTM E1417: Type I, Method D, Sensitivity level 3 or higher, Form a.
- 12) Perform thermal stress relief for min 4h at 190+/-5°C, within 7 days after grinding/honing
- 13) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

3.2 Repair for Zone 2

- 1) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4 and Fig. 5 and enclosed file in Appendix
- 2) It should be preferred to remove corrosion with local blendings, perform Subtask (a). If not possible, machine side faces as described in Subtask (b):
 - (a) Remove corrosion with the lowest possible loss of material.

For each side face, **only one blending per 90° allowed**

The max material removal is defined in para 7.1, Tab. 6. The shape of the local removal has to be in acc. to sketch "B" (please see para 7.1, Fig. 6)

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- (b) Machine both side faces of the sliding tube to remove corrosion.
Machine sliding tube faces with the lowest possible loss of material in acc. to para 7, Fig. 4 and Fig. 5

Restore chamfer $2 \pm 0.3 \times 30^\circ$ (0.01181 inch x 30°) on both sides of the wheel axle bore; break all sharp edges and drilling grooves with R0.1-0.3mm (R0.0039inch – R0.01181inch)

Additionally local blendings in acc. to Subtask (a) allowed if repair limits can be kept (para 2.3, Tab. 2)

- 3) After machining check dimension $\frac{1}{2}b$ (see para 2.2, Fig. 3) and perform further steps, if it is within the stated limit in para 2.3, Tab. 2. If $\frac{1}{2}b$ is not within the stated limit, replace the part!

- 4) Please note:

No identification mark is needed, if repair is performed for this repair zone only

- 5) Perform thermal stress relief at $190 \pm 5^\circ\text{C}$ for 4h.

- 6) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

- 7) Apply Shot-peening on repaired areas in acc. to MIL-S-13165C:

Shot:	Steel
Shot-No.:	S230
Shot hardness:	55-59 HRC
Intensity inside:	A 0.1 – 0.3mm (0,00394 - 0,01181inch)
Intensity outside:	A 0.2 – 0.3mm (0.00787 - 0,01181inch)
Coverage:	>100%

- 8) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

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3.3 Repair for Zone 3

- 1) Take dimension of $\varnothing d_2$ to determine and record the (next) repair step. Repair may be performed in Steps of 0.2mm between $\varnothing d_2=12\text{mm}$ and $\varnothing d_2=13\text{mm}$
- 2) Adjust Sliding Tube carefully to meet all dependent form and positional tolerances, mentioned in para 7, Fig. 4, Fig. 5 and enclosed Sketches in Appendix.
- 3) Enlarge wheel axle cross bolt bore $\varnothing d_2$ to meet the next possible repair step with the lowest possible loss of material. Record performed repair step to purchase repair bushes.

P/N of bushings	nom dia.	min $\varnothing d_2$		max $\varnothing d_2$	
		mm	Inch	mm	Inch
1170-1436	$\varnothing d_2 = \varnothing 12.0 \text{ H7}$	12.000	0.4724	12.018	0.4731
1170-1436RS02	$\varnothing d_2 = \varnothing 12.2 \text{ H7}$	12.200	0.4803	12.218	0.4810
1170-1436RS03	$\varnothing d_2 = \varnothing 12.4 \text{ H7}$	12.400	0.4882	12.418	0.4889
1170-1436RS04	$\varnothing d_2 = \varnothing 12.6 \text{ H7}$	12.600	0.4961	12.618	0.4968
1170-1436RS05	$\varnothing d_2 = \varnothing 12.8 \text{ H7}$	12.800	0.5039	12.618	0.5046
1170-1436RS06	$\varnothing d_2 = \varnothing 13.0 \text{ H7}$	13.000	0.5118	13.018	0.5125

*all dimensions prior cadmium

Tab. 5 Max repair steps of wheel axle cross bolt hole dia.

- 4) Round all sharp edges and drilling grooves with R0.1-0.3mm (0.00394 – 0.01181 inch).

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- 5) Check part for a previous identification mark with this ED-number.

If part is not marked, apply identification mark on part in acc. to AS 478, Method 2D2 or 3A.

Identification mark: **ED-0004**

(for marking area see para 7, Fig. 4 and Fig. 5)

- 6) Perform thermal stress relief at 190+/-5°C for 4h.

- 7) Perform Non Destructive Test procedures:

Nital Etch Inspection in accordance with AMS 2649 or MIL-STD-867A

NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

- 8) Apply Shot-peening in acc. to MIL-S-13165C on identification area:

Shot: Steel

Shot-No.: S230

Shot hardness: 55-59 HRC

Intensity inside: A 0.1 – 0.3mm (0,00394 - 0,01181inch)

Intensity outside: A 0.2 – 0.3mm (0.00787 - 0,01181inch)

Coverage: >100%

APPLICATION OF SHOT PEENING INSIDE CROSS BOLT HOLES ALLOWED BUT NOT NECESSARY.

- 9) Continue with surface treatment as described in para 3.4 or perform repair for another repair zone.

3.4 Surface Treatment of Sliding Tube after machining

- 1) Apply cadmium plating in acc. to related CMM documents except chromium plated areas

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3.5 Installation of bushes (only if repair for zone 3 has been performed)

- 1) Decrease temperature of repair bushes in a bath of liquid nitrogen to -195°C (-319°F), Increase temperature of sliding tube to +100°C (212°F)
- 2) Take each bush separate out of the liquid nitrogen bath and quickly install it into the hole in Sliding Tube with appropriate heat shrinking standard tools for bush installations. see para 7.2, Fig. 7
- 3) MAKE SURE THE BUSHINGS DO NOT EXTEND INTO THE WHEEL AXLE BORE AND OUTER SURFACE OF SLIDING TUBE
- 4) Apply ARDROX 3302 on the edges between Sliding Tube and bushes;
see para 7.2, Fig. 7.

4 Reassembling

Do installation/reassembling in acc. to related CMM documents (see para 1.2)

5 Quality inspection

- 1) Do visual inspection of all affected parts during the repair process
- 2) All surfaces have to be cleaned from dirt or waste material.

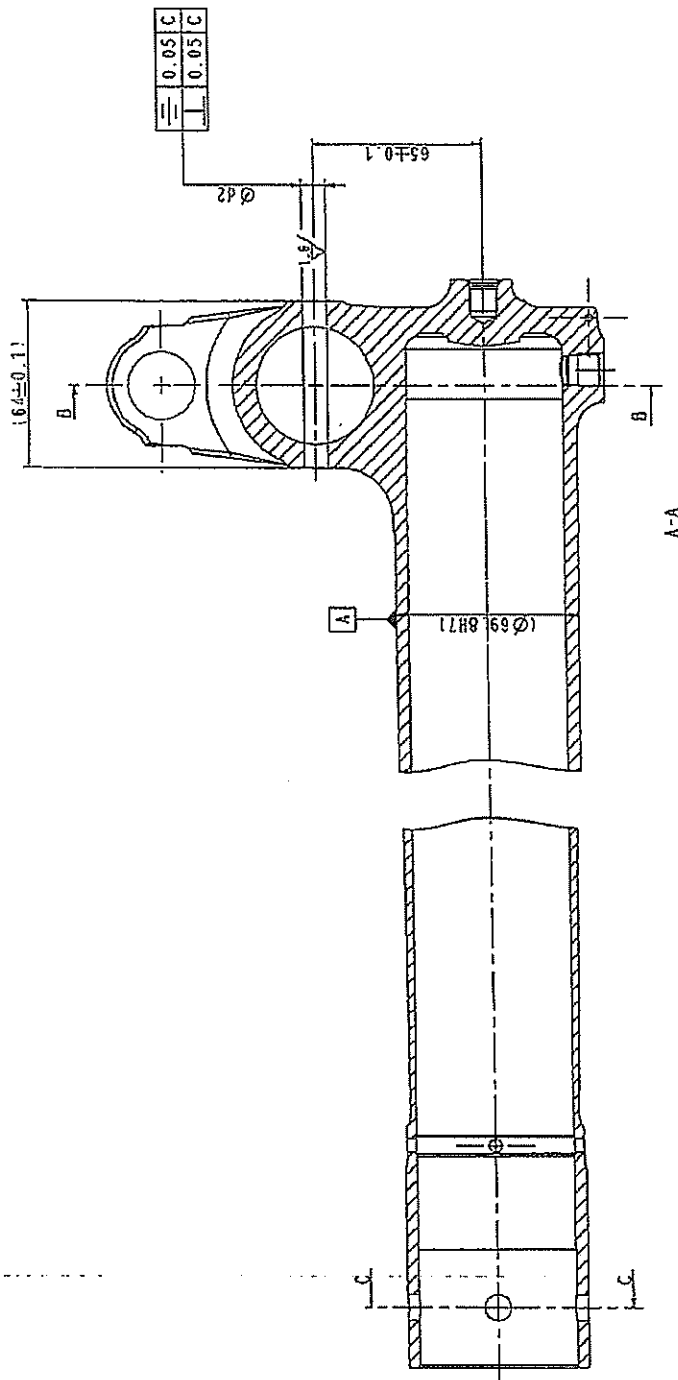
6 Acceptance Testing on A/C level

Perform airworthiness release approval according to the local regulatory authority procedures of owner or operator of the aircraft.

Remark: A/C release is in responsibility of owner or operator

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— CADMIUM PLATED TO LAT 4-3001, CD 10
SHOT PEEN TO MIL S 13165C OVER ALL REPAIRED EXTERNAL AREAS

SHOT PEENING DATA:
GRAIN SIZE: S 230
GRAIN HARDNESS: 55-59 HRC
INTENSITY: 0.2 - 0.3 A EXTERNAL
INTENSITY: 0.1 - 0.2 A INTERNAL
COVERAGE: > 100%

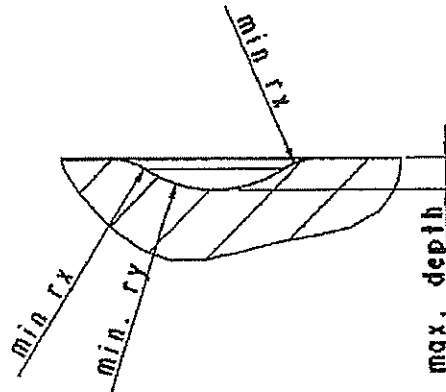
Fig. 5 Sketch 2: Sliding Tube (2/2)

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7.1 Sketch "B" local blending

max. depth:	0.2mm (0.0079 inch)
min. rx:	0.5mm (0.9843inch)
min. ry:	5mm (0.1969 inch)
max length:	12mm (0.4724 inch)
Max width:	6mm (0.236 inch)



Tab. 6 Shape of material removal

ONLY 1 BLENDING PER 90° ALLOWED!

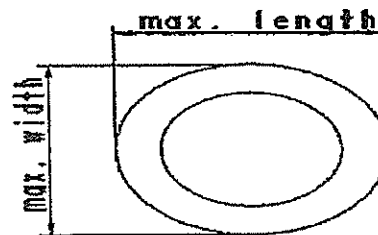


Fig. 6 Shape of removed material

Surface quality of repaired surface **Ra1,6** or better

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7.2 Sketch "C": Installation of bushings

PARTSECTION A-A
(ONLY FOR REPAIR)

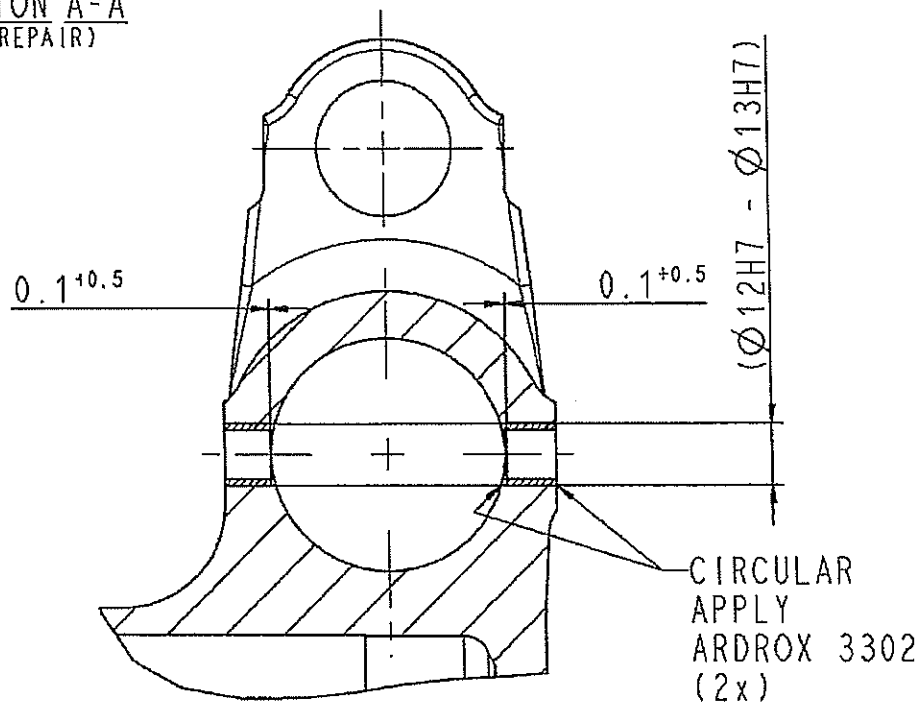


Fig. 7 Installation of bushings

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8 Appendix

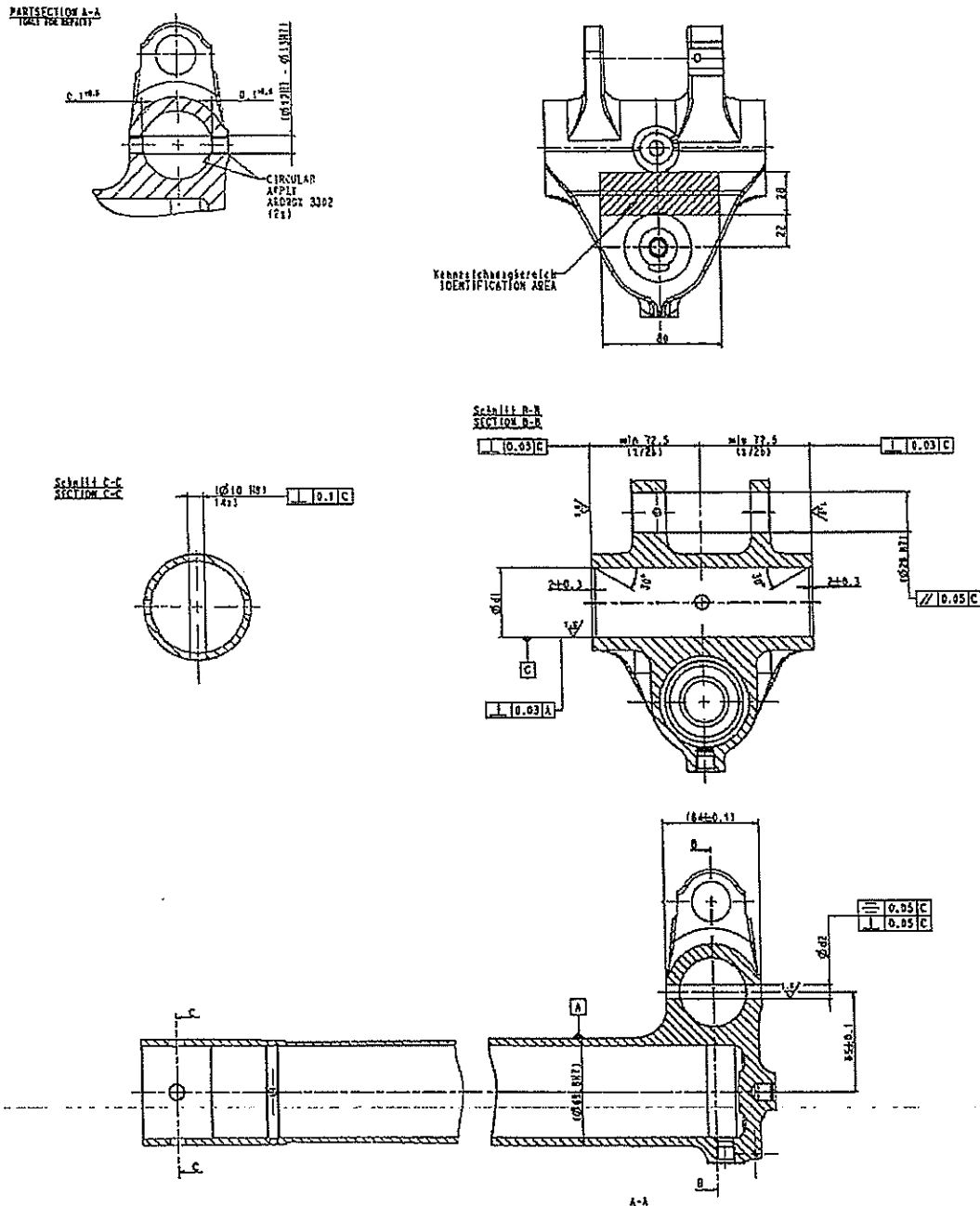


Fig. 8 Simplified drawing for repair

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9 AMENDMENT RECORD

ISSUE	Date	REVISION DESCRIPTION
01	2010-07-13	Initial Issue

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LIEBHERR-AEROSPACE LINDENBERG GMBH
Pfänderstrasse 50-52 - 88161 Lindenberg im Allgäu / Germany

IDR 37205

HAWKER PACIFIC
AEROSPACEFAA Repair Station RJ3R817L
EASA: DE.145.0001

Part Data		Event Data	
Part Description	WHEEL AXLE	Repair Order	51682545
P/N	1170-1402:D9893	Event	L-00530-NLG
S/N	L660	Sales Order	660041973
Customer S/N		Product (A/C Type)	ERJ-145
Detail P/N		Tail Sign	N11535
Detail S/N		Customer/Operator	101896 JSX
		Customer PO	RO-3197-11535
IDR Details		Additional Data	
IDR Status	CL - Closed	TSN	40852.90 FH
IDR Issue Date	26.Aug.2022	CSN	31567.00 CYC
IDR Close Date	18.Oct.2022	OEM Ref.	32-21-09
		OEM	LIEBHERR
Discrepancy			
DIA (5A/5B/5C) O/D MACHINED U/S TO REMOV			
OEM/DER Response			
ED-LLI-10-0069		Response date	10/11/11 09.Sep.2022
		 OCT 18 2022	
Customer Response			
CUSTOMER APPROVAL NOT REQUIRED FOR JSX		Response date	10/11/11 09.Sep.2022
		 OCT 18 2022	
Engineer / Signature	Date OCT 18 2022	Inspector / Signature	Date 10/18/22
	Stamp 		Stamp 

IDR 37205

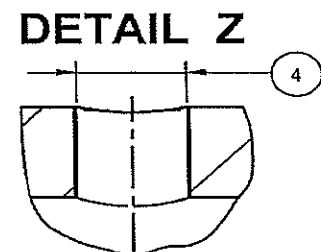
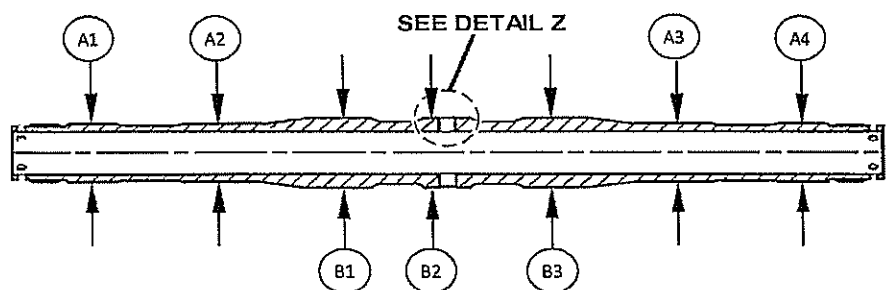
This Document holds no airworthiness approval and reference to OEM approval is required. The purpose of this document is for transmittal of engineering information within the Part 145 production facility only.

Inspection Discrepancy Report (IDR)

IDR Document No. 37205	Rev. No. 0	Date 10/18/2022	Sales Order No. 660041973	Work Order No. 51682545	
Part Description WHEEL AXLE	Part Number 1170-1402		Serial Number L660	A/C Type EMB-145	CMM 32-21-09
Detail Part Description N/A	Detail Part Number N/A		Detail Serial Number N/A	A/C Tail No. (MSN) N11535	
Description Journals (B1, B2, B3) machined undersize to remove corrosion. All other dimensions are within CMM limits.					
Proposed Resolution If structurally acceptable, HPA proposes to - Repair in accordance with ED-LLI-10-0069. - Continue rest of repair and refinish in accordance with CMM					

REFERENCE #	A1	A2	A3	A4
Design Dim.	1.4998 1.4992	1.4998 1.4992	1.4998 1.4992	1.4998 1.4992
Repair Limit	MIN 1.4859	MIN 1.4859	MIN 1.4859	MIN 1.4859
As Received/ Post Rework	1.4871	1.4871	1.4872	1.4867

REFERENCE #	B1	B2	B3	4 (x2)
Design Dim.	1.7731 1.7722	1.7731 1.7722	1.7731 1.7722	0.3760 0.3752
Repair Limit	N/A	N/A	N/A	N/A
As Received/ Post Rework	1.7655	1.7652	1.7654	0.3758



ALL DIMENSIONS ARE IN INCHES

TODAY'S DATE:	10/18/2022	REPAIR CLASSIFICATION:	Minor
NEED BY/DUE DATE:	10/25/2022	SUBMITTED BY:	HPA Engineering
PART CSN:	31567.00	EMAIL:	eng.concessions@hawker.com
PART TSN:	40852:54	PHONE NUMBER:	+1 (818) 765-6201 x199

LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs	ED-LLI-10-0069 Issue 02
	Page 1 / 11	2011-10-28

LIEBHERR-AEROSPACE LINDENBERG GMBH - Design P.O. Box 1363 - 88153 Lindenberg / Germany	FAX: +49 8381 46-4124
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Equipment:		
PN:	SN:	Part Name:
1170-1402 1170-1431 1170-1432 1170-1403 1170-1433 1170-1434 2233-0202 2233-0230 2233-0231	ALL	Wheel Axle
Flight Hours:	Flight Cycles:	Ref. Doc:
ALL	ALL	32-21-08, 32-21-09, 32-21-10, 32-21-11
Part Class:		Additional Information:
1		none
Customer:		
Customer:	Aircraft model:	Aircraft SN:
All Customers	ERJ 145	ALL
Classification of repair:		
Repair minor ☒ major ☐ Parts Life Limit not affected ☒ affected ☐		
Identification mark on part:		
Identification no ☒ yes ☐ :		
Subject: Decision for Customer Request ER-LSL-10-0145 / -10-0174		
Repair procedure for shop repair: This Engineering Disposition describes a nickel-plating solution for the wheel axle at the sliding tube attachment. Within this ED the described repair procedure (chrome plating) is no longer valid for the affected area. The applicable CMM-chapter will be reworked in one of the next revisions. After full accomplished repair the part can return into service without any restriction.		

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Rules

With this Engineering Disposition Liebherr further complies with its contract obligations with respect to the herein mentioned Aircraft model and the respective product designed, developed and supplied by Liebherr. This document describes a method of repair or rework in general and does not provide an individual appraisal for a maintenance enquiry. The user shall respect all instructions and information provided in this Engineering Disposition and any related CMM, AMM or any other document referenced herein.

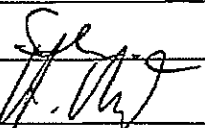
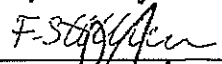
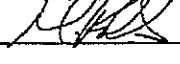
The assigned repair shop shall have the expertise to perform the described repairs. Stated warnings and notes herein are not exhaustive. The assigned repair shop shall comply with all applicable regulations and precautions for occupational safety and the appropriate technical treatment of the materials.

The assigned repair shop shall ensure that all surrounding parts comply with Liebherr delivery conditions and/or repair procedures. Repairs on surrounding parts shall only be performed in accordance with repair procedures provided by Liebherr. Non-Observance of the repair procedures for surrounding parts provided by Liebherr could affect the interchangeability of the parts and possibly lead into a major change!

The included contents do not constitute an airworthiness release approval. Such approval shall be provided by the owner or operator of the aircraft in accordance with the competent regulatory authority procedures.

Dimensions in "inch" are for information only, metric dimensions are generally binding.

Signatures incl. Classification Decision

SIGNATURE-TYPE	ROLE	NAME	DATE	SIGNATURE
Prepare	Originator	Rupert Salein	28/10/2011	
Approved	Airworthiness Engineer - Design	H. Betsch	28/10/11	
Approved	Airworthiness Engineer - Stress	Frank Stellmann	28/10/11	
Approved	Airworthiness Manager	F. Meer	10.11.11	
Approved	Project Leader	E. Lingg	28.10.11	
Approved	Product Support	M. Loh	10.11.11	
Accepted	Design Organisation (TC Holder)			

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LIEBHERR	Engineering Disposition	ED-LLI-10-0069
Aerospace	for repairs	Issue 02
LINDENBERG GmbH	Page 3 / 11	2011-10-28

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1 Introduction

After disassembling of the wheel axle during maintenance the outer diameter could be out of limit for original measurement. This deviation from origin may be affected by wear from wheel axle disassembling or worn cadmium plating.

1.1 Repair Zones

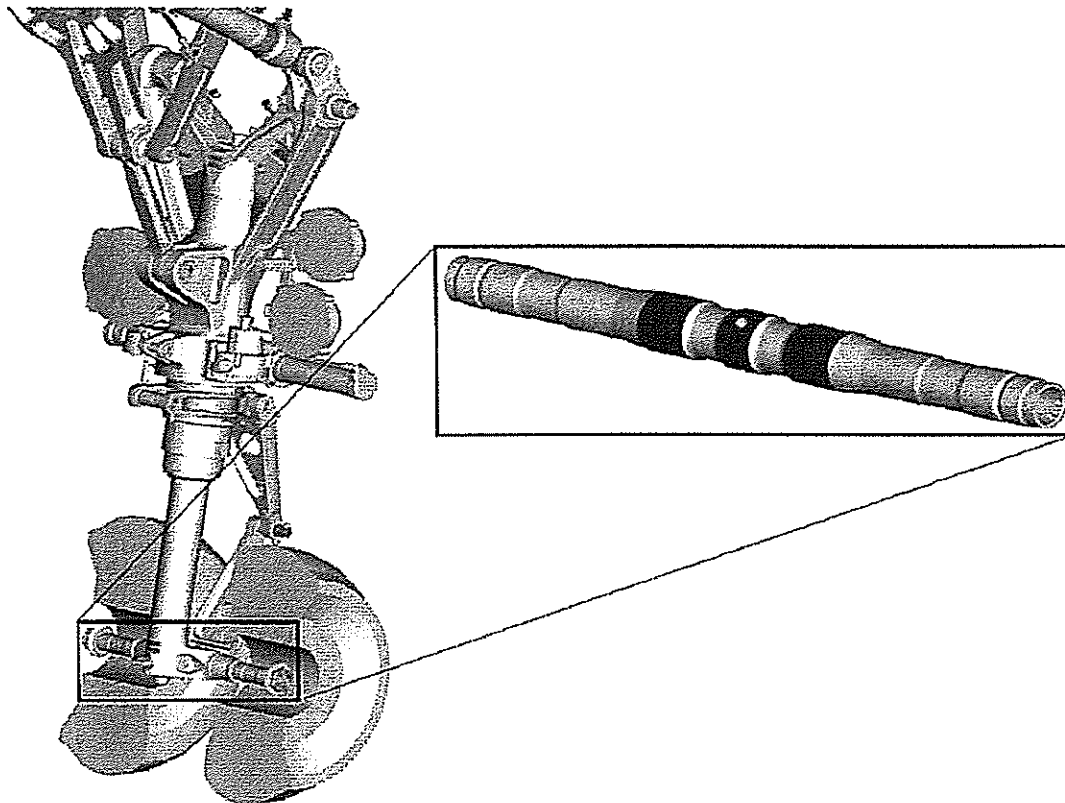


Fig. 1 Repair Zone

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1.2 Applicable CMM Documents

Disassembly/ Assembly, Cleaning, Repair of Paint Finish:

32-21-08, 32-21-09, 32-21-10, 32-21-11

1.3 Stress report

Stress Report: L-2232-DAC-0019 issue 01

1.4 Necessary Parts and Consumables

Affected Parts

Description	Part number	QTY	Material	Rm
Wheel axle	1170-1402, 1170-1431, 1170-1432 1170-1403, 1170-1433, 1170-1434 2233-0202, 2233-0230, 2233-0231	1	E35NCD16H	1800-2000 N/mm ²

Tab. 1 Affected Parts

Consumables

Find consumables; cleaning agent, grease, paint etc. in applicable CMM documents:

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2 Initial Inspection

2.1 Preconditions for Repair

- It is only allowed to perform the repair, if the outer diameter doesn't exceed the limit (see Tab. 2). Otherwise the part must be replaced.

2.2 Repair Limits

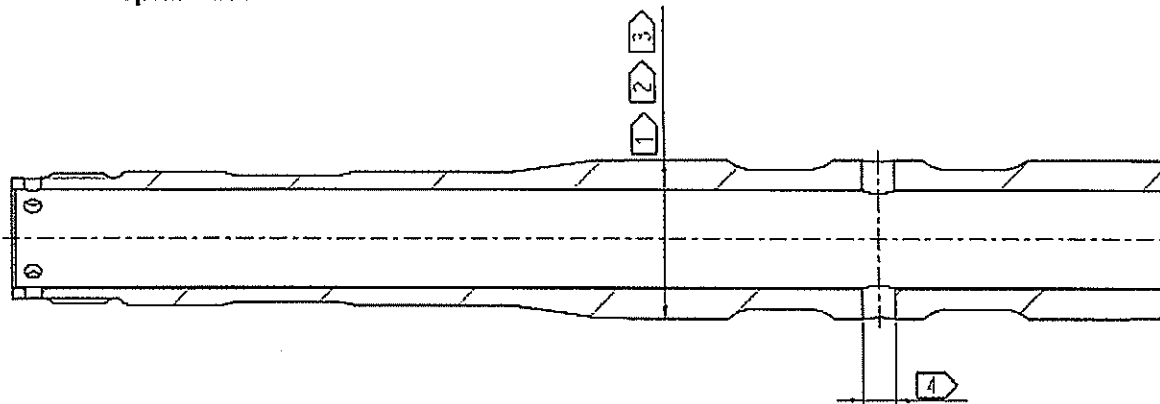


Fig. 2 Repair Limits

	Part-No.	Name	nom. Dimension	Repair NOT ALLOWED if:
1	1170-1402 1170-1403 2233-0202	Wheel axle outer diameter	Pre-Plating Diameter: 45.01 -0.016 mm (1.7720 -0.00063 in.) Post-Plating Diameter: 45.014 $+0.024$ mm (1.7722 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.51$ mm ($\varnothing < 1.752$ in.)
2	1170-1431 1170-1433 2233-0230		Pre-Plating Diameter: 45.160 -0.016 mm (1.7779 -0.00063 in.) Post-Plating Diameter: 45.164 $+0.024$ mm (1.7781 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.65$ mm ($\varnothing < 1.758$ in.)
3	1170-1432 1170-1434 2233-0231		Pre-Plating Diameter: 45.310 -0.016 mm (1.7838 -0.00063 in.) Post-Plating Diameter: 45.314 $+0.024$ mm (1.7840 $+0.00094$ in.)	Pre- Plating-Diameter $\varnothing < 44.80$ mm ($\varnothing < 1.764$ in.)
4	all Wheel Axles	Locking bolt bore	Pre-Plating Diameter: 9.558 $+0.014$ mm [0.3763 $+0.00055$ in.] Post-Plating Diameter: 9.530 $+0.022$ mm [0.3752 $+0.00087$ in.]	Pre- Plating-Diameter $\varnothing > 9.572$ mm ($\varnothing > 0.3768$ in.)

Tab. 2 Repair Limits

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3 Repair Procedure

Caution:

The part has been heat treated. Strictly avoid local temperatures above 190 °C (374 °F) during repair process.

Non-observant causes a loss of tensile strength

Note:

Repair with the lowest loss of material

3.1 Machining

- 1) Remove complete paint and primer coating ref. to CMM
- 2) Remove Cadmium plating ref to. CMM
- 3) Remove chrome from locking bolt bore.
- 4) Grind all affected surfaces to the same diameter within limits. For the minimal allowed outer diameter see Tab. 2.
- 5) If wheel bearing seats are worn remove chrome plating. Repair chrome plating ref. to CMM.
- 6) Apply NDT – magnetic particle in accordance with ASTM E1444 wet continuous method fluorescence

3.2 Surface Treatment

- 1) Apply shot peening ref. to AMS-S-13165 or SAE AMS 2430 to reworked areas:

Shot:	Steel
Grain size:	S 230
Grain hardness:	55-59 HRC
Intensity:	0.2 – 0.3 A External
Intensity:	0.1 – 0.2 A Internal
Coverage:	> 100 %

If the chrome plated areas must be reworked, apply shot peening to the complete part (inner and outer surface) except threads, cotter pin bores, and locking bolt bore.

- 2) If necessary, restore sulfuric acid chrome plating in acc. with SAE AMS 2460 ref. to CMM. (Minimal diameter after plating: 38.245 mm (1.5057 in.)). Cover all not affected surfaces.

Grind chrome plating to final diameter: 38.095 $\pm$ 0.015 mm (1.4998 $\pm$ 0.0006 in.)

Minimal thickness of chrome plate: 0.07 mm (0.00276 in.)

For chrome plating run out see CMM.

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LIEBHERR Aerospace LINDENBERG GmbH	Engineering Disposition for repairs Page 9 / 11	ED-LLI-10-0069 Issue 02 2011-10-28
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- 3) Apply galvanic oversize nickel plating ref. to SAE AMS QQ-N-290B for Sultanate Nickel. Cover all chrome plated and not affected areas.
Grind to pre-plating diameter acc. to Tab. 2.
For nickel plating run out see Fig. 3.
Max. plating thickness: 250 µm
- 4) Apply low embrittlement cadmium plating over all surfaces and plating (except chrome plating) ref. to SAE AMS 2401G. Cover all chrome plated surfaces.
Plating thickness: 10 ⁺¹⁰ µm (0.4 ^{+0.4} µm)
Post-plating diameter acc. to Tab. 2
See Fig. 3 for dimensions.
- 5) Apply Primer and Topcoat. Cover all nickel and chrome plated areas. See CMM.

4 Reassembling

Reassemble the wheel axle ref. to CMM

5 Quality inspection

- 6) Continuously check dimensions, form and positional tolerances during repair procedure.
- 7) Do visual inspection of all affected parts during the repair process
- 8) All surfaces have to be cleaned from dirt or waste material.

6 Part Identification

N/A

7 Acceptance Testing on A/C level

Perform airworthiness release approval according to the local regulatory authority procedures of owner or operator of the aircraft.

Remark: A/C release is in responsibility of owner or operator

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LIEBHERR-AEROSPACE LINDENBERG GMBH
Pländerstrasse 50-52 - 88161 Lindenberg im Allgäu / Germany

8 Technical Drawings/ Sketches

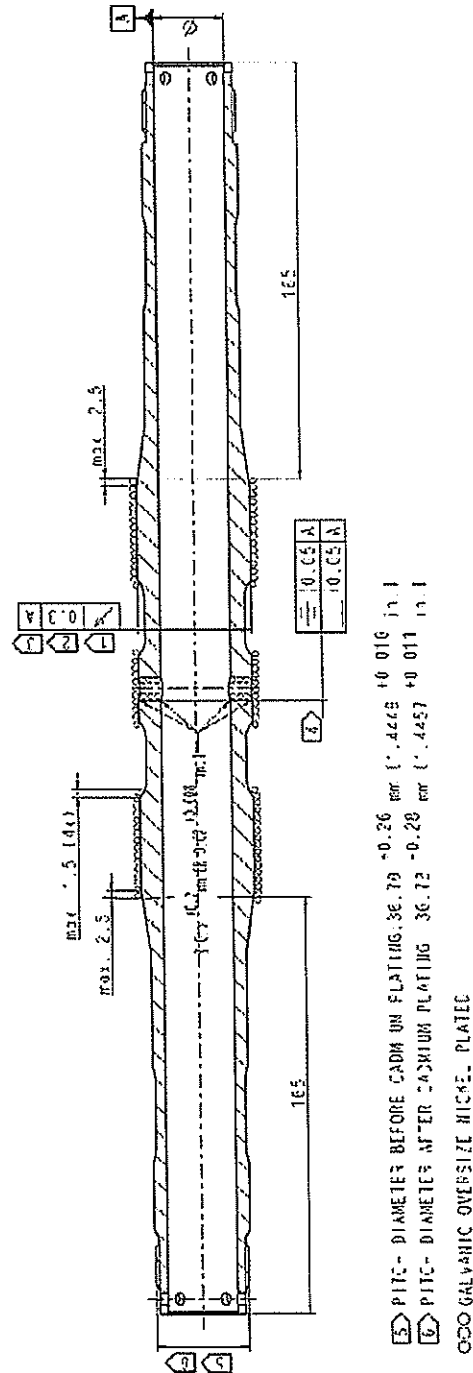


Fig. 3 Details for nickel and cadmium plating

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9 AMENDMENT RECORD

ISSUE	Date	REVISION DESCRIPTION
01	2011-10-21	Initial Issue
02	2011-10-28	Page 9 chapter 3.2 subnote 3) & 4): Corrected description

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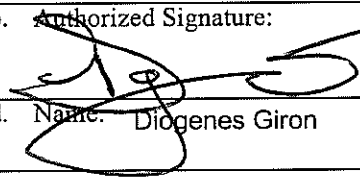
Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Certificates for Replaced Parts (with Traceability)

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158293	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O.: 660041973 / 51682545 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	WHEEL AXLE	1170-1402	1	L660	OVERHAULED		
12. Remarks: Life Details: TSN: 40852:54 CSN: 31567 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATE 19MAR2014. COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION ED-LLI-10-0069 REV.2 DATED 28OCT2011. PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682545 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1170-1402	WHEEL AXLE	L660	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			5629.00	31567.00	7071:52	40852:54
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

WHEEL AXLE RECEIVED IN NORMAL WEAR CONDITION.
PART WILL BE RELEASED FOR OVERHAUL.

IDR 37205 WAS OPEN FOR WHEEL AXLE DUE TO O/D DIA (5A/5/5C) MACHINED U/S.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATE 19MAR2014.
COMPLIED WITH LIEBHERR ENGINEERING DISPOSITION ED-LLI-10-0069 REV.2 DATED 28OCT2011.

CSO: 00:00
TSO: 00:00

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 19, 2022
As shipped Part Number	1170-1402	S / N	L660	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

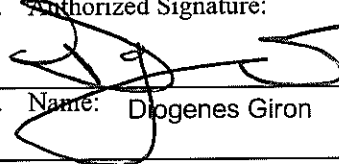
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158294	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice No./P.O.: 660041973 / 51682557 / /					
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	TORQUE LINK ASSY	1170A0300-01	1	1548	OVERHAULED		
12. Remarks: Life Details: TSN: 35956:27 CSN: 28571 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014. NON-PROCURABLE P/N: 1170-0301 PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.			14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.				
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:  		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Diogenes Giron		14e. Date: (dd/mm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682557 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	1170A0300-01	TORQUE LINK ASSY	1548	LIEBHERR AEROSPACE LINDENBERG GMBH	ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO
NONE			5629.00	28571.00	7071:52
Warranty	N/A				
Customer Instructions	OVERHAUL				

Initial Evaluation Results

TORQUE LINK RECEIVED IN NORMAL WEAR CONDITION.
ALL DIMENSIONS ARE ACCEPTABLE PER CMM LIMITS.
PART RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014.

NON-PROCURABLE P/N: 1170-0301

CSO/TSO: ZERO

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 3, 2022
As shipped Part Number	1170A0300-01	S / N	1548	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

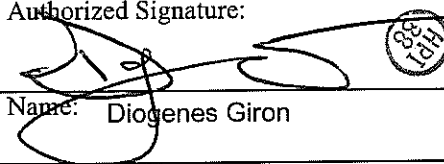
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158295	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352						5. Work Order/Contract/Invoice No./P.O. 660041973 / 51682556 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	TORQUE LINK ASSY	1170A0300-01	1	L3558	OVERHAULED		
12. Remarks: Life Details: TSN: 10811:16 CSN: 8594 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014. NON-PROCURABLE P/N: 1170-0301 PREVIOUS OPERATOR: JSX, A/C: N11535							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12. 14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			14b. Authorized Signature: 				
13b. Authorized Signature:		13c. Approval / Authorization No.:		14c. Approval Certificate No.: RJ3R817L			
13d. Name:		13e. Date:		14d. Name: Diogenes Giron			
13f. (blank)		13g. (blank)		14e. Date: (dd/mm/yyyy) 20.Oct.2022			
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: L-00530-NLG Sales Order: 660041973
Repair Order: 51682556 Receipt Date:
Customer JSX
Customer P.O. RO-3197-11535
Urgency Tail # N11535

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	1170A0300-01	TORQUE LINK ASSY	L3558	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE			5629.00	8594.00	7071:52	10811:16
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

TORQUE LINK RECEIVED IN NORMAL WEAR CONDITON.
ALL DIMENSIONS ARE ACCEPTABLE PER CMM LIMITS.
PART RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV.5 DATED 19MAR2014.

NON-PROCURABLE P/N: 1170-0301

CSO/TSO: ZERO

PREVIOUS OPERATOR: JSX, A/C: N11535

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Oct 3, 2022
As shipped Part Number	1170A0300-01	S / N	L3558	Publication	32-21-09

P/N Detail Print

Print Date: 10/8/2020 10:53

Page: 3 of 4



■ P/N: 1170A0300-01

P/N S/N: 1548

TORQUE LINK ASSY, NLG

Batch: 2347865

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	6741	1468	0:00	53259	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				35956:27	28571	1468	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: L3558

TORQUE LINK ASSY, NLG

Batch: 2329234

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	8594	1468	0:00	51406	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				10811:16	8594	1468	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 614

SLIDING TUBE ASSY, NLG

Batch: 2170239

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
	20000	4380		6647:55	5298	1532	0:00	14702	2848	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

■ P/N: 1170-1402

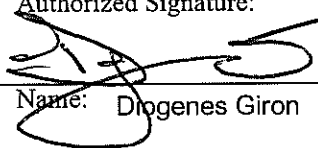
P/N S/N: L660

WHEEL AXLE, NOSE

Batch: 2170240

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			6234:41	31567	1468	0:00	28433	0	OPEN
				7071:52	5629	1468	0:00	0	0	
				40852:54	31567	1468	0:00	0	0	

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag				3. Form Tracking Number: 158296	
4. Organization Name and Address:		HAWKER PACIFIC AEROSPACE  Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352				5. Work Order/Contract/Invoice No./P.O. 660041602 / 51670504 / /	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work		
1	FITTING, MAIN ASSY	2233A0100-02	1	1320	OVERHAULED		
12. Remarks: Life Details: CSN: 4613 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014. NON-PROCURABLE P/N: 2233-0103, SN: 1320 PREVIOUS OPERATOR: JSX, A/C: N243JX							
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.				14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature:		14c. Approval Certificate No.:	
				 		RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Drogenes Giron		14e. Date: (dd/mm/yyyy) 20.Oct.2022	
USER / INSTALLER RESPONSIBILITIES							
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

Evaluation Report

HAWKER PACIFIC AEROSPACE

FAA Repair Station RJ3R817L



Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Event: P-00516-NLG Sales Order: 660041602
Repair Order: 51670504 Receipt Date:
Customer JSX
Customer P.O. RO-2844
Urgency Tail # N243JX

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer		Eligibility
1	2233A0100-02	FITTING, MAIN ASSY	1320	LIEBHERR AEROSPACE LINDENBERG GMBH		ERJ 140/145
Customer Reported Discrepancy			CSO	CSN	TSO	TSN
NONE				4613.00		
Warranty	N/A					
Customer Instructions	OVERHAUL					

Initial Evaluation Results

MAIN FITTING ASSY WAS RECEIVED IN NORMAL WEAR CONDITION.
NO NOTABLE DEFECTS OR DAMAGE NOTED.
WILL BE RELEASED FOR OVERHAUL.

Initial Test

Repair Action Description

Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-09 REV. 5, DATED 19MAR2014, AND CRM 32-21-09-R REV. 0 DATED 19MAR2014.

NON-PROCURABLE P/N: 2233-0103, SN: 1320

CSO: 00.00

TSO: 00:00

PREVIOUS OPERATOR: JSX, A/C: N243JX

ISSUE TO SALES ORDER 660041929

Repair Action Descr. created by	U758531	Print by:	U758531	Print at:	Sep 29, 2022
As shipped Part Number	2233A0100-02	S / N	1320	Publication	32-21-09

CUSTOMER: JSX

PART NUMBER: 1170C0000-08

SERIAL NUMBER: 00700

Assembly CSN: 23,972

Assembly CSO: 4,613

Date of Last Overhaul: 4/11/2012

Date Removed: 3-May-22

Sub Part details

Part No received	Nomenclature	Actual Serial Number from records	Life Limit	CSN	Cy Rem
1170-0001	Torque Link Pin	L1029	60,000	7,306	52,694
1170-0001	Torque Link Pin	L1421	60,000	23,972	36,028
1170-0002	Torque Link Central Bolt	L1269	60,000	19,956	40,044
1170-0032	Pintle Pin	L1569	60,000	16,347	43,653
1170-0032	Pintle Pin	L0339	60,000	16,347	43,653
1170-0070	Main Drag Strut Attachment Pin	L821	60,000	23,972	36,028
1170A0300-01 0301	Torque Link	L2240	60,000	17,099	42,901
1170A0300-01 0301	Torque Link	L1949	60,000	17,099	42,901
1170A1400-01 1170-1401	Sliding Tube	L1232	60,000	16,347	43,653
1170-1402	Wheel Axle		60,000		
1170-1403	Wheel Axle	L186	60,000	23,972	36,028
1170-1431	Wheel Axle		60,000		
1170-1432	Wheel Axle		60,000		
1170-1433	Wheel Axle		60,000		
1170-1434	Wheel Axle		60,000		
1170A3200-01 1170-2301	Steering Cuff	L928	60,000	23,972	36,028
2233A0100-02 0103	Main Fitting	1320	60,000	4,613	55,387

Customer Name Signature James Weaver

Customer Title Chief Inspector

Date Created 7/27/2022



Landing Gear Maintenance Report

E145 NLG LEG STRUT ASSY

Sales Order: 660041929	
Mfg P/N: 1170S0000-01	A/C: N48901
Mfg S/N: 00245	MSN: 501
CPN: N/A	PO: RO-3180-145501

. Previous Operator Traceability

FAA REPAIR STATION RJ3R817L
EASA: DE.145.0001

P/N Detail Print

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A/C: N12900

Position: ONLY

■ P/N: 1170C0000-02

P/N S/N: 00245

LEG STRUT ASSY, NLG

Batch:

2147976

SCHEDULE				ACTUAL				REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Reset Date	Hours	Cycles	Days	
TSN				47990:54	37322	4256	01/13/2012	0:00	0	0	
TSI				18455:12	14705	3209	01/13/2012	0:00	0	0	
NLG STRUTRST135/145				24536:15	19771	4256	03/03/2009	0:00	229	124	OPEN

■ P/N: 1170-0001

P/N S/N: 0376

NLG, TORQUE LINK AXLE

Batch:

2146788

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK PIN				47990:54	37322	3210	0:00	22678	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-0001

P/N S/N: 0383

NLG, TORQUE LINK AXLE

Batch:

2152410

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK PIN				47990:54	37322	3210	0:00	22678	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-0002

P/N S/N: L1820

NLG, TORQUE LINK CENTRAL BOLT

Batch:

2315564

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
NLG TORQUE LINK CENTRAL BOL				24536:15	19771	3210	0:00	40229	0	OPEN
TSI				18455:12	14705	3210	0:00	0	0	
TSN				24536:15	19771	3210	0:00	0	0	

P/N Detail Print

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A/C: N12900

Position: ONLY

■ P/N: 1170-0032

P/N S/N: L3302

PINTLE PIN, NLG

Batch: 2359728

Control Items

Description

NLG PINTLE PIN

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0032

P/N S/N: L3304

PINTLE PIN, NLG

Batch: 2315563

Control Items

Description

NLG PINTLE PIN

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0070

P/N S/N: L1585

DRAG STRUT ATTACHMENT PIN, NLG

Batch: 2359727

Control Items

Description

NLG MAIN DRAG STRUT ATTACH I

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			24536:15	19771	3210	0:00	40229	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

■ P/N: 1170-0071

P/N S/N: L1489

ACTUATOR ATTACHMENT PIN, NLG

Batch: 2354425

Control Items

Description

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				18455:12	14705	3210	0:00	0	0	
				24536:15	19771	3210	0:00	0	0	

P/N Detail Print

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A/C: N12900

Position: ONLY

■ P/N: 1170A0300-01

P/N S/N: 1458

TORQUE LINK ASSY, NLG

Batch: 7531011

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			36100:24	28923	1407	0:00	31077	0	OPEN
				788:30	741	279	0:00	0	0	
				36100:24	28923	1407	0:00	0	0	

■ P/N: 1170A0300-01

P/N S/N: 1523

TORQUE LINK ASSY, NLG

Batch: 7514486

Control Items	Description
NLG TORQUE LINK	(LIFE LIMITED PART) NOSE GEAR TORQUE LINK LIFE LIMIT
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			26758:31	16962	1095	0:00	43038	0	OPEN
				788:30	741	279	0:00	0	0	
				26758:31	16962	1095	0:00	0	0	

■ P/N: 1170A1400-01

P/N S/N: 178

SLIDING TUBE ASSY, NLG

Batch: 2148464

Control Items	Description
NLG SLIDING TUBE	(LIFE LIMITED PART) SLIDING TUBE LIFE LIMIT
NLG STRUTRST135/145	NOSE LANDING GEAR STRUT RESTORE
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
	20000	4380		7261:18	5878	1551	0:00	14122	2829	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170-1403

P/N S/N: L599

WHEEL AXLE, NOSE

Batch: 2322859

Control Items	Description
NLG WHEEL AXLE	(LIFE LIMITED PART) UNSCHED - T/C "NOSE GEAR REMOVE"
TSI	
TSN	

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

P/N Detail Print

Print Date: 10/27/2020 08:20

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A/C: N12900

Position: ONLY

■ P/N: 1170A2300-01

P/N S/N: 0186

NLG, STEERING CUFF ASSY

Batch: 2146901

Control Items

Description

NLG STEERING CUFF

(LIFE LIMITED PART) UNSCHED - T/C "NOSE
GEAR REMOVE"

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			47990:54	37322	3210	0:00	22678	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				47990:54	37322	3210	0:00	0	0	

■ P/N: 1170A3500-02

P/N S/N: 01085

FEEDBACK POTENTIOMETER

Batch: 2342260

Control Items

Description

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
				10808:26	8709	2101	0:00	0	0	
				44189:33	27421	2101	0:00	0	0	

■ P/N: 2233A0100-02

P/N S/N: 1123

MAIN FITTING ASSY, NLG

Batch: 2254554

Control Items

Description

NLG MAIN FITTING 60K

(LIFE LIMITED PART) MAIN FITTING LIFE LIMIT
60000 FC

TSI

TSN

SCHEDULE				ACTUAL			REMAINING			STATUS
Hours	Cycles	Days	Date	Hours	Cycles	Days	Hours	Cycles	Days	
	60000			18455:12	14705	3210	0:00	45295	0	OPEN
				18455:12	14705	3210	0:00	0	0	
				18455:12	14705	3210	0:00	0	0	

CUSTOMER: JSX

PART NUMBER: 1170S0000-02

SERIAL NUMBER: 00245

Assembly CSN: N/A

Assembly CSO: N/A

Date of Last Overhaul: N/A

Date Removed: N/A

Sub Part details

Part No received	Nomenclature	Actual Serial Number from records	Life Limit	CSN	Cy Rem
1170-0071	Actuator Attach Pin	L1884	N/A	8,353	
1170-0001	Torque Link Pin		60,000		
1170-0001	Torque Link Pin		60,000		
1170-0002	Torque Link Central Bolt	L1863	60,000	15,870	44,130
1170-0032	Pintle Pin		60,000		
1170-0032	Pintle Pin		60,000		
1170-0070	Main Drag Strut Attachment Pin	L00526	60,000	28,476	31,524
1170A0300-01 1170-0301	Torque Link	L2509	60,000	17,601	42,399
1170A0300-01 1170-0301	Torque Link	1368	60,000	21,974	38,026
1170A1400-01 1170-1401	Sliding Tube		60,000		
1170-1402	Wheel Axle		60,000		
1170-1403	Wheel Axle		60,000		
1170-1431	Wheel Axle		60,000		
1170-1432	Wheel Axle		60,000		
1170-1433	Wheel Axle		60,000		
1170-1434	Wheel Axle		60,000		
1170A3200-01 1170-2301	Steering Cuff		60,000		
2233A0100-02 0103	Main Fitting		60,000		

Customer Name Signature

James Weaver

Customer Title Chief Inspector

Date Created 10/11/2022

Work Card

WP No.: 181683

Kingman Airline Services

AC Model, Make: EMB-145LR

Tail No: N48901

AC S/N: 145501

Work Order No.:

Customer: JETSUITE

Print Date: 06/27/2022

Item: 5005		Task Type: NON-ROUTINE
Task No.: 5005	Estimated HRs:	Employee:
Work Required: INSTALL NLG LEG PN 1170C0000-02 SN 245 FROM A/C N12900 PER ANDREW KIMM		Customer Approval: ☐ Repair ☐ Defer

Notes:

Start:

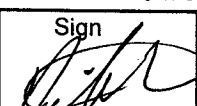
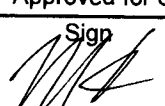


Complete:



Part Removal Information		Part Installation Information	
Desc.		Desc.	NLG Leg
P/N OFF	S/N OFF	P/N ON	117050000-01
Desc.		S/N ON	00245
P/N OFF	S/N OFF	Desc.	
Desc.		P/N ON	
P/N OFF	S/N OFF	S/N ON	
Desc.		Desc.	
P/N OFF	S/N OFF	P/N ON	
Desc.		S/N ON	
P/N OFF	S/N OFF	Desc.	
P/N OFF	S/N OFF	P/N ON	
		S/N ON	
Action:			
Installed NLG Leg PN# 117050000-01 SN# 245 From AC N12900			
per Andrew Kimm IAW EMB AMM 32-20-01-400-801A			

Continuation Form? Yes ☐ RII Task? Yes ☐ Ops/Function Check Required? Yes ☐ NO ☒

Work Performed By			Approved for Service			INSPECTION	
Empl DB 0889	Sign 	Date 6-28-22	Empl 3024	Sign 	Date 28 JUN-2022	Sign & EID of 	Date 28 JUN 2022



TASK 32-20-01-400-801-A

EFFECTIVITY: ALL

3. NOSE LANDING-GEAR LEG - INSTALLATION

A. General

(1) This task gives the procedures to install the NLG leg.

B. References

REFERENCE	DESIGNATION
AMM TASK 07-10-00-500-802-A/200	COMPLETE AIRCRAFT LOWERING
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-20-01-200-801-A/600	NLG - INSPECTION
AMM TASK 32-20-02-400-801-A/400	MAIN BRACE STRUT OF THE NOSE LANDING GEAR - INSTALLATION
AMM TASK 32-30-00-700-801-A/500	EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK
AMM TASK 32-33-05-400-801-A/400	NOSE LANDING GEAR ACTUATOR - INSTALLATION
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
AMM TASK 32-49-05-400-801-A/400	WHEEL ASSEMBLY OF THE NOSE LANDING GEAR - INSTALLATION
AMM TASK 32-50-00-700-802-A/500	NOSE WHEEL STEERING SYSTEM - QUICK ADJUSTMENT
AMM TASK 32-50-00-700-803-A/500	NOSE WHEEL STEERING SYSTEM ACTUATION - OPERATIONAL CHECK
AMM TASK 33-41-02-400-802-A/400	LANDING LIGHT ASSEMBLY - INSTALLATION
AMM TASK 33-42-02-400-802-A/400	NOSE-LANDING-GEAR TAXI LIGHT ASSEMBLY - INSTALLATION
SB 145-32-0036	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 002	Hydraulic Crane, NLG Removal/Installation	To remove the NLG leg	
GSE 111	Stand, NLG Maintenance/Transportation	For maintenance and Transportation of the NLG	
GSE 102	Adapter, Hoist NLG	For removal/installation of the NLG	
Commercially available	Torque Wrench (Range: 0 to 1000 lb.in)	To torque the bolts of the NLG leg	



(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially Available	Feeler Gage	To measure the clearance between the upper half-bearing and the solid spacer washer	
Commercially available	3-Point Micrometer (Internal Measurement)	To measure the inner diameter of the bearing housing	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially Available	Rubber Gloves Resistant to Phosphate-Ester Base Fluid	For protection of the hands	2
Commercially Available	Rubber Goggles Resistant to Phosphate-Ester Base Fluid	For protection of the eyes	2
Commercially Available	Soft Lint-Free Cloth	To clean the components	AR

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MEP 09-075	Corrosion-Inhibiting Compound (COR-BAN 27L)	AR
MIL-PRF-81322	Aeroshell Grease 22	AR
MIL-PRF-23827	Aeroshell Grease 33 (alternative to Aeroshell 22)	AR
MIL-L-87177	Lektro-Tech Super Corr-A	AR
MIL-S-8802 Type II, Class B	Sealant PR-1440 B2	AR
MEP 13-073	Rhodiasolve E-23	AR

G. Expendable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG wheelwell
1	Helps the other technician	NLG wheelwell

I. Preparation

SUBTASK 841-003-A

- (1) Procedure to find the thickness of the half-bearing shim (Figure 404).

NOTE: This procedure is applicable when the shims of the half-bearings are lost or damaged, or when the NLG leg is replaced.

- (a) Install the lower half-bearing to the structure, without the laminated shims.
- (b) Apply a torque of 50.80 to 56.45 N.m (450 to 500 lb.in) to the nuts.



- (c) Measure the diameter in two different positions, as shown in the figure. Write the values.
 - (d) Calculate the average between the two values found in step (c), with this formula (all values in mm):
$$M = (M1 + M2)/2, \text{ where:}$$

M1 = the first measurement
M2 = the second measurement
M = the average between the two measurements
 - (e) Calculate the thickness of the laminated shims as follows (all values in mm):
$$X = 61.922 - M.$$
 - (f) Adjust the thickness of the laminated shims to the value "X" found in step (e).
 - (g) Install the lower half-bearing again to the structure, but, at this time, together with the laminated shims.
 - (h) Apply a torque of 50.80 to 56.45 N.m (450 to 500 lb.in) to the nuts.
 - (i) Do step (c) and make sure that the values found are between 61.907 and 61.937 mm.
 - (j) Do steps (a) thru (i) for the other lower half-bearing.
- (2) Procedure to find the thickness of the laminated washer of the NLG leg (Figure 402 and Figure 403).

NOTE: • This procedure is applicable when the laminated washer is lost or damaged, or when the NLG leg is replaced.

- The NLG leg has two solid spacer washers. The solid washer larger thickness is installed on the right side of the NLG leg. The solid washer smaller thickness is installed on the left side of the NLG leg together with the laminated washer.

- (a) Remove the NLG leg from the GSE 111 and GSE 102.
- (b) With the NLG leg on GSE 102 and GSE 002, install the solid washer larger thickness and the ball joint bearing on the right side of the NLG leg. Refer to DET. B, Figure 402.
- (c) With the NLG leg on GSE 102 and GSE 002, install the solid washer smaller thickness and the ball joint bearing on the left side of the NLG leg, without the laminated washer.
- (d) Temporally install the NLG leg in the upper half-bearings with device GSE 002 and GSE 102.
- (e) Put the lower half-bearing in position.
- (f) Manually move the NLG leg to the right.



- (g) Measure the clearance between the upper half bearing and the solid spacer washer with a feeler gage on the left side.
- (h) Remove the NLG leg.
- (i) Adjust the laminated washer to the thickness found in step (f).

NOTE: The maximum permitted clearance is 0.05 mm (0.002 in).

J. Installation (Figure 401) Figure 402 Figure 403 Figure 404

SUBTASK 420-002-A

- (1) Use a dry lint-free cloth to remove excess old grease from the components as necessary.

WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING. DO NOT BREATHE THE SOLVENT GASES AND WORK IN A WELL VENTILATED AREA.

- (2) With a cloth soaked in Rhodiasolve E-23, clean the remaining grease from the components as necessary.
- (3) Install the solid washer larger thickness and the ball joint bearing on the right side of the NLG leg. Refer to DET. B, Figure 402.
- (4) Install the laminated washer adjusted in paragraph I.(2), the solid washer smaller thickness, and the ball joint bearing on the left side of the NLG leg. Refer to DET. B, Figure 403.

CAUTION: AEROSHELL GREASE 22 MUST NOT BE MIXED WITH AEROSHELL GREASE 33. IF YOU DO NOT OBEY THIS PRECAUTION, THE MIXTURE CAN CAUSE DAMAGE TO THE COMPONENTS.

- (5) Apply grease to the lubrication channel of the NLG ball joint bearing.
- (6) Apply grease to the inner surface of the upper-half bearing and lower-half bearing (contact surface with the ball joint bearing). Refer to Figure 402 and Figure 403.
- (7) Enter in the applicable document the grease that you used.

WARNING: COR-BAN 27L CORROSION-INHIBITING COMPOUND IS TOXIC TO SKIN, EYES, AND RESPIRATORY TRACT. USE GOGGLES AND PROTECTIVE GLOVES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

- (8) Apply corrosion-inhibiting compound to the bolts and to the upper half-bearing (faying surface to the lower half-bearing). Refer to Figure 402 and Figure 403.
- (9) Put the NLG leg (3) in the upper half-bearings with the aid of GSE 002 and GSE 102.
- (10) Apply corrosion-inhibiting compound to the lower half-bearing (faying surface to the upper half-bearing). Refer to Figure 402 and Figure 403.
- (11) Put the lower half-bearing in position.



(12) Install the washers (5) and (7).

(13) Install the bolts (4).

(14) Install the nuts (8).

Apply a torque of 50.80 to 56.45 N.m (450 to 500 lb.in) to the nuts.

(15) Manually lift the NLG leg and make sure that it moves freely.

NOTE: If the NLG leg does not have a free movement, adjust the thickness of the laminated washer (obey the instructions given in paragraph I.(2)) and do steps (3) thru (15) again.

(16) Apply the same grease as that used in step 5 to the bearing through the lubrication fitting installed at the bottom of the lower half-bearing until the grease comes out from the bearing.

(17) Connect the hydraulic hoses (1) and (2) to the NLG leg (3).

(18) Remove GSE 102 and GSE 002.

K. Follow-on

SUBTASK 842-002-A

(1) Apply sealant PR-1440 B2 to all bolts (4) and nuts (8) open to environmental conditions to prevent corrosion. Refer to (Figure 401).

(2) Connect the NLG actuator to the NLG leg (AMM TASK 32-33-05-400-801-A/400).

(3) Connect the main brace strut to the NLG leg (AMM TASK 32-20-02-400-801-A/400).

(4) Install the wheel assemblies (AMM TASK 32-49-05-400-801-A/400).

(5) Connect the ground cable to the NLG leg. For this, install the washer, bolt, and nut.

(6) Install the landing light supports (AMM TASK 33-41-02-400-802-A/400).

(7) Install the taxi light supports (AMM TASK 33-42-02-400-802-A/400).

(8) Attach to the clamps the harness of the air/ground proximity switch (WOW), feedback potentiometer, landing lights, and taxi lights.

(9) On the forward pressure bulkhead, connect the connectors of the air/ground proximity switch (WOW), landing lights, and taxi lights.

NOTE: • Make sure that the hook of the uplock box is in the unlocked position. If necessary, operate the free-fall handle to unlock it.

• Before the installation of the connector, apply Lektro-Tech Super Corr-A into the plug connector to prevent corrosion and clean the contacts.

(10) On the circuit breaker panel, close the ELEC PUMP, CMD, IND 1, and IND 2 circuit breakers and remove the DO-NOT-CLOSE tags from them.

(11) Bleed the air from the hydraulic system lines (AMM TASK 29-10-00-860-803-A/200).



- (12) Do an operational check of the landing gear (AMM TASK 32-30-00-700-801-A/500).
- (13) Do the functional check of the landing gear free-fall system (AMM TASK 32-34-00-700-801-A/500).
- (14) Install the landing-gear safety pins (AMM TASK 32-00-01-910-801-A/200).
- (15) Lower the aircraft and remove the jacks (AMM TASK 07-10-00-500-802-A/200).
- (16) Do the inspection/check of the nose landing gear leg (AMM TASK 32-20-01-200-801-A/600).
- (17) Do the operational check of the nose-wheel steering system (AMM TASK 32-50-00-700-803-A/500).
- (18) If the results of the operational check are unsatisfactory, adjust the nose-wheel steering system (AMM TASK 32-50-00-700-802-A/500).
- (19) For aircraft POST-MOD SB 145-32-0036, remove the safety pin of the NLG doors solenoid valve (AMM TASK 32-00-02-910-801-A/200).

Work Card

WP No.: 181683

Kingman Airline Services

AC Model, Make: EMB-145LR

Tail No: N48901

AC S/N: 145501

Work Order No.:

Customer: JETSUITE

Print Date: 06/27/2022

Item: 5003		Task Type: NON-ROUTINE
Task No.: 5003	Estimated HRs:	Employee:
Work Required: REMOVE NLG LEG PN 1170C0000-02 SN 333 TO SWAP WITH NLG LEG FROM A/C N12900 PER ANDREW KIMM		Customer Approval: ☐ Repair ☐ Defer

Notes:

Start:

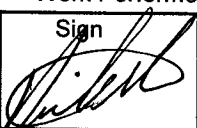
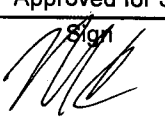


Complete:



Part Removal Information		Part Installation Information	
Desc.		Desc.	
P/N OFF	S/N OFF	P/N ON	S/N ON
Desc.		Desc.	
P/N OFF	S/N OFF	P/N ON	S/N ON
Desc.		Desc.	
P/N OFF	S/N OFF	P/N ON	S/N ON
Desc.		Desc.	
P/N OFF	S/N OFF	P/N ON	S/N ON
Action:			
Removed NLG leg PN # 1170S0000-01 SN 333 to swap with NLG leg from AC N12900 Per Andrew Kimm IAW EMB AMM 32-20-01-000-801-A			

Continuation Form? Yes ☐	RII Task? Yes ☐	Ops/Function Check Required? Yes ☐ NO ☒
---	--	--

Work Performed By			Approved for Service			INSPECTION	
Empl 0889	Sign 	Date 6-28-22	Empl 3024	Sign 	Date 28 Jun. 2022	Sign & Stamp 	Date 28 Jun 2022

Form: M-011

Certified Repair Station # K9GR490Y

Revision: 12/5/2017



NOSE-LANDING-GEAR LEG - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the nose landing-gear (NLG) leg.
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
32-20-01-000-801-A	NOSE LANDING-GEAR LEG - REMOVAL	ALL
32-20-01-400-801-A	NOSE LANDING-GEAR LEG - INSTALLATION	ALL
32-20-01-000-802-A	NOSE LANDING-GEAR UPLOCK PIN - REMOVAL	ALL
32-20-01-400-802-A	NOSE LANDING-GEAR UPLOCK PIN - INSTALLATION	ALL



TASK 32-20-01-000-801-A

EFFECTIVITY: ALL

2. NOSE LANDING-GEAR LEG - REMOVAL

A. General

(1) This task gives the procedures to remove the NLG leg.

B. References

REFERENCE	DESIGNATION
AMM TASK 07-10-00-500-801-A/200	COMPLETE AIRCRAFT JACKING
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-20-02-000-801-A/400	MAIN BRACE STRUT OF THE NOSE LANDING GEAR - REMOVAL
AMM TASK 32-33-05-000-801-A/400	NOSE LANDING GEAR ACTUATOR - REMOVAL
AMM TASK 32-49-05-000-801-A/400	WHEEL ASSEMBLY OF THE NOSE LANDING GEAR - REMOVAL
AMM TASK 32-61-02-000-801-A/400	DOWNLOCK PROXIMITY SWITCH - REMOVAL
AMM TASK 32-63-02-000-801-A/400	AIR/GROUND (WOW) PROXIMITY SWITCH OF NLG - REMOVAL
AMM TASK 32-63-03-000-801-A/400	DOOR-SEQUENCE PROXIMITY SWITCH OF THE NLG - REMOVAL
AMM TASK 32-63-04-000-801-A/400	NLG DOOR-OPEN PROXIMITY SWITCH - REMOVAL
AMM TASK 33-41-02-000-802-A/400	LANDING LIGHT ASSEMBLY - REMOVAL
AMM TASK 33-42-02-000-802-A/400	NOSE-LANDING-GEAR TAXI LIGHT ASSEMBLY - REMOVAL
SB 145-32-0036	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 002	Hydraulic Crane, NLG Removal/Installation	To remove the NLG leg	
GSE 102	Adapter, Holst, NLG	To remove the NLG leg	
GSE 111	Stand, NLG Maintenance/Transportation	For maintenance and transportation of the NLG	



E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves Resistant to Phosphate-Ester Base Fluid	For protection of the hands	2
Commercially available	Rubber Goggles Resistant to Phosphate-Ester Base Fluid	For protection of the eyes	2

F. Consumable Materials

Not Applicable

G. Expendable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG wheelwell
1	Helps the other technician	NLG wheelwell

I. Preparation

SUBTASK 841-002-A

- (1) On the circuit breaker panel, open the ELEC PUMP 1, CMD, IND 1, and IND 2 circuit breakers and attach DO-NOT-CLOSE tags to them.
- (2) For aircraft PRE-MOD SB 145-32-0036, make sure that the pressure in hydraulic system No. 1 is fully released (AMM TASK 29-10-00-860-802-A/200).
- (3) For aircraft POST-MOD SB 145-32-0036, install the safety pin of the NLG doors solenoid valve (AMM TASK 32-00-02-910-801-A/200).
- (4) Make sure that the safety pins of the landing gears are installed (AMM TASK 32-00-01-910-801-A/200).
- (5) Lift the aircraft. Refer to AMM TASK 07-10-00-500-801-A/200.
- (6) Remove the proximity switch from the target to be adjusted. Refer to the applicable task as follows:
 AMM TASK 32-61-02-000-801-A/400
 AMM TASK 32-63-02-000-801-A/400
 AMM TASK 32-63-03-000-801-A/400
 AMM TASK 32-63-04-000-801-A/400
- (7) Remove the landing light supports (AMM TASK 33-41-02-000-802-A/400).
- (8) Release, from the clamps, the harness of the air/ground proximity switch, feedback potentiometer, landing lights, and taxi lights.
- (9) Remove the taxi light supports (AMM TASK 33-42-02-000-802-A/400).



- (10) Disconnect the ground cable from the NLG leg. For this, remove the nut, washer, and bolt.
- (11) Remove the wheel assemblies (AMM TASK 32-49-05-000-801-A/400).
- (12) Release the main brace strut from the NLG leg (AMM TASK 32-20-02-000-801-A/400).
- (13) Release the NLG actuator from the NLG leg (AMM TASK 32-33-05-000-801-A/400).

J. Removal (Figure 401)

SUBTASK 020-002-A

- (1) Disconnect the hydraulic hoses (1) and (2) from the NLG leg (3).

NOTE: Use a drip pan to collect the remaining hydraulic fluid.

- (2) Put GSE 002 and GSE 102 on the NLG leg (3).

NOTE: During the removal of the NLG leg, identify the position (left and right) of the half-bearings, shims, laminated washer, and solid spacer washers to prevent their inverted installation.

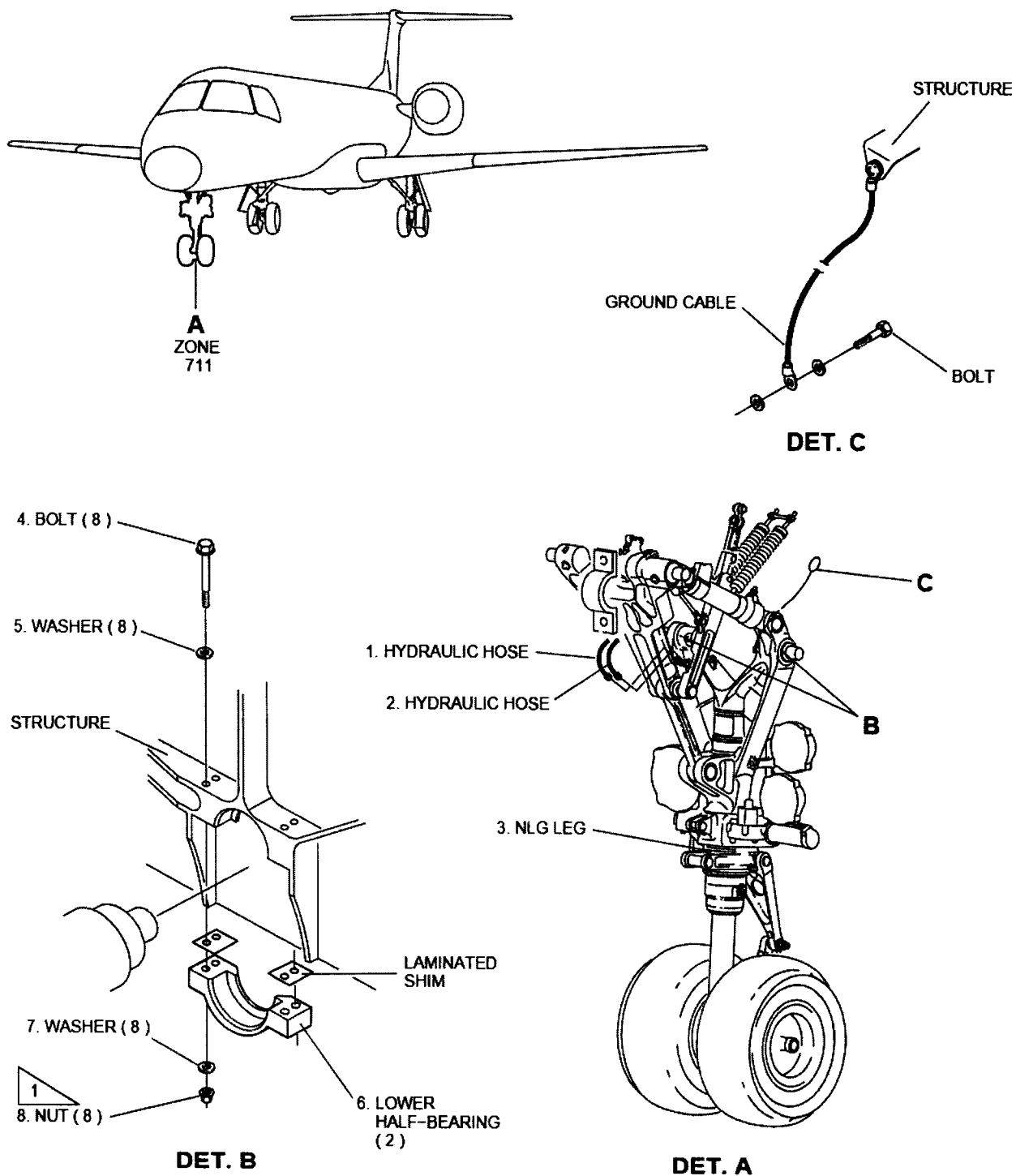
- (3) Remove the nuts (8).
- (4) Remove the washers (7) and (5).
- (5) Remove the bolts (4).
- (6) Remove the lower half-bearings (6).
- (7) Remove the NLG leg (3) and put it on GSE 111.



EFFECTIVITY: ALL

Nose Landing-Gear Leg - Removal/Installation

Figure 401



TORQUE: 50.80 TO 56.45 N.m (450 TO 500 lb.in)

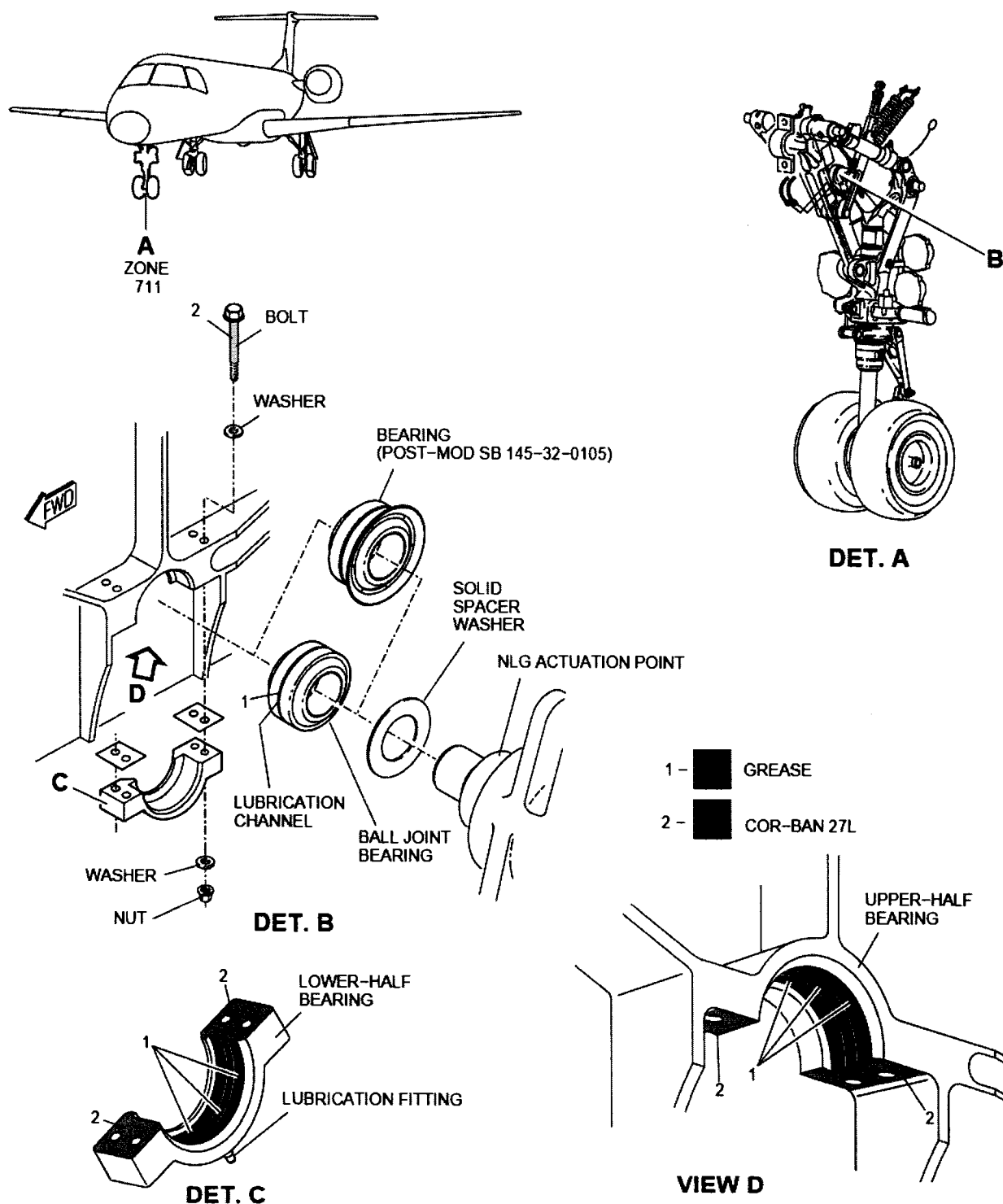
EM145AMM320271C.DGN



EFFECTIVITY: ALL

Nose Landing-Gear Leg - Removal/Installation

Figure 402



NOTE:

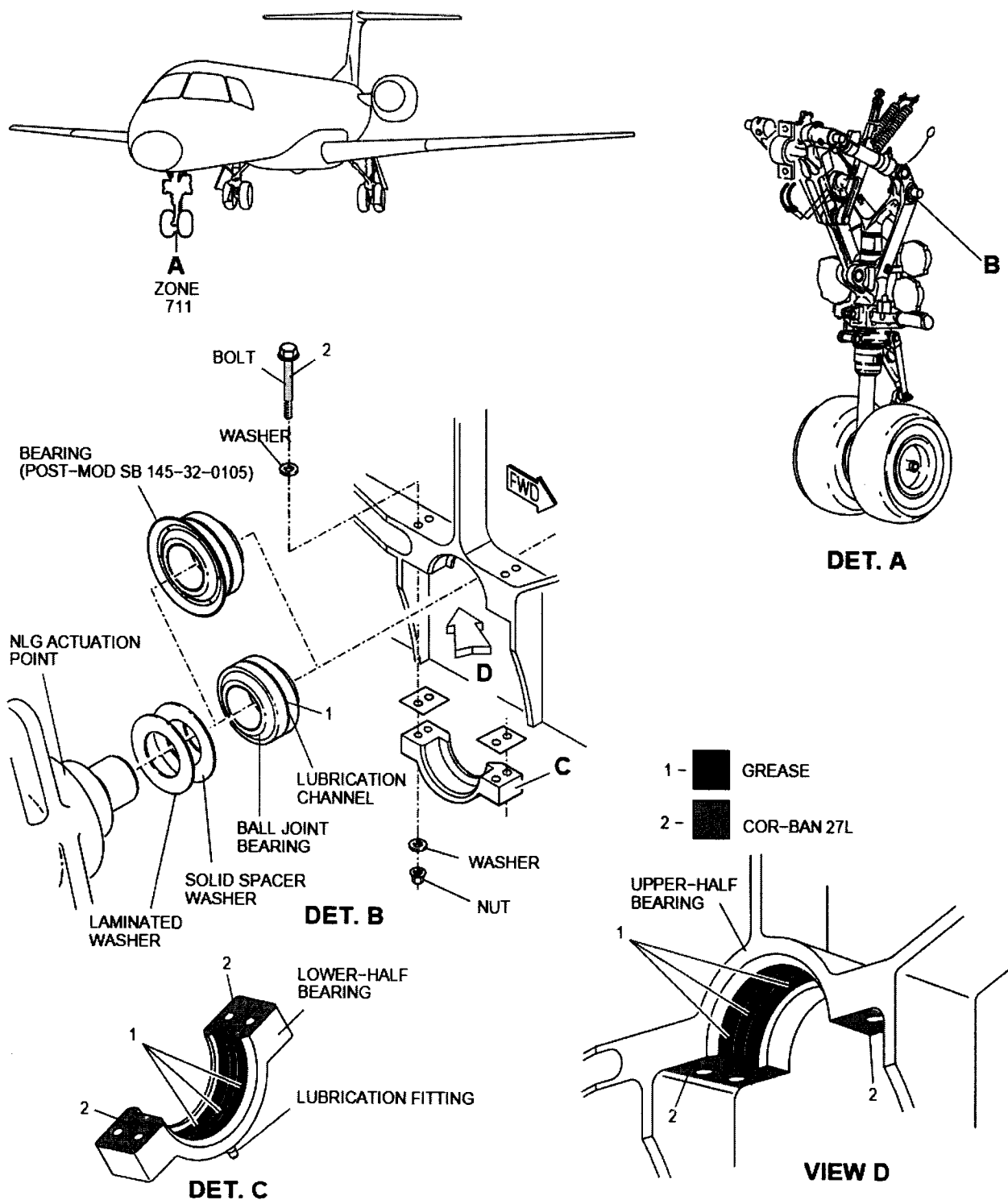
THE UPPER AND LOWER HALF-BEARINGS DO NOT HAVE A LUBRICATION CHANNEL.

EM145AMM320675A.DGN



EFFECTIVITY: ALL

Nose Landing-Gear Leg - Removal/Installation
Figure 403



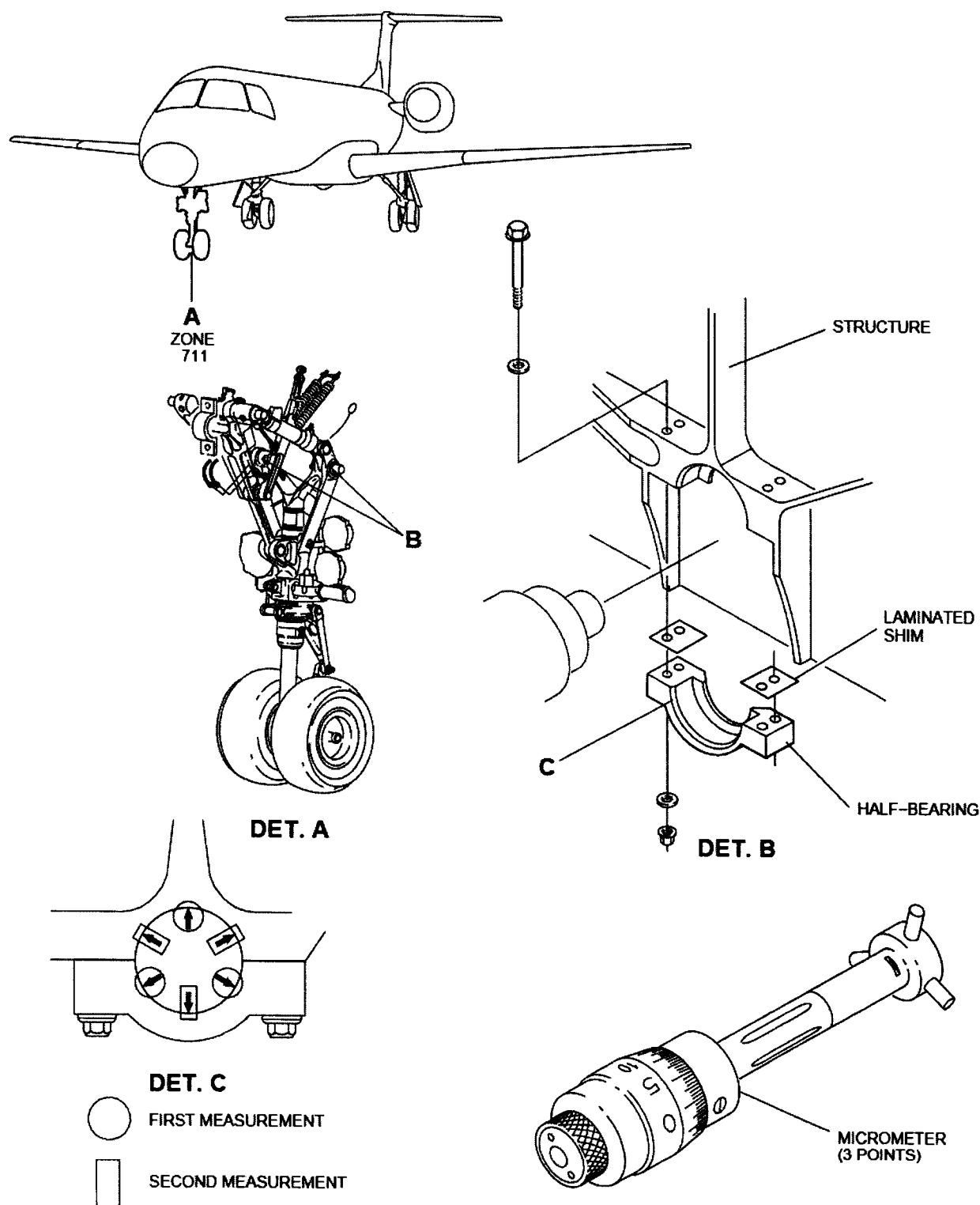
NOTE:
THE UPPER AND LOWER HALF-BEARINGS DO NOT HAVE A LUBRICATION CHANNEL

EM145AMM320498C.DGN



EFFECTIVITY: ALL

Procedure to Find the Thickness of the Half-Bearing Shim
Figure 404



EM145AMM320277C.DGN

ExpressJet

PARTS RECORD AND CONTROL TAG

FORM M-502
(02/06)

SERVICEABLE RECORD			REMOVAL RECORD			
P/N ON	S/N ON		P/N OFF	S/N OFF		
1172C0000-02	SP649-01		1172C0000-02	SP546-01		
DESCRIPTION	LOGPAGE	FLT	TAIL NO.	POSITION		
NLG drag strut	2945670	4269	48901	NLG		
PO NUMBER	WORK ORDER	APU SERIAL NUMBER	ENGINE SERIAL NUMBER			
1002110114	260541					
CONDITION						
☐ NEW ☒ OVERHAUL ☐ REPAIR ☐ CONT. TIME			☒ REPLACED ☐ REMOVED ONLY			
☐ ROBBED FROM _____ POSITION _____			☐ TROUBLESHOOTING ☐ INSTALLED ONLY			
OTHER _____			REASON <u>TIME CHANGE</u>			
SHELF LIFE ☐ YES ☒ NO EXPIRES _____			ENTERED IN AURA ☒ YES ☐ NO BY <u>SV</u>			
INSPECTED BY	EMP NO	DATE	MECHANIC INITIALS	EMP NO.	STA	DATE
h2	7030055	12/07/11	SV	7030960	IAH	12/10/11

12.33.11 247 ✓
Yellow Copy - Records White Copy - Records Green Copy - Attached to Removed Part

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 20123657	
4. Organization Name and Address: Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352						5. Work Order/Contract/Invoice Number: XL8541	
6. Item:	7. Description:	8. Part Number:	9. Eligibility:	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:	
1	NLG MAIN DRAG STRUT ASSEMBLY	1172C0000-02	N/A	1.0	SP649-01	OVERHAULED	
13. Remarks: PO# RO1003110114 (SEE ATTACHED DOCUMENTATION) CSN:17,272.00 CSO/TSO:ZERO OVERHAULED IAW LIEBHERR / ELEB CMM CHAPTER 32-21-15 REV. 5 DATED 12MAY2011, EC 3200-01006 REV. L DATED 21JUL2010 AND EC3210-01163 REV. A DATED 01MAR2011. SEE LIFE LIMIT REPORT FOR PROCURABLE AND NON-PROCURABLE LIFE LIMITED COMPONENTS. Certifies that the work specified in block 12/13 was carried out in accordance with EASA Part-145 and in respect to that work the component is considered ready for release to service under EASA Part-145 Approval Number: EASA.145.4518.							
14. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.			19. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.				
15. Authorized Signature:		16. Approval/Authorization No.:		20. Authorized Signature:		21. Approval/Certificate No.:	
				HPI 41 Ariel Go		RJ3R817L	
17. Name (Typed or Printed):		18. Date(m/d/y):		22. Name (Typed or Printed):		23. Date(m/d/y):	
				ARIEL GO		Nov/12/2011	
User/Installer Responsibilities							
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

- FINAL -

FAA REPAIR STATION
RJ3R817L

WORK ORDER #	XL8541
RECEIPT DATE	10/07/2011
CUSTOMER	EXPRESSJET AIRLINES
CUSTOMER P.O.	RO1003110114
URGENCY	NORMAL
	TAIL# 555

RECEIVING PLANNER WORK ORDER INFORMATION						
QTY	P.O. PART NUMBER	DESCRIPTION				SERIAL NUMBER
1	1172C0000-02	NLG MAIN DRAG STRUT				SP649-01
MANUFACTURER		CSO	CSN	TSD	TSN	AIRCRAFT TYPE
LIEBHERR-AEROSPACE		17272.00	17272.00	22703.16	22703.16	EMBRAER EMB-145 (ERJ)
COND AS REC'D IN REC DEPT						
CUSTOMER REPORTED DISCREP		NONE				
DATE OF LAST REP / OH		REF. WO:				
WARRANTY		N/A				
CUSTOMER INSTRUCTIONS		OVERHAUL A/C#555 A/C#555				

INITIAL EVALUATION RESULTS	
RECEIVED NLG MAIN DRAG STRUT ASSY IN FAIR CONDITION. COMPONENTS ARE WITHIN CMM LIMITS. UNIT WILL BE OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-21-15 AND EC 3200-01006.	
INITIAL TEST	Not Applicable

WORK ACCOMPLISHED:		REPAIR ACTION DESCRIPTION			
OVERHAULED IN ACCORDANCE WITH ELEB CMM 32-21-15 REV 5, DATED 12MAY2011, EC 3200-01006 REV L, DATED 21JUL2010, AND EC3210-01163 REV A, DATED 01MAR2011. CSO: ZERO TSD: ZERO SEE LIFE LIMIT REPORT FOR PROCURABLE AND NON-PROCURABLE LIFE LIMIT COMPONENTS. G.C. 10NOV2011					
AS SHIPPED PART NUMBER: 1172C0000-02		S/N: SP649-01	PUBLICATION: ELEB CMM 32-21-15		
UNIT EXCHANGED FOR P/N: N/A		S/N: N/A	W.O.#: N/A	DATE:	
Signature - Certificated Mechanic/Supervisor: 			Cert #: <u>3240079</u> Date: <u>NOV 12 2011</u>		
Signature - Certificated Inspector: 			Cert #: <u>3500323</u> Date: <u>NOV 12 2011</u>		

Form No. OC799

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

INSTALL

MFG S/N: **SP649-01**

SAFE LIFE LIMITS: MRB-145/1150 Rev. 14 Dated 12-Dec-09, and TR 10-5, 10-6, 10-7, 10-8, 11-1, 12-1

AS RELEASED BY HPA

[illegible]

QC REPRESENTATIVE: *Amel / asyug / ps* DATE: **NOV 12 2011**

EXPRESS JET

XL8541 OFF 555

NLG Main Drag Strut	HOURS TSN	CYCLES TSN	HOURS TSO	CYCLES TSO	HRS THIS INSTL	CYC THIS INSTL
P/N:1172C0000-02 SERIAL: SP649-01	22,703.16	17,272	22,703.16	17,272	14,666.18	11,010

SERIALIZED PART STATUS INFORMATION

PART NUMBER	PART DESCRIPTION	SERIAL	CSI	CSN	CSO	TSI	TSN	TSO
1172-0001	NLG, DRAG STRUT, CENTRAL ART PIN	AR003R032	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1172A0600-01	DRAG STRUT, UPPER, NLG	AT009A009	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1172A0200-01	BOTTOM STAY ASSY	AT003E007	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1172-0037	NLG, DRAG STRUT, PINTLE PIN	AR010P197	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1172-0037	NLG, DRAG STRUT, PINTLE PIN	AR010P202	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16
1172-0066	NLG, DRAG STRUT, ACT ATTACH BOLT	AR003D148	17,272	17,272	17,272	22,703.16	22,703.16	22,703.16

idrepro
Page: 1

19.01.11.17 PRINT IDR'S BY WORKORDER
HAWKER PACIFIC - SUN VALLEY

Date: 11/10/2011
Time: 10:33:47

No open IDRs found for Workorders: XL8541-000 thru XL8541-



NOV 12 2011