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SERVICE BULLETIN No. 6647-32-14

LANDING GEAR - EXTENSION AND RETRACTION - CONTROL AND INTERFACE

LANDING GEAR CONTROL AND INTERFACE UNIT - AMENDMENT 9

USE OF MICROPROCESSOR PRINTED CIRCUIT BOARD PART NUMBER: 001LG010800

1. <u>Planning Information</u>

A. Effectivity

Landing Gear Control and Interface Units (LGCIUs) PNR. 664700500A4X, all serial numbers up to and including 5432.

B. Concurrent Requirements

Not Applicable.



C. Reasons

- (1) Due to obsolescence with various components the following standards of Microprocessor Printed Circuit Board (PCB) are no longer in production:
 - PNR: 001LG010340
 - PNR: 001LG010450
 - PNR: 001LG010590
 - PNR: 001LG010600
- (2) PNR: 001LG010800 standard Microprocessor PCB was introduced before as a part of Amendment 8 (Refer to VSB 6647-32-13) to new production LGCIUs starting from serial number 5433. But Amendment 8 configuration standard also introduced other sub-assemblies at the same time, thus restricting repair options to Operators.
- (3) Amendment 9 is being introduced to permit the use of PNR: 001LG010800 standard Microprocessor PCB for In-Service units that require replacement of a previous standard of Microprocessor PCB.
- D. Description

This Service Bulletin lets PNR: 001LG010800 standard of Microprocessor PCB to be installed as a direct replacement for the previous standards of Microprocessor PCB listed below:

- PNR: 001LG010340
- PNR: 001LG010450
- PNR: 001LG010590
- PNR: 001LG010600
- E. Compliance

Compliance with this Service Bulletin is optional or on an attrition basis for LGCIUs that are serial number up to and including 5432, where the previous standard of Microprocessor PCB is identified at fault and a replacement Microprocessor PCB, PNR: 001LG010800 is necessary to repair the LGCIU.



F. Approval

The technical content of this Service Bulletin has been approved under the authority of the EASA Design Organisation Approval N^o EASA.21J.031.

The modification procedures described in this Service Bulletin are reviewed and technically accepted by Airbus Design Office to apply to the fleet affected.

The SB does not contain any change information that revises the equipment definition covered by Airbus approved modifications.

G. Manpower

The time estimates given in the Service Bulletin are based on the direct labour to do the work. The estimates do not include the time to prepare, plan or inspect the work. Also procurement of parts, other materials and general administration work for the task are not included. The estimated time necessary to embody this Service Bulletin is as follows:

- 1. Disassembly: 30 minutes.
- 2. Assembly: 30 minutes.
- 3. Final Test: 1 hr.
- H. Weight and Balance

Weight and balance are not affected.

I. Electrical Load Data

This Service Bulletin does not change the aircraft electrical load.

J. Software Accomplishment Summary

Not Applicable.

K. References

Ultra Electronics Controls LGCIU, CMM ATA Ref. No. 32-31-39 (Latest Revision).

Ultra Electronics Controls LGCIU, Amendment 8, VSB 6647-32-13 (Latest Revision).

Airbus Equipment Definition Evolution Sheet, EDES 001LG/25, Issue 3, Introducing Amendment 9.



L. Other Publications Affected

Not Applicable.

M. Interchangeability or Intermixability of Parts

Accomplishment of this Service Bulletin does not affect intermixability or interchangeability of the LGCIU.

- 2. <u>Material Information</u>
 - A. Material Price and Availability

Price: The necessary material is detailed in Paragraph 2.C.

Availability: Contact Ultra Electronics Controls for availability.

B. Industry Support Information

Units returned to Ultra Electronics Controls can have this Service Bulletin carried out on request from Operators, or on LGCIUs returned for investigation or repair. Normal conditions and warranty terms for repair items will apply. If necessary, Operators may also carry out this Service Bulletin.

C. Material Necessary for Each Component (Unit)

The following parts from Ultra Electronics Controls are necessary to accomplish this Service Bulletin.

(1) Material to be Purchased.

<u>New PNR</u>	Key Word	Old PNR	<u>Qty</u>	<u>Unit Price</u>	Inst/Disp
001LG010800	Microprocessor PCB	001LG010600 001LG010590 001LG010450 001LG010340	1	\$ 8,239 (World List Price 2012)	New Part



- (2) Material Supplied by the Operator (Consumables)
 - (a) Standard Material

Refer to the related sections of the CMM – Tools and Materials.

(b) Specific Material

No specific material required to embody this Service Bulletin.

D. Material Necessary for Each Spare

Not Applicable.

E. Re-identified Parts

Not Applicable.

F. Tooling – Price and Availability

Not Applicable.

- 3. Accomplishment Instructions
 - A. General
 - CAUTION: YOU MUST WORK ON THE LGCIU ONLY UNDER CLEAN ROOM CONDITIONS. ALL WORK MUST BE CARRIED OUT AT AN APPROVED METAL OXIDE SEMICONDUCTOR WORK STATION, IN ACCORDANCE WITH STANDARD ANTISTATIC PROCECURES TO PREVENT DAMAGE BY STATIC DISCHARGE

A full description of the procedures is described in the LGCIU CMM, ATA Ref. 32-31-39 (Latest Revision). In the procedures which follow, use CMM Illustrated Parts List (IPL) Fig., as detailed, the item numbers in parentheses are the same as those in the IPL Fig.

- B. Disassembly
 - (1) Refer to the LGCIU CMM, ATA Ref. 32-31-39, DISASSEMBLY page 301.
 - (2) Remove OBRM as instructed in DISASSEMBLY, Paragraph 2.A. (IPL Fig.1, Item 5).



- (3) Remove Microprocessor PCB as instructed in DISASSEMBLY, Paragraph 2.B. (IPL Fig.2, Item 55).
- (4) Place the Microprocessor PCB in an anti static bag.
- C. Assembly
 - (1) Refer to the LGCIU CMM, ATA Ref. 32-31-39, ASSEMBLY page 701.
 - (2) Fit new Microprocessor PCB, PNR: 001LG010800 as instructed in ASSEMBLY, Paragraph 2.B. (IPL Fig.2, Item 55).
 - (3) Complete the assembly of the LGCIU as instructed in ASSEMBLY, Paragraph 2.A.
- D. Change Identification

On the Amendment Label (IPL Fig 1, Item 25) identify the LGCIU as Amendment 9.

- E. Test
 - (1) Refer to the LGCIU CMM, ATA Ref. 32-31-39, TESTING AND FAULT ISOLATION page 101.
 - (2) Perform a full acceptance test on the LGCIU as instructed in the TESTING AND FAULT ISOLATION page 101.



4. Notification

After accomplishment of this Service Bulletin, the Operator must tell Ultra Electronics Controls this data:

- Service Bulletin number.
- Serial number(s) of the LGCIU(s) amended.
- Date of amendment(s).

Send this data to:

Customer Support Manager, Ultra Electronics Controls, 417 Bridport Road, Greenford, Middlesex, UB6 8UE, United Kingdom Telephone: +44 (0) 20 8813 4444 Fax: +44 (0) 20 8813 4351 Email: support@ultra-controls.com

5. <u>Further information</u>

If you need more information about this Service Bulletin, or to obtain price/delivery data, contact the Customer Support Manager at:

Ultra Electronics Controls 417 Bridport Road, Greenford, Middlesex UB6 8UE United Kingdom

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