

REVISION TRANSMITTAL

TO: HOLDERS OF SERVICE BULLETIN 8-879-32-01 FOR ELDEC 8-879-03, -05 **LANDING GEAR ELECTRONIC CONTROL UNIT.**

REVISION NUMBER 1, DATED AUG 17/16

HIGHLIGHTS

This page transmits a revision to Service Bulletin 8-879-32-01. The entire Service Bulletin has been reprinted. Discard the old Service Bulletin and replace with the new copy.

Page No.	Description of Change	Effectivity
3	In paragraph 3.C: In the Materials Supplied by ELDEC table, add the top chassis and placard. In the Materials Supplied by Operators table, add paint stripper and cotton swabs.	All
4	Added paragraph 4.B to replace the top chassis. Revised paragraph 4.C(1) to add an optional procedure to use paint stripper for removal of the part number suffix on the nameplate.	All

SERVICE BULLETIN

LANDING GEAR SYSTEM — LANDING GEAR ELECTRONIC CONTROL UNIT

MODIFICATION OF 8-879-03 UNITS TO 8-879-05

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1. Summary

This service bulletin gives the procedure to modify a Part Number (PN) 8-879-03 Landing Gear Electronic Control Unit (LGECU) to PN 8-879-05.

2. Planning Information

A. Effectivity

This service bulletin applies to the ELDEC PN 8-879-03 LGECU, used on Bombardier Global Express 5000 and 6000 series aircraft. This service bulletin replaces two Programmed Control CCAs on 329 aircraft. See paragraph 2.C.(2).

B. Concurrent Requirements

None.

C. Reason

(1) Problem

"PROX_REFERENCE_VOLTAGE_FAIL" fault messages have been observed in the NVM memory on some 8-879001-03 Programmed Control CCAs. When both Programmed Control CCAs in the LGECU report this message concurrently, it can cause a "GEAR DISAGREE" message to be reported by EICAS. This message tells the gear down logic in the aircraft maintenance system to set the aircraft's maximum speed limit to 250 Knots. This can cause the aircraft to reduce throttle if its air-speed is above the maximum limit.

(2) Solution

In each PN 8-879-03 LGECU, two PN 8-879001-03 Programmed Control CCAs are replaced with PN 8-879101-02, The PN 8-879101-02 Programmed Control CCA programming has been changed to avoid false occurrences of the PROX_REFERENCE_VOLTAGE_FAIL message, to prevent unintentional deceleration of the aircraft. After incorporation of this service bulletin, the LGECU will be identified as PN 8-879-05.

D. Compliance

ELDEC recommends this modification to be done when the LGECU is returned for repair or for incorporation of this service bulletin.

E. Approval

The technical content of this Service Bulletin has been reviewed and accepted by Bombardier Aerospace.

F. Manpower

Approximately one man-hour plus testing time is required to modify each PN 8-879-03 LGECU.

G. Weight and Balance

Not affected.

H. Electrical Load Data

Not changed.

I. Software Accomplishment Summary

Not applicable.

J. References

ELDEC 32-08-08 Component Maintenance Manual (CMM)

K. Other Publications Affected

ELDEC 32-08-08 Component Maintenance Manual

L. Interchangeability or Intermixability of Parts

Interchangeability and intermixability of the LGECU is controlled by Bombardier.

Interchangeability of the Programmed Control CCAs, and the LGECU is controlled by ELDEC.

3. Material Information

A. Material — Price and Availability

(1) Contact Crane Aerospace & Electronics for price quotation. See paragraph 5.A.

(2) The turnaround time is 45 business days, and does not include the time necessary to ship the unit.

B. Industry Support Information

Not applicable.

C. Material Necessary for Each Component or Spare

(1) Material Supplied by ELDEC

P/N (Vendor)	Description	Qty	Special Instructions/ Disposition
8-879101-02	Control CCA, Programmed	2	Replaces 8-879001-03
8-879011-02	Chassis, Top	1	Replace ¹
8-879042-01	Placard, Card	1	Replace ²

1. Replacement is not necessary, if part number 8-879-03 is not etched on the top chassis.
2. Installed on the top chassis, if it is replaced.

(2) Material Supplied by the Operator

P/N (Vendor)	Description	Qty	Special Instructions/ Disposition
Commercial	Isopropyl Alcohol, Mil Spec TT-I-735a, Grade A	A/R	Re-identification
Commercial	Lint-free cloth	A/R	Re-identification
Formula 1365 (V27674) ¹	Stripper, Paint	A/R	Re-identification
Commercial	Swab, Cotton	A/R	Re-identification
M-0-NC (V1RXP5) ²	Ink, Two-part Epoxy, Black,	A/R	Re-identification
B-13 ³ (V1RXP5) ¹	Catalyst, Two-part Ink, Black	A/R	Re-identification
M-9-N (V1RXP5) ¹	Ink, Two-part Epoxy, White	A/R	Re-identification
20 ² (V1RXP5) ¹	Catalyst, Two-part Ink, White	A/R	Re-identification
Commercial	Stamp, Rubber, Alpha-numeric Minimum height: 0.9 inch	A/R	Re-identification

1. ZEP Manufacturing Co., 1310 Seaboard Industrial Blvd. NW, Atlanta Georgia, 30301
2. Enthone, Inc., 350 Frontage Rd., West Haven, CT 06516.
3. Five parts by weight of catalyst for each 100 parts by weight of color resin.

D. Re-identified Parts

The parts shown are changed by this service bulletin.

New P/N	Description	Old P/N	Qty	Disposition
8-879-05	LGECU	8-879-03	1	Re-identify

E. Tooling — Price and Availability

No special tools are necessary for this modification.

4. Accomplishment Instructions

Refer to CMM 32-08-08, IPL Figure 1 for the steps given below.

A. Do the steps given below to replace two Control CCAs in the LGECU.

- (1) Remove the Front Assembly (item 5) and two Control CCAs, PN 8-879001-03 (item 60). Refer to DISASSEMBLY in the CMM.
- (2) Install the new Programmed Control CCA, PN 8-879101-02 (item 60A) and Front Assembly (item 5). Refer to ASSEMBLY in the CMM.

B. Do the steps given below to replace the top chassis on the Chassis Assembly, if it is etched with part number 8-879-03.

- (1) Remove and discard the top chassis (IPL Figure 10, item 25) from the Chassis Assembly (item 110). Refer to DISASSEMBLY in the CMM

NOTE: The old top chassis must be discarded because it may include data that is related the 8-879-03 LGECU, and will not be correct after this service bulletin is completed. The new top chassis will not include LGECU data.
- (2) Install the new top chassis (Figure 10, item 25) on the Chassis Assembly (item 110). Refer to ASSEMBLY in the CMM.
- (3) Remove the adhesive backing from the new card placard (IPL Figure 1, item 115) and install it on the top chassis (item 25).

C. Re-Identify the LGECU

The LGECU nameplate (item 120) is located on the Front Assembly.

- (1) Use one of the steps given below to remove the suffix of the LGECU part number on the nameplate..
 - (a) Use paint stripper and a cotton swab to remove the “03” suffix from the part number field.
 - (b) Use white two-part ink to cover the “03” suffix in the part number field, as given below.
 - 1 Use a lint-free cloth and isopropyl alcohol to clean the surface of the nameplate.
 - 2 Use the manufacturer’s instructions to mix the two-part white epoxy ink.
 - 3 Apply white epoxy ink to cover “03”.
 - 4 Allow the ink to cure, before you continue to step 4.C.(1).

NOTE: Refer to ink manufacturer’s instructions for curing time.

- (2) Use a lint-free cloth and isopropyl alcohol to clean the surface of the nameplate.
- (3) Use the manufacturer's instructions to mix the two-part black epoxy ink.
- (4) Use a rubber stamp and two-part black epoxy ink to add "05" to the end of the "ELDEC P/N: 8-879-" field on the nameplate.

NOTE: Refer to ink manufacturer's instructions for curing time.

D. Refer to the steps in TESTING AND FAULT ISOLATION in the CMM to test the LGECU.

5. Further Information

A. Repair Price and Status Information

Crane Aerospace & Electronics
ELDEC Corporation
ATTN: Repair Station
16706 13th Ave. West
Lynnwood, WA 98037-8597
U.S.A.

AOG Desk: +1-425-743-8100
Telephone: +1-425-743-8255
Facsimile: +1-425-787-4223
email: eldecrepairadmin@craneae.com

B. Shipping Address

Customers shall return the units to the address below, with a shipper of their choice.

Crane Aerospace & Electronics
ELDEC Corporation
Warranty and Repair Dept.
16706 13th Ave. West
Lynnwood, WA 98037-8503
U.S.A.

Phone: +1-425-743-8255

NOTE: For International returns, the shipper is responsible to make sure that the unit has been cleared for return by United States customs.

C. Technical Information

For technical questions, please contact the Product Support Representative at:

Crane Aerospace & Electronics
ELDEC Corporation
Lynnwood, WA 98037-8503
U.S.A.

Phone: +1-425-743-8272
+1-425-743-8473
Fax: +1-425-743-8371
Internet: <http://www.cranee.com>

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