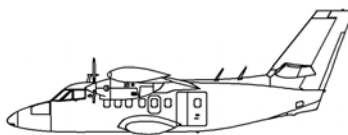




**Aircraft Industries**



## **MANDATORY BULLETIN**

**MB No.: L410UVP-E/130a**

**Concerns:** L 410 UVP-E20 airplanes equipped with FA 2200 Flight Data Recorder up to S/N 2915 inclusive and S/N 2919, 2920, 3001 and 3003.

**Subject:** De-icing signal modification of the FA 2200 Flight Data Recorder.

**Reason:** Affecting the pneumatic de-icing function due to the FA 2200 FDR.

**To be carried out at the latest by:** During next periodic maintenance check 2.

**To be carried out by:** Organization certified for periodic maintenance of L 410 airplanes.

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

**Work costs to be covered by:** Operator.

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

**Bull. becomes effective:** On the day of release.

**Total No. of pages:** 6

A handwritten signature in blue ink, appearing to read 'Jaroslav Vrána', positioned above a dotted line.

Released: Jaroslav Vrána  
Head of airworthiness dept.

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

Date of release: April 6, 2016

**PERFORMANCE:** mandatory

## 1. INSTRUCTIONS FOR PLANNING

### A. CONCERNS

#### 1. Airplane Model

L 410 UVP-E20

#### 2. Version / S/N

Airplanes equipped with FA 2200 Flight Data Recorder up to S/N 2915 inclusive and S/N 2919, 2920, 3001 and 3003.

#### 3. Qualification for Implementation

There are not any special requirements.

#### 4. New Equipment

Not required.

### B. REASON

Affecting the pneumatic de-icing function due to the FA 2200 FDR.

### C. DESCRIPTION

Break of 341K wire.

Installation of new wires.

Installation of a diode and a resistor.

### D. APPROVAL

This Bulletin has been elaborated based on data of the Design Changes No. ZKB 057 220, 058 051.

### E. MAN-HOURS

Supposed Man-hours: 4 M-hours

### F. MATERIAL - AVAILABILITY

#### 1. New Equipment

Not required.

#### 2. Installation Parts

To be delivered by Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic against an order.

#### 3. Costs

**Material:** Covered by Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic.

**Work:** Covered by the operator.

## G. SPECIAL TOOLS

Not required.

## H. WEIGHT AND BALANCE

Influence of the de-icing signal modification on an empty airplane weight and balance is negligible.

## I. USED DOCUMENTATION

### 1. Maintenance Manual, chap.:

020.20.00 024.30.04 024.40.00 025.11.00 027.00.00 030.10.00  
031.11.00 031.35.00

### 2. Drawings:

B573 949X FA 2200 FDR el. schema (airplanes with M601E engines)  
B574 832X FA 2200 FDR el. schema (airplanes with H80-200 engines)

## J. AMENDED DOCUMENTATION

AFM not affected  
MS not affected  
MM not affected  
WM Supplement for the airplane serial number.

## 2. INSTRUCTIONS FOR IMPLEMENTATION

### A. PREPARATORY WORK

- According to the Maintenance Manual (MM) work procedure, chap. 024.40.00.B, disconnect the external power supply plug.
- According to the MM work procedure, chap. 024.30.04.A, remove the accumulators from the airplane.
- According to the MM, chap. 025.11.00, page 401, remove the RH pilot seat.
- According to the MM, chap. 031.11.00, page 403, tilt the RH instrument panel.
- Disconnect the connector of the D82 airframe de-icing control box on the RH control panel. Blind the disconnected connector.
- According to the MM, chap. 027.00.00 points 4.E.(4), (5) remove the cover from the bulkhead No. 21 and install the B596 331N assembling floor into the bay behind the bulkhead No. 21.
- According to the MM, chap. 031.35.00, page 401, remove the FA 2200 Flight Data Recorder and blind the disconnected connectors.

## B. MOUNTING

### **Valid for airplanes from S/N 2904 (powered with H80-200 engines):**

- Cut asunder the 341K wire at a distance of 15 cm from the J1B connector of the FA 2200 FDR (behind the bulkhead No. 21).
- Rename the 341K wire (leading to the J1B connector) to 1341K wire and extend it to the K111 terminal block on the bulkhead No. 21. Connect the 1341K wire to the lug terminal No. 4 of the K111 terminal block acc. to the el. schema B574 832X sheet 1. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 2, 6 of point 3.A. of this bulletin.
- Extend the 341K wire (leading from the D82 airframe de-icing control box) to the K111 terminal block and connect it to the lug terminal No. 2 acc. to the el. schema B574 832X sheet 1. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 2, 6 of point 3.A. of this bulletin.
- Connect the 1590K wire to the lug terminal No. 6 of the K111 terminal block acc. to the el. schema B574 832X sheet 1. Lead the wire to the K100 terminal block on the bulkhead No. 21 and connect it to the lug terminal No. 8. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 6 of point 3.A. of this bulletin.
- According to the el. schema B574 832X sheet 1 install a diode and a resistor to the K111 terminal block. Use material pos. 3, 4 of point 3.A. of this bulletin.
  - Diode - between lug terminals No. 2 and 4
  - Resistor - between lug terminals No. 4 and 6
- Remove blinds of connectors and perform the connectivity check of newly installed connection places according to the point 2.C.1. of this bulletin.
- Connect the connector of the D82 airframe de-icing control box and lock it properly (does not apply for airplanes which have the airframe de-icing system deactivated).
- Remove the blinds of the FA 2200 FDR connectors and install the FDR according to the MM, chap. 031.35.00, page 401.

### **Valid for airplanes up to S/N 2903 inclusive (powered with M601E engines):**

- Cut asunder the 341K wire at a distance of 15 cm from the J1B connector of the FA 2200 FDR (behind the bulkhead No. 21).
- Rename the 341K wire (leading to the J1B connector) to 1341K wire and extend it to the K109 terminal block on the bulkhead No. 21. Connect the 1341K wire to the lug terminal No. 15 of the K109 terminal block acc. to the el. schema B573 949X sheet 1. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 2, 6 of point 3.A. of this bulletin.
- Extend the 341K wire (leading from the D82 airframe de-icing control box) to the K109 terminal block and connect it to the lug terminal No. 13 acc. to the el. schema B573 949X sheet 1. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 2, 6 of point 3.A. of this bulletin.
- Connect the 1590K wire to the lug terminal No. 14 of the K109 terminal block acc. to the el. schema B573 949X sheet 1. Lead the wire to the K100 terminal block on the bulkhead No. 21 and connect it to the lug terminal No. 8. Fasten the wire to the current cable harness on the bulkhead No. 21. Use material pos. 1, 6 of point 3.A. of this bulletin.

- According to the el. schema B573 949X sheet 1 install a diode and a resistor to the K109 terminal block. Use material pos. 3, 4 of point 3.A. of this bulletin.
  - Diode - between lug terminals No. 13 and 15
  - Resistor - between lug terminals No. 14 and 16
- Install a jumper to the K109 terminal block between lug terminals No. 15 and 16 acc. to the el. schema B573 949X sheet 1. Use material pos. 5 of point 3.A. of this bulletin.
- Remove blinds of connectors and perform the connectivity check of newly installed connection places according to the point 2.C.1. of this bulletin.
- Connect the connector of the D82 airframe de-icing control box and lock it properly (does not apply for airplanes which have the airframe de-icing system deactivated).
- Remove the blinds of the FA 2200 FDR connectors and install the FDR according to the MM, chap. 031.35.00, page 401.

## C. TESTS

### 1. Ground Tests

- According to the el. schema B574 832X sheet 1 (airplanes with H80-200 engines) or B573 949X sheet 1 (airplanes with M601E engines) perform connectivity check of all newly installed connection places. Pay special attention to the diode correct orientation.
- Perform check of the operation of the airframe de-icing system (RECORDER switch on the overhead panel is switched on) acc. to the MM, chap. 030.10.00, page 302, points 3.E.(2) to (6) and (9) to (13) - does not apply for airplanes which have the airframe de-icing system deactivated.

### 2. Flight Tests

Not required.

## D. FINISHING WORK

- Carefully clear all the areas where the installation works have been carried out from scraps of material and impurities.
- According to the MM, chap. 020.20.00, repair damaged painting.
- According to the MM, chap. 027.00.00, point 4.E.(18) remove the B596 331N assembling floor from the bay behind the bulkhead No. 21.
- According to the MM, chap. 027.00.00, point 4.E.(19) install the cover on the bulkhead No. 21. Close the small door (FDR) on this bulkhead.
- According to the MM, chap. 031.11.00, page 402, install the RH instrument panel.
- According to the MM, chap. 025.11.00, page 401, install the RH pilot seat.
- According to the MM work procedure, chap. 024.30.04.A, install the accumulators.
- Insert the supplement into the respective airplane manual.

### 3. NECESSARY MATERIAL

#### A. INSTALLATION PARTS DELIVERED BY THE AIRPLANE MANUFACTURER

Pos.	AI Identifier	Name	Pcs/acft
1	B049 278N	Set of Wires for IB 130a	1
2	9167 0602	D144-12 Splice	2
3	B049 178N	1N4007 Diode Assembly	1
4	B049 195N	RR 10kΩ 0.6W Resistor Assembly	1
5	9220 0801	Jumper, LEN 4708	1
6	8322 4115	A-A-52081-C-5 Binding Tape	6 m

**Note:** Pos. 5 is delivered only for airplanes to S/N 2903 inclusive.

### 4. RECORD IN THE AIRPLANE LOGBOOK

De-icing signal modification of the FA 2200 Flight Data Recorder has been performed according to the Mandatory Bulletin L410UVP-E/130a.

Date: .....

Performed: .....

(legible signature of verification engineer)

Elaborated: Ing. Vlastimil Lapčík

Checked: Ing. Pavel Ulrich