

## **ZODIAC AEROSPACE SERVICES**

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## **TRANSMITTAL SHEET**

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**This Transmittal Sheet applies to the Revision 02, dated 20140625, of Service Bulletin MC10-35-274**

### **REASON FOR REVISION**

Airworthiness Directive reference added.  
Correction of Zodiac Aerospace UK location.  
Correction of Amdt letter

### **REVISION SEQUENCE**

**Initial issue : 20140319**  
**Rev01: 20140418**  
**Rev02: 20140625**

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**OXYGEN SYSTEMS EUROPE (OSE).**  
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## SERVICE BULLETIN

### TITLE: OXYGEN – HARNESS ASSEMBLY - INSPECTION FOR POTENTIAL DEFECTIVE COMPONENT

#### 1. PLANNING INFORMATION

##### A. Effectivity

##### (1) Potential Concerned equipment

This Service Bulletin applies to the following Crew Oxygen Mask Regulator fitted with a inflatable harness assembly Part Number (PNR) MXH20-1 or MXH21-1.

PNR	HARNESS
MC10-02-50	MXH21-1
MC10-02-155	MXH21-1
MC10-04-159	MXH21-1
MC10-13-150	MXH20-1
MC10-15-151	MXH20-1
MC10-15-152	MXH20-1

PNR	HARNESS
MC10-15-157	MXH20-1
MC10-15-158	MXH20-1
MC10-15-166	MXH20-1
MC10-15-171	MXH20-1
MC10-15-176	MXH20-1
MC10-16-150	MXH20-1

PNR	HARNESS
MC10-16-151	MXH20-1
MC10-19-151	MXH21-1
MC10-25-154	MXH21-1
MC10-25-158	MXH21-1

##### (2) Affected sub-assembly

This Service Bulletin applies to the harness hose equipped PNR 445186 or 445952 fitted on the inflatable harness assembly PNR MXH20-1 or MXH21-1 and manufactured between 50<sup>th</sup> week of 2008 year (0850S) and 51<sup>th</sup> week of 2010 year (1051S).

##### (3) In the field

Crew Oxygen Mask Regulator listed above and equipped with potentially defective harness hose.

##### (4) Spare parts

Defective harness hose equipped PNR 445186 or 445952 or inflatable harness PNR MXH20-1 or MXH21-1 from stock.

##### B. Concurrent Requirements

Affected customers should notify their usual Zodiac Services contacts in regards of their location (ZS Europe, ZS UK, ZS Middle East, ZS Asia and ZS Americas).

Customers to provide the list of PNR affected and place the corresponding orders for replacement.

Removed harness hoses must be sent in one batch at the end of the retrofit to the ZS work shop from which your area corresponds to.

C. Reason

This Service Bulletin is issued :

- To inform the operators of the potential risk of premature rupture on the inflatable harness.
- To provide instructions for inspection and preventive replacement if necessary of potentially defective inflatable harness.

D. Description

Based on our internal review and customer feedback, ZODIAC AEROTECHNICS formally INTERTECHNIQUE has identified the potentially defective batches of silicon tubes.

Inflatable harnesses assembled with defective silicon tubes have demonstrated an unusually high premature rupture rate.

E. Compliance

Incorporation of this Service Bulletin is mandatory. (refer to Airworthiness Directive AD No: 2014-0142).

F. Approval

This document was established in conformity with the ZODIAC AEROTECHNICS "Alternative Procedures to Design Organisation Approval" ref. PGQ-5030 approved by the EASA. Technical data were approved by ZODIAC AEROTECHNICS in conformity with § 21A.611 of PART 21.

G. Manpower

- (1) 1 technician
- (2) Check only : 5 minutes.
- (3) Complete Operation : 20 minutes.

H. Weight and Balance

None

I. Electrical Load Data

Not Changed

J. Software Accomplishment Summary

Not applicable

K. References

- (1) Component Maintenance Manuals  
See APPENDIX I

L. Publications Affected

- (1) Component Maintenance Manuals  
See APPENDIX I

M. Interchangeability

Not affected

## 2. MATERIAL INFORMATION

### A. Material – Price and Availability

#### (1) Material

PNR	KEYWORD	QTY
MXH21-1	INFLATABLE HARNESS	1
Or 445952	HARNESS HOSE EQUIPPED	1
MXH21-31 <sup>(1)</sup>	INFLATABLE HARNESS	1
Or 420B156 <sup>(1)</sup>	HARNESS HOSE EQUIPPED	1
081356 <sup>(1)</sup> & <sup>(2)</sup>	NAMEPLATE (MXH21-31)	1
417448 <sup>(2)</sup>	CLAMP	1

<sup>(1)</sup> Post SB MA\_B\_C\_F10-35-260

<sup>(2)</sup> Necessary when changing harness hose only.

Inflatable harness MXH21-1 (including harness hose equipped PNR 445952) are modified to MXH21-31 (including Harness hose equipped PNR 420B156) due to service bulletin **MA\_B\_C\_F10-35-260**.

#### (2) Price

On request

#### (3) Availability

Schedule to be agreed with customers.

### B. Industry Support Information

Not applicable

### C. Material Necessary for Each Component (Unit)

#### (1) Material to order

PNR	KEYWORD	QTY	ORDER	SPECIAL INSTRUCTIONS
MXH20-1	INFLATABLE HARNESS	1	MXH21-31 <sup>(1)</sup>	Forward to Zodiac Services maintenance facility*
Or 445186	HARNESS HOSE EQUIPPED	1	Or 420B156 <sup>(1)</sup>	Forward to Zodiac Services maintenance facility*
MXH21-1	INFLATABLE HARNESS	1	MXH21-1	Forward to Zodiac Services maintenance facility*
Or 445952	HARNESS HOSE EQUIPPED	1	445952	Forward to Zodiac Services maintenance facility*
MXH21-1	INFLATABLE HARNESS	1	MXH21-31 <sup>(1)</sup>	Forward to Zodiac Services maintenance facility*
Or 445952	HARNESS HOSE EQUIPPED	1	Or 420B156 <sup>(1)</sup>	Forward to Zodiac Services maintenance facility*

PNR	KEYWORD	QTY	ORDER	SPECIAL INSTRUCTIONS
417448 <sup>(2)</sup>	CLAMP	1	417448	TO DISCARD

<sup>(1)</sup> Post SB MA\_B\_C\_F10-35-260

<sup>(2)</sup> Necessary when changing harness hose only.

\* Refer to § 3.D.

D. Material necessary for each spare

Not applicable

E. Re-identified Parts

With indelible ink or an electric pen, write visibly the SB accomplishment by adding of letter "I" (Inspected) on the bushing of inflatable harness (See Figure 2).

The marking shall be visible once the harness has been re-installed on the mask.

F. Tooling – Price and Availability

Not applicable

### 3. ACCOMPLISHMENT INSTRUCTIONS

A. From the stock :

(1) Inspect the manufacturing date (See Figure 3) of the inflatable harness or harness hose equipped :

- If the manufacturing date is in the specified period above, forward the defective inflatable harness or harness hose equipped to the appropriate Zodiac Services maintenance facility for replacement of the inflatable harness.

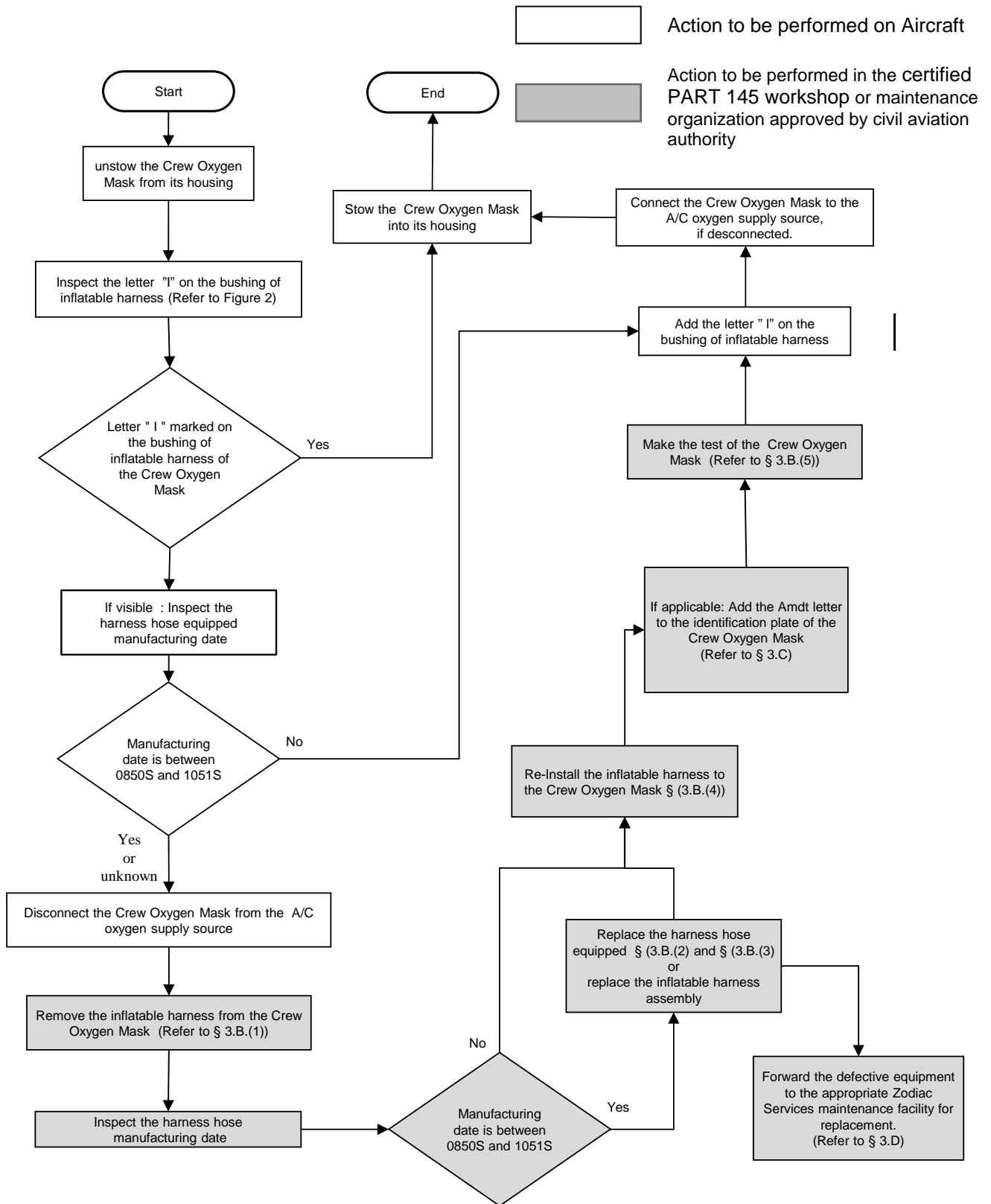
B. Inflatable harness mounted on the Crew Oxygen Mask Regulator :

**WARNING** : STRICTLY OBEY THE PROCEDURES WHEN YOU DO WORK ON OXYGEN SYSTEM. DO NOT USE OIL, GREASE OR OTHER LUBRICANTS MADE FROM PETROL IN THE AREA OF OXYGEN EQUIPMENT. YOU CAN CAUSE A FIRE OR EXPLOSION.

**CAUTION** : APPLY THIS SB ON CLEAN SURFACE AND WITH CLEAN HANDS.

Prior to using the flow chart to start the on-aircraft action(s), the operator, if he has the possibility, can determine, (e.g. aircraft maintenance logs check) whether the inflatable harness has been replaced, during a maintenance operation, on an oxygen mask regulator installed on the aircraft.

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- (1) Removal of the inflatable harness from the Crew Oxygen Mask Regulator:
  - (a) Remove the screw from the inflatable harness with magnetic-screwdriver slotted (3x\_ \_).
  - (b) Lift the locking tab of the coupling block which is in front of the regulator by 1 to 2 mm (0.04 to 0.08 in).
  - (c) Hold the locking tab up and move the coupling block apart from the regulator.
- (2) Disassembly of the comfort inflatable harness PNR MXH20-1 or MXH21-1.
  - (a) Disengage the clamp with a screwdriver. Lift up the clamp at different locations. Discard the clamp.

**NOTE :** Take care not to damage the block.
  - (b) Remove the harness hose equipped from the harness block.
  - (c) If applicable, Remove the nameplate (MXH20-1 or MXH21-1) from the harness block.

Note: Clean the harness block with isopropyl alcohol and lint free cloth.
- (3) Assembly of the comfort inflatable Harness MXH21-1 or MXH21-31
  - (a) Install the O-rings on the ends of the harness hoses.

**NOTE :** The O-rings are lubricated with compatible oxygen lubricant.
  - (b) Install the ends of the harness hoses in the coupling block.
    - 1 Check the direction of the harness hoses (head strap to the top),
    - 2 Position each end of the hoses in its housing in harness block (30). Make sure that the harness hoses are not twisted,
    - 3 Hold the ends of the harness hoses (50) in place manually.
  - (c) Pinch the clamp (20) to engage it in the ends of the harness hoses. Press the clamp until it comes fully to its position (you will hear a click).

**NOTE :** Make sure that the clamp is correctly locked on each end of the harness hoses; its upper face must be flush with the coupling block.
  - (d) Check that each tube end is correctly locked.
  - (e) If applicable, Install the nameplate (MXH21-31) to the harness block.
- (4) Installation of the inflatable harness to the Crew Oxygen Mask Regulator:
  - (a) Install the harness on the regulator body and attach it with the screw.
  - (b) Torque the harness attachment screw 0,20 N.m  $\pm$  0,02 (1.77 lb.in  $\pm$  0.17).
- (5) Test of the Oxygen Crew Mask
  - (a) Make the test of the time and the comfort function:

(refer to CMM 35-13-63 Subtask 35-13-63-790-005-A01)



C. Re-identification

After modification<sup>(1)</sup> of inflatable harness PNR MXH20-1 or MXH21-1 by inflatable harness PNR MXH21-31 or harness hose assembly PNR 445186 or 445952 by harness hose assembly PNR 420B156, The Crew Oxygen Mask Regulators MC10 Series are identified with the amendment letter : **W**

(1) With indelible ink, write the relevant amendment letter on the identification label

<sup>(1)</sup> Post SB MA\_B\_C\_F10-35-260

D. Declaration of Modification

The form attached in appendix II is to be filled by the customer and attach to the PO.



Figure 1 – “I” Letter Position



**Manufacturing Date  
Year Week**  
eg.: 0837 = 37<sup>h</sup> week of 2008

Figure 2 – Manufacturing Date Explanation

### E. ZODIAC SERVICES Facilities

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### APPENDIX I

CMM N°	EQUIPMENT PNR	DESIGNATION
35-13-63	MC10 Series	CREW OXYGEN MASK REGULATOR

## APPENDIX II

DECLARATION OF MODIFICATION			
EQUIPMENT(S) MODIFIED:			
Mask		Harness	
PNR	SNR	PNR	Batch number
NAME AND ADDRESS OF AIRLINES or FAR/JAR 145 REPAIR STATION:			
Modification Date:			
Name, position, signature of the modification responsible:			