
SERVICE BULLETIN

Modification <input checked="" type="checkbox"/>	Recurring action <input type="checkbox"/>	One-off action <input type="checkbox"/>
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No.**292 73 2092**

ARRIEL 2 B - B1 - C - C-PM - C1- C2 - S1

Subject: Hydromechanical Metering Unit (HMU). LP fuel pressure switch with dual sealing diaphragm.**Application of modification TU 92.**

Date on which this SB becomes effective and must systematically be complied with, according to the conditions of application.

This is the date all resources (parts, tools, documentation, etc.) required for this procedure are available.

Applicable from DECEMBER 2002

If resources (parts, tools, documentation, etc.) are available any earlier, the SB may be applied prior to the effectivity date.

Version: C**Reason for update:****Merger of SB No. 292 73 2092 and No. 292 73 2092M.**

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1. Compliance

A. Application

The manufacturer recommends this modification be incorporated as defined in this Service Bulletin.

Validity	Code
ARRIEL 2 C - C-PM - C1 - C2	2-1

Conditions of application for engines in service

(1) Application at the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

Upon receipt of the parts forwarded by Safran Helicopter Engines.

(2) Application at a Safran Helicopter Engines-approved Repair Center

Upon first return to an approved Repair Center, regardless of the reason for return.

Validity	Code
ARRIEL 2 B - B1 ARRIEL 2 S1	3

Conditions of application for engines in service

(1) Application at the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

Upon customer request or following depletion of the existing stock.

(2) Application at a Safran Helicopter Engines-approved Repair Center

Following depletion of the existing stock.

B. Purpose

To eliminate the possibility of fuel leaking through the LP fuel pressure switch ventilation hole.

C. Description (see appendix 2)

This modification consists of installing a new LP fuel pressure switch. This new switch has undergone the following improvements:

- addition of a restrictor in the adjusting screw,
- application of a dual sealing diaphragm.

D. Approval

- ARRIEL 2 B - B1 - C - C1 - C2 - S1 variants:
The technical content of this document is approved under the authority of the DOA (Design Organisation Approval) ref. EASA.21J.070.
- ARRIEL 2 C-PM variant:
The technical information given in this document is approved by Safran Helicopter Engines.

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E. Manpower

- (1) **At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center**
 - (a) **Personnel:** 1 mechanic.
 - (b) **Time required:** 2 man-hours (removal and installation of the adjusted HMU and replacement of the LP fuel pressure switch).
- (2) **At a Safran Helicopter Engines-approved Repair Center**
 - (a) **Personnel** of approved Repair Center.
 - (b) **Time** determined by the Repair Center as being appropriate for this level of intervention.

F. Material

Refer to paragraph 3.

G. Tooling

Mechanic's standard tooling.

H. Weight and balance

Not applicable.

I. References

- | | |
|--|----------------------|
| (1) ARRIEL 2 B Maintenance Manual..... | Ref. X 292 M5 450 2. |
| (2) ARRIEL 2 B1 Maintenance Manual..... | Ref. X 292 N5 450 2. |
| (3) ARRIEL C Maintenance Manual..... | Ref. X 292 M1 450 2. |
| (4) ARRIEL 2 C-PM Maintenance Manual..... | Ref. X 292 P1 450 2. |
| (5) ARRIEL 2 C1 Maintenance Manual..... | Ref. X 292 N4 450 2. |
| (6) ARRIEL 2 C2 Maintenance Manual..... | Ref. X 292 N6 450 2. |
| (7) ARRIEL 2 S1 Maintenance Manual..... | Ref. X 292 L0 301 2. |
| (8) ARRIEL 2 Overhaul Manual..... | Ref. X 292 R1 500 2. |
| (9) ARRIEL 2 B Component Maintenance Manual..... | Ref. X 73-23-03 2. |
| (10) ARRIEL 2 B1 Component Maintenance Manual..... | Ref. X 73-23-05 2. |
| (11) ARRIEL 2 C - C-PM Component Maintenance Manual..... | Ref. X 73-23-04 2. |
| (12) ARRIEL 2 C1 Component Maintenance Manual..... | Ref. X 73-23-13 2. |
| (13) ARRIEL 2 C2 Component Maintenance Manual..... | Ref. X 73-23-08 2. |
| (14) ARRIEL 2 S1 Component Maintenance Manual..... | Ref. X 73-23-01 2. |
| (15) Applicable Helicopter Maintenance Manual. | |

J. Other publications concerned

- | | |
|---|----------------------|
| (1) ARRIEL 2 B Spare Parts Catalogue..... | Ref. X 292 M5 700 2. |
| (2) ARRIEL 2 B1 Spare Parts Catalogue..... | Ref. X 292 N5 700 2. |
| (3) ARRIEL 2 C Spare Parts Catalogue..... | Ref. X 292 M1 700 2. |
| (4) ARRIEL 2 C-PM Spare Parts Catalogue..... | Ref. X 292 P1 700 2. |
| (5) ARRIEL 2 C1 Spare Parts Catalogue..... | Ref. X 292 N4 700 2. |
| (6) ARRIEL 2 C2 Spare Parts Catalogue..... | Ref. X 292 N6 700 2. |
| (7) ARRIEL 2 S1 Spare Parts Catalogue..... | Ref. X 292 L0 700 2. |
| (8) ARRIEL 2 B Illustrated Parts Catalogue..... | Ref. X 292 M5 600 2. |
| (9) ARRIEL 2 B1 Illustrated Parts Catalogue..... | Ref. X 292 N5 600 2. |
| (10) ARRIEL 2 C Illustrated Parts Catalogue..... | Ref. X 292 M1 600 2. |
| (11) ARRIEL 2 C-PM Illustrated Parts Catalogue..... | Ref. X 292 P1 600 2. |
| (12) ARRIEL 2 C1 Illustrated Parts Catalogue..... | Ref. X 292 N4 600 2. |
| (13) ARRIEL 2 C2 Illustrated Parts Catalogue..... | Ref. X 292 N6 600 2. |
| (14) ARRIEL 2 S1 Illustrated Parts Catalogue..... | Ref. X 292 L0 600 2. |

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2. Instructions to be incorporated

A. Implementation

Incorporation of this modification does not necessitate removing the engine. Adjusted HMU must be removed from engine.

(1) At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

Replace the LP fuel pressure switch.

(2) At a Safran Helicopter Engines-approved Repair Center

Replace the LP fuel pressure switch.

B. Operating instructions (see appendix 1)

(1) At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

(a) Remove adjusted HMU: refer to the applicable ARRIEL 2 Maintenance Manual, task 73-23-00-900-801.

(b) Remove PRE TU 92 LP fuel pressure switch: refer to the applicable ARRIEL 2 Maintenance Manual, task 73-23-03-900-805.

(c) Install POST TU 92 LP fuel pressure switch: refer to the applicable ARRIEL 2 Maintenance Manual, task 73-23-03-900-805.

(d) Engrave temporary marking on adjusted HMU identification plate: refer to appendix 1.

Note: Part number of adjusted HMU will be modified when next returned to a Repair Center.

(e) Install adjusted HMU: refer to the applicable ARRIEL 2 Maintenance Manual, task 73-23-00-900-801.

(2) At a Safran Helicopter Engines-approved Repair Center

(a) Remove adjusted HMU: refer to the ARRIEL 2 Overhaul Manual.

(b) Remove PRE TU 92 LP fuel pressure switch: refer to the applicable ARRIEL 2 Component Maintenance Manual.

(c) Install POST TU 92 LP fuel pressure switch: refer to the applicable ARRIEL 2 Component Maintenance Manual.

(d) Engrave new Part Number of adjusted HMU: refer to Common Techniques Book (procedure 300).

(e) Install adjusted HMU: refer to the ARRIEL 2 Overhaul Manual.

C. Reconditioning and checks

(1) At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

Conduct a ground run check: refer to applicable ARRIEL 2 Maintenance Manual, task 71-02-13-280-801.

Note: Conduct a visual leak check of adjusted HMU.

(2) At a Safran Helicopter Engines-approved Repair Center

Refer to the ARRIEL 2 Overhaul Manual.

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D. Identification

(1) At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center

- (a) Update the log card of the removed HMU and the log card of the installed HMU
- (b) Record the replacement of the HMU in the engine log book.
- (c) Integrate the log card of the new HMU in the engine log book.
- (d) Record the application of this SB in section E.
- (e) Update, if necessary, the availability status in section E.
- (f) Send back the fully-completed compliance certificate, links to the digital document

EngineLife Customer Portal: [Certificate 5.1 SB 292 73 2092 EN C](#) or



(2) At a Safran Helicopter Engines-approved Repair Center

- (a) Create a new log card for the HMU.
- (b) Record the application of this SB on the log card.
- (c) Update, if necessary, the availability status on the adjusted HMU log card.
- (d) Send back the fully-completed compliance certificate, links to the digital document

EngineLife Customer Portal: [Certificate 5.1 SB 292 73 2092 EN C](#) or



E. Routine maintenance

Not applicable.

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3. Informations concernant les fournitures

A. Basic information

The parts list required for the incorporation of this Service Bulletin is for one engine.

B. List of parts

New Part Number	Key	Qty	Description	Price	Old Part Number	Key	Qty
9 550 17 913 0	A	1	LP fuel pressure switch	*	9 550 17 199 0	C	1
9 794 71 010 6	B	1	O-ring	*			
ARRIEL 2 B							
0 292 85 853 0	A	1	Adjusted HMU	*	0 292 85 841 0	D	1
ARRIEL 2 B1							
0 292 85 857 0	A	1	Adjusted HMU	*	0 292 85 845 0	D	1
ARRIEL 2 C - C-PM							
0 292 85 854 0	A	1	Adjusted HMU	*	0 292 85 842 0	D	1
ARRIEL 2 C1							
0 292 85 855 0	A	1	Adjusted HMU	*	0 292 85 844 0	D	1
ARRIEL 2 C2							
0 292 86 804 0	A	1	Adjusted HMU	*	0 292 86 805 0	D	1
ARRIEL 2 S1							
0 292 85 856 0	A	1	Adjusted HMU	*	0 292 85 843 0	D	1

*Prices are available upon request.

Key

- A - Part incorporated by this modification.
- B - Part not incorporated by this modification, but required for its incorporation.
- C - Part eliminated by this modification.
- D - Part to be modified by the operator or at a Safran Helicopter Engines-approved Repair Center.

C. Supply conditions

Order supplies from:
 your local Safran Helicopter Engines Support Center
 or
 SAFRAN HELICOPTER ENGINES
 Direction Support et Service
 Département Commercial
 40220 TARNOS - France

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Marquage provisoire de la plaquette d'identification Temporary marking of the identification plate

Matériel Equipment	<input type="text"/>		
Référence P/N	X XXX XX XXXX 2092		
N° Individuel Individual No.	<input type="text"/>	Date	<input type="text"/>

Rayer les quatre derniers chiffres de la référence.

Engrave a line through the last four numbers of the Part Number.

Marquage des quatre derniers chiffres (2092) du Service Bulletin identifiant l'application de la modification TU 92.

Exécution : au crayon vibreur

Hauteur des chiffres : 1,5 mm

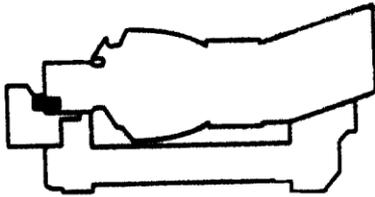
Engrave the last four numbers (2092) of the Service Bulletin referencing modification TU 92.

Engrave using a vibro pen.

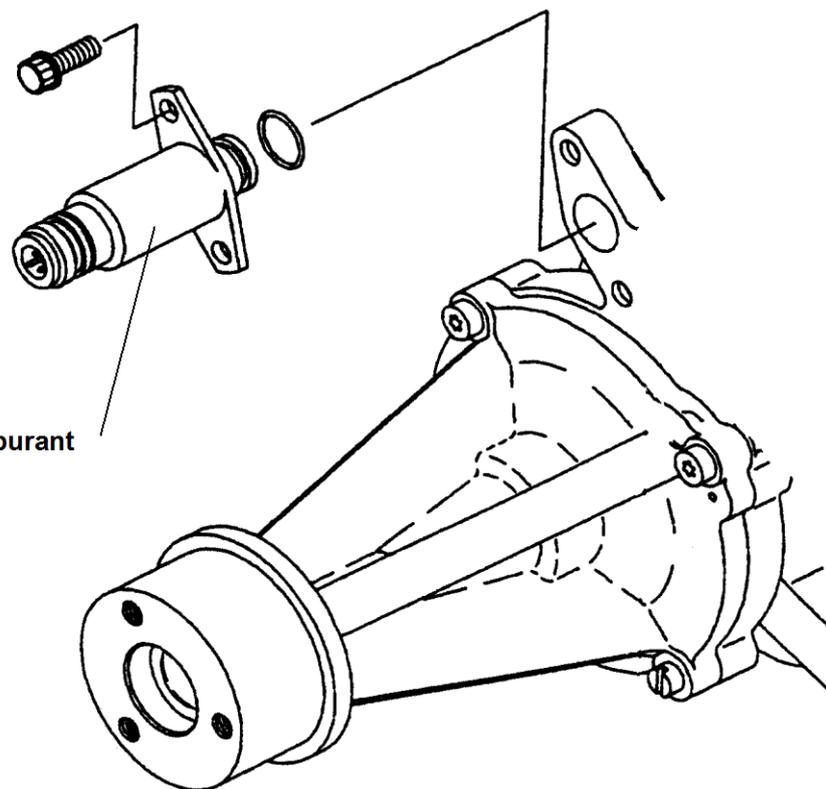
Height of the numbers: 1.5 mm

ANNEXE 1 / APPENDIX 1

SERVICE BULLETIN



Manocontacteur BP carburant
LP fuel pressure switch



ANNEXE 2 / APPENDIX 2

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Subject: Compliance certificate for replacement of adjusted HMU through application of the SB No. 292 73 2092 (TU 92).

Important:

Fill in the compliance certificate after application of the instructions given in this SB
Mail or email it to:

SAFRAN HELICOPTER ENGINES
Equipe Administration Base installée / Fleet Data Administrator Team, BP 25
40220 TARNOS - France
Email: data-fleet.fr.she@safrangroup.com

Equipment information					
Customer			Aircraft S/N		
	S/N	P/N	TSN*	CSN HP*	CSN PT*
Engine					
Removed PRE TU 92 LP fuel pressure switch					
Installed POST TU 92 LP fuel pressure switch					
Removed PRE TU 92 adjusted HMU					
Installed POST TU 92 adjusted HMU					

* TSN = Time Since New
CSN = Cycles Since New

I certify that the above-mentioned adjusted HMU has been installed according to this SB.

Date [DD/MMMM (letters)/YYYY]	
Comments	

CERTIFICATE 5.1