
SERVICE BULLETIN

Modification**Recurring action****One-off action**

No.**292 72 2044**

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

Subject: Module M03 (gas generator). Widening of the labyrinth shroud rear abradable layer.**Application of modification TU 44A.**

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 APRIL 2000

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 72 2044 and SB No. 292 72 2044M.**

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1. Planning information

A. Effectivity

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

Validity	Code
ARRIEL 2 B - B1 ARRIEL 2 C - C-PM - C1 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

Application upon customer request or following depletion of the existing stock.

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

Application following depletion of the existing stock.

B. Purpose

Delete a cause of damage of the extremity of labyrinth shroud rear abradable layer.

C. Description

This modification consists of increasing the width of rear abradable layer and to delete labyrinth shroud front abradable layer.

D. Approval

- ARRIEL 2 B - B1 - C - C1 - 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.

E. Manpower

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

(a) **Personnel:** 1 mechanic.

(b) **Time required:** 12 man-hours (module M03 removal/installation).

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

(a) **Personnel** of approved Repair Center.

(b) **Time** defined by Repair Center for the level of this intervention.

F. Material

Refer to paragraph 3.

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G. Tooling

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

(a) Standard mechanic's tooling.

(b) Tooling for module M03 removal/installation: refer to the applicable ARRIEL 2 Maintenance Manual.

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

Refer to the ARRIEL 2 Overhaul Manual.

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 2 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 S1 Maintenance Manual | Ref. X 292 L0 301 2. |
| (7) ARRIEL 2 Overhaul Manual | Ref. X 292 R1 500 2. |

J. Other publications affected

- | | |
|--|----------------------|
| (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 S1 Spare Parts Catalogue | Ref. X 292 L0 700 2. |
| (7) ARRIUS 2 B Illustrated Parts Catalogue..... | Ref. X 292 M5 600 2. |
| (8) ARRIUS 2 B1 Illustrated Parts Catalogue..... | Ref. X 292 N5 600 2. |
| (9) ARRIUS 2 C Illustrated Parts Catalogue | Ref. X 292 M1 600 2. |
| (10) ARRIUS 2 C-PM Illustrated Parts Catalogue..... | Ref. X 292 P1 600 2. |
| (11) ARRIUS 2 C1 Illustrated Parts Catalogue | Ref. X 292 N4 600 2. |
| (12) ARRIUS 2 S1 Illustrated Parts Catalogue..... | Ref. X 292 L0 600 2. |

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2. Instructions to be incorporated

A. Implementation

The engine must be removed from the helicopter.

This modification can be performed:

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

With replacement of module M03: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-43-900-801.

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

With replacement of labyrinth shroud: refer to the ARRIEL 2 Overhaul Manual.

B. Operating instructions

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

(a) Remove PRE TU 44A module M03: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-43-900-801.

(b) Install POST TU 44A module M03: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-43-900-801.

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

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

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

(b) Do an oil pressure check: refer to the applicable ARRIEL 2 Maintenance Manual, task 79-00-00-200-801.

(c) Do a vibration check: refer to the applicable ARRIEL 2 Maintenance Manual, task 71-02-10-760-801.

(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 module M03 and the log card of the installed module M03.
- (b) Record the module M03 replacement in section "B" of the engine log book and integrate the log card of the installed module M03.
- (c) Record the application of this SB in section "D" of the "current" engine log book or in section "E" of the "unique" engine log book.
Note: Update the availability status, if necessary.
- (d) Send back the removed module M03, along with its log card, to a Safran Helicopter Engines-approved Repair Center.
- (e) Tell Safran Helicopter Engines that module M03 has been replaced by sending back the fully-completed compliance certificate (Appendix 1 of this SB).

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

- (a) Record the application of this SB in the module M03 log card.
Note: Update the availability status, if necessary.
- (b) Tell Safran Helicopter Engines that this SB has been applied by sending back the fully-completed compliance certificate (Appendix 2).

E. Routine maintenance

Not applicable.

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3. Material information

A. Basic information

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

B. List of parts

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

POST TU 44A module M03.

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

New Part Number	Key	Qty	Description	Old Part Number	Key	Qty
0 292 37 789 0	A	1	Labyrinth shroud	0 292 37 783 0	C	1

Key

A - Part incorporated by the modification.

C - Part deleted by the modification.

C. Supply conditions

Order supplies as needed from:

Your local Safran Helicopter Engines Support Center

or

SAFRAN HELICOPTER ENGINES

Direction Support et Service

Département Commercial

40220 TARNOS - France

SERVICE BULLETIN

Objet : Attestation de remplacement du module M03 par application du SB n° 292 72 2044 (TU 44A).

Subject: Compliance certificate for replacement of module M03 through application of the SB No. 292 72 2044 (TU 44A).

Important / Important notice:

Après application des instructions spécifiées dans ce SB, veuillez compléter la présente attestation et la retourner par courrier ou courriel à :

After application of the instructions specified in this SB, please mail or email the fully-completed compliance certificate to:

SAFRAN HELICOPTER ENGINES
Equipe Administration Base installée / Fleet Data Administrator Team, BP 25
40220 TARNOS - France

Email: data-fleet.fr.she@safrangroup.com

Information concernant le matériel / Equipment information						
Utilisateur Customer				N° Appareil Aircraft S/N		
	N/S - S/N	Réf. - P/N	TSN*	TSO*	CSN*	CSO*
Moteur Engine						
Module M03 déposé Removed module M03						
Module M03 posé Installed module M03						

* TSN = Time Since New (Heures depuis neuf)
 CSN = Cycles Since New (Cycles depuis neuf)

TSO = Time Since Overhaul (Heures depuis RG)
 CSO = Cycles Since Overhaul (Cycles depuis RG)

Opération faite par / Work done by:

Je certifie que le module identifié ci-dessus a été installé selon les directives de ce SB.

I certify that the above-mentioned module has been installed according to the directives given in this SB.

Date [JJ/MMMM (en lettre)/AAAA ou/or DD/MMMM (letter)/YYYY]	Nom / Name	Fonction / Job title

Signature :

ANNEXE 1 / APPENDIX 1

SERVICE BULLETIN

Objet : Attestation d'application du SB n° 292 72 2044 (TU 44A).

Subject: SB No. 292 72 2044 compliance certificate (TU 44A).

Important / Important notice:

Après application des instructions spécifiées dans ce SB, veuillez compléter la présente attestation et la retourner par courrier ou courriel à :

After application of the instructions specified in this SB please mail or email the fully-completed certificate to:

**SAFRAN HELICOPTER ENGINES,
Equipe Administration Base installée / Fleet Data Administrator Team, BP 25**

40220 TARNOS - France

Email : data-fleet.fr.she@safrangroup.com

Information concernant le matériel / Equipment information						
Utilisateur Customer				N° Appareil Aircraft S/N		
	N/S - S/N	Réf. - P/N	TSN*	TSO*	CSN*	CSO*
Moteur Engine						
Module M03 modifié Modified module M03						
Enveloppe labyrinthe AVANT TU 44A déposée Removed PRE TU 44A labyrinth shroud						
Enveloppe labyrinthe APRES TU 44A posée Installed POST TU 44A labyrinth shroud						

* TSN = Time Since New (Heures depuis neuf)
CSN = Cycles Since New (Cycles depuis neuf)

TSO = Time Since Overhaul (Heures depuis RG)
CSO = Cycles Since Overhaul (Cycles depuis RG)

Opération faite par / Work done by:

Je certifie que le module identifié ci-dessus a été modifié selon les directives de ce SB.

I certify that the above-mentioned module has been modified according to the directives given in this SB.

Date [JJ/MMMM (en lettre)/AAAA ou/or DD/MMMM (letter)/YYYY]	Nom / Name	Fonction / Job title

Signature :

ANNEXE 2 / APPENDIX 2