

SERVICE BULLETIN

Modification <input checked="" type="checkbox"/>	Recurring action <input type="checkbox"/>	One-off action <input type="checkbox"/>
--	---	---

No. 292 72 2100

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

Subject: Module M05 (reduction gearbox). M04/M05 coupling sleeve with retaining ring which spreads load over bearing surface.

Application of modification TU 100A.

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 JULY 2003

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

Version: B

Reason for update:

Merger of SB No. 292 72 2100 and SB No. 292 72 2100M.

SERVICE BULLETIN

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 - C2 ARRIEL 2 S1	2-A-2

Note: Incorporation of this modification necessitates prior or simultaneous incorporation of modification TU 57 (Service Bulletin No. 292 72 2057).

Conditions of application for engines in service

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

Application if access is provided during a maintenance operation.

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

Application upon first return to an approved Repair Center if the repair/overhaul being performed provides access to M04/M05 coupling sleeve.

B. Purpose

To reduce wear to the stop and the retaining ring of the coupling sleeve which could lead to contamination of the oil system and illumination of the "chip" warning light.

C. Description (Appendix 1)

This modification consists of replacing the M04/M05 coupling sleeve.

The new M04/M05 coupling sleeve has undergone the following improvements:

- elimination of chamfers at groove of stop,
- reduction of diameter of sleeve groove.

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.

SERVICE BULLETIN

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/installation of module M05).
- (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

- (1) **At the operator's site or at a Safran Helicopter Engines-approved Maintenance Center**
 - (a) Standard mechanic's tooling.
 - (b) Tooling for removal/installation of module M05.
- (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 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) Relevant aircraft 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. |

SERVICE BULLETIN

2. Instructions to be incorporated

A. Implementation

Incorporation of this modification necessitates removal of the engine from the helicopter.

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

Replace M04/M05 coupling sleeve.

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

Replace M04/M05 coupling sleeve.

B. Operating instructions

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

(a) Remove module M05: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-15-900-801.

(b) Remove PRE TU 100A coupling sleeve: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-15-900-801.

(c) Install module M05 with a POST TU 100A coupling sleeve: refer to the applicable ARRIEL 2 Maintenance Manual, task 72-00-15-900-801.

(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.

D. Identification

(1) Record the application of this SB in the module M05 log card.

Note: Update the availability status, if necessary.

(2) 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.

SERVICE BULLETIN

3. Material information

A. Basic information

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

B. List of parts

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

New Part Number	Key	Qty	Description *	Old Part Number	Key	Qty
0 292 71 760 0	A	1	Coupling sleeve	0 292 71 739 0	C	1

* Prices and delivery times are available upon request.

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

New Part Number	Key	Qty	Description	Old Part Number	Key	Qty
0 292 71 760 0	A	1	Coupling sleeve	0 292 71 739 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

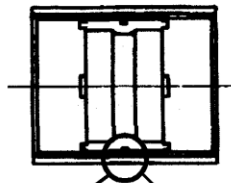
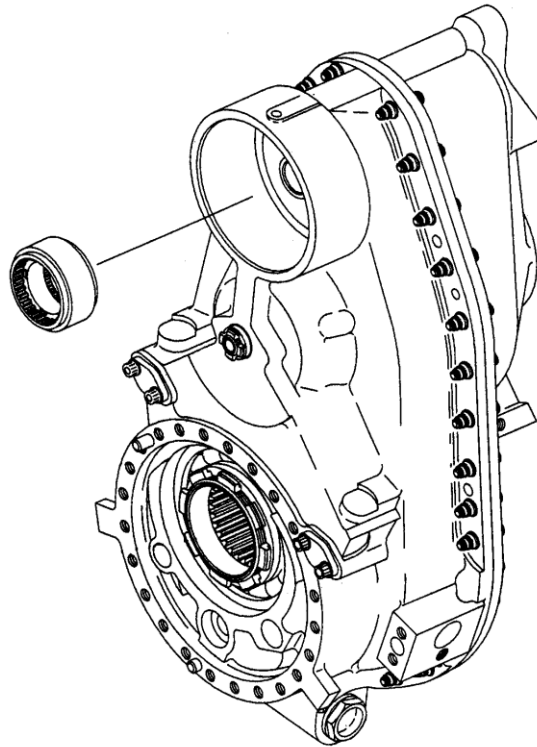
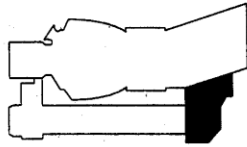
SAFRAN HELICOPTER ENGINES

Direction Support et Service

Département Commercial

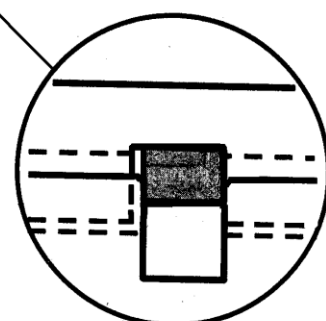
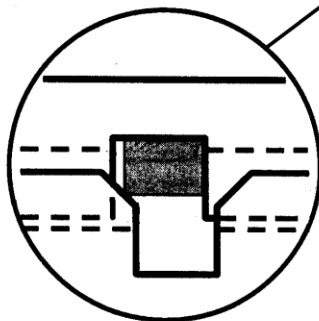
40220 TARNOS - France

SERVICE BULLETIN



AVANT / PRE TU 100A

APRES / POST TU 100A



ANNEXE 1 / APPENDIX 1

SERVICE BULLETIN

Objet : Attestation d'application du SB n° 292 72 2100 (TU 100A).

Subject: SB No. 292 72 2100 compliance certificate (TU 100A).

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 M05						
Manchon déposé AVANT TU 100A Removed PRE TU 100A sleeve						
Manchon posé APRES TU 100A Installed POST TU 100A sleeve						

* 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