

# **SERVICE BULLETIN**

Reference:342-49-045 – SERVICE BULLETINTitle:Return to service for civilian use of an eAPU60 Auxiliary Power Unit, APU<br/>accessory or Electronic Control Unit, which comes from a user not<br/>controlled by a Civil Authority (military, integrator development test<br/>specimen, etc.)Issue number:001Issue Date:13-apr-2023

Responsible Partner Company:	A0126	
Originator:	F1989	
Category:	2 - Highly Recommende	ed
Applicability:	All	
Related SB:	None	
Related Documents:	None	
Accomplishment:	Once only	ecurring
Planned to be incorporated in Techni	cal Publications:	0

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## 1. Revision information

Issue	Date	Reason for update
001	13-apr-2023	Original issue

## 2. Planning information

#### 2.1. Applicability

This Service Bulletin (SB) is applicable to all eAPU60 Auxiliary Power Units which has been operated by a user not controlled by a Civil Authority.

The list of the Helicopter components (APU, APU accessories, parts and appliance) on which this Service Bulletin can be applied is the following:

Internal P/N (Not procurable)	Manufacturer P/N	Component name
N/A	342-50-11	Auxiliary Power Units (APU)
2712002300	BF7969-100	Fuel Block
4115000600	MA8931-100	Fuel Flow Divider
4115000400	MA8931-000	Fuel Flow Divider
N/A	342-45	Electronic Control Unit (ECU)
N/A	342-45-01	Electronic Control Unit (ECU)
N/A	342-45-02	Electronic Control Unit (ECU)
4457001200	037MBH02V02	Electrical Starter Motor
4242240100	CY395	Air/oil exchanger
4242240090	CZ549	Fuel/oil Exchanger

The Fuel Metering Pump (P/N 1449057) is systematically replaced when it is coming from a user not controlled by a Civil Authority.

#### 2.2. Reason

The purpose of this maintenance is to allow the return to service of an eAPU60 Auxiliary Power Unit, APU accessory or Electronic Control Unit for civilian use (under Civil Authority) when a Helicopter component (APU, APU accessories, ECU) is coming from a user not controlled by a Civil Authority.

The use of a Helicopter component (APU, APU accessories, ECU) by an operator not controlled by a Civil Authority may lead to deviations from the type configuration approved by the Civil Authority.

Before the return into service of the Helicopter component (APU, APU accessories, ECU), it is necessary to ensure that there are no deviations, or, if necessary, to carry out actions to bring it back into conformity.

#### 2.3. Description

# The Airworthiness declaration of the Helicopter components (APU, APU accessories, ECU) must be made at SAFRAN POWER UNITS Toulouse.

It requires for all materials:

- the presence of an identifier (identification plate or engraved reference),
- knowledge of the Helicopter components (APU, APU accessories, ECU) configuration and justification of compliance with the maintenance data defined by SAFRAN POWER UNITS,
- knowledge with certainty of the absence of any modification or repair solution not approved by SAFRAN POWER UNITS, establishment of compliance with the approved definition package,
- compliance with Airworthiness data approved by the Civil Authority,
- an "EASA Form One" or equivalent document.



For an APU, it also requires:

- an APU logbook,
- the certainty that all the APU components have been manufactured under the control of SAFRAN POWER UNITS and that the initial assembly (new APU) has been carried out by SAFRAN POWER UNITS.

The owner of the Helicopter components (APU, APU accessories, ECU) must provide documentation from the previous user with the hours and cycles carried out, the Log Cards, the recording of minor or major maintenance operations attesting that the use and possible storage were made in accordance with the manufacturer's instructions.

# In the absence of these documents, the replacement of life-limit parts, limit-of-use parts and calendar-limit components will be systematically carried out.

An overhaul or an Acceptance Test will be carried out on all accessories that return to the Repair Center without the Log Card.

#### 2.4. Compliance

#### 2.4.1. Compliance category

Comply with compliance category 2 - Highly Recommended

#### 2.4.2. Time of compliance

Immediate application before next flight under Civil Authorization when the Helicopter component (APU, APU accessories, ECU) has been operated by a user not controlled by a Civil Authority.

#### 2.5. Approval

The technical content of this document is approved under the authority of DOA No. EASA 21J214.

#### 2.6. Manpower

To be defined taking into account the level of intervention required.

#### 2.7. Material

To be defined taking into account the level of intervention required.

#### 2.8. Tooling

To be defined taking into account the level of intervention required.

#### 2.9. Weight and balance

The weight is not affected.

The centre of gravity is not affected.

#### 2.10. Publication affected

Not applicable.

#### 2.11. Previous modifications

Not applicable.





## 3. Accomplishment Instructions

#### 3.1. To be performed by the end user

- 1. Remove the Helicopter component (APU, APU accessories, ECU) from the carrier (refer to the approved maintenance procedure).
- 2. Package the Helicopter component (APU, APU accessories, ECU).
- 3. Add the following delivery paper work to the packaging:
  - a. For an APU
    - i. APU logbook
    - ii. List of applied Service Bulletins
    - iii. Certificate of maintenance documents (Maintenance Manual, Service Bulletins, Service Letters, Spare Parts List) used for the Helicopter component (APU, APU accessories, ECU) maintenance (refer to Appendix 1)
    - iv. Completed Non-Incident Statement (refer to Appendix 2)
  - b. For an APU accessory or an Electronic Control Unit
    - i. Log Card
    - ii. List of applied Service Bulletins
    - iii. Certificate of maintenance documents (Maintenance Manual, Service Bulletins, Service Letters, Spare Parts List) used for the Helicopter component (APU, APU accessories, ECU) maintenance (refer to Appendix 1)
    - iv. Completed Non-Incident Statement (refer to Appendix 2)
- 4. Send the Helicopter component (APU, APU accessories, ECU) to the Repair Center approved by SAFRAN POWER UNITS.

#### 3.2. To be performed by SAFRAN POWER UNITS Toulouse

- 1. For an APU:
  - a. Examination of documentation from previous user:
    - i. Follow-up of inspections and scheduled maintenance activities,
    - ii. Record of applied Service Bulletins,
    - iii. Recorded work data for repair,
    - iv. Storage (conditions/limitations).
  - b. Determination of the hours and cycles performed, to calculate the remaining availability.
  - c. Control of the APU potential in accordance with chapter 05 of the Maintenance Manual (Airworthiness Limitation Frequency Inspection).
  - d. Statement and evaluation:
    - i. Repair Centers that have been requested to maintain the APU and that have not been approved by SAFRAN POWER UNITS,
    - ii. Any repair solutions that have not received the approval of the manufacturer and the Civil Airworthiness Authority,
    - iii. Components or parts that are not part of the certified definition of the APU,
    - iv. Derogations not approved by civil airworthiness procedures.
    - Any unapproved repair solution must:
      - v. Either give rise to the replacement of the element concerned,
      - vi. Either be the subject of a derogation approved by SAFRAN POWER UNITS or by a civil airworthiness authority which will entail the responsibility of whoever establishes it.
  - e. Verification of the non-exceeding of the limitations of the components with limit life and limit of use.
  - f. Compliance with Airworthiness Directives (AD),
  - g. Analysis of any event concerning the helicopter and the APU detailed in the NIS (hard landing, accident, presence of particles on the magnetic plug, visual inspection of the APU out of criteria, identification statement of components and accessible parts, etc.).



h. Verification of the application of requested modifications.

All the mandatory modifications and all the modifications applicable to any return to an approved Repair Center whatever the reason for the return must be applied. Depending on the level of disassembly, some modifications will also be mandatory applicable to the first return to an approved Repair Center if the repair or overhaul carried out gives access to the element subject to the modification.

In addition, the potential will depend on the standard of modifications.

For the APU potential and the calendar potential, refer to the Maintenance Manual, chapter 05 (Airworthiness Limitation - Frequency - Inspection).

i. Verification of the application of requested SB.

All the mandatory SBs and all the SBs applicable to any return to an approved Repair Center regardless of the reason for the return must be applied. Depending on the level of disassembly, some SBs will also be mandatory applicable to the first return to an approved Repair Center if the repair or overhaul carried out gives access to the element covered by the SB.

- j. Performance of a General Visual Inspection, including the inspection of the bleed port and gearbox studs.
- k. Verification of the activation of the by-pass indicator on the fuel filter. Reset of the by-pass indicator if necessary.
- I. Examination of the drain/chip detector for particles.
- m. Drain the oil of the APU.
- n. Performance of the magnetic particle inspection check for rear engine mount.
- o. Replacement of the fuel filter.
- p. Replacement of the oil filter.
- q. Replacement of the Fuel Metering Pump.
- r. Performance of a Boroscopic Inspection.
- Performance of an Acceptance Test Performance, including a Powercheck.
  A check of the bearings conditions will be carried out during the ATP through a frequency vibration measurement.
- t. Establishment of the "EASA Form One" or equivalent document and of a new civil APU logbook.
- u. Archiving of the military APU logbook.
- 2. For an APU accessory or an Electronic Control Unit:
  - a. Examination of documentation from previous user:
    - i. Follow-up of inspections and scheduled maintenance activities,
    - ii. Record of applied Service Bulletins,
    - iii. Recorded work data for repair,
    - iv. Storage (conditions/limitations).
  - b. Determination of the hours and cycles performed, to calculate the remaining availability.
  - c. Control of the APU potential in accordance with chapter 05 of the Maintenance Manual (Airworthiness Limitation Frequency Inspection).
  - d. Statement and evaluation:
    - i. Repair Centers that have been requested to maintain the Helicopter component (APU accessories, ECU) and that have not been approved by SAFRAN POWER UNITS,
    - ii. Any repair solutions that have not received the approval of the manufacturer and the Civil Airworthiness Authority,
    - iii. Components or parts that are not part of the certified definition of the APU,
    - iv. Derogations not approved by civil airworthiness procedures.
    - Any unapproved repair solution must:
      - v. Either give rise to the replacement of the element concerned,
      - vi. Either be the subject of a derogation approved by SAFRAN POWER UNITS or by a civil airworthiness authority which will entail the responsibility of whoever establishes it.
  - e. Compliance with Airworthiness Directives (AD),
  - f. Analysis of any event detailed in the NIS (incident or accident).



g. Verification of the application of requested modifications.

All the mandatory modifications and all the modifications applicable to any return to an approved Repair Center whatever the reason for the return must be applied. Depending on the level of disassembly, some modifications will also be mandatory applicable to the first return to an approved Repair Center if the repair or overhaul carried out gives access to the element subject to the modification.

In addition, the potential will depend on the standard of modifications.

For the components potential and the calendar potential, refer to the Maintenance Manual, chapter 05 (Airworthiness Limitation - Frequency - Inspection).

- h. Verification of the application of requested SB.
  All the mandatory SBs and all the SBs applicable to any return to an approved Repair Center regardless of the reason for the return must be applied. Depending on the level of disassembly,
  - some SBs will also be mandatory applicable to the first return to an approved Repair Center if the repair or overhaul carried out gives access to the element covered by the SB.
- i. Performance of a Visual Inspection.
- j. Performance of a function test.
- k. In case of Fuel Block returned, replacement of the fuel filter.
- I. Establishment of the "EASA Form One" or equivalent document and of a new civil APU logbook.

#### 3.2.1. Record

Record the embodiment of this SERVICE BULLETIN 342-49-045:

- For APU returned, in the LOG BOOK,
- For an APU accessory or Electronic Control Unit retuned, in the EQUIPMENT LOG CARD.

### 3.2.2. Compliance certificate

For each Helicopter components (APU, APU accessories, ECU) upgraded, send the following service bulletin compliance certificate to the MANUFACTURER.



Objet :	Attestation d'ap	plication du E	Bulletin Serv	ice 342-4	9-045.	
Subject:	Service Bulletin E	Embodiment C	ertificate 342	-49-045.		
Important /	Important notice:					
•	on de ce Bulletin Service, ve	uillez compléter la	nrésente attesta	tion et la reto	urner nar c	ourrier ou fax à ·
	ing this Service Bulletin, ple					
-		Safran Pov	ver Units			
S	Support Clients - 8 Chemin Fax (33) (0)5	du pont de Rupé, E 61 70 74 45 - e.ma				nce
	Informati	on concernant le maté	riel / Equipment inform	mation		
Utilisateur Customer						N° Appareil
		Réf P/N	<b>N/S</b> - S/N	TSN*	CSN*	Aircraft S/N
GAP / APU						
Accessoire du GA	P / APU Accessory					
Calculateur / Elect	ronic Control Unit					
Application de la I	procédure de recivilisation	Yes No				
	n to service for civilian use					
Commentaire Comment						
* TSN = Time S	ince New (Heures depuis r	neuf) CSN = (	Cycles Since Ne	w (Cycles de	puis neuf)	
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Opération effe Work performe						
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Je certifie que	-	nt has been modifi			given in thi	s Service Bulletin.
Je certifie que I certify that the	le matériel identifié ci-des above-mentioned equipme	nt has been modifi	ied according to t			s Service Bulletin.
Je certifie que I certify that the	le matériel identifié ci-des above-mentioned equipme	nt has been modifi e <b>Fo</b> r	ied according to t		given in thi	s Service Bulletin.
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## 4. Material information

#### 4.1. Support equipment

Not applicable.

#### 4.2. Material requirements

Not applicable.

#### 4.3. List of components

Not applicable.

#### 4.4. Interchangeability

Physical interchangeability: ......Not affected Functional interchangeability: .....Not affected Restriction of mixability: .....No restriction

#### 4.5. Parts disposition

Not applicable.

#### 4.6. Procurement conditions

The application of this Service Bulletin is on quotation.

### END OF SERVICE BULLETIN



Appendix 1 – Certificate of maintenance documents (Maintenance Manual, Service Bulletins, Service Letters, Spare Parts List) used for the Helicopter component (APU, APU accessories, ECU) maintenance



Appendix 1 -Certificate of mainte

Note:

Save the attached file before filling it out.



## Appendix 2 – Template of Non-Incident Statement



Note:

Save the attached file before filling it out.