

SERVICE BULLETIN

DMC:	342-49-035 – SERVICE BULLETIN
Title:	Introduction of an APU Fuel Leak Check
Issue number:	002
Issue Date:	16-03-2021

Responsible Partner Company: A0126

Originator: F1989

Category: 2 – Highly Recommended

Applicability: In-service APUs with more than 3,000 cycles and equipped with at least one fuel line P/N 942006 (pre SB 342-49-026 configuration)

Related SB: 342-49-034 and 342-49-026

Related Documents: None

Accomplishment: Once only Recurring

Planned to be incorporated in Technical Publications:
 Yes No

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342-49-035

1. Revision information

Issue	Date	Reason for update
001	17/12/2020	Original issue
002	16/03/2021	Modification of the SB compliance category

2. Planning information

2.1. Applicability

This Service Bulletin (SB) is applicable to all APU power plant P/N 342-50-11 equipped with at least one fuel line P/N 942006 (pre SB 342-49-026 configuration). The concerned APUs are those in-service with more than 3,000 cycles.

2.2. Reason

Following a few occurrence of APU fuel line leakage, Safran Power Units decides to introduce an APU Fuel Leak Check in order to prevent a possible fuel leakage, which could induce a fire risk. This event is classified as a minor safety impact.

This Service Bulletin is part of the continuous improvement already undertaken in the Service Bulletin 342-49-034.

2.3. Description

This Service Bulletin introduces the procedure "Fuel Leak Check" and the procedure to be performed when a fuel leak is confirmed (replacement of the five fuel lines of the main burners manifold).

The "Fuel Leak Check" must be performed every 300 cycles with the APU installed on helicopter.

2.4. Compliance

2.4.1. Compliance category

Comply with compliance category 2 – Highly Recommended.

2.4.2. Time of compliance

Do every 300 cycles.

2.5. Approval

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

2.6. Manpower

Manpower: 1 h man hour is necessary to perform the fuel leak check.

2.7. Material

Refer to para. 3.3.

2.8. Tooling

No additional tooling is required.

2.9. Weight and balance

The weight is not affected.

The centre of gravity is not affected.

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Not applicable.

2.11. Previous modifications

Not applicable.

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3. Accomplishment Instructions

3.1. Required conditions

Not applicable.

3.2. Safety conditions

The helicopter must be safe for maintenance.

3.3. Consumables, materials and expendables

<i>Nomenclature</i>	<i>Identification no.</i>	<i>Qty</i>
Cloth	Local purchase	As Required
Absorber (e.g. talcum)	Local purchase	As Required

3.4. Procedure

Note:

This Service Bulletin must be performed either by the end user or by the manufacturer when a concerned APU is returned to the shop.

1. If the APU is installed in the helicopter, open the APU access doors 461A, 462A, 463A and 481A.
2. Clean the main burners manifold and the combustion casing with a cloth.
3. Apply an absorbent (e.g. talcum) over the main burners manifold and the combustion casing (see colored areas in Figure 1).

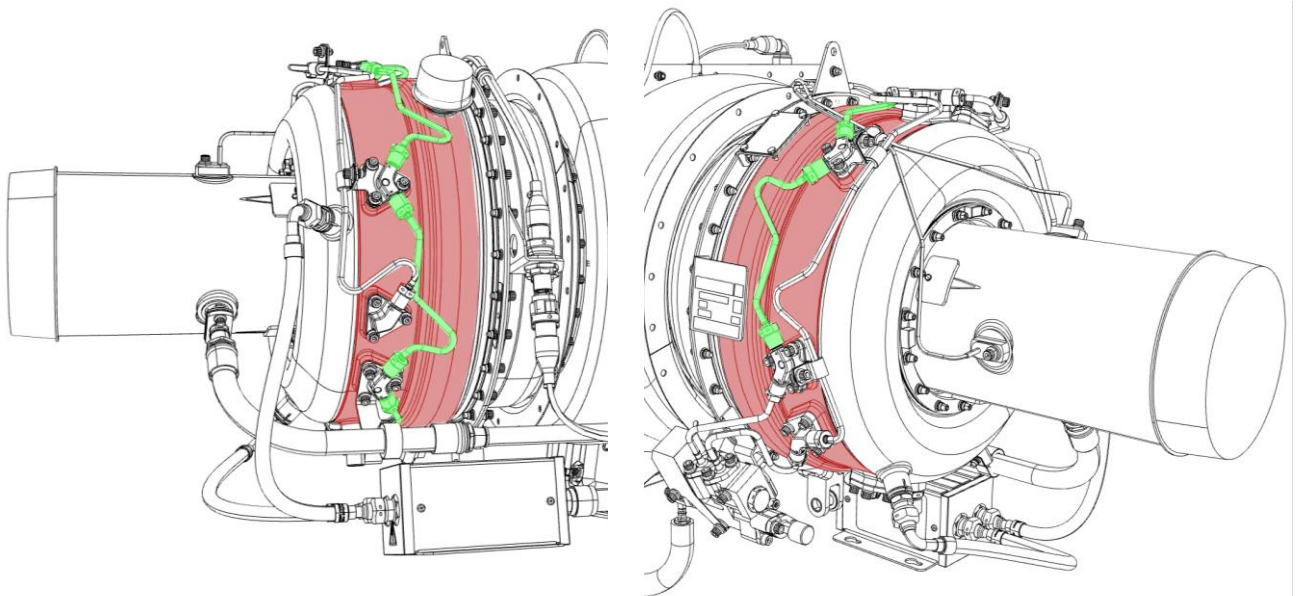


Figure 1: Identification of areas where the application of an absorbent is recommended

4. If the APU is installed in the helicopter, close the APU access doors 461A, 462A, 463A and 481A.

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5. Do a ground run:
 - 5.1. Start the Auxiliary Power Unit (APU).
 - 5.2. Run the APU unit ready to load.
 - 5.3. Load the APU at maximum percentage available of the electrical load.
 - 5.4. Check the APU RPM and APU EGT are stabilized.
 - 5.5. Stop the APU. Refer to operating manual.

WARNING

Be careful when you work on the engine immediately after its operation. The engine components can stay hot for one hour after the APU stopped. The hot components can cause injury.

6. If the APU is installed in the helicopter, open the APU access doors 461A, 462A, 463A and 481A.
7. Inspect each pipe of the main burners manifold (in green on Figure 1) for fuel leaks.
8. If fuel leak is detected:
 - 8.1. Inform Safran Power Units (refer to para. 3.5.2).
 - 8.2. Replace the five fuel lines of the main burners manifold as per the instructions of the DMC 89-A-49-31-05-00A-520A-B and 89-A-49-31-05-00A-720A-B.

3.5. Requirements after job completion**3.5.1. Record**

Record the embodiment of this SERVICE BULLETIN 342-49-035 in the EQUIPMENT LOG CARD of the APU.

3.5.2. Compliance certificate

For each concerned APU power plant for which a fuel leak has been detected, send the following service bulletin compliance certificate to the MANUFACTURER with the following elements:

- Location of the leak (used the figure below and the fuel line number),
- Picture and/or video of the detected leak,
- Detail description of the finding,
- Specify if the fuel lines have been replaced due to the presence of the fuel leak.

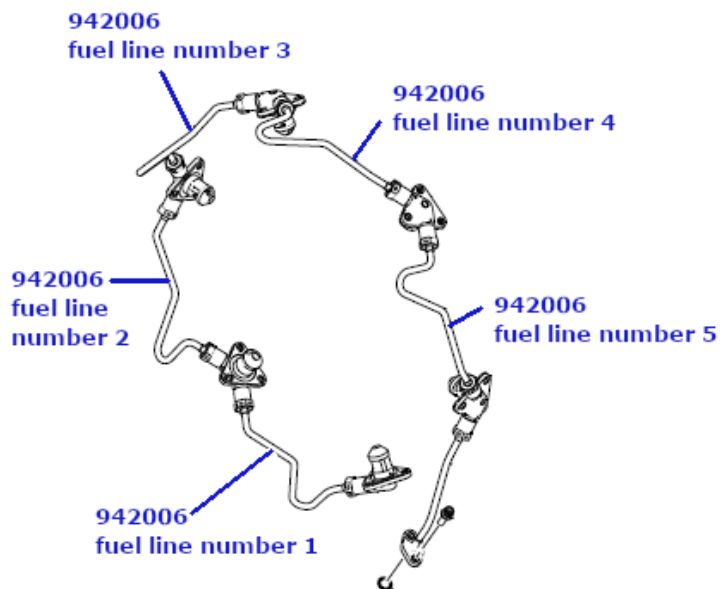
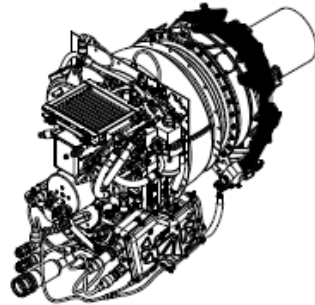


Figure 2: Location of the detected fuel leak

Objet : Attestation d'application du Bulletin Service 342-49-035.
Subject: Service Bulletin Embodiment Certificate 342-49-035.

Important / Important notice:

Après application de ce Bulletin Service, veuillez compléter la présente attestation et la retourner par courrier ou fax à :
 After incorporating this Service Bulletin, please complete this certificate and mail or fax it to:

Safran Power Units
 Support Clients - 8 Chemin du pont de Rupé, BP 62089 - 31019 Toulouse Cedex 2, France
 Fax (33) (0)5 61 70 74 45 - e.mail: csc.spu@safrangroup.com

Information concernant le matériel / Equipment information					
Utilisateur <i>Customer</i>					N° Appareil <i>Aircraft S/N</i>
	Réf. - P/N	N/S - S/N	TSN*	CSN*	
GAP / APU					
Présence de fuites de carburant <i>Fuel leaks detected</i>		Yes <input type="checkbox"/>	No <input type="checkbox"/>		
Commentaire <i>Comment</i>					

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

Opération effectuée par:
Work performed by:

Je certifie que le matériel identifié ci-dessus a été modifié selon les directives du Bulletin Service en objet.
I certify that the above-mentioned equipment has been modified according to the directives given in this Service Bulletin.

Date	Nom / Print name	Fonction / Position	Signature
.....	

4. Material information

4.1. Material requirements

Refer to para. 3.3.

4.2. List of components

The following table gives the parts to be ordered when a fuel leak is confirmed:

Old Part Number	Name	Qty Old/New	New Part Number	Operation Code	Change Code	Support Code
942006 F0271	Fuel Line	5/5	943869 F0271	RE	1	A

- Operation Code
RE = Replaced
- Change codes. These codes give the interchangeability of the new part with the old one.
1 = One-way interchangeable
- Support codes. These codes are used to determine parts availability.
A = Old parts will no longer be supplied

4.3. Interchangeability

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

4.4. Parts disposition

Not applicable.

4.5. Procurement conditions

The parts to be replaced will be provided at conditions indicated in Safran Power Units' price catalogue.

END OF SERVICE BULLETIN