

SERVICE BULLETIN No. 319 71 4092

Version: A

Date: 20 September 2023

First issue

Modification

Periodical action

One-off action

Applicable from:
« NOVEMBER
2023 »

Subject:
Engine draining. Drain valve of the turbine casing.
Modification TF 92.

APPLICABLE ENGINE / VARIANT(S)	EFFECTIVITY CODE	MAINTENANCE LEVEL	CONDITION OF APPLICATION	EFFECT ON OPERATION
ARRIUS 2 F, R	4	1, 2, 3	Application upon customer request	Removal/installation of the drain valve assembly
		4	Application upon customer request	

Apply this SB in full compliance with the manufacturer's instructions.
Refer to the effectivity code above.

1. GENERAL

1.1. Background

1.1.1. Context

Some operators informed Safran Helicopter Engines that there were some malfunctions in the drain valve assembly of the turbine casing.

1.1.2. Analysis

Safran Helicopter Engines analysis shows that these malfunctions are due to several contributing factors:

- Wear on the spherical end-fitting of the needle,
- Rupture of the spring,
- Internal corrosion of the component.

These malfunctions can have several consequences:

- An impact on the EPC (Engine Power Check) results,
- A T45 overtemperature,
- Flames at the exhaust pipe at start.

1.1.3. Solution

The purpose of modification TF 92 is to improve reliability of the drain valve assembly of the turbine casing.

Modification TF 92 introduces a new drain valve assembly. The number of components is reduced, design is simplified and materials are chosen to get a better resistance to corrosion. The spring section is increased. A ball seals the valve body.

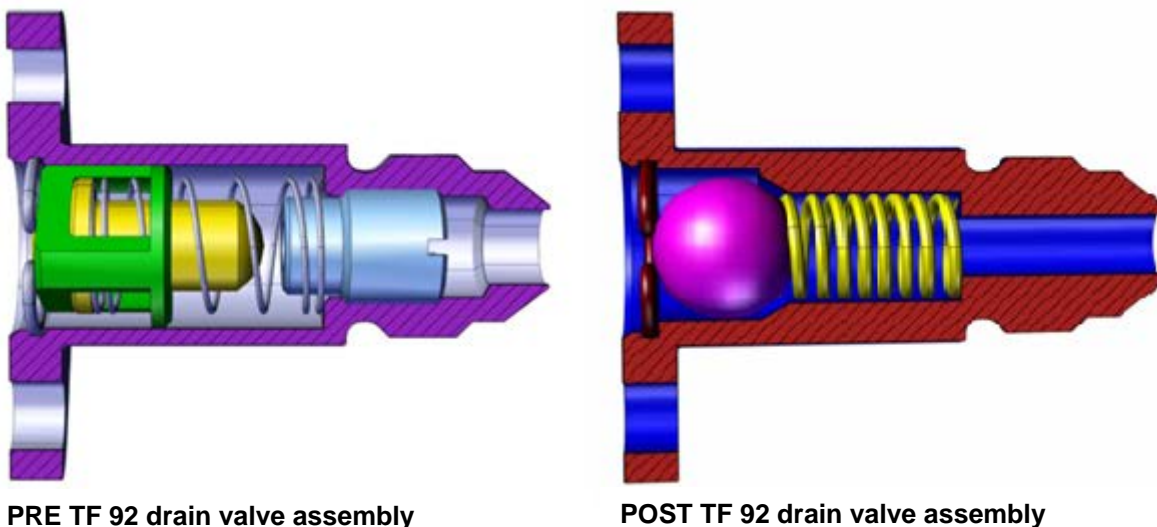


Figure 1

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§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

1.2. Approval

The technical content of this document is approved under the authority of the DOA (Design Organisation Approval) ref. EASA.21J.070.

1.3. Summary of updates

Not applicable.

End of Section §1**“General”**

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§1.GENERAL	§2.LEVEL 1, 2	§3.LEVEL 3	§4.LEVEL 4	§5.CERTIFICATES
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2. PROCEDURE DONE AT THE OPERATOR’S SITE OR AT A MAINTENANCE CENTER APPROVED FOR LEVEL 1, 2

2.1. Manpower

- Personnel: 1 mechanic.
- Time: 1 man - hour (removal and installation of the drain valve assembly).

2.2. Tools / Parts

Mechanic's standard tools.

2.3. Parts information

2.3.1. Basic information

The list of parts is given for one engine.

2.3.2. List of parts

2.3.2.1. Parts for application of this SB.

New Part Number	Key	Qty	Description* / Item	Old Part Number	Key	Qty
ARRIUS 2 F - R						
0 319 95 122 0	A	1	Drain valve assy (71-71-00-01-200)	0 292 68 725 0	C	1

* Prices are given upon request.

A full list of the old item part numbers above is given in the Spare Parts Catalog.

Key

A	Part included by this SB
C	Part deleted by this SB

2.3.2.2. Parts for application of the maintenance tasks referred in this SB

Refer to the applicable ARRIUS 2 Maintenance Manual or Spare Parts Catalog.

2.3.3. 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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2.4. Procedures

Replacement of the PRE TF 92 drain valve assembly with a POST TF 92 drain valve assembly, refer to paragraph 2.6.

2.5. Block diagram for this SB

Not applicable.

2.6. Instructions on how to do the procedure

2.6.1. Implementation

Removal of the engine is not necessary to do this SB.

2.6.2. Operating instructions

- 2.6.2.1. Remove the PRE TF 92 drain valve assembly: refer to the applicable ARRIUS 2 Maintenance Manual, task 71-71-00-900-811.
- 2.6.2.2. Install a POST TF 92 drain valve assembly: refer to the applicable ARRIUS 2 Maintenance Manual, task 71-71-00-900-811.

2.6.3. Reconditioning and checks

Refer to the applicable ARRIUS 2 Maintenance Manual, task 05-50-00-200-801.

2.6.4. Identification

Refer to the Guides U441 and U015 for instructions on how to record the engine log book and the log cards.

- 2.6.4.1. Record the application of this SB in sections A and E.
- 2.6.4.2. Send back the fully-completed compliance certificate, links to the digital document

EngineLife Customer Portal: [Certificate 5.1 SB 319 71 4092 EN A](#) or



2.7. Weight and balance

Not applicable.

End of Section §2

“Procedure done at the operator’s site or at a Maintenance Center approved for Level 1, 2”

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§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

3. PROCEDURE DONE AT A MAINTENANCE CENTER APPROVED FOR LEVEL 3 OR AT THE OPERATOR'S SITE BY A MAINTENANCE CENTER APPROVED FOR LEVEL 3

Refer to the paragraphs of section [§2](#) related to Maintenance Centers approved for Level 1, 2.

End of section §3

“Procedure done AT a Maintenance Center approved for Level 3 OR AT THE OPERATOR'S SITE BY a Maintenance Center approved for Level 3”

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§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

4. PROCEDURE DONE AT A REPAIR CENTER APPROVED FOR LEVEL 4
4.1. Manpower

- Personnel of approved Repair Center.
- Time calculated by the Repair Center for this level of intervention.

4.2. Tools / Parts

Refer to the ARRIUS 2 Overhaul Manual and to the applicable Component Maintenance Manual.

4.3. Parts information
4.3.1. Basic information

The list of parts is given for one engine.

4.3.2. List of parts

New Part Number	Key	Qty	Description / Item	Old Part Number	Key	Qty
ARRIUS 2 F - R						
0 319 95 122 0	A	1	Drain valve assy (71-71-00-01-200)	0 292 68 725 0	C	1

Key

A	Part included by this SB
C	Part deleted by this SB

4.3.3. 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

4.4. Procedures

Replacement of the PRE TF 92 drain valve assembly with a POST TF 92 drain valve assembly, refer to paragraph 4.6.

4.5. Block diagram for this SB

Not applicable.

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§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

4.6. Instructions on how to do the procedure**4.6.1. Implementation**

Not applicable.

4.6.2. Operating instructions

Refer to the ARRIUS 2 Overhaul Manual and to the applicable Component Maintenance Manual.

4.6.3. Reconditioning and checks

Refer to the ARRIUS 2 Overhaul Manual and to the applicable Component Maintenance Manual.

4.6.4. Identification

Refer to the Guides U441 and U015 for instructions on how to record the engine log book and the log cards.

4.6.4.1. Record the application of this SB in section A.

4.6.4.2. Send back the fully-completed compliance certificate, links to the digital document

EngineLife Customer Portal: [Certificate 5.1 SB 319 71 4092 EN A](#) or**4.7. Weight and balance**

Not applicable.

End of Section §4**“Procedure done at a Repair Center approved for Level 4”**

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§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

5.1- Compliance certificate of this SB No. 319 71 4092 (TF 92) - LEVEL 1, 2, 3, 4

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*
Moteur					

* TSN = Time Since New
 CSN = Cycles Since New

I certify that the above-mentioned engine has been modified according to this SB.

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

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§1.GENERAL

§2.LEVEL 1, 2

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§5.CERTIFICATES

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Important:

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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*
Moteur					

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