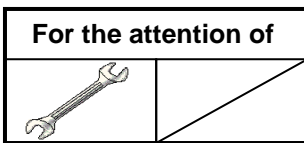




# EMERGENCY ALERT SERVICE BULLETIN

### PROTECTIVE MEASURE

**FIRE PROTECTION - Engine fire detectors**  
**Check and replacement of the engine fire detectors**



HELICOPTER CONCERNED	NUMBER	Version(s)	
		Civil	Military
AS365	26.00.12	N3	K2
AS565	26.00.08		MB, SB, UB
SA366	26.02		GA
EC155	26A009	B, B1	

Revision No.	Date of issue
Revision 0	2022-12-19

**Summary:**

The purpose of this ALERT SERVICE BULLETIN is to check and if necessary replace, on one engine, the non-conform engine fire detector(s) by referring to Service Bulletin No. A292 26 2881 version A from Safran Helicopter Engines.

**Compliance:**

It is mandatory to comply with this ALERT SERVICE BULLETIN.

### 1. PLANNING INFORMATION

#### 1.A. EFFECTIVITY

##### 1.A.1. Helicopters/installed equipment or parts

Helicopters with engine fire detectors MP/N H243-1 or H443-1 and with serial number (S/N) listed in Appendix [4.B.](#)

#### **NOTE**

*The Service Bulletin No. A292 26 2881 version A from Safran Helicopter Engines quotes several references of engine fire detectors:*

- *The engine fire detectors MP/N H243-1 and H443-1 are listed in this ALERT SERVICE BULLETIN because they are under Airbus Helicopters Type Certificate.*
- *The engine fire detectors MP/N H253-1 and H453-1 are not listed in this ALERT SERVICE BULLETIN because they are under Safran Helicopter Engines Type Certificate.*

##### 1.A.2. Non-installed equipment or parts

Not applicable.

#### 1.B. ASSOCIATED REQUIREMENTS

Not applicable.

#### 1.C. REASON

Airbus Helicopters was informed of three occurrences of illumination of the engine fire alarm without confirmed fire (untimely illumination) on helicopters equipped with sealed engine fire detectors.

Although they are delivered by Safran Helicopter Engines with the aircraft engines, the engine fire detectors involved in these occurrences belong to Airbus Helicopters Type Certificate.

The analysis done by Safran Helicopter Engines identified a non-conformity in the production process of the engine fire detectors produced between January and June 2022, by the concerned supplier.

The engine fire detectors produced during this period can show a detection threshold lower than their specification, which could result in an untimely illumination of the engine fire alarm.

The risk analysis carried out by Airbus Helicopters concluded that there was an UNSAFE condition in the event of a false fire alarm on both engines during the same flight.

The purpose of this ALERT SERVICE BULLETIN is to check and if necessary replace, on one engine, the engine fire detectors by referring to Service Bulletin No. A292 26 2881 version A from Safran Helicopter Engines.

### 1.D. DESCRIPTION

This ALERT SERVICE BULLETIN consists to comply with Safran Helicopter Engines Service Bulletin No. A292 26 2881 version A.

### 1.E. COMPLIANCE

#### 1.E.1. Compliance at H/C manufacturer level

Not applicable.

#### 1.E.2. Compliance in service

##### Helicopters/installed equipment or parts:

It is operator who does the work on the helicopter.

Check if the helicopter is equipped with engine fire detectors with a S/N as specified in the Appendix [4.B.](#) not more than 30 Flight Hours (FH) or 60 days after you received the revision 0 of this ALERT SERVICE BULLETIN (the first limit you get to is applicable). Refer to the date in the page footer.

If during the check it is identified that the two engines of the helicopter have at least one engine fire detector given in the Appendix [4.B.](#):

Comply with the instructions of paragraph [3.](#) of this ALERT SERVICE BULLETIN to replace the concerned engine fire detector(s) on one of the engines of the helicopter before 30 FH or 60 days after you received the revision 0 of this ALERT SERVICE BULLETIN (the first limit you get to is applicable).

##### Non-installed equipment or parts:

Not applicable.

### 1.F. APPROVAL




The technical content of this document is approved under the authority of the Design Organization Approval ref. EASA. 21J.700.

The technical content of this document is approved under the prerogatives of the recognition of design capability ref. FRA21J-002-DGA for French Government helicopters.

The technical content of this document is approved by Airbus Helicopters Airworthiness Department for export military versions.

### 1.G. MANPOWER

 Airbus Helicopters recommends that the personnel who will do this ALERT SERVICE BULLETIN have this qualification:

Qualification: 1 Mechanical Technician.



The man-hours are an estimate given for information only and for a standard helicopter configuration.

Estimated Man-hours: one hour for the check and the replacement (if necessary) of the engine fire detector(s).



The helicopter downtime is an estimate given for information only and for a standard helicopter configuration.

The estimate of the helicopter downtime is one hour for the check and the replacement.

### 1.H. WEIGHT AND BALANCE

Not applicable.

### 1.I. POWER CONSUMPTION

Not applicable.

### 1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

### 1.K. REFERENCES

These documents are necessary to comply with this ALERT SERVICE BULLETIN.

Service Bulletin (SB):

SB: A292 26 2881 version A: Replacement of a batch of potentially non-conforming fire detectors (SEE Appendix [4.A.](#)).

Information Notice (IN):

IN: 3785-I-00: Introduction of the digital Service Bulletin reporting SB Insight

### 1.L. OTHER AFFECTED PUBLICATIONS

Not applicable.

### 1.M. PART INTERCHANGEABILITY OR MIXABILITY

Not applicable.

### **2. EQUIPMENT OR PARTS INFORMATION**

#### **2.A. EQUIPMENT OR PARTS: PRICE - AVAILABILITY - PROCUREMENT**

Not applicable.

#### **2.B. LOGISTIC INFORMATION**

Not applicable.

#### **2.C. EQUIPMENT OR PARTS REQUIRED PER HELICOPTER/COMPONENT**

Not applicable.

#### **2.D. EQUIPMENT OR PARTS TO BE RETURNED**

Not applicable.

### 3. ACCOMPLISHMENT INSTRUCTIONS

#### 3.A. GENERAL

Not applicable.

#### 3.B. WORK STEPS

Comply with the Safran Helicopter Engines Service Bulletin No. A292 26 2881 version A, refer to Appendix [4.A.](#)

#### 3.C. RECORD OF COMPLIANCE

Compliance with this document:

- Record the full compliance with this ALERT SERVICE BULLETIN, with the revision number, in the helicopter documents.
- Record compliance with this ALERT SERVICE BULLETIN (see IN 3785-I-00 for instructions):  
QR code or hypertext link



#### **NOTE**

*The recording of compliance with ALERT SERVICE BULLETIN in the SB Insight tool does not replace the recording in the helicopter documents.*


[EASB EC155-26A009](#)

#### 3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.

### 4. APPENDICES

#### 4.A. SAFRAN HELICOPTER ENGINES SERVICE BULLETIN No. A292 26 2881 VERSION A


HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

MANDATORY

ALERT

Version: A  
Date: 14 December 2022  
First issue

Modification

Periodical action

One-off action

**Applicable from:**  
"As soon as this Mandatory SB is issued"

**Subject:**  
Replacement of a batch of potentially non-conforming fire detectors. (Occurrence of 2 impacted engines on the same airframe)

APPLICABLE ENGINE / VARIANT(S)	EFFECTIVITY CODE	MAINTENANCE LEVEL	CONDITION OF APPLICATION	EFFECT ON OPERATION
ARRIEL 2 C - C1 - C2 - C2-CG - C-PM - N	1-A	1,2,3	Check the presence, on your fleet, of the fire detector Serial Numbers (S/N) as specified in the Appendix A* in 30 FH (Flight Hours) or 60 days from the issue of this Mandatory Service Bulletin (first limit reached).  If the 2 engines of the same airframe have at least one fire detector given in the list in the Appendix A*: Replace the concerned fire detector(s) on one of the engines of the airframe before 30 FH or 60 days from the issue of this Mandatory SB (first limit reached).	Replacement of fire detectors.
		4	Not applicable.	

Application of this Mandatory SB is the result of a technical requirement that can have an effect on flight safety for engines in service. The application of this SB is specified by the effectivity code given above.

\*Appendix A attached to this SB electronic version available on *EngineLife*® Customer Portal.

**CAUTION:** FAILURE TO APPLY THIS MANDATORY SB CAN RESULT IN AN UNTIMELY DETECTION OF AN ENGINE FIRE, IN PARTICULAR ON THE 2 ENGINES DURING THE SAME FLIGHT.

**CAUTION:** DO NOT INSTALL AN ENGINE THAT HAS A FIRE DETECTOR GIVEN IN THE LIST IN THE APPENDIX A (REFER TO SB 292 26 2882).  
DO NOT INSTALL A FIRE DETECTOR GIVEN IN THE LIST IN THE APPENDIX A.

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For the definition of the fields in this Service Bulletin, refer to General Service Letter No. 3041



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

## 1. GENERAL

### 1.1. Background

#### 1.1.1. Context

Safran Helicopter Engines was informed of three occurrences of illumination of the engine fire alarm without confirmed fire (untimely illumination) on airframes equipped with sealed fire detectors.

#### 1.1.2. Analysis

The analysis done by Safran Helicopter Engines identified a non-conformity in the production process of the fire detectors produced between January and June 2022, by the concerned supplier.

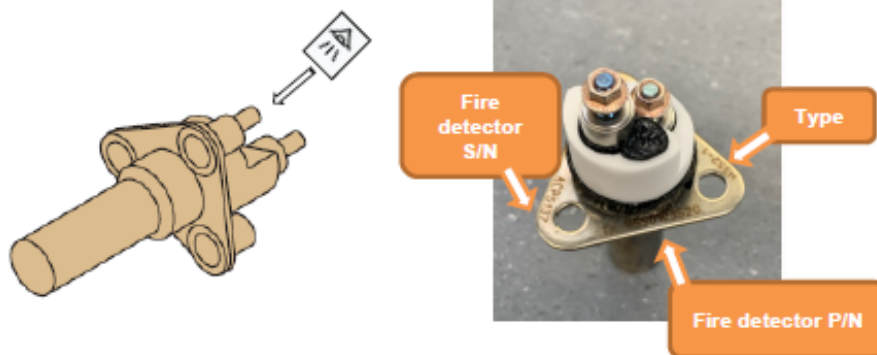
The fire detectors produced during this period can show a detection threshold lower than their specification, which could result in an untimely illumination of the engine fire alarm.

#### 1.1.3. Solution

This Mandatory SB deals with the case where two engines of the same airframe have at least one fire detector that could be impacted by this non-conformity.

In this case, this Mandatory Service Bulletin consists of replacing, on one of the engines of the airframe, the fire detectors that could be impacted by this non-conformity.

The list of the fire detectors that could be impacted by this non-conformity is given in the Appendix A on *EngineLife*® Customer Portal.



### 1.2. Approval

- ARRIEL 2 C - C1 - C2 - C2-CG - C-PM variants: The design of the fire detectors installed on these variants is Airbus Helicopters responsibility, thus the technical content of this document is approved by Airbus Helicopters in agreement with the applicable Airbus Helicopters procedures.
- ARRIEL 2 N variant: The design of the fire detectors installed on these variants is Safran Helicopter Engines responsibility, thus the technical content of this document is approved by Safran Helicopter Engines 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”

SB VERSION A

§1 - 1/1

14 December 2022





HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

## 2. PROCEDURE DONE AT THE OPERATOR'S SITE OR AT A MAINTENANCE CENTER APPROVED FOR LEVEL 1, 2

Refer to the [compliance certificate in chapter 5.1](#)

### 2.1. Manpower

- Personnel: 1 mechanic.
- Time: 1 man-hour.

### 2.2. Tools / Parts

- Mechanic's standard tooling.

### 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 Mandatory SB

Fire detectors, if it is necessary to replace them.

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

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

#### 2.3.3. Supply conditions

##### 2.3.3.1. Contact your local Safran Helicopter Engines representative

##### 2.3.3.2. 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

### 2.4. Procedures

Refer to paragraphs 2.5 and 2.6:

- Do a check of the airframes to know if they have two engines with one or more fire detectors given in the list in the Appendix A.
- Replace the concerned fire detectors on one engine of the airframe, if the two engines of the airframe have one or more fire detectors given in the list in the Appendix A.
- Discard the concerned fire detectors.



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

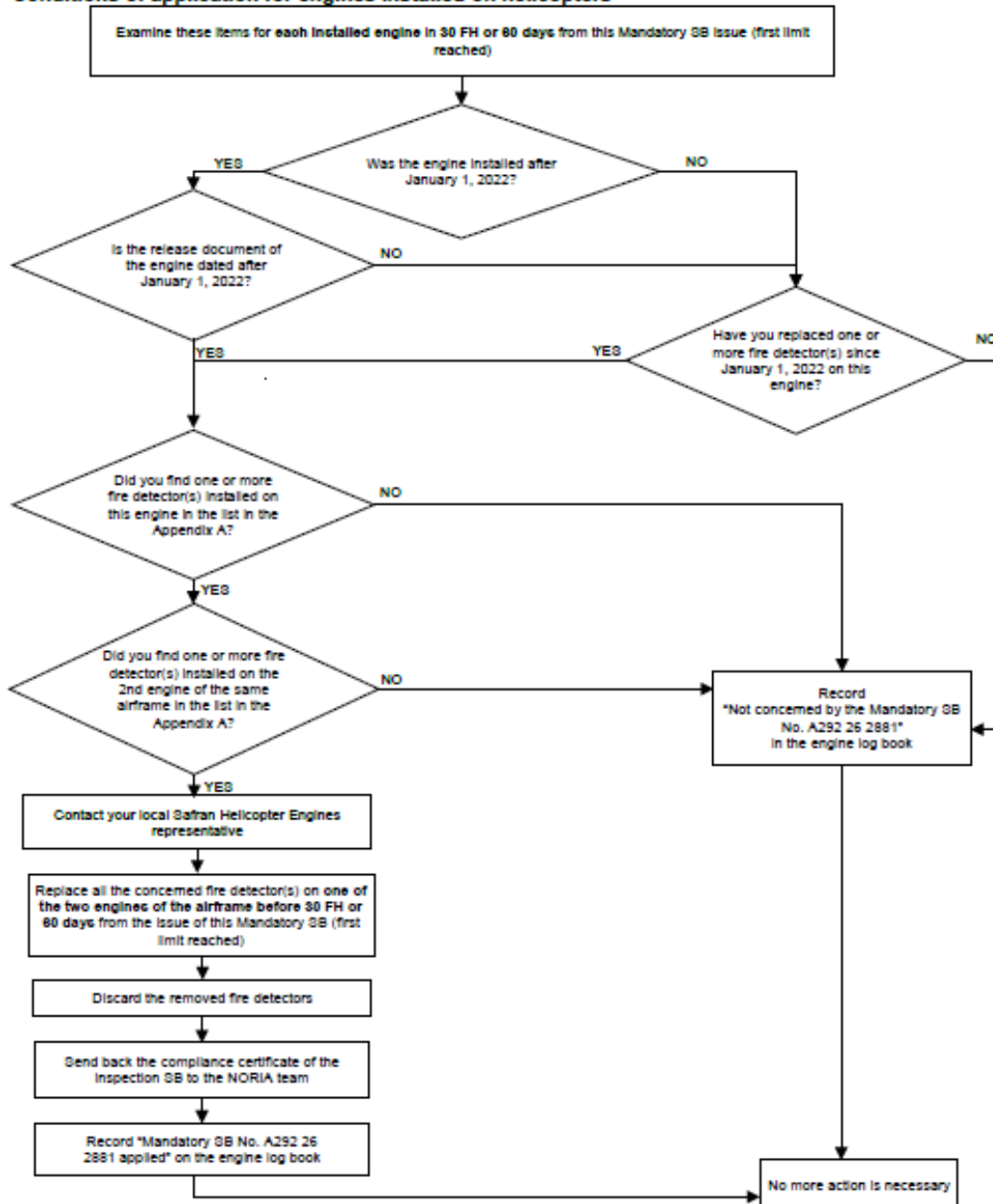
§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

#### 2.5. Block diagram for this SB

##### Conditions of application for engines installed on helicopters



SB VERSION A

§2 - 2/4

14 December 2022



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

#### 2.6. Instructions on how to do the procedure

##### 2.6.1. Implementation

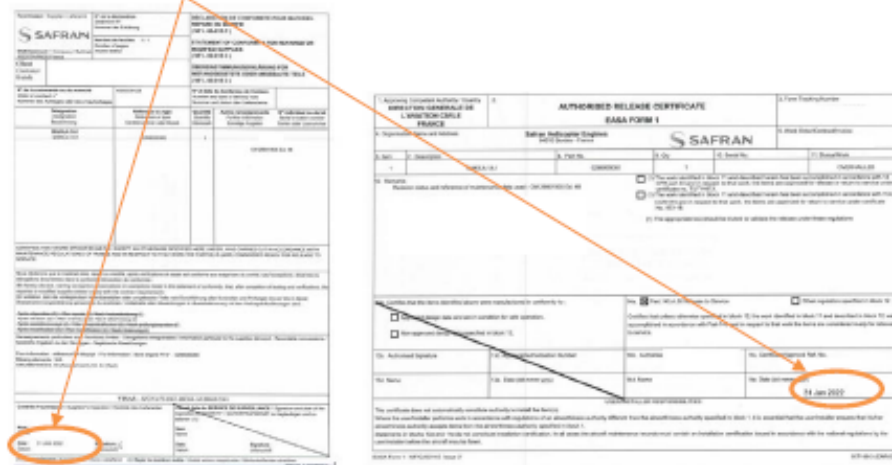
Removal of the engine can be necessary for this Mandatory SB to replace the concerned fire detector(s).

##### 2.6.2. Operating instructions

- 2.6.2.1. Do a check, as specified in paragraph 2.5, of the fire detector S/Ns given in the list in the Appendix A\* to know if they are installed on your engines.

\* Appendix A attached to this SB electronic version available on *EngineLife®* Customer Portal.

**Note:** The date of the engine release document is in the release documents attached to the engine log book.



- 2.6.2.2. If the fire detector S/Ns given in the list in the Appendix A **are not installed** on the engines of the airframe, do not do this Mandatory SB.

- 2.6.2.3. If the fire detector S/Ns given in the list in the Appendix A **are installed** on the two engines of the same airframe:

- Contact your local Safran Helicopter Engines representative.
- Replace the concerned fire detectors, on one of the engines of the airframe, with compliant fire detectors: Refer to the applicable ARRIEL 2 Maintenance Manual, task 26-11-00-900-801.
- Refer to paragraph 2.6.4 for identification.
- Discard the removed fire detectors.

##### 2.6.3. Reconditioning and checks

Not applicable.



#### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

#### 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.

If the fire detector S/Ns given in the list in the Appendix A are installed on the engines of the airframe:

- 2.6.4.1. After replacement of the fire detectors of one of the two engines, record the application of this Mandatory SB in section E, on the modified engine.
- 2.6.4.2. Send back the [compliance certificate in chapter 5.1](#).

#### 2.6.5. Scheduled maintenance

No changes to the scheduled maintenance.

#### 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”**



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

MANDATORY

ALERT

§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 the 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"**



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§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

Not applicable.

End of Section §4

"Procedure done at a Repair Center approved for Level 4"



HELICOPTER ENGINES

### SERVICE BULLETIN No. A292 26 2881

**MANDATORY**

**ALERT**

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

#### 5.1- Compliance certificate of Mandatory SB No. A292 26 2881 - LEVEL 1, 2, 3

##### Important:

Refer to SB status ( **NORIA** or **NORIA TERMINEE** ) in "Technical Documentation" section of the on-line EngineLife portal.

*If the SB is identified as a "Noria":*

Send the certificate back to:

**SAFRAN HELICOPTER ENGINES**  
Equipe NORIA  
40220 TARNOS - France

Email: [noria-tarnos-ariel2.fr.she@safrangroup.com](mailto:noria-tarnos-ariel2.fr.she@safrangroup.com)

*If the SB is identified as a "Noria terminée" (Completed Noria):*

Send the certificate back to:

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

Email: [data-fleet.fr.she@safrangroup.com](mailto:data-fleet.fr.she@safrangroup.com)

Equipment information		
Customer	Aircraft S/N	
	S/N	P/N
Engine		
Removed fire detector		
Removed fire detector		
Removed fire detector		

##### I certify that:

- The above-mentioned engine has been modified according to this Mandatory SB.
- The above-mentioned fire detectors have been discarded according to this Mandatory SB.

Date [DD/MMMM (letter)/YYYY]	Name	Job title

Signature:

### 4.B. S/N OF FIRE DETECTORS CONCERNED BY THE SAFRAN HELICOPTER ENGINES SERVICE BULLETIN No. A292 26 2881 VERSION A

SN of Fire Detectors concerned by the SB A292 26 2881

NS des Détecteurs Incendie concernés par le SB A292 26 2881

Fire detector	200°C	Fire detector	400°C
P/N Supplier	H243-1	P/N Supplier	H443-1
PN Safran HE	9550177130	PN Safran HE	9550177160
Liste des SN		Liste des SN	
BD21501		BN15881	
BD21503		BN15883	
BD21504		BN15885	
BD21505		BN15888	
BD21506		BN15889	
BD21507		BN15890	
BD21508		BN15891	
BD21509		BN15895	
BD21510		BN15896	
BD21511		BN15898	
BD21512		BN15900	
BD21513		BN15901	
BD21514		BN15906	
BD21515		BN15908	
BD21516		BN15911	
BD21517		BN15913	
BD21518		BN15916	
BD21519		BN15917	
BD21520		BN15918	
BD21521		BN15920	
BD21522		BN15921	
BD21523		BN15922	
BD21524		BN15923	
BD21525		BN15924	
BD21526		BN15925	
BD21527		BN15926	
BD21529		BN15927	
BD21530		BN15928	
BD21531		BN15929	
BD21538		BN15930	
BD21539		BN15931	
BD21540		BN15933	
BD21541		BN15936	



BD21542		BN15937	
BD21543		BN15940	
BD21544		BN15942	
BD21545		BN15944	
BD21546		BN15945	
BD21547		BN15948	
BD21548		BN15949	
BD21551		BN15950	
BD21553		BN15951	
BD21560		BN15953	
BD21561		BN15956	
BD21562		BN15959	
BD21569		BN15963	
BD21572		BN15965	
BD21578		BN15967	
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BD21594		BN15978	
BD21601		BN15980	
BD21604		BN15983	
BD21607		BN15986	
BD21608		BN15988	
BD21610		BN15990	
BD21611		BN16004	
BD21612		BN16006	
BD21613		BN16008	
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BD21657		BN16025	
BD21659		BN16027	
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BD21664		BN16030	
BD21666		BN16031	
BD21667		BN16038	
BD21670		BN16040	
BD21671		BN16045	
BD21673		BN16046	

BD21676		BN16049	
BD21678		BN16052	
BD21686		BN16053	
BD21689		BN16054	
BD21691		BN16055	
BD21694		BN16060	
BD21695		BN16061	
BD21699		BN16063	
BD21700		BN16065	
BD21701		BN16066	
BD21702		BN16072	
BD21704		BN16073	
BD21705		BN16075	
BD21706		BN16076	
BD21707		BN16077	
BD21713		BN16078	
BD21717		BN16080	
BD21721		BN16081	
BD21723		BN16082	
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BD21782		BN16133	
BD21784		BN16135	
BD21785		BN16136	
BD21796		BN16137	
BD21799		BN16138	
BD21800		BN16139	
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BD21889		BN16182	
BD21915		BN16183	
BD21952		BN16185	
BD21956		BN16189	
		BN16190	
		BN16194	
		BN16195	
		BN16225	

Back to paragraph [1.E.2.](#)