

SAFETY INFORMATION NOTICE

SUBJECT: ELECTRICAL POWER

Information about Fuses and Fuse Holders potentially containing Asbestos Material

For the attention of



AIRCRAFT CONCERNED	Version(s)	
	Civil	Military
EC120	B	
AS350	B, BA, BB, B1, B2, B3, D	L1
AS550		A2, C2, C3, U2
AS355	E, F, F1, F2, N, NP	
AS555		AF, AN, SN, UF, UN, AP
EC130	B4, T2	
SA365 / AS365	C1, C2, C3, N, N1, N2, N3	F, Fs, Fi, K, K2
AS565		MA, MB, SA, SB, UB, MBe
SA366		GA
EC155	B, B1	
SA330	J	Ba, L, Jm, S1, Sm
SA341	G	B, C, D, E, F, H
SA342	J	L, L1, M, M1, Ma
ALOUETTE II	313B, 3130, 318B, 318C, 3180	
ALOUETTE III	316B, 316C, 3160, 319B	
LAMA	315B	
EC225	LP	
EC725		AP
AS332	C, C1, L, L1, L2	B, B1, F1, M, M1
AS532		A2, U2, AC, AL, SC, UE, UL
H175	B	
BO105	C (C23, CB, CB-4, CB-5), D (DB, DBS, DB-4, DBS-4, DBS-5), S (CS, CBS, CBS-4, CBS-5), LS A-3	CBS-5 KLH, E-4
MBB-BK117	A-1, A-3, A-4, B-1, B-2, C-1, C-2, C-2e, D-2, D-2m, D-3, D-3m	D-2m, D-3m
EC135	T1, T2, T2+, T3, P1, P2, P2+, P3, EC635 T1, EC635 T2+, EC635 T3, EC635 P2+, EC635 P3, T3H, P3H, EC635 T3H, EC635 P3H	

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Airbus Helicopters has been informed by one of its Customer that at least one fuse ref. 58550-XXXX (refer to figure 1) fitted on an airplane is containing Asbestos material. This family of fuses ranging from 40 to 600 amps is mainly used to protect devices or systems with high level of electrical power consumption. These fuses can also be identified in Airbus Helicopters technical documentation through alternative references (where XXX is indicating the fuse amp rating):

- 1540-XXX,
- 1540-XXX-000,
- FU1540-XXXX,
- L58550-XXXX.



Fig. 1 - Example of a 58550-500A fuse

Airbus Helicopters performed laboratory analysis on fuses ref. 58550-XXXX and confirms that some of these fuses (ref. 58550-XXXX) contain Asbestos material.

Nevertheless fuse Supplier confirmed that fuses produced after January 01st, 1997 do not contain Asbestos. Therefore, by reading the fuse production batch date code marked on the fuse body it is possible to determine whether the fuse is impacted or not. There are two different types of marking available to identify the production batch:

- On fuse face using following marking standard: YY-WW (year-week - refer to Fig. 2a)
- On fuse side using following marking standard: DD MMM YYYY (day-month-year - refer to Fig. 2b).

However, production batch markings (date code) has been introduced recently thus limiting the capacity of identification. In case, the fuse body would not show any date code marking, the fuse shall be considered as potentially containing Asbestos.



Fig. 2a - Face Date Code (Week 07-2009)



Fig. 2b - Side Date Code (03 FEB. 2009)

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Asbestos was prohibited in Europe from January 1st, 2005, through the COMMISSION DIRECTIVE 1999/77/EC of 26 July 1999 ([link to official publication](#)) relating to restrictions on the marketing and use of certain dangerous substances and preparations (Asbestos). This Directive was then transposed into national regulations. DIRECTIVE 2009/148/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 ([link to official publication](#)) provides rules on the protection of workers from the risks related to exposure to asbestos at work. Since these are European regulations, we advise you, if not applicable to you, to verify your own local legislation regarding asbestos.

For information, some helicopters have been fitted with an alternative fuse reference (ref. ECS0856-XXS - refer to Figure 3). This alternative reference (ECS0856-XXS) does not contain Asbestos material and can be easily identified as the fuse main body is wrapped into a transparent thermos retractable sleeve (see Figure 3 below). The previous generation of fuses (58550-XXXX) do not integrate this thermo retractable sleeve feature.

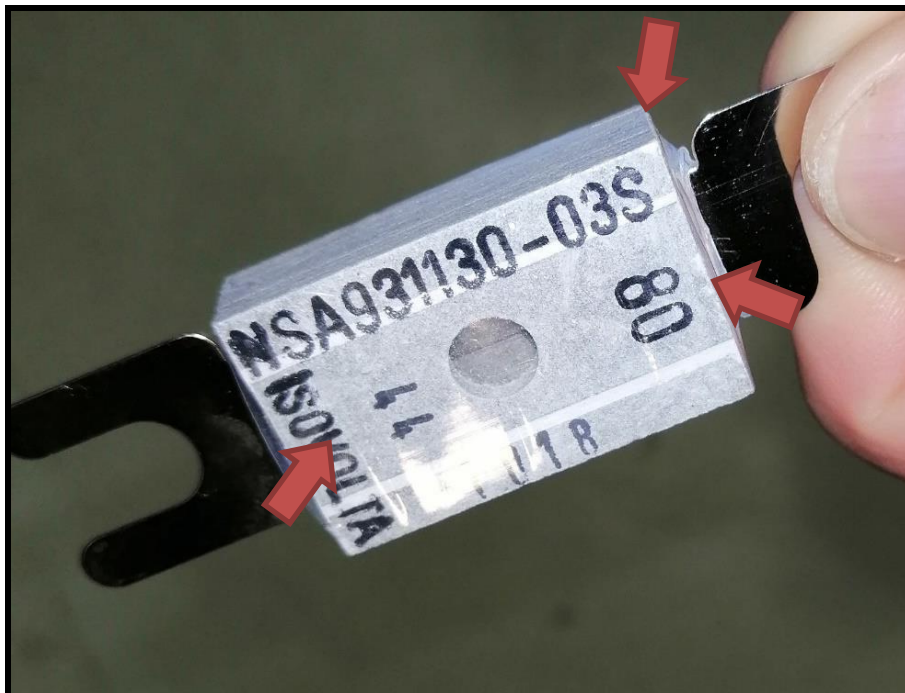


Fig. 3 - Example of a ECS0856-03S fuse (arrows showing the protection sleeve)

With this Safety Information Notice issue 1, Airbus Helicopters would like to provide with following updated information:

First, Airbus Helicopters reminds that the potential presence of Asbestos in 58550-XXXX fuses do not lead to an airworthiness impact.

Airbus Helicopters performed laboratory tests on several variants of the 58550-XXXX fuses as well as “on aircraft” tests campaign. These tests allowed to demonstrate that:

- In normal operations, in degraded operations (blown fuses) or while performing operations at the vicinity of the fuses (e.g.: maintenance operations) no Asbestos fibers dispersion into the atmosphere has been detected
- Asbestos dust could be present at the fuse surface following an impact or friction (on the fuse itself).

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With revision 2 of this Safety Information Notice, Airbus Helicopters would like to provide the following updated information:

In addition to the aforementioned fuses, Airbus Helicopters was informed that some references of fuse holders may contain Asbestos material. The references concerned are as follows:

- FU1541
- FU1541-XXX
- DHS782-200.XX
- 1541-XXX

First, Airbus Helicopters reminds that the potential presence of Asbestos in 1541-XXX fuse holders does not lead to an airworthiness impact.

Then, with respect to the fuse holders, some helicopters may have been fitted with an alternative reference (ref: ECS0858-XXX). This alternative fuse holder does not contain Asbestos material and can be identified by looking directly at the fuse holder base plate, as a specific marking recalling the fuse holder reference (starting with ECS0858) and the manufacturing batch number is provided.

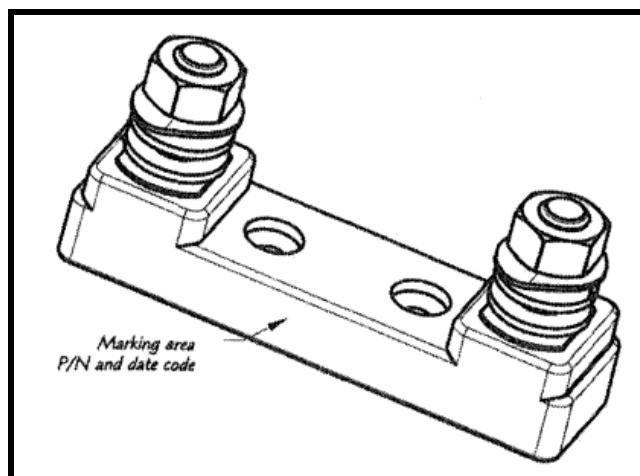


Fig. 4 - Fuse Holder ECS0858-XXX marking location

The information provided previously on fuses also applies to the fuse holders. Typically:

- The potential presence of Asbestos in 1541-XXX fuse holders does not lead to an airworthiness impact.
- In normal operations, in degraded operations (failed fuse holder) or while performing operations at the vicinity of the fuses (e.g.: maintenance operations), there is no Asbestos fiber dispersion into the atmosphere.
- Asbestos dust could be present at the fuse holder surface following an impact or friction (on the fuse holder itself).

Therefore, as a reminder, intervention on the defined fuses (58550-XXXXA) or fuse holders (FU1541-XXX), triggered or not, shall be performed according to national Health Safety and Environmental regulations (please refer to previous references of this Safety Information Notice). For information purposes, procedure applicable in France have been detailed in Appendix 1 (similar procedure may be applied to the fuse holders).

Regarding 58550-XXXXA spare fuses or FU1541-XXX spare fuse holders that Operators may have in stock, in the event that a stocked item's packaging is found damaged and therefore not protected, Airbus Helicopters recommends that any intervention on such items shall be performed according to the relevant national Health and Safety regulations (as referenced in this Safety Information Notice for examples of relevant European regulations).

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Airbus Helicopters will support the retrofit of the concerned fleet, starting with helicopters delivered between January 01st, 2002 and December 31st, 2008. For these helicopters, Customer can request, during a 12 months period after release of this SIN, for a free of charge order to procure the fuses or fuse holders necessary for the retrofit of the impacted helicopters. If you are subject to above described conditions, please contact your usual Key Logistic Manager.

We advise our Customers who will proceed to fuse or fuse holder inspections and, if necessary, exchanges to ensure a proper record of operations at aircraft level (e.g.: aircraft log book).

This Safety Information Notice will be updated in case information related to this topic will be brought to Airbus Helicopters knowledge.

- APPENDIX 1 -

FUSES POTENTIALLY CONTAINING ABESTOS REPLACEMENT PROCEDURE (FRENCH REGULATION REFERENTIAL)

1. Important Information:

Following important information shall be taken into consideration while reading this procedure:

- The procedure described here after is provided for information only in order to provide Airbus Helicopters Customers with more background and contextual information about fuses potentially containing Asbestos replacement.
- This procedure has been defined in order to comply with French Health Safety and Environmental regulation requirement
- This procedure is only applicable in France it remains under Customer responsibility to define the proper fuse replacement procedure as per its national Health Safety and Environmental regulations.

2. Health & Safety Guidelines:

As Asbestos may be present, the replacement of existing fuses on an H/C must be carried out in accordance with the national Health and Safety regulations in force in the country where the fuse replacement operation is done.

To comply with French regulation, Airbus Helicopters has carried out a replacement operation on the most complex helicopter installation (H225) to measure the exposition of the operator and evaluate the risk. Based on this experiment no Asbestos fiber is released in the atmosphere during the operation.

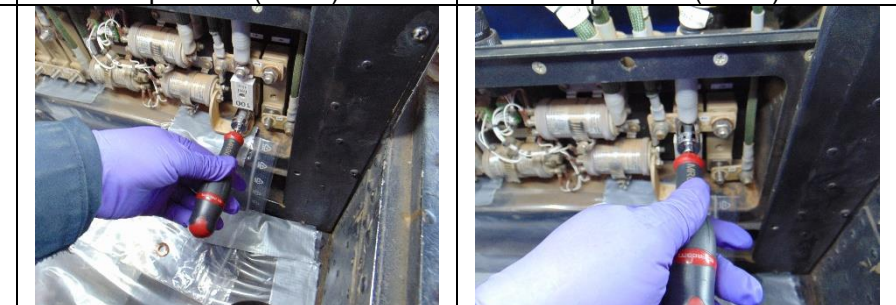

However since Asbestos may be present at the surface of the fuse some precautionary measures need to be implemented.

To be compliant with French Health and Safety regulation, the following operations shall be performed by qualified personnel trained in accordance with Asbestos handling procedure described in French Labor Regulation "Sub-Section IV":

- Carry out the needed dismantling operations to access the fuses according to AMM procedures
- Protect the intervention area using a double skin polyane or similar covering
- Remove the fuses before any other operation (including intervention area cleaning)
- Recover the fuses by an appropriate means and discard them using an adapted depollution channel according to national Environmental regulations
- Proceed to tools and intervention area cleaning using wet wipes and discard wipes using an adapted depollution channel according to national Environmental regulations
- Proceed to fuse holder cleaning using a wipe soaked in iso-propyl alcohol and discard wipes using an adapted depollution channel according to national Environmental regulations
- The operators, must wear in addition to the standard site required personal protection equipment:
 - . Single use FFP3 mask (half disposable FFP3 mask)
 - . Single-use gloves made of nitrile or similar material.

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Illustration of the fuse replacement operation:

		
<p>Example of fuses implantation (H225)</p>	<p>Surfaces protection before operation (skin 1)</p>	<p>Surfaces protection before operation (skin 2)</p>
		
<p>Illustration of tools and individual protections to be used</p>	<p>Fuse disassembly</p>	
		
<p>Used fuse conditioning after disassembly</p>		