

A/C TYPE EC155B  
 A/C REGN 9M-SAS S/N 6583  
 TYPE OF CHECK \_\_\_\_\_



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 Company Registration No.: 197702516C

NO: **23532** FORM NO: M/003

JOB NO. \_\_\_\_\_

PAGE \_\_\_\_\_ OF \_\_\_\_\_

**DEFECT AND RECTIFICATION WORKSHEET/CERTIFICATE OF RELEASE TO SERVICE**

ITEM NO.	REPORTED BY DATE	DEFECT/WORK REQUIRED	ACTION TAKEN	COMPONENT CHANGES		G.I.N.NO. OR O/H/AUL REPORT NO.	MAN HOURS	MECH	LIC/ APP NO. DATE
				S/N OFF	S/N ON				
1.	PEI Q1 17.04.09	COMPLY WITH SB 31-015 — INDICATING & RECORDING SYSTEMS: CHECK OF THE WARNING PANEL.	N/A DUE WARNING PANEL P/N 704A4723061 S/N 24 INSTALLED.						 17/04/09 
2.	PEI Q1 13.05.09	COMPLY WITH ASB 04A001 — LIMITATIONS: SIREN LOAD RELEASE UNITS AS21-5-(1 TO 7)	N/A DUE NOT INSTALLED.						 13/05/09 
<del>3.</del>	<del>PEI Q1 25.05.09</del>	<del>COMPLY WITH SB 292-72-2834 VER ENTERED <del>RESTRICTED</del> <del>ERROR</del> <del>of</del> USE LIMIT OF THE FT BLADES.</del>							

CERTIFIES THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENT IS CONSIDERED READY FOR RELEASE TO SERVICE:

- SAR-145 & SINGAPORE ANO
- EASA PART-145: EASA.145.0056
- \_\_\_\_\_
- MALAYSIAN CIVIL AVIATION REGULATIONS
- MANUFACTURER'S PUBLICATIONS



EUROCOPTER  
DIRECTION TECHNIQUE SUPPORT  
13725 MARGNANE CEDEX FRANCE

CIVIL VERSION(S): B, B1

# SERVICE BULLETIN

No. 31-015

<b>SUBJECT:</b> <b>INDICATING AND RECORDING SYSTEMS</b>
Check of the warning panel

REVISION No.	DATE OF APPROVAL	DATE OF ISSUE
Revision 0	On: March 17, 2009	2009.03.17

## 1. PLANNING INFORMATION

### 1.A. EFFECTIVITY

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

Helicopters equipped with one of the following 022TA\*\* type central warning panels:

- 22-1863 001 (7051A4315006): serial numbers from 0460 to 0593,
- 22-1863 048 (704A47723061): serial numbers from 0086 to 0116, *622TA0402*
- 22-1863 049 (704A47723058): serial numbers from 0558 to 0734,
- 22-1863 050 (704A47723063): serial numbers from 0039 to 0088,
- 22-1863 089 (704A47723068): serial numbers from 0001 to 0281,
- 22-1863 090 (704A47723069): serial numbers from 0001 to 0005.

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

Central warning panels listed in paragraph 1.A.1. of this Service Bulletin.

### 1.B. ASSOCIATED REQUIREMENTS

Not applicable.

### 1.C. REASON

The purpose of this Service Bulletin is to have the manufacturer, "Comtronic", check for the presence of thread-lock compound on the locking screw of the electrical connector of the central warning panel, located on the instrument panel.

### 1.D. DESCRIPTION

During a flight, it was noted that all the lights came on at the same time on the warning panel. After checking, a short circuit was found. It was caused by a screw inside the unit which is intended to secure the electrical connector.

This Service Bulletin introduces Comtronic Service Bulletin 1863 001 SB which asks operators to return the units concerned for a check to ensure that the screw is locked with Loctite. When this check has been carried out, a red letter "V" will be marked on the panel identification label.

### 1.E. COMPLIANCE

EUROCOPTER recommends compliance with this Service Bulletin.

#### 1.E.1. Compliance at the works

Not applicable.

##### 1.E.1.a. On helicopters/installed equipment

Not applicable.



1.E.1.b. Non-installed equipment

Not applicable.

1.E.2. Compliance in service: By the operator

1.E.2.a. On helicopters/installed equipment

Comply with paragraph 2. of this Service Bulletin during a subsequent T inspection, without exceeding 600 flying hours following the issue of this Service Bulletin, issued on the date indicated at the foot of the page.

1.E.2.b. Non-installed equipment

Comply with paragraph 2. of this Service Bulletin, within 2 years following receipt of this Service Bulletin issued on the date indicated at the foot of the page.

**1.F. APPROVAL**

Approval is limited to civil version helicopters subject to an Airworthiness Certificate.

1.F.1. Approval of the modifications

Not applicable.

1.F.2. Approval of the Service Bulletin

The technical information given in Revision 0 of this Service Bulletin No. 31-015 was approved on March 17, 2009 under the authority of EASA Design Organisation Approval No. 21J.056.

**1.G. MANPOWER**

1.G.1. Qualification

To comply with this Service Bulletin, EUROCOPTER recommends the use of personnel with the following qualification:

Qualification: 1 Avionics Technician.

1.G.2. Time for the operations

The time for the operations is given for information purposes for a standard configuration.

Time for the operations: approximately 48 hours (performed on Comtronic's premises).

1.G.3. Estimated helicopter grounding time

- Removal/installation: approximately half a day,
- 48 hours for compliance with this Service Bulletin at Comtronic,
- Shipping time (to and from Comtronic) to be determined with the equipment manufacturer.



EUROCOPTER  
DIRECTION TECHNIQUE SUPPORT  
13725 MARGNANE CEDEX FRANCE

CIVIL VERSION(S): B, B1

# ALERT SERVICE BULLETIN

No. 04A001

**SUBJECT:** LIMITATIONS

SIREN Load Release Units AS21-5-(1 to 7): Anomaly on the locking keeper and load jammed on the cargo hook in the open position

Other (SIREN) Load Release Unit Types: Load jammed on the cargo hook in the open position

**ATA: 25**

REVISION No.	DATE OF APPROVAL	DATE OF ISSUE
Revision 0	On: May 12, 2009	2009.05.12

**CAUTION**

THE INFORMATION AND INSTRUCTIONS CONTAINED IN THIS ALERT SERVICE BULLETIN ARE INTENDED FOR MAINTENANCE PERSONNEL AND FLIGHT CREWS.

## 1. PLANNING INFORMATION

### 1.A. EFFECTIVITY

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

Helicopters equipped with all types of SIREN load release units.

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

Not applicable.

### 1.B. ASSOCIATED REQUIREMENTS

Not applicable.

### 1.C. REASON

- To ensure the release of an under-slung load despite:
  - . an anomaly affecting locking keeper (1) (Figure 1), for one model of SIREN load release unit,
  - . jamming of the ring on the cargo hook in the open position, for all models of SIREN load release units.
- The purpose of this ALERT SERVICE BULLETIN is to:
  - . supersede ALERT TELEX No. 04A001 of July 10, 2001, which formed the subject of DGAC Airworthiness Directive No. 2001-318(A),
  - . update the table specifying the size of the rings in paragraph 2.B.2., in order to:
    - offer a wider choice of load attachment rings,
    - enable operators to use shackles,
    - enable operators to order rings and shackles directly from the equipment manufacturer INDRAERO SIREN.
  - . add a figure showing a load release unit cargo hook without safety pawl,
  - . produce a locally-made placard to draw the operator's attention to the rules for load hang-up under the helicopter, and to the fact that using a load ring of the wrong size can lead to jamming or loss of the load,
  - . add pages to the Flight Manual to draw the pilot's attention to the fact that using a load ring of the wrong size can lead to jamming or loss of the load,
  - . extend the effectivity of this ALERT SERVICE BULLETIN to EC155 helicopter version B1.



**NOTE**

*When ALERT TELEX No. 04A001 was issued on July 10, 2001, EC155 helicopter version B1 did not exist. However, Service Information Letter (SIL) No. 25-004 has been incorporated in all the INDRAERO SIREN CMMs following Service Letter No. 1536-25-01 issued on March 27, 2002.*

- This ALERT SERVICE BULLETIN will form the subject of a new EASA Airworthiness Directive.

**1.D. DESCRIPTION**

As per Figure 1:

- Detail A: Load release unit cargo hook without safety pawl.
- Detail B: Load release unit cargo hook with safety pawl (double keeper).

**1.D.1. For load release units AS21-5-(1 to 7), having a serial number below 415**

Abnormal clearance (J) between locking keeper (1) and cargo hook (2) can generate a situation in which load release is impossible. In fact, if the ring that carries the load bears on locking keeper (1) following:

- incorrect hooking on the ground by the operator,
- a flight in particularly turbulent conditions,

it is impossible to release the load.

Nevertheless, clearance (J) does not lead to untimely load release because locking keeper (1) prevents the ring from coming out of the hook.

**1.D.2. For all SIREN load release units (including load release units AS21-5-(1 to 7))**

The use of rings that are not properly adapted to the size of the hook, can cause the under-slung load to jam on the cargo hook in the open position.

Remark: the use of rings that are not properly adapted can also, in some cases, lead to the loss of an under-slung load.

Pending a modification and an update of the Flight Manual, EUROCOPTER asks you to:

- produce a locally-made placard, giving the instructions for load hang-up under the helicopter,
- include a copy of appendices 1 to 3 in the Flight Manual of each helicopter.

Compliance with this ALERT SERVICE BULLETIN enables operators to prevent any risk connected with the phenomena described above (paragraphs 1.D.1. and 1.D.2.).

## 1.E. COMPLIANCE

The measures described in paragraphs 2.B.1. and 2.B.2. are mandatory since receipt of ALERT TELEX No. 04A001 which was issued on July 10, 2001.

### 1.E.1. Compliance at the works

#### 1.E.1.a. On helicopters

Before delivery to customers:

- Pending the update of the Flight Manual including the instructions given in this ALERT SERVICE BULLETIN, make a copy of:
  - . appendix 1, page 13 of this ALERT SERVICE BULLETIN, and insert it in chapter 2 "Limitations" of all the supplements (approved parts) relating to "External load transport" installations, of the Flight Manual for each helicopter, as per appendix 4,
  - . appendix 2, page 14 of this ALERT SERVICE BULLETIN, and insert it in chapter 4 "Normal Procedures" of all the supplements (approved parts) relating to "External load transport" installations, of the Flight Manual for each helicopter, as per appendix 4,
  - . appendix 3, page 15 of this ALERT SERVICE BULLETIN, and insert it in the "Operational Tips" section (non-approved part) in the "External load transport" chapter of the Flight Manual for each helicopter, as per appendix 4.
- Affix a locally-made placard in accordance with paragraph 2.B.3.

#### 1.E.1.b. On non-installed equipment: Not applicable.

### 1.E.2. Compliance in service: By the operator

#### 1.E.2.a. On helicopters/installed equipment

From receipt of this ALERT SERVICE BULLETIN:

- Before the next time you use load release units AS21-5-(1 to 7), with a serial number below 415 and for which initial compliance with ALERT TELEX No. 04A001 is not recorded on the equipment log card (FME), comply once with paragraph 2.B.1.
- For all models of SIREN load release units (including load release units AS21-5-(1 to 7)):
  - . Before the next time you use SIREN load release units, and pending the update of the Flight Manual, make a copy of:
    - appendix 1, page 13 of this ALERT SERVICE BULLETIN, and insert it in chapter 2 "Limitations" of all the supplements (approved parts) relating to "External load transport" installations, of the Flight Manual for each helicopter, as per appendix 4,
    - appendix 2, page 14 of this ALERT SERVICE BULLETIN, and insert it in chapter 4 "Normal Procedures" of all the supplements (approved parts) relating to "External load transport" installations, of the Flight Manual for each helicopter, as per appendix 4,
    - appendix 3, page 15 of this ALERT SERVICE BULLETIN, and insert it in the "Operational Tips" section (non-approved part) in the "External load transport" chapter of the Flight Manual for each helicopter, as per appendix 4.

Then,

- . From receipt of this ALERT SERVICE BULLETIN, issued on the date indicated at the foot of the page, check parts currently in use and prohibit usage of any non-compliant rings/shackles whose sizes are beyond the tolerances indicated in the table in paragraph 2.B.2.

And,

- . Comply with paragraph 2.B.3. of this ALERT SERVICE BULLETIN in the next 15 flight hours if cargo hook shall be used or no later than within 1 month from receipt of this ALERT SERVICE BULLETIN, issued on the date indicated at the foot of the page.



1.E.2.b. On non-installed equipment

Reminder of the measures stated in the ALERT TELEX:  
Before installing a load release unit AS21-5-(1 to 7), having a serial number below 415, on a helicopter, comply with paragraph 2.B.1.

**1.F. APPROVAL**

Approval is limited to civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this ALERT SERVICE BULLETIN No. 04A001 was approved on May 12, 2009 under the authority of EASA Design Organisation Approval No. 21J.056.

**1.G. MANPOWER**

Qualification: 1 mechanic.

Time: 15 minutes.

**1.H. WEIGHT AND BALANCE**

Weight: Not applicable.

Moment: Not applicable.

**1.I. EFFECT ON ELECTRICAL LOADS**

Not applicable.

**1.J. SOFTWARE MODIFICATION EMBODIMENT RECORD**

Not applicable.

**1.K. REFERENCES**

CMM.

**1.L. OTHER DOCUMENTS AFFECTED**

The Flight Manual will be updated later.

**1.M. INTERCHANGEABILITY AND MIXABILITY OF PARTS**

Not applicable.