

KOKU-KU-KI-55

No. TCD-6850-2006

Date of Issue: April 27, 2006

Japan Civil Aviation Bureau

TAIKUSEI-KAIZEN-TSUHO

Airworthiness Directive

The undermentioned examinations or modifications are mandatory.

1. Applies to : Kawasaki BK117 series helicopters

2. Compliance is required as indicated, unless already accomplished.

To prevent the inoperative situation of all electric power supply systems, accomplish the following.

2.1 Within 50 flight hours after the effective date of this AD or the next 50 flight-hours inspection after the effective date of this AD, whichever occurs later, carry out visual inspection of terminal lug connected with terminal E of starter generator and measurement of resistance of electrical wires between starter-generator and GCU in accordance with Kawasaki Service Bulletin No.KSB-117-272A dated April 27, 2006.

2.2 Repeat the same inspection and measurement as paragraph 2.1 at the time of 300 hour inspection.

2.3 Do the same inspection and measurement as paragraph 2.1 when the starter-generator or the wires connected to the starter-generator are removed/installed.

2.3 If necessary, replace the terminal lug before the next flight in accordance with SB No.KSB-117-272A dated April 27, 2006.

2.4 Before the next flight after the effective date of this AD, insert the copy of applicable Appendix attached, into the "EMERGENCY AND MALFUNCTION PROCEDURES" section of the Flight Manual.

2.5 An alternative means of compliance with this AD may be used, if approved by the Director-General of JCAB.

3. Remarks

3.1 This AD becomes effective on May 11, 2006.

3.2 Kawasaki Service Bulletin No.KSB-117-272A dated April 27, 2006 and later JCAB approved revisions pertain to this subject.

Applies to : Rotorcraft Serial number 1001~1003 and 1005
 ,and NOT accomplished KSB-117-012

This insert page indicates the temporary revision of flight manual.

Insert this page in front of an applicable page of flight manual without removing the applicable page.

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px 10px; text-align: center;">GEN I</div> or <div style="border: 1px solid black; padding: 2px 10px; text-align: center;">GEN II</div> </div>	
Fault condition	Corrective action
<p>• Overvoltage condition caused by wire broken</p>	<p>(1) Voltmeter — Check</p> <p><u>If voltmeter indication exceeds 30V :</u></p> <p>NOTE : In case of overvoltage failure, the GEN caution light of normal generator side turns on.</p> <p>(2) GEN TRIP switch — I and II</p> <p>(3) Both GENERATOR switch — OFF</p> <p>(4) Normal GENERATOR switch — RESET, then ON, (relevant to GEN caution light which turned on first) if necessary</p> <p>(5) If generator load exceeds 110A, cut off unnecessary electrical load.</p> <p style="text-align: center;"><u>LAND AS SOON AS PRACTICABLE</u></p> <p><u>If voltmeter indication NOT exceeds 30V :</u> Original EMERGENCY AND MALFUNCTION PROCEDURES — Perform</p>

Applies to : Rotorcraft Serial number 1001 ~ 1003 and 1005 and KSB-117-012
 accomplished
 Rotorcraft Serial number 1004, 1006 ~ 1008 and 1010 ~ 1024

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<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">GEN I</div> or <div style="border: 1px solid black; padding: 5px; text-align: center;">GEN II</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> (amber) (amber) </div>	
Fault condition	Corrective action
<p>• Overvoltage condition caused by wire broken</p>	<p>(1) Voltmeter — Check <u>If voltmeter indication exceeds 30V :</u> NOTE : In case of overvoltage failure, the GEN caution light of normal generator side turns on.</p> <p>(2) GEN TRIP switch — I and II (3) Both GENERATOR switch — OFF (4) Normal GENERATOR switch — RESET, then ON, (relevant to GEN caution if necessary light which turned on first)</p> <p>(5) If generator load exceeds 110A, cut off unnecessary electrical load.</p> <p style="text-align: center;"><u>LAND AS SOON AS PRACTICABLE</u></p> <p><u>If voltmeter indication NOT exceeds 30V :</u> Original EMERGENCY AND MALFUNCTION PROCEDURES — Perform</p>

Applies to : Rotorcraft Serial number 1009 and 1025~1109

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Fault condition	Corrective action
<p>• Overvoltage condition caused by wire broken</p>	<p>(1) Voltmeter — Check</p> <p><u>If voltmeter indication exceeds 30V :</u></p> <p>NOTE : In case of overvoltage failure, the GEN caution light of normal generator side turns on.</p> <p>(2) GEN TRIP switch — I and II</p> <p>(3) Both GENERATOR switch — OFF</p> <p>(4) Normal GENERATOR switch — RESET, then ON, (relevant to GEN caution light which turned on first) if necessary</p> <p>(5) If generator load exceeds 110A, cut off unnecessary electrical load.</p> <p style="text-align: center;"><u>LAND AS SOON AS PRACTICABLE</u></p> <p><u>If voltmeter indication NOT exceeds 30V :</u></p> <p>Original EMERGENCY AND MALFUNCTION PROCEDURES — Perform</p>

Applies to : Type BK117C-1

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Fault condition	Corrective action
<p>• Overvoltage condition caused by wire broken</p>	<p>(1) Voltmeter — Check</p> <p><u>If voltmeter indication exceeds 30V :</u></p> <p>NOTE : In case of overvoltage failure, the GEN caution light of normal generator side turns on.</p> <p>(2) GEN TRIP switch — I and II</p> <p>(3) Both GENERATOR switch — OFF</p> <p>(4) Normal GENERATOR switch — RESET, then ON, (relevant to GEN caution light which turned on first) if necessary</p> <p>(5) If generator load exceeds 110A, cut off unnecessary electrical load.</p> <p style="text-align: center;"><u>LAND AS SOON AS PRACTICABLE</u></p> <p><u>If voltmeter indication NOT exceeds 30V :</u></p> <p>Original EMERGENCY AND MALFUNCTION PROCEDURES — Perform</p>

Applies to : Type BK117C-2

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CAUTION INDICATIONS

_____ **GEN DISCON** or **GEN DISCON** _____
(SYSTEM I) (SYSTEM II)

Conditions /Indications

Overtoltage condition caused by wire broken

Procedure

1. DC voltage indication — Check

If voltage indication exceeds 30V :

NOTE : In this condition, normal generator is disconnected first from the power distribution system then relevant caution light turns on

2. Both GEN switch — OFF
3. Normal GEN switch — RESET then NORM
(relevant to the caution indication if necessary
which turned on first)
4. DC Voltage indication, GEN and BAT
current indications — Monitor

If electrical power from battery is supplied:

5. Electrical consumers — Reduce as much as possible

6. LAND AS SOON AS PRACTICABLE

NOTE : One generator alone will provide sufficient power for normal services.

If voltage indication NOT exceeds 30V :

2. Original EMERGENCY AND MALFUNCTION PROCEDURES — Perform