KOKU-KU-KI-1299		No. TCD-8201B-2015

Date of Issue: January 9, 2015

Japan Civil Aviation Bureau

TAIKUSEI-KAIZEN-TSUHO

Airworthiness Directive

The undermentioned examinations or modifications are mandatory.

1. Applies to: Kawasaki BK117 series helicopters equipped with a Goodrich rescue hoist assembly having a Part Number (P/N) as listed in Kawasaki Service Bulletin No. KSB-117-361D, or later JCAB-approved revision (hereinafter referred to as SB).

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

To prevent injury to persons on the ground or a hoisting accident due to the overload clutch failure of the hoist, accomplish the following.

2.1 Within 60 days since November 11, 2014 (the effective date of TCD-8201A-2014), determine the P/N of the hoist installed on the helicopter.

2.2 If, as a result of the determination required by paragraph 2.1 of this AD, a Goodrich rescue hoist assembly is installed with a P/N listed in SB, accomplish an initial hoist load check test in accordance with the instructions of SB.

2.3 Within the time interval or hoist operating cycles specified in SB, whichever occurs first after the initial load check as required by paragraph 2.2 of this AD, and, thereafter, at intervals not to exceed the values (calendar time or hoist operating cycles, whichever occurs first) as specified in SB, accomplish a hoist load check/test in accordance with the instructions of SB.

2.4 If, during any hoist load check/test as required by paragraph 2.2 or 2.3 of this AD, the hoist fails the test, deactivate the hoist and, before next hoist operation, replace the hoist with a serviceable hoist, as defined in Table 1 of this AD.

Table 1　Serviceable Goodrich Hoists

A hoist having a P/N not listed in SB
A hoist having a P/N as listed in SB, with an overload clutch assembly which has accumulated less than 24 months, or 1200 hoist cycles since new, or since last overhaul
A hoist having a P/N as listed in SB, with an overload clutch assembly which has accumulated less than 24 months, or 1200 hoist cycles since November 11, 2014 (the effective date of TCD-8201A-2014)

2.5 Within 24 months, or 1200 hoist operating cycles since November 11, 2014 (the effective date of TCD-8201A-2014), or at the next scheduled hoist overhaul, whichever occurs first, and, thereafter, at intervals not to exceed 24 months, or 1200 hoist operating cycles, whichever occurs first, replace the hoist with a serviceable hoist, as defined in Table 1 of this AD, noting the installation requirements of paragraph 2.6 of this AD.

2.6 From the effective date of this AD, it is allowed to install an affected Goodrich rescue hoist, having a P/N as listed in SB, on any helicopter, provided that it is a serviceable hoist, as defined in Table 1 of this AD and, prior to hoisting operation, the hoist has passed a test as specified in paragraph 2.2 of this AD. Following installation, the repetitive actions required by this AD must be accomplished.

2.7 Before next hoist operation after the effective date of this AD, revise the Limitations section of the applicable flight manual to apply the following hoist operation limitations. This may be done by inserting a copy of an applicable attachment of TCD-8201A-2014 or this AD into the flight manual.

Operation with extended cable and load on the hook:

Maximum permissible bank angle in turn is 20°

Warning: exceeding 15° of lateral pendulum angle/helicopter vertical axis can lead to clutch slippage

2.8 From the effective date of this AD, if a partial peel out occurs as described in SB, before next flight, remove or deactivate the hoist or, before next hoist operation, replace the hoist with a serviceable hoist, as defined in Table 1 of this AD, noting the installation requirements of paragraph 2.6 of this AD.

2.9 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 January 23, 2015.

3.2 This AD supersedes the AD No. TCD-8201A-2014 dated November 11, 2014.

3.3 Kawasaki Service Bulletin No.KSB-117-361D dated December 5, 2014 and later JCAB approved revisions pertain to this subject.

Applies to: Kawasaki BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 helicopters Supplement 10-60

「RESCUE WINCH SYSTEM」

This insert page indicates the temporary revision of the flight manual.
Insert this page in front of an applicable page of the flight manual without removing the applicable page.

2.5.4 **Hoist cable pendulum angle limits**

Maximum permissible bank angle
with extended cable and load on the hook ・・・・・・・・・・・・・・・・・20°

WARNING IN CASE OF SIGNIFICANT LOAD FACTOR ON THE HOOK OR ABNORMAL MANEUVER DURING HOIST OPERATION WHICH RESULTS IN A POTENTIAL OVERLOAD CLUTCH SLIPPAGE, PERFORM A HOIST MAINTENANCE IN ACCORDANCE WITH THE APPLICABLE MAINTENANCE MANUAL BEFORE THE NEXT FLIGHT.

CAUTION TO PREVENT SLIPPAGE OF THE HOIST CABLE DUE TO ACTIVATION OF THE OVERLOAD CLUTCH, MINIMIZE CABLE PENDULUM (WITHIN 15° OF LATERAL PENDULUM ANGLE) AND THE FOLLOWING LOAD FACTORS ON THE HOOK SHALL BE AVOIDED:

- ABRUPT MANEUVERS AND RAPID TURNS
- SUDDEN REVERSALS OF HOISTING DIRECTION OR SUDDEN STOPPING OF THE CABLE AT HIGH SPEEDS OF HOISTING

Applies to: Kawasaki BK117C-2 helicopters Supplement 10-29
「RESCUE WINCH SYSTEM」

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

2.6 **Bank　angle**

Maximum permissible bank angle
with extended cable and load on the hook ・・・・・・・・・・・・・・・・・20°

2.8.2 **Pendulum/deflection angle**

WARNING IN CASE OF SIGNIFICANT LOAD FACTOR ON THE HOOK OR ABNORMAL MANEUVER DURING HOIST OPERATION WHICH RESULTS IN A POTENTIAL OVERLOAD CLUTCH SLIPPAGE, PERFORM A HOIST MAINTENANCE IN ACCORDANCE WITH THE APPLICABLE MAINTENANCE MANUAL BEFORE THE NEXT FLIGHT.

CAUTION TO PREVENT SLIPPAGE OF THE HOIST CABLE DUE TO ACTIVATION OF THE OVERLOAD CLUTCH, MINIMIZE CABLE PENDULUM (WITHIN 15° OF LATERAL PENDULUM ANGLE) AND THE FOLLOWING LOAD FACTORS ON THE HOOK SHALL BE AVOIDED:

- ABRUPT MANEUVERS AND RAPID TURNS
- SUDDEN REVERSALS OF HOISTING DIRECTION OR SUDDEN STOPPING OF THE CABLE AT HIGH SPEEDS OF HOISTING