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FAA APPROVED ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

STC SR00896SE

Bell Helicopter Models 206A & 206B

R/N	S/N	
	Hanager, Seattle Aircraft Cert	

Date: NOV 3 0 2015

Renton, Washington



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number

121-059-00

Page 1 of 13

Record of Revisions

Rev.	Date	Page(s)	Reason for Revision
0	NOV 3 0 2015	All	Initial Release.



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page FA

INTRODUCTION

This supplement must be attached to the appropriate Bell FAA approved Rotorcraft Flight Manual when an Onboard Systems P/N 200-267-02, 200-389-00 or 200-390-00 Cargo Hook/Load Weigh Kit is installed in accordance with Supplemental Type Certificate (STC) NO. SR00896SE. The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures and performance information not contained in this supplement, consult the basic Rotorcraft Flight Manual.

Kit P/N 200-267-02 includes the cargo hook (P/N 528-029-00), a link assembly which serves to attach the cargo hook to the Bell "horseshoe" suspension frame, and a manual release cable to connect the cargo hook's release mechanism to the Bell internal manual release system.

Kit P/N 200-390-00 is the same as the 200-267-02 kit except it includes a load weigh system. The load weigh system includes a pin load cell at the cargo hook (P/N 528-029-00), a load weigh indicator installed in the cockpit and an interconnecting wire harness. Its purpose is to provide the pilot with an indication of the weight of the external load carried by the helicopter.

Kit P/N 200-389-00 is an upgrade kit for an operator with an Onboard Systems E-45 Load Weigh System installed. It utilizes the load weigh indicator and the internal wire harness of the E-45 load weigh system but replaces the link style load cell with the pin load cell. This kit does not include a cargo hook. It is intended for an operator with an Onboard Systems cargo hook P/N 528-023-01 or 528-029-00 already installed. If this kit is installed with cargo hook P/N 528-023-01, this RFMS is to be used in conjunction with the RFMS included with the applicable cargo hook kit.



Rotorcraft Flight	
Manual Supplement	

Cargo Hook Kit

Document Number 121-059-00

3 of 13

FAA Approved NOV 3 0 2015

1. OPERATING LIMITATIONS

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remain applicable and are complemented by the following.

Operating Restrictions

With a load attached to the cargo hook, operation shall be conducted in accordance with the respective national operational requirements. For US operators 14 CFR part 133 is applicable.

The cargo hook kit configurations (as installed in accordance with this STC SR00896SE) <u>do not</u> meet the 14 CFR part 27 certification requirements for Human External Cargo (HEC).

NOTICE

The cargo hook equipment certification approval does not constitute operational approval; operational approval for external load operations must be granted by the local Aviation Authority.



The link assembly is designed to allow the cargo hook to pivot and align with the external load in all directions with limits to protect the cargo hook and manual and electrical release cables from damage. Take precautions to prevent external load angles which exceed the limits of rotation provided by the link assembly as the load may not be releasable in this position.



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page 4 of 13

1. **OPERATING LIMITATIONS** continued

Weight Limitations

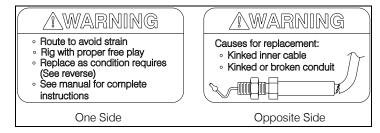
Consult the Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell for Weight Limitations.

The maximum weight to be carried on the cargo hook is the lesser of that specified by the Flight Manual Supplement – Cargo Hook issued by Bell for your particular model or 1500 lbs (680 kg).

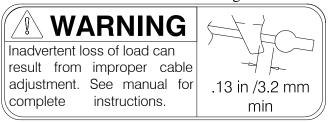
Placards and Markings

The following placards are applicable to these kits.

Located on the manual release cable near the cargo hook:



Located on the bottom of the cargo hook:





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

FAA Approved

5 of 13

NOV 3 0 2015

2. NORMAL PROCEDURES

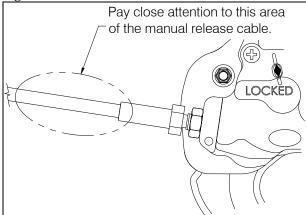
The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remain applicable and are complemented by the following.

Pre-flight Check

Prior to a flight involving external load operations perform the following procedures. If the procedures are not successful do not use the equipment until the problem has been corrected.

- 1) Check all mounting fasteners to ensure that they are tight.
- 2) Check the electrical connector for damage.
- 3) Check the case and covers for cracks and damage.
- 4) Check the load beam for gouges and cracks.
- 5) Check the manual release cable for damage, paying close attention to the flexible section at the area of transition to the end fitting (see below). In this area, check for splitting of the heat shrink and kinked or broken conduit underneath and any sign of separation from the steel end fitting.

Figure 1 Manual Release Cable Check





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page 6 of 13

Pre-flight Check continued

- 6) Pivot the cargo hook and the link assembly directly above it in the side to side and fore/aft directions and verify that they rotate freely about their pivot points.
- 7) Pivot the cargo hook and the link assembly directly above it in the side to side and fore/aft directions and verify that the manual release cable and the electrical harness(es) are not pulled taut in any cargo hook location. The manual release cable and electrical harness must not be the stops which prevent the cargo hook from moving throughout its range of motion.
- 8) Cycle the electrical release mechanism to ensure proper operation. Pressing the CARGO RELEASE switch on the cyclic should cause the cargo hook load beam to open. The cargo hook may be returned to the locked position by manually pushing up on the load beam. The load beam should snap shut. The hook may be flown in the open position to facilitate loading by a ground crew.

NOTICE

The cargo hook interfaces with the rotorcraft's electrical release system as supplied by Bell. Consult the Flight Manual Supplement – Cargo Hook for operation of electrical release system.



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page FAA Approved 7 of 13 NOV 3 0 2015

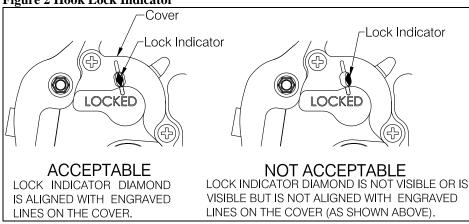
Pre-flight Check continued

9) Cycle the manual release mechanism to ensure proper operation. Pull the manual release lever in the cockpit. The cargo hook load beam must open. Return the cargo hook load beam to the locked position by manually pushing up on the load beam. The load beam should snap shut. Verify that the hook lock indicator on the side of the hook returns to the fully locked position.



In the fully locked position the hook lock indicator must align with the lines on the manual release cover (see Figure 2).

Figure 2 Hook Lock Indicator





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

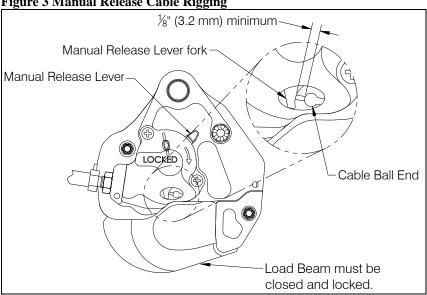
Rev. 0

Page 8 of 13

Pre-flight Check continued

10) Check the manual release cable rigging through the window in the cargo hook manual release cover. Rotate the manual release lever clockwise to remove the free play (the free play is taken up when the hook lock indicator begins to move, this is also readily felt as the lever rotates relatively easily for several degrees as the free play is taken up) and hold it in this position while checking the gap between the release lever fork and the cable ball end as shown below. Visually check that there is approximately a minimum gap of 1/8" (3.2 mm) as shown in Figure 3.

Figure 3 Manual Release Cable Rigging





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

9 of 13

FAA Approved NOV 3 0 2015

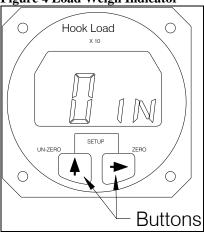
Pre-flight Check continued

The following step only applies if the load weigh system (included with kit P/N 200-389-00 and 200-390-00) is installed.

1) Initialize the Load Indicator per the following:

Power on the Load Indicator and allow it to warm up for 5 minutes (with no load on the hook). Press both Indicator buttons at the same time to go to the setup mode. Scroll through the menu, using the left button, until "0 in" is displayed (see Figure 4), then press the right button. Remove any weight from the cargo hook that is not to be zeroed out and press either button to complete the procedure.

Figure 4 Load Weigh Indicator





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page 10 of 13

Cargo Hook Rigging

Extreme care must be exercised in rigging a load to the Cargo Hook. The following illustration shows the recommended rigging configuration and rigging configurations to avoid.



The examples shown are not intended to allpossibilities. It represent responsibility of the operator to ensure the hook will function properly with the rigging.



Nylon type straps (or similar material) or rope must not be used directly on the cargo hook load beam. If nylon straps or rope must be used they should be first attached to a steel primary ring. Verify that the ring will freely slide off the load beam when it is opened. Only the primary ring should be in contact with the cargo hook load beam. See Figure 5.



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

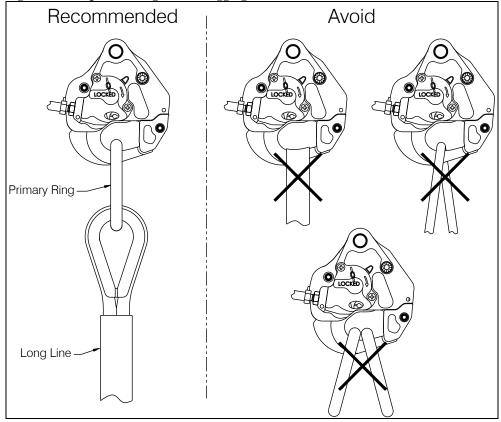
Document Number 121-059-00

FAA Approved

11 of 13

NOV 3 0 2015

Figure 5 Examples of Cargo Hook Rigging





Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

Page 12 of 13

3. EMERGENCY PROCEDURES

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remain applicable.

4. **PERFORMANCE**

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remain applicable.



Rotorcraft Flight Manual Supplement

Cargo Hook Kit

Document Number 121-059-00

Rev. 0

FAA Approved NOV 3 0 2015 13 of 13