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FAA APPROVED

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

Bell Models
206L, 206L-1, 206L-3, 206L-4, 407

R/N _____ S/N _____

FAA Approved: _____
for Manager, Seattle Aircraft Certification Office

Date: 11 DEC 14

Revised:

INTRODUCTION

This supplement must be attached to the appropriate Bell FAA approved Rotorcraft Flight Manual when an Onboard Systems 200-258-00, 200-259-00, or 200-259-01 Cargo Hook Suspension Kit is installed in accordance with Supplemental Type Certificate (STC) NO. SR00898SE. 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 and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell Helicopter.

The 200-258-00, 200-259-00, and 200-259-01 Cargo Hook Suspension Kits include the cargo hook, suspension beam assembly, and pillow blocks. The suspension beam assembly supports the cargo hook and allows it to align itself with a load. The pillow blocks support each end of the suspension beam assembly and attach to the rotorcraft's hard points. In addition the kits include the external manual release cable and external electrical harness. These items interface with the fixed cargo hook provisions on the rotorcraft.

The 200-259-00 and 200-259-01 kits include a load weigh system. The load weigh system consists of a cockpit-mounted indicator, a load cell above the cargo hook, and the interconnecting wiring harness.

1. LIMITATIONS

1-3. Types of Operation

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

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 SR00898SE) do not 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 load weigh indicator (included with kit P/N 200-259-00 and 200-259-01) shall be operated in accordance with Section 3 of Owner's Manual 120-092-00.

1-6 Weight and Center of Gravity

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

The maximum weight to be carried on the cargo hook is the lesser of that specified by the Bell Flight Manual Supplement – Cargo Hook issued by Bell for your particular model or 2650 lbs (1202 kg).

1-20 Placards

The following placards are applicable to all of the kits applicable to this STC.

- Mounted on the bottom of the suspension beam assembly:

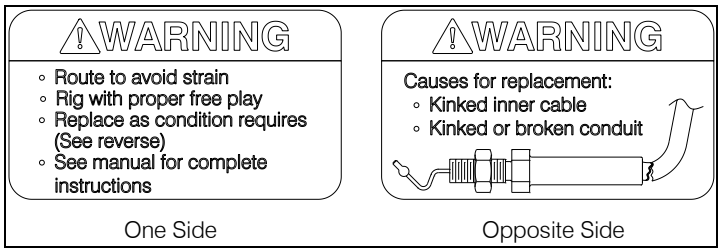
EXTERNAL LOAD LIMIT 407 2650 LBS 206L 2000 LBS

Conversions:

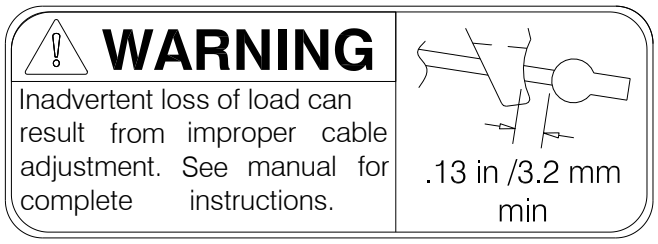
2650 LBS = 1202 kg

2000 LBS = 907 kg

- Located on the manual release cable near the cargo hook:



- Located on the bottom of the cargo hook:



1-20 Placards continued

When an Onboard Systems kit P/N 200-259-00 or 200-259-01 is installed the following placards apply.

- Mounted adjacent to the Onboard Systems load weigh indicator in full view of pilot or co-pilot:

TURN THE WEIGHING SYSTEM OFF WHEN NAVIGATION EQUIPMENT IS IN USE. NO AIRCRAFT OPERATION SHOULD BE PREDICATED ON THE READING OF THE ONBOARD WEIGHING SYSTEM.

- Mounted adjacent to the power switch and the circuit breaker in full view of the pilot and co-pilot.

ELECTRONIC WEIGHING SYSTEM

2. NORMAL PROCEDURES

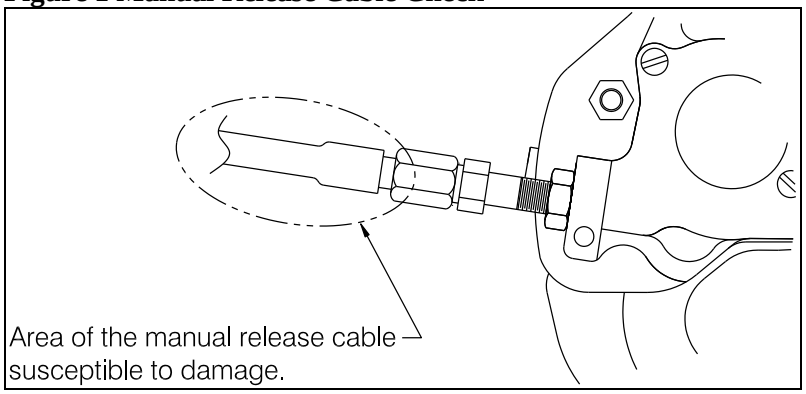
The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remain applicable and are complemented by the following.

2-3 Pre-flight Check

Before 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 cargo hook fasteners to ensure that they are tight.
2. Check the cargo hook case and covers for cracks and damage.
3. Check the cargo hook load beam for gouges and cracks.
4. Check the electrical connector for damage and security.
5. Check the manual release cable for damage, paying close attention to the flexible conduit at the area of transition to the cargo hook end fitting (see below). Check for kinked, broken, or splitting of the outer black conduit in this area and separation of the conduit from the steel end fitting.

Figure 1 Manual Release Cable Check



2. NORMAL PROCEDURES continued

2-3 Pre-flight Check continued

6. 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 it. The load beam should snap shut. The cargo hook may be flown in the open position to facilitate loading by a ground crew.

NOTICE

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

7. Cycle the cargo hook's electrical release mechanism to ensure proper operation. Pressing the CARGO RELEASE switch on 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.

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 the electrical release system.

2. NORMAL PROCEDURES continued

2-3 Pre-flight Check continued

8. Move the cargo hook and the suspension system throughout their full ranges of motion to ensure the manual release cable and electrical harnesses have enough slack. The cable or electrical harnesses must not be the stops that prevent the cargo hook or suspension from moving freely in all directions.

9. Move the cargo hook back and forth on the suspension beam to ensure that it rolls freely and that there are no obstructions within the beam.

When an Onboard Systems 200-259-00 or 200-259-01 Cargo Hook Suspension System with Load Weigh is installed, perform the following additional procedure:

1. Zero the load weigh system or tare the weight on the cargo hook that is not wanted, such as the weight of a cargo net or long line, by depressing the zero button on the indicator.

2. NORMAL PROCEDURES continued

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.

⚠ WARNING

The example shown is not intended to represent all possibilities. It is the responsibility of the operator to ensure the hook will function properly with the rigging.

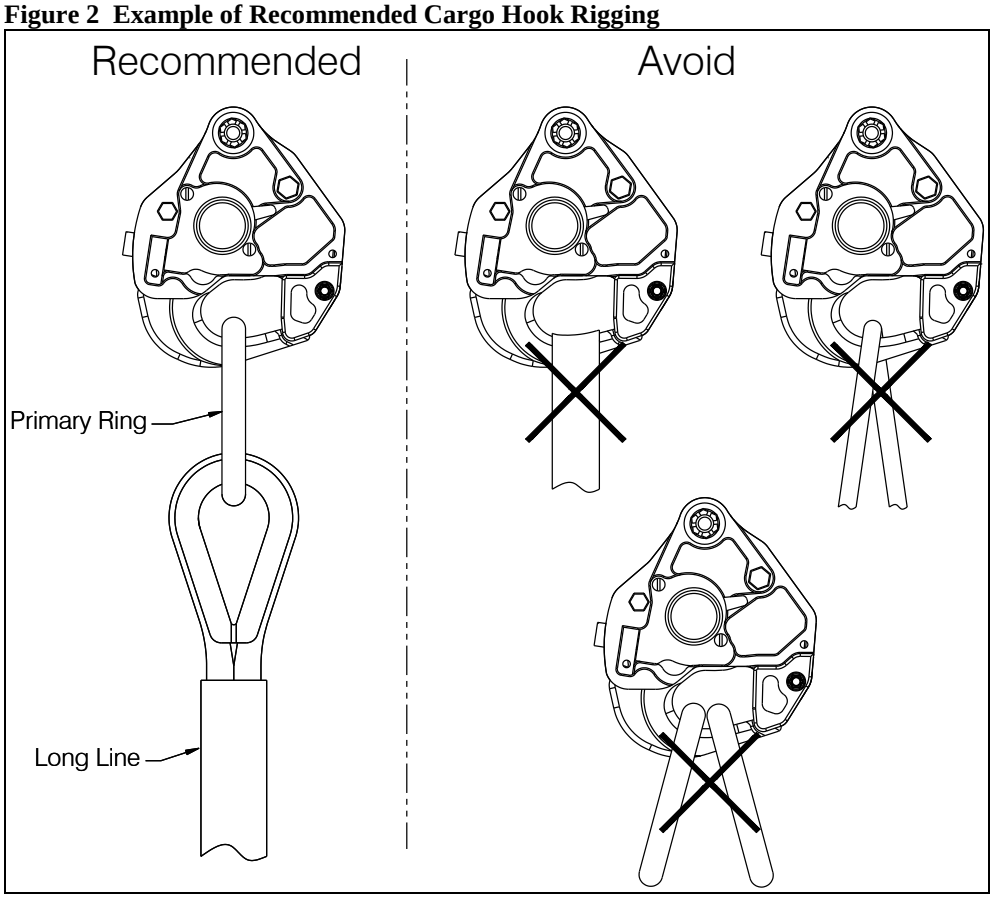
Nylon Type Straps or Rope

⚠ WARNING

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 2.

2. NORMAL PROCEDURES continued

Figure 2 Example of Recommended Cargo Hook Rigging



2. NORMAL PROCEDURES continued

Trailing Loads

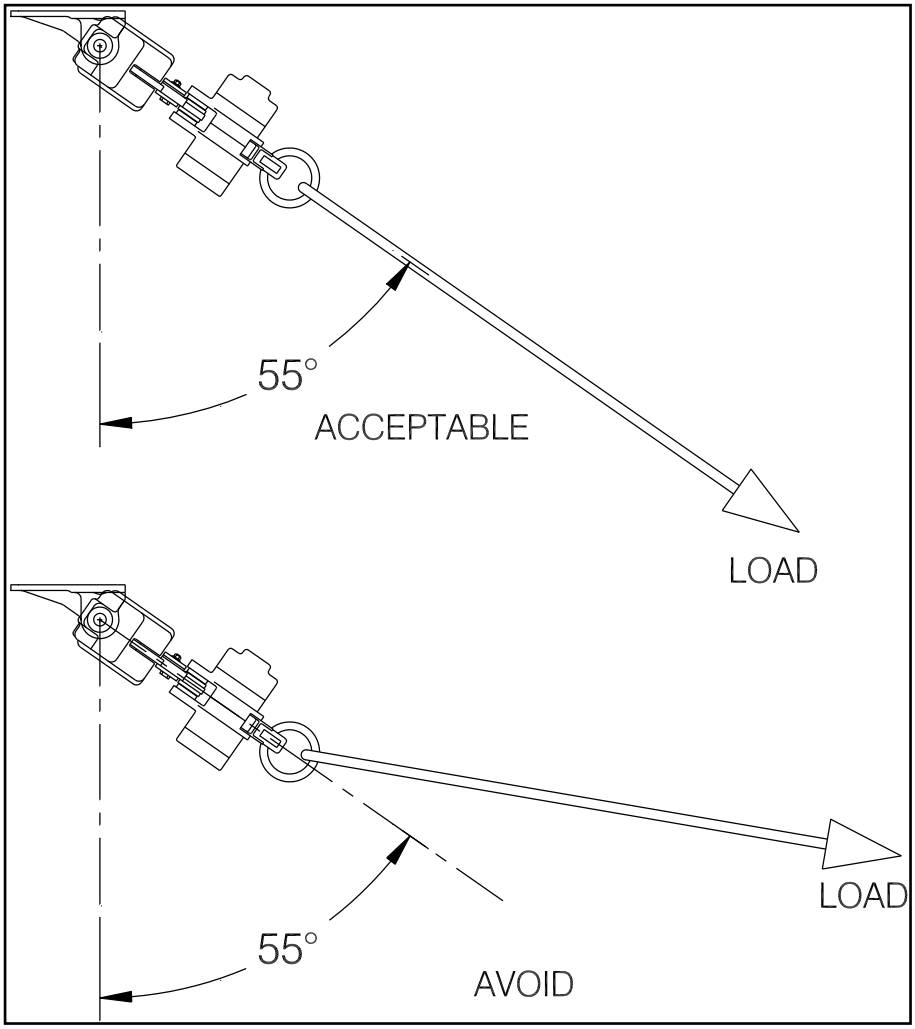
WARNING

The suspension system is designed to accommodate loads through an angle of up to 55° from vertical —both forward and aft. However, when loads exceed 55°, the travel stops on the Pillow Blocks prevent the Suspension Beam from further rotation and cause bending stresses to be carried by the Load Cell. Care should be taken to avoid this flight regime.

The situation is most likely to occur when flying at high speeds with light loads, which have large aerodynamic drag, for example - an empty fire or fertilizer bucket or an empty long line. Figure 3 illustrates the adverse loading situation.

2. NORMAL PROCEDURES, continued

Figure 3 Trailing Loads



3. EMERGENCY PROCEDURES

The Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remains applicable.

4. PERFORMANCE

The Rotorcraft Flight Manual Supplement – Cargo Hook issued by Bell remains applicable.

When an Onboard Systems 200-259-00 or 200-259-01 Cargo Hook Suspension System with Load Weigh is installed the following applies. The Load Weigh System is designed and installed as a means of MONITORING the load (weight) suspended from the cargo hook. Functional and performance characteristics have not been determined on the basis of the load cell indication or display. Therefore, this instrument shall NOT be used as a primary indication of performance and flight operation must NOT be predicated on its use.