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**ROTORCRAFT FLIGHT MANUAL
SUPPLEMENT**

**Onboard Systems
Sling Suspension System
With Talon LC Hydraulic Cargo Hook**

**Eurocopter Helicopter Models
AS350B, AS350B1, AS350B2, AS350B3
AS350BA, & AS350D**

R/N _____ S/N _____

FAA Approved: Donald N. Wilson
for Manager, Seattle Aircraft Certification Office

Date: 23 July 08

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INTRODUCTION

This supplement must be attached to the appropriate FAA approved Eurocopter Rotorcraft Flight Manual when an Onboard Systems 200-282-01 or 200-282-02 Cargo Hook Sling Suspension is installed in accordance with Supplemental Type Certificate (STC) NO. SR01862SE. In addition it is necessary to obtain Eurocopter's EXTERNAL LOAD TRANSPORT "CARGO SLING" Flight Manual Supplement for your particular AS350 model helicopter.

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 Eurocopter's EXTERNAL LOAD TRANSPORT "CARGO SLING" Flight Manual Supplement for your particular AS350 model helicopter.

The 200-282-01 and 200-282-02 Cargo Hook Sling Suspension Systems are comprised of:

- A "sling" suspension that supports the cargo hook and includes the load cell.
- An electrical release system that provides means for release by pilot actuation of the push button on the control console and a switch on the cyclic.
- A hydraulic release system, which provides an additional means of releasing a cargo hook load. A lever mounted to the collective actuates it.
- A load weigh system, which is comprised of an indicator mounted to the RH door pillar within the cockpit and a load cell above the cargo hook.

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I. LIMITATIONS

I.1 Airspeed Limits

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for airspeed limits when an external load is attached.

Maximum operational air speed with external loads is dependent upon the load configuration and sling length. It is the operator's responsibility to establish the maximum operational speed for each specific configuration.

I.2 Type of Operation

With a load attached to the cargo hook, operation shall be conducted in accordance with the respective national operational requirements. For U.S. operators FAR Part 133 is applicable.

This cargo hook is approved for non-human cargo, class B rotorcraft-load combinations only.

The helicopter may also be operated with the suspension removed and the fixed provisions portion of the kit installed only. The fixed provisions include the internal hydraulic release system, internal electrical harnesses, and cargo hook related equipment in the cockpit.



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I.3 Weight and CG

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for longitudinal cg limits when an external load is attached.

I.4 Cargo Hook Load

The lesser of that specified by the Eurocopter "Cargo Sling" Flight Manual Supplement for your particular AS350 model or 1660 lbs (750 kg).

I.5 Placards

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for placard information

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II. NORMAL PROCEDURES

II.1 Daily or Pre-Flight Check

Before each cargo hook use perform the following procedures. If the procedures are not successful do not use the equipment until the problem has been corrected.

II.1.1 Exterior Check

1. Check all mounting fasteners to ensure that they are tight.
2. Check the electrical connections for damage and security.
3. Check slave cylinder on cargo hook for signs of oil leakage.
4. Check the cargo hook for cracks and damage.
5. Check the cargo hook load beam for gouges and cracks.
6. Swing the hook and the suspension assembly to their full extremes to verify that they do not reach the limit of range of motion of the electrical harnesses, ground strap, and hydraulic hose.



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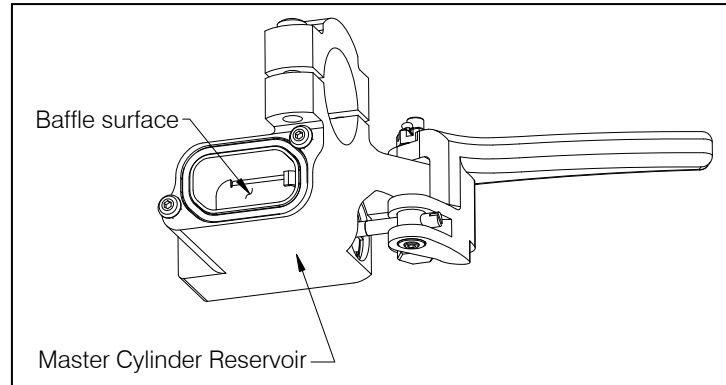
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II.1.2 Interior Check

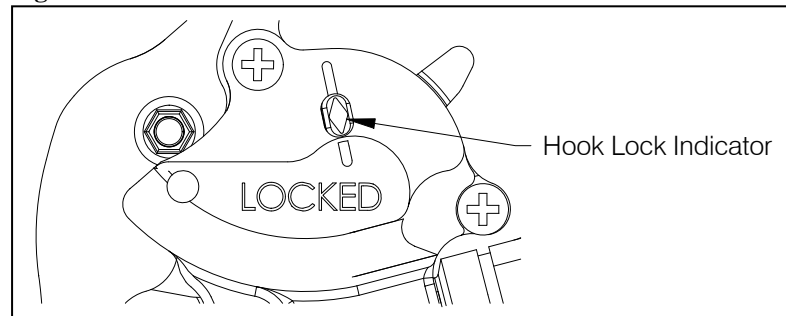
1. Check the fluid level in the master cylinder reservoir. The master cylinder reservoir features a transparent lid through which the fluid level can be checked. Hydraulic fluid must be visible over the baffle surface.

Figure 1 Fluid Level Check



2. Cycle the hydraulic release system to ensure proper operation. Pulling the release lever on the collective should cause the cargo hook 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. 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 should align with the lines on the cover (see Figure 2).

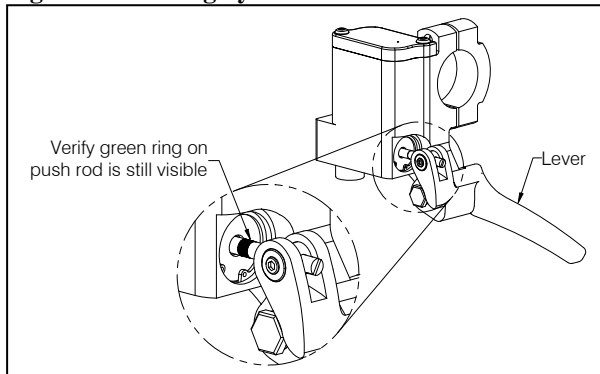
Figure 2 Hook Lock Indicator



II.1.2 Interior Check continued

3. Check the hydraulic release system for excess air in the lines by pulling the release lever firmly until it bottoms out. Check the push rod position (see Figure 3). If some of the green ring on the push rod is visible, the system is ready for use. If none of the green ring is visible, the system needs to be bled. Refer to applicable Owner's Manual or ICA for bleed instructions.

Figure 3 Checking System for Excess Air



4. Cycle the electrical release mechanism to ensure proper operation. Pressing the CARGO RELEASE switch on cyclic should cause hook to open. Hook may be returned to the locked position by manually pushing up on the load beam. The hook should snap shut. The hook may be flown in the open position to facilitate loading by a ground crew.

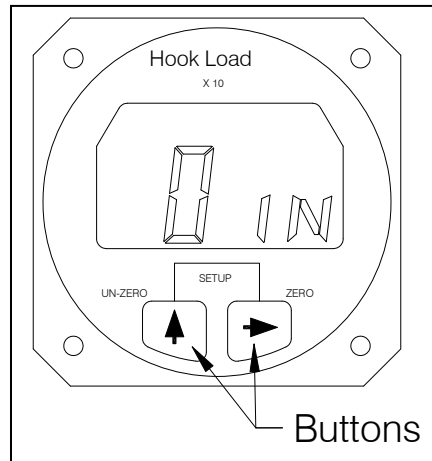
NOTE

The cargo hook kits use the OEM electrical release switch located on the cyclic. Refer to the Eurocopter Rotorcraft Flight Manual Supplement for operational information for the rotorcraft's cargo hook electrical release system.

II.1.2 Interior Check continued

5. Power on the hook 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 until the symbol “0 in” is displayed, then press the right button. Remove any weight that is not to be zeroed out and press either button to complete the procedure.

Figure 4 Load Indicator



II.2 Cargo Hook Rigging

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



The example shown is not intended to represent all possibilities. It is the responsibility of the operator to assure the hook will function properly with the rigging. Some combinations of small primary rings and large secondary rings could cause fouling during release.

Nylon Type Straps or Rope



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.

II.3 In Flight

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for normal in flight procedures.



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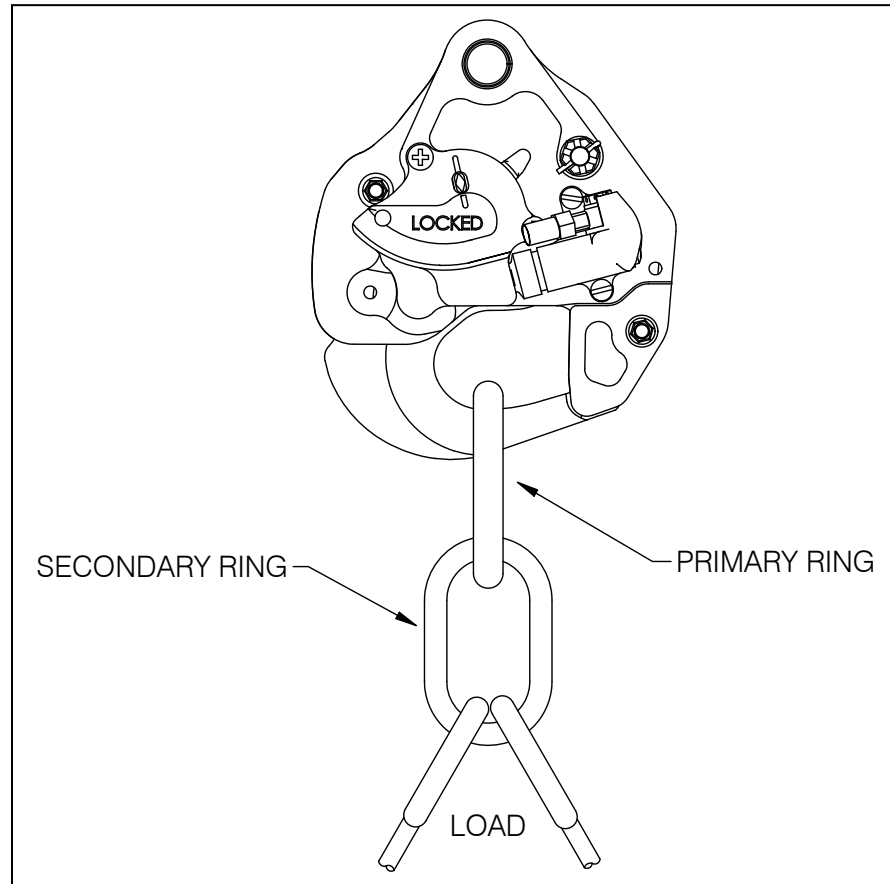
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Figure 5 Example of Recommended Cargo Hook Rigging



III. EMERGENCY PROCEDURES

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for emergency procedures.

III.1 Cargo Hook Fails to Release Electrically.

In the event that the Cargo Hook will not release the external load electrically, proceed as follows:

1. Pull the hydraulic release lever to release the external load.

IV. PERFORMANCE

The basic Flight Manual and “Cargo Sling” Flight Manual Supplement issued by Eurocopter remain applicable when there is no external load attached.

When there is an external load attached, performance will be reduced depending on its size, weight, and shape.

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 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.



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