

ONBOARD SYSTEMS
INTERNATIONAL

SERVICE BULLETIN
Document No. 159-026-00 Rev. 1
Date: August 31, 2009

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www.OnboardSystems.com

Subject: Cargo Hook enhanced safety.

Reference: Alert Service Letter 159-025-00, May 5, 2009

Helicopters Affected: All helicopters with an Onboard Systems cargo hook P/N 528-029-00 or 528-029-01 installed. The applicable kit part numbers for these cargo hooks and their approved installations are:

Kit P/N	Approved for installation on:
200-261-01	Eurocopter AS350 Series and EC130B4
200-264-01	MD 369 Series & 500N
200-264-02	MD 600N
200-326-00	Robinson R44
200-327-00	Robinson R44 II
200-327-01	Robinson R44 II
200-328-00	Bell 407
200-329-00	Bell 407
200-353-00	Eurocopter AS350 Series

Compliance: Recommended within 6 months of the date of this bulletin.

Description: Onboard Systems has received reports of inadvertent load releases when using the 528-029-XX series Cargo Hook. Upon investigation it was determined that in certain cases the manual release cable end can bind on the inside of the manual release cover after the manual release system is cycled. This binding can prevent the cargo hook from completely re-latching and result in a subsequent inadvertent load release. This is most likely to occur if the manual release cable uses a large cable termination, if the cable strands after the termination are too long or the cable end is kinked or bent.

The action(s) recommended by this service bulletin are described below.

Action: Replace the cargo hook's existing Manual Release Cover (P/N 290-898-00) with Manual Release Cover P/N 290-898-01.

The Manual Release Cover P/N 290-898-01 incorporates additional clearance to prevent binding of the manual release cable end as well as a window to facilitate checking for proper manual release cable rigging.



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Approval: The engineering design aspects of this bulletin are FAA/DER approved.

Manpower: Approximately 0.25 man-hours will be required.

Required Material: The following material is required for accomplishment of this bulletin and may be obtained from Onboard Systems:

<u>Qty</u>	<u>P/N</u>	<u>Description</u>
(1)	290-898-01	Manual Release Cover

Special Tools: None

Weight and Balance: Not affected

Publications Affected:

Cargo Hook Service Manuals: 122-017-00, 122-018-00

The latest manual revisions are available through Onboard Systems' website at www.onboardsystems.com.

Point of Contact: For additional assistance, contact Keys Miller at Onboard Systems. Phone: 360-546-3072 or 1-800-275-0883. Email: keys@onboardsystems.com.

Disposition of Parts Removed: Destroy on site.



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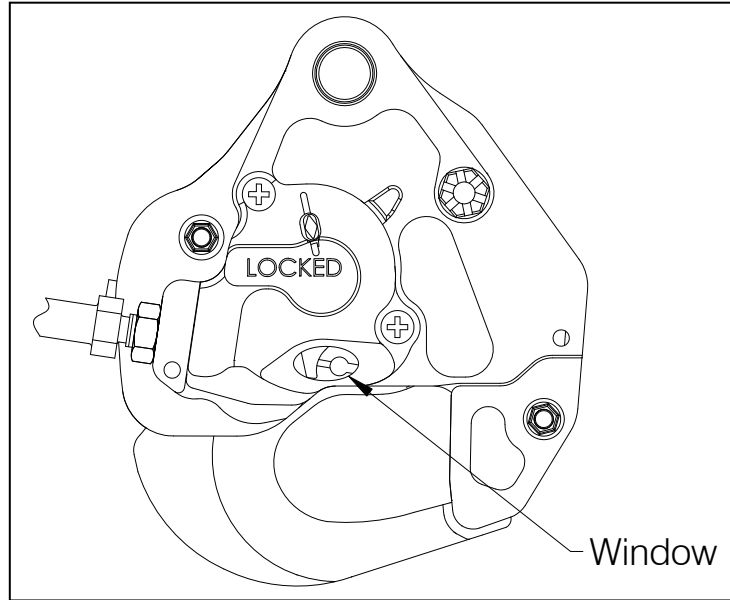
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Accomplishment Instructions:

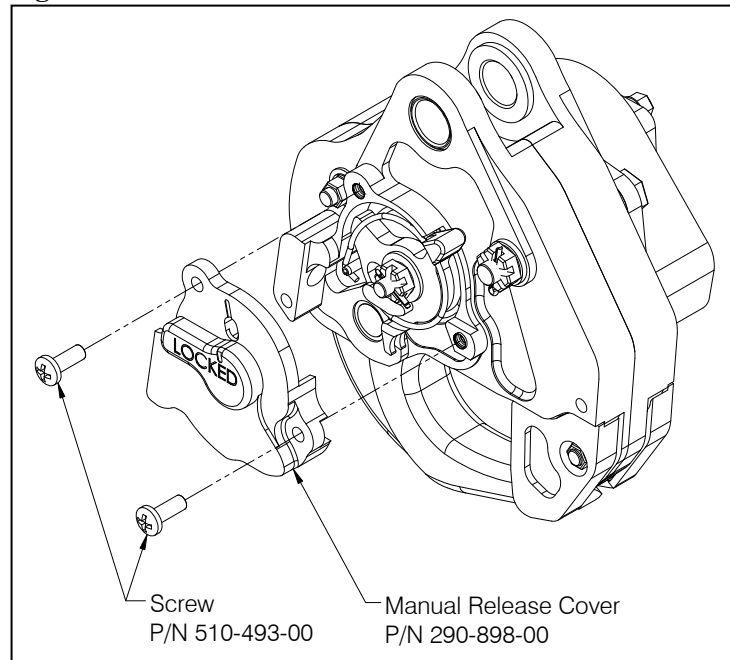
1. Check the cargo hook manual release cover to determine whether this service bulletin has been previously complied with. If the manual release cover has an elliptical window in it, this service bulletin has been complied with. Accomplishment of this bulletin does not affect the part number of the Cargo Hook.

Figure 1 Manual Release Cover Identification



2. Remove existing manual release cover (P/N 290-898-00) by removing two screws (P/N 510-493-00) as shown in Figure 2 below. Retain the screws.

Figure 2 Manual Release Cover Removal



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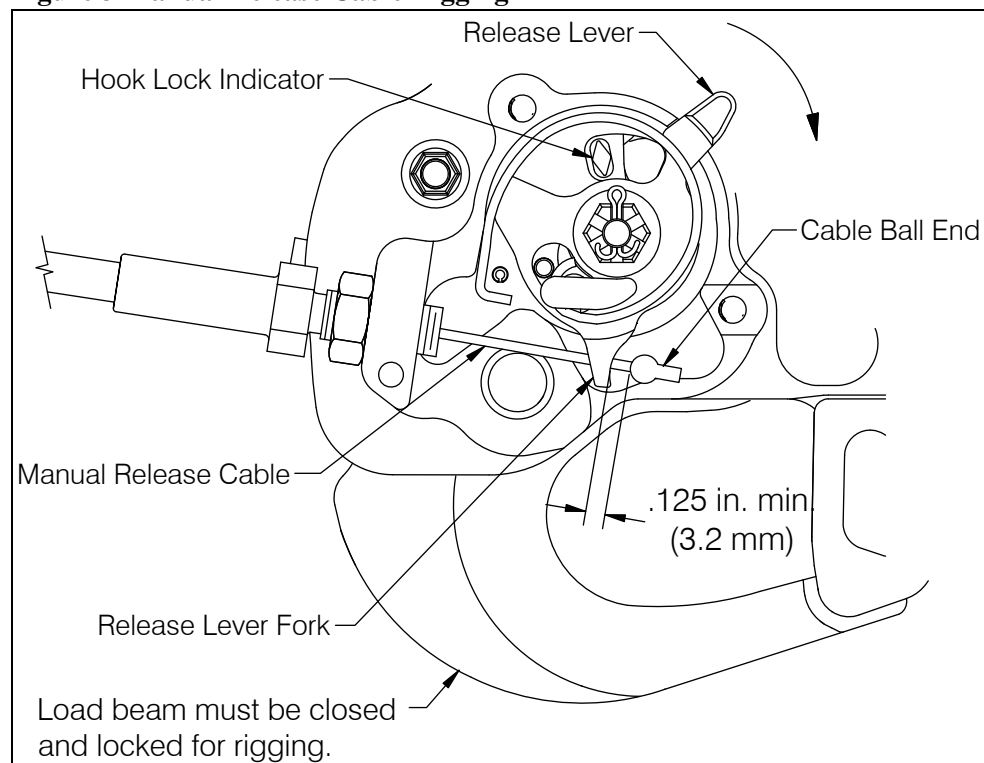
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3. Inspect the manual release cable end for frayed wires extending past the cable ball end termination and for kinks or bends. Grind off frayed wires flush to cable ball end, as necessary. Place the cable ball end into the manual release lever fork.
4. Ensure that the manual release cable is rigged properly per the following: Rotate the release lever in the clockwise direction to remove 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 measure the gap between the release lever fork and cable ball end as shown in Figure 3 with the manual release lever in the cockpit in the non-release position. If necessary, adjust the manual release cable system to obtain a minimum of 1/8 in. (3.2 mm) of gap at the release lever fork.



Manual release cable rigging must be done with the cargo hook in the closed and locked position.

Figure 3 Manual Release Cable Rigging



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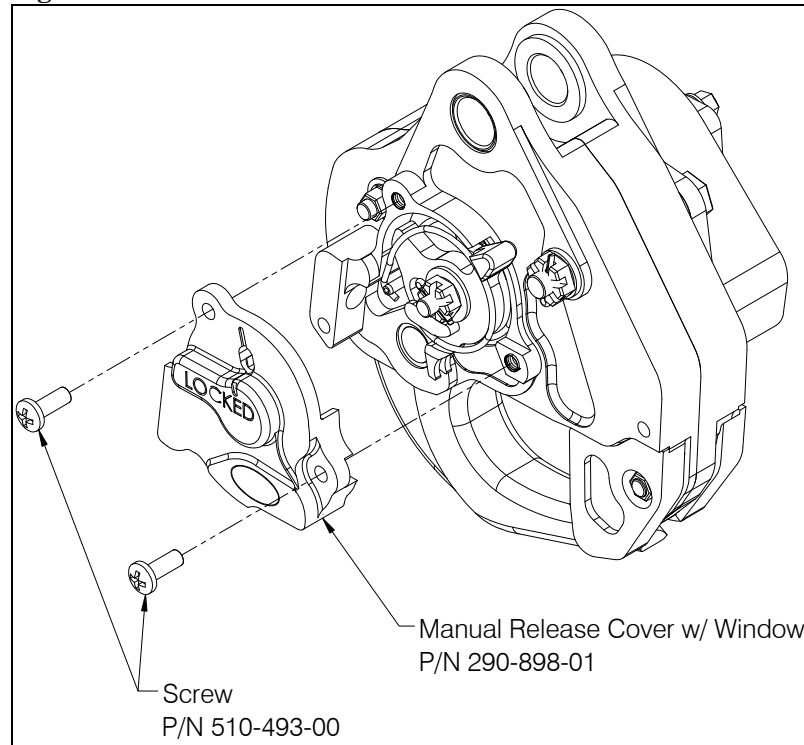
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5. Install the new Manual Release Cover with window (P/N 290-898-01) onto the cargo hook with the screws (P/N 510-493-00) that were removed on the previous step.

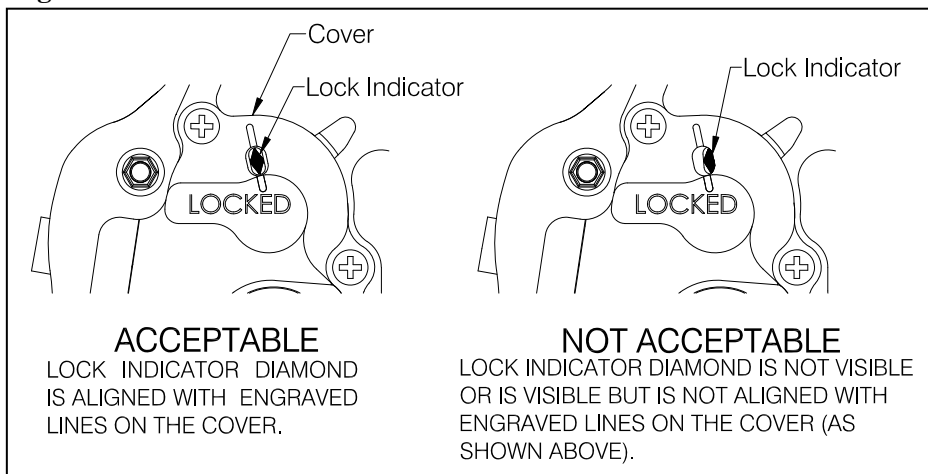
Figure 4 Windowed Manual Release Cover Installation



Installation Check-out

1. Activate the manual release system by pulling the release lever in the cockpit. The cargo hook must release. Reset the cargo hook load beam by hand after release. Verify that the hook locked 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 5).

Figure 5 Hook Locked Indicator



2. Make appropriate logbook entry.