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3,600 Pound Keeperless Cargo Hook Kit

For The

MD Helicopters' 369 Series, 500N, and 600N Models

STC SR00892SE

System Part Numbers 200-264-01, 200-264-02

Owner's Manual

Owner's Manual Number 120-096-01
Revision 1
March 15, 2017

13915 NW 3rd Court Vancouver Washington 98685 USA
Phone: 360-546-3072 Fax: 360-546-3073 Toll Free: 800-275-0883
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Record of Revisions

Revision	*Date*	*Page(s)*	*Reason for Revision*
0	08/04/08	All	Initial Release
1	03/15/17	All	Added optional installation configuration with quick release pin. Added references in the installation instructions to newer attach point kits 200-231-02 and 200-231-03. General updates throughout.

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Section 1
General Information

Introduction

The 200-264-01 cargo hook kit is approved for installation with the following MD Helicopter (MDHI) models which use the 369H92105-501 cargo hook assembly.

369D	369HS
369E	369HM
369F	369HE
369FF	500N

The 528-029-00 Cargo Hook, 270-073-00 Electrical Release Cable, and 268-005-01 Manual Release Cable included in this 200-264-01 cargo hook kit are suitable as replacements for the cargo hook (Breeze-Eastern P/N 17149-4), electrical release cable, and manual release cable in the MD Helicopters' 369H92105-501 cargo hook assembly.

The 200-264-02 cargo hook kit is approved for installation with MD Helicopter 600N models which use the 369H92105-503 or 369H92105-505 cargo hook assembly.

Safety Labels

The following definitions apply to safety labels used in this manual.

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Draws the reader's attention to important or unusual information not directly related to safety.

Used to address practices not related to personal injury.

Bill of Materials

The following items are included with the Cargo Hook Kit, if shortages are found contact the company from whom the system was purchased.

Part No.	Description	200-264-01 Quantity	200-264-02 Quantity
528-029-00	Cargo Hook	1	1
270-073-00	Electrical Release Harness	1	-
270-073-02	Electrical Release Harness	-	1
268-005-01	Manual Release Cable	1	-
268-005-02	Manual Release Cable	-	1
290-360-01	Travel Limit Bumper	1	1
290-361-00	Bumper Pads	2	2
510-178-00	Cotter Pin	1	1
510-170-00	Nut	1	1
510-174-00	Washer	1	1
510-183-00	Washer	2	2
290-332-00	Attach Bolt	1	1
120-096-01	Owner's Manual	1	1
121-006-01	RFM Supplement	1	1
122-017-00	Cargo Hook CMM	1	1
123-003-01	ICA Maintenance Manual	1	1

Specifications

Table 1-1 Specifications (528-029-00 Cargo Hook)

Design load	3,600 lbs. (1,633 kg.)
Design ultimate strength	13,500 lbs. (6,123 kg.)
Electrical release capacity	9,000 lbs. (4,082 kg.)
Mechanical release capacity	9,000 lbs. (4,082 kg.)
Force required for mechanical release at 3,600 lb.	8 lb. Max.(.600" travel)
Electrical requirements	22-32 VDC, 6.9 - 10 amps
Minimum release load	0 pounds
Unit weight	3.0 lbs. (1.4 kg.)
Mating electrical connector	PC06P8-2S

Theory of Operation

The primary elements of the Cargo Hook are the load beam, the internal mechanism, and a DC solenoid. The load beam supports the load and is latched through the internal mechanism. The DC solenoid and an external manual release cable provide the means for unlatching the load beam.

The load is attached to the load beam by passing the cargo sling ring into the throat of the load beam and pushing the ring against the upper portion of the load beam throat, which will initiate the hook to close. In the closed position, a latch engages the load beam and latches it in this position.

To release the load, the latch is disengaged from the load beam. With the latch disengaged, the weight of the load causes the load beam to swing to its open position, and the cargo sling slides off the load beam. The load beam then remains in the open position awaiting the next load.

A load release can be initiated by three different methods. Normal release is achieved by pilot actuation of the push-button switch in the cockpit. When the push-button switch is pressed, it energizes the DC solenoid in the Cargo Hook, and the solenoid opens the latch in the internal mechanism. In an emergency, release can be achieved by operating a mechanical release cable. The release cable operates the internal mechanism of the Cargo Hook to unlatch the load beam. The load can also be released by the actuation of a lever located on the side of the Cargo Hook.

Section 2
Installation Instructions

These procedures are provided for the benefit of experienced aircraft maintenance facilities capable of carrying out the procedures. They must not be attempted by those lacking the necessary expertise.

Cargo Hook Removal

If present, remove the MD Helicopters' supplied Cargo Hook from the aircraft by disconnecting the electrical release cable from the belly mounted bulk-head type connector. Disconnect the manual release cable from the cyclic stick release lever assembly and remove it from the attaching clamps along its entire length. Remove the single bolt used to attach the Cargo Hook to the airframe mounting bracket and separate the Cargo Hook from the aircraft.

Cargo Hook Installation

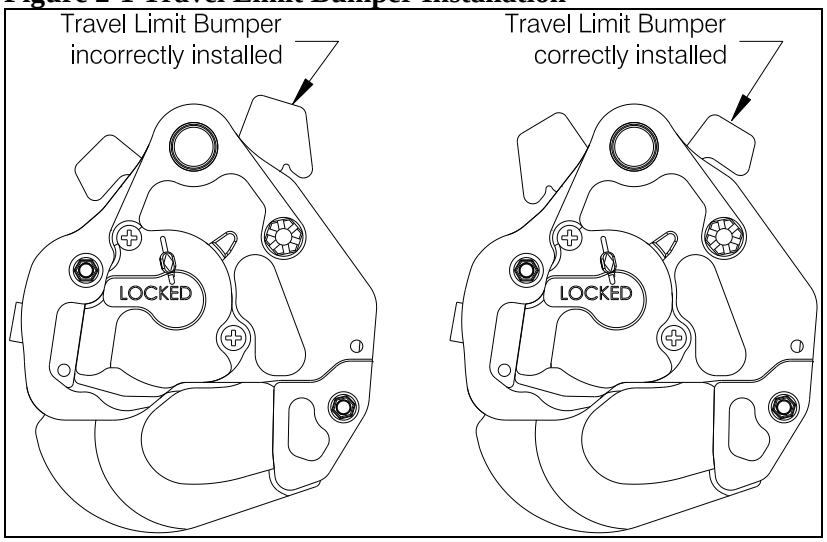
Inspect the helicopter's cargo hook attach point and attaching hardware to ensure that all components are in serviceable condition.

If the cargo hook kit is being installed with an Onboard Systems P/N 200-231-00 or 200-231-01 Attach Point Kit install the P/N 290-360-01 Travel Limit Bumper to the Cargo Hook as illustrated in Figure 2-1. The Travel Limit Bumper helps protect the aircraft skin and the release cables from excessive hook movement.

⚠ CAUTION

Do not use the cargo hook without the bumper if the cargo hook is being used with attach point kit P/N 200-231-00 or 200-231-01 or the MD Helicopters attach point.

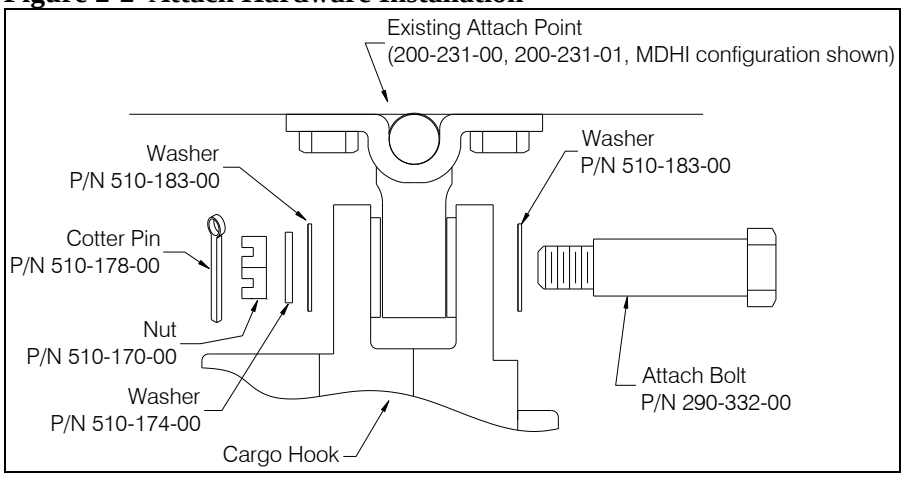
Figure 2-1 Travel Limit Bumper Installation



Cargo Hook Installation, continued

Apply grease (AeroShell 7 or equivalent) to the Attach Bolt (P/N 290-332-00) and install the cargo hook to the attach point using the Attach Bolt, washers, nut and cotter pin, as illustrated in Figure 2-2. The cargo hook load beam must point aft.

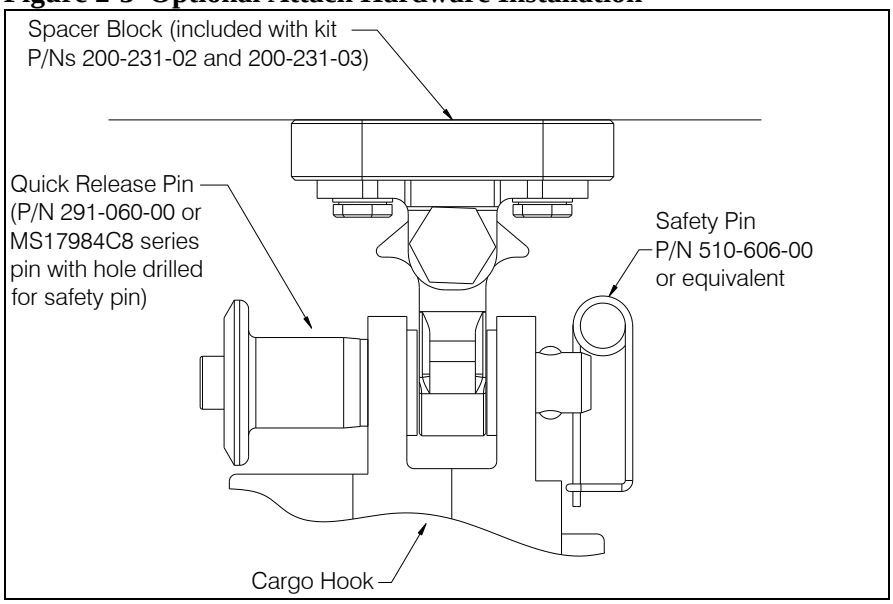
Figure 2-2 Attach Hardware Installation



Tighten nut on Attach Bolt to finger tight then rotate to previous castellation if necessary to insert cotter pin. Install and secure cotter pin.

To facilitate transition of the cargo hook between a side pull installation and the belly installation a quick release pin (P/N 291-060-00 or equivalent MS17984C8 series pin modified with a hole for safety pin) may be used if the cargo hook is installed with Attach Point Kit P/N's 200-231-02 or 200-231-03 only. Grease the shank of the pin with AeroShell 7 grease or equivalent before installing.

Figure 2-3 Optional Attach Hardware Installation

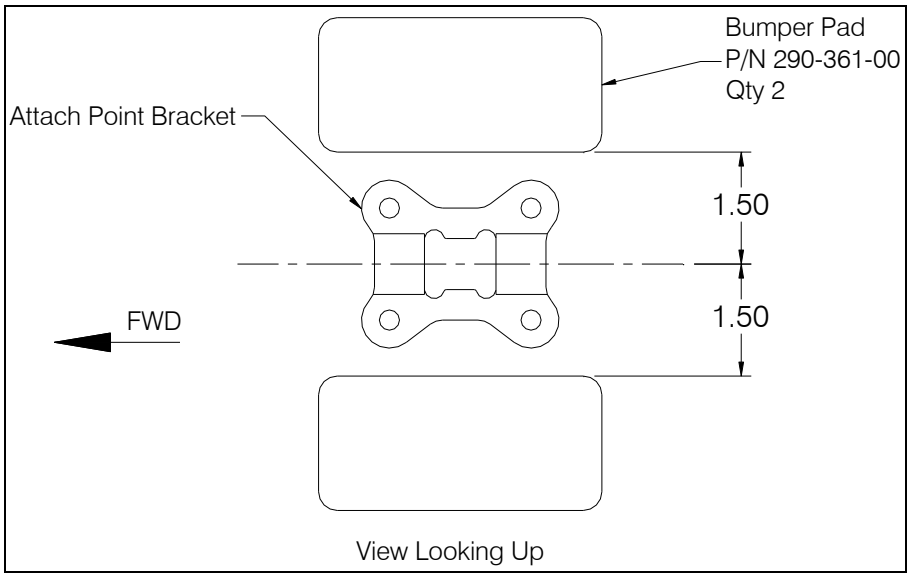


Cargo Hook Installation, continued

If the cargo hook kit is being installed with an Onboard Systems P/N 200-231-00 or 200-231-01 Attach Point Kit or the MD Helicopters attach point remove any existing hook bumper pads that may be attached to the A/C skin. Install the supplied P/N 290-361-00 Bumper Pads to the airframe skin in the location illustrated in Figure 2-3 with 3M trim cement.

If the Cargo Hook Kits are being installed with Onboard Systems Attach Point Kit P/N 200-231-02 or P/N 200-231-03 the bumper pads are NOT to be used.

Figure 2-4 Bumper Pads Installation



Cargo Hook Installation, continued

Remove the manual release cover from the cargo hook.

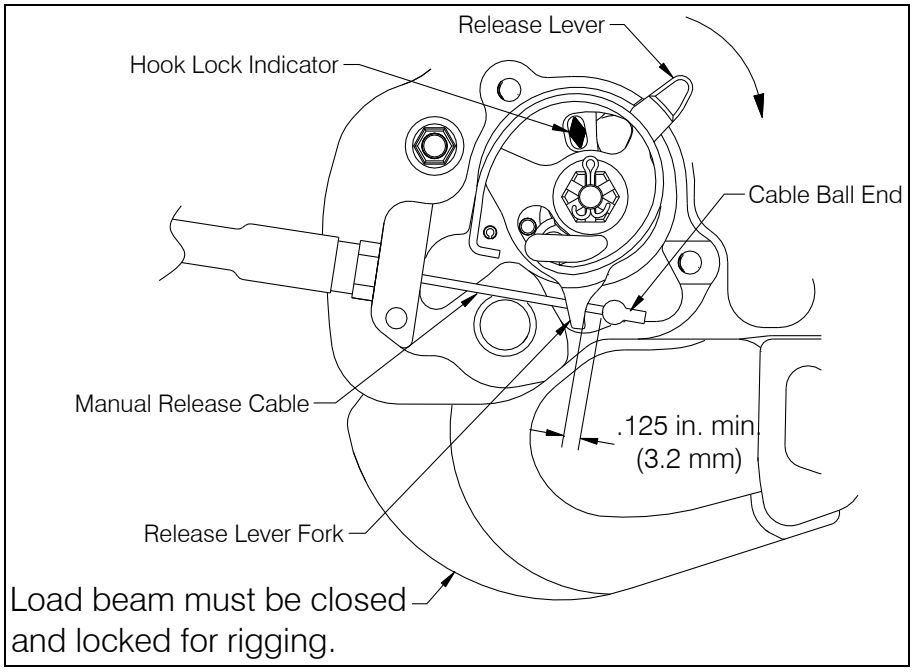
Thread the swaged end of the manual release cable into the cargo hook manual release boss on the hook side plate and tighten against the hook.

Place the cable ball end fitting into the hook manual release lever fork as illustrated in Figure 2-4.

Rotate the release lever in the clockwise direction to remove free play and hold in this position (the free play is taken up when the hook lock indicator begins to move). Measure the cable ball end free play with the manual release handle in the cockpit in the non-release position. Adjust the manual release cable system for a minimum of .125 inches (3.2 mm) of free play at the fork as shown in Figure 2-4.

Replace the cargo hook manual release cover when the rigging is complete.

Figure 2-5 Manual Release Cable Rigging



Cargo Hook Installation, continued

Route the electrical release harness and manual release cable and rig the cyclic stick release lever assembly following the MD Helicopters Installation and Maintenance Instructions, Publication No CSP-005 or later approved source.

Connect the cargo hook electrical release harness connector to the Cargo Hook and belly mounted bulk-head receptacle and safety wire the connector. Listed below is the pin out for the cargo hook connector and bulkhead receptacle.

CAUTION

Earlier versions of the Cargo Hook is equipped with a suppression diode that will be damaged if the Cargo Hook electrical connections are reversed. Do not attach the electrical connector until the polarity of the aircraft connector is determined to be compatible with the Cargo Hook connector listed in Table 2-1.

Table 2-1 Cargo Hook Connector

Pin	*Function*
A	Ground
B	Positive

Table 2-2 Bulkhead Receptacle

Pin	*Function*
A	Power
B	Ground
C	Shield

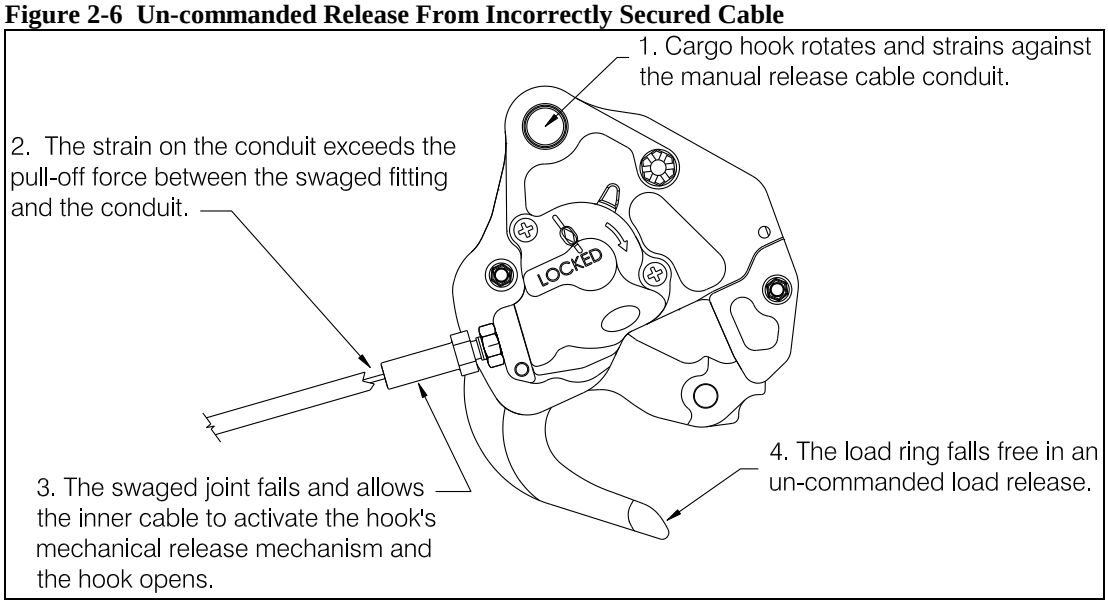
Secure the Release Cable

Secure the cargo hook manual and electrical release harness following the MD Helicopters' Installation and Maintenance Instructions, Publication No. CSP-005 or later approved source. The first clamp used to secure the manual release to the A/C skin **should not be less than 23 inches** from the hook.

WARNING

Un-commanded cargo hook release will happen if the manual release cable is improperly restrained. The cable must not be the stops that prevent the Cargo Hook from swinging freely in all directions. If the Cargo Hook loads cause the hook to strain against the manual release cable the swaged end of the cable may separate allowing the inner cable to activate the cargo hook manual release mechanism. The result is an un-commanded release. Ensure that no combination of cyclic stick or Cargo Hook position is restrained by the manual release cable.

Figure 2-6 Un-commanded Release From Incorrectly Secured Cable



Installation Check-Out

After installation of the Cargo Hook Kit, perform the following functional checks.

1. Swing the installed Cargo Hook to ensure that the manual release cable assembly and the electrical release harness have enough slack to allow full swing of the suspension assembly without straining or damaging the cables. The cable and harness must not be the stops that prevent the Cargo Hook from swinging freely in all directions.
2. With no load on the cargo hook load beam, pull the lever operated cargo hook mechanical release, the Cargo Hook should release. Reset the cargo hook load beam and verify the hook lock indicator aligns with the engraved lines on the cover.
3. Close the cargo hook release circuit breaker and position the battery switch to the ON position. With no load on the cargo hook load beam, depress the cargo hook electrical release button, the Cargo Hook should release. Reset the cargo hook load beam and verify the hook lock indicator aligns with the engraved lines on the cover.
4. See the MD Helicopters' service instructions for your specific helicopter model for additional installation instructions.

Component Weights

The weight of the Cargo Hook Kit components are listed below. Subtract the weight of the MDHI cargo hook kit components removed.

Table 2-3 Component Weights

Item	Weight lbs (kgs)
Cargo Hook	3.0 (1.36)
Manual Release Cable	1.0 (.45)
Electrical Release Cable	0.5 (.23)
Bumper Pads	0.2 (.09)
Travel Limit Bumper	0.1 (.05)
Total Kit Weight	**4.8 (2.2)**

Cargo Hook Location

Table 2-4 Cargo Hook Location

Fuselage Station	99.3

Paper Work

In the US, fill in FAA form 337 for the initial installation. This procedure may vary in different countries. Make the appropriate aircraft log book entry. Insert the Rotorcraft Flight Manual Supplement 121-006-01 in the Rotorcraft Flight Manual.

Section 3
Operation Instructions

Operating Procedures

Prior to a flight involving external load operations perform the following:

1. Ensure that the manual release cable and electrical release harness do not limit the movement of the cargo hook.
2. Be completely familiar with this manual, particularly the Cargo Hook rigging section.
3. Be completely familiar with all MD Helicopters' cargo hook operating instructions.
4. Activate the electrical system and press the release button to ensure the cargo hook electrical release is operating correctly. The mechanism should operate smoothly. Reset the cargo hook load beam by hand after release.

CAUTION

The release solenoid is intended to be energized only intermittently. Depressing the electrical release button continuously in excess of 20 seconds will cause the release solenoid to overheat, possibly causing permanent damage

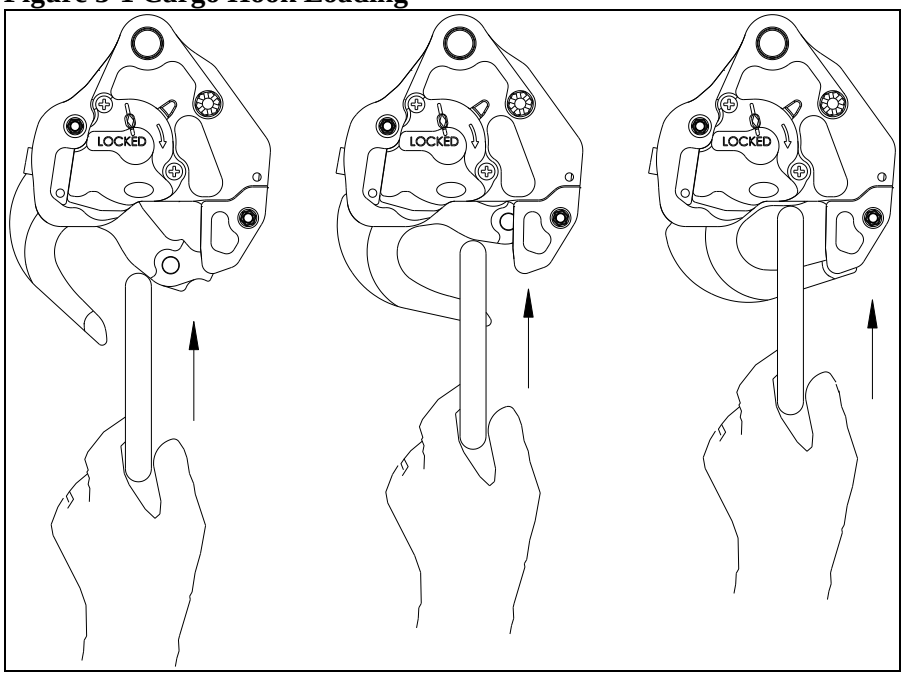
5. Activate the release lever assembly located on the cyclic stick to test the cargo hook manual release mechanism. Reset the cargo hook load beam by hand after release. Verify the hook lock indicator aligns with the engraved lines on the manual release cover.

See the Component Maintenance Manual 122-017-00 and the MDHI service instructions that cover the original Cargo Hook installation for additional instructions.

Cargo Hook Loading

The cargo hook can easily be loaded with one hand. A load is attached to the hook by pushing the ring upward against the upper portion of the load beam throat, as illustrated in Figure 3-1, until an internal latch engages the load beam and latches it in the closed position.

Figure 3-1 Cargo Hook Loading



Cargo Hook Rigging

Extreme care must be exercised when rigging a load to the Cargo Hook. Steel load rings are recommended to provide consistent release performance and resistance to fouling. The following illustration shows the recommended rigging and rigging to avoid, but is not intended to represent all rigging possibilities.

Some combinations of small primary rings and large secondary rings could cause fouling during release.

It is the responsibility of the operator to assure the cargo hook will function properly with each rigging.

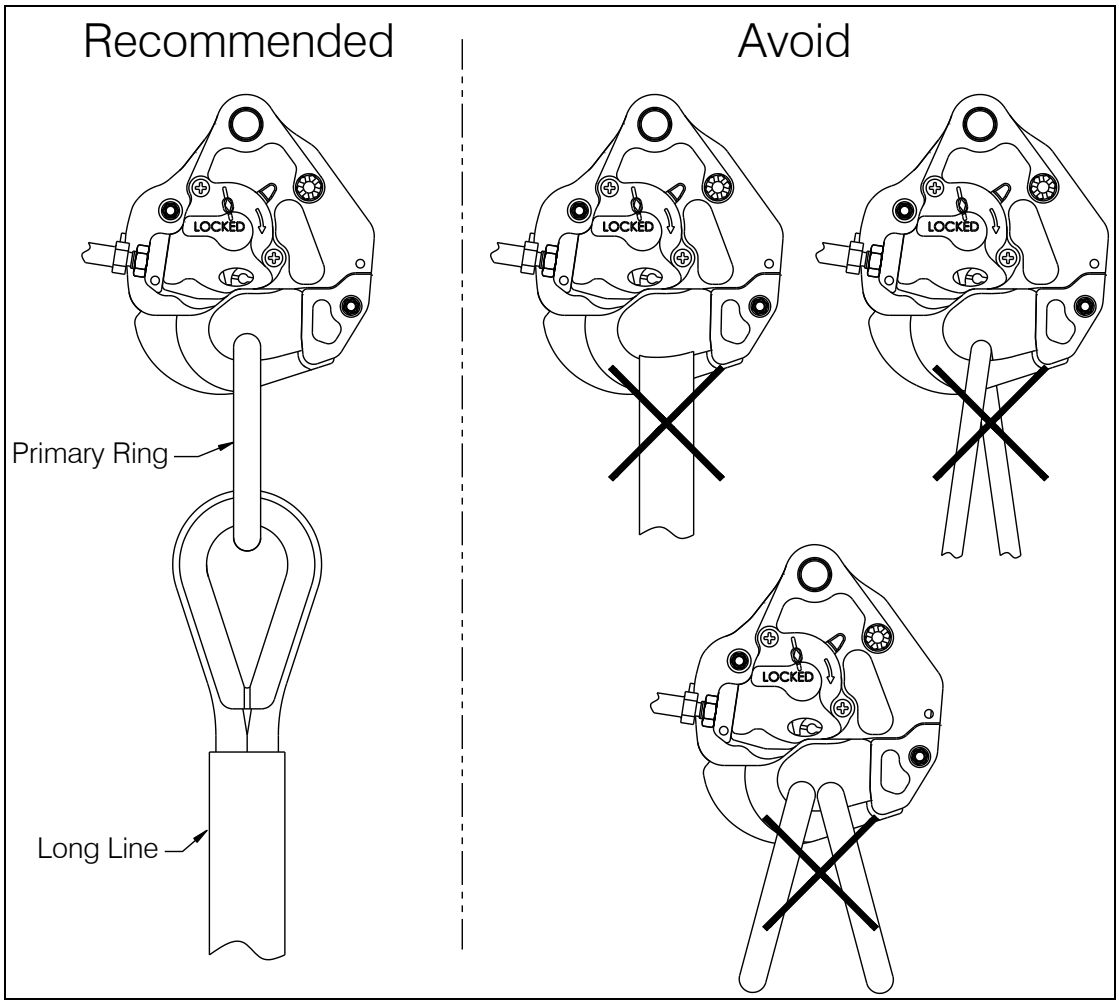
Cargo Hook Rigging, continued

Nylon Type Straps and 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.

Figure 3-2 Examples of Cargo Hook Rigging



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Section 4
Maintenance

Refer to Cargo Hook Component Maintenance Manual 122-017-00 for the cargo hook and Instructions for Continued Airworthiness 123-003-01 for additional detailed maintenance information for the cargo hook kit.

Instructions for Returning Equipment to the Factory

If an Onboard Systems product must be returned to the factory for any reason (including returns, service, repairs, overhaul, etc.) obtain an RMA number before shipping your return.

An RMA number is required for all equipment returns.

- To obtain an RMA, please use one of the listed methods.
  - Contact Technical Support by phone or e-mail (Techhelp@OnboardSystems.com).
  - Generate an RMA number at our website: http://www.onboardsystems.com/rma.php
- After you have obtained the RMA number, please be sure to:
  - Package the component carefully to ensure safe transit.
  - Write the RMA number on the outside of the box or on the mailing label.
  - Include the RMA number and reason for the return on your purchase or work order.
  - Include your name, address, phone and fax number and email (as applicable).
  - Return the components freight, cartage, insurance and customs prepaid to:

    Onboard Systems
    13915 NW 3rd Court
    Vancouver, Washington 98685
    USA
    Phone: 360-546-3072

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Section 5
Certification

FAA STC

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number **SR00892SE**

This certificate, issued to **Onboard Systems International**
13915 NW 3rd Court
Vancouver, WA 98685

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part **27** *of the* **Federal Aviation Regulations**

Original Product—Type Certificate Number: H3WE
Make: MD Helicopters, Inc.
Model: 369D, 369E, 369F, 369FF, 369HE, 369HM, 369HS, 500N, and 600N

Description of the Type Design Change: Fabrication of Onboard Systems International Model 200-264-00, 200-264-01, and 200-264-02 Cargo Hook Kits in accordance with FAA Approved Onboard Systems International Master Drawing List No. 155-061-00, Revision 8, dated August 27, 2008, or later FAA approved revision. Installation of the 200-264-00 kit in accordance with FAA approved Onboard Systems International Owner's Manual No. 120-096-00, Revision 4, dated September 17, 2007, or later FAA approved revision, and installation of the 200-264-01 and 200-264-02 kits in accordance with FAA approved Onboard Systems International Owner's Manual No. 120-096-01, Revision 0, dated August 4, 2008, or later FAA approved revision. This modification must be inspected and maintained in accordance with Section ATA 5 of the FAA approved Onboard Systems International Instructions for Continued Airworthiness, Document No. 123-003-00, Revision 3, dated October 10, 2006, or later FAA approved revision, and Onboard Systems (See Continuation Sheet – Page 3)

Limitations and Conditions: Approval of this change in type design applies to only those MD Helicopter model rotorcraft listed above, which were previously equipped with an FAA approved installation of MD Helicopter cargo hook kits and cargo hooks shown on the table on Page 3 of 3. This approval should not be extended to rotorcraft of these models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that rotorcraft. Rotorcraft modified in accordance with this STC must be operated in (See Continuation Sheet – Page 3)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 22, 2000
Date of issuance: March 20, 2001
Date reissued:
Date amended: January 13, 2003, November 3, 2008

By direction of the Administrator

(Signature)

Acting Manager, Seattle Aircraft Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM 8110-2(10-68)

PAGE 1 OF 3 PAGES

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number **SR00892SE**

Onboard Systems
Reissued:
Amended: January 13, 2003, November 3, 2008

Description of the Type Design Change continued: International Cargo Hook Service Manual No. 122-005-00, Revision 12, dated July 18, 2008, or later FAA approved revision, for the 200-264-00 Cargo Hook Kit or section ATA 5 of the FAA approved Onboard Systems international Instructions for Continued Airworthiness, Document No. 123-003-01, Revision 0, dated August 4, 2008, or later FAA approved revision, and Onboard Systems international Cargo Hook Service Manual No. 122-017-00, Revision 2, dated June 4, 2008, or later FAA approved revision, for the 200-264-01 or 200-264-02 Cargo Hook Kits.

Limitations and Conditions continued: accordance with FAA approved Onboard Systems International Rotorcraft Flight Manual Supplement (RFMS) No. 121-006-00, Revision 4, dated June 18, 2008, or later FAA approved revision, for the 200-264-00 cargo hook kit or Onboard Systems International RFMS No. 121-006-01, Revision 0, dated October 23, 2008, or later FAA approved revision, for the 200-264-01 or 200-264-02 Cargo Hook Kit. A copy of this Certificate, FAA approved RFMS, and Maintenance Manual, must be maintained as part of the permanent records of the modified rotorcraft.

Cargo Hook Kit	Helicopter Model	Cargo Hook
369H90072-501, -505, -507, -515, -519	369D	369H92105-501
369H90072-505, -517, -519	369E	369H92105-501
369H90072-505	369F	369H92105-501
369H90072-505, -511, -519	369FF	369H92105-501
369H90072-519, -523	500N	369H92105-501
369H90072-501	369HE	369H92105-501
369H90072-501	369HM	369H92105-501
369H90072-501	369HS	369H92105-501
369H90072-525, -529	600N	369H92105-503, -505

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

-- END --

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM 8110-2-1 (10-69)

Canadian Approval

Transport Canada / Transports Canada
Aviation / Aviation

Suite 620
800 Burrard Street
Vancouver, B.C.
V6Z 2J8

Your file *Votre référence*

Our file *Notre référence*
P-01-0149

April 20, 2001

Mr. Ron Pirtle
Onboard Systems International
11212 N.W. St. Helens Road
Portland, OR.
USA 97231

Dear Mr. Pirtle

Subject: Acceptance of FAA STC SR00892SE

This is in response to the FAA Seattle ACO letter dated April 9, 2001, requesting Transport Canada approval of the subject STC.

In accordance with our current policy associated with the review of foreign STC's, some STCs applicable to certain categories of aircraft may be accepted solely on the basis of their foreign certification, and do not require the issue of a corresponding certificate by Transport Canada. The subject STC falls within these criteria.

This STC will be entered in the national index of STCs that have been reviewed and accepted by Transport Canada for installation on Canadian registered aeronautical products.

This letter confirms formal acceptance of the referenced STC by Transport Canada.

Yours truly,

Henry Wong
for
Regional Manager
Aircraft Certification

c.c. Ms. Dorenda Baker, Acting Manager, Seattle Aircraft Certification Office

EASA STC

European Aviation Safety Agency

SUPPLEMENTAL TYPE CERTIFICATE

EASA.IM.R.S.01167 Revision 1

This Supplemental Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EC) No. 1702/2003 to

Onboard Systems International

13915 NW 3rd Court
WA
98685
Vancouver
United States

and certifies that the change in the type design for the product listed below with the limitations and conditions specified meets the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified below:

Original Product Type Certificate Number:	FAA TC H3WE
Type Certificate Holder:	McDonnell Douglas
Model:	MD Helicopters 369D, 369E, 369F, 369FF, 369HE, 369HM, 369HS, 500N, 600N
Original STC Number:	FAA STC SR00892SE

Description of Design Change:
installation of Onboard Systems International Model 200-264-00, 200-264-01, and 200-264-02 Cargo Hook Kits in accordance with Onboard Systems International Master Drawing List No. 155-061-00, Revision 8, dated August 27, 2008, or later EASA approved revision.

Associated Technical Documentation:
Installation:
- Installation of the 200-264-00 kit - should be done in accordance with Onboard Systems International Owner's Manual No. 120-096-00, Revision 4, dated September 17, 2007, or later EASA approved revision.
- Installation of the 200-264-01 and 200-264-02 kits - should be done in accordance with Onboard Systems International Owner's Manual No. 120-096-01, Revision 0, dated August 4, 2008, or later EASA approved revision.

Inspection and Maintenance: The modification must be inspected and maintained in accordance with ATA Chapter 5 of :
- For the 200-264-00 Cargo Hook Kit - Onboard Systems International Instructions for Continued Airworthiness, Document No. 123-003-00, Revision 3, dated October 10, 2006, or later EASA approved revision, and Onboard Systems International Cargo Hook Service Manual No. 122-005-00, Revision 12, dated July 18, 2008, or later EASA approved revision,

EASA Form 91, Issue 1

European Aviation Safety Agency

or

- For the 200-264-01 or 200-264-02 Cargo Hook Kits - Onboard Systems international Instructions for Continued Airworthiness, Document No. 123-003-01, Revision 0, dated August 4, 2008, or later EASA approved revision, and Onboard Systems International Cargo Hook Service Manual No. 122-017-00, Revision 2, dated June 4, 2008, or later EASA approved revision,

Operation: Rotorcraft modified in accordance with this STC must be operated in accordance with :

- For the 200-264-00 Cargo Hook Kit - Onboard Systems International Rotorcraft Flight Manual Supplement (RFMS) No. 121-006-00, Revision 4, dated June 18, 2008, or later EASA approved revision.

- For the 200-264-01 or 200-264-02 Cargo Hook Kit - Onboard Systems International RFMS No. 121-006-01, Revision 0, dated October 23, 2008, or later EASA approved revision.

Limitations and Conditions:

1. Prior to installation of this modification the installer must determine that the interrelationship between this modification and any other previously installed modification will introduce no adverse effect upon the airworthiness of the product. The installation of this modification by third persons is subject to written permission of the approval holder and holding and disposal of the approved appropriate documentation.
2. Approval of this change in type design applies to only those MD Helicopter model rotorcraft identified here, which were previously equipped with an FAA approved installation of MD Helicopter cargo hook kits and cargo hooks shown on the table below.

Cargo Hook Kit	Helicopter Model	Cargo Hook
369H90072-501, -505, -507, -515, -519	369D	369H92105-501
369H90072-505, -517, -519	369E	369H92105-501
369H90072-505	369F	369H92105-501
369H90072-505, -511, -519	369FF	369H92105-501
369H90072-519, -523	500N	369H92105-501
369H90072-501	369HE	369H92105-501
369H90072-501	369HM	369H92105-501
369H90072-501	369HS	369H92105-501
369H90072-525, -529	600N	369H92105-503, -505

This Certificate shall remain valid unless otherwise surrendered or revoked.

For the European Aviation Safety Agency,

Date of issue: 15 July 2009

Massimo **MAZZOLETTI**
Certification Manager

STC – EASA.IM.R.S.01167 Revision 1 – Onboard Systems International

DCA Malaysia STC (600N model only)

JABATAN PENERBANGAN AWAM MALAYSIA
(DEPARTMENT OF CIVIL AVIATION MALAYSIA)
ARAS 1-4, BLOK PODIUM
NO. 27, PERSIARAN PERDANA, PRESINT 4
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
62618 PUTRAJAYA
MALAYSIA

Telefon : 6-03-88714000
Faks : 6-03-88901640
AFTN : WMKKYAYX
Teleks : PENAMA MA 30128
Kawat : CIVIL KUALA LUMPUR
Web : http://www.dca.gov.my

Your Ref. :

Our Ref. : DCA/AW/VSTC/2017/005

Date : 7 March 2017

Onboard Systems International
13915 NW 3rd Court
Vancouver, WA 98685

Attn: **Mr. Mark Hanson**
Certification Manager

Dear Sir,

VALIDATION OF FAA SUPPLEMENTAL TYPE CERTIFICATE NO. SR00892SE

This is in reference to FAA letter 102S-16-256 dated Nov 4, 2016 and your letter to the FAA dated October 7, 2016 requesting validation of FAA Supplemental Type Certificate (STC) No. SR00892SE date amended 3 November 2008.

This letter certifies that the following Supplemental Type Certificate (STC) is acceptable for Malaysian Airworthiness Certification:-

STC Validation Reference No:	**VSTC/2017/005**
STC Holder	**Onboard Systems International, 13915 NW 3rd Court, Vancouver, WA 98685**
STC Reference Number	**SR00892SE date amended 3 November 2008 or later FAA approved revision.**
State of Design	**FAA**
Description of Design Change	**Fabrication and Installation of Onboard System International Model 200-264-02 Cargo Hook Kit.**
STC applicable to Aircraft/ Engine type or model	**MD Helicopters Inc. (MDHI) 600N**
DCA Type Acceptance	**Type acceptance letter reference DCA/AW/AT/MD600N dated 19 December 2016**

Limitations and Conditions:-

1. Fabrication of Onboard Systems International Model 200-264-02 Cargo Hook Kits in accordance with FAA Approved Onboard Systems International Master Drawing List No. 155-061-00, Revision 8, dated August 27, 2008, or later FAA approved revision.

(Sila catat rujukan Jabatan ini apabila berhubung)

DCA Malaysia STC (600N model only) continued

2. Installation of the 200-264-02 kits in accordance with FAA approved Onboard Systems International Owner's Manual No. 120-096-01, Revision 0, dated August 4, 2008, or later FAA approved revision.

3. This modification must be inspected and maintained in accordance with Section ATA 5 of the FAA approved Onboard Systems international Instructions for Continued Airworthiness, Document No. 123-003-01, Revision 0, dated August 4, 2008, or later FAA approved revision, and Onboard Systems international Cargo Hook Service Manual No. 122-017-00, Revision 2, dated June 4, 2008, or later FAA approved revision, for the 200-264-02 Cargo Hook Kits.

4. Approval of this change in type design applies to only those MD Helicopter model rotorcraft listed above, which were previously equipped with an FAA approved installation of MD Helicopter cargo hook kits and cargo hooks shown on the table below:

Cargo Hook Kit	Helicopter Model	Cargo Hook
369H90072-525, -529	600N	369H92105-503, -505

5. This approval should not be extended to rotorcraft of these models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that rotorcraft.

6. Rotorcraft modified in accordance with STC SR00892SE must be operated in accordance with FAA approved Onboard Systems International RFMS No. 121-006-01, Revision 0, dated October 23, 2008, or later FAA approved revision, for the 200-264-02 Cargo Hook Kit.

7. A copy of STC SR00892SE, FAA approved RFMS, and Maintenance Manual, must be maintained as part of the permanent records of the modified rotorcraft.

8. If the holder agrees to permit another person to use STC SR00892SE to alter the product, the holder shall give the other person written evidence of that permission.

9. Appropriate installation approval shall be obtained for the embodiment of STC SR00892SE.

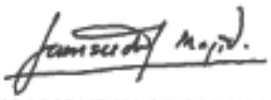
10. All other limitations and conditions as stated in STC SR00892SE.

This validation letter shall remain valid unless otherwise cancelled, superseded or revoked by the Director General of Civil Aviation.

Thank You

"BERKHIDMAT UNTUK NEGARA"

Yours faithfully,



(SAMSUDIN AB MAJID)
Airworthiness Sector
For Director General Civil Aviation
MALAYSIA

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