PLEASE CHECK WEB SITE AT WWW.ONBOARDSYSTEMS.COM FOR THE LATEST REVISION OF THIS MANUAL

Multi-Channel Slip Ring Kit

for the

204, 205, 212 & 412 Series Helicopters

Kit Part Number 200-095-00

Owner's Manual

Owner's Manual Number 120-034-01
Revision 13
April 7, 2017

13915 NW 3rd Court Vancouver Washington 98685 USA
Phone: 360-546-3072 Fax: 360-546-3073 Toll Free: 800-275-0883
www.OnboardSystems.com

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RECORD OF REVISIONS

Revision	*Date*	*Page(s)*	*Reason for Revision*
5	9/17/02	Title, 4-4	Factory address change.
6	12/9/02	4-2, 4-3	Replaced 232-014-00 with 232-014-01.
7	7/14/03	4-1 thru 4-4	Updated part numbers to reflect new dash no. configuration 210-090-01
8	09/11/06	4-1	Added overhaul frequency to section 4.
9	10/09/07	TOC, Section 1, 2-2, 4-1 & 4-2	Added explanation of warnings, cautions and notes to Section 1. Updated warnings, cautions and notes throughout. Changed "daily inspection" to "daily check."
10	3/2/10	4-1 & 4-2	Changed overhaul frequency schedule.
11	3/11/11	Section 1, Section 2, 4-1	Added -25 Bell suspension as an eligible system, updated format of safety labels, clarified daily check, corrected bill of materials to reflect current configuration.
12	06/20/11	2-2, 2-3	Added NOTICE regarding earlier versions of slip ring assembly and instructions for modification.
13	04/07/17	4-1, 4-2	Updated overhaul interval to 6 years/1500 hours, updated definition of "hours of external load operations".

Register Your Products for Automatic Notifications

Onboard Systems offers a free notification service via fax or email for product alerts and documentation updates. By registering your Onboard Systems products at our website, we will be able to contact you if a service bulletin is issued, or if the documentation is updated.

You can choose to receive notices on an immediate, weekly, or monthly schedule via fax, email or both methods. There is no charge for this service. Please visit our website at www.onboardsystems.com/notify.php to get started.

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CONTENTS

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Section 1
General Information

Introduction

The Onboard Systems Multi-Channel Slip-Ring kit is a means of supplying electrical power and control signals to accessory equipment suspended from the rotating cargo hook of the Bell 204, 205, 212, and 412 Series Helicopters. The Onboard Slip-Ring attaches to the Bell 204-072-915-25 or 204-072-915-103 cargo suspension system and replaces the original Bell unsealed cargo hook slip-ring, reducing the need for corrosion related maintenance.

Two channels of the Onboard Slip-Ring are dedicated to the operation of the cargo hook electrical release mechanism. Six other channels are available to operate suspended equipment such as fire-fighting buckets, agricultural and forest application equipment, logging equipment, construction equipment, and long-line hooks.

The Slip-Ring could be wired so that each piece of individual equipment could have its own switch in the cockpit, connecting through a separate Slip-Ring channel to a common accessory connector (designed by the installer to meet his specific needs) at the hook. Once the Slip-Ring and its control wires are installed, an equipment change would involve simply attaching the equipment to the cargo hook and plugging its control wires into the installer's common equipment connector.

The Onboard Multi-Channel Slip-Ring Kit 200-095-00 is offered as a means of passing electrical current across the rotating junction between the helicopter cargo hook suspension system and the suspended load. This kit must be considered as an electrical part only, and not as a completed electrical system. Onboard has not evaluated any end-to-end use of this part other than the cargo hook electrical release mechanism defined herein and no other use is assumed or implied.

Introduction, continued

Accordingly, it is the responsibility of the installer and their Authorized Inspector (AI) to verify that each electrical system incorporating this Slip-Ring kit meets the applicable electrical requirements of the Federal Aviation Regulations. All electrical considerations such as electrical load determinations, voltage drops, electrical interference, electrical bus and circuit protections, etc. are the responsibility of the end user and may require further FAA approval.

Onboard Systems has accomplished satisfactory electrical load testing of the elements of this Slip-Ring kit, only, and has demonstrated maximum load ratings of 10 amps (continuous) and 30 amps (intermittent for 30 seconds) in the standard 28VDC electrical system. Electrical loading above these currents or time limits may harm kit performance. The cargo hook mechanical and electrical release systems for the Bell model 204-072-915-25 and 204-072-915-103 suspension systems have been evaluated and found to be acceptable with this kit installed (see Figure 1).

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 200-095-00 Multi-Channel Slip-Ring Kit, if shortages are found contact the distributor from whom the system was purchased.

Part No.	Description	Quantity
120-034-01	Owner's Manual	1
210-090-01*	Slip-Ring Assembly	1
235-073-00	Mounting Bracket	1
290-207-00	Mounting Bolts	2
290-208-00	Plugs	2
510-131-00	Screws	2
512-002-00	Ty-Raps	10

* Supersedes P/N 210-090-00. Optionally replace –01 with –00.

Inspection

Inspect each component for evidence of mishandling and damage. If damage is evident, do not use it. File a claim with the carrier and notify the distributor from whom the system was purchased.

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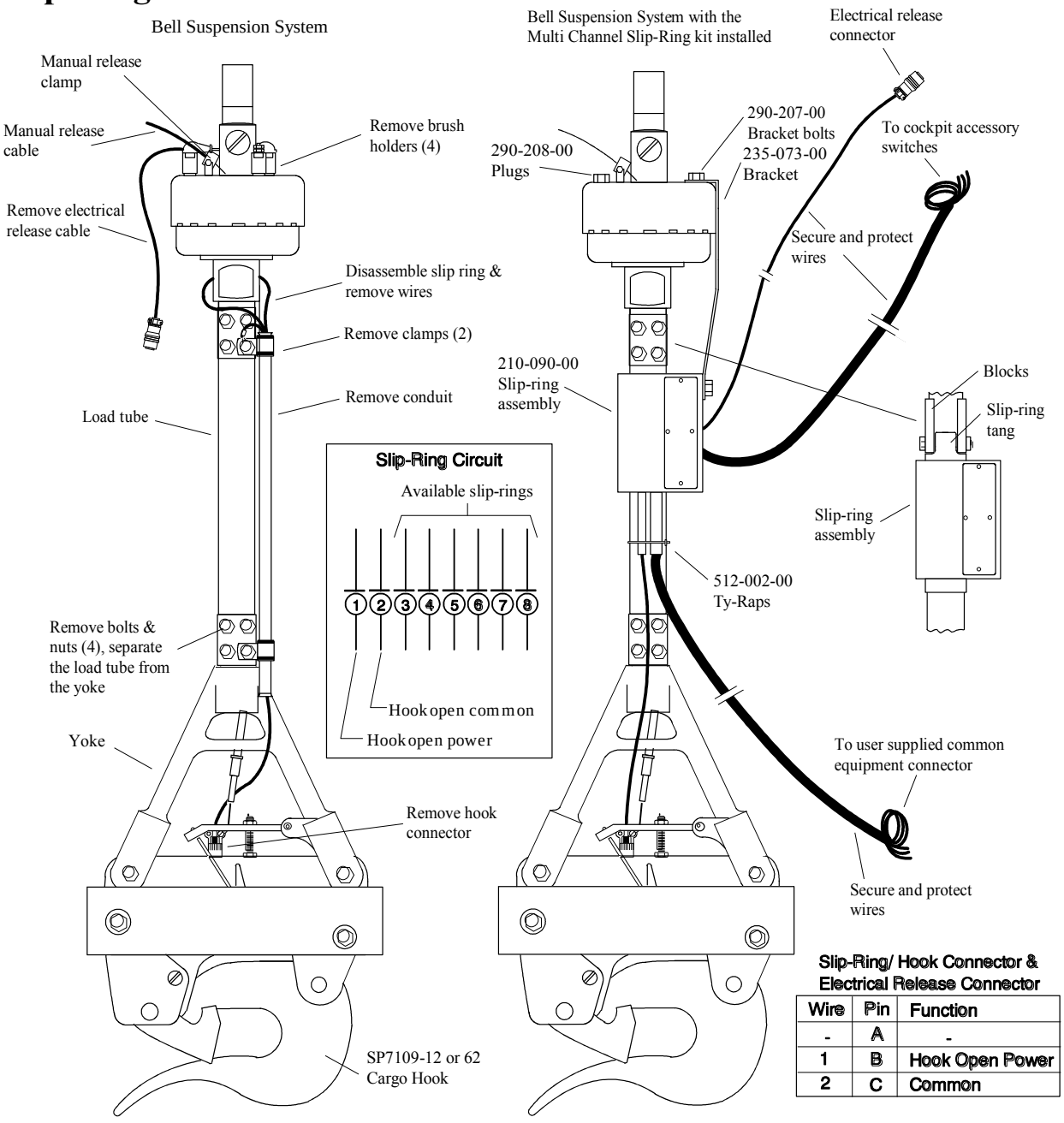
Section 2
Installation

Slip-Ring Installation Overview



Slip-Ring/ Hook Connector & Electrical Release Connector

Wire	Pin	Function
-	A	-
1	B	Hook Open Power
2	C	Common

Slip-Ring Installation

1. Remove the Bell Suspension System (P/N 204-072-915-25 or 204-072-915-103) from the aircraft.
2. The Bell Suspension System slip-ring located at the top of the suspension system will not be used. Remove the electrical release cable located at the top of the slip ring and the four-slip ring brush holders, and the wire conduit.
3. Remove the four bolts and nuts which retain the load tube to the yoke and separate the two components.

NOTICE

It will be necessary to first loosen the manual release cable clamp.

4. Slide the Multi-Channel Slip-Ring over the load tube until the Slip-Ring tang slips between the two blocks that retain the load tube. Reattach the yoke to the load tube with the four bolts and nuts. Torque nuts in accordance with appropriate Bell service instructions. Adjust the manual release cable clamp following appropriate Bell service instructions for your suspension system, i.e. 212-5.
5. Using the two 510-131-00 screws provided, attach the lower edge of the connecting bracket to the Onboard Slip-Ring housing and safety wire. Rotate and align the bracket with the two outer brush holder holes, in the original Bell housing, attach using the two 290-207-00 bolts provided and safety wire. Fill the remaining two brush holder holes in the Bell housing with the two 290-208-00 plastic plugs provided and safety wire.
6. To re-establish the cargo hook electrical release function, attach the cargo hook connector from the bottom of the slip-ring to the cargo hook mating connector. Then attach the electrical release connector from the side of the slip-ring to the electrical release receptacle for the aircraft.

Slip-Ring Installation continued

7. To establish accessory equipment controls, connect the wires in the six-wire bundle that exits the side of the slip-ring to the desired cockpit switches. Attach a user-supplied connector to the accessory equipment wires that exit the bottom of the slip ring. Each wire is marked with a number which corresponds with a slip-ring channel.

NOTICE

Earlier versions of the slip-ring assembly had three wires to the cargo hook connector and five wires for accessory equipment. If three wires are needed for the cargo hook, the slip ring assembly may be modified per the following.

Remove the same numbered wire from the input and output accessory equipment bundle, disassemble the connector backshells, route each removed wire to their respective connector and solder them into pin C. Re-assemble backshells onto connectors.

Slip-Ring Installation Check Out

After installation of the Suspension System, perform a functional check following the Bell Helicopter suspension systems instructions for your specific helicopter and the steps below.

1. **Ensure that the cargo hook is free to move to its full extremes without interference from the Slip-Ring wires.**
2. Cycle the cargo hook manual and electrical release systems several times to ensure proper operation
3. Cycle the Slip-Ring accessories several times to ensure proper operation.

Component Weight

Item	Weight
Multi-Channel Slip-Ring Kit	2.9 lbs (1.3 kgs)

Paper Work

Insert the Flight Manual Supplement into the aircraft flight manual. 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.

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Section 3
Operation Instructions

Suspension System Operating Procedures

Before operating the Slip-Ring Kit, be completely familiar with the Bell Helicopter suspension system operating instructions for your helicopter.

Operating instructions with the Slip-Ring Kit installed are the same as without the kit.

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Section 4
Inspection, Maintenance & Overhaul

Slip-Ring Inspection, Maintenance & Overhaul Procedures

Inspection, maintenance and overhaul of the Suspension System shall be in accordance with the table below. For the location of the parts listed see *Slip-Ring Parts List* in the next section.

Time Between Overhaul (TBO): 1500 hours of external load operations or 6 years, whichever comes first.

NOTICE

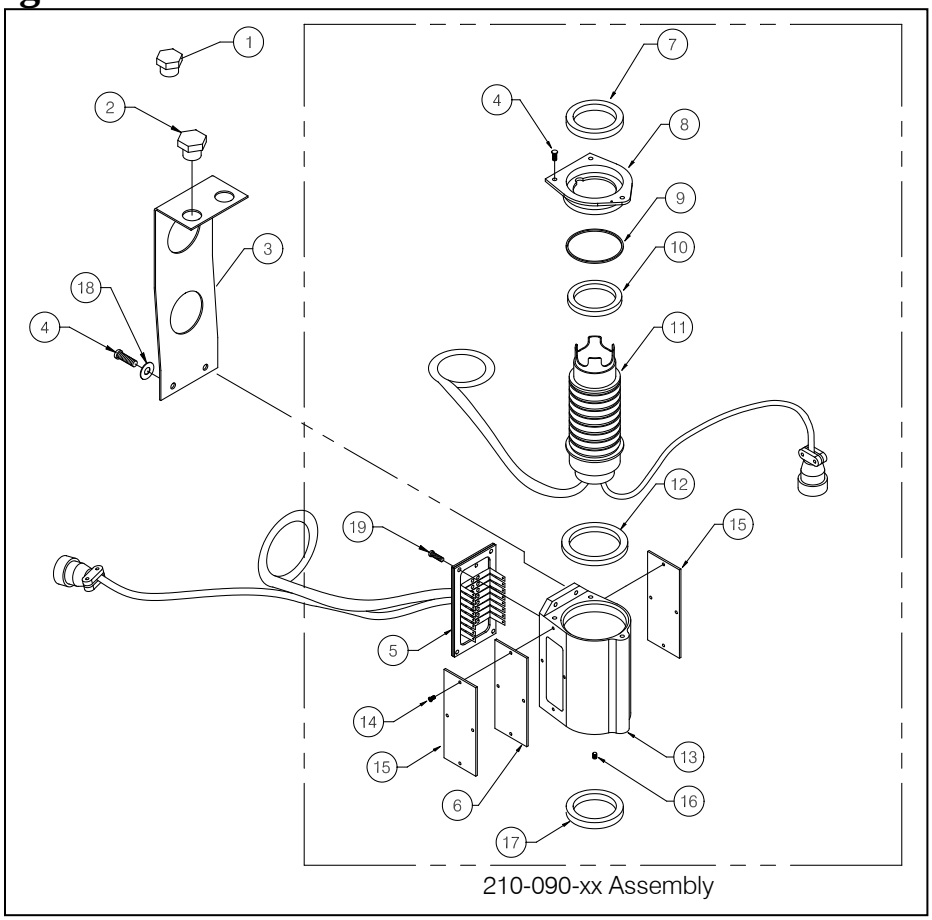
*Hours of external load operations should be interpreted to be **(1)** anything is attached to the primary cargo hook (whether or not a useful load is being transported) and **(2)** the aircraft is flying. If these conditions are **NOT** met, time does **NOT** need to be tracked.*

Item	**Description, Part No.**	**Daily check** (prior to a flight involving external load operations).	**Inspection - 100 hours or annually, whichever comes first.**	**Overhaul**
1	Slip-Ring Kit, 200-095-00	Cycle the cargo hook electrical release mechanism to ensure proper operation. Cycle the accessories attached to the Slip-Ring to ensure proper operation.	See sequence 2 through 11 below.	See sequence 2 through 11 below.
2	Mounting Bracket, 235-073-00	None.	Check for evidence of cracks. Check attaching hardware for security. Check for evidence of corrosion. If cracked or severely corroded, replace part. Remove corrosion and treat with zinc chromate primer.	Same as 100 Hour Check
3	Housing, 290-197-00 290-197-01	None.	Check for evidence of cracks. Check attaching hardware for security. Check for evidence of corrosion. Remove corrosion and treat with zinc chromate primer. If cracked or severely corroded, replace part.	Same as 100 Hour Check

Slip-Ring Inspection, Maintenance & Overhaul Procedures, continued

Item	Description, Part No.	Daily Check (prior to a flight involving external load operations).	Inspection - 100 hours or annually, whichever comes first.	Overhaul
4	Bearing Cap, 290-194-00	None.	Inspect for evidence of cracks. Inspect attaching hardware for security. Check for evidence of corrosion. Remove corrosion and treat with zinc chromate primer. If cracked or severely corroded, replace part.	Same as 100 Hour Check
5	Upper Seal, 556-016-00	None	None	Replace
6	Upper Bushing, 290-195-00	None	None	Replace if ID exceeds 1.763 in. (44.8 mm)
7	O'Ring, 556-018-00	None	None	Replace
8	Core Assembly, 232-015-00	None	Remove cover plates and inspect contacts and rings for wear, damage and corrosion. Polish out and treat area with a coat of general purpose lubricant such as MIL-G-23827 grease. Replace worn or damaged parts as needed. Lubricate rings and contacts with MIL-G-23827 grease.	Inspect the 8 rings and 2 bushing journals for security, damage, corrosion and wear. If parts are loose, replace the core. If parts are damaged, replace the core. If the diameter of the upper journal is less than 1.744 in. (44.3 mm) replace the core. If the diameter of the lower journal is less than 2.119 in. (53.8 mm) replace the core. If the rings are pitted or grooved more than 0.020 in. (.51 mm) replace the core. Polish out shallow pits and grooves. Polish out corrosion. Lubricate the journals and rings with MIL-G-23827 grease.
9	Wiper Assembly, 232-014-01 232-014-02	None	Same as Core Assembly 232-015-00 above.	Inspect the wiper fingers for damage, wear and corrosion. Replace the assembly if they are damaged or worn. Polish out corrosion and coat with MIL-G-23827 grease.
10	Lower Bushing 290-196-00	None	None	Replace if ID exceeds 2.138 in. (54.3 mm).
11	Lower Seal 556-017-00	None	None	Replace

Slip-Ring Parts List



210-090-xx Assembly

Item	Part No.	Description	Quantity[1]	Quantity[2]
1	290-208-00	Plug	2	2
2	290-207-00	Mounting Bolt	2	2
3	235-073-00	Bracket	1	1
4	510-131-00	Screw	5	5
5	232-014-01	Wiper Assembly	1	-
5	232-014-02	Wiper Assembly	Opt	1
6	521-002-00	Inspection Cover Gasket	2	-
6	521-002-01	Inspection Cover Gasket	Opt[3]	2
7	556-016-00	Upper Seal	1	1
8	290-194-00	Bearing Cap	1	1
9	556-018-00	O'Ring	1	1
10	290-195-00	Upper Bushing	1	1
11	232-015-00	Core Assembly	1	1
12	290-196-00	Lower Bushing	1	1
13	290-197-00	Slip-Ring Housing	1	-
13	290-197-01	Slip-Ring Housing	Opt	1

1 For Kit 200-095-00 with 210-090-00 Slip-Ring Assembly.

2 For Kit 200-095-00 with 210-090-01 Slip-Ring Assembly.

3 Preferred option, use with 510-483-00 Screws and 235-072-01 Inspection Cover.

Slip Ring Parts List, continued

Item	Part No.	Description	Quantity[1]	Quantity[2]
14	510-132-00	Screw	8	-
14	510-483-00	Screw	Opt	8
15	235-072-00	Inspection Cover	2	-
15	235-072-01	Inspection Cover	Opt	2
16	510-133-00	Set Screw	3	3
17	556-017-00	Lower Seal	1	-
18	510-149-00	Washer	2	2
19	510-317-00	Screw	4	4

1 For Kit 200-095-00 with 210-090-00 Slip-Ring Assembly
2 For Kit 200-095-00 with 210-090-01 Slip-Ring Assembly

Slip-Ring Trouble Shooting

PROBABLE CAUSE	DIFFICULTY	CORRECTIVE ACTION
Faulty wiring, circuit breaker, switch, solenoid or slip-ring contacts.	Cargo hook does not open, solenoid inoperative, no power to receptacle. See note # 1	Check continuity through the slip-ring assembly. Repair or replace defective parts.
Faulty wiring, circuit breaker, switch, or slip-ring contacts.	Slip-Ring accessories do not operate, no power to receptacle.	Check continuity through the slip-ring assembly. Repair or replace defective parts.
Short in the system, faulty wiring, circuit breaker, switch, or slip-ring contacts.	Circuit breaker opens when slip-ring accessories are energized.	Check continuity through the slip-ring assembly. Repair or replace defective parts.

Note # 1 Additional Bell Helicopter Suspension system trouble shooting procedures are available in the Service Instructions, such as 212-5.

Slip-Ring Disassembly & Assembly Procedures

Remove the cargo hook suspension system from the aircraft following procedures from the appropriate Bell service instructions. Remove the 210-090-00 or -01 Slip-Ring assembly from the suspension system by separating the load tube from the yoke and sliding the slip-ring assembly from the load tube. Remove the four screws retaining the wiper assembly and carefully remove the assembly. Remove the three screws that retain the bearing housing, with a twisting pulling action remove the bearing housing. Slide the housing from the core assembly. Inspect the components per instructions listed in a previous section, *Slip-Ring Inspection, Maintenance & Overhaul Procedures.*

Reassemble the components and carefully inspect the contacts through the inspection cover openings to insure that each contact is properly seated against its appropriate ring and is not overlapping another ring. Insure that each contact is flat on the ring and exerting a force of approximately 60 grams on the ring. Reassemble the components and safety wire all fasteners. Adjust and test the manual and electrical release mechanisms per the appropriate Bell service instructions.

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
STC

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number **SH5758NM**

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

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

Original Product—Type Certificate Number: *See attached Approved Model List (AML)
Make: No. SH5758NM for list of approved rotorcraft
Model: models and applicable airworthiness regulations

Description of the Type Design Change: Fabrication of the Onboard Model 200-095-00 Multi-Channel Electrical Slip-Ring Kit in accordance with Onboard Systems Master Drawing List No. 155-022-00, Revision B, dated March 11, 2010, or later FAA approved revision; and installation of this system in accordance with FAA approved Onboard Systems Owner's Manual No. 120-034-01, Revision 11, dated March 11, 2010, or later FAA approved revision. Inspect the Multi-Channel Slip-Ring Kit in accordance with Section 4 of Onboard Systems Owner's Manual No. 120-034-01, Revision 11, dated March 11, 2010, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to only those Bell model rotorcraft listed on AML SH5758NM, amended May 17, 1999, or later FAA approved amendments, which are equipped with an FAA approved installation of Bell cargo hook suspension assembly, P/N 204 072 915 25 or P/N 204 072-915-103, with either Breeze-Eastern Cargo Hook P/N SP7109-12 or SP7109-62. 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.

(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: July 10, 1992
Date reissued:
Date of issuance: August 12, 1992
Date amended: 5/17/1999; 1/13/2003; 5/16/2011

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

STC continued

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number **SH5758NM**

Onboard Systems
Reissued:
Amended: 5/17/1999; 1/13/2003; 5/16/2011

Limitations and Conditions continued:

Rotorcraft modified in accordance with this STC must be operated in accordance with an FAA approved copy of the Rotorcraft Flight Manual Supplement, revised May 17, 1999, or later FAA approved revision. A copy of the Certificate, Continuation Sheet No. SH5758NM, AML No. SH5758NM, and FAA approved Rotorcraft Flight Manual Supplement must be maintained as part of the permanent records of the modified rotorcraft.

WARNING

The Onboard Multi-Channel Slip-Ring Kit 200-095-00 is offered as a means of passing electrical current across the rotation junction between the rotorcraft cargo hook suspension system and suspended load. This kit must be considered as a electrical part, only, and not as a completed electrical system. Onboard has not evaluated any end-to-end use of this part other than the cargo hook electrical release mechanism defined herein and no other use is assumed or implied.

Accordingly, it is the responsibility of the installer and their Authorized Inspector (AI) to verify that each electrical system incorporating this Slip-Ring kit meets the applicable electrical requirements of the Federal Aviation Regulations. All electrical considerations such as electrical load determinations, voltage drops, electrical interference, electrical buss and circuit protection, etc. are the responsibility of the end user and may require further FAA approval.

Onboard has accomplished satisfactory electrical load testing of the elements of this Slip-Ring kit, only, and has demonstrated maximum load ratings of 10 amps (continuous) and 30 amps (intermittent for 30 seconds) for the standard 28 VDC electrical system. Electrical loading above these currents or time limits may harm kit performance. The cargo hook mechanical and electrical release systems for the Bell model 204-072-915-25 and 204-072-915-103 suspension systems have been evaluated and found to be acceptable with this kit installed.

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 the 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)

PAGE 3 OF 3 PAGES

FAA APPROVED MODEL LIST (AML) SH5758NM
FOR
ONBOARD SYSTEMS

ISSUE DATE: AUGUST 12, 1992

ITEM	AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING LIST		RFM SUPPLEMENT NO. AND DATE	AML AMENDED DATE
					NUMBER	REV		
1	BELL	204B, 205A, 205A-1	H1SW	CAR 7, dated. 8/1/58 and Amendments 7-1 through 7-4, Category B	155-022-00	3 5/3/99	SH5758NM 5/17/99	5/17/99
2	BELL	212, 412, 412EP	H4SW	FAR Part 29, dated 2/1/65 and Amendments 29-1 and 29-2. See TCDS H4SW for additional information	155-022-00	3 5/3/99	SH5758NM 5/17/99	5/17/99
3	GARLICK	UH-1H	H13WE	FAR 21.25 (a)(2)	155-022-00	3 5/3/99	SH5758NM 5/17/99	5/17/99

FAA APPROVED: _____
Acting Manager, Seattle Aircraft Certification Office

DATE: May 17, 1999

Amended: May 17, 1999

Flight Manual Supplement

Onboard Systems
11212 NW St. Helens Road
Portland, OR 97231
STC No. SH5758NM

FAA APPROVED

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

FOR

BELL MODEL 204B, 205A, 205A-1, 212, 412 AND 412EP,
AND GARLICK MODEL UH-1H HELICOPTERS

R/N_____ S/N_____

This supplement must be attached to the appropriate FAA approved Bell/Garlick Rotorcraft Flight Manual when an Onboard Systems Model 200-095-00 Multi-Channel Electrical Slip-Ring Kit for the cargo hook suspension system is installed accordance with Supplemental Type Certificate (STC) No. SH5758NM. 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.

I. LIMITATIONS

No change.

II. PROCEDURES: PRE-FLIGHT

Swing the Bell cargo hook suspension system and hook assembly to the full extremes to verify that it does not self trip. Consult the latest revision of the owner's manual for daily and 100 hour inspection procedures.

Check the Slip-Ring assembly for visual damage.

Verify proper function of both the mechanical and electrical release systems.

Verify proper function of each accessory using the Slip-Ring Kit.

III. PERFORMANCE

No change.

FAA Approved: _____
Acting Manager, Seattle Aircraft
Certification Office

Date: August 12, 1992
Rev.: May 17, 1999

Section 6
STA SH96-78

STA

DEPARTMENT OF TRANSPORT

Supplemental Type Approval

Number: SH96-78

This approval is issued to:

Onboard Systems
11212 NW Saint Helens Rd.
Portland, Oregon
97231 USA

Issue No.: 1

Approval Date: 19 June, 1996

Issue Date: 20 June, 1996

Responsible Region Pacific

Aircraft/Engine Type or Model: Refer to attached FAA Approved Model List (AML) No. SH5758NM for list of approved rotorcraft models and applicable airworthiness regulations.

Canadian Type Approval or Equivalent:

Description of Type Design Change: Installation of the Onboard model 200-095-00 Multi-Channel Slip-Ring Kit for the cargo hook suspension system in accordance with FAA STC SH5758NM.

Installation/Operating Data, Required Equipment and Limitations:

Fabrication of the Onboard Systems Model 200-095-00 Multi-Channel Slip-Ring Kit is to be carried out in accordance with FAA Approved Onboard Systems Master Drawing List No. 155-022-00, dated July 10, 1992, or later FAA approved revision. Installation of this system is to be done in accordance with FAA approved Onboard Systems Owners Manual No. 120-034-00, dated July 10, 1992, or later FAA approved revision.

Required Equipment:
FAA approved Rotorcraft Flight Manual Supplement dated August 12, 1992 or later approved revision is required for this installation.
Inspection of the Multi-Channel Slip-Ring kit is to be done in accordance with Section 4 of the Onboard Systems Owners Manual No. 120-034-00, dated July 10, 1992, or later approved revision.
Approval of this change in type design applies to only those Bell model rotorcraft listed on AML No. SH5758NM, dated August 12, 1992, or later FAA approved revision, which were previously equipped with an FAA approved installation of Bell cargo hook suspension assembly, P/N 204-072-915-103, with either Breeze-Eastern Cargo Hook P/N SP7109-12 or SP7109-62. This approval is applicable to the kit only, and not as a completed electrical system.

Conditions: This approval is only applicable to the type / model of aeronautical product specified therein. Prior to incorporating this modification, it shall be established that the interrelationship between this change and any other modification(s) incorporated will not adversely affect the airworthiness of the modified product.

L.B. Samoil

For Minister of Transport

Canada

26-0357 (10-88)