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INSTALLATION INSTRUCTIONS

LIGHTWEIGHT REPLACEMENT NITROGEN RESERVOIR ASSEMBLY

206-376-100

ON

EMERGENCY FLOATATION SYSTEM

FOR

KIT NO. 206-706-211-101/-103
BELL HELICOPTER TEXTRON MODEL 206A AND 206B HELICOPTERS
BHT SI 206-115

Report Number AA-91061

Revision J

August 26, 2010



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LOG OF REVISIONS

Revision	Date	Description	Pages	Prepared By Appvd By
- THRU F-	09/11/92 THRU 08/07/97	Various Technical Revisions	All	
G	07/06/00	Deleted Table of contents Added Log of Revisions page Revised washer callout from AN960JD10L	All All 6,7	
H	12/05/00	Added DOT Specification	6,7	
I	1/31/08	Reformatted Document Added Restricted Disclosure Notice Added maintenance Manual Reference Note Added Floatation System Discharging Note Revised DOT spec number	All 2 4 5 9	
J	8/26/10	Deleted Alt Washer AN960JD10L Revised description of 206-377-064 from Bracket Assembly to Spacer Assembly	8 8	

THIS CHANGE HAS BEEN DETERMINED TO BE MINOR IN ACCORDANCE WITH THE AGREEMENT BETWEEN THE FAA AND AAI DATED SEPTEMBER 3, 2009.


FOR ROBERT C. LAZAROFF

27 AUGUST 2010

1.0 INTRODUCTION

These instructions provide the information necessary to remove the installed Emergency Floatation System Reservoir Assembly and install the **AERONAUTICAL ACCESSORIES, INC. EMERGENCY FLOATATION SYSTEM LIGHTWEIGHT REPLACEMENT RESERVOIR ASSEMBLY P/N 206-376-100** on Bell Helicopter Textron model 206A and 206B model helicopters. This installation replaces the existing nitrogen reservoir assembly with a certified replacement lightweight reservoir assembly on helicopters which have Emergency Floatation Systems installed. All Engineering aspects of these instructions are FAA approved under STC No.SR00175AT.

NOTE:

The following FAA approved installation is a co-requisite or prerequisite for the installation of the Lightweight Replacement Reservoir Assembly P/N 206-376-100:

1. Emergency Flotation System:

Bell Helicopter Textron Emergency Flotation System
P/N 206-706-211-101/-103 for 206A and 206B Helicopters.
Bell SI 206-115

NOTE

Refer to Bell Helicopter Model 206 Maintenance Manual and all applicable maintenance manuals and/or ICAs for disassembly/reassembly instructions not specifically addressed in this document

2.0 INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS FOR LOWER FUSELAGE MOUNTED RESERVOIR OF BELL HELICOPTER TEXTRON KIT P/N 206-706-211-101/-103 INSTALLED ON BELL 206A AND 206B MODEL HELICOPTERS PER BHT SI 206-115.

- a. Remove existing nitrogen cylinder.

CAUTION

**Do not remove Reservoir while pressurized.
See Section 2.1 Floatation System Discharging**

- b. Disconnect valve assembly/adapter from the forward end of the reservoir.
- c. Remove valve assembly/adapter. Tag and retain valve assembly/adapter for installation in Lightweight Replacement Reservoir Assembly. Discard Packing. Old Reservoir should be disposed of at discretion of owner.

2.1 FLOATATION SYSTEM DISCHARGING

- a. Gain access to the Emergency Floatation System Nitrogen Reservoir inflation valve and charging Schrader valve.
- b. Remove the Protective cap from the Schrader valve.
- c. Slowly vent the pressurized nitrogen into the atmosphere until the system reservoir gage indicates zero pressure.

NOTE

During discharging, the system reservoir will decrease in temperature rapidly. Adjust rate of nitrogen release as required to minimize hazard and avoid unprotected contact with reservoir during this process.

- d. Close charging valve

2.2 INSTALL LIGHTWEIGHT REPLACEMENT RESERVOIR ASSEMBLY
P/N 206-377-050

- a. Remove existing Brackets BHT P/N 206-073-837-1 and dispose of at installer's discretion. Install two (2) Bracket Assemblies P/N 206-377-030 using hardware provided. Torque screws to 20-25 in-lbs. See Figure 1.
- b. Inspect valve assembly/adaptor to ensure fitting ends and threads are not damaged.
- c. Install new Packing P/N MS28778-16 under valve assembly/adaptor and install into Lightweight Reservoir Assembly P/N 206-377-050. Torque to 150-200 inch pounds.
- d. Install Lightweight Reservoir Assembly per Figure 1, ensuring reservoir decals are visible.
- e. Leave Clamp Assemblies P/N 206-374-081 loose to permit adjustment of Reservoir Assembly.
- f. Apply Corrosion Preventive Compound to threads of fitting.
- g. Connect valve assembly/adaptor to fitting and torque 150-200 inch pounds.
- h. Position Reservoir Assembly and torque Clamp Assembly P/N 206-374-081 nuts to 10-15 inch pounds.
- i. Apply Sealant, PR-1422 Class A2 or equivalent over bolt heads.
- j. Service Lightweight Replacement Reservoir Assembly per Section 2.3 of this document.

2.3 MAINTENANCE AND INSPECTION INSTRUCTIONS

- a. The retirement life of the reservoir is 15 years from date of manufacture.
- b. Inspection and Testing intervals include a hydrostatic test required every three years. When the Reservoir Assembly is sent to a testing agency for hydrostatic re-test, a copy of the DOT Specification and Hydrostatic Testing Procedures must accompany the Reservoir Assembly.
- c. Servicing Procedure:

NOTE

Service with dry nitrogen only.

CAUTION

Reservoir should not be pressurized unless installed on helicopter. Do not remove while under pressure.

- d. Connect external source of nitrogen supply to filler valve on reservoir neck.
- e. Fill reservoir in accordance with pressures specified on the pressure decal located on the reservoir.

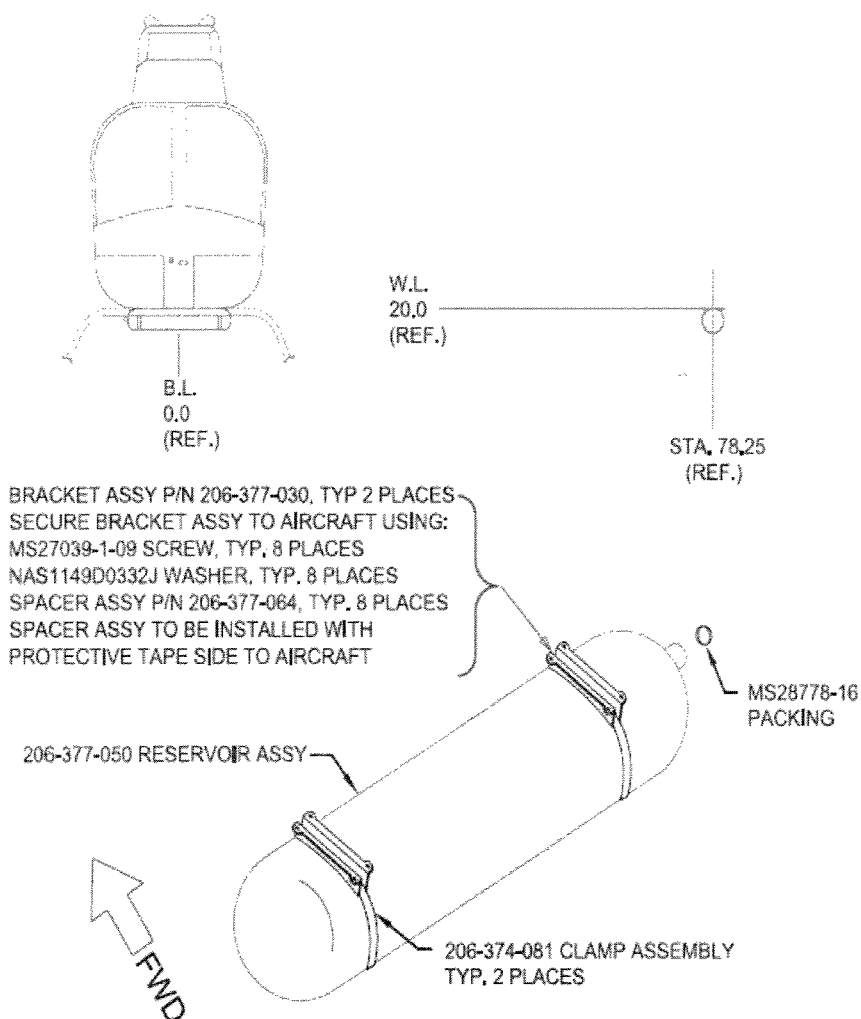
CAUTION

Maximum service pressure of the Lightweight Replacement Reservoir Assembly is 3675 PSI.

NOTE

Aeronautical Accessories, Inc.'s P/N 206-377-010 Reservoir is a component of the P/N 206-377-050 Reservoir Assembly.

Aeronautical Accessories, Inc.'s P/N 206-377-050 Reservoir Assembly is a component of the AAI Kit P/N 206-376-100 Emergency Flotation System Lightweight Replacement Reservoir Assembly for Bell 206A and 206B Model Helicopters.



-100 INSTALLATION

REPLACES RESERVOIR ASSY IN BELL 206A AND 206B
MODEL HELICOPTERS EQUIPPED WITH BHT EMERGENCY
FLOTATION SYSTEM KIT P/N 206-706-211-101/-103.
BHT SI 206-115 (REF)

Figure 1

PARTS LIST

206-376-100 LIGHTWEIGHT REPLACEMENT NITROGEN
RESERVOIR ASSEMBLY

<u>Qty</u>	<u>Part Number</u>	<u>Description</u>
1	206-377-050	Lightweight Reservoir Assy
2	206-377-030	Bracket Assembly
8	206-377-064	Spacer Assembly
2	206-374-081	Clamp Assembly
1	MS28778-16	Packing
8	MS27039-1-09	Screw
8	NAS1149D0332J	Washer
1		Reservoir Component Card
1	AA-96208	Hydrostatic Testing Procedure
1	DOT-SP-11194	Dot Specification
	Alt.: DOT-E-8391*	

* When Bottle is made to DOT-E-8391 Specifications, include this document in the kit in lieu of DOT-SP-11194.

Confirm inventory prior to installation

Packed by _____ / _____ / _____

United States of America
Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SR00175AT

This certificate, issued to

Aeronautical Accessories, Inc.
P.O. Box 3689
Bristol, Tennessee 37625

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 6 of the Civil Air Regulations.

Original Product — Type Certificate Number: H2SW
Make: Bell Helicopter
Model: 206A, B, L, L-1, L-3, L-4

Description of Type Design Change:

Installation of lightweight replacement reservoir assembly in accordance with Aeronautical Accessories, Inc. (AAI) Drawing List Report No. AA-91060, no revision, dated September 11, 1992, or later FAA approved revisions.

Limitations and Conditions:

This approval should not be extended to other rotorcraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will produce no adverse effect upon the airworthiness of that rotorcraft.

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: December 13, 1990

Date issued:

Date of issuance: April 1, 1993

Date amended:

March 25, 1996



By direction of the Administrator

Paul C. Sconyers
(Signature)

Paul C. Sconyers
Associate Manager, ACE-117A

Atlanta 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.



REPÚBLICA FEDERATIVA DO BRASIL
COMANDO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL
INSTITUTO DE FOMENTO E COORDENAÇÃO INDUSTRIAL

CERTIFICADO DE HOMOLOGAÇÃO SUPLEMENTAR DE TIPO
(Supplemental Type Certificate)

NÚMERO 2000S03-13
(Number)

Este certificado, emitido com base na Lei nº 7565 "Código Brasileiro de Aeronáutica", de 19 de dezembro de 1986,
(This certificate, issued in the basis of the Law No. 7565 "Código Brasileiro de Aeronáutica", dated 19 December 1986,

é conferido ao (à): Aeronautical Accessories, Inc.
is granted to:)
P.O. Box 3689
Bristol, Tennessee 37625
USA

por ter a modificação ao projeto de tipo do produto abaixo citado, observadas as limitações e condições
(for having the change to the type design of the product mentioned below, with the limitations and conditions therefor as)

especificadas, satisfeito aos requisitos de aeronavegabilidade aplicáveis.
(specified hereon, met the applicable airworthiness requirements.)

Produto Original - Número do Certificado de Tipo: H2SW (CTA)
(Original Product - Type Certificate No:)

Fabricante: Bell Helicopter Textron
(Manufacturer:)

Modelo(s): 206A, 206B, 206L, 206L-1, 206L-3 and 206L-4
(Model(s):)

DESCRIÇÃO DA MODIFICAÇÃO AO PROJETO DE TIPO:
(Description of Type Design Change:)

Installation of lightweight replacement reservoir assembly, in accordance with Drawing List Report No. AA-91060, Rev. F, dated 18 NOV 1997, or later approved revisions.
This CHST validates in Brazil the STC # SR00175AT, issued by FAA (USA).

LIMITAÇÕES E CONDIÇÕES:
(Limitations and Conditions:)

See continuation sheet for applicable data.

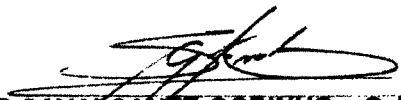
DATAS:
(Dates of:)

Do Requerimento: 01 JUNE 1998
(Application:)

Da emissão: 31 MAR 2000
(Issue:)

Da reemissão:
(Reissue:)


JOSÉ LUIZ R. BELDERRAIN - Ten.-Cel.-Eng.
Chefe da Divisão de Homologação Aeronáutica
(Chief, Divisão de Homologação Aeronáutica)


SIOMAR CAVALCANTE GODINHO - Cel.-Av.
Diretor do Instituto de Fomento e Coordenação Industrial
(Director, Instituto de Fomento e Coordenação Industrial)



REPÚBLICA FEDERATIVA DO BRASIL
COMANDO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL
INSTITUTO DE FOMENTO E COORDENAÇÃO INDUSTRIAL

Folha de Continuação ao
(Continuation Sheet to)

CERTIFICADO DE HOMOLOGAÇÃO SUPLEMENTAR DE TIPO
(Supplemental Type Certificate)

NÚMERO 2000S03-13
(Number)

LIMITAÇÕES E CONDIÇÕES:
(Limitations and Conditions:)

- I. This approval should not be extended to other aircraft of this model 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 aircraft.
- II. 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.
- III. A copy of this Certificate and Report No. AA-91061 - Installation Instruction, shall be maintained as part of the permanent records for the modified aircraft.

----- END -----



ENTE NAZIONALE
PER L'AVIAZIONE CIVILE
(ex D.L.gs. No. 250/97)

REGISTRO AERONAUTICO ITALIANO
DIREZIONE CERTIFICAZIONE MATERIALE AERONAUTICO

Our ref.: 98/927/MAE
25 February 1998

Aeronautical Accessories, Inc.
P.O. Box 3689
Bristol, Tennessee 37625
USA

Subject: FAA STC SR00175AT - Italian Validation.

Reference: Aeronautical Accessories, Inc. letter of application dated 24 November 1997.

Dear Sirs,

according to the existing Bilateral Airworthiness Agreement between USA and Italy, and following satisfactory accomplishment of RAI evaluation, we wish to inform you that the FAA STC SR00175AT amended on 25 March 1996 can be considered validated in Italy.

The validation is granted for the following models:

Bell 206A, B, L-1.

Please consider RAI in the mailing list for continuous airworthiness information for the related STC installation.

Yours faithfully

MAE Director
Ing. Filippo De Florio

CE/bs

c.c.: - FAA Brussels
- DD.TT. RAI



AIRWORTHINESS APPROVAL NOTE NO: 23814 Issue 12

APPLICANT: CAA Internal Purposes

AIRCRAFT TYPE: Bell 206 Series

REGISTRATION NO: Not Applicable

CONSTRUCTOR'S NO: Not Applicable

Validation of Aeronautical Accessories FAA Bell 206 Series STC Approvals

In accordance with BCAR B2-2 para 7.2.3 procedures, the following Aeronautical Accessories, Inc modifications are approved for use in the Transport Category (Passengers) when installed in accordance with the FAA STC on UK registered Bell/Agusta Bell 206 Series aircraft, as appropriate:

<u>Description</u>	<u>STC</u>	<u>Model</u>
Range Extender	SH2889SW	Bell 206A,B
Longranger Extender	SH1522SO	Bell 206L,L-1
Raingutter	SH1148SO	Bell 206A,B,L,L-1,L-3
Spacemaker	SH227WZ	Bell 206A,B,L,L-1,L-3,L-4,407
Maintenance Step	SH1281SO	Bell 206A,B
Folding Maintenance Step	SH2243SO	Bell 206A,B,L,L-1,L-3,L-4,407
Step/Handle	SH1282SO	Bell 206A,B
Step/Handle	SH1366SO	Bell 206L,L-1,L-3,L-4,407
High Skid Gear	SH1392SO	Bell 206A,B
High Skid Gear	SH2804SO	Bell 206L,L-1,L-3,L-4
Low Skid Gear	SH2764SO	Bell 206A,B
Low Skid Gear	SH2941SO	Bell 206L,L-1,L-3,L-4
Flitestop	SH1322SO	Bell 206A,B,L,L-1,L-3,L-4
Baggage Floor Protector	SH1147SO	Bell 206A,B,L,L-1,L-3,L-4,407
Cyclic Cover	SH244WE	Bell 206A,B,L,L-1,L-3,L-4
Collective Safety Cover	SH2373SO	Bell 206A,B,L,L-1,L-3,L-4
Crew Wedge Window	SH1815SO	Bell 206A,B,L,L-1,L-3,L-4
Replacement Windows	SH1664SO	Bell 206A,B,L,L-1,L-3,L-4
Crew Shoulder Harness	SH2073SO	Bell 206A,B,L,L-1,L-3,L-4
Door Openers	SH1990SO	Bell 206A,B,L,L-1,L-3,L-4,407
VRs	SH7882SW	Bell 206A,B
Cabin Floor Protector	SH2889SO	Bell 206A,B,L,L-1,L-3,L-4,407
Crew Vertical Slide Windows	SH2139SO	Bell 206A,B,L,L-1,L-3,L-4,L-4 (Modified)
Replacement Drive Train Seals	SR00539AT	Bell 206A,B,L,L-1,L-3,L-4
Tail Rotor Pedal Lockout	SR00513AT	Bell 206A,B,L,L-1,L-3,L-4
Replacement Interior Truss	SID298SO	Bell 206A,B,L,L-1,L-3
Replacement Door Locks and Latching	SR00095AT	Bell 206A,B,L,L-1,L-3,L-4
Fuel Cap		

APPLICANT
AIRCRAFT PROJECTS DEPARTMENT
FLIGHT MANUALS SECTION
POWERPLANT DEPARTMENT
REGIONAL MANAGER:-

<u>Description</u>	<u>STC</u>	<u>Model (Cont'd)</u>
Lightweight Replacement Nitrogen Reservoir Assembly	SR00175AT	Bell 206A, B, L, L-1, L-3, L-4
Electrical Inflation Valve Retrofit Kit	SR00822AT	Bell 206A, B, L, L-1, L-3
Air Deflector	SR01556AT	Bell 407
Air Deflector	SR01582AT	Bell 206A, B, L, L-1, L-3, L-4
Dual Video Camera System and Monitor	SH2292SO	Bell 206A, B, L, L-1, L-3
Hinged Circuit Breaker Panel	SR00347AT	Bell 206A, B, L, L-1, L-3, L-4

Issue 2 has been raised to correct minor editorial errors.

Issue 3 has been raised to include the Bell 206L4, where applicable.

Issue 4 has been raised to include the Crew Vertical Slide Windows.

Issue 5 has been raised to include the Replacement Drive Train Seals.

Issue 6 has been raised to include the Tail Rotor Pedal Lockout and Bell 206 L-4 applicability to High and Low Skid Gear.

Issue 7 has been raised to include the Replacement Interior Trim

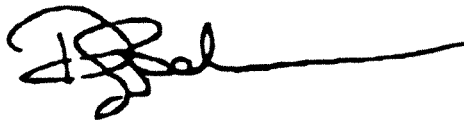
Issue 8 has been raised to include Replacement Door Locks and Locking Fuel Cap

Issue 9 has been raised to include replacement Nitrogen Reservoir and Electrical Inflation Valves for the Bell Emergency Flotation Equipment.

Issue 10 has been raised to include installation of Air Deflection on crew and passenger door windows.

Issue 11 has been raised to include STCs SK01582AT, SH2292SO and SR00347AT.

Issue 12 has been raised to include the Bell 407, where applicable.



P Sparkes

For the Civil Aviation Authority

Date 8 October 1999