1. Cover Page.

# **INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

Aero Pacific Document Number 407UM01-02

# AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT Manual Part Number AP407UM01-ICA

12/15/11 Rev. A

APPLICABLE TO BELL HELICOPTER / TEXTRON HELICOPTER 407 AND 206 SERIES MODELS:

407, 206, 206A, 206A-1, 206B, 206B-1, 206L, 206L-1, 206L-3, 206L-4

Aero Pacific 1407 South Coast Highway Oceanside, CA. 92054 (760) 967-1333

#### 2. Revision List

## **REVISION LIST**

# INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT Manual Part Number AP407UM01-ICA

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REVISION#	DESCRIPTION	DATE
NEW	INITIAL RELEASE	10/25/99
А	Remove (2) Bevel Bushings p/n AP407UM01-16 from text pages 9, 10, and 12.	12/15/1
	Replace with (2) Spacers Item 65 p/n AP407UM01-27 and (1) Bushing Item 64	
	p/n AP407UM01-26 at all locations.	
	Correct all ICA pages to read 12/15/11 Rev. A	
T. No. 2000 (1990) 1990 (1990) 1990 (1990)		
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# 3. List of Effective Pages

# **INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

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# LIST OF EFFECTIVE PAGES

**LIST OF REVISIONS** 

Revision

(Initial Release) 10/25/99

Revision

12/15/11

## LIST OF EFFECTIVE PAGES

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Section C Drawings Section D Special Processes	17. through 24. 25. through 28.	Rev. A Rev. A	12/15/11 12/15/11 12/15/11

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A. INTRODUCTION

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#### 2. GENERAL

This Manual contains maintenance and inspection information as well as other information describing requirements and actions necessary to continue the airworthy condition of the AP407UM01 Aft Utility Mount. Changes in this information will be provided to owners by Aero Pacific Form QC015, Supplemental Type Certificate Notification of Revision. Original owner address is obtained from our database derived from our Supplemental Type Certificate records document "Letter of Conditional Approval for Use" which requires name, address, model, serial number, and registration information. Subsequent owners are requested to provide Aero Pacific with their address to keep our data base current and allow information to reach the correct party.

#### 3. DESCRIPTION OF USE

This mount is designed to provide sturdy attachment for a variety of searchlights, cameras, and other electronic or electrical devices to the lower aft cabin area of Bell Helicopter/Textron Models 407 and 206 Series Helicopters.

The mount structure consists of an aluminum saddle plate from which the searchlight or other device is suspended. Attachment of the saddle plate to the helicopter is accomplished at three locations. Forward attachment is accomplished at two locations by creating hardpoints on the lower aft left and right sides of the helicopter cabin structure utilizing plates and doublers riveted in place. The aft attachment point is the existing aft lift-point protrusion, and is connected to the saddle plate with a fork fitting. For safety reasons the overboard drain line outlet(s) are moved farther aft to prevent dripping onto the installed accessory. The searchlight or other device may be connected to the saddle plate with quick-disconnect dovetail plate mounts or autostow plate for ease of removal and installation. The location of the mount structure is such that it allows installation of most FAA approved air conditioning systems without interference. The mount location provides greater ground clearance and reduced drag penalties when compared to location of like equipment on the flat area of the cabin belly.

The maximum suspended payload weight from this mount is limited to 55.0 pounds U.S. The maximum operational speed (Vne) is limited to 130 Knots with equipment attached to the mount. There is no speed penalty incurred with the mount installed and the payload removed. Only specific qualified payload equipment and attachment hardware as specified in the STC may be used on this mount. A weight and balance document must be available in the aircraft reflecting the current mount configuration in use.

#### 4. APPLICABILITY

The AP407UM01 Utility Mount is designed for use and installation on the following specific Bell Helicopter / Textron Models only: Model 407, 206L, 206L-1, 206L-3, 206L-4.

#### 5. REQUIREMENTS

All above listed helicopter models must be equipped with Type Certificated High Skid Gear when this mount structure is installed.

## 6. PAYLOAD EQUIPMENT AND OPERATIONAL LIMITATIONS

Only specific approved Payload Equipment and attachment hardware may be used as specified in the STC. Operation of listed applicable helicopter models are limited as stated in the STC Flight Manual Supplement for the AP407UM01 Aft Utility Mount installation.

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## 7. EXPLANATION OF ABBREVIATIONS

p/n = Part Number

# = number (as in number 12 drill.....#12)

BHT = Bell Helicopter / Textron, representing the particular Type Certificate holder at the time. (in. or ") = inch(lbs.) = pounds U.S.

(in.-lb.) = inch-pounds (deg.) = degrees

(p.s.i.) = pounds per square inch

(STC) = Supplemental Type Certificate

(ICA) = Instructions for Continued Airworthiness

#### 8. MEASUREMENTS

All measurements are in inches, pounds U.S., inch-pounds, or degrees.

#### 9. SPECIAL TOOLS

Removal, Reinstallation, Maintenance, and Inspection may require several special tools in addition to standard mechanics tools. They are:

- 1. Torque wrench capable of values from 15 to 150 inch-pounds torque.
- 2. Small spray gun and minimum 50 p.s.i. compressed air source.
- 3. Small stainless steel brush.

#### 10. ADDITIONAL INFORMATION

This manual contains instructions for multiple specific models of the 206 Series helicopter and the model 407 helicopter. Additional information is contained in the aircraft manufacturers Handbook of Maintenance Instructions

#### 11. WARNINGS, CAUTIONS, OR NOTES

Certain procedures carried out during the course of completing instructions contained in this manual could cause unnecessary damage to parts of the helicopter, work resulting in unacceptable results, or harm to the installer. Warnings are used to help prevent major damage to the aircraft or harm to the installer. Cautions are used to help prevent minor damage to the aircraft or unacceptable work. Notes are informative in nature and generally contain recommendations or suggestions that will result in a successful installation. Underlining and CAPITAL LETTERS are used to bring specific words to your attention.

## 12. WEIGHT AND BALANCE DATA, EQUIPMENT LOCATION

Weight and balance data is detailed on Drawing W of this manual. You will be required to prepare and have available in the aircraft a weight and balance calculation expressing the mount and payload configuration which you are using.

#### 13. CROSS REFERENCE OF PARTS

All parts and fastener hardware cross reference by item number to part number on all drawings to the Parts List and include quantities. Refer to Drawings for correct part location and usage.

#### 14. DEFINITIONS

The following nomenclature is used throughout this ICA to describe specific special word groups in a condensed fashion.

Mount Structure = A short worded abbreviation to describe the assembly group of the Saddle Plate p/n AP407UM01-01, Fork Mount p/n AP407UM01-02, Upper Dovetail Plate p/n AP001UM01B (or Autostow Upper Mount), and their respective attachment hardware as a unit. Payload Equipment = Any appliance (electrical, electronic, or other), separate or combined, attached to or suspended from the Mount Structure.

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<u>Assemblage</u> = Two or more individual separate assemblies of parts combined into one connected assembly.

Attachment Point(s) = Left forward bolting location created by permanently riveting in place Exterior Doubler p/n AP407UM01-09, Internal Doubler p/n AP407UM01-11, and Internal Shim p/n AP407UM01-14; Right forward bolting location created by permanently riveting in place Exterior Doubler p/n AP407UM01-10, Internal Doubler p/n AP407UM01-12, and Internal Shim p/n AP407UM01-15; Aft bolting location created by installation of (2) Bevel Bushings p/n AP407UM01-16 on the aft lift point of the helicopter; mentioned singularly or as a group. Hardpoint = Same as Attachment Point.

<u>Point(s)</u> of <u>Attachment</u> = Location position on the helicopter hull or structure either created or existing at which something may be attached.

#### 15. CONSUMABLE PRODUCTS

The following product must be purchased or made available to complete reinstallation:

PROSEAL 890B-2 pint system or equivalent; Available from: Courtaulds Aerospace Sealant 5454 San Fernando Road Glendale, CA 91203

Note: The Consumable Products Manufacturers Instructions for Use and Container Label contain information concerning correct application and safe use of their Product.

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1. Section Divider and Section Contents

### SECTION B

# **AIRWORTHINESS LIMITATIONS**

- 1. SECTION DIVIDER AND SECTION CONTENTS
- 2. DECLARATION OF AIRWORTHINESS LIMITATIONS
- 3. SCHEDULED INSPECTION PROCEDURE AND DAMAGE LIMITATIONS
- 4. SCHEDULED INSPECTION CHECKLIST
- 5. MAINTENANCE PROCEDURES
- 6. GENERAL INSTRUCTIONS: REMOVAL, DISASSEMBLY, AND REINSTALLATION
- 7. REMOVAL OF PAYLOAD EQUIPMENT, MOUNT STRUCTURE AND DRAIN SYSTEM
- 8. REASSEMBLY OF MOUNT STRUCTURE
- 9. REINSTALLATION OF MOUNT STRUCTURE, PAYLOAD EQUIPMENT, AND DRAIN SYSTEM
- 10. REPLACEMENT OF AN INDIVIDUAL PART
- 11. PARTS LIST
- 2. <u>DECLARATION OF AIRWORTHINESS LIMITATIONS</u> "There are no Airworthiness Limitations associated with this design change." This installation has no life-limited parts.

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# 3. SCHEDULED INSPECTION PROCEDURE and DAMAGE LIMITATIONS

**A. GENERAL** This Scheduled Inspection Procedure contains Damage Limitations and Wear Limits used to determine serviceability of parts, and a check sheet designed to be used when performing scheduled inspections. This checklist when completed should become a permanent part of the Aircraft and/or Utility Mount records. Adherence to Maintenance Procedures in this ICA is required, and that material should be consulted when using this checklist.

#### **B. PRE-INSPECTION REQUIREMENTS**

- 1. Only latest revision of Inspection Checklist must be used.
- 2. Thoroughly clean all parts, assemblies, and fasteners to be inspected.

#### C. DEFINITIONS OF NOMENCLATURE

- Certain special words are used in the check sheet to describe groups or assemblies of specific parts. Definitions of Attachment Points, Mount Structure, Payload Equipment, Assemblage, and other special words may be found in the Introduction Section A of this ICA.
- 2. Refer to Drawings A, B, B-2, D, E, and Parts List of this ICA for part names, numbers and location. All drawing item numbers cross reference directly to item number and part number on Parts List. Refer to Drawing T for torque values, and Drawing W for weight and balance data.

### D. INCLUDED REQUIREMENTS OF INSPECTION PERIOD

The Annual Inspection is to be performed to the same requirements as a 100 Hour Inspection. Perform all 100 Hour Inspection items when performing a 500 Hour,1000 Hour or 5000 Hour Inspection. Perform all 500 Hour Inspections when performing 1000 Hour or 5000 Hour Inspection. Perform all 1000 Hour Inspection items when performing a 5000 Hour Inspection.

#### E. DAMAGE LIMITATIONS

Any parts or fasteners showing damage in excess of limits set forth in this section are non-airworthy and must replaced with a serviceable part or fastener. Fasteners with corrosion penetrating the plated coating shall be replaced.

		stiali de replaced.	
		DAMAGE LIMITATIONS	
ENTIRE MO	UNT STRUCTUR	E, LEFT AND RIGHT MOUNT E	BRACKETS, AND ADAPTOR
Part or	Dam	age Limits (All Limits Are Maxin	num Allowable)
Item	Cracks	Scratches	Dents, Gouges, Corrosion
ALL	None Allowed	Maximum Depth: .030 inch Maximum Length: .500 inch	Maximum Depth: .030 inch Maximum Length: .500 inch
Forked ends of Fork Mount	None Allowed	Inside Fork: None Allowed Exterior: .010 inch Maximum	Inside Fork: None Allowed Exterior: .010 inch Maximum
Saddle Plate bend radius	None Allowed	Inside Surface: None Allowed Exterior: .020 inch Maximum	Inside Surface: None Allowed Exterior: .020 inch Maximum
FASTENERS	None Allowed	Maximum Depth: .005 inch Maximum Length: .100 inch	Maximum Depth: .005 inch Maximum Length: .100 inch

BOLT HOLE WEAR LIMITS			
Initial Hole Size Diameter	Maximum Measured Diameter In Any Direction		
1/4 inch (.250)	.265 inch		
5/16 inch (.313)	.328 inch		

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# SCHEDULED INSPECTION PROCEDURE AND DAMAGE LIMITATIONS

# 4. <u>INSPECTION CHECKLIST</u>

Regi	stration #	Make:	Model:	TT:	Date:	
MOUNT STRUCTURE						
Perio	od (Hours)	Wha	at To Inspect		Mech.	Insp.
100	100 Visually inspect all parts for damage and condition. It is not necessary to remove or disassemble Mount Structure for any 100 Hour Inspection items.				Э	
100	Check torque or	n all fasteners. Refer	to Drawing T as neces	sary.		
100	p/n AP407UM01	agnification inspection 1-02 at attachment po and lift point for dam	n lens, examine forked pint to the aft helicopter page and condition.	ends of Fork Mount lift point		
	LEFT AND RIG	HT FORWARD HAR	DPOINTS AND AFT LI	FTPOINT ATTACH	MENT	
100	from inside Left	and Right Forward F	Remove tailcone divider lardpoints for condition and security of drain s	and security. Check	(	
500	Remove Payloa	d from Mount Structu	re by disconnecting at	Dovetail Plates.	T	
500	Using a 10X ma	ignification inspection in the area of beveled	lens, examine Upper dovetail grooves and d	Dovetail Plate p/n	or	
500	Using a 10X magnification inspection lens, examine Lower Dovetail Plate p/n AP001UM02 Assembly in the area of beveled dovetail grooves and countersunk holes for damage and condition.		<			
1000	Remove Mount	Structure from aircra	ft at Attachment Points			
1000	wear and condit	ion. Using a 10X mag	wear. Examine Attachr gnification inspection le p/n AP407UM01-01 for	ens, examine bend		
	LEFT AND RIGI	HT FORWARD HAR	DPOINTS AND AFT LI	FTPOINT ATTACH	MENT	
1000	right hardpoints	. Examine airframe s	k condition of mounting structure in area around oublers. Re-coat as ne	hardpoint(s). Chec	k	
5000			nine all bolt holes for we serviceable parts as n			

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#### MAINTENANCE PROCEDURES

#### Introduction:

Maintenance to the mount structure is conducted on an "as needed" basis determined by the results obtained during the Scheduled Inspection Procedure contained in this ICA. Maintenance is limited to removal, disassembly, reinstallation, replacement of damaged parts, general cleaning, corrosion removal, and treatment of the mount surface after corrosion removal or acceptable damage. Serviceability of a part is based solely on condition. There are no life-limited parts. There are no moving parts requiring lubrication or adjustments.

- 1. **General cleaning** is to be performed as necessary using clean dry rags. <u>No abrasives</u>. If used on your installation, keep dove-tail mount grooves clean and free from dirt or oil. Wipe with clean dry rag at any time payload assembly is removed or re-installed.
- 2. For **heavier cleaning** (bugs, imbedded deposits, etc.) use lukewarm water and a mild dish washing liquid soap mix and clean rags. Rinse with clean water. Blow or wipe dry.
- 3. Any corrosion found must be removed and treated as follows:
  - A. Light surface corrosion: Clean locally with small stainless steel brush (tooth brush size).
- B. <u>Medium corrosion</u>: Disassemble mount as necessary and clean with stainless steel brush. Clean and coat part surface at damaged area as per Aero Pacific Surface Preparation and Conversion Coating for Aluminum Process AP006.Paint damaged area as per Aero Pacific Priming and Painting Process AP007. These processes are contained in Section D of this ICA.
- C. <u>Heavy corrosion</u>: Disassemble mount as necessary. Mask or block off entire part or assembly exposing only area to be cleaned. Abrasive clean with glass bead blasting. Remove masking materials and thoroughly clean all abrasive materials from part or assembly. Clean and coat surface of part at damaged area as per Aero Pacific Surface Preparation and Conversion Coating for Aluminum Process AP006. Paint damaged area as per Aero Pacific Priming and Painting Process AP007.
- D. <u>Severe corrosion</u> may require part replacement. Consult INSPECTION PROCEDURE and DAMAGE LIMITATIONS contained in this ICA to determine serviceability.
- 4. Treat scratches and gouges in the same manner as corrosion listed above, referring to the same Documents for limitations and processes.
- 5. Parts which fail to meet the requirements of DAMAGE LIMITATIONS contained in this ICA shall be replaced. Refer to PARTS LIST contained in this ICA for correct replacement parts.
- 6.. Remove, disassemble, or reinstall the mount structure as per instructions contained in REMOVAL and REINSTALLATION INSTRUCTIONS contained in this ICA.
- 7. Any nuts or bolts removed require torque during re-installation. Refer to Drawing T contained in this ICA for torque values and procedures.
- 8. Refer to Section D of this ICA for detailed instructions concerning the following Aero Pacific Special Processes:
  - A. Aero Pacific Process AP006: Local Area Surface Preparation and Conversion Coating for Aluminum.
  - B. Aero Pacific Process AP007: Priming and Painting Local Areas.

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# 6. GENERAL INSTRUCTIONS-REMOVAL, DISASSEMBLY, and REINSTALLATION

Reference Drawings A, B, B-2, D, E, T, W and Parts List during Removal or Reinstallation. Drawings B and B-2 differ only as to which brand or type of quick removal device (Dovetail Plates or Autostow) is to be installed on your aircraft. Select the drawing defining your specific installation and the other may be ignored. Reference Drawings D, and E for all installations. Reference drawing W for weight and balance information on all models. Reference Drawing T for bolt and nut torque values on all models.

## 7. REMOVAL OF PAYLOAD EQUIPMENT, MOUNT STRUCTURE, and DRAIN SYSTEM

<u>CAUTION:</u> Do not remove Mount Structure or Payload Equipment unless all electrical connection and/or other connections have been disconnected.

- A. Removal of Payload Equipment (Dovetail Attachment) Reference Drawing B.
- 1. Cut safety wire securing (2) bolts Item 44 p/n AN4CH10A attaching Item 6 p/n AP001UM02-02 Side Clamp on Lower Dovetail Plate Item 5 p/n AP001UM02-02 attached to payload equipment.
- 2. Loosen these bolts and back them out approximately 1/4 inch while supporting the payload.
- 3. Slide Payload Equipment and Lower Dovetail Plate forward or aft, and free from Upper Dovetail Plate Item 3 p/n AP001UM01B.
- B. Removal of Payload Equipment (Autostow) Reference Drawing B-2.
- 1. Manufacturers Handbook of Installation and Operation contains information concerning removal and reinstallation of accessories using Autostow attachment.
- C. Removal of Mount Structure Reference Drawings B and/or B-2.
  - Note: The Aircraft Manufacturers Handbook of Maintenance Instructions contains information on the removal and installation of access panel between baggage compartment and aircraft cabin tailcone area at Station 192.0.
- 1. Remove cabin divider panel between baggage compartment and aircraft cabin tailcone area.
- 2. At helicopter aft lift point located at station 204.92 locate Bolt Item 37 p/n AN5C30 attaching Fork Mount Item 2 p/n AP407UM01-02 to the lift point stub protruding from the aircraft belly. Remove Cotter Pin Item 40 p/n MS24665-153 from Castle Nut Item 38 p/n AN310C5. Loosen and remove Castle Nut. Do Not remove Bolt Item 37 at this time.
- 3. At forward left side of Saddle Plate Item 1 p/n AP407UM01-01 locate forward attach bolt Item 35 p/n AN4C10A. From inside loosen and remove Nut Item 34 p/n MS21044C4 attaching bolt through Saddle Plate and Cabin Hull. Leave bolt in place.
- 4. At forward right side of Saddle Plate Item 1 p/n AP407UM01-01 locate forward attach bolt Item 35 p/n AN4C10A. From inside loosen and remove Nut Item 34 p/n MS21044C4 attaching bolt through Saddle Plate and Cabin Hull. Leave bolt in place.
- 5. While supporting forward end of Mount Assemblage, remove both bolts item 35 p/n AN4C10A from left and right sides and allow Mount Assemblage to pivot down and hang from aft point of attachment.
- Remove aft attachment bolt Item 37 p/n AN5C30 and pull Mount Assemblage carefully down and away from (2) Spacers Item 65 p/n AP407UM01-27 and Bushing Item 64 p/n AP407UM01-26mounted in Aft Lift Point stub.
- 7. Do not remove (2) Spacers Item 65 p/n AP407UM01-27 and Bushing Item 64 p/n AP407UM01-26 from Aft Lift Point stub unless there is no intention of reinstallation of mount at any time. CAUTION: If aircraft is to be flown with Mount Assemblage temporarily removed ACCOMPLISH THE FOLLOWING:
  - a. Obtain and Insert (1) Bolt p/n AN5-17A t through the (2) Spacers Item 65 p/n AP407UM01-27 and Bushing Item 64 p/n AP407UM01-26 located at the Aft Lift Point stub. Secure in place with (1) Nut p/n MS21044-5 and (2) AN960-516L Washers. Torque to 90 inch-pounds +/-5.

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- b. Plug the 1/4" holes located at the left and right forward hardpoints by obtaining and installing (2) Bolts p/n AN4-6A Bolts, (2) Nuts p/n MS21044-4 and (4) Washers p/n AN960-416. Insert bolts, install nuts, and torque to 65 inch-pounds +/-5.
- 8. Complete removal of (2) Spacers Item 65 p/n AP407UM01-27 and Bushing Item 64 p/n AP407UM01-26 may be accomplished by punching each one individually from the Aft Lift Point stub using a 1/4" inch drift. **Note:** Bevel Bushings will probably be damaged, and this is not recommended unless Mount Structure is not to be reinstalled.
- 9. CAUTION: Removal of the Left and Right Hardpoint Doublers, Shims and Lateral Channel is not recommended as they have been permanently attached the helicopter structure. Potential for damage to the aircraft structure exceeds any value or necessity to remove the parts. The combined weight is less than one pound and is negligible.
- D. Disassembly of Mount Structure (Dovetail Plates) Refer to Drawing B.
- 1. Remove (4) Nuts Item 36 p/n MS21043-4 attaching Upper Dovetail Plate Item 3 p/n AP001UM01B and Fork Mount Item 2 p/n AP407UM01-02 to Saddle Plate Item 1 p/n AP407UM01-01. Remove (4) Bolts Item 33 p/n NAS6604-12, (4) Washers Item 43 p/n AN960-416L, and separate parts. Pin Item 4 p/n AP001UM01-02 may be removed from Upper Dovetail Plate using a punch or drift slightly smaller than .125" diameter. **Note:** It is recommended that the pin be pressed out with an Arbor Press or Hydraulic Press. Use of a hammer may cause damage to the hole.
- 2. Remove Tiedown Ring Item 19 p/n AP407UM01-17 from Fork Mount Item 2 p/n AP407UM01-02 by removing Nut Item 20 p/n AP407UM01-18 and (2)Washer Item 42 p/n AN960-416 from threaded end of Tiedown Ring.
- 3. Remove (2) Bolts Item 44 p/n AN4CH10A . Remove Side Clamp Item 6 p/n AP001UM02-02 from side of Lower Dovetail Plate Item 5 p/n AP001UM02-01.
- 4. Cut safety wire securing (4) bolts Item 21 p/n AP407UM01-20(1/4x28 thread) or Item 22 p/n AP407UM01-21(5/16x24 thread) attaching Lower Dovetail Plate Item 5 p/n AP001UM02 to Payload Equipment or Accessory. Remove these (4) bolts. Separate Lower Dovetail Plate from Accessory.
- E. <u>Disassembly of Mount Structure</u> (Autostow) Refer to Drawing B-2.
- 1. Remove (4) Nut Item 36 p/n MS21043-4 and (6) Nut Item 61 p/n MS21043-4 from the (8) Screw Item 58 p/n MS24694S102 and (2) Screw Item MS24694S103 attaching Fork Mount Item 2 p/n AP407UM01-02 and Autostow Upper Mount Plate to Saddle Plate Item 1 p/n AP407UM01-01. Separate parts. Note: The Autostow Manufacturers Handbook of Maintenance Instructions contains information on removal, installation, and operation of that equipment.
- Remove Tiedown Ring Item 19 p/n AP407UM01-17 from Fork Mount Item 2 p/n AP407UM01-02 by removing Nut Item 20 p/n AP407UM01-18 and (2)Washer Item 42 p/n AN960-416 from threaded end of Tiedown Ring.
- F. <u>Disassembly and Removal of Drain System Modification</u> Refer to Drawing A, D, and E. Reference Drawing A for Item Number and cross-reference to Parts List for Part Number.
- Note 1: On the left side drain system only, BHT Model 407 uses 3/8" diameter #6 drain lines and fittings expressed as plain Item Numbers. BHT Models 206L Series use 1/4" diameter #4 drain lines and fittings expressed in parenthesis. Choose the correct Item Number for your installation. Right side drain system uses 1/4" diameter #4 drain lines and fittings for both Model 407 and 206L Series.
- Note 2: The Aircraft Manufacturers Handbook of Maintenance Instructions contains information on the removal and installation of access panel between baggage compartment and aircraft cabin tailcone area at Station 192.0.

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- 1. Gain access to the aft cabin tailcone area behind Station 192.0.
- 2. On the left side of the aircraft locate the drain line(s) Item 7 (51). Remove Tubing Nuts Item 23 (52) at each end of the drain tubes at four locations. Remove the drain tubes. **Note: Mark front and rear left-side drain lines for easy identification and location during reinstallation.**
- 3. Locate 90 degree Bulkhead Elbow Item 25 (54) mounted on the left side of bulkhead ring at Station 204.92. Loosen and remove Bulkhead Nut Item 26 (55). Remove Bulkhead Elbow and Bulkhead Washers Item 31 (32) from hole in bulkhead ring.
- 4. At station 207.92 (left side) locate the Drain Fitting Item 9 (56). On the outside of the aircraft hull at this location remove Bulkhead Nut Item 26 (55). Remove Drain Fitting and Bulkhead Washers Item 31 (32) from hole in aircraft hull. Note: Aircraft Manufacturers Handbook of Maintenance Instructions contains information on repairing or filling holes in the composite structure.
- 5. On the right side of the aircraft locate the drain line(s) Item 8. Remove Tubing Nuts Item 27 at each end of the drain tubes at four locations. Remove the drain tubes. **Note: Mark front and rear right-side drain lines for easy identification and location during reinstallation.**
- 6. Locate 45 degree Bulkhead Elbow Item 29 mounted on the right side of bulkhead ring at Station 204.92. Loosen and remove Bulkhead Nut Item 30. Remove Bulkhead Elbow and Bulkhead Washers Item 32 from hole in bulkhead ring.
- 7. At station 207.92 (right side) locate the Drain Fitting Item 10. On the outside of the aircraft hull at this location remove Bulkhead Nut Item 30. Remove Drain Fitting and Bulkhead Washers Item 32 from hole in aircraft hull. Note: Aircraft Manufacturers Handbook of Maintenance Instructions contains information on repairing or filling holes in the composite structure.
- 8. This completes removal procedure. Complete weight and balance documentation to reflect this change. Refer to Drawing W. If original system is to be reinstalled weight change is negligibile.

#### 8. REASSEMBLY OF MOUNT STRUCTURE

- A. Reassembly of Mount Structure (Dovetail) Refer to Drawing B and T.
- Orient position of Fork Mount Item 2 p/n AP407UM01-02 on top side of Saddle Plate Item 1 p/n AP407UM01-01 and Upper Dovetail Block Item 3 p/n AP001UM01B on bottom side of Saddle Plate as depicted in Drawing B. Line up (4) matching holes in each part and from the bottom insert (4) Bolts Item 33 p/n NAS6604-12. Attach (4) Washer Item 43 p/n AN960C416L and (4) Nuts Item 36 p/n MS21043-4. Tighten and torque to specification found in Drawing T.
- 2. Insert Tiedown Ring Item 19 p/n AP407UM01-17 through remaining 1/4" diameter free hole at forked end of Fork Mount Item 2 p/n AP407UM01-02. Place (2) Washers Item 42 p/n AN960C416 as shown in Drawing B. Attach Nut Item 20 p/n AP407UM01-18, tighten and torque to specification.
- B. Reassembly of Mount Structure (Autostow) Refer to Drawing B-2 and T.
- Orient position of Fork Mount Item 2 p/n AP407UM01-02 on top side of Saddle Plate Item 1 p/n AP407UM01-01 and Autostow Upper Mount Plate on bottom side of Saddle Plate as depicted in Drawing B-2. Line up (10) matching holes in each part and from the bottom insert (8) Screws Item 58 p/n MS24694S102 and (2) Screws Item 59 p/n MS24694S103. Attach (10) Washer Item 42 p/n AN960C416, and/or (10) Washer Item 43 p/n AN960C416L (as appropriate) on top side of Fork Mount and Saddle Plate. Install (10) Nuts Item 36 p/n MS21043-4. Tighten and torque Nuts and Screws to specification found in Drawing T.

Note: The Autostow Manufacturers Handbook of Maintenance Instructions contains information on removal, installation, and operation of that equipment.

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2. Insert Tiedown Ring Item 19 p/n AP407UM01-17 through remaining 1/4" diameter free hole at forked end of Fork Mount Item 2 p/n AP407UM01-02. Place (2) Washers Item 42 p/n AN960C416 as shown in Drawing B. Attach Nut Item 20 p/n AP407UM01-18, tighten and torque to specification.

## 9. REINSTALLATION OF MOUNT STRUCTURE, PAYLOAD EQUIPMENT, and DRAIN SYSTEM

A. Reinstallation of Mount Structure. Refer to Drawings A, B, B-2, D, E,

1. Place forked ends of Fork Mount Item 2 p/n AP407UM01-02 over outer ends of the (2) Spacers Item 65 p/n AP407UM01-27 and Bushing Item 64 p/n AP407UM01-26 and align holes.

2. Insert Bolt Item 37 p/n AN5C30 through hole(s) using appropriate (4) Washers Item 39 p/n AN960C516 and Castle Nut Item 38 p/n AN310C5. Tighten nut by hand only at this time.

3. Pivot Mount Structure assemblage forward and align forward left and right side 1/4" diameter

mounting holes on Saddle Plate Item 1 p/n AP407UM01-01.

- 4. Place (1) Washer Item 41 p/n AN970C4 on the outside of Saddle Plate at both left and right forward mounting holes. Place from (1) to (3) Washers Item 41 p/n AN970C4 as required to shim distance between inside surface of Saddle Plate and aircraft hull surface. Insert (1) Bolt Item 35 p/n AN4C10A through Washers, Saddle Plate, and aircraft hull on both left and right sides.
- 5. Gain access to the aft tailcone area behind bulkhead ring at Station 192.0.

Note: The Aircraft Manufacturers Handbook of Maintenance Instructions contains information on the removal and installation of access panel between baggage compartment and aircraft cabin tailcone area at Station 192.0.

6. Attach (1) Washer Item 42 p/n AN960C416 and (1) Nut Item 34 p/n MS21044C4 to each forward mount Bolt Item 35 p/n AN4C10A on the inside of the helicopter hull both left and right sides. Tighten and torque to specification found on Drawing T.

 At aft attachment point, tighten and torque Castle Nut Item 38 p/n AN310C5 and Bolt Item 37 p/n AN5C30 to specification found on Drawing T. Insert and secure Cotter Pin Item 40 p/n MS24665-153 through Bolt and Castle Nut.

B. Attachment of Payload Equipment (Dovetail Attachment) Refer to Drawing B.

- 1. Attach Lower Dovetail Plate item 5 p/n AP001UM02-01 to top of payload using appropriate bolt series and length for the particular piece of equipment. Torque to specification on Drawing W. Safety wire bolt heads in pairs. Keep interconnecting safety wire twist in provided grooves and below surface height of the Lower Dovetail Plate. Attach Side Clamp Item 6 p/n AP407UM02-02 to side of Lower Dovetail Plate using (1) Bolt Item 44 p/n AN4C10A and (1) Washer Item 42 p/n AN960C416 at each of the two attachment holes. Tighten Bolts by hand, leaving loose by approximately 1/4" between bottom of bolt head and Side Clamp to allow play for installation.
- 2. Lift assemblage of Payload and Lower Dovetail Plate up to Upper Dovetail Plate and engage dovetail grooves. Center dovetail plates to one-another and tighten (2) bolts p/n AN4CH10A on side of Lower Dovetail Plate Assembly by hand until tight. Torque these bolts to specification. Safety wire bolt heads. Reconnect any electronic, electrical, or mechanical connection required. Note: The Accessory or Equipment Manufacturers Handbook of Maintenance Instructions contains information on reconnecting any electrical and/or other connections required for that equipment.
- 3. Complete Weight and Balance records to reflect this change.

C. Attachment of Payload Equipment (Autostow) Refer to Drawing B-2.

Note: The Autostow Manufacturers Handbook of Maintenance Instructions contains information on removal, installation, and operation of that equipment.

D. Reinstallation and Assembly of Drain System. Refer to Drawings A, D, E, and T.

Reference Drawing A for Item Number and cross-reference to Parts list for Part Number.

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- Note 1: On the left side drain system only, BHT Model 407 uses 3/8" diameter #6 drain lines and fittings expressed as plain Item Numbers. BHT Models 206L Series use 1/4" diameter #4 drain lines and fittings expressed in parenthesis. Choose the correct Item Number for your installation. Right side drain system uses 1/4" diameter #4 drain lines and fittings for both Model 407 and 206L Series.
- Note 2: The Aircraft Manufacturers Handbook of Maintenance Instructions contains information on the removal and installation of access panel between baggage compartment and aircraft cabin tailcone area at Station 192.0.
- 1. Gain access to the aft cabin tailcone area behind Station 192.0.
- 2. At Station 204.92 (left side) locate .44" diameter hole (for 1/4" lines) or .56" diameter hole (for 3/8" lines) on the left side of bulkhead approximately 12" down from compartment ceiling centered laterally. This hole was previously drilled during initial installation. Clean this area as necessary to remove any sealant present. Referring to Drawing A, install (1) 90 Degree Elbow Item 25 (Item 54), (2) Bulkhead Washer Item 31 (Item 32), and (1) Bulkhead Nut Item 26 (Item 55). Coat Washers Item 31 (Item 32) lightly on the surface contacting the bulkhead ring at Station 204.92 (left side) with Proseal 890B-2 Sealant prior to assembly. Tighten and torque to specification on Drawing T.

Note: The Consumable Products Manufacturers Instructions for Use and Container Label contain information concerning correct application and safe use of their Product.

- 3. At Station 207.92 (left side) locate .44" diameter hole (for 1/4" lines) or .56" diameter hole (for 3/8" lines) on the left side of the helicopter aft cabin. Refer to Drawing D. This hole was previously drilled during initial installation. Clean this area as necessary to remove any sealant present. Referring to Drawing A, install (1) Drain Fitting Item 9 p/n AP407UM01-07 (Item 56 p/n AP407UM01-23), (2) Bulkhead Washer Item 31 (Item 32), and (1) Bulkhead Nut Item 26 (Item 55). Coat Washers Item 31 (Item 32) lightly on the surface contacting the helicopter hull surface at Station 207.92 (left side) with Proseal 890B-2 Sealant prior to assembly. Tighten and torque.
- 4. At Station 204.92 (right side) locate .44" diameter hole on the right side of bulkhead approximately 12" down from compartment ceiling centered laterally. This hole was previously drilled during initial installation. Clean this area as necessary to remove any sealant present. Referring to Drawing A, install (1) 45 Degree Elbow Item 29, (2) Bulkhead Washer Item 32, and (1) Bulkhead Nut Item 30. . Coat Washers Item 32 lightly on the surface contacting the bulkhead ring at Station 204.92 (left side) with Proseal 890B-2 Sealant prior to assembly. Tighten and torque.
- 5. At Station 207.92 (right side) locate .44" diameter hole on the right side of the helicopter aft cabin. Refer to Drawing E. This hole was previously drilled during initial installation. Clean this area as necessary to remove any sealant present. Referring to Drawing A, install (1) Drain Fitting Item 10 p/n AP407UM01-08, (2) Bulkhead Washer Item 32, and (1) Bulkhead Nut Item 30. Coat Washers Item 32 lightly on the surface contacting the helicopter hull surface at Station 207.92 (right side) with Proseal 890B-2 Sealant prior to assembly. Tighten and torque.
- 6. Locate left-side drain line tube assemblies previously fabricated to shape and size during initial Installation. They have been previously marked for location. Reinstall lines, tighten Tubing Nuts, and torque to specification on Drawing T. Note: If not marked as directed in "Removal" section of this ICA, the drain line tube locations may be easily found by the fact that each has a different shape and length and will only fit one location without re-shaping or bending.
- 7. Locate right-side drain line tube assemblies previously fabricated to shape and size during initial Installation. They have been previously marked for location. Reinstall lines, tighten Tubing Nuts, and torque to specification on Drawing T. Note: If not marked as directed in "Removal" section of this ICA, the drain line tube locations may be easily found by the fact that each has a unique shape and length and will only fit one location without re-shaping or bending.

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### 10. REPLACEMENT OF AN INDIVIDUAL PART

- A. Part Removal.
- 1. Removal of an individual part is accomplished by utilizing the "Removal " section of this ICA, Section B Part 7 to the degree necessary to effectively remove the individual part.
- B. Part Replacement.
- 1. Once an approved replacement part has been obtained, installation of that part is accomplished utilizing the "re-assembly" and/or "Reinstallation" section of this ICA, Section B Parts 8 and 9 to the degree necessary to effectively reinstall the part and return the assembly to an airworthy condition.

-----END------

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## **PARTS LIST**

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Iten	n Part Number	Description	Qty. per	Asse	embly	Qty. Su	pplied
1.	AP407UM01-01	Saddle Plate		1			1
	AP407UM01-02	Fork Mount		1			1
	AP001UM01B	Upper Dovetail Plate Assy.		1			1
	AP001UM01-02	Stop Pin		1			1
5.	AP001UM02-01	Lower Dovetail Plate Assy. 1/4" hole	s	1			1
6.	AP001UM02-02	Lower Dovetail Plate Side Clamp		1			1
7.	AP407UM01-05	3/8 inch O.D. Aluminum Tube, 48"	long	1	(407 (	Only)	1
8.	AP407UM01-06	1/4 inch O.D. Stainless Tube, 48" l		1		,,	1
9.	AP407UM01-07	# 6 Drain Fitting, Left Side	0	1	(407 (	Only)	1
10.	AP407UM01-08	# 4 Drain Fitting, Right Side		1		,	1
11.	AP407UM01-09	External doubler, Left		1			1
12.	AP407UM01-10	External Doubler, Right		1			1
13.	AP407UM01-11	Internal Doubler, Left		1			1
14.	AP407UM01-12	Internal Doubler, Right		1			1
15.	AP407UM01-13	Lateral Channel		1			1
16.	AP407UM01-14	Internal Shim, Left		1			1
17.	AP407UM01-15	Internal Shim, Right		1			1
18.	AP407UM01-16	(No Longer Used)					
19.	AP407UM01-17	Ring, Tie-down		1			1
20.	AP407UM01-18	Lock-nut, 1/4X20 Thread		1			1
21.	AP407UM01-20	Bolt, SX-16 Searchlight 5/16X24 TI	hread	4			0
22.	AP407UM01-21	Bolt, SX-16, Patrol, or other 1/4X28		4			0
23.	AN818-6D	Nut, Tubing		4	(407 (	Only)	4
24.	AN819-6D	Sleeve, Tubing		4	(407 (	Only)	4
25.	AN833-6D	Elbow, 90 degree		1	(407 (	Only)	1
26.	AN924-6D	Nut, Bulkhead		2	(407 (	Only)	2
	AN818-4J	Nut, Tubing, Stainless		4			4
	AN819-4J	Sleeve, Tubing, Stainless		4			4
	AN837-4J	Elbow, 45 degree, Stainless		1			1
30.	AN924-4J	Nut, Bulkhead, Stainless		2			2
31.	NAS1149D0932J	Washer, Bulkhead, for #6 fittings		4	(407 (	Only)	4
32.	NAS1149D0732J	Washer, Bulkhead, for #4 fittings		4	(206L	- Qty. 8)	4
33.	NAS6604-12	Bolt, dovetail attach		4	•	, ,	4
34.	MS21044C4	Nut, Lock, forward attach		2			2
35.	AN4C10A	Bolt, forward attach		2			2
36.	MS21043-4	Nut, Lock, dovetail attach		4			4
37.	AN5C30	Bolt, aft fork attach		1			1
	AN310C5	Nut, Castle, aft fork attach		1			1
39.	AN960C516	Washer		as	req'd		4
40.	MS24665-153	Cotter Pin		1	100		1

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## **PARTS LIST**

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Item Part Number	Description	Qty. per	Assembly	Qty. Supp	lied
41. AN970C4 42. AN960C416 43. AN960C416L	Washer, Large Area, forward attach s Washer Washer	spacer	as req'd		8 8 8
44. AN4H10A	Bolt, dovetail side clamp attach		as req'd 2		2
45. CR3552-04-07	Rivet, Cherry Max, monel, countersun		2.5	(407 Only)	25
46. CR3552-04-06 46A.CR3552-04-04	Rivet, Cherry Max, monel, countersun		as req'd	2061 Only	10 25
47. CR3552-04-05	Rivet, Cherry Max, monel, countersun Rivet, Cherry Max, monel, countersun		as req'd (	(206L- Only)	6
48. CR3253-04-02	Rivet, Cherry Max, universal head		as req'd		16
49. CR3253-04-03	Rivet, Cherry Max, universal head		as req'd		10
50. CR3253-04-04 51. AP407UM01-22	Rivet, Cherry Max, universal head 1/4 inch O.D. Aluminum Tube 48" long	n	as req'd	206L- Only)	6 1
52. AN818-4D	Nut, Tubing	9		206L- Only)	4
53. AN819-4D	Sleeve, Tubing		200	206L- Only)	4
54. AN833-4D	Elbow, 90 degree		. 12	206L- Only)	1
55. AN924-4D 56. AP407UM01-23	Nut, Bulkhead #4 Drain Fitting, Left Side			206L- Only) 206L- Only)	2
57. AP407UM01-MM	Installation Manual for AP407UM01 Ki	it	1	LOOL Offig)	1
62. AP407UM01-ICA	Instructions for Continued Airworthine	ess	1		1
63. AP407UM01-RFM	Rotorcraft Flight Manual Supplement		1		1
64. AP407UM01-26 65. AP407UM01-27	Bushing		1		1
UJ. MI-4U/ UIVIU 1-2/	Spacer		2		2

The following additional parts are available by order (not included in this Kit) to allow installation of Auto Stow Quick Mount available from an independent manufacturer:

58. MS24694S102	Screw	8	(Auto Stow Only)
59. MS24694S103	Screw	2	(Auto Stow Only)

It is the responsibility of the installer to fit Auto Stow.

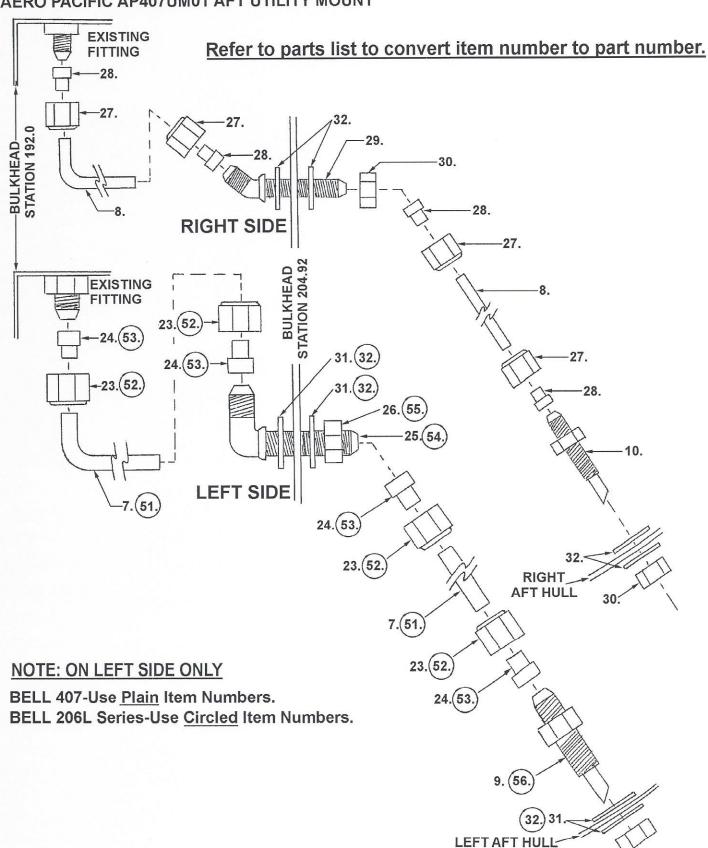
# INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT Manual Part Number AP407UM01-ICA 12/15/11 Rev. A

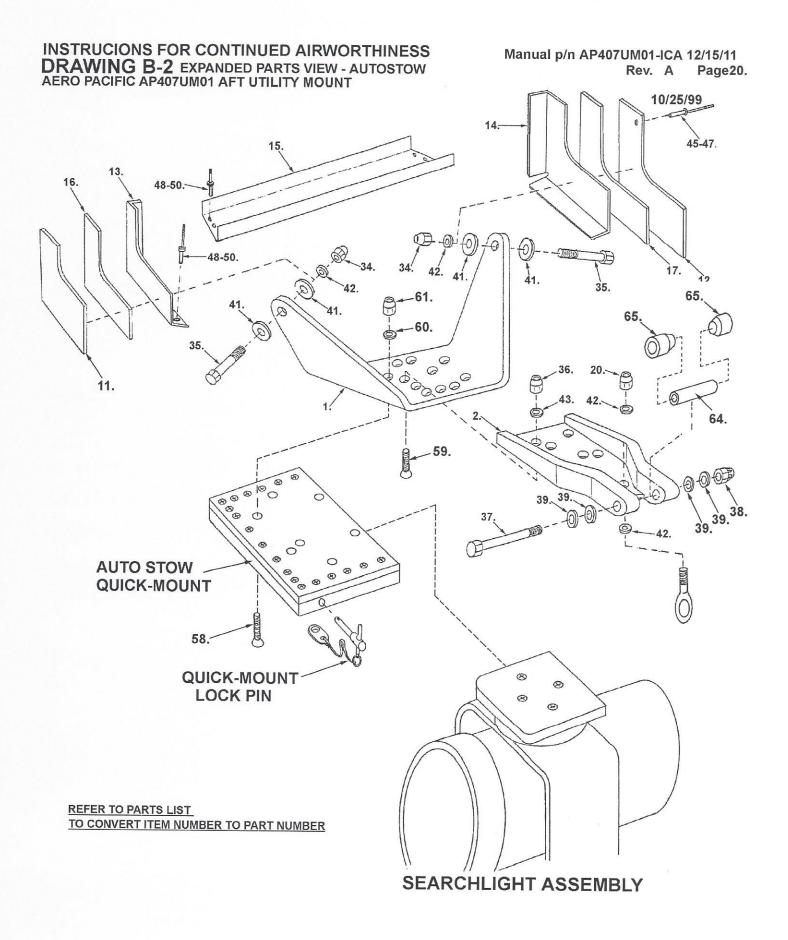
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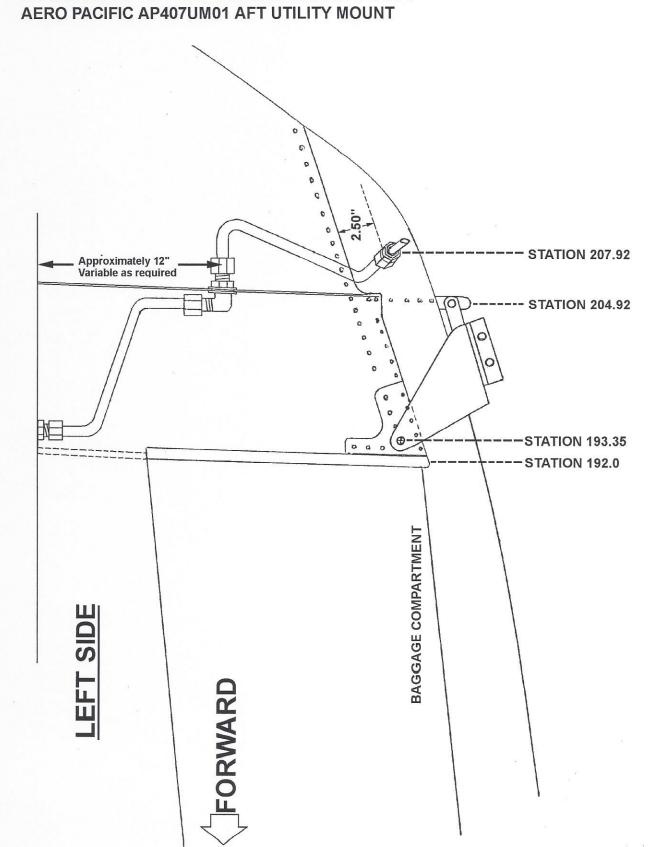
1. Section Divider and Section Contents

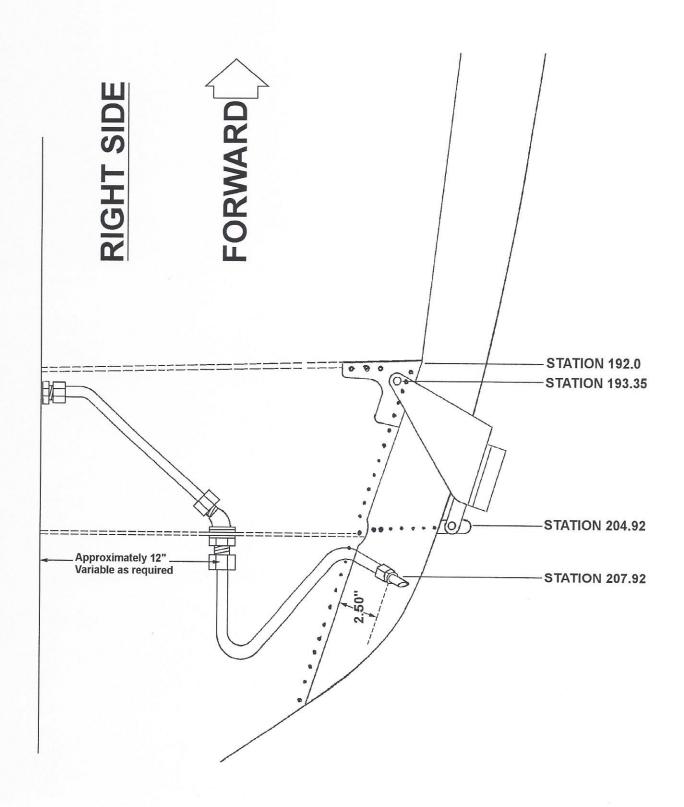
# SECTION C DRAWINGS

- 1. SECTION DIVIDER AND SECTION CONTENTS
- 2. DRAWING A
- 3. DRAWING B
- 4. DRAWING B-2
- 5. DRAWING D
- 6. DRAWING E
- 7. DRAWING T
- 8. DRAWING W









# INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT

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# DRAWING T

#### FASTENER TORQUE REQUIREMENT PROCEDURE

The following torque limits are stipulated for initial installation, repairs, and subsequent removal and/or reinstallation of the AP407UM01 mount or any parts thereof. All torque values are stated in inch-pounds. The importance of correct application of torque cannot be overemphasized. Under-torque can result in unnecessary wear of nuts and bolts as well as to the parts they are holding. Over-torque can be equally damaging because of failure of a bolt or nut from over stressing the threaded areas, resulting in structural failure.

1. Always use a calibrated torque wrench.

2. If possible, always use torque wrench on nut end of fastener assembly.

- Do not lubricate threads prior to torque application. Threads must be clean and dry on both the bolt and the nut. Apply
  a smooth even pull when applying torque pressure. If chattering or jerking motion occurs during final torque, back off
  and re-torque.
- 4. On self locking nuts, run nut down near contact with the washer or bearing surface and check "friction drag torque" required to turn the nut (or bolt if going into hidden self-locking nut plate). If "friction drag torque" is less than the minimum listed below, the nut (or hidden self locking nut plate) is not to be used. Minimum allowable "friction drag torque" values are listed by size below. Bolts and Nuts should be torqued to the values listed below. These values include "friction drag torque". Apply recommended torque.

5. Re-use of self locking nuts is not recommended. Minimum "friction drag torque" values are listed below. Under no circumstance should any nut or bolt combination testing a friction drag torque less than the limits expressed below be used for flight. Nuts or bolts exhibiting corrosion which has penetrated the outer plated coating should be replaced.

BOLTS, SC	REWS, and TIEDOWN RING		(inch-pounds)			
ITEM	PART NUMBER	DESCRIPTION	TORQUE VALUE			
19.	AP407UM01-17	TIEDOWN RING	60 +/-5			
21.	AP407UM01-20	BOLT, SX-16 5/16X24	130 +/-5			
22.	AP407UM01-21	BOLT, SX-16 1/4X28	65 +/-5			
33.	NAS6604-12	BOLT, 1/4X28	95 +/-5			
35.	AN4C10A	BOLT, 1/4X28	65 +/-5			
37.	AN5C30	BOLT, 5/16X24 drilled shank	90 +/-5			
44.	AN4CH10A	BOLT, 1/4X28 drilled head	65 +/-5			
58.	MS24694S102	SCREW, 1/4X28	65 +/-5			
59.	MS24694S103	SCREW. 1/4X28	65 +/-5			
	M6246646166	GOILEW, 114X20	05 +/-5			
NUTS			(inch-pounds)			
ITEM	PART NUMBER	DESCRIPTION	TORQUE VALUE			
20.	AP407UM01-18	NUT, NYLON LOCK 1/4X20	60 +/-5			
23.	AN818-6D	NUT, TUBING ALUM, #6	75-125			
26.	AN924-6D	NUT, BULKHEAD ALUM. #6	75-125			
27.	AN818-4J	NUT, NUT, TUBING, STAINLESS #4	40-65			
30.	AN924-4J	NUT, BULKHEAD, STAINLESS #4	40-65			
34.	MS21044N4	NUT, NYLON LOCK 1/4X28	65 +/-5			
36.	MS21043-4	NUT, METAL LOCK 1/4X28	95 +/-5			
38.	AN310C5	NUT, CASTLE 5/16X24	90 +/-5			
52.	AN818-4D	NUT, TUBING ALUM. #4	40-65			
55.	AN924-4D	NUT, BULKHEAD ALUM. #4	65 +/-5			
61.	MS21043-4	NUT, METAL LOCK 1/4X28	95 +/-5			
BAILLIBALISS -						
MINIMUM F						
ITEM	PART NUMBER	DESCRIPTION TORQUI	E VALUE DRAG TORQUE			
20.	AP407UM01-18	NUT, LOCKING (NYLON), 1/4 60+/-	5 5			
34.	MS21044C4	NUT, LOCKING (NYLON), 1/4 65+/-				
36.	MS21043-4	NUT, LOCKING (METAL), 1/4 95+/-				

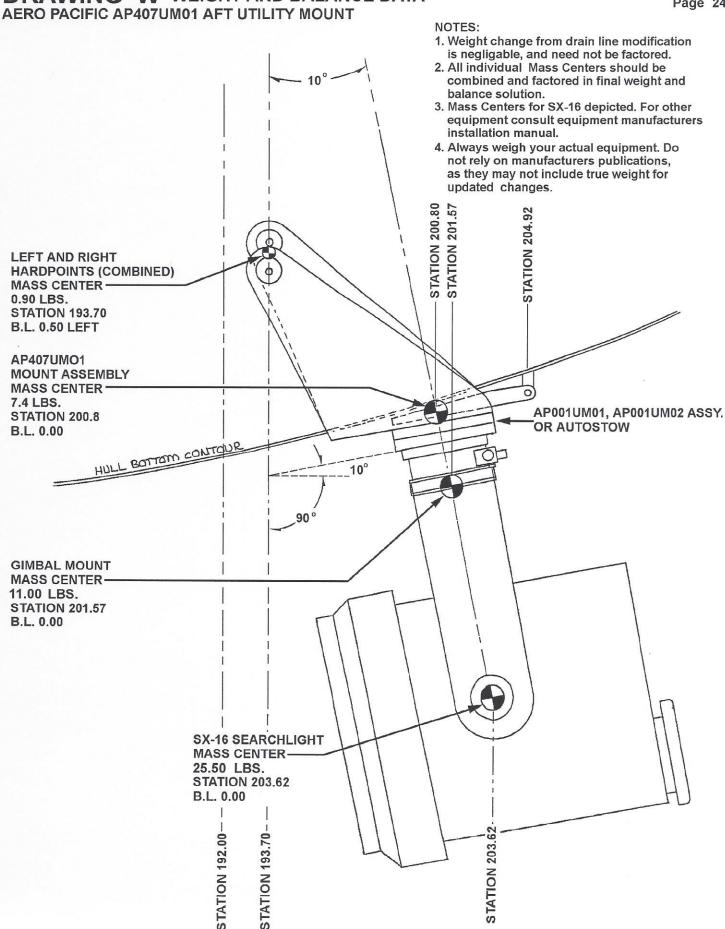
BOLT HEAD MARKINGS Specifications require that most bolts which are made to conform with standard drawings be identified by a specific marking on the bolt head. Shown here are the markings of sample bolts. The initials "RM" and "RBM" identify the manufacturer of the bolt.

AN3-(length), AN4-(length), AN5-(length)

NAS6604-(length)







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1. Section Divider and Section Contents

# SECTION D SPECIAL PROCESSES

- 1. SECTION DIVIDER AND SECTION CONTENTS
- AERO PACIFIC PROCESS AP006
   Local Area Surface Preparation and Conversion Coating For Aluminum
- 3. AERO PACIFIC PROCESS AP007 Priming and Painting Local Areas

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# LOCAL AREA SURFACE PREPARATION AND CONVERSION COATING FOR ALUMINUM

#### SURFACE PREPARATION

- Remove any excessive amounts of oil, dirt, chemicals, or other coatings from the part(s) if necessary by wiping thoroughly with Stoddard Number 5 Solvent or Dupont First Kleen 3900S fast-dry initial surface cleaner. Use protective clothing, eye protection, and gloves as necessary on this and all following operations.
- 2. Remove any final surface film from part(s) by wiping thoroughly with Dupont Kwik-Kleen 3949S or Dupont Prep-Sol 3919S cleaning solutions. Use clean rags.
- 3. Blow dry or thoroughly wipe off part(s) with clean dry rag. Keep part(s) clean and dry until step 4.
- 4. Carefully wipe part(s) with rag moderately soaked with Dupont Aluminum Metal Cleaner 225S or a 2% solution of Muriatic Acid and water. Contain solution to immediate area of repair by wiping with dry rag or masking unwanted areas. Reaction will be indicated by a small amount of white bubbling at exposed area of unprotected aluminum. Reaction may be accelerated by light scrubbing of part(s) with 3M brand Scotchbrite pad 07448 lightly soaked with solution. Dilute 225S Cleaner as per manufacturers instructions if used.
- Immediately rinse part thoroughly with clean water, temperature between 40 and 120 degrees Fahrenheit.
   Conversion coating must be applied within five minutes, or before part is allowed to completely dry.
   Do not blow dry.

#### **CONVERSION COATING**

- 1. Within five minutes, or before part is allowed to dry, wipe immediate area with a clean rag moderately soaked with DuPont 226S Conversion Coating or Chemical Commodities Alodine 1200 Conversion Coating. Both these products are used full strength with no dilution. Follow respective manufacturers instructions. Wipe and soak for five minutes. Temperature at time of application should be between 40 and 90 degrees Fahrenheit. Examine part occasionally and continue to soak area until desired gold finish density is obtained.
- 2. Immediately rinse with clean water. Blow or wipe dry with clean rag. Inspect for complete coverage of coating. Re-coat with conversion coating if necessary and repeat this step

AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT
Manual Part Number AP407UM01-ICA

12/15/11 Rev. A

AERO PACIFIC PROCESS AP006

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LOCAL AREA SURFACE PREPARATION AND CONVERSION COATING FOR ALUMINUM

### REQUIRED MATERIALS

PRODUCTS:

2.

First Kleen 3900S Kwick Kleen 3949S Prep Sol 3919S

Cleaner 225S Aluminum 226S

Aluminum Conversion

Conversion Coating

MANUFACTURED BY: E.I. Dupont De Nemours Wilmington Delaware

19898 (800) 441-7515

PRODUCT: Alodine 1200 Aluminum Conversion Coating

MANUFACTURED BY: Chemical Commodities 27447 Pacific St. Highland, CA. 92346 (909) 864-2310 PRODUCT:

Scotchbrite Pad 07448

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MANUFACTURED BY:

3-M Company

Automotive Trades Div. St. Paul MN. 55144-1000

# **INSTRUCTIONS FOR CONTINUED AIRWORTHINESS** AERO PACIFIC MODEL AP407UM01 AFT UTILITY MOUNT

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#### 3.

# AERO PACIFIC PROCESS AP007

## PRIMING AND PAINTING LOCAL AREAS

- 1. Wipe area to be painted with Methyl Ethyl Keytone (M.E.K.).
- 2. Tape and mask off areas not to be primed or painted if necessary or required. Allow a minimum of 1/8 inch overlap of applied coating over non-damaged area of original painted surface if this is a repair or touch-up, or the specific situation requires it.
- 3. Using specified primer mixed as per manufactures instructions, prime desired area using spray gun.
- 4. Allow recommended drying time as per manufacturers instructions.
- 5. Using specified paint mixed as per manufacturers instructions, paint desired area using spray gun. If necessary, refer to masking instructions as per Step 2.
- 6. Allow recommended drying time. Remove masking materials.

## SPECIFIED MATERIALS

**PRIMER** 

PAINT

Manufacturer: Dupont Chemical

Type:

Corlar 824S

Color: Activator: Gray or Red 826S

Manufacturer: Dupont Chemical

Type:

Imron

Color:

As Desired

Activator:

192S