ISSUE DATE:	4/20/06	
		١.
REVISION		

DATE: 3/22/12 SUBTITLE:



Service Manual and I.C.A.
Aerocet 206 Cargo Pack

PAGE	
	1 of 28
FILE NO.	
	A-10033
REVISION	
	2

SERVICE MANUAL

AND

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS FOR

AEROCET 206 CARGO PACK

This ICA must be followed when the Cargo Pack is installed in accordance with Supplemental Type Certificate, (STC) No. <u>SA0096SE</u>, dated <u>June 7, 1994</u>.

The information contained in this document supplements or supercedes the basic manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this manual, consult the basic aircraft ICA or Maintenance Manual.

Aerocet, Inc. P.O. Box 2119 265 Shannon Lane Priest River, Idaho 83856 Phone: (208) 448-0400

Fax: (208) 448-1644

3/22/12

DATE:



Service Manual and I.C.A. Aerocet 206 Cargo Pack

PAGE	2 of 28
FILE NO.	
FIEL NO.	A-10033
REVISION	
	2

Rev 0 was approved by FAA without signature sheet.

STATEMENT OF Rev.1 CERTIFICATION

This manual complies with Federal Aviation Association (FAA)

Airworthiness Requirements Part 23

SUBTITLE:

FAA Acceptance: Date: 2/21/2012
The above certification does not apply to revisions or amendments made after the date of initial certification by other Approved Organizations. Revisions or amendments made by other Approved Organizations must be

separately certified and recorded on separate record sheets

STATEMENT OF Rev 2 CERTIFICATION

The changes in revision C are classified as minor and do not affect the FAA approved sections of this manual. The changes to the IPC include data that has FAA design data approval.

ISSUE DATE: 4/20/06 TITLE: REVISION DATE:



Service Manual and I.C.A. Aerocet 206 Cargo Pack

PAGE	3 of 28
FILE NO.	
	A-10033
REVISION	
	2

LOG OF REVISIONS PAGE

3/22/12

SUBTITLE:

LOG OF	REVISIONS	PAGE		
REV.	PAGES	DESCRIPTION	DATE	APPROVED
	AFFECT.			
0	ALL	Initial Release	4/20/06	
1	5	Changed "Continued Airworthiness) to	7/01/10	
1		"Recommended Airworthiness), Table of	7701710	
		Contents, Section 4		
		Contents, Section 4		
	5	Added Section 5, "Airworthiness Limitations",		
		and Section 6, "Illustrated Parts Catalogue", to		
		Table of Contents		
		Table of Contents		
	7,8	Added sub-sections 1.1, "Availability", 1.2,		
	7,0	"Component Maintenance Manuals", 1.3,		
		"Installation Manual", 1.4, "Dimensions,		
		Locations, and Nomenclature", Figures 1.4.1		
		and 1.4.2 to document		
	0.12	Added Sections 2.1 Festener Torque 2.2		
	9-12	Added Sections 2.1, Fastener Torque, 2.2,		
		Fastener Torque Values, and 2.3, Fastener Use		
		and Discretion to document		
	1.4	A 11-1 ((XX)		
	14	Added "Warnings" 3x, beginning section 3.4,		
		Resin Mixing		
	1.5	A 11 12nd		
	15	1 0 1		
		assessed", Section 3.4, Resin Mixing		
	1.5	A 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	15	T		
		253)", table heading		
	1.5	D 1 . 16007		
	15			
		of 3 "Warnings" added previously		
	1-			
	17			
		Airworthiness", was "Continued Airworthiness"		
	1.40			
	149			
		to document		
	21.60			
	21-28			
		to document	- / / -	
2			3/22/12	
	24-28			
		6.1.3, 6.1.4, 6.1.5, 6.1.6.		
2	15 15 17 149 21-28 ALL 2 24-28	Added 2 nd paragraph, "Gel times should be assessed", Section 3.4, Resin Mixing Added "(Obsolete – use Hydrex 100 33350, not shown)", at "Typical Gel Times (Hydrex 33-253)", table heading Deleted "Warning", which was duplicate of 1 of 3 "Warnings" added previously Changed Section 4 heading, "Recommended Airworthiness", was "Continued Airworthiness" Added Section 5, "Airworthiness Limitations" to document Added Section 6, "Illustrated Parts Catalogue", to document Rev 2 certification statement. New Figure showing washers on rivets for Fig. 6.1.3, 6.1.4, 6.1.5, 6.1.6.	3/22/12	

<u> </u>					
ISSUE DATE:	4/20/06		Incorporated	PAGE	4 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

This page intentionally left blank.

	<u> ✓ERŒET</u>				
ISSUE DATE:	4/20/06		Incorporated	PAGE	5 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

Table of Contents

Description	Section
Introduction and General Information	1
Cargo Pack Maintenance	2
Repairing Composite Structure	3
Recommended Airworthiness Service Schedule, General Practices and Product Listings for Service	4
Airworthiness Limitations	5
Illustrated Parts Catalogue	6

<u> </u>					
ISSUE DATE:	4/20/06		Incorporated	PAGE	6 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

This page intentionally left blank.

<u>∕IERŒET</u>			
ISSUE 4/20/06	Incorporated	PAGE	7 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/12	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

SECTION 1. Introduction and General Cargo Pack Information

This service and maintenance manual is applicable to Aerocet 206 Cargo Pack and its general application to a variety of Cessna Model 206 airplanes.

The Aerocet 206 Cargo Pack is all composite construction and is mounted to the belly of the aircraft according to the approved installation document. (Reference the STC document for specific listing. At the time of this writing, Document A-10014 is applicable to all aircraft models.)

1.1 Availability

One complete hard (paper) copy of this manual shall be provided with each new 206 Cargo pack. Additional copies and minor revisions shall be available via email, U.S.P.S. (mail), UPS or FedEx by request. Fees and delivery charges may apply.

Notification of any changes that require service for airworthiness shall be distributed to all applicable Aerocet owners on record with Aerocet, Inc. In such a case, copies of the applicable, revised portions of this manual shall be provided.

Aerocet, Inc. maintains record of purchasers and/or owners, collected at the time of purchase in order to comply with the above, as well as to maintain a high standard of service. If you have moved since your original purchase, have purchased a used product or otherwise have reason to believe that the contact information on file is incorrect, please provide the following information to Aerocet, Inc: (Aerocet contact information is on the front of this document.)

Cargo Pod Infor	mation:
	Cargo Pod S/N
Aircraft Informa	ation:
	Aircraft Make/Model
	Aircraft Registration
	Aircraft S/N
Owner Informat	ion: (as applicable)
	Previous Owner
	Previous Address
	Present Owner
	Present Address
	Present Phone Number
	Present Email Address

1.2 Component Maintenance Manuals

Certain accessories that are more complex, that require additional inspection and maintenance procedures may be described in Component Maintenance Manuals (CMM) or Maintenance Manuals (MM). These documents would be provided as part of the documentation provided with your product. At the time of this writing, no such components are used with Aerocet 206 Cargo Pod.

This subsection is reserved in the case of such future use.

1.3 Installation Manual

Installation instructions are provided as a part of the documentation package provided with the original purchase or upon request as detailed above. Refer to Aerocet Document Number A-10014 for instructions and installation parts lists.

	<u> ✓IERCCET</u>					
ISSUE DATE:	4/20/06		Incorporated	PAGE	8 of 28	
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033	
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2	

1.4 Dimensions, Locations and Nomenclature

(See A-10014, values are reference here) BASIC SPECIFICATIONS:

Maximum Weight: 300 lbs. Maximum Load: 200 lbs/ft² Internal Volume: 16 ft2

Overall Length: 97.5" (8'1 ½") Opening for Baggage: 10.1" x 27.1" Width (along 30" of mid-section): 40.5"

CHANGE IN WEIGHT AND BALANCE:

Weight Increase: 35.0 pounds (net change)

Arm: 51.0 inches

Resultant Moment: 1785.0 pound-inches

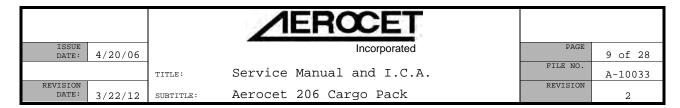
Index: 1.632



Figure 1.4.1 Showing side view of Aerocet Cargo Pod on Cessna 206 Aircraft.



Figure 1.4.2 Showing front view of Aerocet Cargo Pod on Cessna 206 Aircraft.



SECTION 2. Cargo Pack Maintenance

Corrosion is minimized due to the composite construction. The cargo pack should be kept clean with soap and water. External stains may be removed using commercially available marine fiberglass stain remover. We have used a product called FSR with good success. These surfaces may also be waxed to help in the cleaning process.

-Do not use abrasive cleaners or pads – these will scratch the white gel-coat surface. The gel-coat color surface should always be maintained on external surfaces for ultraviolet protection.

Cargo door provides access for inspection to view internal damage and to comply with the maintenance inspections. (See Table 1 in Section 4 for scheduled maintenance. See also: "Exceptional Inspections".)

Any penetration to the shell structure, delamination of the cloth layers, or gelcoat having worn through must be repaired according to hull repair Section 3. Significant damage (i.e. damage caused by ground or animal strikes) may warrant consultation with Aerocet, Inc. Significant damage may be categorized as damage that penetrates beyond the outside laminates to the core and/or the inside laminates, that is greater than 4" in diameter, or that compromises attachment fasteners.

Latches and seals are to be maintained as needed for proper function.

If applicable, Exhaust Extensions, which are required only on Cessna T206H airplane applications, should be inspected for stress cracking, corrosion, damage and condition.

2.1 Fastener Torque

2.1.1 Torque Value Conversion:

To convert in.-lbs. to ft.-lbs: Value (ft.-lbs.) x 12 = Value (in-lbs.) To convert ft.-lbs. to in.-lbs: Value (in-lbs.) x 0.0833 = Value (ft.-lbs.)

2.1.2 Tooling Requirements:

Calibrated torque wrench

Adapters that affect the length of the torque wrench will affect the required torque indication and must be calculated according to Figure 2.2.3.

2.1.3 Hardware Cleanliness:

All hardware is to be free of dirt, grit and grease. All dirty hardware shall be thoroughly cleaned and lubricated with a dry film lubricant such as LPS 1, or Teflon products per manufacturer instructions. It is recommended that all stainless hardware be thoroughly lubricated with anti-seize lubricant of good quality to prevent galling upon assembly.

2.1.4 Torque Procedure

Assure that hardware is clean and properly prepared for installation. Assemble nuts to bolts, measuring the tension required to turn the nut and add this to the required final torque. Where possible apply torque to the nut, and not to the fastener head. Apply a smooth, even pressure, stopping and re-torquing if chattering or premature loading occurs. This may warrant disassembly and subsequent inspection for burrs or galling. Replace any damaged hardware.

Cross – recessed, Machine – pan head style screws should be torqued only to "hand tight", the fiberglass should exhibit only mild deformation. A portable hand drill could be used, provided that the clutch is set properly. All other fasteners shall be torqued as shown in this section unless otherwise noted.

	<u> </u>					
ISSUE DATE:	4/20/06		Incorporated	PAGE	10 of 28	
		TITLE: Se	ervice Manual and I.C.A.	FILE NO.	A-10033	
REVISION DATE:	3/22/12	SUBTITLE: A6	erocet 206 Cargo Pack	REVISION	2	

2.2 Fastener Torque Values (Except where otherwise noted)

CAUTION THE FOLLOWING TORQUE VALUES ARE DERIVED FROM OIL FREE CADMIUM PLATED THREADS.							
	TORQUE LIMITS REC	MAXIMUM ALLOWA	ABLE TIGHTENING				
Thread Size	Tension type nuts MS20365 and AN310 (40,000 psi in bolts)	Shear type nuts MS20364 and AN320 (24,000 psi in bolts)	Nuts MS20365 and AN310 (90,000 psi in bolts)	Nuts MS20364 and AN320 (54,000 psi in bolts)			
	FINE THREAD SERIES						
8-36 10-32 1/4-28 5/16-24 3/8-24 7/16-20 1/2-20 9/16-18 5/8-18 3/4-16 7/8-14 1-14 1-1/8-12	12-15 20-25 50-70 100-140 160-190 450-500 480-690 800-1000 1100-1300 2300-2500 2500-3000 3700-5500 5000-7000 9000-11,000	7-9 12-15 30-40 60-85 95-110 270-300 290-410 480-600 600-780 1300-1500 1500-1800 2200-3300+ 3000-4200+ 5400-6600+	20 40 100 225 390 840 1100 1600 2400 5000 7000 10,000 15,000 25,000	12 25 60 140 240 500 660 960 1400 3000 4200 6000 9000 15,000			

Figure 2.2.1 Recommended Torque Values (inch-pounds) (From AC43.13-1B, Table 7-1)

FINE TH	READ SERIES				
	MINIMUM PREVAILING				
THREAD SIZE	TORQUE				
7/16 - 20	8 inch-pounds				
1/2 - 20	10 inch-pounds				
9/16 - 18	13 inch-pounds				
5/8 -18	18 inch-pounds				
3/4 - 16	27 inch-pounds				
7/8 - 14	40 inch-pounds				
1 - 14	55 inch-pounds				
1-1/8 - 12	73 inch-pounds				
1-1/4 - 12	94 inch-pounds				
COARSE THREAD SERIES					
COARSE 1	HREAD SERIES				
COARSE 1 THREAD SIZE	HREAD SERIES MINIMUM PREVAILING				
	MINIMUM PREVAILING				
THREAD SIZE	MINIMUM PREVAILING TORQUE				
THREAD SIZE 7/16 - 14	MINIMUM PREVAILING TORQUE 8 inch-pounds				
7/16 - 14 1/2 - 13	MINIMUM PREVAILING TORQUE 8 inch-pounds 10 inch-pounds				
7/16 - 14 1/2 - 13 9/16 - 12	MINIMUM PREVAILING TORQUE 8 inch-pounds 10 inch-pounds 14 inch-pounds				
7/16 - 14 1/2 - 13 9/16 - 12 5/8 - 11	MINIMUM PREVAILING TORQUE 8 inch-pounds 10 inch-pounds 14 inch-pounds 20 inch-pounds				
7/16 - 14 1/2 - 13 9/16 - 12 5/8 - 11 3/4 - 10	MINIMUM PREVAILING TORQUE 8 inch-pounds 10 inch-pounds 14 inch-pounds 20 inch-pounds 27 inch-pounds				
7/16 - 14 1/2 - 13 9/16 - 12 5/8 - 11 3/4 - 10 7/8 - 9	MINIMUM PREVAILING TORQUE 8 inch-pounds 10 inch-pounds 14 inch-pounds 20 inch-pounds 27 inch-pounds 40 inch-pounds				

Figure 2.2.2 Minimum Prevailing Torque Values for Re-used Self-Locking Nuts (from AC43.13-1B, Table 7-2)

Self-Locking Nuts:

Self-locking nuts, when re-used, must have at least the minimum prevailing torque listed in figure to the left. Nuts that are smaller than those listed in the table shall not be used if they can be run up by hand.

		<u> ∕IERCCET</u>					
ISSUE DATE:	4/20/06		Incorporated	PAGE	11 of 28		
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033		
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2		

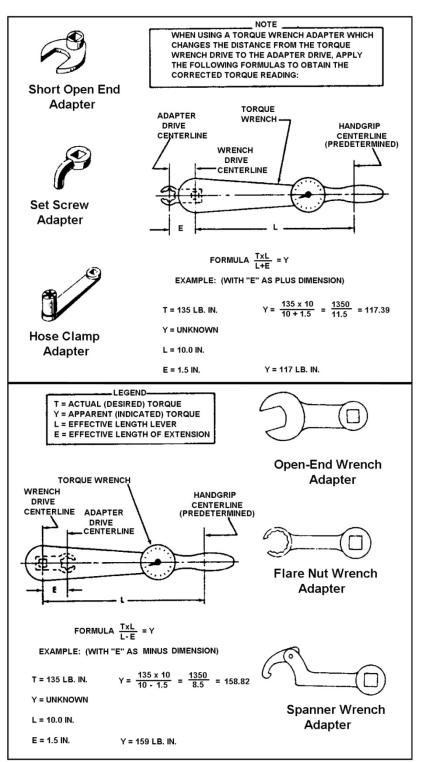


Figure 2.2.3 Torque Wrench with Various Adapters (from AC43.13-1B, Figure 7-2)

ISSUE DATE: 4/20/0	Incorporated	PAGE	12 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/1	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

2.3 Fastener Use and Discretion

2.3.1 Fastener Lengths

Rivets: Where replacement or repair of rivets is required, use rivets of proper specifications only. For instance, MS203426AD4-xxx. Lengths may be determined by measuring the thickness of the material(s) to be assembled and adding 1.5 X Diameter of the rivet to be used. Over-sized rivets may be substituted where holes have been drilled out.

Bolts and screws shall have a minimum of one thread visible through the nuts upon final torque.

Washers may be rearranged if necessary to accommodate proper fit, up to two washers beneath the nut and one beneath the fastener head. Typically, Aerocet intends to put one thin washer beneath the fastener head and one thicker washer beneath the nut.

2.3.2 Fastener Reuse

Fasteners are to be inspected for condition, per Section 6 of this manual. Such fasteners that are acceptable may be cleaned, re-lubricated and re-installed as determined. Self-locking nuts shall meet the minimum prevailing torque as listed in Figure 2.2.2, or shall be replaced.

ISSUE 4/20/06	Incorporated	PAGE	13 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/12	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

SECTION 3. Repairing Composite Structure

3.1. General Description

Composite structure repair, done correctly, will obtain the strength required to return the cargo pack to normal service and show little or no cosmetic evidence of damage having taken place. The materials used for original construction and repair are conventional to the industry. Contact Aerocet, Inc. prior to beginning a repair to obtain correct materials - resin (resins have shelf lives), catalyst, cloth, gel-coat, resin thickeners. "In-the-field" epoxy patch kits may be used in an emergency if the damage is relatively small, but the repair must be replaced with correct materials for equal strength status. Damage larger than 4" in size requires consulting Aerocet, Inc. for proper laminate orientation and counts in the damaged area.

3.2. Repair Types and Procedures – All repaired areas on the exterior must be surface coated (gelcoated) with a minimum of 10 mil thickness to assure UV protection.

3.2.1. Resin Starved Areas, Exposed Fibers, or Small Impact Damaged Soft Spots (1/2" Dia. or less).

- 3.2.1.1. If necessary sand surfaces to remove gloss.
- 3.2.1.2. Use brush, squeegee, or hypodermic to work resin into defective area. (Use same resin as the original laminate).

3.2.2. Small Bruises, Punctures Less than 1/4" diameter, or Surface Voids.

- 3.2.2.1. Sand surface surrounding defect to remove gloss.
- 3.2.2.2. Use same fabric as the original part.
- 3.2.2.3. Cut patches to fit correction area, extending a minimum of 1/2" past the damaged area. All patch corners must be rounded.
- 3.2.2.4. Apply a light brush coat of resin (similar to original).
- 3.2.2.5. Place one or more plies on detail covering correction area using impregnation of fabric as described in section 3.3.

3.2.3. Cuts, Fractures, or Punctures 1/4" diameter or Larger.

- 3.2.3.1. Cut back material as required to ascertain extent of damage. Trim plies outward to a smooth oval (1/2"per ply generally).
- 3.2.3.2. If the area is large enough supply backing to hold the shape of the original contour. Put a parting agent on this backing to assure its release.
- 3.2.3.3. Replace the fabric on a ply-for-ply basis overlapping 1/2" minimum on each succeeding ply using impregnation of fabric as described in section 3.3. (Any smooth areas need to be sanded with 80 grit sandpaper to assure proper bonding.)

<u> ∕IERCCET</u>							
ISSUE d/20/06	Incorporated	PAGE	14 of 28				
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033				
REVISION DATE: 3/22/12	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2				

3.2.3.4. If damage has occurred where there is sandwich construction and involving the core, then work each layer separately. Fix either the outside or inside skins. Then cut to fit like core material to replace the damaged core. Bond the core onto the repaired skin using the proper resin and thickener. A mixture of Hydrex resin and Aerosil 202 thickener should be applied to the bonding surface of the core using a squeegee (Torin Corebond alt. OK). A film of approximately .015" should be used. Pressure needs to be applied for the bond to assure proper adhesion to the skin eliminating air voids. This pressure can be applied to small area core bonding by weights (ex. lead shot bags with a release film to keep from sticking to any excess). Larger areas require core bonding using a vacuum bag. Consult Aerocet, Inc. for this procedure. Fill any seam voids with a resin/glass bubble mixture. Apply the final laminates accordingly to finish the repair.

3.3. Impregnation of Fabric

Resin impregnation can be accomplished by laying cloth, cut to a suitable pattern, on a flat table and applying resin mixture with a squeegee so as to achieve an even impregnation. Similarly, it may also be done directly on the part with the cloth being applied with either a squeegee or a brush, assuring that voids and starved areas are not produced. It is very helpful to apply a thin coat of resin to the area to be laminated. Then lay the cloth down, rolling the cloth into the resin. Any air in the laminate should be squeegeed or brushed out. See section 8.4 regarding resin mixing.

3.4. Resin Mixing

WARNING

Observe all safety regulations and recommendations of the manufacturer according to the Material Safety Data Sheet (MSDS) and/or other instructions for the safe use and handling of all resin related products.

WARNING:

Cobalt should never be mixed directly with MEKP catalyst. A violent reaction will occur which may result in fire or explosion. Cobalt should be stored separately from the catalyst.

WARNING:

Be careful with the MEKP catalyst. Contact with eyes must be prevented. Flush eyes immediately, contact a physician immediately. Never mix MEKP without eye protection. Read recommendations on catalyst supply bottle.

Gel time or pot life is the time it takes the resin to set up in the container after proper and thorough mixing with accelerators and catalysts. Gel times can be adjusted significantly by varying the amounts of these materials. Gel times also will vary significantly with the batch size if left in a bucket or with a very thick laminate.



Gel times should be assessed with each new batch or type of resin system used in the working environment. Ambient air and resin temperatures, shelf-life and catalyst ratios may affect the gel times significantly. As previously stated, thicker laminates and/or resin pots will cure more quickly due to accumulation of heat during gel process. Thin laminates such as specified for use in many Aerocet products will often gel in double the amount of time needed to gel a 100g in a 4 in. diameter pot.

Resin catalysis shall not be accomplished in ambient air temperatures of less than 50°F, except under extreme circumstances for the purposes of a temporary field repair. In no case shall more than 2% catalyst mixture be used; and in no case shall less than the recommended (.75%) catalyst mixture be used.

<u>TYPICAL GEL TIMES (HYDREX 33-253)</u> (Obsolete – Use Hydrex 100 33350, not shown)100g castings only, laminate times typically double

33%MEKP %Catalyst	Resin Qty	50°F	60°F	70°F	80°F
.75%	100gm	55 min	38 min	28 min	23 min
1.00%	100gm	40 min	27 min	20 min	15 min
1.50%	100gm	30 min	21 min	14 min	11 min
2.00%	100gm	23 min	17 min	12 min	8 min

Note: *Under no circumstances* should more than 2.0% catalyst mixture be used. Also, do not use less than the recommended minimum amount of catalyst (.75%) or the resin may never completely cure, resulting in a reduction of strength.

3.5. Preparation of Fiberglass Materials

- 3.5.1. Fiberglass shall be trimmed on a clean table to prevent contamination.
- 3.5.2. When laps are necessary, lap widths of at least 1/2" shall be maintained for fiberglass pieces in any given ply and no more than one of the component plies shall be lapped at any one place. The number of laps shall be kept to a minimum.

3.6. Surface Coat Application (Gel Coat)

- 3.6.1. All surface coats must be applied to a thickness of 10 to 15 mil. Use a mil gauge and check often.
- 3.6.2. All surface coats must be catalyzed with 2% MEKP.
- 3.6.3. Thinning of surface coats can only be done to manufacturers recommendations.

<u> ∕IERŒET</u>						
ISSUE DATE:	4/20/06		Incorporated	PAGE	16 of 28	
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033	
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2	

This page intentionally left blank.

			<u> </u>		
ISSUE DATE:	4/20/06		Incorporated	PAGE	17 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

SECTION 4. Recommended Airworthiness Service Schedule, General Practices and Product Listings for Service

4.1. Recommended Service Schedule – Table 1

TABLE 1

INSPECTION TIME INTERVALS					NTHS) rs first)
	Notes	25	50	100 (12)	200 (24)
Exterior	Inspect for damage, surface coat (gel coat - UV protection).	Х			
Interior	Inspect for evidence of damage.			Х	
Cargo Door	Inspect seals, latches and hinges for proper function, corrosion and damage.				Х
Hardware	Spray coat protection according to Note #1, Hardware according to Note #2 (if desired).			X	
Placards	Inspect for placement & legibility. (See installation manual for proper locations).				Х
	Inspect for stress cracking and corrosion (applicable to Cessna T206H only).			Х	

Note #1 – Spray coat of a migrating corrosion material (ACF-50, Boeshield T9, or Corrosion X).

Note #2 – Coat hardware with PUR-AL-KETONE or LPS 3.

4.2. "Exceptional" Inspections:

In a variety of circumstances, it is necessary to perform prompt inspections for damage. Details relating to these investigations are addressed in Sections 2 & 3 of this manual and Table 1 above. It is the responsibility of the pilot to determine the severity of damage, and the flightworthiness of the aircraft in the field. Inspections and repairs are to be performed as necessary and per practices outlined throughout this manual.

A list of possible scenarios includes, but is not limited to the following:

- 4.2.1 Harsh landings, especially when heavy cargo is loaded or has shifted in a significant manner.
- 4.2.2 Impact with an object during taxi, take-off or landing.
- 4.2.3 Suspected damage incurred during tie-down.
- 4.2.4 Visible damage found during normal preflight inspection.

	<u> ∕IERŒET</u>		
ISSUE d/20/06	Incorporated	PAGE	18 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/12	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

4.3. General Practices

- 4.3.1 Metal Parts check for corrosion, stress cracks or metal distortion, elongation of holes, rivet damage
- 4.3.2 Critical Bolts check for corrosion (rust), wear, torque
- 4.3.3 Composite Parts check for stress cracks, gel coat presence (UV protection), punctures

4.4. Product Listings (our recommendations)

- 4.4.1 Rust (corrosion) Protection ACF-50, Corrosion X, or Boeing Co. Boeshield T9
- 4.4.2 Bolt Protection PUR-AL-KETONE (Distributed by Lake & Air), LPS Industries LPS 3, Zip Chemical Co. Zip D-5029NS
- 4.4.3 Composite Materials for Hull Repair Contact Aerocet, Inc. for resin, cloth, gel-coat, resin thickeners

		<u> ∕IERŒET</u>		
ISSUE DATE: 4/20/	16	Incorporated	PAGE	19 of 28
	TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/	.2 SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

Section 5. Airworthiness Limitations

5.1 GENERAL

The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

5.2 DESCRIPTION

1. TIME LIMITED ITEMS.

None.

2. **REQUIRED INSPECTIONS INTERVAL.**

None.

3. **SCHEDULED MAINTENANCE: None** (for Aerocet recommended Inspection or Replacement, refer to Section 4.

			<u> ∕IERCCET</u>		
ISSUE DATE:	4/20/06		Incorporated	PAGE	20 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

This page intentionally left blank.

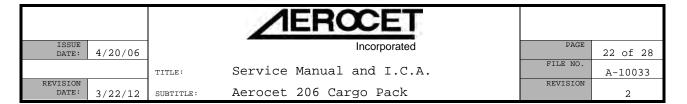
	/ERCCET		
ISSUE DATE: 4/20/0	Incorporated	PAGE	21 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/1	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

Section 6. Illustrated Parts Catalogue

Section 6 contains part listings for the Aerocet 206 Cargo Pod. For installation – related part listings, refer to Aerocet installation manual A-10014.

6.1 LIST OF FIGURES

- Figure 6.1.1. 206 Cessna Pod Door Versions
- Figure 6.1.2. Parts Listing for 10-10010-1 Door Configuration
- Figure 6.1.3. Parts Listing for 10-10010-1 Door Panel Assembly
- Figure 6.1.4. Parts Listing for 10-10010-2 Door Configuration
- Figure 6.1.5. Parts Listing for 10-10010-2 Door Panel Assembly
- Figure 6.1.6. Parts Listing for 10-10010-3 Door Configuration
- Figure 6.1.7. Parts Listing for 10-10010-3 Door Panel Assembly



Cargo Pod Door Versions

10-10010-1 Original Door design, utilizing Camloc latches and three bottom-positioned door hinges. Available for repair and replacement parts only, once -2 and -3 versions are available.

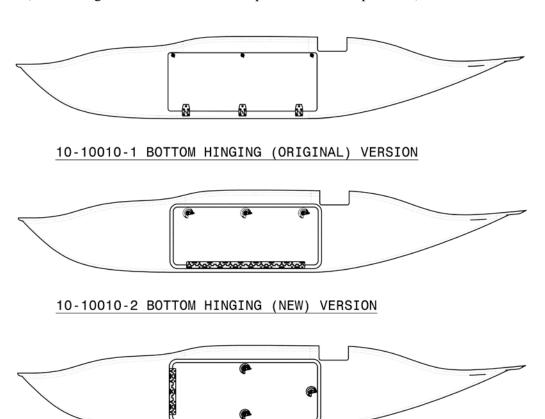
(Refer to Figures 6.1.2 and 6.1.3 for exploded views and part lists.)

10-10010-2 New Door design, utilizing Aerocet developed rotational latches and a piano hinge along the bottom edge. An available option on all new 206 Pod orders.

(Refer to Figures 6.1.4 and 6.1.5 for exploded views and part lists.)

10-10010-3 New Door design, utilizing Aerocet developed rotational latches and a piano hinge along forward edge. An available option on all new 206 Pod orders.

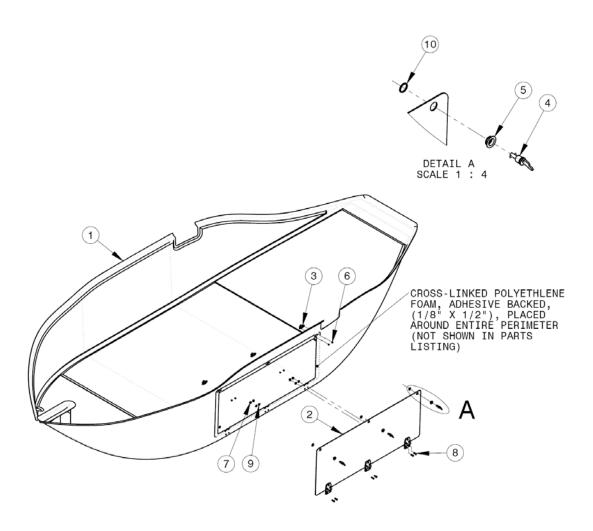
(Refer to Figures 6.1.6 and 6.1.7 for exploded views and part lists.)



10-10010-3 FORWARD HINGING (NEW) VERSION

Figure 6.1.1. 206 Cessna Pod Assembly Versions

	<u> </u>		
ISSUE d/20/0	Incorporated	PAGE	23 of 28
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/22/1	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2

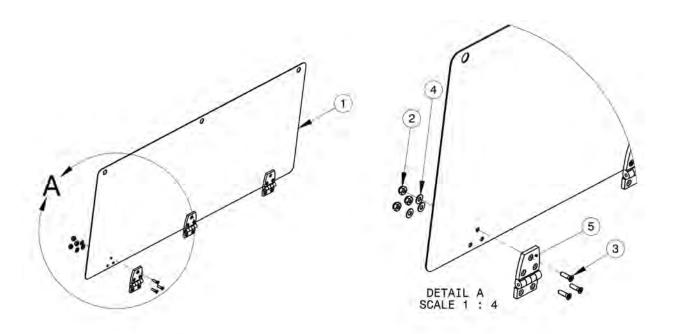


10-10010-1 POD ASSEMBLY, BOTTOM HINGING DOOR, ORIGINAL CONFIGURATION

ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
1	1	PART	10-10010-11	AEROCET 206 CARGO POD SHELL, -1 OPTIONS
2	1	ASSY	10-10015	DOOR PANEL ASSEMBLY
3	3	PART	214-16N	CAMLOCK END
4	3	HRWDR	4002-7W	STUD, CAMLOC P/N
5	3	PART	4002-N	GROMMET
6	6	HRDWR	MS20426AD4-4	RIVET, 100° COUNTERSUNK HEAD, LENGTH A/R
7	6	HRDWR	MS21044C08	NUT, SELF-LOCKING, REGULAR HEIGHT, STAINLESS
8	6	HRDWR	MS24694C6	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100°
9	6	HRDWR	NAS1149C0332R	WASHER, FLAT, STAINLESS
10	3	HRDWR	R4G	SNAP RING, CAMLOC P/N

Figure 6.1.2. Parts Listing for 10-10010-1 Door Configuration

	<u> ∕IERŒET</u>				
ISSUE 4/20/06	Incorporated	PAGE	24 of 28		
	TITLE: Service Manual and I.C.A.	FILE NO.	A-10033		
REVISION DATE: 3/22/12	SUBTITLE: Aerocet 206 Cargo Pack	REVISION	2		

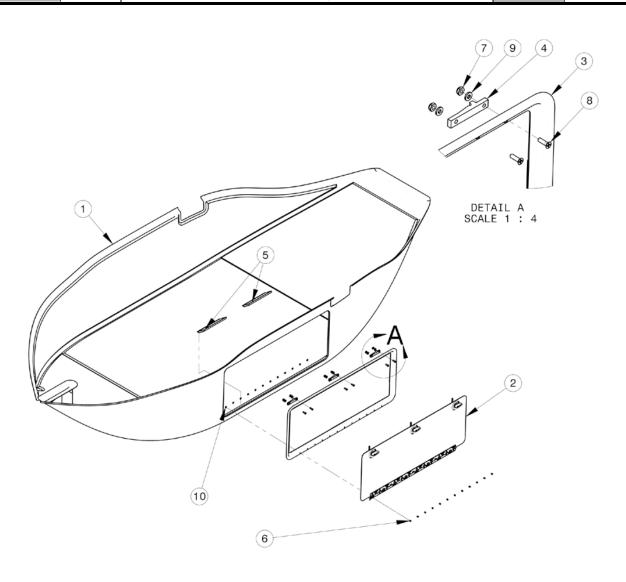


10-10015 ORIGINAL DOOR ASSEMBLY

ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
4	1	PART	10-10016	DOOR PANEL
2	9	HRDWR	MS21044C08	NUT, SELF-LOCKING, REGULAR HEIGHT, STAINLESS
3	9	HRDWR	MS24694C6	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100°
4	9	HRDWR	NAS1149C0332R	WASHER, FLAT, STAINLESS
5	3	HRDWR	SD 202511-1	DOOR HINGE

Figure 6.1.3. Parts Listing for 10-10015 Door Assembly

			<u> ∕IERŒET</u>		
ISSUE DATE: 4/2	20/06		Incorporated	PAGE	25 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE: 3/2	22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

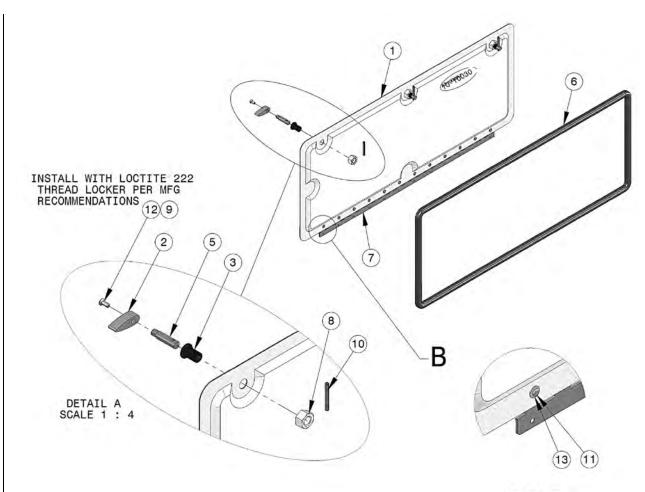


10-10010-2 POD ASSEMBLY, BOTTOM HINGING DOOR CONFIGURATION

ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
1	1	PART	10-10010-21	AEROCET 206 CARGO POD SHELL, -2 & -3 OPTIONS
2	1	ASSY	10-10030-1	DOOR PANEL ASSEMBLY
3	1	PART	10-10038	TRIM RING AND DOOR INSET
4	3	PART	10-10051	LATCH RAMP
5	2	PART	10-10053	CARGO RAMP
6	12	HRDWR	MS20426AD4-5	RIVET, 100° COUNTERSUNK, LENGTH A/R
7	6	HRDWR	MS21083C3	NUT, SELF-LOCKING, LOW HEIGHT, STAINLESS
8	6	HRDWR	MS24694C52	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100°
9	6	HRDWR	NAS1149C0363R	WASHER, FLAT, STAINLESS
10	12	HRDWR	NAS1149FN432P	WASHER, FLAT

Figure 6.1.4. Parts Listing for 10-10010-2 Door Configuration

			<u> ✓ERCCET</u>		
ISSUE DATE:	4/20/06		Incorporated	PAGE	26 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2



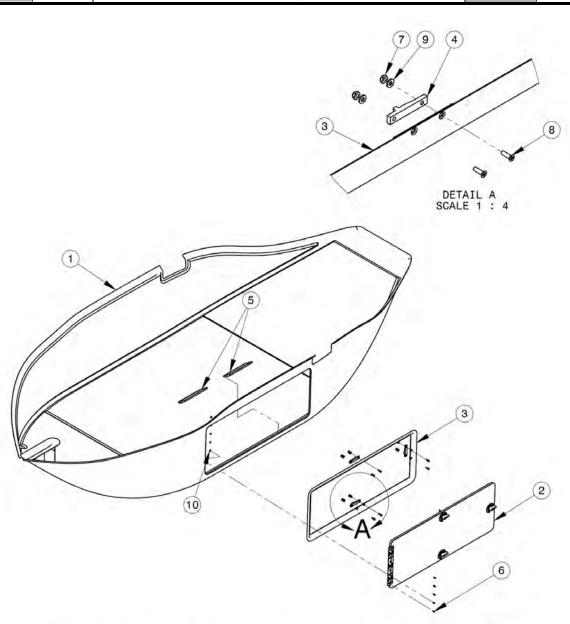
DETAIL B SCALE 1 : 2

10-10030-1 BOTTOM HINGING DOOR ASSEMBLY

ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
1	1	PART	10-10031	DOOR PANEL, BOTTOM HINGING
2	3	PART	10-10032	LATCH HANDLE
3	3	PART	10-10034	LATCH BUSHING
4	3	PART	10-10035	PANEL LATCH POSITION PLACARD
5	3	PART	10-10037	LATCH POST
6	1	HRDWR	10-10039	EPDM FOAM RUBBER SEAL, 1/2" D PROFILE
7	1	ASSY	10-10040-1	HINGE ASSEMBLY, AEROCET 206 CARGO POD
8	3	PART	35-80004	NUT, HEX, NYLON, 1/2-20 THREAD
9	1	HRDWR	LOCTITE 222	THREAD LOCKER
10	3	HRDWR	MS16562-240	SPRING PIN
11	12	HRDWR	MS20426AD4-5	RIVET, COUNTERSUNK (LENGTH A/R)
12	3	HRDWR	MS24694C49	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100
13	12	HRDWR	NAS1149FN432P	WASHER, FLAT

Figure 6.1.5. Parts Listing for 10-10030-1 Bottom Hinging Door Assembly

			<u> ∕IERŒET</u>		
ISSUE DATE:	4/20/06		Incorporated	PAGE	27 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2

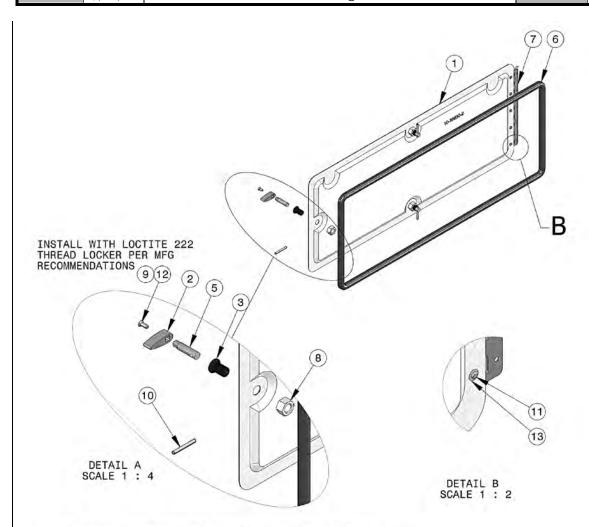


10-10010-3 POD ASSEMBLY, FORWARD HINGING DOOR CONFIGURATION

ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
1	1	PART	10-10010-21	AEROCET 206 CARGO POD SHELL, -2 & -3 OPTIONS
2	1	ASSY	10-10030-2	DOOR PANEL ASSEMBLY, FORWARD HINGING
3	1	PART	10-10038	TRIM RING AND DOOR INSET
4	3	PART	10-10051	LATCH RAMP
5	2	PART	10-10053	CARGO RAMP
6	5	HRDWR	MS20426AD4-9	RIVET, COUNTERSUNK (LENGTH A/R)
7	6	HRDWR	MS21083C3	NUT, SELF-LOCKING, LOW HEIGHT, STAINLESS
8	6	HRDWR	MS24694C52	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100°
9	6	HRDWR	NAS1149C0363R	WASHER, FLAT, STAINLESS
10	5	HRDWR	NAS1149FN432P	WASHER, FLAT

Figure 6.1.6. Parts Listing for 10-10010-3 Door Configuration

			<u> ∕IERŒET</u>		
ISSUE DATE:	4/20/06		Incorporated	PAGE	28 of 28
		TITLE:	Service Manual and I.C.A.	FILE NO.	A-10033
REVISION DATE:	3/22/12	SUBTITLE:	Aerocet 206 Cargo Pack	REVISION	2



10-10030-2 FORWARD HINGING DOOR ASSEMBLY

NO.	QTY	TYPE	PART NUMBER	DESCRIPTION
1	1	PART	10-10031	DOOR PANEL, FWD HINGING
2	3	PART	10-10032	LATCH HANDLE
3	3	PART	10-10034	LATCH BUSHING
4	3	PART	10-10035	PANEL LATCH POSITION PLACARD
5	3	PART	10-10037	LATCH POST
6	1	HRDWR	10-10039	EPDM FOAM RUBBER SEAL, 1/2" D PROFILE
7	-1	ASSY	10-10040-2	HINGE ASSEMBLY, AEROCET 206 CARGO POD
8	3	PART	35-80004	NUT, HEX, NYLON, 1/2-20 THREAD
9	-1	HRDWR	LOCTITE 222	THREAD LOCKER
10	3	HRDWR	MS16562-240	SPRING PIN
11	5	HRDWR	MS20426AD4-5	RIVET, COUNTERSUNK (LENGTH A/R)
12	3	HRDWR	MS24694C49	MACHINE SCREW, FLAT COUNTERSUNK HEAD, 100°
13	5	HRDWR	NAS1149FN432P	WASHER, FLAT

Figure 6.1.7. Parts Listing for 10-10030-2 Forward Hinging Door Assembly