



US Department  
of Transportation  
Federal Aviation  
Administration

## MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved  
OMB No. 2120-0020  
11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

<b>1. Aircraft</b>	Nationality and Registration Mark N4593H	Serial No. 15-357	
	Make Piper	Model PA-15	Series Vagabond
<b>2. Owner</b>	Name (As shown on registration certificate) David Grimm	Address (As shown on registration certificate) Address 4710 Penridge Rd.	
		City Toledo	State OH
		Zip 43615	Country USA

### 3. For FAA Use Only

**"The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above aircraft, subject to conformity inspection by a person authorized in 43.7."**

Date 9/29/10 Signature of FAA Inspector [Signature]

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

### 6. Conformity Statement

<b>A. Agency's Name and Address</b>		<b>B. Kind of Agency</b>	
Name <u>David Grimm</u>		X	U.S. Certificated Mechanic
Address <u>4710 Penridge Rd.</u>			Foreign Certificated Mechanic
City <u>Toledo</u> State <u>OH</u>			Certificated Repair Station
Zip <u>43615</u> Country <u>USA</u>			Certificated Maintenance Organization
		C. Certificate No. A&P 383605011	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual David Grimm <u>[Signature]</u> <u>9-30-10</u>
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### 7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is  Approved  Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	X Inspection Authorization	Other (Specify)

Certificate or Designation No. <u>AP383605011A</u>	Signature/Date of Authorized Individual <u>[Signature]</u> <u>9-30-10</u>
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### NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

#### 8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N4593H

Nationality and Registration Mark

Date

This 337 is to separate and clarify the original 337 for this aircraft dated 8-9-82 when the dual 12 gallon wing tanks were installed.

This field approval is only for the fuel tank installation in the wings, see ICA airworthiness limitations.

Installation of these tanks as part of an auxiliary fuel system is approved in the Piper J-3/PA-11 wing by STC SA560GL. The Piper PA-15 wing is a shorter version of the J-3/PA-11 wing sharing the same ailerons, ribs, and spar dimensions. There is no difference in the structural integrity of this installation in PA-15 wings as compared to J-3/PA-11 wings.

#### Tank installation description

Reference photos T1, T2, and Drawing T001.

Installation in PA-15 wing is identical to the J-3/PA-11 wing installation with the exception of widening the first bay between the front and rear spars by relocating the center portion of the second rib outboard 3.5 inches. The second wing rib Univair P/N U1228-05 is modified into FWD, Center, and Rear sections.

See Univair Service Letter No. 100. The Center section of the rib is fastened to its new location with its original flanges and rib screws. The FWD and Rear sections are installed in their original locations using their original flanges and additional rib screws.

Each tank is held in place by 4 stainless steel retainer brackets.

These straps are 1.5 inches wide, formed to wrap around the front and rear spar.

The ends of these straps are bent 90 degrees to the face (vertical) of the wing spar forming a tab 1 inch long. These straps have a 1/8 thick rubber strap positioned between the wing spar and the tank hold down strap to prevent dissimilar metals from touching. The wing tank strap is held in position by four rib screws in the wing spar, two in front and two in back of the strap in the same area that the wing ribs are attached. Two straps are attached to the front spar, two attached to the rear spar.

The wing tank is set in place and the mounting tabs / holes for the tanks are used to position the holes to be drilled in the wing tank straps. AN509 10R screws, AN365-1032 nuts and AN960 washers are used to attach the wing tanks to the wing tank brackets.

Wing tanks are inspected for clearance on all sides and also with diagonal wires. 1/8 rubber straps is fitted into the tubes in the fuel tanks to prevent diagonal brace wires from rubbing when vibrating.

Additional Sheets Are Attached

N4593H

Nationality and Registration Mark

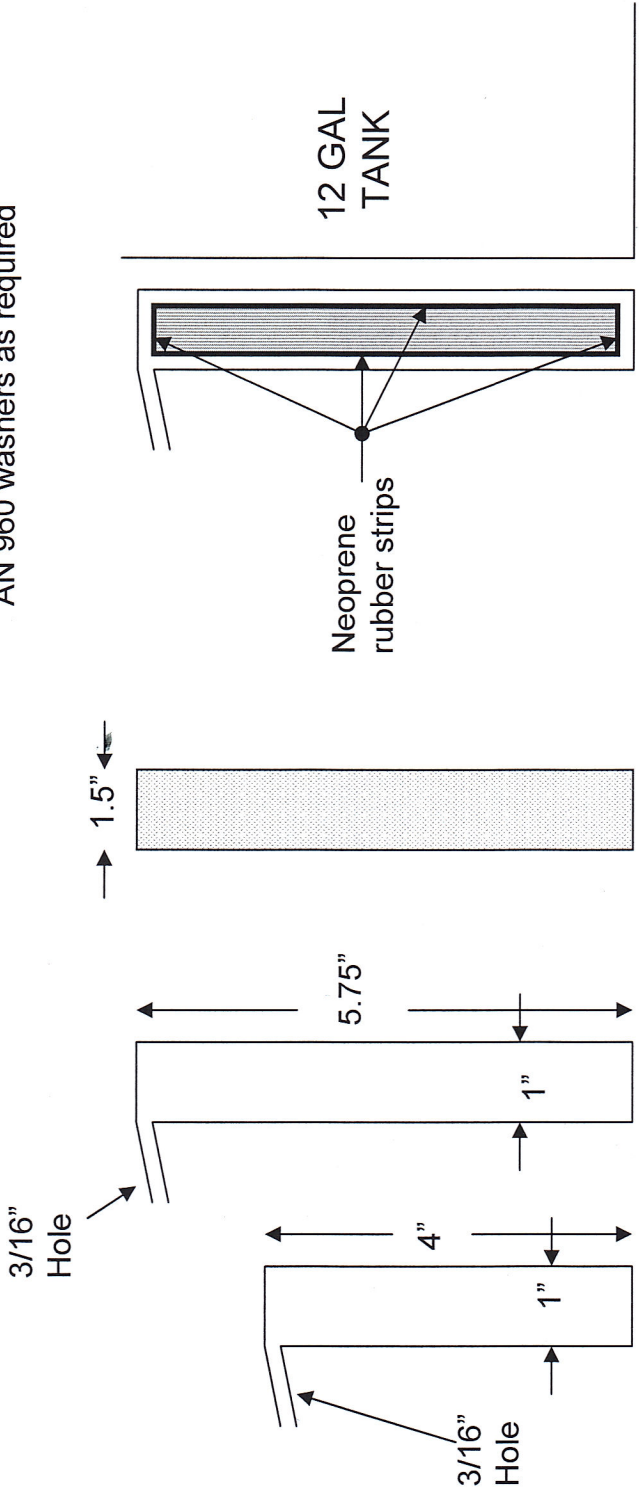
Date

**INSTRUCTIONS FOR CONTINUED AIRWORTHINES: Dual 12 Gallon Wing Tanks PA-15 sn 15-357**

1. **INTRODUCTION:** Installation 12 Gallon Wing Tanks in PA-15 sn15-357
2. **DESCRIPTION:** As described in block 8 of this 337
3. **CONTROL, operation information:** No special procedures required.
4. **SERVICING INFORMATION:** no special information
5. **MAINTENANCE INSTRUCTIONS:** no special information
6. **TROUBLE SHOOTING:** no special information
7. **REMOVAL / REPLACEMENT:** As described in block 8 of the attached 337
8. **DIAGRAMS:** T1, T2, and Drawing T001
9. **SPECIAL INSPECTIONS:** none required
10. **APPLICATION OF PROTECTIVE TREATMENTS:** none required.
11. **DATA:** This 337, Univair Service Letter No. 100,
12. **LIST OF SPECIAL TOOLS:** none required
13. **FOR COMMUTER CATEGORY AIRCRAFT:** not applicable
14. **RECOMMENDED OVERHAUL PERIODS:** On Condition.
15. **AIRWORTHINESS LIMITATIONS:** These tanks must be integrated into a separately approved airplane fuel system in order to be used.
16. **REVISIONS:** A letter will be submitted to the local FAA Office with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing block 3 and including the following statement, "The attached revised/new Instructions for Continued Airworthiness for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness. After the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, and date on the FAA Form 337.

Drawing# T001  
 12 Gallon wing tanks  
 PA-15 aircraft  
 August 25, 2010

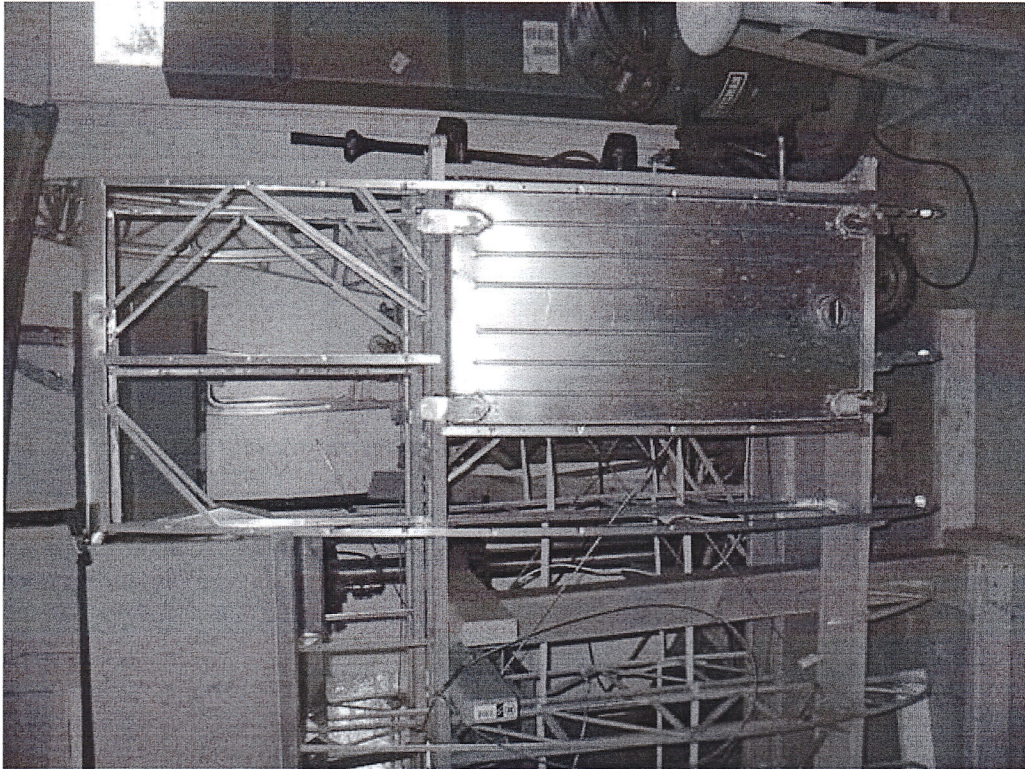
AN 509 10 R 10 screw (4 per side)  
 AN 365-1032 nuts (4 per side)  
 AN 960 washers as required



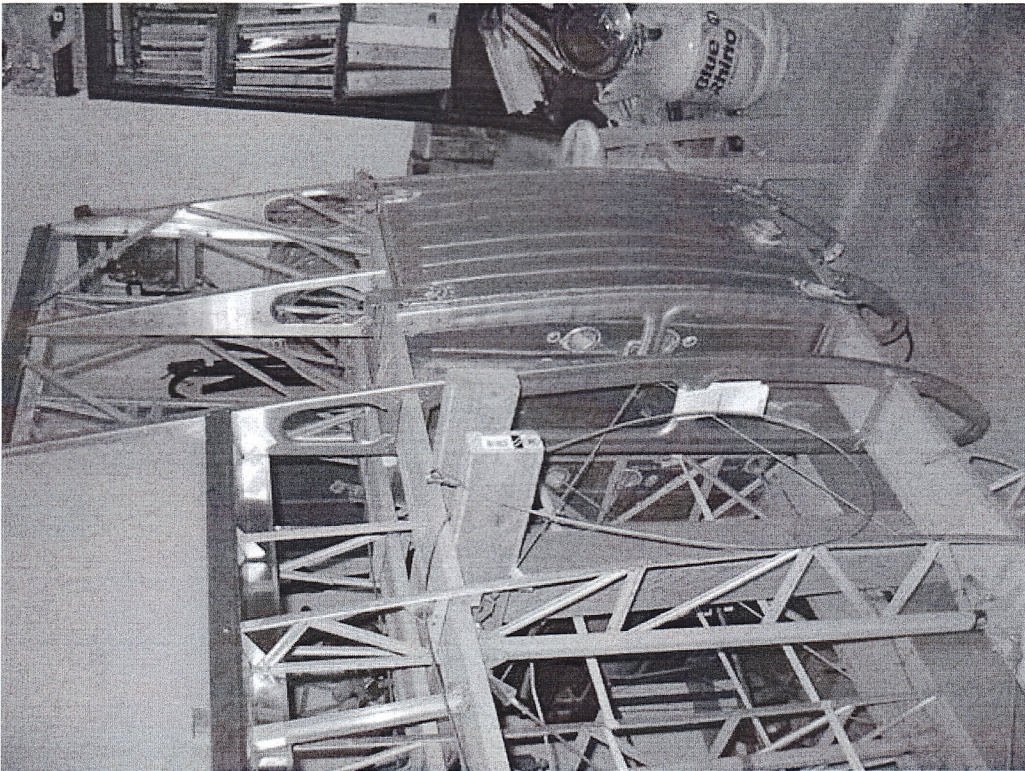
Rear Retainer FWD Retainer

Retainer Material .036" 321 Stainless Steel  
 2 FWD, 2 Rear retainers required per tank.  
 Install 1/16" - 1/8" by 1 1/4" Neoprene rubber strips  
 between spar and retaining brackets to protect spar

NOTE: Match Drill Tank Tabs and Retainer Brackets



T1



T2