



US Department of Transportation  
Federal Aviation Administration

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

OMB No. 2120-0020  
Exp: 5/31/2018

Electronic Tracking Number

For FAA Use Only

GL23 201506589

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 <b>N3385B</b>	Serial No. <b>22-2184</b>	
	Make <b>Piper</b>	Model <b>PA-22</b>	Series
<b>2. Owner</b>	Name (As shown on registration certificate) <b>Slipshod Aviation LLC</b>		
	Address (As shown on registration certificate)		
	Address <b>1331 W 4370 S</b>		
	City <b>Hurricane</b>	State <b>Utah</b>	Zip <b>84737</b> Country <b>USA</b>

### 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 03-05-2015 Signature of FAA Inspector Douglas Peterson

GL-23

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	<u>Piper</u>	(As described in Item 1 above)	<u>22-2184</u>
<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

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
Name <u>David Grimm</u>		<input checked="" type="checkbox"/>	U. S. Certificated Mechanic	<b>AP 3715810</b>	
Address <u>4710 Penridge Rd</u>		<input type="checkbox"/>	Foreign Certificated Mechanic		
City <u>Toledo</u> State <u>Ohio</u>		<input type="checkbox"/>	Certificated Repair Station		
Zip <u>43615</u> Country <u>USA</u>		<input type="checkbox"/>	Certificated Maintenance Organization		

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 
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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	<input checked="" type="checkbox"/>	Inspection Authorization

Certificate or Designation No. <b>AR3715810IA</b>	Signature/Date of Authorized Individual 
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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.)

N3385B

Nationality and Registration Mark

Date

1. Aircraft has PA-22 conventional gear conversion STC-SA45RM. Grove TSO'd wheel and brake assemblies are designated for this landing gear. Remove existing wheel and brake assemblies.

2. Install Grove Aircraft Landing Gear System Inc. P/N 60-1002E (Aluminum) or 60-1002D (Magnesium) Wheel Assembly and 29-1005C Brake Assembly. See Grove Dwg # 60-1002E or 60-1002D & Dwg 29-1005C.

A) Install torque plate onto each gear using 6 AN4-5A, 12 AN960-416L washers and 6 MS21042-4 nuts. Torque to 90 in-lbs. See installation Dwgs 28-4009.

B) Install Grove Wheel assembly 60-1002E or 60-1002D on axle against integral spacer on the axle. Secure wheel on each axle with axle nut and MS24665-360 cotter pin. See Dwg # 28-4009, wheel & brake installation.

C) Lubricate torque pins on the caliper with a dry lubricant. Install caliper assembly on the aircraft, from inboard to outboard, by sliding the torque pins through the bushings of the torque plate. Position the back plates between the tire and the brake caliper and install the tie-bolts. Torque bolts to 90 in-lbs. See Dwg # 29-1005C, Assy, Brake.

D) Fabricate and install hydraulic lines and hoses in accordance with AC43.13-1B Chapter 9, Section 2, Paragraph 9-30 to connect brake caliper to existing aircraft brake line. Allow enough freedom in the brake line for the caliper to float

E) Bleed brake system. Replenish with MIL-H-5606 pumping to the bleeder valve on the lower end of the brake caliper. When reservoir is full, close bleeder valve and reservoir vent. Apply hard pressure to brake pedal. Check to see if you have a "hard pedal" and there are no leaks. Repeat cycle until air is purged from system.

3. Hub cap installation is optional. Torque screws to 15 in-lbs. Ref Dwg 60-1002E or 60-1002D

4. Aircraft maintenance records and weight and balance document have been revised to show the above installation.

**INSTRUCTIONS for CONTINUED AIRWORTHINESS**

1. Introduction: This installation replaces the previous wheel and brakes with Grove Aircraft Landing Gear Systems, Inc. TSO'd wheel and brake components. The model wheel and brake installed has a rated static load of 1750 lbs per wheel and almost twice the brake energy required for this airframe. The wheels are approved for tire sizes of 6.00x6, 7.00x6, 8.00x6 and 8.50x6.

2. Description: As described in block 8 of the attached FAA form 337.

3. Control, Operation Information: The brakes will work the same as the original using the original brake pedals for braking action.

Additional Sheets Are Attached



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.)

N3385B

Nationality and Registration Mark

Date

INSTRUCTIONS for CONTINUED AIRWORTHINESS continued:

4. Servicing Information: When changing tires and tubes, insure tube does not get pinched between wheel halves. Torque wheel nuts to 150 in-lbs. Wheel bearings should be inspected every 100 hours or every annual inspection. Grease for wheel bearings is Aeroshell 22, Mobil 28 or equivalent. Minimum disk thickness is 0.225 inches. Minimum brake pad thickness is 0.100 inches Tie bolt torque for back plates is 90 in-lbs. Hydraulic system fluid level should be serviced with MIL-H-5606 or equivalent. Inspect wheels and brake components for corrosion, cracks and leaks. Inspection of brake system should be accomplished during preflight, 100 hour intervals or annual.

5. Maintenance Instructions: Complete maintenance instruction can be found in the Grove Aircraft Landing Gear Systems BRAKE CALIPER INSPECTION AND MAINTENANCE, WHEEL ASSEMBLY, INSPECTION AND MAINTENANCE and INSTRUCTIONS for CONTINUED AIRWORTHINESS for GROVE BRAKE ASSEMBLIES with FAA-TSO APPROVAL Documents.

6. Trouble shooting: Complete trouble shooting information can be found in the documents listed in item 5 above. These documents have been added to the aircraft records with this FAA form 337.

7. Removal / Replacement: Complete removal and replacement information can be found in the documents listed in item 5 above.

8. Diagram: See attached Grove drawing numbers; 28-4009, 29-1005C and 60-1002D or 60-1002E which have been added to the aircraft maintenance records.

9. Special Instructions: None required

10. Application of Protective Treatments: None

11. Data: This 337 and Grove drawings listed in item 8 above.

12. List of special tools: None

13. For Commuter Category Aircraft: N/A

14. Recommended Overhaul Periods: ON CONDITION.

15. Airworthiness Limitations: N/A

16. Revision: A letter will be submitted 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 will be made, identifying the revision, its location and date on the FAA form 337.

=====END=====

Additional Sheets Are Attached