



US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Cessna	Model 140
	Serial No. 13913	Nationality and Registration Mark N1728V
2. Owner	Name (As shown on registration certificate) Riverside Aircraft Sales Edward L. Moore Ouida Y. Moore	Address (As shown on registration certificate) 327 South Lewis Ave. Philadelphia, MS 39350

3. For FAA Use Only
The data identified herein complies with applicable airworthiness requirements and is approved for the above described aircraft subject to a conformity inspection by a person authorized in FAR 43, Section 43.7.
Edward L. Moore 06-02-2010
Aviation Safety Inspector ACE-FSDO-19 Date

4. Unit Identification				5. Type	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in Item 1 above)				
POWERPLANT	Continental	O-200A	251835-A-48		X
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address Edward L. Moore 4175 Gann Store Road Hixson, TN 37343	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. A&P1299567
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D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date May 26, 2010	Signature of Authorized Individual <i>Edward L. Moore</i>
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7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection		Certificate or Designation No.	Signature of Authorized Individual	

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.)

N1728V

Serial #13913

May 26, 2010

- 1. This Form 337 seeks field approval of the use of engine crankcase mount arm boss adapters to preclude the requirement to change the aircraft engine mount in an STC approved engine replacement/upgrade to this aircraft.**
- 2. The original Continental (TCM) 85 HP, C85-12F, engine in this aircraft is being replaced with a TCM, 100 HP, 0-200A engine as approved under STC SA547EA. This engine change will result in minimum weight change and, in fact, it will probably result in an engine gross weight decrease since a modern lightweight starter and an alternator are on the 0-200A rather than the heavier Delco-Remy starter and generator used on the C85. TCM data indicates that there is less than two pound weight difference in the two basic engines.
The C85-12 engine mounting arm end bosses have front and rear conical recesses for the TCM 22387 conical rubber bushings. (see attachment 1 photo 1 & 2). The arm bosses of the 0-200A crankcase are bored through and counterbored for Lord J-3608-1 mount bushing assemblies. (see attachment 1 photo 3 & 4). Due to the increase in length of the Lord bushing over the TCM bushing, (see attachment 1 and compare photo 1 with photo 4), STC SA547EA requires the original engine mount to be replaced with a Cessna 0451111 mount (see attachment 2) which is approximately 1" shorter (firewall to engine) to compensate for the increase length of the Lord bushing assemblies.**
- 3. It is proposed to use four pair of owner produced engine case mount arm boss, machined aluminum, adapters as inserts to reconfigure the 0-200A engine arm bosses to accept the original TCM 22387 conical bushings. (see attachment 1 photo 5). The TCM 22387 bushings are, in fact, approved for and used on other specified 0-200A engines. (see attachment 3). A TCM technical representative ("Ron" @ 1-888-826-5465) researched the 0-200A database and confirmed that certain aircraft manufacturers specified the 0-200 engines with mounting arm boss configurations that used the TCM 22387 conical bushings.**
- 4. In this engine change, use of the TCM 22387 bushing should result in less engine movement in the aircraft enclosed cowling as opposed to the Lord bushing. TCDS E-233, C75 through C85 series engines**

X Additional Sheets Are Attached

