



INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

FAA-STC SE8987SW

**Proposal to Increase Lycoming O-320-E2A Engine
Power Rating from 150 hp to 160 hp**

Drawing 2663

Notice

This document must be referenced on Block 8 of FAA form 337 and added to the aircraft permanent record as required by 14 CFR Part 91, §91.417(a)(2)(vi) when the reference FAA-STC modification is accomplished on eligible aircraft. This document complies with the requirements of 14 CFR Part 23, §23.1529, in accordance with 14 CFR Part 23, Appendix G.

Aircraft Serial No. _____

Aircraft Registration No. _____

I. INTRODUCTION

This document provides instructions for continued airworthiness (ICA) for modified 160 hp Lycoming O-320-E2A engine in accordance with RAM Aircraft, L.P. Supplemental Type Certificate (STC) SE8987SW.

For information, contact:

RAM Aircraft, Limited Partnership
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Waco, TX 76708
Phone: 254 752-8381
Fax: 254 752-3307

II. DESCRIPTION

The STC is to modify the Textron Lycoming O-320-E2A engine model to increase the 5 minute takeoff power from 150 hp to 160 hp.

III. SPECIAL PROCEDURES

none

IV. SERVICING INFORMATION

The following document shall be followed for the operation of Lycoming O-320-E2A engine.

- Textron Lycoming E Series Engine Parts Catalog number PC-203-1 dated July 1984 or later FAA approved revision.
- Textron Lycoming Overhaul Manual number 60294-7 for Direct Drive Engines, dated February 1992 or later FAA approved revision.
- RAM Aircraft LP Overhaul Manual Supplement number 2645 dated July 6, 2005 or later FAA approved revision.

V. MAINTENANCE INSTRUCTIONS

The following document shall be followed for Parts, Overhaul, and Maintenance of the Textron Lycoming O-320-E2A engine model.

- Textron Lycoming E Series Engine Parts Catalog number PC-203-1 dated July 1984 or later FAA approved revision.

- Textron Lycoming Overhaul Manual number 60294-7 for Direct Drive Engines, dated February 1992 or later FAA approved revision.
- RAM Aircraft LP Overhaul Manual Supplement number 2645 dated July 6, 2005 or later FAA approved revision.

VI. TROUBLESHOOTING

The following document shall be followed for Troubleshooting of the installation of Textron Lycoming O-320-E2A engine model on Piper PA-28-140 or PA-28-151 aircraft models.

- FAA approved Piper PA-28-140 or PA-28-151 service manual.

VII. REMOVAL AND REPLACEMENT

The following document shall be followed for removal and replacement of the Textron Lycoming O-320-E2A engine on Piper PA-28-140 or PA-28-151 aircraft models.

- FAA approved Piper PA-28-140 or PA-28-151 service manual.

VIII. SPECIAL INSPECTION REQUIREMENTS

The following document shall be followed for inspection of the Textron Lycoming O-320-E2A engine model.

- Textron Lycoming Overhaul Manual number 60294-7 for Direct Drive Engines, dated February 1992 or later FAA approved revision.
- RAM Aircraft LP Overhaul Manual Supplement number 2645 dated July 6, 2005 or later FAA approved revision.

IX. APPLICATION OF SPECIAL TREATMENTS

None

X. DATA

Per RAM Drawing 1724 Revision B dated 6-29-2005 or later FAA approved revision.

XI. SPECIAL TOOLS

None

XII. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT

None

XIII. AIRWORTHINESS LIMITATIONS SECTION

Note: The airworthiness limitations section is FAA approved and specifies maintenance required under §§ 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

ENGINE LIMITATIONS

Propellers:

- a. Number of Propellers: 1
- b. Manufacturer: Sensenich
- c. Propeller Model Number: 74DM6-0-58 or -60
- e. Diameter: Maximum = 74 inches, Minimum = 72 inches
- g. Operating Limits:
 - (1) Maximum Continuous: 160 H.P. – 2700 rpm.
 - (2) Take-off : 160 H.P. – 2700 rpm.

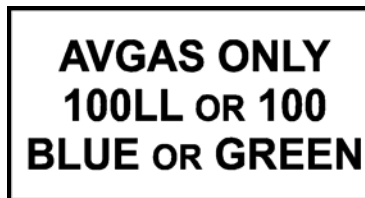
INSTRUMENT MARKINGS

Tachometer:

GREEN ARC	2200 – 2650 RPM
YELLOW ARC	2650 – 2700 RPM
RED RADIAL	2700 RPM

PLACARDS

Install Fuel Placard on top of wing next to each fuel filler cap in plain view:



XIV. REVISION

To revise this document, a letter should be submitted to the local FAA-FSDO with a copy of the revised FAA form 337 and revised ICA. Once accepted by the FAA inspector, a maintenance record entry should be made, identifying the revision, its location and date of the form 337.

XV. ASSISTANCE

For assistance with ICA issues not addressed herein, contact the Fort Worth FAA Aircraft Evaluation Group (AEG) at: 1 (817) 222-5272.