



## Airworthiness Directive

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Docket No. 91-ANE-08; Amendment 39-6962; AD **91-08-07**

TEXTRON LYCOMING Model TIO-360, TIO-540, TIO-360, TIO-540, LTIO-540, TIGO-541, TIO-541, and TIVO-540 Series Engines

**PDF Copy (If Available):**

### ▼ Preamble Information

DATES: Effective May 6, 1991.

### ▼ Regulatory Information

**91-08-07** TEXTRON LYCOMING: Amendment 39-6962. Docket No. 91-ANE-08.

Applicability: TIO-360 Series engines with serial numbers up to L-215-64A inclusive; TIO-540 Series engines with serial numbers up to L-9245-61/61A inclusive, except TIO-540-AE2A engines for which the requirements of AD 89-15-10 are met; LTIO-540 Series engines with serial numbers up to L-2911-

68A inclusive; TIGO-541 Series engines with serial numbers up to L-780-62 inclusive; all TIO-541 Series engines; and all TIVO-540 Series engines. Also applies to overhauled and remanufactured engines of these models shipped from the factory prior to November 15, 1990, and to any Textron Lycoming engine that has been modified to use a turbocharger and that has the fuel pump vent vented to the induction system.

Compliance: Required within the next 15 hours in service for paragraph (a) and within the next 50 hours in service for paragraph (b), after the effective date of this AD, unless already accomplished.

To prevent engine power loss and possible loss of the aircraft, accomplish the following:

(a) Perform a fuel leak check at the fuel pump vent hose fitting as follows:

- (1) Disconnect the fuel pump vent hose at the engine fuel pump. Then proceed to turn on the aircraft boost pump and visually inspect for any fuel draining out from the engine pump vent port.
- (2) Prior to further flight, remove and replace with a serviceable pump, engine fuel pumps which exhibit leakage. Repeat the leak check following pump replacement to verify no fuel is passing through the fuel pump vent port.
- (3) Reconnect the fuel pump vent hose at the engine fuel pump.

(b) Inspect and replace if necessary, the fuel pump vent restrictor fitting as follows:

- (1) Remove fitting from the pump vent port and measure the orifice opening using an appropriate size wire gauge or drill bit. The orifice diameter must be within .014-.020 inch and the fitting must have the code letter "R" impression stamped on a flat surface.
- (2) Prior to further flight, replace any restrictor fitting that has an orifice diameter out of limits, or if no restrictor orifice exists. Install a new or serviceable restrictor fitting with a proper size orifice, and identified with the letter "R", using Loctite hydraulic sealant or equivalent on the pipe threads.
- (3) Ensure that the orientation of the reinstalled fitting is the same as the original fitting.
- (4) Reconnect the pump vent line.

NOTE: Textron Lycoming Service Bulletin Nos. 494 and 497 and Service Instruction No. 1446 pertain to this subject. Fuel pump vent fittings supplied by Textron Lycoming with the proper size orifice are identified by the letter "R" stamped on each fitting.

Engine Models TIO-541 and TIVO-540 series are not specified in the service bulletins, for these engines the engine driven pump and vent fitting were furnished by the aircraft manufacturer.

(c) Aircraft may be ferried in accordance with the provisions of Federal Aviation Regulations 21.197 and 21.199 to a base where the AD can be accomplished.

(d) Upon submission of substantiating data by an owner or operator through an FAA Inspector (maintenance, avionics, or operations, as appropriate), an alternate method of compliance with the requirements of this AD or adjustments to the compliance schedule specified in this AD may be approved by the Manager, New York Aircraft Certification Office, Engine & Propeller Directorate, Aircraft Certification Service, FAA, New England Region, Room 202, 181 South Franklin Avenue, Valley Stream, New York 11581.

All persons affected by this directive who have not already received the appropriate service information from the manufacturer may obtain copies upon request to Textron Lycoming/Subsidiary of Textron Inc., 652 Oliver Street, Williamsport, Pennsylvania 17701. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, Room 311, 12 New England Executive Park, Burlington, Massachusetts.

This amendment becomes effective on May 6, 1991.

▼ **Footer Information**

▼ **Comments**