

# RAM AIRCRAFT SERVICE LETTER

# SL2003-01A

**SUBJECT:** COMPLIANCE WITH FAA AIRWORTHINESS DIRECTIVE (AD) 98-02-08

**PURPOSE:** Provide clarification as to the applicability of AD 98-02-08 to RAM Aircraft owned Supplemental Type Certificates (STC) on Textron Lycoming O-320 series, four cylinder reciprocating engines.


**MODELS AFFECTED:** Textron Lycoming O-320-E3D and O-320-E2A engines modified by STC SE8987SW and O-320-E2D engines modified by STC SE3692SW.

## BACKGROUND

RAM Aircraft originally issued Service Letter SL2003-01 on April 11, 2003 to installers of modified Lycoming O-320-E3D and O-320-E2D engines per RAM STC SE8987SW and SE3692SW. The service letter required that RAM modified engines comply with FAA Airworthiness Directive (AD) 98-02-08. STC SE8987SW and SE3692SW increase the takeoff power rating of the Textron Lycoming O-320-E3D and O-320-E2D engines from 150 hp to 160 hp. Recently, RAM revised STC SE8987SW to add Lycoming O-320-E2A engine to increase takeoff and maximum continuous power rating from 150 hp to 160 hp.

The revision A of this Service Letter instructs the installer that compliance with FAA AD 98-02-08 is mandatory for all RAM-modified Lycoming engine models listed above. The O-320-E2D engine modified by STC SE3692SW is installed on, but not limited to, Cessna model 172 aircraft. The O-320-E2A and O-320-E3D engines modified by STC SE8987SW are installed on, but not limited to, Piper model PA-28-140 and PA-28-151 aircraft.

Textron Lycoming and the FAA issued AD 98-02-08 (attached) on Jan. 28, 1998 that applies to Lycoming 320 series engines limited to 160 HP, and 360 series, four cylinder reciprocating engines with fixed pitch propellers. The action required by the AD is intended to prevent crankshaft failure, which can result in engine failure, propeller separation, forced landing, and possible damage to the aircraft. Note 1 of AD 98-02-08 states, "This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD." RAM-modified engines per above STCs are rated at 160 HP and have the same basic crankshaft as the standard 160 HP 320 series engines, and thus compliance with AD 98-02-08 is mandatory.

ISSUED			REVISED			 <b>RAM Aircraft, Limited Partnership</b> Waco Regional Airport 7505 Karl May Dr, Waco, Texas 76708 Phone: (254) 752-8381 Fax: (254) 752-3307 Website: <a href="http://www.ramaircraft.com">http://www.ramaircraft.com</a>	PAGE	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		1 of 2	A
04	11	2003	05	23	2007		SL2003-01	

GUIDANCE

**Textron Lycoming O-320-E2D engines modified by STC SE3692SW, and O-320-E2A and O-320-E3D engines modified by STC SE8987SW must comply with the requirements of AD 98-02-08 (attached).**


Perform crankshaft inspections per Textron Lycoming Service Bulletin No. 505B, dated Dec. 1, 1997, within the compliance times specified by AD 98-02-08. Compliance with all portions of AD 98-02-08 is required.

As specified in AD 98-02-08, paragraph (f), if the crankshaft ID has been painted with Urethabond 104 and confirmed with the letters "PID" stamped on the propeller flange OD per Textron Lycoming Service Bulletin No. 530A, dated Jun. 29, 1998, then the inspection actions required by AD 98-02-08 are no longer necessary. However, it is necessary to complete the survey shown in Appendix 1 of AD 98-02-08.

Textron Lycoming Service Bulletins are available on the Textron Lycoming website: <http://www.lycoming.textron.com> or may be obtained by contacting RAM Aircraft.

CONTACT

RAM Aircraft Customer Service Dept. at (254) 752-8381 (M-F, 8 AM to 5 PM, CDT).

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MO	DAY	YEAR	MO	DAY	YEAR		2 of 2	A
04	11	2003	05	23	2007		SL2003-01	