



FAA
Aircraft Certification Service

SPECIAL AIRWORTHINESS
INFORMATION BULLETIN

SUBJ: Reciprocating Engine Cylinder: Identification Information for Superior Air Parts, PMA Cylinder Heads for Teledyne Continental Motors (TCM) IO-520, TSIO-520, and IO-550 Series Engines. **SAIB:** NE-10-07
Date: November 2, 2009

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators, and certificated repair facilities of **TCM series engines with certain Superior Air Parts, Inc. (SAP) investment cast cylinder assemblies** to help identify the cylinder assemblies listed in airworthiness directive (AD) 2009-16-03. At this time, the airworthiness concern is not an unsafe condition that would warrant AD action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

On August 5, 2009, we issued AD 2009-16-03 to require inspecting certain TCM engines with SAP cylinders installed. In AD 2009-16-03, paragraph (f), we provided additional information to aid in identifying affected part number (P/N) cylinders without having to remove the cylinder from the engine. Paragraph (f) states: "Look at the cylinder head for the P/N SAC 52001 I or SAC 55001 I, and the word AMCAST."

Since we issued that AD, SAP has informed us that the affected investment cast cylinder heads might have the letters "CP" and a revision marking as shown in the following Table 1 instead of the word "AMCAST."

Table 1 – Foundry and Revision Markings on Affected Cylinder Head Assemblies

TCM Engine Models	Foundry Marking	Revision Marking
520 series	AMCAST	None
	CP	-B, -D, or -J
550 series	AMCAST	None
	CP	-B, -D, or -J

The same foundry made all of the SAP investment cast cylinder heads. After Citation Precision bought the foundry in 1998, the top of the cylinder heads were marked "CP."

Table 2 – Manufacturing Date of Affected Cylinder Head Assemblies

Foundry Markings	Revision Marking	Manufacturing Date
AMCAST	None	1994 thru Sept. 1998
CP	B	Sept. 1998 thru March 2000
CP	D	April 2000 thru June 2006
CP	J	July 2006 thru Jan. 2007

Recommendations

If your records show that your TCM engine has an SAP cylinder assembly, and you cannot see the part number on the bottom flange of the cylinder assembly, you can remove the valve cover and look for P/N SAC 52001 I and the word “AMCAST” or the letters “CP.” If either are present, your cylinder assembly is affected by AD 2009-16-03.

For Further Information Contact

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