LUFTFARTSVERKET
Luftfartsinspektionen

LUFTVÄRDIGHETSDIREKTIV (LVD)

Motor
Teledyne
Continental
LVD Nr 2511

Sektion 2. Utlandstillverkad flygmateriel

TITEL:	**Kontroll av luftintagsspjäll**
GÄLLER:	TCM 0-200A S/N 256030 t o m 256037, C85, C90, 0-200 och 0-240 i enlighet med bifogad kopia av FAA AD 93-22-05.
ÅTGÄRD:	Utför åtgärder angivna i bifogad kopia av FAA AD 93-22-05 och TCM Critical Service Bulletin CSB Nr 93-13 daterad 12 augusti, 1993.
TID FÖR ÅTGÄRD:	Kontroll inom 5 flygtimmar räknat från detta LVD's utgivningsdatum och därefter i intervall av 25 flygtimmar tills felfritt luftintag installerats.
UNDERLAG:	FAA AD 93-22-05 TCM Critical Service Bulletin CBS Nr 93-13 daterad 12 augusti, 1993, eller senare utgåva.
REFERENS:	FAA AD 93-22-05.
UTGIVNINGS-DATUM:	1993-12-02

LFS: 1993:35

Åtgärd enligt LVD utgör nödvändig förutsättning för ifrågavarende flygmateriels luftvärdighet. Referens BCL M 1.11. Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senaste gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

L 1563-1

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Bilaga till LVD Nr 2511

PRIORITY LETTER AIRWORTHINESS DIRECTIVE -11- 1 0

FLIGHT STANDARDS SERVICE
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P.O. BOX 26460
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U.S. Department
of Transportation
**Federal Aviation
Administration**

DATE: November 4, 1993
93-22-05

This priority letter Airworthiness Directive (AD) is prompted by four reports from one flight school in Scotland of engines found with cracks in the carburetor air intake housing assemblies. Teledyne Continental Motors (TCM) conducted further investigations and found cracks in the air valve (commonly called the carburetor heat butterfly valve) and the welds in the air valve and shaft areas of carburetor air intake housing assemblies. These cracks can result in loss of engine power due to the separation of the air valve or a piece of it from the shaft, which can then block off the air flow to the carburetor. The restricted air flow results in partial or complete power loss depending on the amount of blockage. The cracks in the suspect assemblies were discovered at 122, 29, 11, and 0 hours time in service since installation on TCM O-200, however, this condition may apply to TCM C85, C90, and O-240 series piston engines. This condition, if not corrected, could result in engine failure due to a cracked air valve in the carburetor air intake housing.

Teledyne Continental Motors has determined that 102 carburetor air intake housing assemblies and 41 repair kits with parts not produced to the type design data were manufactured. These units were installed at the factory in new TCM Model O-200A engines with serial numbers 256030 through 256037. In addition, suspect carburetor air intake housing assemblies, Part Numbers (P/N) CE11141, CE11142, 639814, 639815, 641534, and repair kit assembly, P/N 641689, were sold as replacement parts after August 31, 1991, for TCM C85, C90, O-200, and O-240 series engines.

Teledyne Continental Motors has changed the P/N's for new assemblies; the PN's are as follows: P/N 653661, which supersedes P/N CE11142; P/N 653670, which supersedes P/N 639815; P/N 653675, which supersedes P/N 641534; and P/N 653657, which supersedes P/N 641689. Assemblies with P/N CE11141 and P/N 639814 have not been superseded, as these assemblies include an air filter, but their corresponding airbox P/N's are CE11142 and 639815.

Since both correctly manufactured parts (12 total) and suspect parts (a total of 114 assemblies and 41 repair kits) of the same P/N were sold after August 31, 1991, and 12 suspect assemblies and 11 suspect kits have been removed from service to date, a total of 132 assemblies must be inspected to determine which are suspect.

Teledyne Continental Motors also produced several assemblies, P/N 641534, which meet type design criteria. Prior to shipment of these parts to a distributor, TCM will mark them with a permanent ink stamp, "CSB 93-13", located on the inside of the housing assembly where it is easily seen from the air filter interface.

The FAA has reviewed and approved the technical contents of TCM Critical Service Bulletin (CSB) No. 93-13, dated August 12, 1993, that describes procedures for an initial inspection to determine if a suspect assembly is installed, repetitive inspections for cracks, and replacement, if necessary, of carburetor air intake housing assemblies with serviceable assemblies.

Since an unsafe condition has been identified that is likely to exist or develop on other engines of this same type design, this AD requires an initial inspection to determine if a suspect carburetor air intake housing assembly is installed. Suspect carburetor air intake housing assemblies must be replaced with a serviceable assembly if a crack is found. In addition, this AD requires repetitive inspections for cracks, and replacement, if necessary, of carburetor air intake housing assemblies with serviceable assemblies. Replacement with serviceable carburetor air intake housing assemblies constitutes terminating action to the inspection requirements of this AD. The actions are required to be accomplished in accordance with the service bulletin described previously.

Pursuant to the authority of the Federal Aviation Act of 1958, delegated to me by the Administrator, the following priority letter AD 93-22-05, applicable to TCM C85, C90, O-200 and O-240 series piston engines, is issued and is effective immediately upon receipt.

93-22-05 Teledyne Continental Motors: Priority Letter issued on November 4, 1993. Docket No. 93-ANE-54.

Applicability: Teledyne Continental Motors (TCM) Model O-200A piston engines with Engine Serial Numbers 256030 through 256037; and TCM C85, C90, O-200, and O-240 series piston engines with carburetor air intake housing assemblies, Part Numbers (P/N) CE11141, CE11142, 639814, 639815, 641534, and Repair Kit Assemblies, P/N 641689, purchased after August 31, 1991, without a permanent ink stamp "CSB 93-13" located on the inside of the housing assembly. These engines are installed on but not limited to the following aircraft: American Champion Models 7BCM, 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7FC, 7JC, 7ECA, 11BC, S11BC, 11CC, S11CC, and 402; Anderson Greenwood Model 14; Cessna Model 120, 140, 140A, 150, 150A-M, and A150K-M; Luscombe Model 8E, 8F, and T-8F; McClish (Funk) Model B85C; Piper Model PA-18 and PA-19; Reims Model F150G, H, J, K, L, M, FA150K, L, FRA150L, and M; Spinks Model Lark 95; Superior (Culver) Model V and V-2; Taylorcraft Model 19 and F-19; and Univair (Erco, Forney, Alon, Mooney) Model 415E, 415G, F-1, F-1A, A-2, and M-10.

Compliance: Required as indicated, unless accomplished previously.

To prevent engine failure due to a cracked air valve in the carburetor air intake housing assembly, accomplish the following:

(a) Within the next 5 hours time in service (TIS) after receipt of this priority letter AD, inspect the carburetor air intake housing assembly in accordance with paragraph 2 of the Inspection Procedure section of TCM Critical Service Bulletin (CSB) No. 93-13, dated August 12, 1993.

(1) If the carburetor air intake housing assembly meets the requirements of Paragraph 2A of the Inspection Procedures of TCM CSB No. 93-13, dated August 12, 1993, no further action is required.

(2) If the carburetor air intake housing assembly meets the requirements of paragraph 2B of TCM CSB No. 93-13 dated August 12, 1993, inspect the carburetor air intake housing assembly for cracks. If cracks are found anywhere in the assembly, prior to further flight replace with a serviceable assembly.

(b) Thereafter, for assemblies that meet the requirements of paragraph 2B of TCM CSB No. 93-13, dated August 12, 1993, inspect the carburetor air intake housing assembly for cracks in accordance with Paragraphs 3 and 4 of the Inspection Procedure of TCM CSB No. 93-13, dated August 12, 1993, at intervals not to exceed 25 hours TIS since the last inspection. If cracks are found anywhere in the assembly, prior to further flight replace with a serviceable assembly.

(c) Inspect uninstalled carburetor air intake housing assemblies in accordance with paragraph (a) of this AD prior to installation.

(d) For the purpose of this priority letter, a serviceable carburetor air intake housing assembly is defined as:

(1) An assembly purchased on or before August 31, 1991; or

(2) An assembly that meets the inspection criteria of paragraph (a)(1) of this AD; or

(3) An assembly with the following P/N's:

(i) 653661, which supersedes CE11142;

(ii) 653670, which supersedes 639815;

(iii) 653675, which supersedes 641534;

(iv) 653657, which supersedes 641689; or

(4) An assembly, P/N 641534, with a permanent ink stamp "CSB 93-13" located on the inside of the housing assembly.

NOTE: The assemblies, P/N's CE11141 and 639814, have not been superseded, as these are assemblies with the air filter included, corresponding to airboxes, P/N's CE11142 and 639815.

(e) Replacement with a serviceable carburetor air intake housing assembly constitutes terminating action to the inspection requirements of this AD.

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

NOTE: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Atlanta Aircraft Certification Office.

(g) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(h) Copies of the applicable service information may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (205) 438-3411. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA.

(i) Priority Letter AD 93-22-05, issued November 4, 1993, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT:

Jerry Robinette, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1669 Phoenix Parkway, Suite 210C, Atlanta, GA 30349; telephone (404) 991-3810, fax (404) 991-3606.