U.S. DEPARTMENT OF TRANSPORATION
FEDERAL AVIATION ADMINISTRATION

Airworthiness Directive

96-12-07 TELEDYNE CONTINENTAL MOTORS: Amendment 39-9649. Docket 93-ANE-07. Supersedes AD 78-09-07 R3, Amendment 39-4538.

Applicability: Teledyne Continental Motors (TCM) (formerly Bendix) S-20, S-1200, D-2000, and D-3000 series magnetos equipped with impulse couplings, installed on but not limited to reciprocating engine powered aircraft manufactured by Beech, Cessna, Mooney, and Piper.

NOTE 1: This airworthiness directive (AD) applies to each magneto 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. For magnetos that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (c) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any magneto from the applicability of this AD.

NOTE 2: The FAA has received reports of some confusion as to what is meant by S-20, S-1200, D-2000, and D-3000 series magnetos as referenced in TCM Mandatory Service Bulletin (MSB) No. MSB645, dated April 4, 1994, and this airworthiness directive (AD). A typical example is S6RN-25, where the S designates single type ignition unit (a D designates a dual ignition unit), the 6 designates the number of cylinders, the R designates right hand rotation, the N is the manufacturer designation (this did not change when TCM purchased the Bendix magneto product line), and the number after the dash indicates the series (a -25 is a S-20 series magneto while a -3200 is a D-3000 series magneto, etc.).

Compliance: Required as indicated, unless accomplished previously.

To prevent magneto failure and subsequent engine failure, accomplish the following:

(a) For magnetos with riveted or snap ring impulse coupling assemblies, having less than 450 hours time in service (TIS) since new, or overhaul, or since last inspection, on the effective date of this AD, accomplish the following:

(1) Prior to the accumulation of 500 hours TIS since new, or overhaul, or since last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(b) For magnetos with riveted or snap ring impulse coupling assemblies, having 450 or more hours TIS since new, or overhaul, or since last inspection, on the effective date of this AD, or an unknown TIS on the effective date of this AD, accomplish the following:

(1) Within the next 50 hours TIS after the effective date of this AD, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instruction of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(c) 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.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The actions required by this AD shall be done in accordance with the following TCM service documents:

Document No.	**Pages**	**Revision**	**Date**
MSB No. MSB645	1-6	Original	April 4, 1994
Total Pages: 6.			
SB No. 639	1-2	Original	March 1993
Total Pages: 2.			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (334) 438-3411. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on July 18, 1996.