CONTINENTAL MOTORS® IGNITION SYSTEMS

SERVICE BULLETIN

Compliance Will Enhance Safety

CATEGORY 3

SB670

Supersedes SB669
TECHNICAL PORTIONS
FAA APPROVED

SUBJECT: Replacement and maintenance of the Continental Motors S-20, S-200, and S-1200 Series Magneto Distributor Block

PURPOSE: To advise of availability of improved distributor blocks (see Table 1) and to advise of updated maintenance and inspection procedures.

COMPLIANCE: During the next 500-hour magneto maintenance event, or at the next magneto overhaul, whichever occurs first.

MODELS AFFECTED: All aviation gasoline engines utilizing Continental Motors, Inc. (CMI) (formerly TCM/Bendix) S-20, S-200, and S-1200 Series Magnetos

I. General Information

Magnetos manufactured by Continental Motors, Inc. (CMI) contain a bronze oilite bushing in the distributor block that supports the distributor gear shaft. The bushing is bonded to the distributor block during its manufacture.

CMI is aware of instances in which the bushing has become loosened in the distributor block. The loose bushing may result in an offset or disengaged distributor gear, damaged distributor gear teeth, and/or rough running engine operations. CMI now offers distributor blocks that feature improved materials and processes to ensure adhesion between distributor blocks and bushings. Each distributor is marked with a batch-code, consisting of a two digit year number, and a two digit batch number.

NOTE: This service bulletin is not intended to replace the recommended periodic maintenance intervals and magneto maintenance procedures as outlined in the published CMI Magneto Service Support Manuals.

NOTE: Compliance with these instructions eliminates the recurring "100-hour Inspection" required by Service Bulletin "SB669, Continental Motors S-20, S-200, and S-1200 Series Magneto Distributor Gear Block Inspection."

II. Scope

In addition to procedures already detailed in the applicable Magneto Service Support Manual under "500-Hour Inspection" this Service Document requires revised maintenance actions at all 500-hour periodic maintenance events.

This Service Document includes instructions for inspection, replacement, and disposal of distributor blocks bearing **superseded batch-codes** (Table 1) with distributor blocks bearing certain batch codes at or before the next 500-hour periodic maintenance event.

III. Inspection Procedure

NOTE: At the "500 Hour-Inspection", magnetos are accessible and the end of the distributor gear shaft is ready for distributor block replacement.

1. Locate the distributor block batch-code as shown in Figure 1 and Figure 2.
2. Replace distributor blocks bearing superseded batch-codes with acceptable batch codes as shown in Table 1. Destroy distributor blocks with superseded batch-codes after removal.

Table 1. Distributor Block Batch-Codes

Magneto Series	Magnetos Built with Acceptable Distributor Block Batch-Codes (subsequent to these serial number)	Affected Distributor Block Part Number (P/N))	Distributor Block Batch-Codes	
			Distributor Blocks with Superseded Batch-Codes	Distributor Block with Acceptable Batch-Codes
S4-20 or S4-200	D15FA001(R) E15FA001(R)	10-357424	84-01 to 86-01	86-02 to 05-99
			06-01 to 15-02	15-03 and subsequent
S6-20 or S6-200		10-357426	84-01 to 86-01	86-02 to 05-99
			06-01 to 15-01	15-02 and subsequent
S4-1200	F15KA001(R)	10-391584	84-01 to 86-01	86-02 to 05-99
			06-01 to 14-99	15-01 and subsequent
S6-1200	F15FA001(R)	10-391586	84-01 to 86-01	86-02 to 05-99
			06-01 to 15-01	15-02 and subsequent
S8-1200	F16CA001(R)	10-391588	84-01 to 86-01	86-02 to 05-99
			06-01 to 14-99	15-01 and subsequent

3. Complete magneto servicing according to the Magneto Service Support Manual, "500-Hour Inspection."
4. Install magneto according to the engine's Maintenance and Overhaul Manual.
5. Reinstall the engine cowling using the airframe manufacturer's maintenance instructions.
6. Perform ground run-up to normal operating temperature according to the Airplane Flight Manual/ Pilot's Operating Handbook (AFM/POH) published by the aircraft manufacturer.
7. Perform a Magneto RPM Drop Check according to instructions in the applicable Airplane Flight Manual /Pilot's Operating Handbook (AFM/POH) to verify proper ignition system operation. RPM drop is expected when one magneto channel in a dual ignition system is turned off.
8. Make the appropriate logbook entry for compliance with this Service Bulletin.

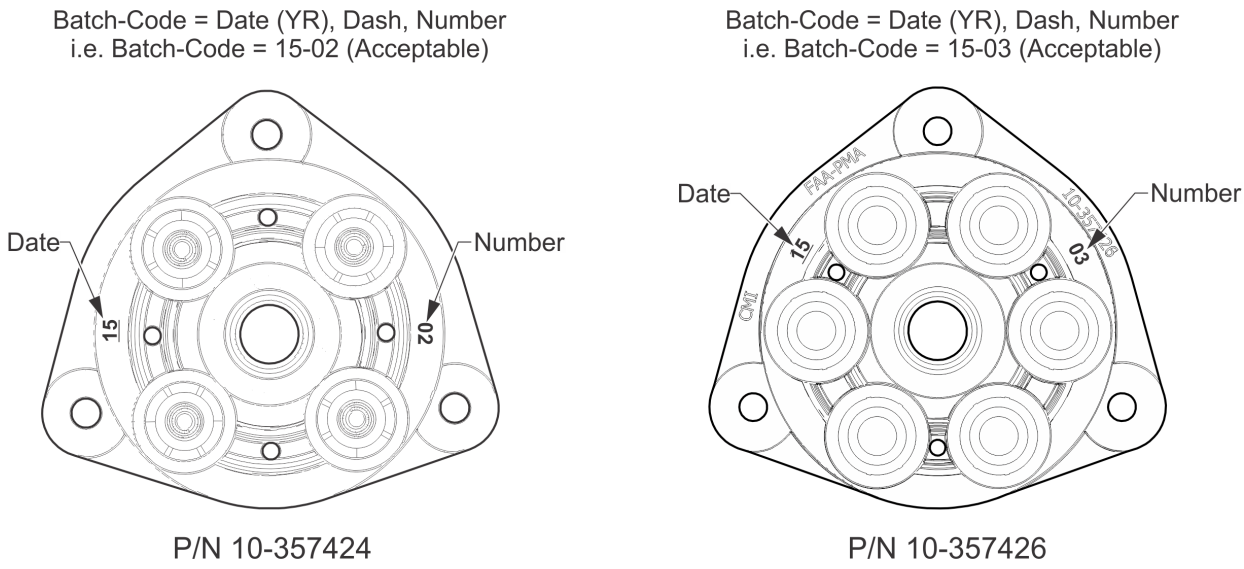

Figure 1. Distributor Block Batch-Codes, (S-20, S-200, typical)

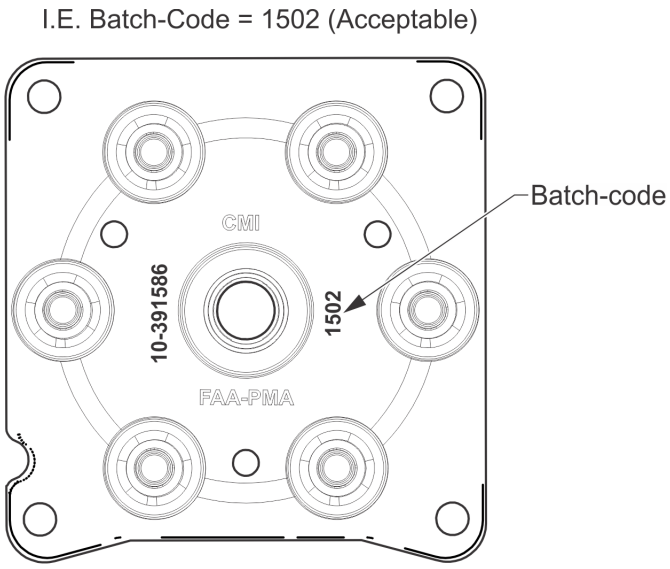

Figure 2. Distributor Block Batch-Code, (S-1200, typical)

Intentionally Left Blank