

TELEDYNE CONTINENTAL[®] AIRCRAFT ENGINE
CRITICAL SERVICE BULLETIN
Compliance Necessary To Maintain Safety

CATEGORY 2
CSB94-1
FAA APPROVED


SUBJECT: TELEDYNE CONTINENTAL MOTORS IGNITION SYSTEMS
SERVICE BULLETIN – NO. CSB641

PURPOSE: To advise TCM customers of the subject service bulletin.

COMPLIANCE: See attached TCM Ignition Systems Service Bulletin No. CSB641

**MODELS
AFFECTED:** All engine models that utilize the magneto part numbers listed in the
attached service bulletin.

Teledyne Continental Motors requires that the attached TCM Ignition Systems Service Bulletin No. CSB641 be complied with as indicated.

ISSUED			REVISED			 TELEDYNE CONTINENTAL MOTORS P.O. Box 90 • MOBILE ALABAMA 36601 (205)-438-3411	PAGE NO	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		1 of 1	NONE
02	01	94						

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CRITICAL SERVICE BULLETIN
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CATEGORY 2

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SUBJECT:

REASON FOR BULLETIN:

POSSIBLE OPEN CONDITION OF SC-20, SC-200 AND S-1200 SERIES MAGNETO CAPACITOR, P/N 10-349276

Quality assurance testing has revealed the potential for incomplete internal grounding circuits on magneto capacitors P/N 10-349276 delivered to TCM by a component supplier during the period of October through December, 1993. Although these capacitors originally passed acceptance test, the possibility exists for the ground to be lost with time due to operational vibration.

In the interest of safety, TCM is recalling and replacing all capacitors P/N 10-349276 with date codes 93-40 and 93-42 and will cover the customer's cost of inspection and replacement.

WARNING . . The propeller must not be moved by hand on engines that may contain affected capacitors until the inspection and/or replacement instructions set forth in this service bulletin are complied with. To do so could cause the engine to fire which may result in serious bodily injury or death.

EQUIPMENT AFFECTED:

1. All new and rebuilt SC-20, SC-200 and S-1200 Series Magnetos (Part number series 10-500XXX-X, 10-600XXX-X and 10-349XXX-X, respectively) with manufacturing (serial) numbers: J2793XXX(R) through J3193XXX(R), K0193XXX(R) through K3093XXX(R), L0193XXX(R) through L2293XXX(R) inclusive, with capacitor P/N 10-349276 marked with date code 93-40 or 93-42 installed, except magnetos identified as being already in compliance with this Bulletin as specified under IDENTIFICATION.

NOTE . . . The "X" numbers in the part and serial numbers have no significance in determining affectivity. Only the first five digits are needed. The "(R)" at the end of the serial numbers indicates "rebuilt". The absence of an "(R)" indicates a "new" magneto.


2. All magnetos that have had spare capacitors P/N 10-349276 installed subsequent to October 27, 1993 identified with date codes 93-40 and 93-42.
3. All spare capacitors, P/N 10-349276 identified with date codes 93-40 and 93-42.

COMPLIANCE:

1. All affected magnetos and magnetos that have had spare P/N 10-349276 capacitors installed subsequent to October 27, 1993 must be inspected and affected capacitors replaced within 25 operating hours or immediately if a "Hot Magneto" (no R.P.M. drop) is found to exist during a magneto drop check while performing an engine run-up. Return all capacitors that are replaced to

Teledyne Continental Motors
 Attention: Service Department
 2000 9th Street
 Mobile, Al 36615
 (205) 438-3411 Ext. 305

2. All spare capacitors P/N 10-349276 must be inspected and those identified with date codes 93-40 and 93-42 returned to TCM.

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GENERAL INFORMATION:

In P/N 10-349276 Capacitor Assemblies marked with date codes 93-40 and 93-42, an intermittent open circuit condition may exist between the internal thru-lead and the "p-lead" stud terminal. If this open circuit condition exists, the magneto cannot be shut off during magneto RPM drop-off check ("Mag drop check") or at engine shut down. A hazardous "Hot Magneto" condition exists under these conditions. Because of the intermittent nature of this open circuit condition, Teledyne Continental Motors is requiring return of all affected capacitors from the field.

DETAILED INSTRUCTIONS:

1. For affected magnetos and magnetos that have had spare P/N 10-349276 capacitor installed subsequent to October 27, 1993:

Note . . . If access allows, the following procedures may be performed with the magneto installed on the engine. Otherwise, the magneto must be removed from the engine, the following procedures performed, and the magneto reinstalled on the engine following the Engine Manufacturer's latest published procedures.

- 1.1 Remove the two screws securing the capacitor to the magneto cover and gently slide the capacitor out just enough to view the ink stamped date code on the side. If the date code is other than 93-40 or 93-42, reinstall the capacitor, apply 8 to 12 in. lbs. torque to both capacitor securing screws, and identify the magneto as specified under IDENTIFICATION.
- 1.2 If the capacitor is marked with date code 93-40 or 93-42, remove breaker cover to allow full access to the capacitor flag terminal. Note capacitor lead routing and flag terminal orientation. Remove capacitor from magneto and remove o-ring packing from the capacitor. Install packing on a replacement capacitor and install replacement capacitor into cover. Apply 8 to 12 in. lbs. torque to both capacitor securing screws. Route lead and install capacitor flag terminal onto breaker in the same orientation as was noted upon removal. Reinstall breaker cover. For S-1200 series magnetos, apply 30 to 35 in. lbs. of torque to the cover securing screw. For SC-20 and SC-200 Series magnetos, apply 20 to 25

in. lbs. torque to each of the four breaker cover retaining screws. When reinstalling "p-lead", apply 15 to 17 in. lbs torque to nut on stud terminal. Identify magneto as specified under IDENTIFICATION.


- 1.3 Make an engine logbook entry indicating compliance with this Service Bulletin. Include magneto part number and manufacturing (serial) number in the logbook entry. Return all capacitors marked with P/N 10-349276 and date codes 93-40 or 93-42 to TCM.
2. For spare capacitors:
 - 2.1 Return all spare capacitors marked with P/N 10-349276 and date codes 93-40 or 93-42 to TCM.

IDENTIFICATION:

Upon compliance with the Detailed Instructions of this bulletin, metal stamp the letter "E" approximately 1/8 inch high in the upper left corner of the magneto data plate, near the word "TYPE".

WARRANTY CONSIDERATION:

All affected equipment will be covered by the TCM Gold Medallion Warranty or Ignition Systems Warranty as applicable, subject to its terms and conditions. Warranty claims may be filed through any TCM Distributor. Up to 1.8 hours labor will be allowed per magneto installed on engine. Up to 1.0 hours labor will be allowed per magneto not installed on engine.

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