

LUFTVÄRDIGHETSDIREKTIV (LVD)

Hjälpapparater TCM eller Bendix LVD Nr 2535

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

Hjälpapparater - Magnetapparat TCM eller Bendix

GÄLLER:

TCM/Bendix magneter med kondensator P/N 10-349276 installerade i magnetapparater modell SC20, SC200 och

S1200"series".

ATGÄRD:

Utför åtgärder i enlighet med bifogad kopia av FAA AD 94-06-09

(Priority Letter).

TID FÖR

ÅTGÄRD:

Inom 10 flygtimmar räknat från detta LVD's utgivningsdatum.

UNDERLAG:

TCM Critical Service Bulletin (CSB) 641 daterad 1994-02-01,

TCM Critical Service Bulletin CSB94-1 daterad 94-02-01,

Lycoming Service Bulletin 517 daterad 94-02-25.

REFERENS:

FAA AD 94-06-09 (Priority Letter)

UTGIVNINGS-

DATUM:

1994-04-24

LFS: 1994:8

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.

Bilaga till LVD Nr 2535

THIS PRIORITY LETTER AIRWORTHINESS DIRECTIVE /AD/ IS PROMPTED BY REPORTS THAT TELEDYNE CONTINENTAL MOTORS /TCM/ PRODUCED AND DELIVERED MAGNETO CAPACITORS, PART NUMBER /P/N/ 10-349276, WHICH HAVE THE POTENTIAL FOR AN INTERMITTENT OPEN CIRCUIT CONDITION THAT MAY EXIST BETWEEN THE INTERNAL THROUGH-LEAD AND P-LEAD STUD TERMINAL. THE POTENTIAL OPEN CICUIT CONDITION WAS INITIALLY DISCOVERED DURING A PRODUCTION ENGINE TEST RUN AT TCM. FURTHER INVESTIGATION REVEALED THIS PROBLEM TO BE LIMITED TO TWO LOT NUMBERS, 93-40 AND 93-42, APPROXIMATELY 500 CAPACITORS TOTAL. TO DATE 241 OF THE CAPACITORS HAVE BEEN FOUND AND TAKEN OUT OF SERVICE. THESE PARTS WERE USED IN MAGNETOS PRODUCED AT TCM FOR COMPANY USE, TEXTRON LYCOMING USE, AFTER MARKET SALES, AND FOR INDIVIDUAL CAPACITORS SOLD AS SPARES TO THE FIELD AFTER OCTOBER 27,1993. THESE INDIVIDUAL REPLACEMENT PARTS CAN BE FITTED INTO TCM OR BENDIX MAGNETOS.

//END PART ONE//

//PART TWO OF NINE//

A CAPACITOR WITH AN INTERMITTENT OPEN CICUIT CONDITION CAN RESULT IN A ?HOT MAG? /I.E. THE MAGNETO IS NOT GROUNDED WHEN THE IGNITION/MAGNETO SWITCH IS PLACED IN THE OFF POSITION/. THE MAGNETO IS THEREFORE CAPABLE OF PRODUCING IGNITION, AND IF THE PROPELLER IS MOVED WITH SOME RESIDUAL FUEL LEFT IN THE CYLINDERS, THE ENGINE COULD START MOMENTARILY. THIS MOMENTARY ENGINE START COULD TURN THE PROPELLER WITH ENOUGH FORCE TO CAUSE INJURY OR DEATH TO GROUND PERSONNEL STRUCK BY THE TURNING PROPELLER. CAPACITORS WITH AN INTERMITTENT OPEN CIRCUIT CONDITION MAY SHOW NO DROP-OFF DURING THE MAGNETO CHECK PRIOR TO FLIGHT. THIS CONDITION, IF NOT CORRECTED COULD RESULT IN POSSIBLE INJURY OR DEATH TO GROUND PERSONNEL DUE TO A NON-GROUNDED MAGNETO.

THE FEDERAL AVIATION ADMINISTRATION /FAA/ HAS REVIEWED AND APPROVED THE TECHNICAL CONTENTS OF TCM CRITICAL SERVICE BULLETIN

//END PART TWO//

//PART THREE OF NINE// /CSB/ 641, DATED FEBRUARY 1,1994, THAT DESCRIBES PROCEDURES FOR DETERMINING IF MAGNETOS CONTAIN CAPACITORS, P/N 10-349276, THAT MAY HAVE AN INTERMITTENT OPEN CICUIT CONDITION.

SINCE AN UNSAFE CONDITION HAS BEEN IDENTIFIED THAT IS LIKELY TO EXIST OR DEVELOP ON OTHER MAGNETOS OF THIS SAME TYPE DESIGN, THIS AD REQUIRES INSPECTION WITHIN 10 HOURS TIME IN SERVICE AFTER RECEIPT OF THIS AD TO DETERMINE IF AFFECTED CAPACITORS ARE INSTALLED IN MAGNETOS, AND REPLACEMENT, IF NECESSARY, WITH SERVICEABLE CAPACITORS. ALL AFFECTED MAGNETOS MUST BE METAL STAMPED WITH THE LETTER ?E? TO SHOW COMPLIANCE. 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 94-06-09, APPLICABLE TO TCM /FORMERLY BENDIX/ SC-20, SC-200, AND

//END PART THREE//

I FV RESIDE

//PART FOUR OF NINE// S-1200 SERIES MAGNETOS INSTALLED ON BUT NOT LIMITED TO RECIPROCATING ENGINE POWERED BEECH, CESSNA, MAULE, MOONEY, PIPER, AND ROBINSON AIRCRAFT, IS ISSUED AND IS EFFECTIVE IMMEDIATELY UPON RECEIPT. 94-06-09 TELEDYNE CONTINENTAL MOTORS. PRIORITY LETTER ISSUED ON MARCH 9,1994. DOCKET NO. 94-ANE-12. APPLICABILITY. TELEDYNE CONTINENTAL MOTORS /TCM/ /FORMERLY BENDIX/ MAGNETOS NEW AND REBUILT TCM MODEL SC-20, PART NUMBER /P/N/ 10-500XXX-X SERIES: MODEL SC-200, P/N S10-600XXX-X SERIES: AND MODEL S-1200, P/N 10-349XXX-X SERIES, MAGNETOS WITH SERIAL NUMBER /S/N/ J2793XXX/R/ THROUGH J3193XXX/R/, K0193XXX/R/ THROUGH K3093XXX/R/ AND L0193XXX/R/ THROUGH L2293XXX/R/ INCLUSIVE, WITH CAPACITOR, P/N 10-349276, WITH DATE CODE 93-40 OR 93-42. IN ADDITION, ALL TCM MODEL SC-20, P/N 10-500XXX-X SERIES, MAGNETOS THAT HAVE CAPACITOR, P/N 10-349276, IDENTIFIED WITH DATE CODE 93-40 OR 93-42, INSTALLED //END PART FOUR// //PART FIVE OF NINE// AFTER OCTOBER 27,1993. ALSO, ANY TCM OR BENDIX MAGNETO REGARDLESS OF SERIAL NUMBER THAT WAS FITTED AFTER OCTOBER 27,1993, WITH CAPACITORS P/N 10-349276, SOLD AS INDIVIDUAL REPLACEMENT PARTS WITH DATE CODE 93-40 OR 93-42. THESE MAGNETOS ARE INSTALLED ON BUT NOT LIMITED TO RECIPROCATING ENGINE POWERED BEECH, CESSNA, MAULE, MOONEY, PIPER, AND ROBINSON AIRCRAFT. NOTE. THE ?X? REPRESENTS NUMBERS IN THE P/N AND S/N THAT HAVE NO SIGNIFICANCE IN DETERMINING APPLICABILITY. ONLY THE FIRST FIVE DIGITS ARE NEEDED. THE ?/R/? AT THE END OF THE S/N INDICATES A REBUILT MAGNETO. THE ABSENCE OF AN ?/R/? INDICATES A NEW MAGNETO. COMPLIANCE. REQUIRED AS INDICATED, UNLESS ACCOMPLISHED PREVIOUSLY TO PREVENT INJURY OR DEATH TO GROUND PERSONNEL DUE TO A NON-GROUNDED MAGNETO, ACCOMPLISH THE FOLLOWING. NOTE. WARNING. DO NOT MOVE PROPELLERS BY HAND ON ENGINES THAT MAY //END PART FIVE// LFV RESURS CONTAIN AFFECTED CAPACITORS UNTIL THE INSPECTION PROCEDURES REQUIRED BY THIS AIRWORTHINESS DIRECTIVE /AD/ ARE COMPLETED. GROUND PERSONNEL SHOULD AVOID THE PROPELLER ARC. /A/ WITHIN THE NEXT 10 HOURS TIME IN SERVICE AFTER RECEIPT OF THIS PRIORITY LETTER AD, INSPECT AFFECTED MAGNETOS FOR THE PRESENCE OF CAPACITOR P/N 10-349276, IN ACCORDANCE WITH THE DETAILED INSTRUCTIONS, PARAGRAPHS 1, 1.1 AND 1.2 OF TCM CRITICAL SERVICE BULLETIN /CSB/ 641, DATED FEBRUARY 1,1994, AND, IF NECESSARY, REPLACE WITH A SERVICEABLE PART AS FOLLOWS. /1/ IF THE CAPACITOR IS MARKED WITH A DATE CODE OTHER THAN 93-40 OR 93-42, REINSTALL THE CAPACITOR IN THE MAGNETO AND METAL STAMP THE LETTER ?E? IN ACCORDANCE WITH THE IDENTIFICATION PARAGRAPH OF TCM CSB641, DATED FEBRUARY 1,1994, TO SHOW COMPLIANCE WITH THIS AD. NO FURTHER ACTION IS REQUIRED. //END PART SIX// ILEN DECLIDE //PART SEVEN OF NINE// /2/ IF THE CAPACITOR IS MARKED WITH EITHER DATE CODE 93-40 OR 93-42, REPLACE WITH A SERVICEABLE CAPACITOR OF THE SAME P/N BUT WITH A DATE CODE OTHER THAN 93-40 OR 93-42, AND METAL STAMP THE LETTER ?E? IN ACCORDANCE WITH THE IDENTIFICATION PARAGRAPH OF TCM CSB641, DATED FEBRUARY 1,1994, TO SHOW COMPLIACE WITH THIS AD. /B/ PRIOR TO INSTALLATION, INSPECT UNINSTALLED CAPACITOR, P/N 10-349276, AND REPLACE, IF NECESSARY, WITH A SERVICEABLE PART, IN ACCORDANCE WITH THE DETAILED INSTRUCTION, PARAGRAPH 2.1 OF TCM CSB641, DATED FEBRUARY 1,1994. NOTE. TCM CRITICAL SERVICE BULLETIN CSB94-1 DATED FEBRUARY 1,1994, AND LYCOMING SERVICE BULLETIN 517 DATED FEBRUARY 25,1994, REFERS TO THIS SUBJECT. $ar{eta}$ C/ AN ALTERNATIVE METHOD OF COMPLIANCE OR ADJUSTMENT OF THE COMPLIANCE TIME THAT PROVIDES AN ACCEPTABLE LEVEL OF SAFETY MAY BE //END PART SEVEN// ILFV RESURS

//PART EIGHT OF NINE//

USED IF APPROVED BY THE MANAGER, ATLANTA AIRCRAFT CERTIFICATION OFFICE. THE REQUREST 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 FAR 21.197 AND 21.199 TO OPERATE THE AIRCRAFT TO A LOCATION WHERE THE

REQUIREMENTS OF THIS AD CAN BE ACCOMPLISHED.

/E/ 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.

//END PART EIGHT//

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//PART NINE OF NINE//
/F/ PRIORITY LETTER AD 94-06-09, ISSUIED MARCH 9,1994, 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. //END PART NINE//