

MANDATORY**MEL-71-03****TITLE**

POWER PLANT - TRANSMITTAL OF CONTINENTAL MOTORS MSB18-08C INSPECTION AND MAINTENANCE MODIFICATION OF CYLINDER ASSEMBLIES

EFFECTIVITY

All airplane serial numbers for the models that follow that have Continental GTSIO-520-C, D, H, K, L, M, N, IO-550-G, N, P, R, IOF-550-N, P, R, TSIO-520-BE, TSIO-550-A, B, C, E, G, K, N, TSIOF-550-D, J, K, P aviation gasoline (AvGas) engines originally manufactured, rebuilt, or modified with cross-flow cylinder replacement on or after 01 NOV 2014.

MODEL	SERIAL NUMBERS
404	404-0001 thru 404-0136, 404-0201 thru 404-0246, 404-0401 thru 404-0460, 404-0601 thru 404-0695, 404-0801 thru 404-0859
411	411-0001 thru 411-0300
421	421-0001 thru 421-0200
421A	421A0001 thru 421A0158
421B	421B0001 thru 421B0056, 421B0101 thru 421B0147, 421B0201 thru 421B0275, 421B0301 thru 421B0486, 421B0501 thru 421B0665, 421B0801 thru 421B0970
421C	421C0001 thru 421C0171, 421C0201 thru 421C0350, 421C0401 thru 421C0525, 421C0601 thru 421C0715, 421C0801 thru 421C0910, 421C1001 thru 421C1115, 421C1201 thru 421C1257, 421C1401 thru 421C1413, 421C1801 thru 421C1807

SPARES

Also affected are any cylinders that are in spares stock and any spare GTSIO-520-C, D, H, K, L, M, N, IO-550-G, N, P, R, IOF-550-N, P, R, TSIO-520-BE, TSIO-550-A, B, C, E, G, K, N, TSIOF-550-D, J, K, P aviation gasoline (AvGas) engines that had a cylinder installed or replaced on or after 01 NOV 2014.

REASON

Continental Motors has received several field reports that indicate the potential for fracture initiation on engines (exceeding 500 hours of operation) at the radius edge of identified cylinder heads produced on or after November 1, 2014. The affected cylinder casting can be identified by the "filled" top fin flange area above the exhaust port.

DESCRIPTION

This service document transmittal of Continental Motors MSB18-08C Inspection and Maintenance Modification of Cylinder Assemblies.

COMPLIANCE

MANDATORY. This service document must be accomplished as follows:

December 10, 2020

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Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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- If under 500 hours in service, perform radius blend inspection and modification no later than the next scheduled 100-Hour/Annual inspection.
- If 500 hours or greater, perform radius blend modification at the next maintenance event (not to exceed 50 hours).

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

TOOLING

No specialized tooling is required to complete this service document.

REFERENCES

Applicable Model Maintenance/Service Manual

Continental Motors MSB18-08C Inspection and Maintenance Modification of Cylinder Assemblies (Revision C or later revision)

NOTE: To make sure all publications used are complete and current. Refer to www.txtavsupport.com.

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Review the engine log book for documentation of prior compliance with Continental Motors SB18-08A, MSB18-08B, or MSB18-08C (or later revision).
 - A. If Continental Motors SB18-08A, MSB18-08B, or MSB18-08C (or later revision) has been complied with, go to Step 8.
 - B. If Continental Motors SB18-08A, MSB18-08B, or MSB18-08C (or later revision) has not been complied with, go to Step 2.
2. Review Continental Motors MSB18-08C (or later revision), Section I General and Section II Scope and compare the cylinder part numbers, date that cylinder was obtained and cylinder serial number for affected cylinder.
 - A. If none of the engine cylinders are affected, go to Step 8.

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- B. If any engine cylinder is affected or it is undetermined by review of the engine log book, go to Step 3.
3. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.
 - (2) Disconnect the airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
4. Remove the engine cowling. (Refer to the applicable Cessna Model Maintenance or Service Manual.)
5. Review and complete Continental Motors MSB18-08C (or later revision), Inspection and Maintenance Modification of Cylinder Assemblies.
6. Install the engine cowling. (Refer to the applicable Cessna Model Maintenance or Service Manual.)
7. Remove the maintenance warning tags and connect the airplane battery.
8. Make an entry in the airplane logbook that states compliance and method of compliance with this service document and Continental Motors MSB18-08C.

MATERIAL INFORMATION

No part are required to complete this service document.

TITLE

POWER PLANT - TRANSMITTAL OF CONTINENTAL MOTORS MSB18-08C INSPECTION AND MAINTENANCE MODIFICATION OF CYLINDER ASSEMBLIES

TO:

Aircraft Owner of Cessna Models 404, 411, 421, 421A, 421B, 421C.

All airplane serial numbers for the models that follow that have Continental GTSIO-520-C, D, H, K, L, M, N, IO-550-G, N, P, R, IOF-550-N, P, R, TSIO-520-BE, TSIO-550-A, B, C, E, G, K, N, TSIOF-550-D, J, K, P aviation gasoline (AvGas) engines originally manufactured, rebuilt, or modified with cross-flow cylinder replacement on or after 01 NOV 2014.

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REASON

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COMPLIANCE

MANDATORY. This service document must be accomplished as follows:

- If under 500 hours in service, perform radius blend inspection and modification no later than the next scheduled 100-Hour/Annual inspection.
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LABOR HOURS

Refer to Section V Warranty, Allowances/Reimbursements of Continental Motors MSB18-08C (Revision C or later revision).

MATERIAL AVAILABILITY

No part are required to complete this service document.

WARRANTY

This service document is *mandatory*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

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Eligibility: Airplanes identified within the serial number effectivity of this service document must have active engine warranty coverage on the original issue date of this document and the coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Cessna Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at ww2.txtav.com/Parts or email the completed Textron Aviation Claim Form to warranty@txtav.com. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution
Warranty Administration
285 South Greenwich Road
Bldg B89, Docks 1-4
Wichita, KS 67206
USA

Expiration: December 10, 2021 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.