

MANDATORY**SEL-71-10****TITLE**

POWER PLANT - TRANSMITTAL OF CONTINENTAL MOTORS SB18-04A REPLACEMENT OF FLANGED NUT

EFFECTIVITY

All airplane serial numbers for the following Cessna and Beechcraft models that have a Continental Motors, Inc. (CMI), O-470, IO-470, IO-520, GIO-550, GTSIO-520, IO-550, IOF-550, L/TSIO-520, TSIO-550, TSIOF-550 and TSIOL-550 aviation gasoline (AvGas) engine installed.

CESSNA MODELS

MODEL	SERIAL NUMBERS
180	614, 30000 thru 32661
180A	32662 thru 32999, 50001 thru 50355
180B	50356 thru 50661
180C	624, 50662 thru 50911
180D	18050912 thru 18051063
180E	18051064 thru 18051183
180F	18051184 thru 18051312
180G	18051313 thru 18051445
180H	18051446 thru 18052284
180J	18052285 thru 18052489, 18052491 thru 18052770
180K	18052490, 18052771 thru 18053203
182	613, 33000 thru 33842
182A	33843 thru 34753, 34755 thru 34999, 51001 thru 51556
182B	34754, 51557 thru 51622, 51624 thru 52358
182C	631, 52359 thru 53007
182D	51623, 18253008 thru 18253598
182E	18253599 thru 18254423
182F	18254424 thru 18255058
182G	18255059 thru 18255844
182H	634, 18255846 thru 18256684
182J	18255845, 18256685 thru 18257625
182K	18257626 thru 18257698, 18257700 thru 18258505
182L	18258506 thru 18259305

January 26, 2021

SEL-71-10
Page 1 of 6

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

This document contains technical data and is subject to U.S. export regulations. This information has been exported from the United States in accordance with export administration regulations. Diversion contrary to U.S. law is prohibited. ECCN: 9E991

MANDATORY**SEL-71-10**

182M	18257699, 18259306 thru 18260055
182N	18260056 thru 18260825
182P	675, 18260826 thru 18263478, 18263480 thru 18265175
182Q	18263479, 18265176 thru 18267301, 18267303 thru 18267715
182R/T182	18267302, 18267716 thru 18268541
182R	643, 18268542 thru 18268615
R182/TR182	R18200584 thru R18202041
A182J	A182-0001 thru A182-0056
A182K	A182-0057 thru A182-0096
A182L	A182-0097 thru A182-0116
A182N	A182-0117 thru A182-0148
F182P	F18200001 thru F18200025
F182Q	F18200026 thru F18200169
FR182	FR18200001 thru FR18200070
185	185-0001 thru 185-0237
185A	185-0238 thru 185-0512
185B	185-0513 thru 185-0653
185C	185-0654 thru 185-0776
185D	185-0777 thru 185-0967
185E/A185E	185-0968 thru 185-1149
A185E	185-1150 thru 185-1934, 18501833 thru 18502090
A185F	18502091 thru 18504448
188/A188	651, 188-0001 thru 188-0572
A188/A188A	18800573 thru 18800832
188B	18800833 thru 18802348
A188B	18800833 thru 18803973, 18800967T thru 18803973T
T188C	T18802839T, T18803307T, T18803308T, T18803325T thru T18803974T
A-A188B	A-A1880001 thru A-A1880034
210-5 (205)	205-0001 thru 205-0480
210-5A (205A)	205-0481 thru 205-0577
206	206-0001 thru 206-0275
U206	U206-0276 thru U206-0437
U206A/TU206A	U206-0438 thru U206-0656
U206B/TU206B	U206-0657 thru U206-0914

MANDATORY**SEL-71-10**

U206C/TU206C	U206-0915 thru U206-1234
U206D/TU206D	U206-1235 thru U206-1444
U206E/TU206E	U20601445 thru U20601700
U206F/TU206F	U20601701 thru U20603521
U206G/TU206G	676, U20603522 thru U20607020
P206	P206-0002 thru P206-0160
P206A/TP206A	P206-0161 thru P206-0306
P206B/TP206B	P206-0307 thru P206-0419
P206C/TP206C	P206-0420 thru P206-0519
P206D/TP206D	P206-0520 thru P206-0603
P206E/TP206E	P206-00001, P20600604 thru P20600647
206H	20608001 thru 20608353
T206H	T20608001 thru T20609611
207/T207	20700001 thru 20700362
207A/T207A	20700363 thru 20700788
210	57001 thru 57575
210A	21057576 thru 21057840
210B	21057841 thru 21058085
210C	21058086 thru 21058220
210D	21058221 thru 21058510
210E	21058511 thru 21058715
210F	21058716 thru 21058818
210G	21058819 thru 21058936
210H	21058937 thru 21059061
210J	21059062 thru 21059199
210K/T210K	21059200 thru 21059502
210L/T210L	21059503 thru 21061573
210M/T210M	21061042, 21061574 thru 21062954
210N/T210N	21062955 thru 21064897
210R/T210R	21064898 thru 21065009
P210N	P21000001 thru P21000834
P210R	P21000835 thru P21000874
T210F	T210-0001 thru T210-0197
T210G	T210-0198 thru T210-0307
T210H	T210-0308 thru T210-0392
T210J	21058140, T210-0393 thru T210-0454

MANDATORY

SEL-71-10

T240	T24000001 thru T24002146
300 (LC40-550FG)	40001 thru 40079
350 (LC42-550FG)	42001 thru 42084, 42501 thru 42569, 421001 thru 421020
400 (LC41-550FG)	41002 thru 41108, 41501 thru 41533, 41563 thru 41800, 411001 thru 411161

BEECHCRAFT MODELS

MODEL	SERIAL NUMBERS
35-33	CD-1 thru CD-224, CD-233, CD-234, CD-236, CD-241, CD-246 thru CD-250
35-A33	CD-225 thru CD-232, CD-235, CD-237 thru CD-240, CD-242, CD-245, CD-251 thru CD-387
35-B33	CD-388 thru CD-813
35-C33	CD-814 thru CD-1118
35-C33A	CE-1 thru CE-179
E33	CD-1119 thru CD-1234
F33	CD-1235 thru CD-1254
G33	CD-1255 thru CE-1304
E33A	CE-180 thru CE-289
E33C	CJ-1 thru CJ-25
F33A	CE-290 thru CE-1791
F33C	CJ-26 thru CJ-179
H35	D-4866 thru D-5061, D-5063 thru D-5330
J35	D-5062, D-5331 thru D-5725
K35	D-5726 thru D-6161
M35	D-6162 thru D-6561
N35	D-6562 thru D-6841
P35	D-6842 thru D-7139, D-7141 thru D-7309
S35	D-7140, D-7310 thru D-7976
V35	D-7977 thru D-8598
V35A	D-8599 thru D-9068
V35B	D-9069 thru D-10403
36	E-1 thru E-184
A36	E-185 thru E-3629, E-3631 thru E-3635
A36TC	EA-1 thru EA-241, EA-243 thru EA-272
B36TC	EA-242, EA-273 thru EA-697
G36	E-3630, E-3636 thru E-4146

SPARES

MANDATORY**SEL-71-10**

Also affected are any 652541 Flange Nuts that are in spares stock and any spare O-470, IO-470, IO-520, GIO-550, GTSIO-520, IO-550, IOF-550, L/TSIO-520, TSIO-550, TSIOF-550, and TSIOL-550 engine that had a 652541 Flange Nut installed or replaced after October 1, 2017.

REASON

Continental Motors, Inc. has seen evidence of dimensional non-conforming conditions for a limited production of 652541 Flanged nuts. A flanged nut that is non-conforming can damage the threads of the through-bolt. A damaged through-bolt can lead to through-bolt failure, cracked engine case, crankshaft bearing shift and subsequently engine failure.

NOTE: Flange nuts purchased prior to 1 October 2017 are not affected by Continental Motors Service Document SB18-04A.

DESCRIPTION

This service document transmits Continental Motors SB18-04A Replacement of Flanged Nut (P/N 651541) Identified with Manufacturer's Stamp "ZB".

COMPLIANCE

MANDATORY. This service document must be accomplished at the next maintenance event, 100-hour or 12-month (annual-type) inspection, whichever occurs first.

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 SB18-04A Replacement of Flanged Nut (P/N 651541) Identified with Manufacturer's Stamp "ZB" (Revision A or later revision)

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

MANDATORY**SEL-71-10****PUBLICATIONS AFFECTED**

None

ACCOMPLISHMENT INSTRUCTIONS

1. Review the engine log book for documentation of prior compliance with Continental Motors SB18-04A (Revision A or later revision).
 - A. If Continental Motors SB18-04A (Revision A or later revision) has been complied with, go to Step 7.
 - B. If Continental Motors SB18-04A (Revision A or later revision) has not been complied with, go to Step 2.
2. 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.
3. Remove the engine cowling. (Refer to the Appropriate Cessna Model Maintenance or Service Manual.)
4. Review and complete Continental Motors SB18-04A (Revision A or later revision), Replacement of Flanged Nut (P/N 651541) Identified with Manufacturer's Stamp "ZB".
5. Return all suspect flanged nuts to Continental Motors. (Refer to the Continental Motors SB18-04A, Section IV Warranty, B. Parts Return Instructions.)
6. Install the engine cowling. (Refer to the Appropriate 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 SB18-04A.

MATERIAL INFORMATION

It may be necessary to order the parts below to complete this service document.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
652541	As Necessary	Flange Nut	Same	Return all identified flange nuts Install new

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

TITLE

POWER PLANT - TRANSMITTAL OF CONTINENTAL MOTORS SB18-04A REPLACEMENT OF FLANGED NUT

TO:

Aircraft Owner of Cessna and Beechcraft Models as follows:

All airplane serial numbers for the following Cessna and Beechcraft models that have a Continental Motors, Inc. (CMI), O-470, IO-470, IO-520, GIO-550, GTSIO-520, IO-550, IOF-550, L/TSIO-520, TSIO-550, TSIOF-550 and TSIOL-550 aviation gasoline (AvGas) engine installed.

CESSNA MODELS

All Cessna Models 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R/T182, 182R, R182/TR182, A182J, A182K, A182L, A182N, F182P, F182Q, FR182, 185, 185A, 185B, 185C, 185D, 185E/A185E, A185E, A185F, 188/A188, A188/A188A, 188B, A188B, T188C, A-A188B, 210-5 (205), 210-5A (205A), 206, U206, U206A/TU206A, U206B/TU206B, U206C/TU206C, U206D/TU206D, U206E/TU206E, U206F/TU206F, U206G/TU206G, P206, P206A/TP206A, P206B/TP206B, P206C/TP206C, P206D/TP206D, P206E/TP206E, 206H, T206H, 207/T207, 207A/T207A, 210, 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210J, 210K/T210K, 210L/T210L, 210M/T210M, 210N/T210N, P210N/T210R, P210N, P210R, T210F, T210G, T210H, T210J, T240, 300 (LC40-550FG), 350 (LC42-550FG), 400 (LC41-550FG).

BEECHCRAFT MODELS

All Beechcraft Models 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, F33, G33, E33A, E33C, F33A, F33C, H35, J35, K35, M35, N35, P35, S35, V35, 36, A36, A36TC, B36TC, G36.

SPARES

Also affected are any 652541 Flange Nuts that are in spares stock and any spare Continental Motors, Inc. (CMI), O-470, IO-470, IO-520, GIO-550, GTSIO-520, IO-550, IOF-550, L/TSIO-520, TSIO-550, TSIOF-550 and TSIOL-550 aviation gasoline (AvGas) engine that had a 652541 Flange Nut installed or replaced after October 1, 2017.

REASON

Continental Motors, Inc. has seen evidence of dimensional non-conforming conditions for a limited production of 652541 Flanged nuts. A flanged nut that is non-conforming can damage the threads of the through-bolt. A damaged through-bolt can lead to through-bolt failure, cracked engine case, crankshaft bearing shift and subsequently engine failure.

NOTE: Flange nuts purchased prior to 1 October 2017 are not affected by Continental Motors Service Document SB18-04A.

COMPLIANCE

MANDATORY. This service document must be accomplished at the next maintenance event, 100-hour or 12-month (annual-type) inspection, whichever occurs first.

January 26, 2021

SEL-71-10
Page 1 of 3

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

This document contains technical data and is subject to U.S. export regulations. This information has been exported from the United States in accordance with export administration regulations. Diversion contrary to U.S. law is prohibited. ECCN: 9E991

LABOR HOURS

Refer to Section IV Warranty, Allowances/Reimbursements of Continental Motors SB18-04A Replacement of Flanged Nut (P/N 651541) Identified with Manufacturer's Stamp "ZB" (Revision A or later revision):

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
652541	*	*

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in 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.

Eligibility: All 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 Beechcraft or 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: January 26, 2022 (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.

SERVICE BULLETIN

Contains Useful Information Pertaining To Your Aircraft Engine

Supersedes SB18-04
TECHNICAL PORTIONS
FAA APPROVED

SUBJECT: Replacement of Flanged Nut (P/N 652541)
Identified with Manufacturer’s Stamp “ZB”

PURPOSE: To provide required service replacement for through-bolt, flanged nuts (P/N 652541).

COMPLIANCE: At the next 100-Hour/Annual Inspection or next maintenance event.

MODELS

AFFECTED: All Continental Motors, Inc. (CMI), O-470, IO-470, IO-520, GIO-550, GTSIO-520, IO-550, IOF-550, L/TSIO-520, TSIO-550, TSIOF-550 and TSIOL-550 aviation gasoline (AvGas) engines using flanged nut (P/N 652541).

I. GENERAL INFORMATION

Continental Motors, Inc. (CMI) has seen evidence of dimensional non-conforming conditions for a limited production of flanged nuts (P/N 652541).

The manufacturer’s stamp is used to identify those flanged nuts which require replacement (maker’s mark, “ZB” on the outer-edge of the nut head, see Figure 1).

UPDATE: Flange nuts purchased prior to 1 OCT 2017 are not affected by this Service Document (SB18-04A).

II. SCOPE

Action required to comply with this Service Document:

1. This Service Document creates a required replacement procedure for the through-bolt, flanged nut (P/N 652541) identified with manufacturer’s stamp “ZB” at the next 100-hour “Engine Inspection” (see Section COMPLIANCE, above).
2. Replace all flanged nuts (P/N 652541, as shown in Figure 1) in accordance with the procedures in Section III, “ACTION REQUIRED”.



Figure 1. Flanged Nut, Manufacturer’s Stamp, (maker’s mark, affected)

ISSUED	REVISED	 P.O. Box 90 Mobile, AL 251-436-8299	PAGE NO	DOC NO	REVISION
2018/07/05	2018/12/18			1 of 4	SB18-04

III. ACTION REQUIRED

Perform “100-hour Engine Inspection” according to your engine’s Maintenance and Overhaul Manual. Perform the following steps:

1. Identify the affected flanged nut by the manufacturer’s stamp (maker’s mark) as “ZB” on the outer-head edge (see Figure 1).

NOTE: Flanged nuts **purchased prior to 1 OCT 2017** or identified with the “OPTIONAL” profile (relief cut, as shown in Figure 2) **do not** require replacement.

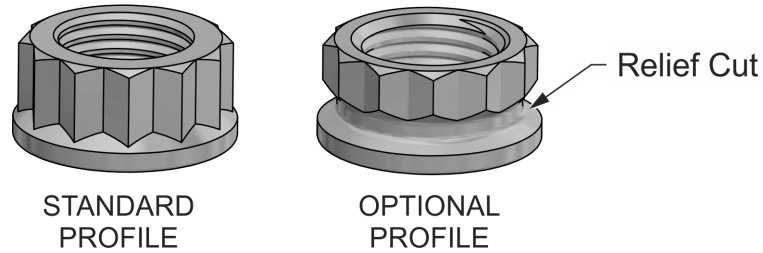


Figure 2. Flanged Nut, Profiles

WARNING

Do not loosen or tighten torque on more than one through-bolt at a time. Failure to loosen or torque through-bolt nuts on both sides of the engine may result in engine failure.

2. All identified flanged nuts installed must be removed and replaced according to the applicable Maintenance and Overhaul Manual crankcase hardware instructions (one through-bolt at a time).
3. All identified flange nuts (removed or spares) must be returned to Continental Motors according to the instructions in Section IV on page 3.
4. As each nut is removed, visually inspect the through-bolt and crankcase hardware for thread damage:
 - a. If the crankcase hardware is not damaged (through-bolt threads, etc.), continue to Step 5.

CAUTION: Lubricate fasteners and apply torque to the crankcase hardware according to the applicable Maintenance and Overhaul Manual crankcase torque instructions for your engine. Failure to do so may result in crankcase damage or engine failure.

- b. If the crankcase through-bolt exhibits thread damage, replace the damaged unit (one through-bolt at a time) according to the Maintenance and Overhaul Manual crankcase hardware installation instructions. After replacing all damaged crankcase hardware, pre-torque and final torque all through-bolts according to the crankcase torque instructions, in M-0, “Standard Practice Maintenance Manual, Chapter 10.”
- c. If a flanged nut is missing or crankcase hardware indicates a fracture or crack, remove engine from service and perform an inspection for possible bearing shift according to the Maintenance and Overhaul Manual.

ISSUED	REVISED	 P.O. Box 90 Mobile, AL 251-436-8299	PAGE NO	DOC NO	REVISION
2018/07/05	2018/12/18		2 of 4	SB18-04	A

5. Thoroughly clean removed crankcase hardware with mineral spirits and apply corrosion protection after completing the installation (Step 1. through Step 4. above) for all affected parts, according to M-0, "Standard Practice Maintenance Manual, Chapter 6."
6. Create a log book entry of compliance with this Service Bulletin, SB18-04A.

IV. WARRANTY

Standard warranty practices apply. Visit the Continental Motors web site at www.continentalmotors.aero to obtain copies of Continental Motors Warranty Policies.

Complete and eMail the linked Compliance Form (<http://continentalmotors.aero/uploadedFiles/Content/Services/Warranty%20Claim.pdf>), along with a copy of the work invoice and a copy of the repair agency's W-9, immediately upon completion for reimbursement. Continental Motors reserves the right to request copies of invoices and maintenance records to verify warranty applicability.

A. Allowances/Reimbursements

Eligible Allowance / Reimbursement Type	4 Cylinder	
	Labor Hours ¹	Parts
Inspection for Flanged Nut (P/N 652541) Identified with Manufacturer's Stamp "ZB"	1	inc.
Replacement of all Flanged Nuts (P/N 652541) ²	4	inc. ³
Replacement of affected crankcase hardware (as required according to the Maintenance and Overhaul Manual crankcase hardware installation instructions) ²	X	inc. ³

1. at published shop rate
2. including reasonable freight costs
3. as required by the applicable engine ICA

B. Parts Return Instructions

Replacement parts required to comply with this bulletin are published in the Illustrated Parts Catalog (IPC) on the Continental Motors web site and may be ordered through any authorized Continental Motors distributor.

Return all identified parts to the following address:

Continental Motors
 C/O **SB18-04A**
 2039 S. Broad Street
 Mobile, Alabama 36615

- or eMail: cmtechnical@cmg.aero
- or Fax: 1 (251) 436-8270

Contact Continental Motors Technical Services at one of the numbers listed below if you have any questions concerning the technical content of this Service Document.

1.888.826.5465 Toll Free in the United States
 +1.251.436.8299 International Callers
 +1.305.964.0872 En Español

ISSUED	REVISED	 P.O. Box 90 Mobile, AL 251-436-8299	PAGE NO	DOC NO	REVISION
2018/07/05	2018/12/18		3 of 4	SB18-04	A

Intentionally Left Blank

ISSUED	REVISED	 P.O. Box 90 Mobile, AL 251-436-8299	PAGE NO	DOC NO	REVISION
2018/07/05	2018/12/18		4 of 4	SB18-04	A