

Date: May 17, 2021

Subject: Superior Air Parts through-bolt part number SA641931-9.81 replacement

Issue:

Superior Air Parts has discovered that some of its part number SA641931-9.81 through-bolts were manufactured with the incorrect center O-ring groove section location as specified on the approved design. The incorrect placement of the grooves does not allow for the dowel feature in the bolt to engage properly on the right side of the crankcase which could lead to bearing distortion and crankcase fretting. Additionally, the sealing O-rings are required to be in the proper position to prevent oil seepage. Therefore, within the next 10 hours of service, perform the following:

Application:

Continental Motors Inc. (CMI) engines with part number SA641931-9.81 installed after January 1, 2018:

O-470-A, -B, -B, -CI, -E, -G, -G-CI, -H, -J, -K, -K-CI, -L, -L-CI, -M, -M-CI, -N, -P, -R, -S, -T, -U

IO-470-A, -C, -D, -E, -F, -G, -H, -J, -K, -L, -LO, -M, -N, -P, -R, -S, -T, -U, -V, -VO

LIO470-A

TSIO470-B, -C, -D

IO-520-A, -D, -E, -F, -J, -K, -L, -P

LIO-520-P

TSIO-520-AE, -C, -G, -H, -M, -R

LTSIO-520-AE

IO-550-D, -E, -F, -G, -L

IOF-550-D, -E, -F, -L

Compliance:

Within the next 10 hours, the lower front through-bolt, part number SA641931-9.81, should be removed and replaced with part number 641931-9.81. Through-bolt replacement kits will be supplied by Superior Air Parts Kit number ("SB THRUBOLT KIT"). Each kit will contain the following parts for compliance with this Service Bulletin:

1ea. SA634511 6 point nut

1ea. 641931-9.81 Through-bolt

2ea. SA630979-9 O-ring

1ea. SA652541 12 Point nut

1ea. Return envelope

Procedure:

- 1) Ensure the master and magneto switches are in the off position. Remove engine cowling (if required) in accordance with the airframe manufacturer's maintenance manual.

- 2) Remove the lower front through-bolt in accordance with the Continental Motors Inc. maintenance or maintenance and overhaul manual. See illustration number 1 and 2

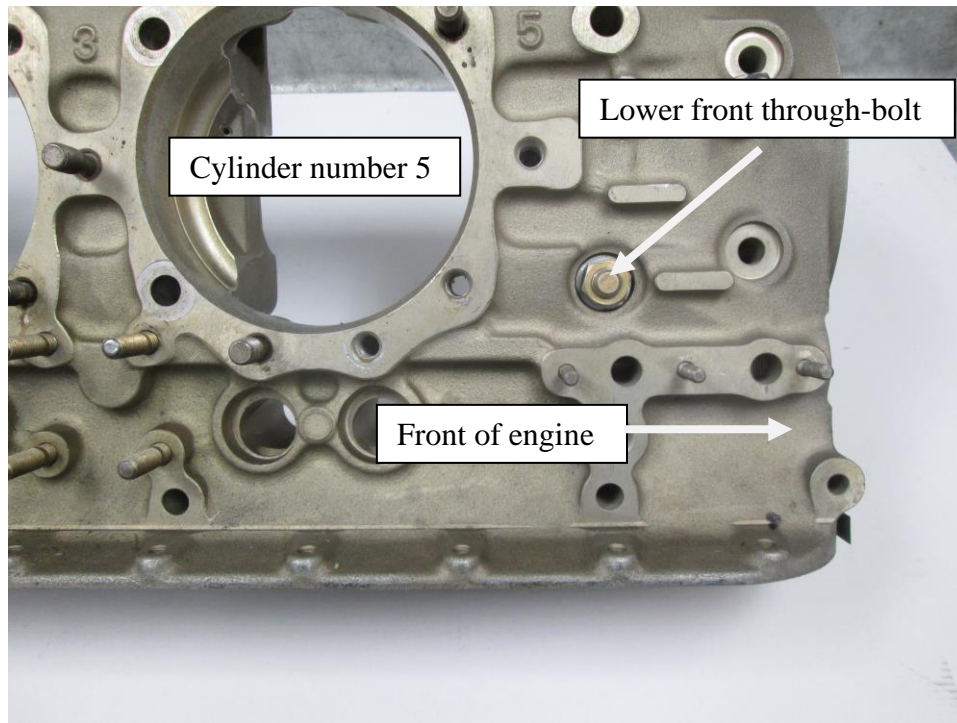


Illustration 1

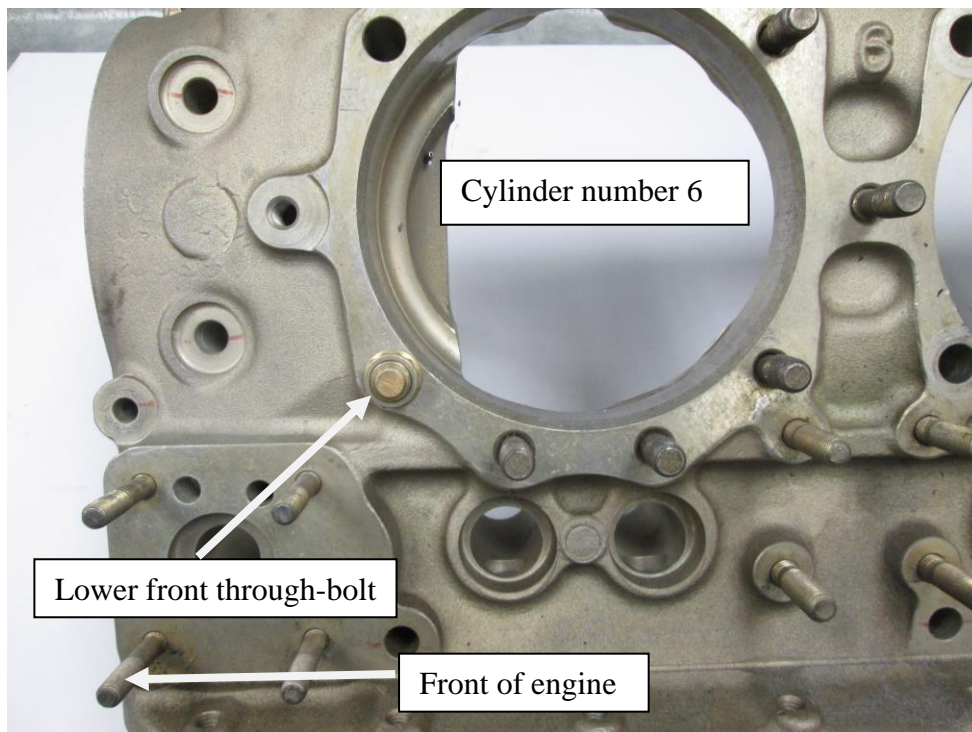


Illustration 2

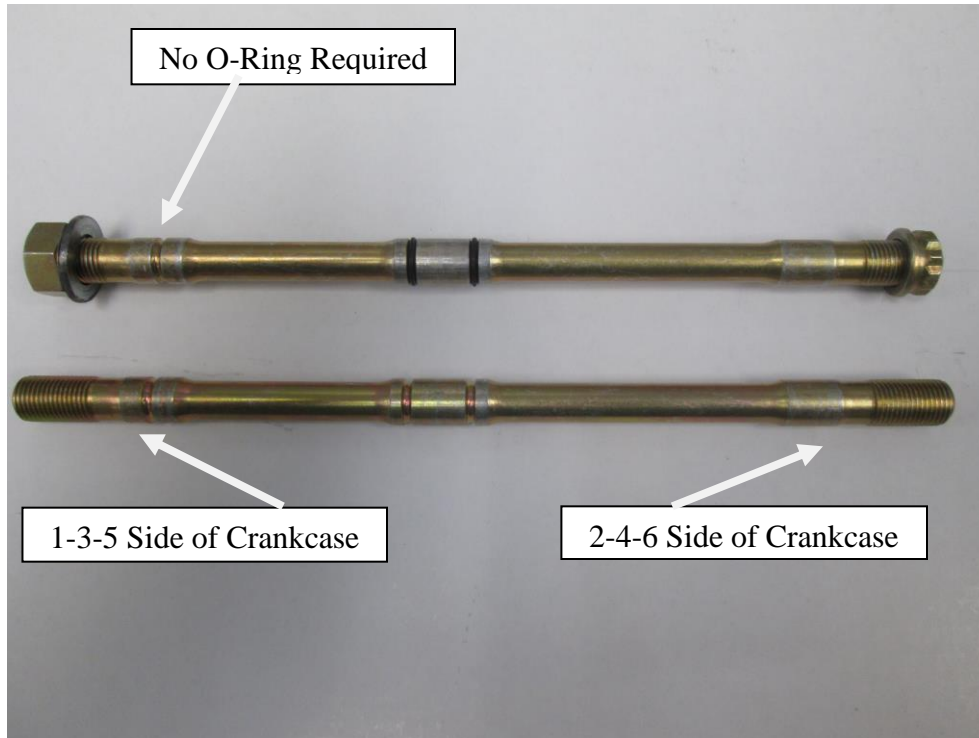


Illustration 3

- 3) Without installing the included O-rings, slide the new through bolt into position in the crankcase. See Illustration 3 for correct orientation. There should be only slight resistance sliding through the crankcase and may require light tapping with a rubber mallet to move through-bolt into position. If the through-bolt will not slide through the case and into position, please contact Superior Air Parts.
- 4) If the bolt settles into position, remove and install the O-rings on the center section of the bolt. The groove closest to the oil cooler side does not require O-rings. Install the bolt and torque fasteners to proper specifications as set forth in the latest revision of Continental Motors Inc. Maintenance or Maintenance and Overhaul Manual and Continental Motors Inc. M-0. Note the 6 point nut and the 12 point nuts may have different torque values. There is no need to repeat an entire torque sequence for all cylinder fasteners but only the through bolt and its respective fasteners being replaced.
- 5) Perform an engine run-up and leak check in accordance with the latest revision of Continental Motors Inc. Maintenance or Overhaul Manual and Continental Motors Inc. M-0.
- 6) Make an engine logbook entry that indicates compliance with B21-01
- 7) Complete the B21-01 compliance form on the last page of the document. Return the compliance form and the removed through-bolt to Superior Air Parts using the included pre-paid shipping envelope.

Superior Air Parts Technical Support Contact Information: 800-420-4727 option 3 for technical product support.

Compliance Form B21-01

Date of compliance _____

Superior Air Parts
621 South Royal Lane Suite 100
Coppell, TX 75019
Attn: Elizabeth Kahle

The aircraft to which this Service Bulletin will be applied is/are:

Aircraft make _____

Aircraft Model _____

Aircraft N Number _____

Engine Model _____

Engine S/N _____

Mechanic performing compliance:

Signature _____

Print name and title _____