

February 23, 2023 3:23 PM, Version 1

AFTER MSB IS RELEASED AND AFTER AD IS RELEASED ONE VOICE

WEBSITE MESSAGE

Update: February 23, 2023

- The Federal Aviation Administration (FAA) issued an Airworthiness Directive (AD 2023-04-08) on February 23, 2023, related to the Mandatory Service Bulletin (MSB23-01). Please be aware that AD 2023-04-08 takes precedence over MSB23-01 making the AD the governing document and rule for this issue.
- Continental recently identified a potential safety of flight issue for aircraft equipped with Continental 360, 470, 520, 550 series engines and replacement crankshaft assemblies. As the parts manufacturer, Continental reported this to the authorities and released an MSB on February 13, 2023. MSB23-01 preemptively advises that an inspection should be performed to confirm that the crankshaft counterweight retaining ring was properly installed in new and rebuilt engines assembled between June 1, 2021, and February 7, 2023. This advice also applies to replacement crankshaft assemblies manufactured between June 1, 2021, through February 7, 2023. To further clarify, the MSB stated that Continental engines with over 200 hours may continue normal flight operations; however, this is no longer valid after the release of the AD. The AD takes precedence over the MSB and now requires an inspection of all affected engines and crankshaft assemblies listed in the MSB.
- This page provides answers to some of the most asked questions regarding the MSB23-01 for crankshaft assemblies. Should you have additional questions, please [review the full MSB](#) or contact the Continental MSB Support Team.

This information is subject to change. Always refer to the most recent AD and MSB.

- **(NEW) Where can I view AD 2023-04-08?**
- Follow this link to review the full AD: <https://drs.faa.gov/browse/excelExternalWindow/FR-ADFRAWD-2023-03796-0000000000.0001>

- **(NEW) Should I follow the FAA AD or Continental's MSB?**
- The FAA AD 2023-04-08 takes precedence over Continental's MSB23-01 making the AD the governing document and rule for this issue. Please reference the MSB as needed.

- **(NEW) What are the differences between the Continental MSB and FAA AD?**
- The FAA AD inspection requirements apply to all engines referenced in MSB23-01A regardless of the operating hours on the engine.
- The FAA AD must be completed prior to the next flight and does not provide a flight time allowance that can be used to reposition the aircraft to a maintenance facility. A Special Flight Permit will need to be requested and issued provided that:
 - The engine oil filter pleats or screen are first inspected and there is no evidence of metal contamination; or
 - An oil change has been completed within the previous 5 flight hours, and there was no evidence of metal contamination in the oil filter pleats or screen.
- Refer to the AD for the complete requirements.

- **How do I apply for a Special Flight Permit?**
- Follow this link to apply for the Special Flight Permit from the FAA <https://awc.faa.gov/AWCExternalApplicant/Splash/Index>

- **What if the MSB inspection has been performed and logged prior to release of the AD? What is the next action?**
- Per section J., Credit for Previous Actions in the AD, an additional logbook entry is not needed if the actions were performed before the effective date of this AD using the Continental Mandatory Service Bulletin MSB23-01, dated February 13, 2023.

- **(UPDATED) What crankshaft assemblies are impacted by the Mandatory Service Bulletin (MSB) 23-01?**
- Continental has identified a potential safety of flight issue for aircraft equipped with Continental 360, 470, 520, 550 series engines and replacement crankshaft assemblies. Consequently, per MSB23-01, Continental recommends that an inspection should be performed to confirm that the crankshaft counterweight retaining ring was properly installed in new and rebuilt engines assembled between June 1, 2021, and February 7, 2023. This advice also applies to replacement crankshaft assemblies manufactured between June 1, 2021, through February 7, 2023.

- **Does this MSB impact the 200 series, Titan, and or PRIME engines?**
- This potential assembly error does not impact the popular avgas 200 and 240 engine models, Titan, or PRIME engines.
 - o Continental 200 and 240 engines do not include counterweights
 - o Titan and PRIME engines are assembled using a different procedure

- **Where can I view the complete list of impacted engines and crankshaft assemblies?**
- The complete list of engines and crankshafts used as service spares that are affected by this bulletin are identified by Serial Number in MSB23-01. Visit the Service Bulletins section of the website under Support.

- **Where do I find my engine serial number and crankshaft serial number?**
- The engine data plate is mounted to the 1-3-5 side of the engine. The crankshaft serial number is stamped in the perimeter of the propeller flange.

- **If my engine serial number and my crankshaft serial number are not listed, should the engine be inspected?**
- An inspection is not required on engines and crankshaft assemblies that are not listed in MSB23-01.

- **(UPDATED) My engine serial number and crankshaft serial number are listed in this MSB but my engine has over 200 operating hours. Should I get my crankshaft counterweights inspected?**
- Yes, to comply with the AD, all engine serial numbers and crankshaft serial numbers listed in the MSB, regardless of operating hours, should be inspected.

- **What if I recently had maintenance performed that required the installation of a new crankshaft?**
- If you had a maintenance event that resulted in a new crankshaft, check the MSB to see if your crankshaft serial number is affected.

- **(UPDATED) If my engine serial number and crankshaft serial number are listed, what should I do to comply with the MSB and AD?**
- Per the instructions of MSB23-01, you should immediately proceed with crankshaft counterweight inspection.

- **(UPDATED) If my engine serial number and crankshaft serial number are listed, is my aircraft grounded?**
- Per the AD, affected crankshaft assembly must be inspected before further flight after the effective date of the AD.
- A special flight permit may be issued in accordance with 14 CFR 21.197 and 21.199 to permit a one-time, non-revenue ferry flight to operate the aircraft to a location where the maintenance actions can be performed, provided that:
 - The engine oil filter pleats or screen are first inspected and there is no evidence of metal contamination; or
 - An oil change has been done within the previous 5 flight hours, and there was no evidence of metal contamination in the oil filter pleats or screen.

- **(UPDATED) If my engine serial number and crankshaft serial number are listed, what procedure needs to be performed?**
- Per the AD, an inspection of the crankshaft assembly should be performed immediately for all affected serial numbers regardless of operating hours.

- **Are there specific avgas service centers that will complete the inspection?**
- This inspection can be completed in the field, so your local qualified aircraft mechanic can perform this inspection and the potential procedure to comply with the MSB.

- **Is a specific tool required to perform the inspection?**
- A specially designed gage should be used to check the tolerance between the retaining ring ears. To request a complimentary inspection tool, you can phone our MSB Support Team at 1-251-441-4460 or email MSB23Support@continental.aero
- If you are within a 5-hour flight range, you can contact Continental's Factory Service Center, Continental Services, at CQF in Fairhope, Alabama, to schedule your inspection. To check on availability, call 1-251-990-5080 or email cmfsc@continental.aero

- **(UPDATED) Is there engine warranty coverage for this inspection?**
- The actions required to comply with this service document are covered, up to the Eligible Allowance provided for reimbursement, as shown in the MSB.
- Any affected engine or crankshaft assembly over 200 hours that per the AD now requires an inspection, will be covered in accordance with MSB23-01A Section V. Warranty.
- To obtain the Compliance Form and start the warranty process, use this link: <http://www.continental.aero/uploadedFiles/Content/Services/Continental-Services-Warranty-Claim.pdf>

- **(NEW) If I need a special flight permit, will Continental's warranty cover the oil filter inspection?**
- Per Continental's standard maintenance practices, Continental will cover the oil filter inspection, one (1) quart of oil, and labor.
- To submit a separate warranty for this oil filter inspection, use this link:
<http://www.continental.aero/uploadedFiles/Content/Services/Continental-Services-Warranty-Claim.pdf>

- **What steps has Continental taken to mitigate this issue from happening in the future?**
- Continental has conducted a root cause analysis and identified that this was not a machining error or design flaw. Continental identified that this was an isolated workmanship assembly error and is taking this quality escape seriously. As a part of our review process and continuous improvement initiatives, the Continental team is evaluating all aspects of our assembly process, from training procedures to tools and quality systems.

- **(UPDATED) Will the Federal Aviation Administration (FAA) issue an Airworthiness Directive (AD)?**
- The FAA issued AD2023-04-08 on February 23, 2023, making the AD the governing document and rule for this issue.

- **Should I preserve my engine?**
- Continental recommends following the guidelines set in Continental's Maintenance Manual, M-0. Contact our Technical Support Team if you have specific preservation questions.

- **What MSB resources are available:**
- Phone: 1-251-441-4460 Monday through Friday, 6 AM to 6:30 PM CST
- Email: MSB23support@continental.aero
- Website frequently asked questions: www.continental.aero
- MSB Link: <http://continental.aero/support/service-bulletins.aspx>