

COMPLIANCE NECESSARY TO MAINTAIN SAFETY

Supersedes CSB673B  
TECHNICAL PORTIONS  
FAA APPROVED

- SUBJECT:** Potential Improperly Lubricated Roller Bearing in S-1200 Series Magnetos
- PURPOSE:** Notify customers of inspection requirement for affected S-1200 Series Magnetos.
- COMPLIANCE:** Within 25 hours after the affected magneto(s) are placed in service. If either magneto has accumulated more than 25 operating hours, inspect prior to next flight.

**MODELS**

**AFFECTED:** Continental I0-346A, 0-470-B, E, G, J, K, L, M, R, S, U; I0-470-C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V, VO; GTSI0-520-C, D, F, H, K, L, M, N; I0-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, P; LTSI0-520-AE; TSI0-520-A, AE, AF, B, BB, C, CE, DB, G, H, KB, LB, M, NB, P, R, T, UB, VB, WB; I0-550-B, C, D, E, F, L; TSI0L-550-A, B, C equipped with S-1200 Series Magnetos, engines equipped with Continental S-1200 Series Magnetos authorized by PMA Supplements 1-54 and new and rebuilt service spare S-1200 Magnetos

**I. GENERAL INFORMATION**

The supplier of Continental Part No. 10-400561, Bearing, Roller, has identified one lot of the roller bearings was delivered to Continental with a light corrosion preventive lubricant rather than the specified translucent white grease. Affected magnetos assembled without the properly lubricated roller bearing have a potential to overheat, causing accelerated wear in the contact and cam follower. Affected magneto assemblies must be disassembled to inspect the roller bearing condition. Roller bearings, Part No. 10-400561 sold as service spares may also be affected.

**II. AFFECTED MAGNETO SERIAL NUMBERS**

Continental Magneto model and serial numbers are comprised of the component identification, year, month (letters A through L), and a sequential four digit number beginning with the letter A and number one (A001) and incrementing for each unit produced during the month. S-1200 Magneto serial numbers use “F” in the component ID position.

Table 1. Serial Number Format

COMPONENT ID	YEAR	MONTH	SERIAL
F	21	E	A001

Magnetos with serial numbers between **F21EA057** and **F21KA009R**, manufactured and sold between May and November 2021, may have been assembled using the improperly lubricated roller bearing. Affected units must be disassembled and inspected to determine if the non-conforming roller bearing was used in assembly. S-1200 magneto serial numbers outside the specified range are unaffected - no further action is required.

Affected magnetos that have been reworked and inspected are being identified with a **five-point star stamped** on the **data plate** (see Figure 3) after corrective action is accomplished. If the S-

1200 Magneto is within the affected serial number range and the magneto data plate is marked with a five-point star, corrective action is complied with - no further action is required.

### III. CORRECTIVE ACTION

Return uninstalled (service spare) magnetos affected by this bulletin in their original packaging to Continental for warranty replacement. Contact a Continental Customer Service representative for return authorization.

Return affected Part No. 10-400561, Roller Bearings purchased for inventory to Continental for warranty replacement. If the roller bearings are in the original packaging, refer to the package labels in Figure 1. Parts identified with **Lube Code: 140** are treated with the proper lubricant. If the label indicates *Lube Code: 125*, return the bearing(s) to Continental for replacement. If the bearings were removed from the original packaging, inspect the bearings using the criteria in Section III. B. 8 for disposition.



Figure 1. Bearing Package Markings

Continental has established a pool of assembled S-1200 magnetos and dedicated team to comply with the inspection and corrective action. Customers may remove and return the magnetos for warranty replacement or have the repairs accomplished by a local repair station. For affected magneto(s) installed on engines, inspect affected magneto(s) within 25 hours after installation. If affected magneto has been in service more than 25 hours, perform the inspection prior to next flight.

**A. Remove affected Magneto(s) from the engine (as applicable) and install Serviceable Magneto(s) not affected by this Critical Service Bulletin according to the applicable Instructions for Continued Airworthiness.**

OR

**B. Disassemble and Inspect affected Magneto(s) (according to X42001 instructions).**

NOTE: The following parts must be replaced 100% with new parts upon removal from the magneto, regardless of whether disassembly is for the purpose of inspection, parts replacement, or overhaul: Wedges (35), screws (54), retaining rings (18, 50), washers (55), bearings (59, 63), felt strip (23), capacitor (10), carbon brush (26), and pin (37). If installed, spring (47), gaskets (7, 58), washer (2) and packing (5) shall be replaced at each disassembly with new parts.

The following parts may be reused except as detailed below or unless

other conditions warrant replacement: main and retard contact assemblies (30), felt washer (20), gear kit (25).

1. Remove cover retention screw and lockwasher (1) and plain washer (2) (if installed) from cover (6). Remove capacitor lead and retard/capacitor (as necessary) lead from contacts to separate cover from magneto.
2. Using an inspection light and 4-5X magnifying lens, inspect shaft in the area between the cam (33) and the bearing (63).
  - a. Translucent white grease residue (Figure 2) in this area is an indicator of a properly lubricated bearing. If grease is detected here, go to “Assembly” procedures in Section C.
  - b. If no white grease is detected in this area, or if greater access is desired, continue disassembly with step 3.
3. Using a pair of padded jaw pliers, grip the drive member on the drive end of the rotating magnet (61). While holding the rotating magnet, loosen the cam securing screw (31) and turn out half way.
4. Remove contacts (30) only as necessary to access cam by loosening screws (27).

*CAUTION: If the self-locking screw (31) is loosened or removed for any reason, replace it with a new self-locking screw. Torque to 21-25 in-lbs.*
5. Use a wedge, removal pry bar, or broad-bladed screwdriver to loosen the cam from the shaft. If using a stout screwdriver, place the end between the bottom of the cam (33) and housing (72). Apply downward pressure to the screwdriver handle to loosen the cam from the taper of the shaft. Remove the screw (31), washer (32) and cam (33).
6. Using an inspection light and 4-5X magnifying lens, inspect shaft in the area where it protrudes from the bearing (63).
  - a. Translucent white grease (Figure 2) residue in this area is an indicator of a properly lubricated bearing. If grease is detected here, go to “Assembly” procedures in Section C.
  - b. If no white grease is detected in this area, continue disassembly with step 7.
7. Disassemble the drive components and shaft/flange assembly according to “Disassembly” instructions in the latest revision of S-1200 Service Support Manual, Document Number X42001, paragraphs 4-2.3, 4-2.4, and 4-2.5.
8. Using an inspection light and 4-5X magnifying lens, inspect rotating magnet shaft (61) at the bearing area and inspect the roller bearing (63) inner diameter.
  - a. Translucent white grease (Figure 2) residue in this area is an indicator of a properly lubricated bearing. If grease is detected here, go to “Assembly” procedures in Section C.
  - b. If no white grease is detected in these areas:
    - 1) Inspect rotating magnet shaft (61) at the bearing area for signs of bearing distress, including but not limited to overheating (bluing, discoloration) and/or displaced metal. If rotating magnet shaft (61) shows signs of bearing distress, it must be replaced along with bearing (63), cam (33) and all contact assemblies (30). Remove rotating magnet shaft (61) according to the “Disassembly”

instructions in the latest revision of S-1200 Service Support Manual, Document Number X42001, paragraphs 4-2.6, and 4-2.7.

- 2) Place the magneto housing (72) on the base plate of an arbor press with the drive end down. Using the “R” (for “Remove”) end of the 11-9815 drift, press out the roller bearing (63) and discard. (See X42001, figure 4-4).



**Bearing - No Grease**

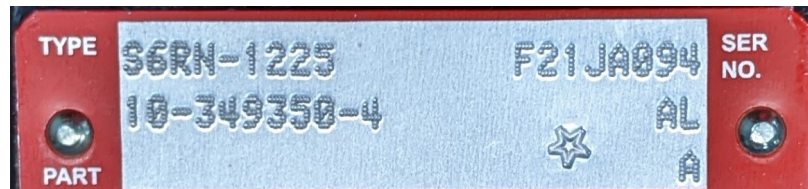


**Greased Bearing Before Installation**

**Figure 2. Bearing Condition Inspection**

### C. Assembly

1. Reassemble magneto according to “Assembly” instructions in the latest revision of S-1200 Service Support Manual, Document Number X42001, using paragraphs 9-2.1, 9-2.2, 9-2.3, 9-2.4, 9-2.5, 9-2.6, 9-2.7, 9-2.8, 9-2.9, 9-2.13, 9-2.16, 9-2.17, 9-2.18, 9-2.19, 9-2.20 as necessary.
2. Install magneto on engine according to “Assembly” instructions in S-1200 Service Support Manual, Document Number X42001, paragraph 9-3 and the engine manufacturer’s instructions.
3. When corrective action is complete, mark the dataplate in the lower right corner with a commercially available ImpressArt (or equivalent) 2.50mm five-point star stamp and ball-peen hammer to indicate compliance with this bulletin.



**Figure 3. Magneto Dataplate After Compliance**

#### IV. WARRANTY

The actions required to comply with this Service Document are covered, up to the Eligible Allowance provided for reimbursement, as shown below. Standard warranty practices apply. Visit the Continental web site at [www.continental.aero](http://www.continental.aero) to obtain copies of Continental Warranty Policies.

Complete and email a copy of the linked [Compliance Form](#), along with a copy of the work invoice (and a copy of the repair agency's W-9 if the repairs are accomplished by a repair facility in the Continental United States) upon completion for reimbursement. Continental reserves the right to request copies of invoices and maintenance records to verify warranty applicability.

#### Allowances/Reimbursements

Eligible Allowances for Reimbursement		Labor Hours <sup>1 2</sup>
1	Remove affected magneto(s) from engine for inspection.	0.75
2	Inspect S-1200 Magneto(s) to determine if non-conforming Part No. 10-400561 roller bearing was used in assembly.	0.25
3	Remove and replace Part No. 10-400561 roller bearing, re-assemble magneto.	0.50
4	Install magneto(s) on engine.	0.75
5	Perform engine functional check	0.25

1. at published shop rate
2. Labor allowance is per affected magneto.

Contact Continental Technical Services at the phone numbers or email address 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  
email: [CMTechnical@continental.aero](mailto:CMTechnical@continental.aero)

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**ISSUED**  
2022/01/31

**REVISED**  
2022/05/24



**DOC NO** **REVISION**  
CSB673 C

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