

TITLE

EXHAUST - ROD END BEARING INSPECTION

EFFECTIVITY**MODEL**

208

SERIAL NUMBERS

20800695

REASON

To inspect the rod end bearing and replace the rod end bearing if the bearing inner race do not have the required cadmium plating.

DESCRIPTION

This service document provides parts and instructions to inspect the rod end bearing and replace the rod end bearing if the bearing inner race do not have the required cadmium plating.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

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

Cessna Model 208 Series Maintenance Manual

October 31, 2023

CAL-78-01
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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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PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. 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 main 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.
2. Open the upper cowling doors. (Refer to Cessna Model 208 Series, Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.)
3. (Refer to Figure 1, Detail A.) Do an inspection of the S1104-3 Rod End Bearing that is attached to the power control cable.
 - A. Remove and discard the MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safelying - Maintenance Practices.)
 - B. Remove and keep the nut, washers, spacer and bolt that connect the S1104-3 Rod End Bearing to the power control lever arm.
 - (1) Disconnect the S1104-3 Rod End Bearing from the power control lever arm.
 - C. (Refer to Figure 1, Detail G.) Inspect the inner races of the S1104-3 Rod End Bearing for cadmium plating.
 - (1) If the S1104-3 Rod End Bearing is cadmium plated, go to Step 3.D.
 - (2) If the S1104-3 Rod End Bearing is not cadmium plated, do the steps that follow:
 - (a) Loosen the jam nut to disengage the S1104-3 Rod End Bearing from the power control cable.
 - (b) Remove and discard the S1104-3 Rod End Bearing from the power control cable.
 - (c) Install a new S1104-3 Rod End Bearing to the power control cable.
NOTE: Make sure that the new S1104-3 Rod End Bearing is cadmium plated.
 - (d) Tighten the jam nut to engage the S1104-3 Rod End Bearing to the power control cable.
 - D. Connect the S1104-3 Rod End Bearing to the power control lever arm using the kept bolt, spacer, washers and nut.
 - (1) Install a new MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safelying - Maintenance Practices.)
4. (Refer to Figure 1, Detail B.) Do an inspection of the S1104-3 Rod End Bearing that is attached to the propeller speed control cable.
 - A. Remove and discard the MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safelying - Maintenance Practices.)
 - B. Remove and keep the nut, washers, spacer and bolt that connect the S1104-3 Rod End Bearing to the propeller speed control lever arm.
 - (1) Disconnect the S1104-3 Rod End Bearing from the propeller speed control lever arm

- C. (Refer to Figure 1, Detail G.) Inspect the inner race of the S1104-3 Rod End Bearing for cadmium plating.
- (1) If the S1104-3 Rod End Bearing is cadmium plated, go to Step 4.D.
 - (2) If the S1104-3 Rod End Bearing is not cadmium plated, do the steps that follow:
 - (a) Loosen the jam nut to disengage the S1104-3 Rod End Bearing from the propeller speed control cable.
 - (b) Remove and discard the S1104-3 Rod End Bearing from the propeller speed control cable.
 - (c) Install a new S1104-3 Rod End Bearing to the propeller speed control cable.
NOTE: Make sure that the new S1104-3 Rod End Bearing is cadmium plated.
 - (d) Tighten the jam nut to engage the S1104-3 Rod End Bearing to the propeller speed control cable.
- D. Connect the S1104-3 Rod End Bearing to the propeller speed control lever arm using the kept bolt, spacer, washers and nut.
- (1) Install a new MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.)
5. (Refer to Figure 1, Detail C.) Do an inspection of the S1104-3 Rod End Bearing that is attached to the fuel condition control cable.
- A. Remove and discard the MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.)
 - B. Remove and keep the nut, washers and bolt that connect the S1104-3 Rod End Bearing to the fuel condition control lever arm.
 - (1) Disconnect the S1104-3 Rod End Bearing from the fuel condition control lever arm.
 - C. (Refer to Figure 1, Detail G.) Inspect the inner race of the S1104-3 Rod End Bearing for cadmium plating.
 - (1) If the S1104-3 Rod End Bearing is cadmium plated, go to Step 5.D.
 - (2) If the S1104-3 Rod End Bearing is not cadmium plated, do the steps that follow:
 - (a) Loosen the jam nut to disengage the S1104-3 Rod End Bearing from the fuel condition control cable.
 - (b) Remove and discard the S1104-3 Rod End Bearing from the fuel condition control cable.
 - (c) Install a new S1104-3 Rod End Bearing to the fuel condition control cable.
NOTE: Make sure that the new S1104-3 Rod End Bearing is cadmium plated.
 - (d) Tighten the jam nut to engage the S1104-3 Rod End Bearing to the fuel condition control cable.
 - D. Connect the S1104-3 Rod End Bearing to the fuel condition control lever arm using the kept bolt, washers and nut.
 - (1) Install a new MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.)
6. (Refer to Figure 1, Detail D.) Do an inspection of the S1104-3 Rod End Bearing that is attached to the emergency power control cable.
- A. Remove and discard the MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.)

- B. Remove and keep the nut, washers, bushing and bolt that connect the S1104-3 Rod End Bearing to the manual override arm.
- (1) Disconnect the S1104-3 Rod End Bearing from the manual override arm.
- C. (Refer to Figure 1, Detail G.) Inspect the inner race of the S1104-3 Rod End Bearing for cadmium plating.
- (1) If the S1104-3 Rod End Bearing is cadmium plated, go to Step 6.D.
- (2) If the S1104-3 Rod End Bearing is not cadmium plated, do the steps that follow:
- (a) Loosen the jam nut to disengage the S1104-3 Rod End Bearing from the emergency power control cable.
- (b) Remove and discard the S1104-3 Rod End Bearing from the emergency power control cable.
- (c) Install a new S1104-3 Rod End Bearing to the emergency power control cable.
- NOTE:** Make sure that the new S1104-3 Rod End Bearing is cadmium plated.
- (d) Tighten the jam nut to engage the S1104-3 Rod End Bearing to the emergency power control cable.
- D. Connect the S1104-3 Rod End Bearing to the manual override arm using the kept bolt, washers, bushing and nut.
- (1) Install a new MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safelying - Maintenance Practices.)
7. Adjust the power control, fuel condition control, propeller speed control and emergency power control linkage as required. (Refer to Cessna Model 208 Maintenance Manual, Chapter 76, Engine Controls Rigging - Adjustment/Test.)
8. Close the upper cowling doors. (Refer to Cessna Model 208 Series, Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.)
9. Remove the lower right cowling panel. (Refer to Cessna Model 208 Series, Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.)
10. (Refer to Figure 1, Detail F.) Do an inspection of the S1104-3 Rod End Bearing in the engine exhaust duct installation.
- A. Remove and keep the nut, washers and bolt that connect the S1104-3 Rod End Bearing to the bracket.
- (1) Disconnect the S1104-3 Rod End Bearing from the bracket.
- B. (Refer to Figure 1, Detail G.) Inspect the inner race of the S1104-3 Rod End Bearing for cadmium plating.
- (1) If the S1104-3 Rod End Bearing is cadmium plated, go to Step 9.C.
- (2) If the S1104-3 Rod End Bearing is not cadmium plated, do the steps that follow:
- (a) Loosen the jam nut to disengage the S1104-3 Rod End Bearing from the center hanger assembly.
- (b) Remove and discard the S1104-3 Rod End Bearing from the center hanger assembly.
- (c) Install a new S1104-3 Rod End Bearing to the center hanger assembly.
- NOTE:** Make sure that the new S1104-3 Rod End Bearing is cadmium plated.
- (d) Tighten the jam nut to engage the S1104-3 Rod End Bearing to the center hanger assembly.

- C. Connect the S1104-3 Rod End Bearing to the bracket using the kept bolt, washers and nut.
- (1) Install a new MS24665-134 Cotter Pin. (Refer to Cessna Model 208 Series Maintenance Manual, Chapter 20, Safetying - Maintenance Practices.)
11. Install the removed lower right cowling panel. (Refer to Cessna Model 208 Series, Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.)
12. Remove the maintenance warning tags and connect the airplane battery.
13. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

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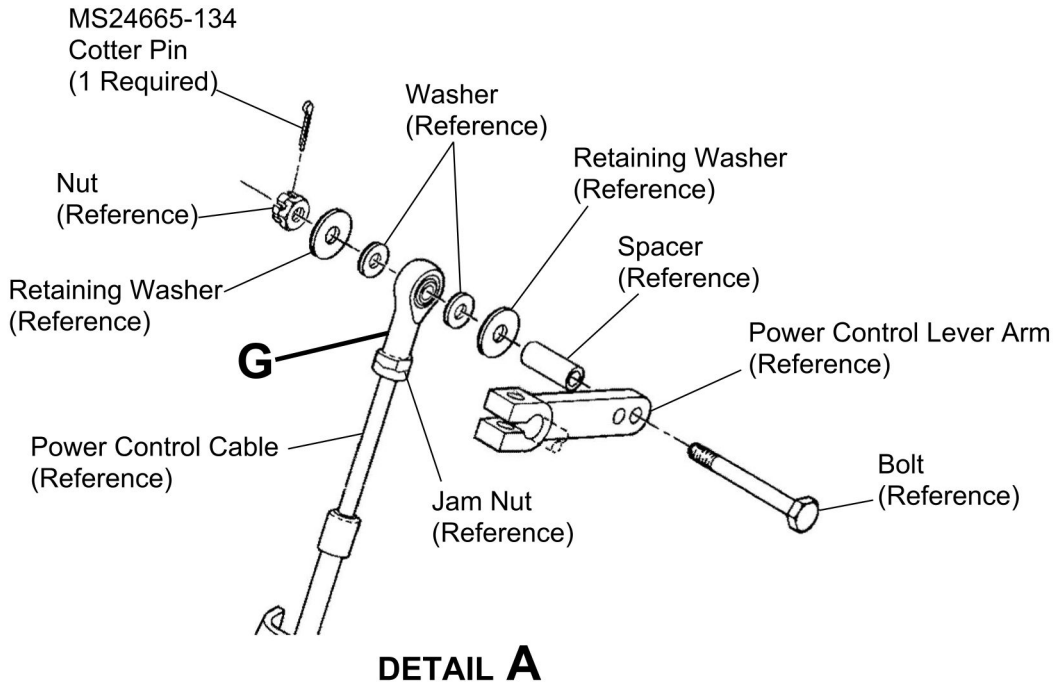
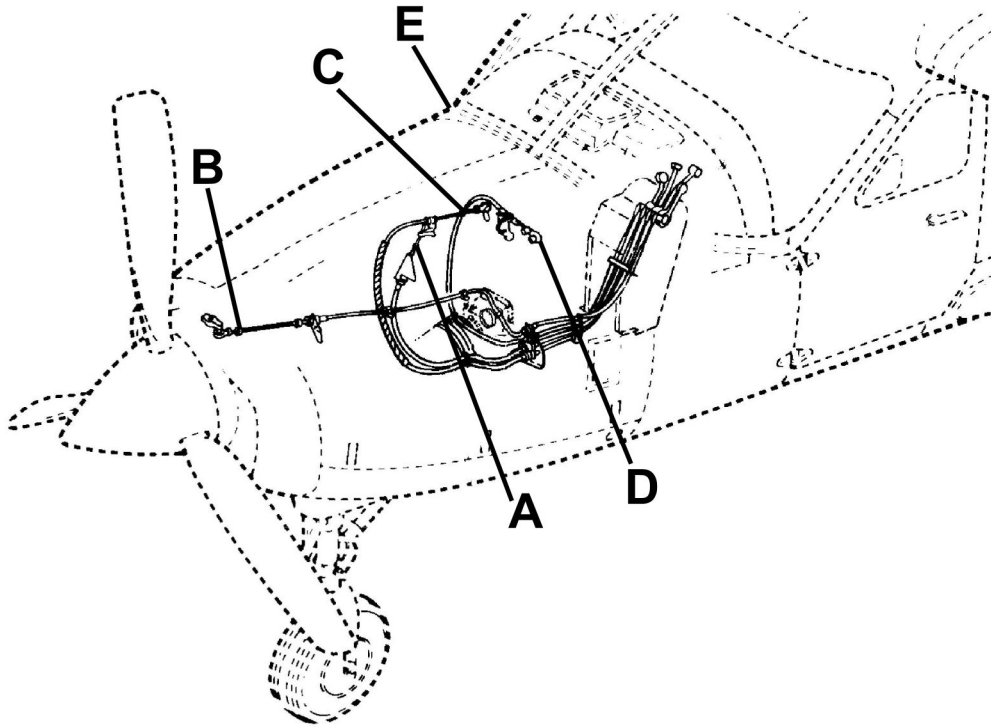


Figure 1. Rod End Bearing Inspection/Replacement (Sheet 1)

2615R1006
A26152007

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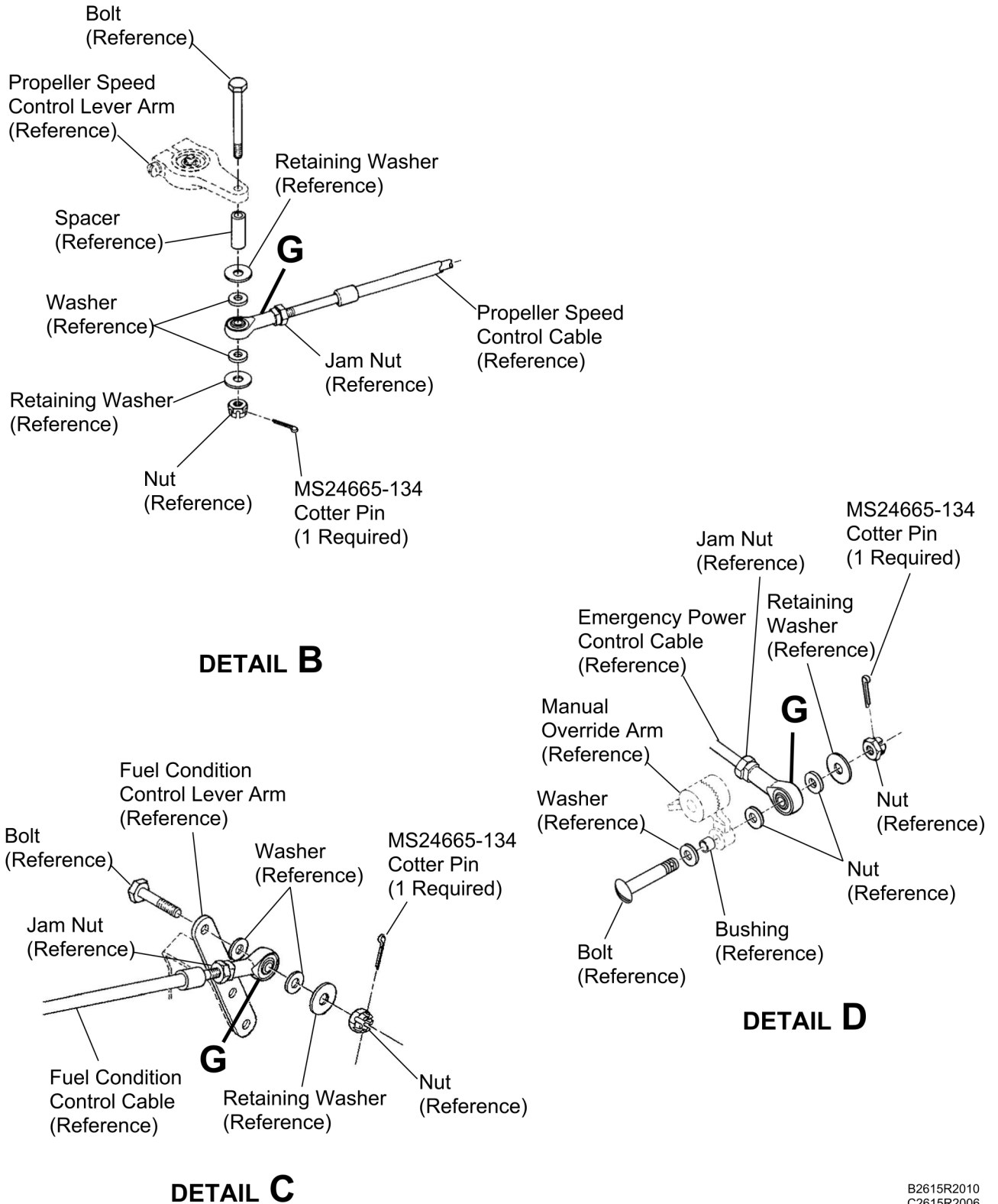


Figure 1. Rod End Bearing Inspection/Replacement (Sheet 2)

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C2615R2006
D2615R2010

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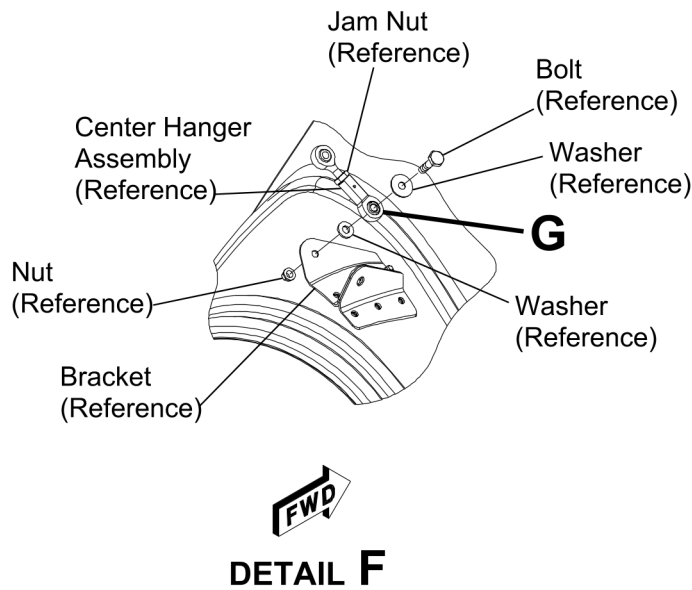
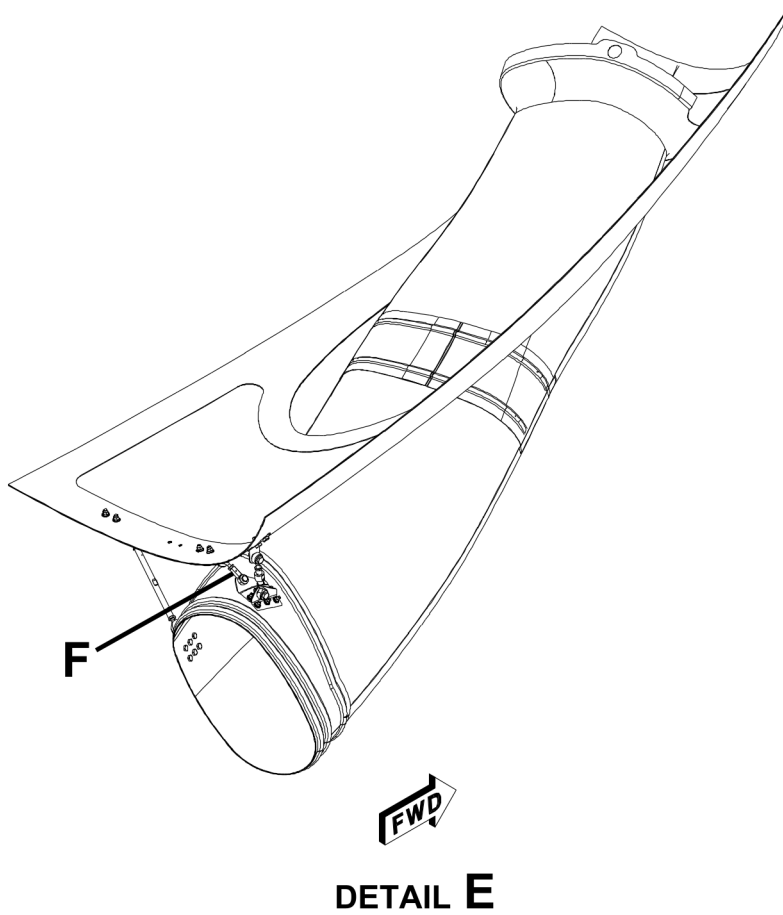
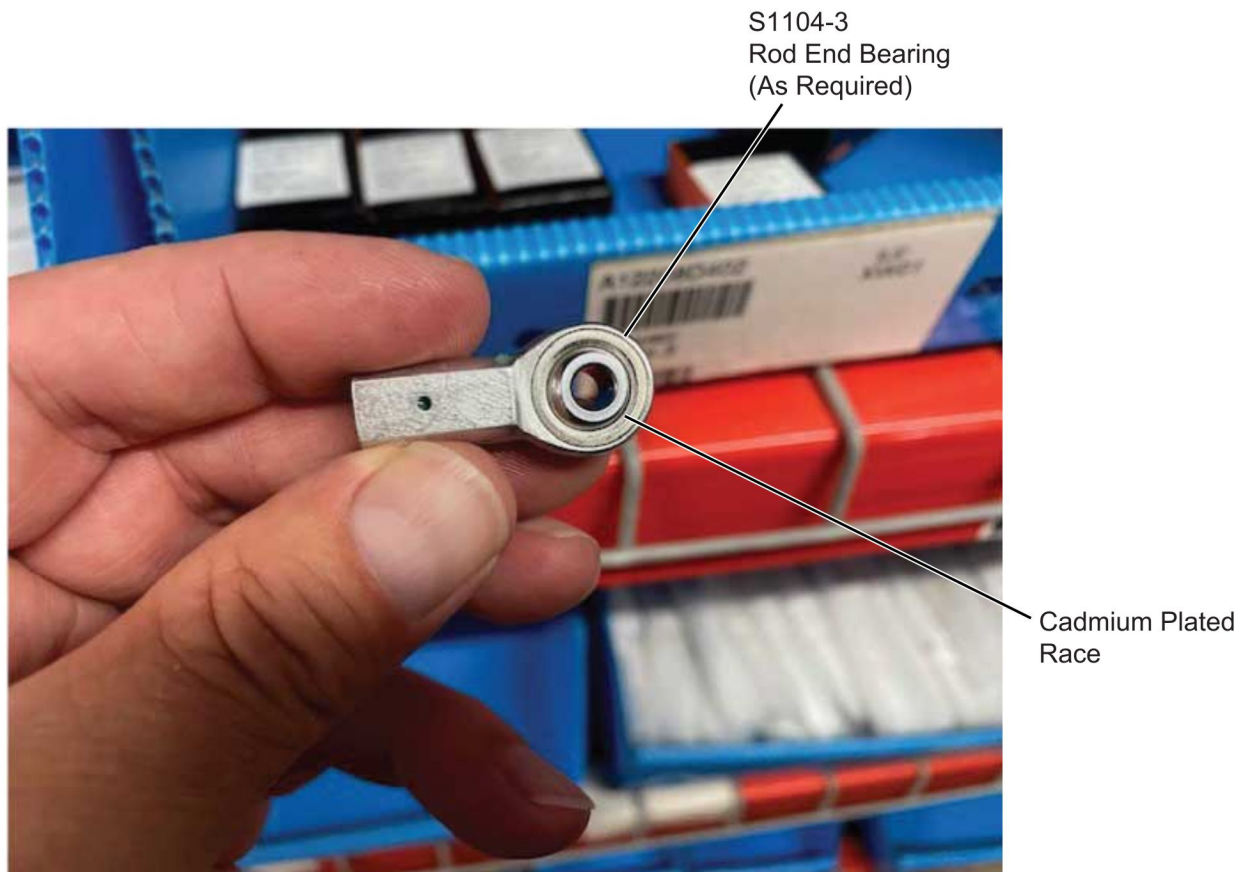


Figure 1. Rod End Bearing Inspection/Replacement (Sheet 3)

E2652T1027
F2652T1027

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DETAIL G

Figure 1. Rod End Bearing Inspection/Replacement (Sheet 4)

MATERIAL INFORMATION

The parts below may be required to complete this service letter.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
MS24665-134	4	Cotter Pin	Same	Discard Old. Install New.
S1104-3	As Required	Rod End Bearing	Same	

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

TITLE

EXHAUST - ROD END BEARING INSPECTION

TO:

Cessna Model 208 Aircraft Owner

REASON

To inspect the rod end bearing and replace the rod end bearing if the bearing inner race do not have the required cadmium plating.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Inspection and Modification	4.0

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
MS24665-134	*	*
S1104-3	*	*

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

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

October 31, 2023

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Eligibility: Airplanes identified within the serial number effectivity of this service document must have active Airframe 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 should be forwarded to:

TEXTRON AVIATION INC
CORE RETURNS
201 N GREENWICH RD BLDG 94
Wichita, KS 67206-2558

Expiration: 10/31/2024 (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 support.txtav.com to register.