

No.: 21TS-01 January 2021

TO: Service Locations

FROM: Service Methods Development

SUBJECT: DD Platform Lower, End Bearing Failure Strategy Change

ISSUE

In an effort to improve repair efficiency, and enhance the customer experience, Detroit has created two different strategies for determining the root cause of lower, end bearing failures. The type of failure will now determine the proper strategy to follow. This strategy change applies to all GHG17, Euro V, and Gen 5 DD13, DD15, and DD16 On-Highway engines.

REQUIRED ACTION

Strategy A (Easy):

For **rod out of the block failures (hole in the cylinder block)**, read and complete the following eight chapters from the "DD Platform Bearing Failure Guide". The numbers shown below are the chapter numbers from the guide but are subject to change in the future.

- 1. DD Platform Bearing Failure Guide (Introduction)
- 2. A Note on Warranty
- 3. Design of the Engine Lubrication System
- 4. Driver Questionnaire
- 5. Vehicle and Engine Inspection
- 6. Gathering and Interpreting Electronic Information
- 7. Oil Filter and Oil Filter Standpipe Inspection
- 19. Technician Checklist

After completing all eight chapters, if the rod out of the block failure is determined to be eligible for warranty coverage, use SDT code 101-035AE LOWER END BEARING FAILURE ANALYSIS (EASY) when filing the warranty claim. This SDT pays 2.4 hours. Use the appropriate connecting rod bearing part number as the Primary Failed Part (PFP).

Strategy B (Difficult):

For **all** other lower, end bearing failures, follow the "DD Platform Bearing Failure Guide" in order, to determine root cause in an efficient manner. The guide starts with simple tasks and becomes more labor intensive in the later chapters. Read and complete all 19 chapters listed below from the "DD Platform Bearing Failure Guide". The numbers shown are the chapter numbers from the guide but are subject to change in the future.

1. DD Platform Bearing Failure Guide (Introduction)

- 2. A Note on Warranty
- 3. Design of the Engine Lubrication System
- 4. Driver Questionnaire
- 5. Vehicle and Engine Inspection
- 6. Gathering and Interpreting Electronic Information
- 7. Oil Filter and Oil Filter Standpipe Inspection
- 8. Checking for Contaminated Lubricating Oil
- 9. Debris in the Oil Pan
- 10. Oil Pump and Oil Suction Manifold Inspection
- 11. Lower End Bearing Construction
- 12. Bearing Removal
- 13. Types of Lower End Bearing Failures
- 14. Vertical Failure vs. Horizontal Failure
- 15. Probability of a Defect
- 16. Failure Scenarios
- 17. Conclusion
- 18. Glossary of Terms
- 19. Technician Checklist

After completing all 19 chapters, if the lower end bearing failure is determined to be eligible for warranty coverage, use SDT code 101-035EE LOWER END BEARING FAILURE ANALYSIS (DIFFICULT) when filing a warranty claim. This SDT pays 10.7 hours. The Primary Failed Part (PFP) will vary depending on the root cause of the bearing failure.

CONTACT INFORMATION

Please contact the Detroit Diesel Customer Support Center at 800-445-1980 or email <u>csc@daimler.com</u> if you have any questions.