



Durability Event: Truck Severe Trough

1 Scope

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. To subject a test vehicle to very high level suspension impacts, representative of greater than average customer service for full size trucks.

1.2 Foreword. Not applicable.

1.3 Applicability. The Truck Severe Trough facility in this specification is intended for use in light duty truck testing performed at Milford Proving Ground (United States of America).

This global test procedure is intended to document the test facility requirements and driving instructions necessary to properly execute this durability event. Regional test procedures exist in order to implement this global procedure at the various GM proving grounds. Each regional test procedure includes the driving instructions for the specific access roads to and from the test facility, references to local signs and landmarks, and any other region-specific information necessary to implement this GMW durability event.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW15444

GMW15445

2.3 Additional References.

2.3.1 Milford.

DL.MF.TT

DR.MF.TT

3 Resources

3.1 Facilities. Refer to Figures A1 and A2 in Appendix A for dimensions of the Truck Severe Trough.

3.1.1 Calibration. The test facilities and equipment shall be in good working order and shall have a valid calibration label.

3.1.2 Alternatives. Alternative test facilities and equipment may also be used. However, all measuring variables as specified in this standard shall be determined correctly with respect to their physical definition.

3.2 Equipment. Refer to the appropriate proving ground driving instruction document.

3.3 Test Vehicle/Test Piece. Not applicable.

3.4 Test Time. The time required to execute this event varies by proving ground. Refer to the appropriate proving ground driving instruction document.

3.5 Test Required Information. Not applicable.

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3.6 Personnel/Skills. Refer to the appropriate proving ground driving instruction document.

4 Procedure

4.1 Preparation. Refer to the appropriate proving ground driving instruction document listed in 2.3.

4.2 Conditions.

4.2.1 Environmental Conditions. This driving module is intended to be executed during dry, wet, and/or snow-covered weather conditions. If any portions of the module, due to inclement weather conditions, are beyond the tractive capability of the vehicle or unsafe, the module should be postponed.

4.2.2 Test Conditions. Deviations from the requirements of this standard shall have been agreed upon. Such requirements shall be specified on component drawings, test certificates, reports, etc.

4.3 Instructions. This driving module consists of one pass of the Truck Severe Trough. Align the vehicle so that both driver and passenger side wheels will enter the trough at the same time. Proceed through the trough at 15 km/h with both front and rear wheels. See Appendix A, Figures A1 and A2 for trough profile and dimensions.

5 Data

5.1 Calculations. Refer to the appropriate durability test standard.

5.2 Interpretation of Results. Refer to the appropriate durability test standard.

5.3 Test Documentation. Refer to the appropriate durability test standard.

6 Safety

This standard may involve hazardous materials, operations, and equipment. This standard does not propose to address all the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

7 Notes

7.1 Glossary. Refer to GMW15444 "Global Durability Test Instructions and Definitions" for terms and definitions. Also, refer to GMW15445 "Vehicle Ballast" for definitions of ballast related terms.

7.2 Acronyms, Abbreviations, and Symbols. Not applicable.

8 Coding System

This standard shall be referenced in other documents, drawings, etc., as follows:

Test to GMW16180

9 Release and Revisions

This standard was originated in February 2009. It was first approved by the Global Proving Grounds Durability Test Development Team in June 2009. It was first published in July 2009.

Issue	Publication Date	Description (Organization)
1	JUL 2009	Initial publication.
2	OCT 2013	Five year refresh. (Global Proving Ground Durability Test Development Team)

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