



Cold Weather Exposure Test Event: Inspection

1 Introduction

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 specify the inspection, maintenance, and repair practices to be applied to vehicles running on the parent specification, GMW15016 Cold Weather Exposure Test.

1.2 Applicability. Refer to parent specification GMW15016.

1.3 Remarks. This event is performed to conduct maintenance and to inspect for functionality of options and vehicle components during cold weather operation of the vehicle.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW15016

3 Resources

3.1 Facilities. General Motors Cold Weather Development Centers (Kapuskasing, Canada; Hei He, China; Arjeplog, Sweden).

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. Not applicable.

3.2.1 Replacement Parts. Unless otherwise specified, the general guideline for replacement parts is that GM service parts will be used.

3.2.2 Tools. The vehicle is to be repaired and maintained with tools similar to those which would be used by a service facility working on the customer's vehicle. No extraordinary servicing techniques or special tools, not appropriate to the complexity of the particular repair, are to be used.

3.3 Test Vehicle/Test Piece. Refer to parent specification GMW15016.

3.4 Test Time. Not applicable.

3.5 Test Required Information. Not applicable.

3.6 Personnel/Skills. Refer to parent specification GMW15016.

4 Procedure

4.1 Preparation. Refer to parent specification GMW15016.

4.2 Conditions. Refer to parent specification GMW15016.

GM Confidential

© Copyright 2014 General Motors Company All Rights Reserved

June 2014

Page 1 of 5

4.2.1 Environmental Conditions. Not applicable.

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.

4.3.1 Inspection.

4.3.1.1 Perform an Overnight Soak prior to beginning the inspection.

4.3.1.2 Perform drive evaluation.

4.3.1.3 Inspect the applicable items on the vehicle condition check sheet and record any findings using the Interim Inspection Form (see Data Sheet A1, Appendix A). Complete any additional data sheets as specified by the test coordinator.

4.3.1.4 Conduct any specific checks requested by the sponsoring divisions or test requester.

4.3.1.5 Wash vehicle using high pressure spray wash system.

4.3.1.6 When appropriate (as identified in Section 4.3.1 of GMW15016), a vehicle underbody wash will be performed immediately prior to leaving the garage for its next Vehicle Soak.

4.3.2 Maintenance.

4.3.2.1 The test vehicle is to receive routine preventative maintenance based on instructions and intervals prescribed in the Owner's Manual, unless otherwise specified.

4.3.2.2 Top-off fluid levels as required at time of inspection unless instructed otherwise. Record quantities of fluid added on Data Sheet A1.

4.3.3 Repair.

4.3.3.1 Repair shall be performed when the test vehicle displays symptoms that would be detected by the customer and which would be likely to prompt the customer to take the vehicle in for diagnosis and repair. On this basis, it is the test driver's role (as described in Section 4.3.10 of GMW15016) to report that the vehicle requires attention. The driver should, in essence, be the customer, viewing and evaluating the vehicle's behavior as would the owner and recommending checkout of possible malfunction. Repair may also be performed when, in the opinion of the responsible test user, further operation of the vehicle would prove hazardous to test personnel. In that case, a separate test involving the part or system in question is to be conducted under controlled conditions to determine all effects and results of the malfunctions such as failure mode, second and third order failures. It is essential that the communication loop be closed in cases of this nature. Any communication or information resulting from such a test is to be carefully documented and preserved.

4.3.3.2 In the event that an additional malfunction is discovered during the inspection or repair of another item, it is to be evaluated carefully before any corrections are made. Consideration should be given to the probability that the customer's mechanic would have discovered the malfunction, informed the customer, and received the authorization for repair. The test user should use supporting information defining customer practice in repairing such items.

4.3.3.3 Where the vehicle is fitted with specific test components, there should be a report documenting their repair or replacement. These reports, as well as other findings, are a major result of the overall test process and should be recorded and analyzed as data relating to test vehicle repair ability and serviceability.

4.3.3.4 Any additional comments or observations should be recorded on the data sheet (see Data Sheet A2).

5 Data

5.1 Calculations. Not applicable.

5.2 Interpretation of Results. Not applicable.

5.3 Test Documentation. Record pertinent test results on supplied data sheets in Appendix A.

GM Confidential

© Copyright 2014 General Motors Company All Rights Reserved

June 2014

Page 2 of 5

AVA Documents
Document Sharing Hub