GM	WORLDWIDE ENGINEERING STANDARDS	Test Procedure	GMW17724

EBCM Teen/Valet Mode TCS/ESC On/Off Performance

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. The purpose of this standard is to verify the functional interface between the Electronic Brake Control Module (EBCM) and Body Control Module (BCM) when Teen or Valet Mode is active in the vehicle. Teen or Valet Mode active will not allow driver to disable Electronic Stability Control (ESC) and will limit the driver's ability to turn Traction Control System (TCS) off to get vehicle unstuck and then to automatically re-enable when vehicle speed is increased.

1.2 Applicability. This standard is applicable for vehicles equipped with the Teen and/or Valet Mode.

1.3 Remarks. Not applicable.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

None

2.3 Additional References.

CG4664 EBCM Teen Valet Mode TCS ESC On Off Functional Checkout

3 Resources

3.1 Facilities. Test is to be conducted on a flat surface, such as those located at the Milford Proving Ground (MPG), or any other applicable surface.

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. Production representative vehicle with functioning Teen and/or Valet Mode.

3.3 Test Vehicle/Test Piece. Refer to Section 4.

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3.4 Test Time.

Calendar time:	1 day
Instrumentation time:	0 day
Test time:	2 hours
Coordination time:	1 day

3.5 Test Required Information. Calibration values described in CG4664.

3.6 Personnel/Skills. Chassis controls engineer certified to run braking tests.

4 Procedure

4.1 Preparation.

4.1.1 Build or verify the test vehicle with functioning Teen/Valet Mode and EBCM software/hardware.

4.2 Conditions.

4.2.1 Environmental Conditions. Dry asphalt test surfaces are required where driver can control vehicle speed and verify status of TCS/ESC.

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. Follow the instructions and record vehicle reactions according to CG4664.

5 Data

5.1 Calculations. Not applicable.

5.2 Interpretation of Results. Results of vehicle reactions from testing and any comments are recorded in CG4664.

5.3 Test Documentation. The vehicle information, test information and test results shall be published following GM corporate protocol using the Evaluation Report template and the approved engineering document management system/repository.

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.

In general, a risk assessment needs to be performed for every driving instruction prior to executing this standard. (**Note:** National law needs to be considered while performing a risk assessment.) The required rating of risk by exposure probability and possible violation will be done in a separate document. Every identified risk must be named inside the risk assessment for the relevant driving instruction in order to announce that risk to employees. Within the risk assessment, the vehicle equipment and different vehicle build stages have to be considered. After performing a risk assessment, non-acceptable risk needs to be mitigated by appropriate countermeasures. Here technical measures are preferred because these are independent from attendant circumstances. In case technical measures are not appropriate, organizational and/or personal measures will apply. This includes training, wearing of Personal Protection Equipment, or arrangement of idle time.

6.1 Safety Precautions.

6.1.1 Instrumentation and other test equipment must be securely mounted in accordance with proving grounds traffic safety guidelines for mounting and usage of in-vehicle instrumentation.

6.1.2 All running lights and vehicle safety features must be operational according to proving grounds rules for running lights and power windows. Exterior lights must not be obscured by styling add-ons, covers or camouflage packages. The horn may be disabled because of steer angle transducer installation.

6.1.3 A helmet is required in accordance with the regulations of the test facility. The vehicle should never be operated in a manner where the vehicle leaves the roadway or goes onto the shoulder for any reason.

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