



Interior Door Trim Assembly - Steady State Part Monitoring

1 Introduction

Note: 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. This standard establishes the minimum requirements for steady state part monitoring to insure manufacturing processes are producing components within engineering specifications. Nothing in this document supersedes requirements specified by Product Engineering in the Component/Assembly drawings or Supplier Quality in the manufacturing control plan.

This standard defines the engineering requirements that must be monitored through steady state production to insure customer expectations are met.

1.2 Applicability. This standard covers all global regions.

1.3 Remarks.

1.3.1 Dimensional Control - Variable Data. Variable Data is collected to insure Characteristics on Parts/Subassemblies that influence or establish fit or function requirements at next point of use, Assembly Plant, are within engineering specifications (for example: Instrument Panel Width to Door Trim, Overhead A-Pillar Contour to A-Pillar Garnish).

1.3.2 Dimensional Control - Attribute Checks. Attribute Data is collected to insure Characteristics on Parts/Subassemblies that are established and controlled during the manufacturing process and internal to the Part/Subassembly are within engineering specifications (for example: Instrument Panel Trim Plate to Radio, Overhead Wiring Harness Location).

1.3.3 Electrical Functionality. Electrical functionality is checked to insure electrical components internal to the Part/Subassembly are functioning within engineering specifications (for example: HVAC fan, radio, Navigation, etc.)

1.3.4 Torque Monitoring. Torque is monitored to insure fasteners used to attach components to the Parts/Assemblies are within engineering specifications.

1.3.5 Component Actuation Efforts. Actuation efforts are monitored to insure components function within engineering specifications.

1.3.6 Component Mutilation. Components are inspected to insure they are not soiled, scratched, torn, or otherwise deformed beyond engineering specifications.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3059	GMW14444	GMW14797	GMW15745
GMW14109	GMW14668	GMW14892	GMW15987

2.3 Additional References.

- CG2779 - Door Trim Supplier Steady State Part Monitoring Requirements.

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- GM1925, GM Fixture Standards.
- Warranty Spill Prevention Report.

3 Requirements

3.1 System/Subsystem/Component/Part Definition. Not applicable.

3.1.1 Appearance. Not applicable.

3.1.2 Content.

3.1.2.1 Physical Content. Not applicable.

3.1.2.2 Functional Content. Not applicable.

3.1.3 Ambient Environment. Not applicable.

3.1.4 Interfaces. Not applicable.

3.1.5 Usage Definition. Not applicable.

3.2 Product Characteristics. Not applicable.

3.2.1 Performance Requirements. Not applicable.

3.2.2 Physical Characteristics. Not applicable.

3.2.2.1 Dimensions and Capacity. Not applicable.

3.2.2.2 Mass Properties. Not applicable.

3.2.3 Reliability. Not applicable.

3.2.3.1 Reliability Evaluation Point. Not applicable.

3.2.3.2 Reliability Requirements. Not applicable.

3.2.4 Serviceability. Not applicable.

3.2.5 User System/Subsystem/Component/Part Interface. Not applicable.

3.3 Design and Construction. Not applicable.

3.3.1 Materials, Processes and Parts Selection Guidelines. Not applicable.

3.3.1.1 Material Guidelines. Not applicable.

3.3.1.2 Processes Guidelines. Not applicable.

3.3.1.3 Parts Guidelines. Not applicable.

3.3.2 Design Guidelines and Constraints. Not applicable.

3.3.3 Identification and Marking. Not applicable.

3.3.4 Workmanship. Not applicable.

3.3.5 Interchangeability. Not applicable.

3.4 Documentation. Not applicable.

3.5 Support of System/Subsystem/Component/Part After Sale. Not applicable.

3.6 System/Subsystem/Component/Part Operator Training. Not applicable.

3.7 System/Subsystem/Component/Part Characteristics. Not applicable.

3.7.1 System/Subsystem/Component/Part Definition. Not applicable.

3.8 Frequency of Checks. Frequency of checks is to be defined in the component control plan and approved by GM Supplier Quality unless otherwise stated in this standard.

3.9 Dimensional Control - Variable Data. Variable Data must be collected for all Key Product Characteristic (KPC), Product Quality Characteristic (PQC), and Process Modeling Point (PMP) points specified in the Part/Subassembly Detail Drawing and/or Measurement Point files. Variable Data is to be submitted to GM per GMW15745 Dimensional Engineering Requirements. Checking fixtures are to be designed to collect Variable Data per GM1925 GM Fixture Standards. This document can be found through GM Supply Power > LOGIN > Document Library > Supplier Quality > Procedures and Forms > GM1925 GM Fixture Standards.

Note: Coordinate Measuring Machine (CMM)/Non-Contact measurement equipment is not required for advanced problem solving.

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The Supplier is responsible for interface problem solving.

3.10 Dimensional Control - Attribute Checks. Attribute Checks are to be performed on all dimensional characteristics established and controlled during the manufacturing process and internal to the Part/Subassembly and specified with a feature control frame in the Part/Subassembly Detail Drawing. Attribute Checks are in-process/in-station visual or go-no go checks. No data record or data submission to GM required unless specified by Supplier Quality in the Part/Subassembly Control Plan.

3.11 Electrical Functionality. Electrical functionality is to be checked on 100% of the supplier's parts for all electrical components internal to the Part/Subassembly unless otherwise specified by Supplier Quality in the Part/Subassembly Control Plan. This requirement includes, but is not limited to: Control Switches, Door Modules, Lamps, Wiring Harnesses, etc.

3.12 Torque Monitoring. Torque is to be monitored on fasteners attaching the following components to the Part/Subassembly:

- Door Pull Handle.
- Door Pull Cup.
- Door Trim Bracket.

No data record or data submission to GM required unless specified by Supplier Quality in the Part/Subassembly Control Plan.

3.13 Component Actuation Efforts. Component Actuation efforts are to be monitored on the following components:

- Door Release Handle.
- Articulating Map Pocket/Storage Compartment.
- HVAC Outlets.
- Cup Holders.
- Sun Shades.
- Electrical Switches.

No data record or data submission to GM required unless specified by Supplier Quality in the Part/Subassembly Control Plan.

3.14 Component Mutilation. Part/Subassemblies are to be visually inspected to insure they are not soiled, scratched, torn, or otherwise deformed beyond engineering specifications.

3.15 Variable Data Template. Figure 1 contains the initial variable data collection points. The actual program specific points will be developed by the program execution team. The Dimensional Program Manager (DPM) will lead this activity with support from the component Dimensional Systems Engineer (DSE) and measurement point group.

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