GM	WORLDWIDE ENGINEERING STANDARDS	General Specification	GMW15291

Vehicle Stone Chip Rating Scale – Front Lower Body

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 the rating scale is to allow comparison between vehicles and consistency between personnel. It is important to recognize that rating stone chipping involves perception of an objectionable surface and much of the judgment is subjective. In developing the stone chip scales, an attempt has been made to provide some objective measures that will guide subjective judgment.

1.2 Applicability. Durability Test Vehicles with Corrosion exposure per GMW8738.

1.3 Remarks. The Stone Chip Rating Scale Guidelines contain stone chip rating scales, rating guidelines, and photographs for the determination of stone chip severity on exterior vehicular body parts, including both plastic and metallic body panels and plastic trim and fascias. It is intended that the scales are used for both corporate chip inspections, as well as field surveys. See 3.1.1.

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	GMW14501	GMW15292	GMW15294
GMW8738 (ID)	GMW15290	GMW15293	

(ID) = This standard is limited to internal distribution within General Motors and shall not be distributed outside this company. Contact the GM Lead Engineer for further instructions.

3 Requirements

3.1 Using the Rating Scales. The stone chip rating scale reflects the various degrees of stone chipping commonly found on vehicle body panels and trim, and ranks them on a scale of three (3) to ten (10). A rating of three (3) represents severe and extensive chipping, while a rating of ten (10) indicates no chipping at all. The photographic guidelines associated with this scale include examples of all rating levels from ten (10) through three (3).

3.1.1 Guideline Arrangement. The Guidelines are arranged in five stand-alone documents, each covering a different area of the body.

- Fascia behind Wheel (GMW15290)
- Front Lower Body (GMW15291)
- Hood (GMW15292)
- Leading Edge (GMW15293)
- Lower Side Flare (GMW15294)

Note: For further information, contact General Motors (GM) Corrosion Engineering.

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3.1.1.1 Front Lower Body Rating Scale. Use this rating scale when rating stone impingement damage on the front lower body areas behind the front tire (e.g., fenders, rockers). Locate the worst area on the panel or panel section being rated. Compare this area to the series of photographs (Figure A1 through Figure A8) in Appendix A and select the comparable level for the rating.

4 Validation

4.1 General. This rating scale, along with the four additional rating scales defined in 3.1.1 Guideline Arrangement, supports the stone impact evaluation for the GMW14501 Global Self-Induced Gravel Chipping and Proving Ground General Durability Road Test Procedures.

Note: Be advised that other stone chip rating scales do exist (e.g., GMW14700, SAE J400), but that these other scales are more applicable to the evaluation of flat panels tested in a laboratory gravelometer.

4.2 Validation Cross Reference Index. Not applicable.

4.3 Supporting Paragraphs. Not applicable.

5 Provisions for Shipping

Not applicable.

6 Notes

6.1 Glossary. Not applicable.

6.2 Acronyms, Abbreviations, and Symbols.

GM General Motors

GSSLT Global Subsystem Leadership Team

SAE SAE International

7 Additional Paragraphs

7.1 All parts or systems supplied to this standard must comply with the requirements of GMW3059, **Restricted and Reportable Substances.**

8 Coding System

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

GMW15291

9 Release and Revisions

This standard was originated in April 2006. It was first approved by the Global Laboratory Corrosion Testing Harmonization Team in September 2006. It was first published in July 2007.

Issue	Publication Date	Description (Organization)
1	JUL 2007	Initial publication.
2	DEC 2012	5 Year Refresh – Minor wording changes. (Corrosion Global Subsystem Leadership Team)
3	AUG 2017	Updated template, references and content for 5 year refresh. (Materials – Corrosion Global Subsystem Leadership Team (GSSLT))

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