



## Cold Slam Test

### 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.** Evaluate cold slam durability for exterior attached components.

**1.2 Foreword.** Not applicable.

**1.3 Applicability.** This standard describes a test procedure to determine the cold slam resistance of exterior automotive moldings attached with pressure sensitive tape to test panels coated with the exterior automotive paint system.

### 2 References

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

#### 2.1 External Standards/Specifications.

SAE 1008

#### 2.2 GM Standards/Specifications.

GMW15201

### 3 Resources

#### 3.1 Facilities.

**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.

**3.2.1** Refer to Appendix A, Figures A1 through A14 for fixture details.

**3.2.2** Cold box or room capable of maintaining -30 °C.

**3.3 Test Vehicle/Test Piece.** Not applicable.

**3.4 Test Time.** Not applicable.

**3.5 Test Required Information.** Not applicable.

**3.6 Personnel/Skills.** Not applicable.

### 4 Procedure

#### 4.1 Preparation.

**4.1.1** Cold Rolled Steel (CRS) Panels 100 mm × 300 mm × 0.90 mm, SAE 1008 painted one (1) side with current exterior paint.

**4.1.2** The length of the molding specimen shall be 150 mm minimum with 12.7 mm wide pressure sensitive tape. Prior to tape application, molding shall be wiped with a 1:1 dilution of isopropyl alcohol and distilled water. Solvent shall be wiped dry with a lint free clean cloth, and air dried prior to application of tape.

**4.1.3** Laminate double-coated foam tape (non-liner side) to molding.

**4.1.4** Roll one (1) time with a 6.8 kg roller at a rate of approximately 30 cm/minute.

**4.1.5** Painted panels shall be wiped with a 1:1 dilution of isopropyl alcohol and distilled water. Solvent shall be wiped dry with a lint free clean cloth, and air dried prior to application of tape. Painted panels shall not be reused.

**4.1.6** Remove the tape release liner and apply to the painted test panel. Roll two (2) times in same direction with a 6.8 kg roller a rate of approximately 30 cm/minute.

## **4.2 Conditions.**

**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 Test Procedure.**

**4.3.1.1** The fixture and test panels are to be conditioned at the specified temperature for a minimum of 4 h.

**4.3.1.2** The test panel is put in slide on the hinged door with the moldings horizontal.

**4.3.1.3** The hinged door is lifted from the vertical 90° to horizontal and then released for free fall. The number of slams shall be per GMW15201. Base of fixture to be fixed during test.

**4.3.1.4** Record degree of molding separation from test panel after each slam. Partial or complete separation is considered failure.

## **5 Data**

**5.1 Calculations.** Not applicable.

**5.2 Interpretation of Results.** Not applicable.

**5.3 Test Documentation.** Not applicable.

## **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.** Not applicable.

**7.2 Acronyms, Abbreviations, and Symbols.**

**CRS** Cold Rolled Steel

**SAE** SAE International

## **8 Coding System**

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

Test to GMW16982

## **9 Release and Revisions**

This standard was originated in June 2013. It was first approved by the Adhesives Global Subsystem Leadership Team in August 2013. It was first published in August 2013.

| Issue | Publication Date | Description (Organization) |
|-------|------------------|----------------------------|
| 1     | AUG 2013         | Initial publication.       |

## Appendix A

Figure A1: Overall Cold Slam Fixture

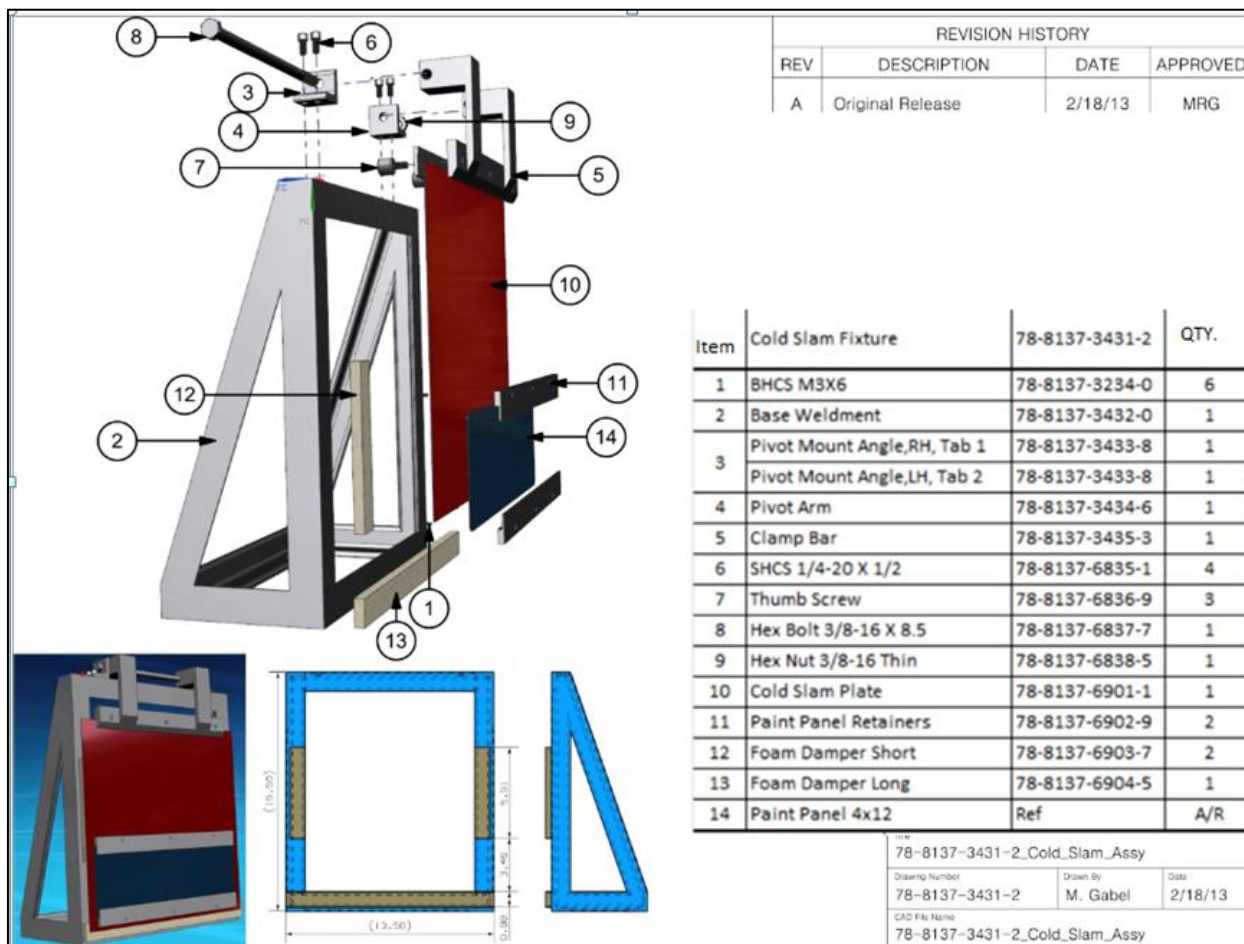
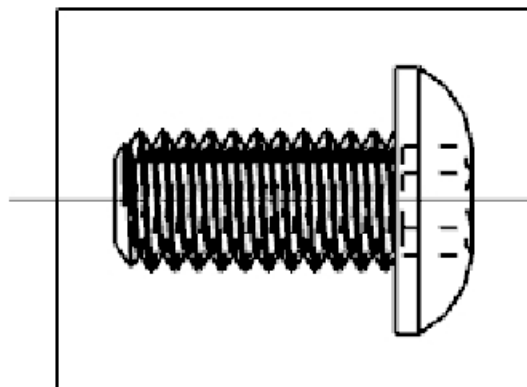
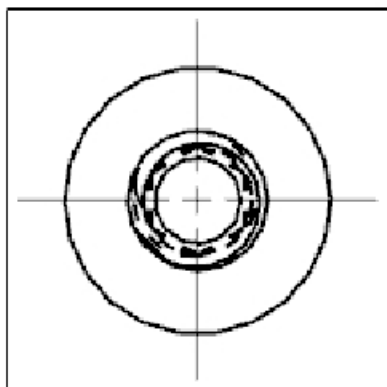


Figure A2: Item 1 Referenced in Fixture Drawing



Mat'l :  
BHCS, M3 x 6  
McMaster Carr  
92095A179  
5.06 per Pk of 100

|                                           |                      |                 |
|-------------------------------------------|----------------------|-----------------|
| Title<br>78-8137-3234-0_BHCS_M3X6         |                      |                 |
| Drawing Number<br>78-8137-3234-0          | Drawn By<br>M. Gobel | Date<br>11/7/12 |
| CAD File Name<br>78-8137-3234-0_BHCS_M3X6 |                      |                 |