

TP-206-08
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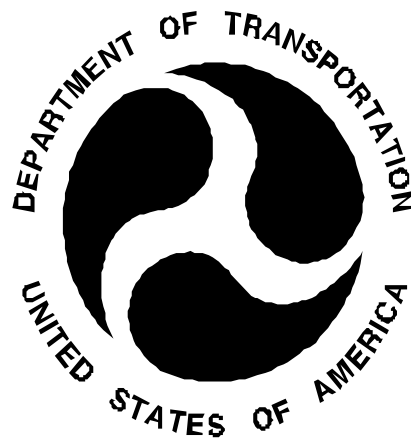
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

LABORATORY TEST PROCEDURE

FOR

FMVSS No. 206

Door Locks and Door Retention Components



U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
Mail Code: NVS-220, W43-481
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OVSC TEST PROCEDURE No. 206
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**REVISION CONTROL LOG
FOR OVSC LABORATORY
TEST PROCEDURES**

TP-206

TEST PROCEDURE		FMVSS 206		DESCRIPTION
REV. No.	DATE	AMENDMENT	EFFECTIVE DATE	
00				Original release signed by O.D.
01				
02				
03				
04				
05				
06		3/16/98		
07	2/6/07	72FR5385	September 1, 2009	Test procedure upgrade for bench level door latch and hinge tests per amendment, including extension to sliding door latches, and including reference to inertial load and sliding door transverse load test procedures.
08	2/19/10	75FR7370	February 19, 2010	Minor revisions, update standardized format, and updating of applicability per amendment.
09				
10				
11				
12				

1. PURPOSE AND APPLICATION

This document is provided by the National Highway Traffic Safety Administration (NHTSA), Office of Vehicle Safety Compliance (OVSC) for the purpose of presenting procedures for uniform testing and providing suggestions for the use of specific equipment for contracted testing laboratories. It contains requirements based on the test procedures specified in the Federal Motor Vehicle Safety Standard(s) (FMVSS) and any applicable safety Regulations. The OVSC test procedures include requirements that are general in scope to provide flexibility for contracted laboratories to perform compliance testing and are not intended to limit or restrain a contractor from developing or utilizing any testing techniques or equipment which will assist in procuring the required compliance test data. These test procedures do not constitute an endorsement or recommendation for use of any particular product or testing method.

Prior to conducting compliance testing, contracted laboratories are required to submit a detailed test procedure to the Contracting Officer's Technical Representative (COTR) to demonstrate concurrence with the OVSC laboratory test procedure and the applicable FMVSS. If any contractor views any part of an OVSC laboratory test procedure to be in conflict with a FMVSS or observes deficiencies in a laboratory test procedure, the contractor is required to advise the COTR and resolve the discrepancy prior to the start of compliance testing or as soon as practicable. The contractor's test procedure must include a step-by-step description of the methodology and detailed check-off sheets. Detailed check-off sheets shall also be provided for the testing instrumentation including a complete listing of the test equipment with make and model numbers. The list of test equipment shall include instrument accuracy and calibration dates. All equipment shall be calibrated in accordance with the manufacturer's instructions. There shall be no contradictions between the laboratory test procedure and the contractor's in-house test procedure. Written approval of the in-house test procedures shall be obtained from the COTR before initiating the compliance test program.

NOTE: The OVSC Laboratory Test Procedures, prepared for the limited purpose of use by independent laboratories under contract to conduct compliance tests for the OVSC, are not rules, regulations or NHTSA interpretations regarding the meaning of a FMVSS. The laboratory test procedures are not intended to limit the requirements of the applicable FMVSS(s). In some cases, the OVSC laboratory test procedures do not include all of the various FMVSS minimum performance requirements. In addition, the laboratory test procedures may specify test conditions that are less severe than the minimum requirements of the standard. The laboratory test procedures may be modified by the OVSC at any time without notice, and the COTR may direct or authorize contractors to deviate from these procedures, as long as the tests are performed in a manner consistent with the standard itself and within the scope of the contract. Laboratory test procedures may not be relied upon to create any right or benefit in any person. Therefore, compliance of a vehicle or item of motor vehicle equipment is not necessarily guaranteed if the manufacturer limits its certification tests to those described in the OVSC laboratory test procedures.

2. GENERAL REQUIREMENTS

Federal Motor Vehicle Safety Standard (FMVSS) No. 206 establishes minimum performance requirements for motor vehicle door locks and door retention components. The purpose of Standard 206 is to minimize the likelihood of occupants being thrown from a vehicle as a result of impact. The standard applies to all side and back doors on passenger cars, multipurpose passenger vehicles, and trucks, and buses with a gross vehicle weight rating (GVWR) of 4,536 kg or less, that lead directly into a compartment that contains one or more seating accommodations and the associated door components. The standard does not apply to folding doors, roll-up doors, detachable doors, bus doors used only for emergency egress purposes and labeled accordingly and on bus doors to accommodate a permanently attached wheelchair lift system that when the device is in the retracted position, the lift platform retracts to a vertical orientation parallel to and in close proximity with the interior surface of the lift door and in that position, the platform completely covers the doorway opening, has fixed attachments to the vehicle and provides a barricade to the doorway. The bus wheelchair lift door must be linked to an alarm system consisting of either a flashing visible signal located in the driver's compartment or an alarm audible to the driver that is activated when the door is not fully closed and the vehicle ignition is activated.

This procedure provides requirements for compliance testing of motor vehicle door locks and door retention components to the load test requirements of FMVSS No. 206. The tables below summarize the load test requirements specified in FMVSS No. 206. As noted below, detailed test procedure information for the full vehicle and door only inertial load test requirements, and for the full vehicle sliding door transverse load test requirements are contained in test procedures TP-206I-01 and TP-206S-01, respectively.

2. GENERAL REQUIREMENTS....Continued

A. Hinged Doors

Test Requirement	FMVSS 206 Section	Test Procedure Section
Door Latch Load Test One - Fully Latched 11,000 N - Secondary Latched 4,500 N	S4.1.1.1	12.2A & B
Door Latch Load Test Two - Fully Latched 9,000 N - Secondary Latched 4,500 N	S4.1.1.2	12.2C & D
Door Latch Load Test Three ¹ - Fully Latched 9,000 N	S4.1.1.3	12.2E
Door Latch Inertial Load Test - Vehicle Test - Door Only Test	S4.1.1.4	See TP-206I-01
Door Hinge ² - Longitudinal Load 11,000 N - Transverse Load 9,000 N - Back Door - Load Test One 11,000 N - Load Test Two 9,000 N - Load Test Three 9,000 N ¹	S4.1.2.1	12.4

¹Back doors that open upward.

²In some circumstances, it may be necessary to conduct evaluations of individual hinges in a hinge system. In that case, the hinge must bear a load proportional to the total number of hinges in the hinge system. (For example, an individual hinge in a two-hinge system must be capable of withstanding 50% of the load requirements of the total system).

2. GENERAL REQUIREMENTS....Continued

B. Sliding Side Doors

Test Requirement	FMVSS 206 Section	Test Procedure Section
Door Latch Load Test One - Fully Latched 11,000 N - Secondary Latched 4,500 N (if equipped)	S4.2.1.1	12.3A & B
Door Latch Load Test Two - Fully Latched 9,000 N - Secondary Latched 4,500 N (if equipped)	S4.2.1.2	12.3C & D
Door Latch Inertial Load Test - Vehicle Test - Door Only Test	S4.2.1.3	See TP-206I-01
Vehicle Transverse Load Test - Door Load 18,000 N	S4.2.2	See TP-206S-01

The test methods and procedures are also based on the following Society of Automotive Engineers (SAE) standards:

- A. SAE J839b, "Passenger Car Side Door Latch Systems", June 1991
- B. SAE J934, "Vehicle Passenger Door Hinge Systems", July 1982

2. GENERAL REQUIREMENTS....Continued

2.1 APPLIED TEST LOADS

The loads to be applied during the conduct of each test are specified in the following table. The applied loads specified are greater than those specified in FMVSS No. 206 in order to assure that the devices are at least exposed to the required load, while also providing an indication of the degree of margin in the strength of the items under test. The applied loads may be exceeded if additional test data is desired, as directed by the COTR. For example, for latch testing, the tests are normally conducted until latch failure (i.e. separation of the latch and striker). The PASS/FAIL determination shall be based only upon the required loads specified in FMVSS No. 206, which are also provided in the table shown below.

Hinged Door Test Requirement	Required Load (N)	Applied Load (N)
Door Latch Load Test One		
- Fully Latched	11,000 N	13,800
- Secondary Latched	4,500 N	7,000
Door Latch Load Test Two		
- Fully Latched	9,000 N	11,600
- Secondary Latched	4,500 N	7,000
Door Latch Load Test Three ¹		
- Fully Latched	9,000 N	11,600
Door Hinge ²		
- Longitudinal Load	11,000 N	13,800
- Transverse Load	9,000 N	11,600
- Back Door		
- Load Test One	11,000 N	13,800
- Load Test Two	9,000 N	11,600
- Load Test Three ¹	9,000 N	11,600
Sliding Side Door Test Requirement	Required Load (N)	Applied Load (N)
Door Latch Load Test One		
- Fully Latched	11,000 N	13,800
- Secondary Latched (if equipped)	4,500 N	7,000
Door Latch Load Test Two		
- Fully Latched	9,000 N	11,600
- Secondary Latched (if equipped)	4,500 N	7,000

¹Back doors that open upward.

²In some circumstances, it may be necessary to conduct evaluations of individual hinges in a hinge system. In that case, the hinge must bear a load proportional to the total number of hinges in the hinge system. (For example, an individual hinge in a two-hinge system must be capable of withstanding 50% of the load requirements of the total system).

2. GENERAL REQUIREMENTS....Continued

METRIC SYSTEM OF MEASUREMENT

Section 5164 of the Omnibus Trade and Competitiveness Act (Pub. L. 100-418) establishes that the metric system of measurement is the preferred system of weights and measures for trade and commerce in the United States. Executive order 12770 directs Federal agencies to comply with the Act by converting regulatory standards to the metric system after September 30, 1992. In a final rule published on March 15, 1990 (60 FR 13639), NHTSA completed the first phase of metrication, converting English measurements in several regulatory standards to the metric system. Since then, metrication has been applied to other regulatory standards (63 FR 28912).

Accordingly, the OVSC laboratory test procedures include revisions to comply with governmental directives in using the metric system. Regulatory standards converted to metric units are required to use metric measurements in the test procedures, whereas standards using English units are allowed to use English measurements or to use English measurements in combination with metric equivalents in parentheses.

All final compliance test reports are required to include metric measurements for standards using metrication.

NOTE: The methodology for rounding measurement in the test reports shall be made in accordance with ASTM E29-06b, "Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications."

3. SECURITY

The contractor shall provide appropriate security measures to protect the OVSC test vehicles and Government Furnished Property (GFP) from unauthorized personnel during the entire compliance testing program. The contractor is financially responsible for any acts of theft and/or vandalism which occur during the storage of test vehicles and GFP. Any security problems which arise shall be reported by telephone to the Industrial Property Manager (IPM), Office of Acquisition Management, within two working days after the incident. A letter containing specific details of the security problem shall be sent to the IPM (with copy to the COTR) within 48 hours.

The contractor shall protect and segregate the data that evolves from compliance testing before and after each vehicle test. No information concerning the vehicle safety compliance testing program shall be released to anyone except the COTR, unless specifically authorized by the COTR or the COTR's Division Chief.

NOTE: No individuals, other than contractor personnel directly involved in the compliance testing program or OVSC personnel, shall be allowed to witness any vehicle or equipment item compliance test or test dummy calibration unless specifically authorized by the COTR.

4. GOOD HOUSEKEEPING

Contractors shall maintain the entire vehicle compliance testing area, fixtures and instrumentation in a neat, clean and painted condition with test instruments arranged in an orderly manner consistent with good test laboratory housekeeping practices.

5. TEST SCHEDULING AND MONITORING

The contractor shall submit a test schedule to the COTR prior to conducting the first compliance test. Tests shall be completed at intervals as required in the contract. If not specified, the first test shall be conducted within 6 weeks after receiving the first delivered unit. Subsequent tests shall be completed in no longer than 1 week intervals unless otherwise specified by the COTR.

Scheduling of tests shall be adjusted to permit vehicles (or equipment, whichever applies) to be tested to other FMVSSs as may be required by the OVSC. All compliance testing shall be coordinated with the COTR in order to allow monitoring by the COTR and/or other OVSC personnel if desired. The contractor shall submit a monthly test status report and a vehicle status report (if applicable) to the COTR. The vehicle status report shall be submitted until all vehicles are disposed of. The status report forms are provided in the forms section.

6. TEST DATA DISPOSITION

The Contractor shall make all preliminary compliance test data available to the COTR on location within four hours after the test. Final test data, including digital printouts and computer generated plots (if applicable), shall be available to the COTR in accordance with the contract schedule or if not specified within two working days. Additionally, the Contractor shall analyze the preliminary test results as directed by the COTR.

The test data shall be retained by the contractor for a minimum of 3 years after conclusion of each delivery order, purchase order, etc.

The contractor shall protect and segregate the data that evolves from compliance testing before and after each test.

TEST DATA LOSS

A. INVALID TEST DESCRIPTION

An invalid compliance test is one, which does not conform precisely to all requirements/specifications of the OVSC Laboratory Test Procedure and Statement of Work applicable to the test.

B. INVALID TEST NOTIFICATION

The Contractor shall notify NHTSA of any test not meeting all requirements/specifications of the OVSC Laboratory Test Procedure and Statement

6. TEST DATA DISPOSITION.....Continued

of Work applicable to the test, by telephone, within 24 hours of the test and send written notice to the COTR within 48 hours of the test completion.

C. RETEST NOTIFICATION

The Contracting Officer of NHTSA is the only NHTSA official authorized to notify the Contractor that a retest is required. The retest shall be completed within 2 weeks after receipt of notification by the Contracting Officer that a retest is required.

D. WAIVER OF RETEST

NHTSA, in its sole discretion, reserves the right to waive the retest requirement. This provision shall not constitute a basis for dispute over the NHTSA's waiving or not waiving any requirement.

E. TEST REPORT

No test report is required for any test that is determined to be invalid unless NHTSA specifically decides, in writing, to require the Contractor to submit such report. The test data from the invalid test must be safeguarded until the data from the retest has been accepted by the COTR. The report and other required deliverables for the retest vehicle are required to be submitted to the COTR within 3 weeks after completion of the retest.

F. DEFAULT

The Contractor is subject to the default and subsequent reprocurement costs for non-delivery of valid or conforming tests (pursuant to the Termination For Default clause in the contract).

G. NHTSA'S RIGHTS

None of the requirements herein stated shall diminish or modify the rights of NHTSA to determine that any test submitted by the Contractor does not conform precisely to all requirements/specifications of the OVSC Laboratory Test Procedure and Statement of Work applicable to the test.

7. GOVERNMENT FURNISHED PROPERTY (GFP)

GFP consists of test items as specified in the applicable contract. The GFP is authorized by contractual agreement. The contractor is responsible for the following.

TEST SAMPLE IDENTIFICATION AND STORAGE

Upon receipt at the laboratory, the items to be tested shall be assigned laboratory test group numbers and shall also be tagged, when known, with the vehicle model year, make and model, location (in vehicle), and sample name and part number.

EXAMPLE: 2006 XYZ Safe Rider 2-door coupe left front door hinge

An inventory shall be made of the number, name and condition of samples received.

The test samples shall be stored in a dry, clean, dust free area specifically designated by the Laboratory Project Manager.

8. CALIBRATION OF TEST INSTRUMENTS

Before the Contractor initiates the vehicle safety compliance test program, a test instrumentation calibration system must be implemented and maintained in accordance with established calibration practices. The calibration system shall include the following as a minimum:

- A. Standards for calibrating the measuring and test equipment shall be stored and used under appropriate environmental conditions to assure their accuracy and stability.
- B. All measuring instruments and standards shall be calibrated by the Contractor, or a commercial facility, against a higher order standard at periodic intervals not exceeding 12 months for instruments and 12 months for the calibration standards except for static types of measuring devices such as rulers, weights, etc., which shall be calibrated at periodic intervals not to exceed two years. Records, showing the calibration traceability to the National Institute of Standards and Technology (NIST), shall be maintained for all measuring and test equipment.

Accelerometers shall be calibrated every twelve months or after a test failure or after any indication from calibration checks that there may be a problem with the accelerometer whichever occurs sooner.

- C. All measuring and test equipment and measuring standards shall be labeled with the following information:
 - 1. Date of calibration
 - 2. Date of next scheduled calibration
 - 3. Name of the technician who calibrated the equipment

8. CALIBRATION OF TEST INSTRUMENTS.....Continued

- D. A written calibration procedure shall be provided by the Contractor, which includes as a minimum the following information for all measurement and test equipment:
1. Type of equipment, manufacturer, model number, etc.
 2. Measurement range
 3. Accuracy
 4. Calibration interval
 5. Type of standard used to calibrate the equipment (calibration traceability of the standard must be evident).
 6. The actual procedures and forms used to perform the calibrations.
- E. Records of calibration for all test instrumentation shall be kept by the Contractor in a manner that assures the maintenance of established calibration schedules.
- F. All such records shall be readily available for inspection when requested by the COTR. The calibration system shall need the acceptance of the COTR before vehicle safety compliance testing commences.
- G. Test equipment shall receive a system functional check out using a known test input immediately before and after the test. This check shall be recorded by the test technician(s) and submitted with the final report.
- H. The Contractor may be directed by NHTSA to evaluate its data acquisition system.

Further guidance is provided in the International Standard ISO 10012-1, "Quality Assurance Requirements for Measuring Equipment" and American National Standard ANSI/NCSL Z540-1, "Calibration Laboratories and Measuring and Test Equipment General Requirements."

NOTE: In the event of a failure to meet the standard's minimum performance requirements additional calibration checks of some critically sensitive test equipment and instrumentation may be required for verification of accuracy. The necessity for the calibration will be at the COTR's discretion and shall be performed without additional cost.

9. PHOTOGRAPHIC DOCUMENTATION

Digital Photographs

The contractor shall take digital photographs of the test execution procedures. Photographs shall be taken in color and contain clear images. A tag, label or placard identifying the test item, NHTSA number (if applicable) and date shall appear in each photograph and must be legible. Each photograph shall be labeled as to the subject matter. The required resolution for digital photographs is a minimum of 1,600 x 1,200 pixels. Digital photographs are required to be created in color and in a JPG format. Glare or light from any illuminated or reflective surface shall be minimized while taking photographs.

The test reports shall include enough photographs to describe the testing in detail and shall be organized in a logical succession of consecutive pictures. The digital photographs shall be included in the test report as 203 mm x 254 mm or 215.9 mm x 279 mm (8 x 10 or 8½ x 11 inch) pictures. All photographs are required to be included in the test report in the event of a test failure. Any failure must be photographed at various angles to assure complete coverage. Upon request, the photographs shall be sent to the COTR on a CD or DVD and saved in a “read only” format to ensure that the digital photographs are the exact pictures taken during testing and have not been altered from the original condition.

9.1 Photographic Views

Each final test report shall include digital photographs of the test setup used for each phase of testing, including pre-test and post-test photographs of the item being tested. The photographs shall include a placard in view that identifies the test laboratory, the test date, test vehicle year, make and model, the specific FMVSS 206 test, the test item name and part number, and the words “Pre-Test” or “Post-Test” as appropriate.

If a test failure occurs, additional digital photographs shall be taken to document each test failure.

9.2 Video Coverage

9.2.1 Door Latch and Hinge Load Test Video Coverage

Each latch and hinge load test shall be recorded with a digital video camera fully documenting the entire load test. The video coverage shall include a placard in view just before the start of each test that identifies the test laboratory, the test date, test vehicle year, make and model, the specific FMVSS 206 test, and the test item name and part number.

10. DEFINITIONS

Auxiliary Door Latch is a latch equipped with a fully latched position, with or without a secondary latched position, and fitted to a door or door system equipped with a primary door latch system.

Auxiliary Door Latch System consists of door latches and strikers other than those associated with the primary latch system.

Back Door is a door or door system on the back end of a motor vehicle through which passengers can enter or depart the vehicle or cargo can be loaded or unloaded. It does not include:

A trunk lid; or

A door or window composed entirely of glazing material and whose latches and/or hinge systems are attached directly to the glazing material.

Body Member is that portion of the hinge normally affixed to the body structure.

Door Hinge System is one or more hinges used to support a door.

Door Latch System consists of latches and strikers installed on a door system.

Door Member is that portion of the hinge normally affixed to the door structure and constituting the swinging member.

Door System is the door, latch, striker, hinges, sliding track combinations and other door retention components on a door and its surrounding doorframe. The door system of a double door includes both doors.

Double Door is a system of two doors where the front door or wing door opens first and connects to the rear door or bolted door, which opens second.

Folding Door is a movable barrier, which will close off an entranceway to a bus, multipurpose passenger vehicle or truck, consisting of two or more hinge panels that swing, slide, or rotate; does not have a striker and latch assembly

Fork-bolt is the part of the latch that engages and retains the striker when in a latched position.

Fork-bolt Opening Direction is the direction opposite to that in which the striker enters the latch to engage the fork-bolt.

Fully Latched Position is the coupling condition of the latch that retains the door in a completely closed position.

Hinge is a device system used to position the door relative to the body structure and control the path of the door swing for passenger ingress and egress.

10. DEFINITIONS.....Continued

Hinge Pin is that portion of the hinge normally interconnecting the body and door members and establishing the swing axis.

Latch is a device employed to maintain the door in a closed position relative to the vehicle body with provisions for deliberate release (or operation).

Primary Door Latch is a latch equipped with both a fully latched position and a secondary latched position and is designated as a “primary door latch” by the manufacturer (by the time it certifies the vehicle and may not thereafter alter the designation).

Primary Door Latch System consists of a primary door latch(s) and a striker(s).

Secondary Latched Position refers to the coupling condition of the latch that retains the door in a partially closed position.

Side Front Door is a door that, in a side view, has 50 percent or more of its opening area forward of the rearmost point on the driver’s seat back, when the seat back is adjusted to its most vertical and rearward position.

Side Rear Door is a door that, in a side view, has 50 percent or more of its opening area to the rear of the rearmost point on the driver’s seat back, when the driver’s seat is adjusted to its most vertical and rearward position.

Striker is a device with which the latch engages to maintain the door in the fully latched or secondary latched position.

Trunk Lid is a movable body panel that provides access from outside the vehicle to a space wholly partitioned from the occupant compartment by a permanently attached partition or fixed or fold-down seat back.

11. PRETEST REQUIREMENTS

11.1 IN-HOUSE TEST PROCEDURE

Every contractor is required to submit a detailed in-house test procedure to the COTR before initiating the compliance test program. The procedure must include a step-by-step description of the methodology to be used. The contractor's test procedure shall contain a detailed check-off sheet and a complete listing of test equipment with makes and model numbers. The list of test equipment shall include instrument accuracy and calibration dates. There shall be no contradictions between the OVSC Laboratory Test Procedure and the contractor's in-house procedure without COTR agreement. The procedures shall cover all aspects of testing from test item receipt to submission of the final report. Written approval of the in-house test procedure and all subsequent revisions shall be obtained from the COTR. The in-house procedure shall include the following:

- A. A step-by-step description of the methodology and test procedure to be used.
- B. A written Quality Control (QC) procedure which shall include calibrations, the data review process, report review, and the people assigned to perform QC per task.
- C. A complete listing of test equipment which shall include instrument accuracy and calibration dates.
- D. Detailed check-off lists to be used during the test and during data review. These lists shall include all test procedure requirements and FMVSS requirements pertaining to the safety standard for which testing is being performed. Each separate check-off sheet shall identify the lab, test date, vehicle and test technicians. These check sheets shall be used to document that all requirements and procedures have been complied with. These sheets shall be submitted with the test report.

11.2 INSTRUMENTATION AND DATA ACQUISITION

11.2.1 Hinged Doors and Sliding Side Doors – Latch System and Hinge Load Testing

Load testing shall use a load cell and data acquisition system providing continuous recording (or discrete measurements recorded at an adequately high sampling rate) for all load tests and shall be capable of providing data accurate to within ± 1 percent up to each of the required test loads of 4,500 N, 9,000 N, and 11,000 N. This does not include the 900 N force on latches during longitudinal loading.

The test system shall be calibrated after contract award, in all load ranges to be used, unless current calibration is less than six months old and covers the entire load ranges to be used.

11. PRETEST REQUIREMENTS....Continued

11.3 TEST CONDITIONS

Unless otherwise specified, all tests and measurements shall be conducted under the following environmental conditions:

- A. Temperature: 75°F ± 15°F
- B. Relative Humidity: 50% ± 10%
- C. Atmospheric Pressure: 28 to 32 inches of mercury

Continuous recording of environmental temperature and relative humidity of the testing area shall be available during all tests. Test samples, unless otherwise specified, shall be stabilized at test room ambient conditions for a period of at least 24 hours immediately prior to testing.

11.4 TEST PERSONNEL PERFORMANCE

Personnel supervising and/or performing the compliance test program shall be thoroughly familiar with the requirements, test conditions, equipment for the test to be conducted, and safety requirements.

11.5 RECORDING OF TEST DATA

Data will be submitted on the Test Data Sheet forms specified for use in the final test report. Data will be typed before the sheets are submitted. One set of Inspection and Test Data sheets shall be completed for each vehicle manufacturer. The following are requirements for each inspection entry:

FOR HINGES –

- A. VEHICLE MANUFACTURER – the manufacturer of the vehicle for which the test samples were intended including address
- B. HINGE MANUFACTURER – include the name and address of manufacturers of hinge assemblies, if known, and if other than the vehicle manufacturer
- C. HINGE MARKINGS – all letters, numbers and trade marks
- D. APPARENT MATERIALS – apparent materials of hinge body, pin, and attaching hardware if present. Material determination is to be by visual observation and magnet. Plated materials are to be scratched in an unstressed area to see base material.

11. PRETEST REQUIREMENTS....Continued

E. DESCRIPTION – include the following:

- (1) Overall dimensions
- (2) Probable method of fabrication
- (3) Whether stamped and bent or cast, etc.

Describe configuration (flat, offset) type of mounting or attachment.

FOR LATCHES –

- A. LATCH MANUFACTURER – same information as for HINGES
- B. LATCH MARKINGS – all letters, numbers and trade marks
- C. APPARENT MATERIALS – same requirements as for HINGES
- D. DESCRIPTION – dimensions, type of mechanism, fabrication and method of attachment

Any unusual or significant observations shall be added on the bottom of the Test Data Sheets. Any spaces not entered on the data forms shall be marked "N/A".

12. COMPLIANCE TEST EXECUTION

12.1 GENERAL REQUIREMENTS

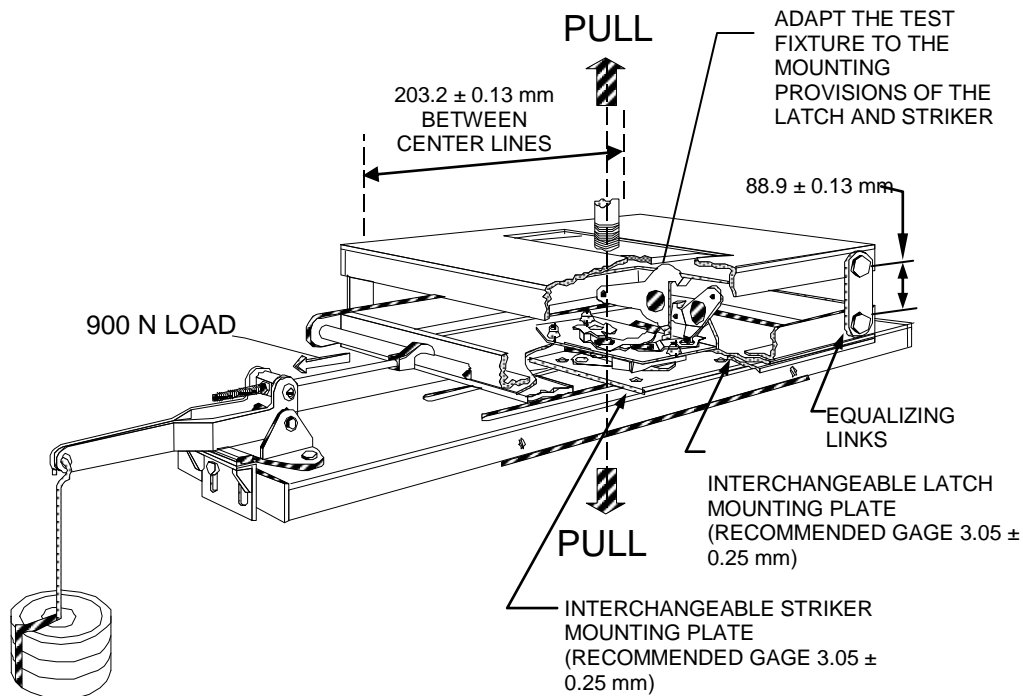
- A. Test fixtures shall be sufficiently stiff to prevent localized stress to the hinge systems, or to latch-striker, especially in transverse pull.
- B. Test fixture and attachment shall be subject to NHTSA approval.
- C. The means of attachment of the sample to the test fixture shall be adequate to prevent failure of the attachment.
- D. If alternate attachment bolt or screw heads are needed, they shall be the same size, shape, and strength as those used in attaching to the vehicle.
- E. Fixture surfaces shall mate at attachment points. Where mounting holes are countersunk on latch and striker, fixture surfaces shall be formed to provide close contact, with correct angle of countersink provided to latch/striker surface and to screw head.
- F. Reinforced test fixturing shall be used for the latch system testing. The fixturing shall be of the same general design as that specified in SAE recommended practice J839. The latch and striker mounting plates will be at least 0.25 inch thick and other parts of the fixturing will be reinforced proportionately. Replacement of these plates when they become distorted through testing to the extent that mounting of the test system (latch/striker) is not feasible shall be the responsibility of the Contractor. Maintenance of these fixtures, if required, shall also be the responsibility of the contractor during the life of the contract.
- G. If needed (typically necessary) the test plate to which the door latch is mounted shall have a striker cut-out configuration similar to the environment in which the door latch will be mounted on normal vehicle doors.

12. COMPLIANCE TEST EXECUTION...Continued

12.2 HINGED DOOR LATCHES

A. Door Latch Load Test One, Fully Latched Position (see Figure 1).

FIGURE 1 - DOOR LATCH – TENSILE TESTING FIXTURE FOR LOAD TEST ONE



- (1) Position latch and striker on the test fixture as shown in Figure 1 such that the tensile force will be applied perpendicular to the face of the latch, and such that the latch and the striker are not compressed against each other.
- (2) Attach the latch and striker to the test fixture as positioned in the preceding step. Align the direction of engagement parallel to the linkage of the fixture.
- (3) Engage latch and striker in the fully latched position.
- (4) Apply a 900 N force to the latch, to load the latch and striker in the latch-opening direction, as shown in Figure 1.
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. latch/striker separation). Record the condition of the test items at the conclusion of the test.

12. COMPLIANCE TEST EXECUTION...Continued

B. Door Latch Load Test One, Secondary Latched Position.

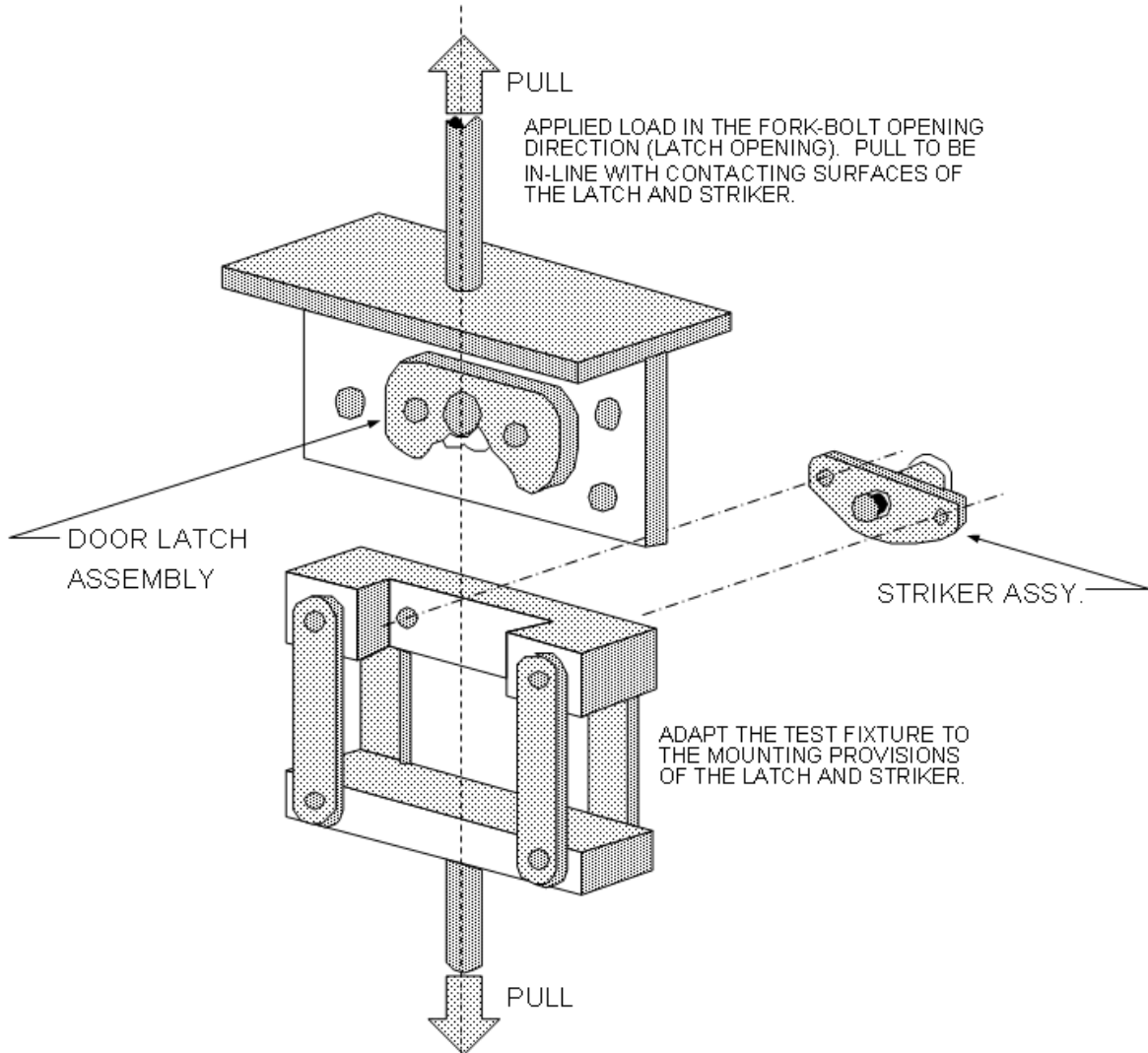
- (1) Position latch and striker on the test fixture as shown in Figure 1 such that the tensile force will be applied perpendicular to the face of the latch, and such that the latch and the striker are not compressed against each other.
- (2) Attach latch and striker to the test fixture as positioned in the preceding step. Align the direction of engagement parallel to the linkage of the fixture.
- (3) Engage latch and striker in secondary latched position.
- (4) Apply a 900 N force to the latch, to load latch and striker in the latch-opening direction, as shown in Figure 1.
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. latch/striker separation). Record the condition of the test items at the conclusion of the test.

C. Door Latch Load Test Two, Fully Latched Position.

- (1) Position latch and striker on the test fixture as shown in Figure 2 such that the tensile force will be applied parallel to the face of the latch and in the fork-bolt opening direction.
- (2) Attach latch and striker to the test fixture as positioned in the preceding step.
- (3) Engage latch and striker in the fully latched position.
- (4) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. latch/striker separation). Record the condition of the test items at the conclusion of the test.

12. COMPLIANCE TEST EXECUTION...Continued

FIGURE 2 – DOOR LATCH – TENSILE TESTING FIXTURE FOR LOAD TEST TWO



12. COMPLIANCE TEST EXECUTION...Continued

D. Door Latch Load Test Two, Secondary Latched Position.

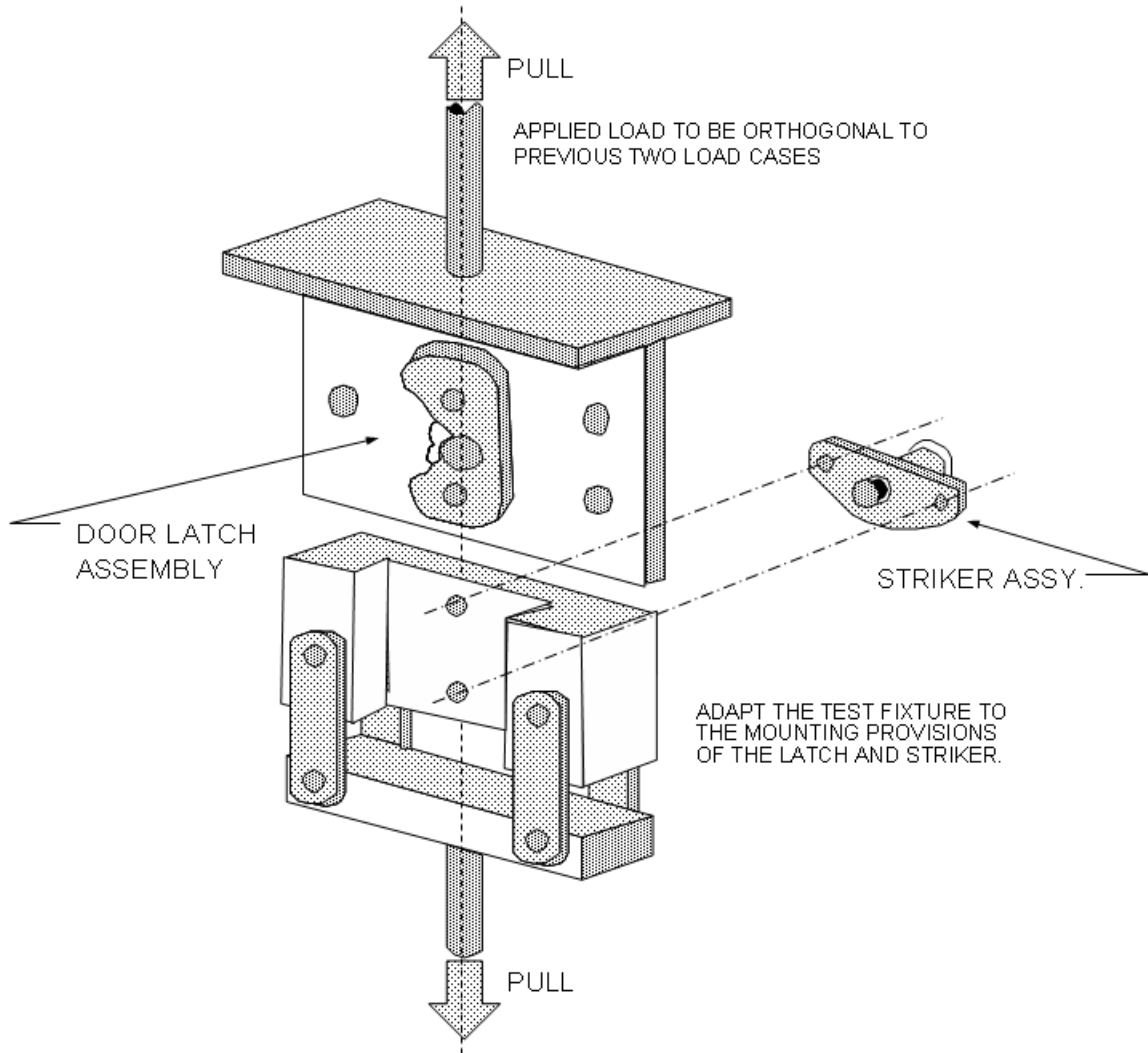
- (1) Position latch and striker on the test fixture as shown in Figure 2 such that the tensile force will be applied parallel to the face of the latch and in the fork-bolt opening direction.
- (2) Attach the latch and striker to the test fixture as positioned in the preceding step.
- (3) Engage latch and striker in secondary latched position.
- (4) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. latch/striker separation). Record the condition of the test items at the conclusion of the test.

E. Door Latch Load Test Three, Fully Latched Position (only for back doors that open upward).

- (1) Position latch and striker on the test fixture as shown in Figure 3 such that the tensile force will be applied in a direction that is orthogonal to the load directions specified in Load Test One and Load Test Two (see Figure 4).
- (2) Attach latch and striker to the test fixture as positioned in the preceding step.
- (3) Engage latch and striker in fully latched position.
- (4) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. latch/striker separation). Record the condition of the test items at the conclusion of the test.

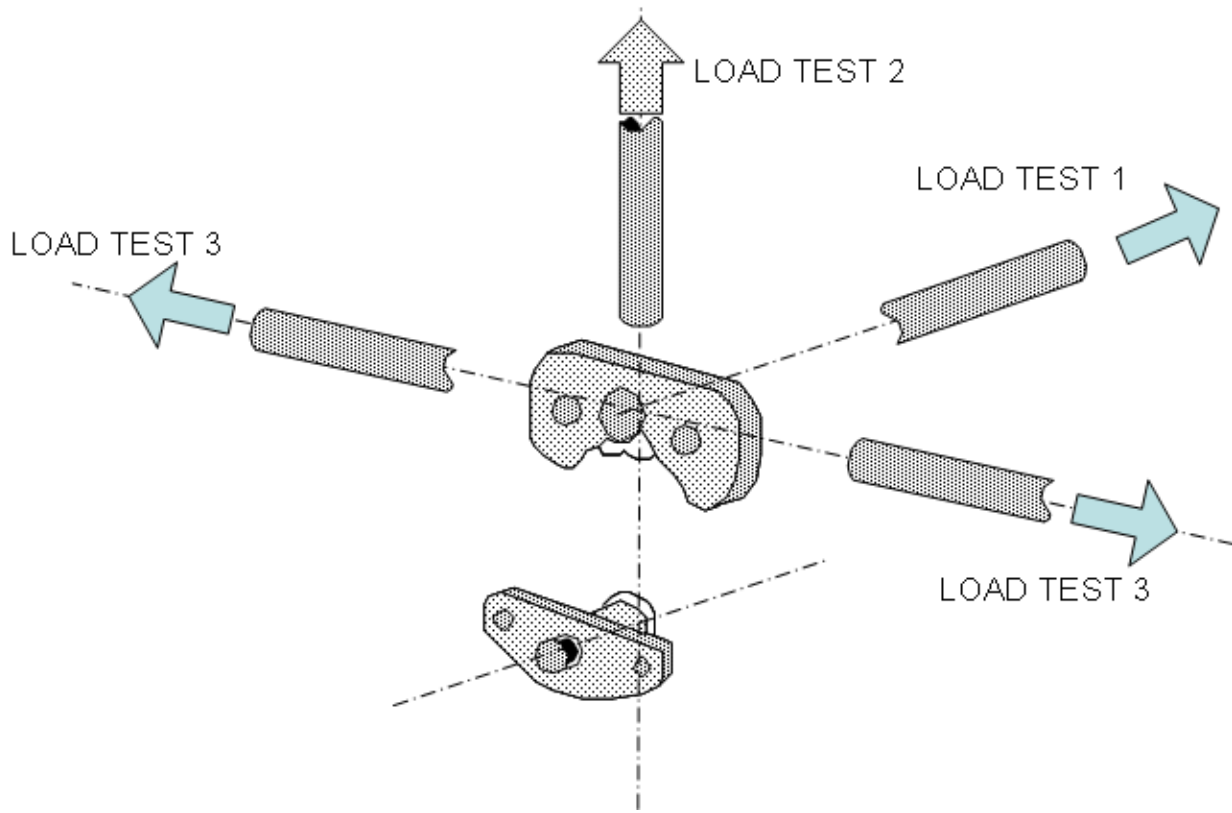
12. COMPLIANCE TEST EXECUTION...Continued

FIGURE 3 – DOOR LATCH – TENSILE TESTING FIXTURE FOR LOAD TEST THREE (BACK DOORS ONLY)



12. COMPLIANCE TEST EXECUTION...Continued

FIGURE 4 – DOOR LATCH STATIC LOAD TEST DIRECTIONS



12. COMPLIANCE TEST EXECUTION...Continued

12.3 SLIDING SIDE DOOR LATCHES

A. Door Latch Load Test One, Fully Latched Position.

The test shall be conducted as specified in section 12.2 A.

B. Door Latch Load Test One, Secondary Latched Position.

If the sliding side door latch is equipped with a secondary latched position (for a primary door latch system), the test shall be conducted as specified in section 12.2 B.

C. Door Latch Load Test Two, Fully Latched Position.

The test shall be conducted as specified in section 12.2 C.

D. Door Latch Load Test Two, Secondary Latched Position.

If the sliding side door latch is equipped with a secondary latched position (for a primary door latch system), the test shall be conducted as specified in section 12.2 D.

12.4 DOOR HINGES

12.4.1 Multiple Hinge System

A. Door Hinge Longitudinal Load Test

- (1) See Figures 5 and 6, and SAE Recommended Practice J934 (July 1982).
- (2) Attach the hinge system to the test fixture as shown in Figure 5. The hinge attitude shall simulate the closed-door vehicle position relative to the hinge centerline.
- (3) The distance between the extreme ends of the hinge system shall be 406 mm \pm 4 mm (see Figure 5).
- (4) The tensile force shall be applied equidistant between the linear center of the engaged portions of the hinge pins and through the centerline of the hinge pin in the longitudinal vehicle direction (see Figure 6).
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. separation of either hinge). Record the condition of the test items at the conclusion of the test.

12. COMPLIANCE TEST EXECUTION...Continued

B. Door Hinge Transverse Load Test

- (1) See Figures 5 and 6, and SAE Recommended Practice J934 (July 1982).
- (2) Attach the hinge system to the test fixture as shown in Figure 5. The hinge attitude shall simulate the closed-door vehicle position relative to the hinge centerline.
- (3) The distance between the extreme ends of the hinge system shall be 406 mm \pm 4 mm (see Figure 5).
- (4) The tensile force shall be applied equidistant between the linear center of the engaged portions of the hinge pins and through the centerline of the hinge pin in the transverse vehicle direction (see Figure 6).
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. separation of either hinge). Record the condition of the test items at the conclusion of the test.

C. Back Door Hinge Load Test One

- (1) See Figures 5 and 7.
- (2) Attach the hinge system to a test fixture similar to that shown in Figure 5. The hinge attitude shall simulate the closed-door vehicle position relative to the hinge centerline.
- (3) The distance between the extreme ends of the hinge system shall be 406 mm \pm 4 mm (Figure 5).
- (4) The tensile force shall be applied equidistant between the linear center of the engaged portions of the hinge pins and through the centerline of the hinge pin, and perpendicular to the hinge face plate (longitudinal load test) such that the hinge plates are not compressed against each other (see Figure 7). (The hinge face plate is the side of the hinge that attaches to the body of the vehicle).
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. separation of either hinge). Record the condition of the test items at the conclusion of the test.

12. COMPLIANCE TEST EXECUTION...Continued

D. Back Door Hinge Load Test Two

- (1) See Figures 5 and 7.
- (2) Attach the hinge system to the test fixture similar to that shown in Figure 5. The hinge attitude shall simulate the closed-door vehicle position relative to the hinge centerline.
- (3) The distance between the extreme ends of the hinge system shall be 406 mm \pm 4 mm (see Figure 5).
- (4) The tensile force shall be applied equidistant between the linear center of the engaged portions of the hinge pins and through the centerline of the hinge pin, and perpendicular to the axis of the hinge pin and parallel to the hinge face plate (transverse load test) such that the hinge plates are not compressed against each other (see Figure 7).
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. separation of either hinge). Record the condition of the test items at the conclusion of the test.

E. Back Door Hinge Load Test Three (only for back doors that open upward)

- (1) See Figures 5 and 7.
- (2) Attach the hinge system to a test fixture similar to that shown in Figure 5, noting that the test fixture shall contain provisions for applying the tensile load along the axis of the hinge pin. The hinge attitude shall simulate the closed-door vehicle position relative to the hinge centerline.
- (3) The distance between the extreme ends of the hinge system shall be 406 mm \pm 4 mm (see Figure 5).
- (4) The tensile force shall be applied through the centerline of the hinge pin and in the direction of the axis of the hinge pin (see Figure 7).
- (5) While operating the data recorder, apply the tensile force at a rate not to exceed 5 mm per minute up to the applicable load specified in section 2.1, or until failure (i.e. separation of either hinge). Record the condition of the test items at the conclusion of the test.

12. COMPLIANCE TEST EXECUTION...Continued

12.4.2 Single Hinge of a Hinge System

In some circumstances, it may be necessary to test the individual hinges of a hinge system. In such cases, the results for an individual hinge, when tested in accordance with the procedures specified in section 12.4.1, shall be such as to indicate that system requirements S4.1.2 of FMVSS No. 213 are met. The hinge must bear a load proportional to the total number of hinges in the hinge system. For example, an individual hinge in a two-hinge system must be capable of withstanding 50% of the load requirements of the total system. When tested in accordance with the procedures specified in section 12.4.1, the adjacent hinge spacing requirement of $406 \text{ mm} \pm 4 \text{ mm}$ is not applicable. A typical single hinge test fixture is shown in Figure 8.

12.4.3 Full Length (Piano) Hinge System

Full length (piano) hinges shall be tested in accordance with the procedures specified in section 12.4.1 noting that the hinge spacing requirement of $406 \text{ mm} \pm 4 \text{ mm}$ is not applicable, and ensuring that the applicable tensile force is applied to the complete hinge system.

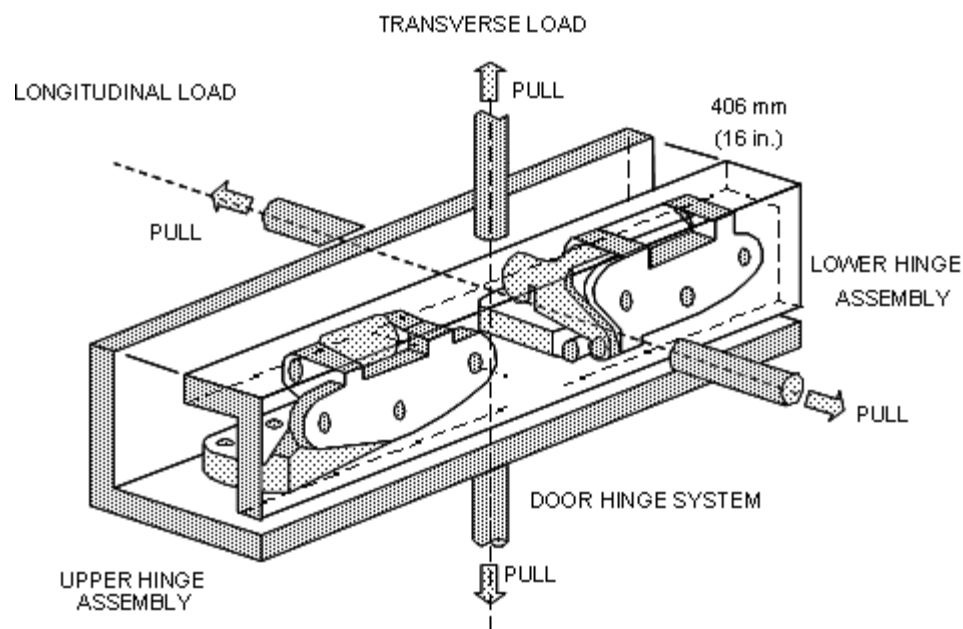


Figure 5 - Hinge Static Load Fixture

(Note: In Figure 5 above, the 406 mm dimension refers to the distance between the extreme ends of the hinge system).

12. COMPLIANCE TEST EXECUTION...Continued

HINGE LOAD APPLICATION DIRECTIONS

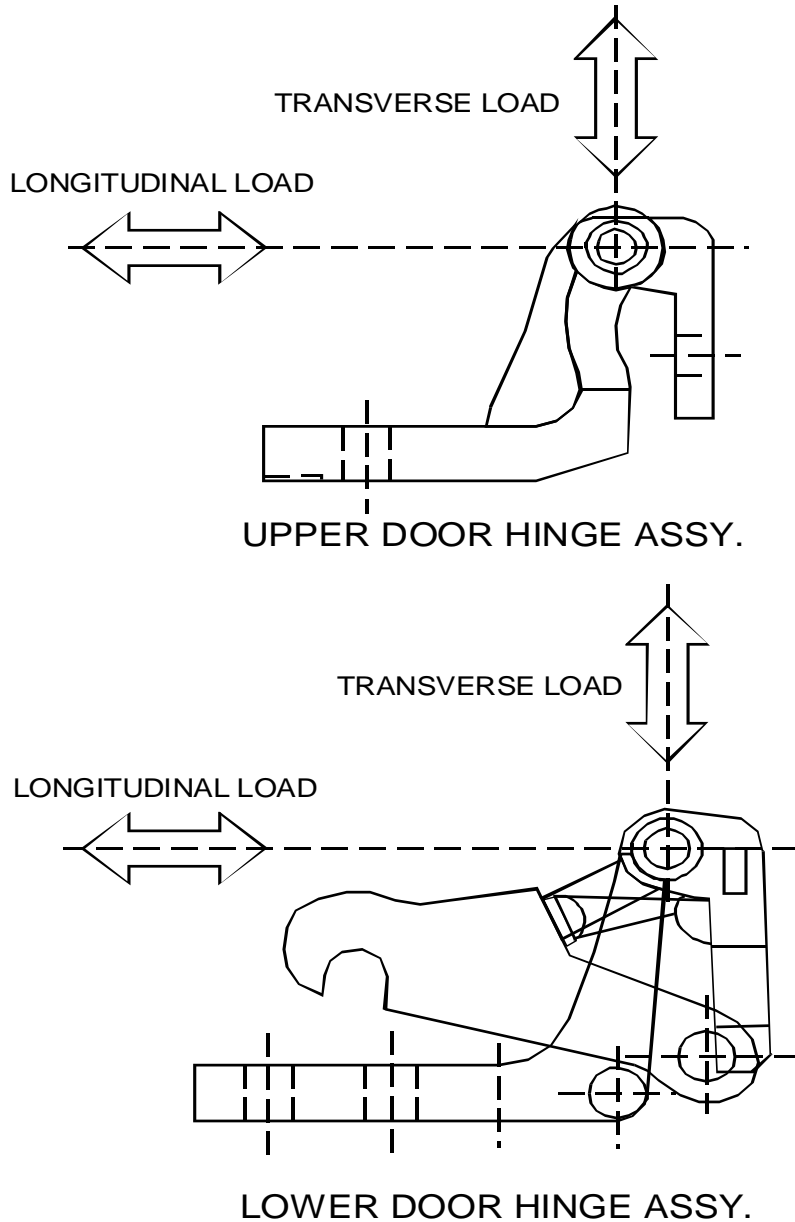
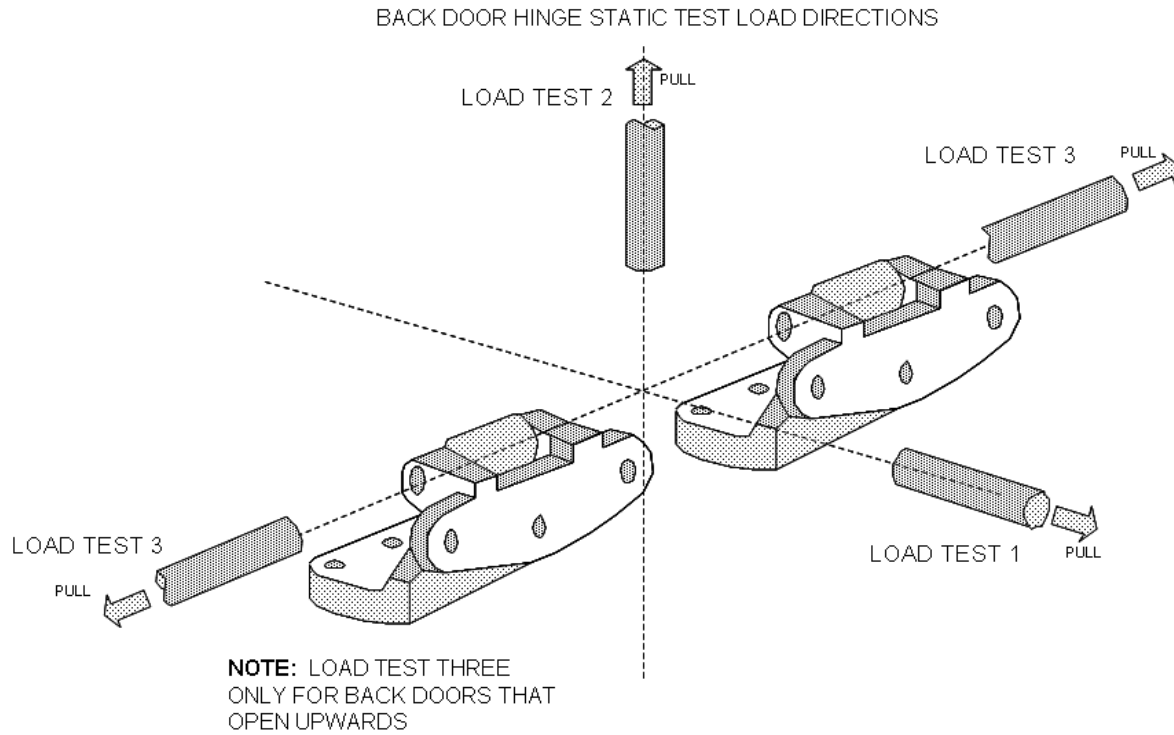


FIGURE 6

NOTE: The relative position of the hinge elements shown is for illustrative purposes only. The hinges must be positioned as in the closed-door position and tested in either the vehicle longitudinal or transverse direction as appropriate.

12. COMPLIANCE TEST EXECUTION...Continued

FIGURE 7 – HINGE STATIC TEST LOAD DIRECTIONS FOR BACK DOORS



12. COMPLIANCE TEST EXECUTION...Continued

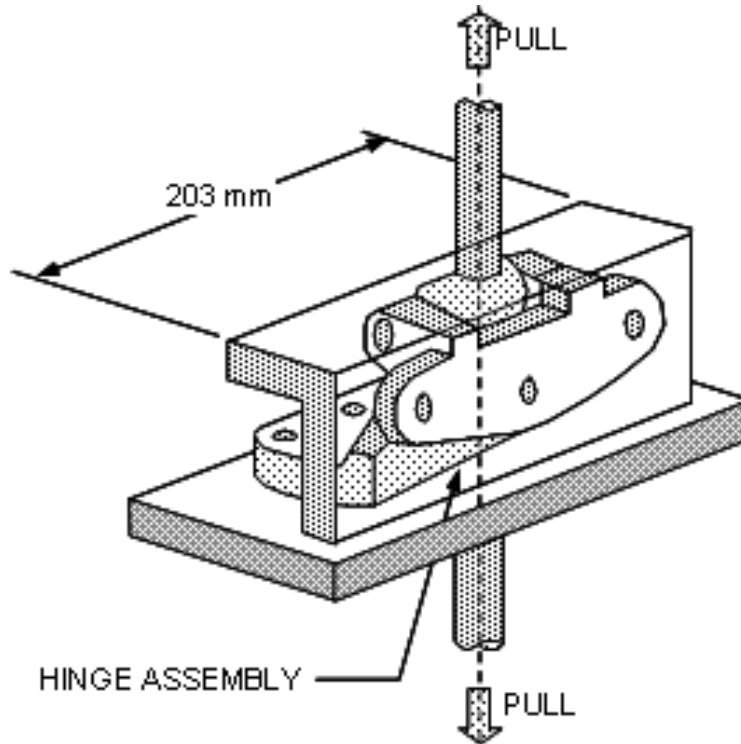


Figure 8 – Singe Hinge Test Fixture

13. POST TEST REQUIREMENTS

The contractor shall re-verify all instrumentation and check data sheets and photographs. The contractor shall ensure the appropriate data is recorded in all data blocks on every compliance test data sheet.

Test sample items that have “passed” compliance requirements shall be stored at no additional cost until receipt of disposition instructions from the COTR after all testing, inspection and acceptance of the Final Test Report.

Test sample items that have “failed” requirements shall be stored, up to two years, at no additional cost until receipt of disposition instructions from the COTR.

14. REPORTS

14.1 MONTHLY STATUS REPORTS

The contractor shall submit a monthly Test Status Report and a Vehicle Status Report to the COTR. The Vehicle Status report shall be submitted until all vehicles are disposed of. Samples of the required reports are found in the report forms section.

14.2 APPARENT TEST FAILURE

Any indication of a test failure shall be communicated by telephone to the COTR within 24 hours with written notification mailed within 48 hours (Saturdays and Sundays excluded). A Notice of Test Failure (see report forms section) with a copy of the particular compliance test data sheet(s) and preliminary data plot(s) shall be included. In the event of a test failure, a post test calibration check of some critically sensitive test equipment and instrumentation may be required for verification of accuracy. The necessity for the calibration shall be at the COTR's discretion and shall be performed without additional costs to the OVSC.

14.3 FINAL TEST REPORTS

14.3.1 COPIES

Two hard copies of each Final Test Report and one electronic copy shall be submitted to the COTR for acceptance within two weeks of test completion. The Final Test Report format to be used by all contractors is specified in the following subsections, and sample Data Sheet formats are included in section 15. The electronic copy shall be submitted on Compact Disc Recordable (CDR) in Microsoft Soft (MS) Word format and Adobe Acrobat Portable Document Format (PDF), or the electronic copy may be emailed directly to the COTR.

Payment of contractor's invoices for completed compliance tests may be withheld until the Final Test Report is accepted by the COTR. Contractors are requested to NOT submit invoices before the COTR is provided copies of the Final Test Report.

Contractors are required to submit the first Final Test Report in typed draft form within two (2) weeks after the compliance test is conducted. The contractor and the COTR will then be able to discuss the details of both test conduct and report content early in the compliance test program.

Contractors are required to PROOF READ all Final Test Reports before submittal to the COTR. The OVSC will not act as a report quality control office for contractors. Reports containing a significant number of errors will be returned to the contractor for correction, and a "hold" will be placed on invoice payment for the particular test.

14. REPORTS....Continued

14.3.2 REQUIREMENTS

The Final Test Report and associated documentation (including photographs) are relied upon as the chronicle of the compliance test. The Final Test Report will be released to the public domain after review and acceptance by the COTR.

For these reasons, each final report must be a complete document capable of standing by itself. The contractor should use DETAILED descriptions of all compliance test events. Any events that are not directly associated with the standard but are of technical interest should also be included. The contractor should include as much DETAIL as possible in the report. Instructions for the preparation of the first three pages of the final test report are provided for standardization.

14.3.3 FIRST THREE PAGES

A. FRONT COVER

A heavy paperback cover (or transparency) shall be provided for the protection of the final report. The information required on the cover is as follows:

- (1) Final Report Number such as 206-ABC-20XX-00X, where –

206 is the FMVSS tested
ABC are the initials for the laboratory
20XX is the Fiscal Year of the test program
00X is the Group Number

- (2) Final Report Title And Subtitle such as:

SAFETY COMPLIANCE TESTING FOR FMVSS 206
Door Locks and Door Retention Components

World Motors Corporation
20XX Safe Rider 2-door Coupe

- (3) Contractor's Name and Address such as

COMPLIANCE TESTING LABORATORIES, INC.
4335 West Dearborn Street
Detroit, Michigan 48090-1234

14. REPORTS....Continued

NOTE: DOT SYMBOL WILL BE PLACED BETWEEN ITEMS (3) AND (4)

- (4) Date of Final Report completion
- (5) The words "FINAL REPORT"
- (6) The sponsoring agency's name and address as follows

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
Mail Code: NVS-220, W43-481
1200 New Jersey Avenue, SE
Washington, DC 20590

14. REPORTS....Continued**B. FIRST PAGE AFTER FRONT COVER**

When a contract test laboratory is reporting, a disclaimer statement and an acceptance signature block for the COTR shall be provided as follows:

This publication is distributed by the National Highway Traffic Safety Administration in the interest of information exchange. Opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof.

If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement.

Prepared By: _____

Approved By: _____

Approval Date: _____

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: _____

Acceptance Date: _____

14. REPORTS....Continued**C. SECOND PAGE AFTER FRONT COVER**

A completed Technical Report Documentation Page (Form DOT F1700.7) shall be completed for those items that are applicable with the other spaces left blank. Sample data for the applicable block numbers of the title page follows.

Block 1 — REPORT NUMBER

206-ABC-20XX-00X

Block 2 — GOVERNMENT ACCESSION NUMBER

Leave blank

Block 3 — RECIPIENT'S CATALOG NUMBER

Leave blank

Block 4 — TITLE AND SUBTITLE

Final Report of FMVSS 206 Compliance Testing of Door Locks and
Door Hinges from a 20XX Safe Rider 2-door coupe, Part Nos.
8456782 & 9123123

Block 5 — REPORT DATE

Month Day, 20XX

Block 6 — PERFORMING ORGANIZATION CODE

ABC

Block 7 — AUTHOR(S)

John Smith, Project Manager
Bill Doe, Project Engineer

Block 8 — PERFORMING ORGANIZATION REPORT NUMBER

206-ABC-20XX-00X

14. REPORTS....Continued

Block 9 — PERFORMING ORGANIZATION NAME AND ADDRESS

ABC Laboratories
405 Main Street
Detroit, MI 48070-1234

Block 10 — WORK UNIT NUMBER

Leave blank

Block 11 — CONTRACT OR GRANT NUMBER

DTNH22-XX-D-12345

Block 12 — SPONSORING AGENCY NAME AND ADDRESS

United States Department of Transportation
National Highway Traffic Safety Administration
Office of Vehicle Safety Compliance
Mail Code: NVS-220
1200 New Jersey Avenue, SE
Washington, DC 20590

Block 13 — TYPE OF REPORT AND PERIOD COVERED

Final Test Report
Month Day to Month Day, 20XX

Block No. 14 — SPONSORING AGENCY CODE

NVS-220

Block 15 — SUPPLEMENTARY NOTES

Leave blank

14. REPORTS....Continued

Block 16 — ABSTRACT

Compliance tests were conducted on Door Latches and Door Hinges from a 20XX XYZ Safe Rider 2-door coupe passenger car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-206-0X. Test failures identified were as follows:

None

NOTE: Above wording must be shown with appropriate changes made for a particular compliance test. Any questions should be resolved with the COTR.

Block 17 — KEY WORDS

Compliance Testing
Door Locks and Door Retention Components
FMVSS 206

Block 18 — DISTRIBUTION STATEMENT

Copies of this report are available from

National Highway Traffic Safety Administration
Technical Information Services Division, NPO-411
1200 New Jersey Ave., SE (Rm E12-100)
Washington, DC 20590
FAX No.: 202-493-2833
Email: tis@nhtsa.dot.gov

Block 19 — SECURITY CLASSIFICATION OF REPORT

Unclassified

Block 20 — SECURITY CLASSIFICATION OF PAGE

Unclassified

Block 21 — NUMBER OF PAGES

Add appropriate number

14. REPORTS....Continued

Block 22 — PRICE

Leave blank

14.3.4 TABLE OF CONTENTS

Final test report Table of Contents shall include the following:

Section 1	Purpose of Compliance Test
Section 2	Compliance Test Data Summary
Section 3	Test Data
Section 4	Test Failure Details (if applicable)
Appendix A	Interpretations or Deviations From FMVSS 206
Appendix B	Test Equipment List and Calibration Information
Appendix C	Photographs

Note: While the above format may vary (with COTR approval), Section 1, Purpose of Compliance Test, shall include the following information finalized accordingly:

PURPOSE OF COMPLIANCE TEST

The tests performed are part of the safety compliance program for the National Highway Traffic Safety Administration (NHTSA) by ABC under Contract No. DTNH22-XX-D-12345. The purpose of the testing is to determine whether production motor vehicle door latches and door retention components meet the minimum test requirements of TP-206-08, "Door Locks and Door Retention Components". The testing was conducted in accordance with the ABC testing procedure submitted to and approved by NHTSA along with the Office of Vehicle Safety Compliance Test Procedure No. TP-206-08.

15. DATA SHEETS

DATA SHEET 1
INSPECTION DATA - FMVSS 206

TEST GROUP NO.: _____ ; INSPECTION DATE: _____

TESTING
LABORATORY: _____

LABORATORY TECHNICIAN(S): _____

VEHICLE MANUFACTURER: _____

VEHICLE MAKE/MODEL: _____

HINGE INFORMATION:

A. DOOR TYPE: _____

B. MANUFACTURER: _____

C. MARKINGS:

UPPER: _____

LOWER: _____

D. APPARENT MATERIALS: _____

E. DIMENSIONS AND DESCRIPTION:

UPPER: _____

LOWER: _____

F. STAMPED AND FORMED, BOLTING MOUNTING: _____

(Continued on next page)

15. DATA SHEETS....Continued

LATCH INFORMATION:

A. DOOR TYPE: _____

B. MANUFACTURER: _____

C. MARKINGS:

LATCH: _____

STRIKER: _____

D. APPARENT MATERIALS: _____

E. DIMENSIONS AND DESCRIPTION:

LATCH: _____

STRIKER: _____

F. LATCH assembly designated as Primary Door Latch System (Yes/No): _____

COMMENTS:

RECORDED BY: _____

DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET 2A
HINGED SIDE DOORS
SUMMARY OF TEST RESULTS

TEST GROUP NO.: _____ ;

TEST DATE: _____

INDICATE P - PASS OR F - FAIL

GROUP NO.	VEHICLE MODEL	TEST DATE	APPLIED TEST LOAD (N)	REQUIRED LOAD (N)	FAILURE MODE*	PASS/ FAIL**
1	FULLY LATCHED Load Test One			11,000		
2	SEC. LATCHED Load Test One			4,500		
3	FULLY LATCHED Load Test Two			9,000		
4	SEC. LATCHED Load Test Two			4,500		
5	HINGE Longitudinal Load			11,000		
6	HINGE Transverse Load			9,000		

* FAILURE MODE shall only apply when load requirements are NOT met.

** PASS/FAIL criteria shall be based upon FMVSS 206 required loads.

REMARKS:

A. LATCH –

CONDITION

(1) Load Test One

Fully Latched - _____

Secondary Latched - _____

(2) Load Test Two

Fully Latched - _____

Secondary Latched - _____

(Continued on next page)

15. DATA SHEETS....Continued

B. HINGE – CONDITION

(1) Longitudinal Load _____

(2) Transverse Load _____

REMARKS:

RECORDED BY: _____

DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET 2B
HINGED BACK DOORS
SUMMARY OF TEST RESULTS

TEST GROUP NO.: _____;

TEST DATE: _____

INDICATE P - PASS OR F - FAIL

GROUP NO.	VEHICLE MODEL	TEST DATE	APPLIED TEST LOAD (N)	REQUIRED LOAD (N)	FAILURE MODE*	PASS/ FAIL**
1	FULLY LATCHED Load Test 1			11,000		
2	SEC. LATCHED Load Test 1			4,500		
3	FULLY LATCHED Load Test 2			9,000		
4	SEC. LATCHED Load Test 2			4,500		
5	FULLY LATCHED Load Test 3			9,000		
6	HINGE Load Test 1			11,000		
7	HINGE Load Test 2			9,000		
8	HINGE Load Test 3			9,000		

* FAILURE MODE shall only apply when load requirements are NOT met.

** PASS/FAIL criteria shall be based upon FMVSS 206 required loads.

REMARKS:

A. LATCH –

CONDITION

(1) Load Test 1

Fully Latched - _____

Secondary Latched - _____

(2) Load Test 2

Fully Latched - _____

Secondary Latched - _____

(Continued on next page)

15. DATA SHEETS....Continued

(3) Load Test 3

Fully Latched - _____

B. HINGE –

(1) Load Test 1 _____

(2) Load Test 2 _____

(3) Load Test 3 _____

REMARKS:

RECORDED BY: _____

DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET 2C
SLIDING SIDE DOORS
SUMMARY OF TEST RESULTS

TEST GROUP NO.: _____ ;

TEST DATE: _____

INDICATE P - PASS OR F - FAIL

GROUP NO.	VEHICLE MODEL	TEST DATE	APPLIED TEST LOAD (N)	REQUIRED LOAD (N)	FAILURE MODE*	PASS/ FAIL**
1	FULLY LATCHED Load Test One			11,000		
2	SEC. LATCHED ¹ Load Test One			4,500		
3	FULLY LATCHED Load Test Two			9,000		
4	SEC. LATCHED ¹ Load Test Two			4,500		

¹If Equipped

* FAILURE MODE shall only apply when load requirements are NOT met.

** PASS/FAIL criteria shall be based upon FMVSS 206 required loads.

REMARKS:

RECORDED BY: _____

DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET 3
EQUIPMENT LIST AND CALIBRATION RECORD

TEST GROUP NO.: _____ ; INSPECTION DATE: _____

TESTING LABORATORY: _____

NOTE: Information to be included for each item of test instrumentation is as follows:

EQUIPMENT DESCRIPTION: _____

EQUIPMENT MANUFACTURER: _____

TYPE AND/OR MODEL: _____

SERIAL NUMBER: _____

LIMITS: _____

ACCURACY: _____

FREQUENCY OF CALIBRATION: _____

EXPIRATION OF CALIBRATION: _____

USED ON TEST NUMBER: _____

REMARKS:

RECORDED BY: _____;

DATE: _____

APPROVED BY: _____

16. FORMS

LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS 206

TEST DATE: _____

LABORATORY: _____

CONTRACT NO.: _____;

DELV. ORDER NO: _____

LABORATORY PROJECT ENGINEER'S NAME: _____

TEST SPECIMEN DESCRIPTION –

VEHICLE MFR. & MODEL: _____

COMPONENT MFR: _____

IDENTIFICATION NO: _____

PART NO.: _____

TEST FAILURE DESCRIPTION: _____

FMVSS REQUIREMENT, PARAGRAPH: _____

NOTIFICATION TO NHTSA (COTR): _____

DATE: _____

BY: _____

REMARKS:

16. FORMS....Continued

INVENTORY AND PROGRAM SCHEDULE RECORD
FMVSS No. 206

Grp No.	Mfr Model	Recd	Fixture Compl	Latch LT 1 Fully	Latch LT 1 Sec.	Latch LT 2 Fully	Latch LT 2 Sec.	Latch LT 3 Fully	Hinge Long.	Hinge Trans	Hinge Ortho	Report Sent Date
001												
002												
003												
004												
005												
006												
007												
008												
009												
010												

REMARKS: