



Fatigue Test of Door Lock Strikers

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 specification is to determine the dynamic strength of door lock strikers.

1.2 Applicability. This specification applies to routine quality inspections and approval tests of new designs or parts from new manufacturing methods.

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.

- Assembly Drawings
- CG190 Evaluation Report Template
- Component Technical Specifications (CTS)
- Subsystem Technical Specifications (SSTS)

3 Resources

3.1 Facilities.

Testing Machine: Either a resonance pulsator made by Schenck Darmstadt, a 5 kN actuator with Servo-valve, or equivalent equipment.

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 Equipment of Testing Machine.

3.2.1.1 Load cell having a sufficiently large measuring range.

3.2.1.2 Control unit having a closed control circuit to control the vibrational force.

3.2.1.3 Pre-select cycle counter.

3.3 Test Vehicle/Test Piece. Not applicable.

3.4 Test Time. May vary by program. See Sections 4.1 and 4.3 for more information.

3.5 Test Required Information. Torque requirements for lock striker attachments, input loads and cycles.

3.6 Personnel/Skills. Test technician familiar with test facilities and equipment.

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4 Procedure

4.1 Preparation.

4.1.1 Test Setup for Door Lock Striker Front View.

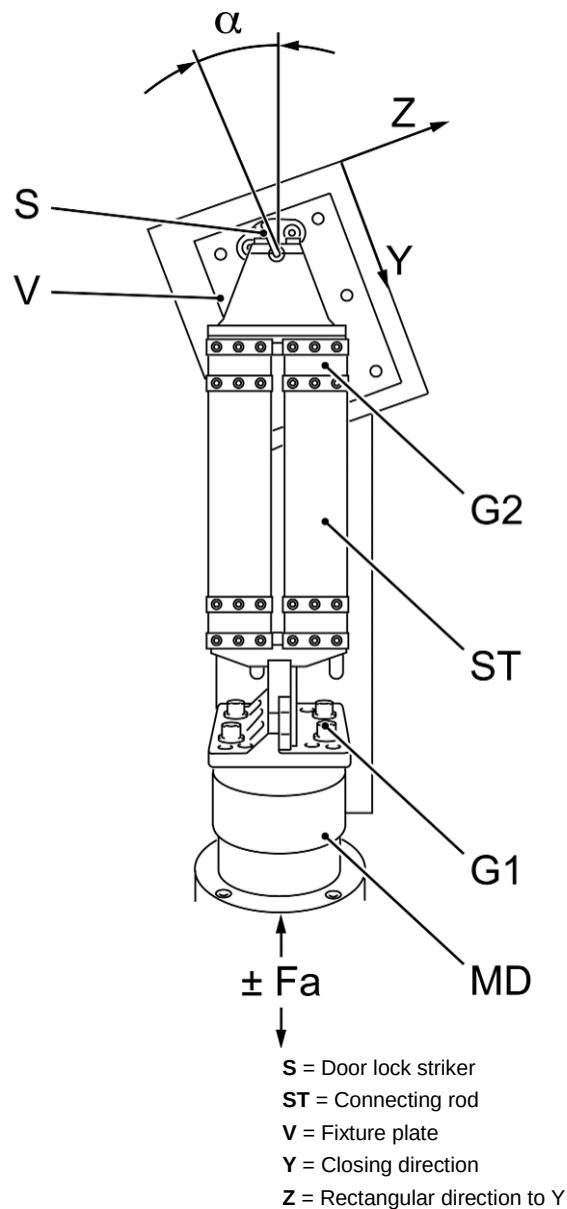


Figure 1: Test Setup for Door Lock Striker Front View

The test force $\pm F_a$ is applied to the lock striker(s) with the testing machine via load cell (MD) and connecting rod (ST). The connecting rod (ST) has two joints (G1) and (G2).

The lock striker is bolted to a fixture plate (V) using the production fasteners and torque requirements, and turned by an angle α from the closing direction Y to direction Z, as can be seen on Figure 1.

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