



Stricter Testing of Brake Hose Ageing Resistance

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.

Note: The stricter ageing resistance test is not required for hoses incorporating rayon reinforcement.

1.1 Purpose. This test procedure shall be used to simulate stricter ageing of brake hoses in conjunction with brake fluid and a saturated steam atmosphere. The parts shall then be subjected to further tests to check their good working order.

1.2 Applicability. Brake hoses in a saturated steam atmosphere not incorporating rayon reinforcement.

1.3 Remarks. None.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3056

GMW14361

GMW16955

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 Test Equipment. Container to hold brake fluid, contents approximately 350 cm³ (see Figure 1, similar to GMW14361).

3.3 Test Vehicle/Test Piece.

3.3.1 Test Material. The number of brake hoses to be aged depends on the number of pre-aged brake hoses required for other test procedures.

3.4 Test Time. Reference the lab test procedures in Section 4 for timing details.

3.5 Test Required Information. See 5.3.

3.6 Personnel/Skills. Conform to company and/or laboratory requirements. Technician training records must be available upon request.

4 Procedure

4.1 Preparation. Not applicable.

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 brake hoses shall be fastened, suspended vertically, with their female fitting to a container (see Figure 1).

4.3.1.1.1 The other end (banjo fitting or female fitting) of the brake hoses, shall be sealed with a suitable screw plug.

4.3.1.1.2 The container shall be filled with brake fluid (use brake fluid to GMW16955 (Fluid Code A1) unless otherwise specified).

4.3.1.1.3 The screw plug of each brake hose shall be opened until brake fluid emerges to ensure that the hose is filled with brake fluid without air bubbles. The ends shall then be securely screwed.

After all air is removed from the brake hoses, the container should still be filled approximately 50% with brake fluid, and be securely sealed.

Figure 1: Container to Hold Brake Fluid

