

NOTICE OF
ADOPTION

ADOPTION NOTICE 1
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TITLE OF DOCUMENT: Sealed Beam Headlamp Assembly

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HIGHWAY VEHICLE STANDARD

an American National Standard

SAE J580

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Ø SEALED BEAM HEADLAMP ASSEMBLY

1. SCOPE: This standard applies to the design and testing of sealed beam headlamp assemblies, including the functional parts which are mounted on the exterior of a vehicle. The standard does not apply to sealed beam units which are covered in SAE J571, J579, and J1132.
2. DEFINITIONS:
 - 2.1 Sealed Beam Headlamp Assembly: A major lighting assembly which includes one or more sealed beam units used to provide general illumination ahead of the vehicle.
 - 2.2 Mounting Ring: The adjustable ring upon which the sealed beam unit is mounted.
 - 2.3 Retaining Ring: The clamping ring that holds the sealed beam unit against the mounting ring.
 - 2.4 Aiming Screws: Horizontal and vertical adjusting screws with self-locking features used to aim and retain the headlamp unit in the proper position.
3. LIGHTING IDENTIFICATION CODE: Sealed beam headlamp assemblies for use on vehicles may be identified by the code "HH" in accordance with SAE J759, Lighting Identification Code.
4. TEST PROCEDURES:
 - 4.1 SAE J575: Tests for Motor Vehicle Lighting Devices and Components is a part of this report. The following tests are applicable:
 - 4.1.1 Vibration Test
 - 4.1.2 Corrosion Test

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- 4.2 Aiming Adjustment Test: When making the aiming adjustment test, an accurate measurement technique shall be used. This may consist of: a) attaching a device such as a spot projector to the sealed beam unit; or b) replacing the sealed beam unit with a mirror having a separate light source; or c) other equally accurate means.

When conducting the test, the headlamp assembly shall be mounted in the design position with the unit at nominal aim (0,0).

- 4.3 Inward Force Test: The mechanism, including the aiming adjusters, shall be subjected to an inward force of 222 N directed normal to the headlamp aiming plane and symmetrically about the center of the sealed beam unit face.
- 4.4 Connector Tests: Effectiveness of the connector shall be tested by measuring the voltage drop in accordance with Figure 1 when a 10A. load is applied.
- 4.5 Torque Deflection Test: The headlamp assembly to be tested shall be mounted in designed vehicle position and set at nominal aim (0,0). The sealed unit shall be replaced by the appropriate deflectometer (Figures 2, 3, and 4). A torque of 2.25 Nm shall be applied to the headlamp assembly through the deflectometer and a reading on the thumbwheel shall be taken. The torque shall then be removed and a second reading on the thumbwheel shall be taken.

5. REQUIREMENTS:

5.1 Performance Requirements:

- 5.1.1 SAE J575: Sealed beam headlamp assemblies shall meet requirements in SAE J575 for the following conditions:

5.1.1.1 Vibration

5.1.1.2 Corrosion

- 5.1.2 Aiming Adjustment Requirements: When tested in accordance with paragraph 4.2, the unit shall meet the following requirements:

- 5.1.2.1 When the headlamp assembly is tested in the laboratory, a minimum aiming adjustment of ± 4.0 deg shall be provided in both the vertical and horizontal planes.
- 5.1.2.2 On headlamp assemblies with independent vertical and horizontal aiming screws, the adjustment shall be such that when tested in the laboratory neither the vertical nor horizontal aim shall deviate more than 100 mm from horizontal or vertical planes, respectively, at a distance of 7.6 m through an angle of ± 4.0 deg.