



### HEADLAMP AIMING DEVICE FOR MECHANICALLY AIMABLE SEALED BEAM HEADLAMP UNITS—SAE J602b

**SAE Standard**

Report of Lighting Committee approved October 1957 and last revised September 1973.

**1. Scope**—This specification applies to the requirements of a device used in the field and inspection stations to aim the mechanically aimable type of sealed beam headlamp units.

The purpose of this specification is to provide a laboratory test procedure to determine whether the devices under test are capable of accurately positioning sealed beam headlamp units from their aiming pads and maintaining their accuracy in service within the tolerances designated in this specification.

**2. Definitions**

**2.1 Headlamp Aiming Device**—A device used to adjust and inspect the aim of mechanically aimable headlamp units consisting of one or more fixtures designed to seat against the three aiming pads (aiming plane) on mechanically aimable headlamp units installed on a vehicle to facilitate accurate aiming of such units, vertically and laterally.

**2.2 Mechanically Aimable Headlamp Units**—A unit having three pads on the face of the lens forming a mechanical aiming plane used to adjust and inspect the aim of the unit when installed on a vehicle.

**2.3 Aiming Plane**—A plane through the three aiming pads on the face of the lens.

**3. Samples for Test**—Sample devices submitted for laboratory tests shall be representative of the devices as regularly manufactured and marketed. Each sample shall include all accessory equipment peculiar to the device. Full assembly and operating instructions shall be provided, including information on how to check accuracy and maintain the device in calibration.

**4. Laboratory Facilities**—The laboratory shall be equipped with all facilities necessary to make the tests required in this standard.

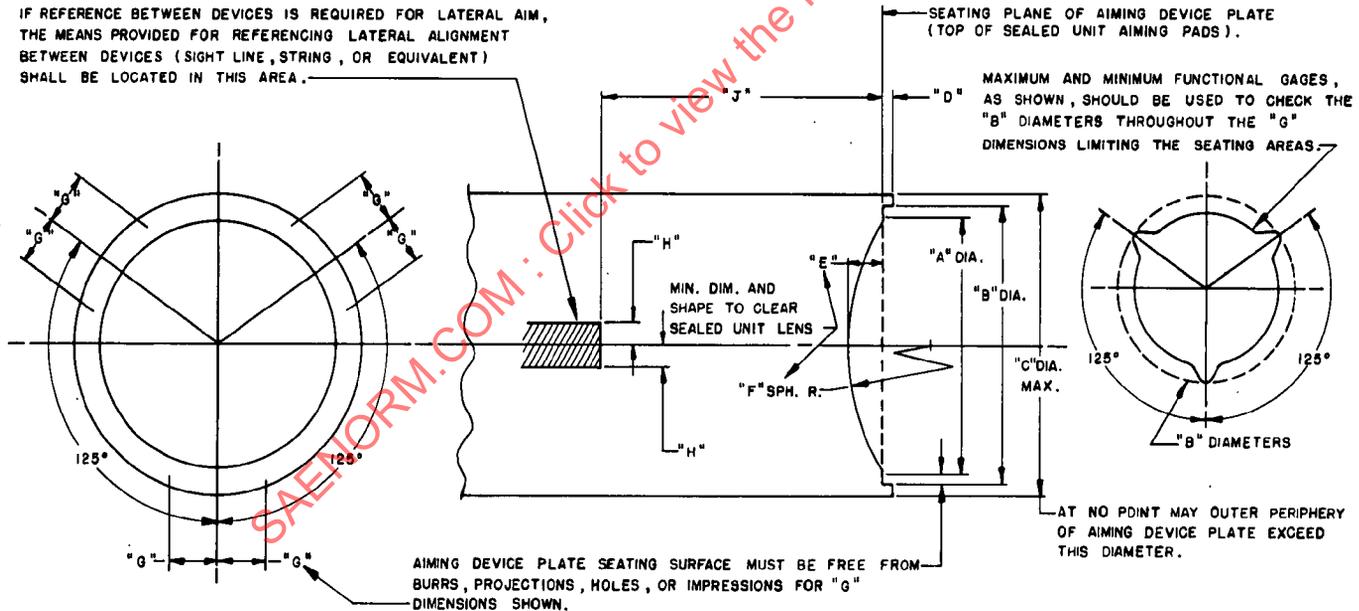
**5. General Requirements**

**5.1** The device shall be of such design that the seating portion will register only on the three aiming pads on the 5¾ in (146 mm) or 7 in (178 mm) sealed beam units as covered by SAE J571.

**5.2** No part of the device, except those parts (strings, sighting devices, scales, etc.) required for referencing lateral alignment between devices, shall extend beyond the dimensional limits of the headlamp aiming device locating plate (Fig. 1, dimension C).

**5.3** A device which uses an adapter to fit more than one size sealed beam unit shall meet all of the requirements of this recommended practice with and without the adapter.

IF REFERENCE BETWEEN DEVICES IS REQUIRED FOR LATERAL AIM, THE MEANS PROVIDED FOR REFERENCING LATERAL ALIGNMENT BETWEEN DEVICES (SIGHT LINE, STRING, OR EQUIVALENT) SHALL BE LOCATED IN THIS AREA.



NOTE: THERE SHALL BE NO PROJECTIONS, TANGS, LUGS, ETC., ON THIS LOCATING PLATE WHICH WILL PERMIT LOCATING THE AIMING DEVICE ON ANY PART OF THE HEADLAMP OTHER THAN THE AIMING PADS ON THE MECHANICALLY AIMABLE SEALED BEAM UNIT.

Locating Plate	Unit of Measure	Dimensions												
		A		B		C	D		E	F	G	H	J	
		Max	Min	Max	Min	Max	Max	Min	Ref	Ref	Min	Max	Min	
5-3/4 in (146 mm)	in mm	4.830 122.7	4.770 121.2	5.375 136.5	5.345 135.8	5.700 144.8	0.165 4.19	0.145 3.68	0.70 17.8	4.40 111.8	0.70 17.8	1.00 25.4	9.50 241.3	
7 in (178 mm)	in mm	6.140 156.0	6.080 154.4	6.710 170.4	6.680 169.7	7.031 178.6	0.180 4.57	0.160 4.06	0.96 24.4	5.60 142.2	0.70 17.8	1.00 25.4	10.25 260.4	

FIG. 1—DIMENSIONAL SPECIFICATIONS FOR HEADLAMP AIMING DEVICE LOCATING PLATE