

TURN SIGNAL OPERATING UNITS—SAE J589

SAE Standard

Report of Lighting Committee approved September 1950 and last revised March 1960. Editorial change April 1964.

Definition—An operating unit is that part of a turn signal system by which the operator of a vehicle causes the signal units to function.

Operating units are divided into two groups, Class A and Class B. Class A turn signal operating units may be used on any vehicle.

Class B turn signal operating units may be used on any passenger car; and on any other vehicles where the distance from the center of the steering wheel to the extreme left side of the vehicle is less than 24 in. and where distance from center of steering wheel to extreme rear end of vehicle or combination of vehicles is less than 14 ft, except that Class B operating units should not be used on truck tractors.

The following sections from SAE J575 are a part of this standard.

Section B—Samples for Test

Section C—Lamp Bulbs

Section D—Laboratory Facilities

Durability Test—The unit should be operated with the maximum bulb load to be used on the vehicle. The voltage drop from the input

terminal of the switch to each lamp terminal (including 3 in. of No. 16 or 18 gage wire on each side of the switch) should be measured at the beginning and at intervals of not more than 25,000 cycles during, and upon completion of the cycle test. (NOTE: Flasher not to be included in circuit during test.) When the unit is provided with a self-cancelling mechanism, the test equipment should be arranged so that the unit will be turned "off" in its normal operating manner. The test should be made at a rate not to exceed 15 complete cpm. One complete cycle should consist of the following sequence: off, left turn, off, right turn, and back to off. During the test, the unit should be operated at 6.4 v for 6-v systems or 12.8 v for 12-v systems, from a power supply meeting the following requirements:

1. Output current—approximately ten times load current.
2. Regulation—less than 5% voltage change.
3. Ripple voltage—not more than 5%.
4. Response time—not more than 25 millisecc rise time from 0 to