

SURFACE VEHICLE STANDARD

SAE J563b

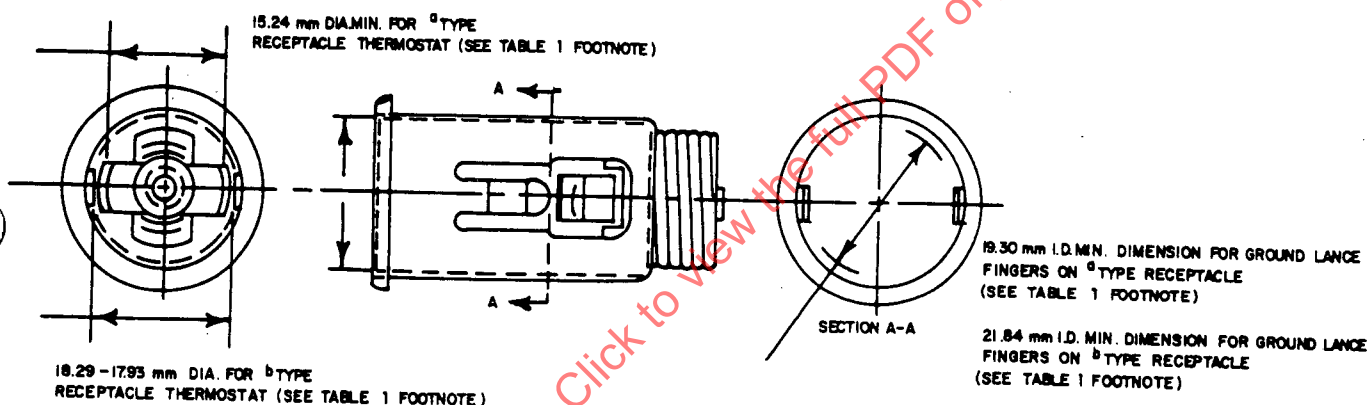
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an American National Standard

SIX- AND TWELVE-VOLT CIGAR LIGHTER RECEPTACLES

This SAE Standard covers the basic cigar lighter receptacle, which may optionally incorporate overload protective devices.

Figure 1 and Table 1 show the cigar lighter receptacle and its pertinent dimensions.



(R) FIGURE 1 - Cigar Lighter Receptacle (Typical)

(R) TABLE 1 - Diameters of Receptacle and Lighter Plug

Volts	Inside Dia. B, mm	Plug Body Dia. mm
6	21.34-21.46	21.08-21.23
12	20.93-21.01 ^a	20.73-20.88
12	21.41-21.51 ^b	21.13-21.23

^aReceptacles providing bimetal finger contact to the outer periphery of the heating element cup.

^bReceptacles providing bimetal finger contact to the inner periphery of the heating element cup.

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Lighter plugs shall be permanently marked either "6 volt" or "12 volt".

Manufacturers of accessory plugs to energize devices such as trouble lamps and razors are cautioned to conform to the provisions given in this SAE Standard.

- (R) Live contact of any accessory plug shall be made with the center stud; the contacting member must not be less than 3.56 mm in diameter and have a minimum spherical radius of 2.54 mm at the contacting end.

To prevent damage, the body of an accessory plug back of the contact end should be large enough to serve as a centering guide when it is inserted into the receptacle. The contact end of any accessory plug should have sufficient taper so as not to interfere with the receptacle bimetal fingers. Any ground contact fingers should be so designed as not to interfere with, distort, or catch on the grounding lances in the receptacle when the plug is rotated.

Wiring capacity and overload protection, as provided by the automotive industry to the 12-V lighter receptacle, restricts accessory plug devices to a maximum current draw of 8.0 amp.

- (R) Accessory plugs shall be permanently marked "6 volt" or "12 volt" in letters 4.7 mm high minimum.

The (R) is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.

RATIONALE:

Not applicable.

RELATIONSHIP OF SAE STANDARD TO ISO STANDARD:

Not applicable.

APPLICATION:

This SAE Standard covers the basic cigar lighter receptacle, which may optionally incorporate overload protective devices.

REFERENCE SECTION:

Not applicable.

COMMITTEE COMPOSITION:

DEVELOPED BY THE SAE ELECTRICAL EQUIPMENT COMMITTEE

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