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SAE J156 APR86

Fusible Links

SAE Standard
Reaffirmed April 1986

Submitted for Recognition as
an American National Standard

RATIONALE:

Not applicable.

RELATIONSHIP OF SAE STANDARD TO ISO STANDARD:

Not applicable.

REFERENCE SECTION:

SAE J1128, Operator Cab Environment for Heated, Ventilated, and Air Conditioned Construction and Industrial Equipment

APPLICATION:

This SAE Recommended Practice covers the details, use, and design evaluation testing of fusible links for motor vehicle electrical wiring protection. The specifications as listed are known good practice and are not intended to restrict new materials or construction.

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HIGHWAY VEHICLE STANDARD

Submitted for recognition as an American National Standard

SAE J156

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Reaffirms J156a

FUSIBLE LINKS

1. SCOPE: This SAE Recommended Practice covers the details, use, and design evaluation testing of fusible links for motor vehicle electrical wiring protection. The specifications as listed are known good practice and are not intended to restrict new materials or construction.

2. DEFINITION: A fusible link is a special section of low tension cable designed to open the circuit when subjected to an extreme current overload. Its purpose is to minimize wiring system damage when such an overload occurs accidentally in those circuits protected by the fusible link.

3. GENERAL SPECIFICATIONS:

3.1 Conductors: Conductors shall conform to the specifications shown in Table 1 of SAE J1128.

3.2 Insulation: The insulating material shall meet the requirements shown in SAE J1128 Type HTS. A special insulation with a tensile strength of 1000 psi (6900 kPa) minimum and STS wall may also be used.

3.3 Wire Size: The fusible link must be of a smaller wire size than any connecting cable in the circuits being protected. Wire sizes are to be determined experimentally with the vehicle wiring system based on the type of harness wire insulation, circuit loads, and physical locations. This may be done either in the vehicle or with an equivalent laboratory set up.

3.4 Length: The length of each fusible link for effective protection is to be determined in the same manner as for the wire size.

3.5 Location: Fusible links shall be located such that any fumes generated during their destruction will not cause undue discomfort to any passenger, and no damage will occur to adjacent components, combustible material, or other circuits.