



SURFACE VEHICLE RECOMMENDED PRACTICE

J1292™

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Superseding J1292 JAN2008

Automobile and Motor Coach Wiring

RATIONALE

The SAE Cable Standards Committee has agreed to stabilize SAE J1292 to preserve the document until research can be completed to understand if revision is required. SAE Truck and Bus Electrical Systems Committee has replaced SAE J1292 with newer SAE documents.

STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE Cable Standards Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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FOREWORD

1. SCOPE

This SAE Recommended Practice covers the application of primary wiring distribution system harnesses to automotive, and Motor Coach vehicles. This is written principally for new vehicles but is also applicable to rewiring and service. It covers the areas of performance, operating integrity, efficiency, economy, uniformity, facility of manufacturing and service. This practice applies to wiring systems of less than 50 V.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest version of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J156 Fusible Links

SAE J163 Low Tension Wiring and Cable Terminals and Splice Clips

SAE J258 Circuit Breaker—Internal Mounted—Automatic Reset

SAE J541 Voltage Drop for Starting Motor Circuits

SAE J553 Circuit Breakers

SAE J554	Electric Fuses (Cartridge Type)
SAE J561	Electrical Terminals—Eyelet and Spade Type
SAE J858	Electrical Terminals—Blade Type
SAE J895	Five Conductor Electrical Connectors for Automotive Type Trailers
SAE J928	Electrical Terminals—Pin and Receptacle Type
SAE J1127	Low Voltage Battery Cable
SAE J1128	Low Voltage Primary Cable

2.1.2 ASTM Publication

Available from ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM D 573 Test Method for Rubber—Deterioration in an Air Oven

3. GENERAL SECTION

3.1 Definition

The systems of installation known as two wire or single wire are to be designated respectively as insulated-return and ground-return systems. Installations in which the frame and/or body of the vehicle are used as part of the return circuit are considered as ground-return systems.

3.2 Insulated Cable

All insulated cable shall conform to SAE Standards J1127 and SAE J1128.

3.2.1 Conductors

3.2.1.1 All conductors are to be constructed in accordance with SAE J1127 and SAE J1128 except when good engineering practice dictates special strand constructions.

3.2.1.2 Conductor materials and stranding other than copper can be used if all applicable requirements for physical, electrical, and environmental conditions are met as dictated by the end application.

3.2.2 Conductor Insulation

Physical and dimensional values of conductor insulation are to be in conformance with the requirements of SAE J1127 or SAE J1128 except when good engineering practice dictates special conductor insulations.

3.3 Insulated Cable Application

3.3.1 Select cable insulation in accordance with the vehicle's working environment. Consideration is given to physical and environmental factors such as flexing, heat, cold, bend, oil and fuel contact, dielectric, abrasion, short circuit, and pinch resistance among others.

NOTE: Most vehicle working environments permit the use of a thermoplastic insulated, SAE type GPT, general purpose cable. A cable of this type is generally used in static (non-flexing) applications when nominal abrasion, heat, cold, oil, dielectric, short circuit, and pinch resistance properties are desired.