

AS 2703—1987

Australian Standard[®]

**VEHICLE LOOP DETECTOR
SENSORS**

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Australian Electrical and Electronic Manufacturers Association
Australian Road Research Board
Confederation of Australian Industry
Department of Territories (Commonwealth)
Department of Transport (Commonwealth)
Metal Trades Industry Association of Australia
National Association of Australian State Road Authorities
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SENSORS**

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PREFACE

This Standard was prepared by the Association's Committee on Road Traffic Signals to supersede AS 2703—1984. It is one of a group of Standards which set out requirements for equipment associated with traffic signal installations, viz:

- AS 2144 Traffic Signal Lanterns.
- AS 2339 Traffic Signal Posts and Attachments.
- AS 2353 Pedestrian Push-button Assemblies.
- AS 2578 Traffic Signal Controllers.
Part 1: Physical and Electrical Compatibility.
- AS 2703 Vehicle Loop Detector Sensors. (This Standard.)
- AS 2979 Traffic Signal Mast Arms.

This Standard applies particularly to the electronic equipment used in traffic control and counting systems for the detection of vehicles. Such equipment is used in conjunction with inductive wire loops buried beneath the surface of the road pavement to provide the detection system. To a major extent the detection characteristics are determined by the actual loop configuration used. Standards for the cables used in the construction of these loops are as follows:

- AS 2276 Cables for Traffic Signal Installations
Part 2: Feeder Cable for Vehicle Detectors.
Part 3: Loop Cable for Vehicle Detectors.

The requirements of Section 4 of this Standard have been framed in such a way that the performance of vehicle loop detector sensors can be assessed independently of other elements of the detection system. A suggested series of type tests for checking the operational performance of the sensors is provided in Appendix B. Recommended routine tests are described in Appendix C.

The alterations introduced in this edition affect Clauses 1.2, 1.3.17, 1.3.22, 3.5.2, 3.6.2, 3.6.4(a) and Appendices A and B. The most significant changes made are the—

- (a) correction of explanatory material in Appendix A relating to the performance characteristics of vehicle loop detector sensors; and
- (b) addition of a new paragraph (B4.1) in Appendix B clarifying procedures for the type testing of multi-channel detector sensors.

Other changes involve corrections of existing requirements or editorial clarifications.

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