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**Electromagnetic
Susceptibility
Measurement
Procedures for
Vehicle Components
(Except Aircraft)**

SAE Recommended Practice
Revised August 1987

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Submitted for Recognition as
an American National Standard

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Ø ELECTROMAGNETIC SUSCEPTIBILITY MEASUREMENT PROCEDURES
FOR VEHICLE COMPONENTS (EXCEPT AIRCRAFT)

1. INTRODUCTION:

1.1 Scope: This SAE Recommended Practice establishes uniform laboratory measurement techniques for the determination of the susceptibility to undesired electromagnetic sources of electrical, electronic, and electromechanical ground-vehicle components. It is intended as a guide toward standard practice, but may be subject to frequent change to keep pace with experience and technical advances, and this should be kept in mind when considering its use.

1.2 Measurement Philosophy: The need for measurement of the susceptibility of vehicle electronic components to electromagnetic sources has become more essential as more electronic components are introduced into motor vehicles. Electronic and electrical equipment may be susceptible to performance anomalies when subjected to electromagnetic sources, either of a transient or steady-state nature.

Electromagnetic interference (EMI) may be transient, intermittent, or continuous in nature arising from sources such as transmitters or other equipment located either on board or adjacent to the vehicle, or from component parts of the vehicle ignition or electrical power systems.

This recommended practice sets forth uniform procedures for establishing the susceptibility levels of individual vehicle components. It does not set limits on levels of EM energy in which vehicle components must perform; however, suggestions for developing functional performance status classifications for immunity are given in Appendix B.

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