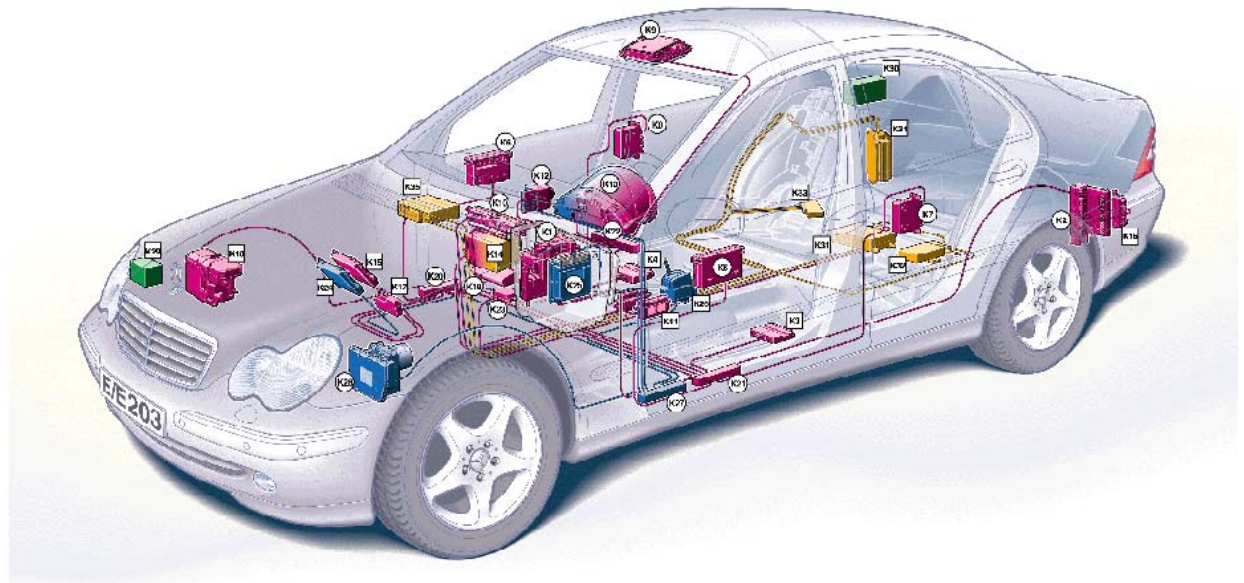




Mercedes-Benz

Controller Area Network CAN



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Objectives

- Explain advantages of CAN networks
- Explain how CAN networks operate
- Describe location of CAN connectors
- Explain CAN diagnosis techniques
- Provide reference information on other models
(reference section at back of handout)



What is a CAN System?

A CAN system is:

- A digital communication link between multiple Electronic Control Modules (ECM)
- A 2 wire, bi-directional communication link with data transmitted according to priority
- Message specific addressing

Advantages

- Cost
- Improved immunity to electrical interference
- Fewer connectors
- Fewer pins on control modules
- Weight savings
- Fewer sensors
- Improved diagnosis facilities
- Rapid transmission rates

Types of CAN Communication

Mercedes-Benz uses several CAN networks. Depending on model and year the following may be used.

CAN C - Engine CAN (*also known as chassis CAN*)

Fast communication speeds 125 kbps or 500 kbps

CAN B - Interior CAN (*also known as body CAN*)

Communication speed 83 kbps

Information from CAN C can be sent to control modules on the CAN B or vice versa via the Electronic Ignition Switch (EIS). The EIS is the only control module* that can transfer the messages and is known as the gateway.