#### What is a Fusible Link?

A fusible link is a short piece of insulated low-voltage cable within an automotive wiring harness that is designed to protect the harness in applications where a fuse is unsuitable. In an extreme current overload situation, the conductor within the link is melted while the ensuing flame and spark is contained within the link's insulation.

#### What are the ratings for fusible links?

Fusible links are not rated in amps like fuses because each installation is unique and designed to meet specific circuit protection requirements.

#### What size replacement fusible link should be used ?

The automotive service industry recommends using the same gauge and length as the blown fusible link after the cause of failure is corrected.

#### How do you use a parallel connector?

Insert the stripped end of a fusible link and the stripped end of the cable being protected into a parallel connector as shown, and crimp. A parallel connector should always be protected with electrical tape or heat-shrink tubing.



# What size fusible link should be used in a new installation?

The suitability of a fusible link in a new application can be determined only by a qualified harness engineer with full knowledge of the circuit protection requirements, the installation and operating conditions, and the safety and liability aspects. We cannot make specific recommendations.

# Are there any general guidelines for choosing a suitable fusible link?

Typically, a given harness segment is protected by fusible link that is four gauge numbers smaller. A 14gauge wire would be protected by an 18-gauge fusible link. A 6-gauge wire would be protected by a 10gauge link, and so on. Odd number wire gauge sizes like 19, 15, 13 and 11 are counted when sizing a link. The length of a fusible link should not exceed 9".

# Can a fusible link be used to replace a fuse that blows frequently?

In general, a fusible link should never be used to replace an automotive fuse unless authorized by a vehicle factory service bulletin. Safety and liability issues are involved.

# Can a blown fusible link be replaced with a MAXI<sup>™</sup> fuse?

While "MAXI" fuses have replaced most factory-installed fusible links in late model vehicles, they do not have the same performance characteristics as fusible links and should not be used to replace them

unless specifically authorized by a vehicle factory service bulletin. Fusible links continue to be used in most starting circuit applications.

# Where can I find more technical information on automotive fusible links?

Specifications relating to conductors, insulation, wire size, length, location termination, identification and testing are spelled out in SAE Specification J156, The Society of Automotive Engineers' web address is <u>www.sae.org</u>.