1967 Corvette: Chevrolet PartsMart: Fusible Links

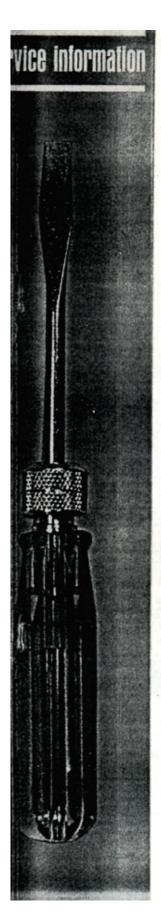
Subject: Fusible Link Service

Model and Year: 1967 Passenger Cars

Source: Chevrolet PartsMart

Date: February 1967

Below is an excellent source of information from Chevrolet PartsMart in February 1967 on how to diagnose the fusible links on 1967 Corvettes. It lists the correct wire colors and their gauges.



FUSIBLE LINKS

1967 Passenger Cars

A "fusible link" is a length of special insulated wire (normally four wire gauges smaller than the circuit it is protecting) of which the design and construction are identical to the body and chassis wiring used throughout the vehicle. The "fusible link" circuit protection is functionally the same as a fuse in that an open circuit condition will develop from an excessive circuit overload (short circuit). The wire conductors of the "fusible link" will heat up until they melt and separate the same as a fuse element. The four wire gauge size differential allows the "fusible link" to open before other wire in the circuit is damaged.

NOTE: When a "link" fails, the insulation diameter will increase to approximately twice the original diameter (under normal conditions the link insulation will be of a smaller diameter than the connecting harness) throughout its entire length and the insulation surface will present a bubble effect as opposed to the original smooth finish. If this effect is not noted, it may be necessary to perform a point-to-point continuity check at the "fusible link" to determine if it has failed.

There are four circuits on the passenger cars that are protected by "fusible links" (Fig. 1). These are:

- Protection for 10-gauge battery charging circuit. The pigtail lead at the battery positive cable (except Corvette) is a 14-gauge, brown fusible link protecting the 10-gauge battery charging circuit. This wire is an integral part of the battery cable assembly and servicing requires replacing the complete battery cable assembly. On Corvette models this link is installed as a molded splice at the solenoid "Bat" terminal and servicing requires splicing in a new link.
- Protection for all unfused wiring of 12-gauge or larger. A 16-gauge black fusible link is located at the horn relay to protect all unfused wiring of

12-gauge or larger. It is installed as a molded splice and servicing requires splicing in a new link.

- 3. Generator light and field circuitry. The generator warning light and field circuitry (16-gauge wire) is protected by a fusible link (20-gauge orange wire) used in the "battery feed to voltage regulator #3 terminal" wire. The link is installed as a molded splice in the generator and forward lamp harness and is serviced by splicing in a new 20-gauge wire as required.
- 4. Ammeter Circuit. The ammeter circuit on all models is protected by two orange 20-gauge wire fusible links installed as molded splices in the circuit at the junction block or the solenoid "Bat" terminal (Corvette only) and at the horn relay. Each link is serviced by splicing in a new 20-gauge wire as required.

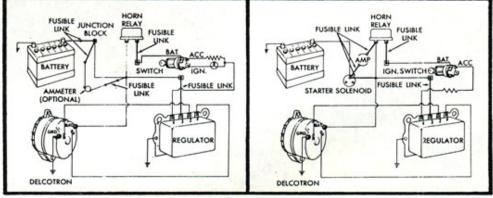
Passenger car "fusible links" are serviced from bulk stock (50 foot coils) under the following part numbers:

Wire Gauge	Color	Part No.
14	Brown	6292995
16	Black	6292996
20	Orange	6292997

To replace the passenger car "fusible links" perform the following:

- 1. Cut away old fusible link wire and molded splice.
- Cut new "fusible link" from bulk wire to a maximum length of eight (8) inches.
- Splice in new "fusible link" wire with splice clip* and solder.
- 4. Cover splice with plastic electrical tape.*
- Add terminal* as required to the other end of new "link".

*Available commercially



Passenger Car

Corvette

Fig. 1-Passenger Car Fusible Links

Online URL:

https://www.corvetteactioncenter.com/tech/knowledgebase/article/1967-corvette-chevrolet-partsmart-fusible-links-1139.html