

Chevrolet Malibu and Saturn AURA Green Line Hybrid Emergency Response Quick Reference*



Procedures for Disabling Electrical

Disabling 12 Volt Power

Perform EACH of the following steps to disable the 12 volt electrical system. This includes power to the airbag system.

1. Turn the ignition key to the OFF position
OR if the ignition key is not accessible, remove the Run/Crank Relay located in the underhood fuse block
2. Disconnect or cut BOTH 12v negative (-) battery cables

Run/Crank Relay



Cut here to disable BOTH 12v negative cables at once

3. Verify tachometer is pointing to OFF



WAIT a minimum of 10 seconds to allow any undeployed airbag reserve energy to dissipate.

Note: Since one of the 12v negative (-) cables is partially hidden from view, it is best to disconnect the cables from the terminal or cut the cables near the terminal.

Key Components and Do Not Cut Zones

Vehicle Identification



Note: Saturn AURA Green Line shown, Chevrolet Malibu Hybrid similar.

NOTE: Green Line emblem only on Saturn AURA

Do Not Cut Zones

DO NOT CUT HERE. Roof rails may contain side impact air bag inflator canisters

Passenger side shown, Drivers side is the same.



DO NOT CUT HERE. Hybrid Battery has 36v electrical potential at all times

DO NOT CUT HERE. Conduit tube beneath the vehicle contains intermediate 36v electrical wire

Highlighted areas indicate DO NOT CUT Zones

36 Volt Electrical System

First perform the "Disabling 12 Volt Power" procedure to eliminate current flow on the 12 volt electrical system. This also reduces the 36 volt current flow to a low level in the blue intermediate voltage (36v) cable. No further action is required.

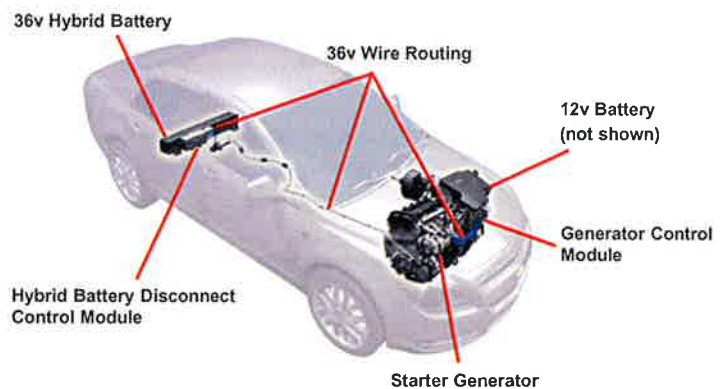
Do NOT cut the intermediate voltage (36v) cable, because there is a higher arc potential.

CAUTION: Cutting the intermediate voltage cable may result in an arc hazard.



Note: The intermediate voltage cable routed under vehicle is not colored blue but is housed in a metal conduit

Key Hybrid Components



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For more information consult the 2007 Saturn AURA Green Line Hybrid and 2008 Chevrolet Malibu Hybrid Emergency Response Guide at

www.gmstc.com

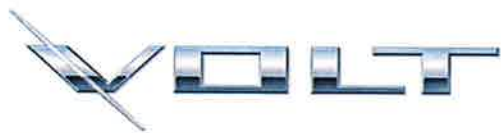
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Chevrolet Volt

Quick Reference Sheet

Vehicle Identification

The Chevrolet Volt badging is one method of identifying the vehicle. The vehicle's logo is located on the right-front and left-front fenders as well as the deck lid.



A unique Liquid Crystal Display (LCD) instrument panel cluster assists in identifying the Chevrolet Volt.

Instrument Panel Cluster

Energy Display



High Voltage Cables - DO NOT CUT ZONES

DANGER: Do NOT cut the orange high voltage 360 volt cables. Cutting these cables can result in serious injury or death. No matter what disable method you have performed, always assume the high voltage cables and components contain high voltage.



Vehicle - DO NOT CUT ZONES

DO NOT CUT HERE. Side curtain air bags and lift gate hold open struts.



DO NOT CUT HERE. The Volt battery has 360 volt electrical potential at all times. It is inside the center tunnel and under the rear seat area.

Do NOT cut the:

- Front seat back on the outboard area, contains side air bags.
- B pillar near the rocker, contains the seat belt pretensioner.
- Outboard area of the front seat lower frame, houses an additional seat belt pretensioner.

WARNING: Do NOT cut into the vehicle until the 12V electrical system has been disabled. Cutting into the vehicle prior to disconnecting and isolating the 12V electrical energy sources may cause air bag deployment resulting in serious injury.

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High Voltage Labels

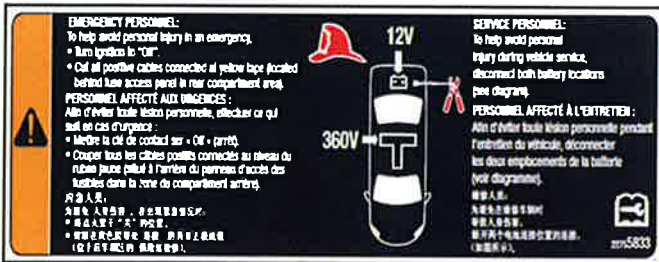
The Chevrolet Volt features a series of high voltage labels that enable quick identification of potential electrical hazards. The labels are attached on each high voltage component.

The labels are color coded to indicate the potential high voltage state



High Voltage Labels

The emergency / service personnel warning label is affixed at the front of the engine compartment and provides specific procedures for emergency personnel.



High Voltage Labels

The high voltage danger labels are red and indicate that high voltage is present at all times. These labels are located on the high voltage battery.



High Voltage Labels

The high voltage warning labels are orange and indicate a potential shock hazard if high voltage is not properly disabled. The labels are located on all high voltage components with the exception of the high voltage battery which utilizes the danger label.



High Voltage Labels & First Responder Tags

The First Responder cable cut tag is wrapped around the low voltage positive battery cable and is located in the rear compartment behind the fuse panel door. To help ensure that low voltage is not holding the high voltage contactors closed, cut the cable before any extrication work is performed.



The Volt has labels to help First Responders safely disable the vehicle in an emergency situation. The cable cut tag is yellow and wraps around the low voltage positive cable to indicate where emergency personnel must cut the cable.



To Disable the 12V Power

1. Press the Start button on the center instrument panel to turn OFF the ignition.
2. Cut the 12V positive battery cable at the yellow tag cut position. The cable is identified by the yellow First Responder tag. The tag is located behind the left rear closeout panel in the rear compartment of the vehicle.

Note: After disabling 12V power, wait 10 seconds to allow any un-deployed air bag reserve energy to dissipate.

Important:

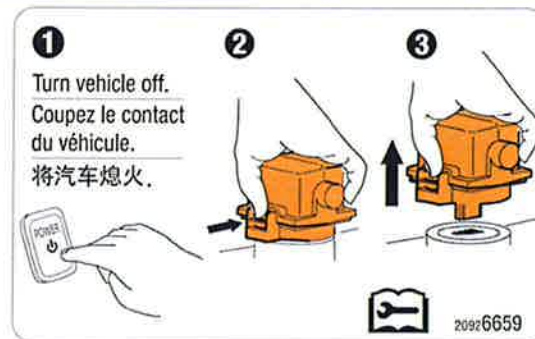
Cut through the red positive low voltage cable on each side of the tag to remove a section of the cable to ensure they cannot inadvertently reconnect.



Disabling a Volt

The Manual Service Disconnect (MSD) may also be removed to further ensure the high voltage system is disabled within the battery. The MSD physically interrupts the high voltage cables internal to the battery. There is a label that illustrates the removal of the MSD which is located underneath the center console box.

Note: There is high voltage in the battery even if the MSD is removed.



Charging System

In the event a Volt is involved in an incident while the battery charger is plugged in for charging the battery, remove the charge cord from the car using the charger cord handle at the charge port in the left front fender. If that cannot be accomplished, the electrical power to the charge cord should be terminated at the source.



High Strength Steel

The Volt has been designed to protect the occupant(s) during a collision. The body structure is nearly 80% high strength steel. The occupant's are protected from front, rear and side impacts by a structural cage created by the underlying vehicle structural design. Additional crumple zones protect the occupant with front, side and rear rails that are designed to crush in a crash.



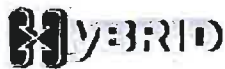
GMC Yukon and Sierra, Chevrolet Tahoe and Silverado, and Cadillac Escalade Two-mode Vehicles

Quick Reference Sheet

Vehicle Identification

Special badging is used to identify the GMC Yukon and Sierra, Chevrolet Tahoe and Silverado, and Cadillac Escalade Two-mode Vehicles. Two-mode Hybrid vehicles One of these emblems is located on the lower right corner of the vehicle's liftgate. The eighth digit of the Vehicle Identification Number (VIN) can also be used to identify a Two-mode Hybrid vehicle. If the eighth digit is a five (5), this signifies the vehicle is a Hybrid.

A Hybrid badge is also located on the right and left C-pillars



A tachometer with Auto Stop indicator and an Economy gauge are unique to these vehicles



Tachometer with Auto Stop Indicator



Economy Gauge

When the hood is opened, indications that a Two-mode Hybrid system is present include a Hybrid badge and a HIGH VOLTAGE WARNING label on the power electronics cover.



Under the second row, rear seat sub-floor is a DANGER HIGH VOLTAGE label attached to the Hybrid battery case, indicating high voltage.



Note:
All high voltage cables used in Two-mode Hybrid models are colored orange for easy identification.

Note:
The hood ajar switch will NOT prevent current flow through the 300 volt electrical system.



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CAUTION: As you approach a Two-mode Hybrid vehicle it may be operating in Auto Stop Mode, and may appear that the vehicle is turned OFF, or the engine has stalled. The engine may restart without warning for numerous reasons. It is important to perform the disabling 12v power procedure to ensure that all vehicle propulsion modes have been disabled.

To Disable 12v Power You Must



- Turn the ignition key to the OFF position.
- Remove the 12 volt (+) positive battery cable from the battery post. Ensure the terminal cannot contact the battery post.

- OR -

- If the ignition key is not accessible, disconnect the 12 volt positive (+) battery cable (located in the left, front underhood area).
- Cut all three exposed 12v positive cables. The location for cutting the 12 volt positive cables is identified by labels that indicate where to cut.



Note: The 12 volt battery cables have lever type, quick release terminals.

Note: After disabling 12v power, wait at least 10 seconds to allow any un-deployed air bag reserve energy to dissipate.

High Voltage Manual Disconnect

If accessible, you can minimize the potential for 300v current flow by removing the manual disconnect lever from the 300 volt Hybrid battery. The hybrid battery is located under the second row, rear seat sub-floor.



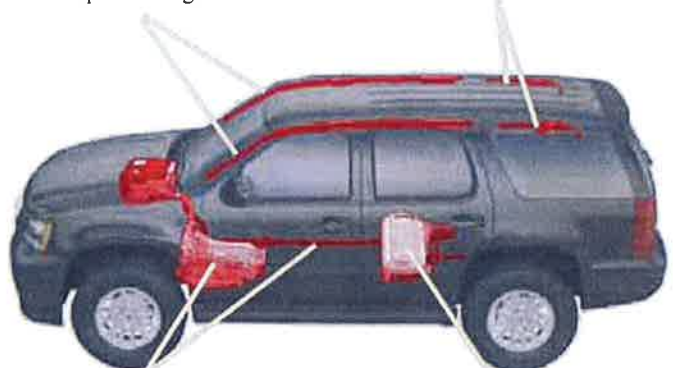
DANGER: The manual disconnect lever is designed to facilitate servicing of the vehicle. The energy potential within the 300v battery cannot be disabled. Even with the disconnect removed, assume the high voltage cables and components contain high voltage.

If the 300 volt battery is exposed, it should only be handled by a properly trained technician - Otherwise, serious injury or death may occur.

Vehicle DO NOT CUT ZONES

DO NOT CUT HERE. Roof rails between the windshield and 'D' pillars (rear pillars). Side impact air bags.

DO NOT CUT HERE. Side curtain air bags (with optional third row seat)



DO NOT CUT HERE. Under vehicle area near passenger side frame rail contains high voltage 300 volt electrical cables.

DO NOT CUT HERE. Two-mode Hybrid battery has 300 volt electrical potential at all times.

WARNING: Do NOT cut into the vehicle until the 12v electrical system has been deactivated. Cutting into the vehicle prior to disconnecting and isolating the 12v electrical sources may cause air bag deployment resulting in serious injury.

For more information, consult the GMC Yukon, Chevrolet Tahoe & Cadillac Escalade First Responder Guide at www.gmstc.com

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