2003-04 ELECTRICAL

Fuses & Circuit Breakers - H2

IDENTIFICATION

WARNING: Vehicles are equipped with air bag supplemental restraint system. Before attempting any repairs involving steering column, instrument panel or related components, see SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM in appropriate AIR BAG RESTRAINT SYSTEMS article in RESTRAINTS.

CAUTION: When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See appropriate COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION before disconnecting battery.

FUSIBLE LINKS

Fusible links are usually located between battery and starter or electrical center. For description and repair procedures, see **Fig. 1**.

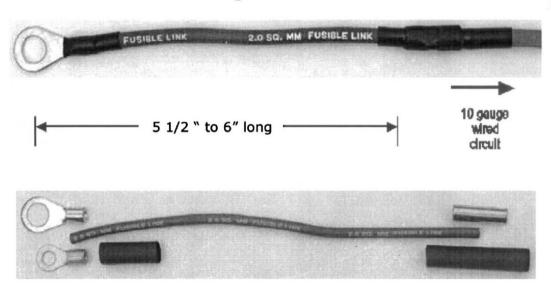
Circuit Protection - Fusible Links

Fusible link is wire designed to melt and break continuity when excessive current is applied. It is often located between or near the battery and starter or electrical center. Use a continuity tester or a DMM at each end of the wire containing the fusible link in order to determine if it is broken. If broken, it must be replaced with fusible link of the same gage size.

Repairing a Fusible Link

Repair the fusible link by replacing the entire fusible link assembly from generator to the starter.

14 Gauge Fusible Link



# FL-18	18ga. Fusible Link	protects 14ga. or heavier wired systems
# FL-16	16ga. Fusible Link	protects 12ga. or heavier wired systems
# FL-14	14ga. Fusible Link	protects 10ga. or heavier wired systems
# FL-12	12ga. Fusible Link	protects 8ga. or heavier wired systems

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Fig. 1: Repairing Fusible Links

INSTRUMENT PANEL FUSE BLOCK

NOTE: Instrument panel fuse block is located at left end of instrument panel. See <u>Fig.</u> 2.

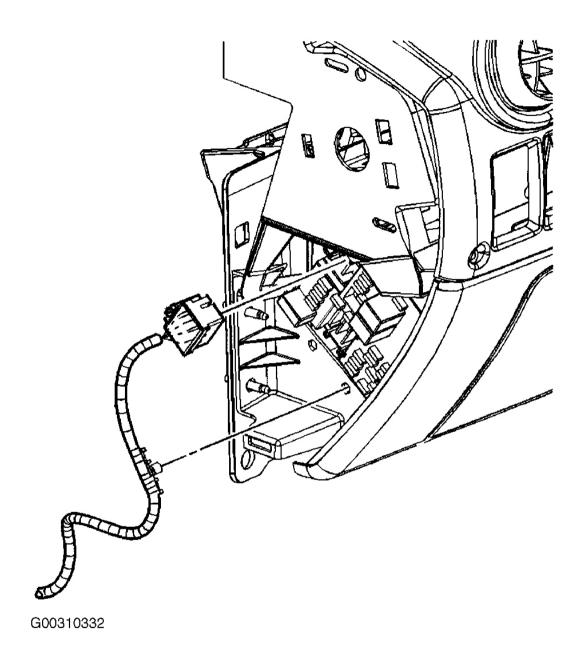


Fig. 2: Locating Instrument Panel Fuse Block Courtesy of GENERAL MOTORS CORP.

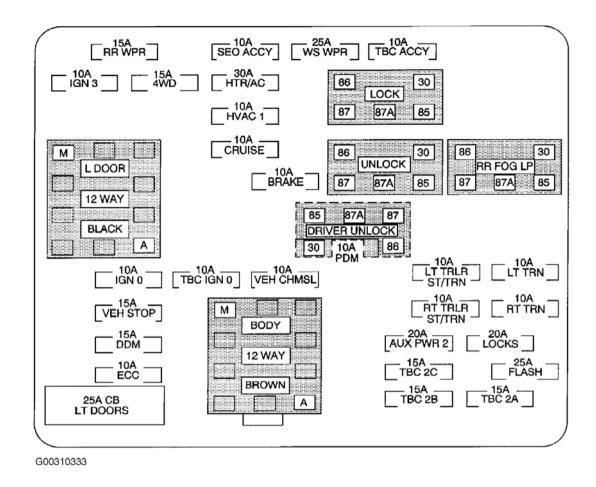


Fig. 3: Identifying Instrument Panel Fuse Block Components Courtesy of GENERAL MOTORS CORP.

Device	Rating	Description
RR WPR Fuse	15A	Rear Window Wiper/Washer Switch
SEO ACCY Fuse	10A	Body Builder Provision
WS WPR Fuse	25A	Windshield Wiper Motor and Module
TBC ACCY Fuse	10A	Body Control Module (BCM)
IGN 3 Fuse	10A	Heated Seat Module - LR/RR
4WD Fuse	15A	Air Suspension Module, Ride Height Switch, Transfer Case Shift Control Switch
HTR A/C Fuse	30A	Not Used
LOCK Relay		Door Lock Actuator - Liftgate, Door Latch Assembly - LR, Door Latch Assembly - RR
HVAC 1 Fuse	10A	HVAC Control Module, HVAC Actuators, Inside Rearview Mirror
L DOOR		Fuse Block - I/P C4 (Driver Door Harness)
CRUISE Fuse	10A	Cruise Control Switch
UNLOCK Relay		Door Lock Actuator - Liftgate, Door Latch Assembly - LR, Door Latch Assembly - RR
RR FOG LP Relay		Not Used
BRAKE Fuse	10A	Stop Lamp Switch
DRIVER UNLOCK Relay		Not Used
PDM Fuse	10A	Front Passenger Door Module (FPDM)
IGN O Fuse	10A	Automatic Transmission, Powertrain Control Module (PCM), Shift Lock Control Keylock Solenoid
TBC IGN O Fuse	10A	Body Control Module (BCM)
VEH CHMSL Fuse	10A	CHMSL Stop Lamp, Trailer Wiring Provisions

Fig. 4: Instrument Panel Fuse Block Legend - 1 Of 2 (2003 & 2004) Courtesy of GENERAL MOTORS CORP.

LT TRLR ST/TRN Fuse	10A	Trailer Wiring Provisions
LT TRN Fuse	10A	Instrument Panel Cluster (IPC), Side Marker Lamps - LF/LR, Turn Signal Lamp - LR, Turn/Park Lamp - LF
VEH STOP Fuse	15A	Turn Signal/Hazard Flasher Module, VEH CHMSL Fuse
BODY		Relay Block - Body C3 (Body Harness)
RT TRLR ST/TRN Fuse	10A	Trailer Wiring Provisions
RT TRN Fuse		Instrument Panel Cluster (IPC), Side Marker Lamps - RF/RR, Turn Signal Lamp - RR, Turn/Park Lamp - RF
DDM Fuse	15A	Driver Door Module (DDM)
AUX PWR 2 Fuse	20A	I/P Accessory Power Outlets, Accessory Power Outlet - Rear
LOCKS Fuse	20A	Door Lock/Unlock Relay
ECC Fuse	10A	Not Used
TBC 2C Fuse	15A	Body Control Module (BCM)
FLASH Fuse	25A	Turn Signal/Hazard Flasher Module
LT DOORS CB	25A	Window Switch - LR, Driver Door Module (DDM)
TBC 2B Fuse	15A	Body Control Module (BCM)
TBC 2A Fuse	15A	Body Control Module (BCM)

Fig. 5: Instrument Panel Fuse Block Legend - 2 Of 2 (2003) Courtesy of GENERAL MOTORS CORP.

LT TRLR ST/TRN Fuse	10A	Trailer Wiring Provisions
LT TRN Fuse	10A	Instrument Panel Cluster (IPC), Side Marker Lamps - LF/LR, Turn Signal Lamp - LR, Turn/Park Lamp - LF
VEH STOP Fuse	15A	Turn Signal/Hazard Flasher Module, VEH CHMSL Fuse
BODY		Relay Block - Body C3 (Body Harness)
RT TRLR ST/TRN Fuse	10A	Trailer Wiring Provisions
RT TRN Fuse		Instrument Panel Cluster (IPC), Side Marker Lamps - RF/RR, Turn Signal Lamp - RR, Turn/Park Lamp - RF
DDM Fuse	15A	Driver Door Module (DDM)
AUX PWR 2 Fuse	20A	I/P Accessory Power Outlets, Accessory Power Outlet - Rear
LOCKS Fuse	20A	Door Lock/Unlock Relay
ECC Fuse	10A	Liftgate Door Lock Relay
TBC 2C Fuse	15A	Body Control Module (BCM)
FLASH Fuse	25A	Turn Signal/Hazard Flasher Module
LT DOORS CB	25A	Window Switch - LR, Driver Door Module (DDM)
TBC 2B Fuse	15A	Body Control Module (BCM)
TBC 2A Fuse	15A	Body Control Module (BCM)

Fig. 6: Instrument Panel Fuse Block Legend - 2 Of 2 (2004) Courtesy of GENERAL MOTORS CORP.

INSTRUMENT PANEL RELAY BLOCK

NOTE: Instrument panel relay block is located at lower left corner of instrument panel. See Fig. 7.

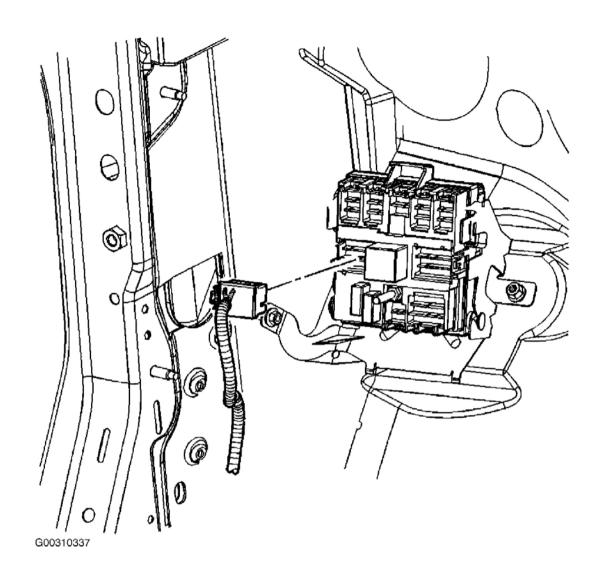


Fig. 7: Locating Instrument Panel Relay Block Courtesy of GENERAL MOTORS CORP.

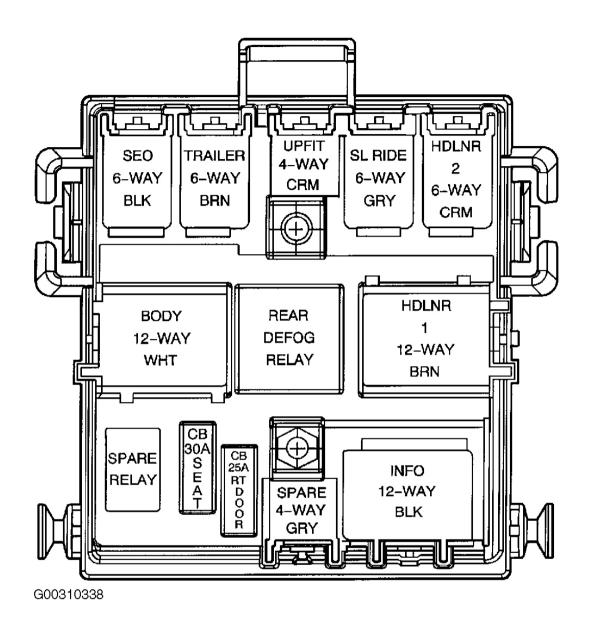


Fig. 8: Identifying Instrument Panel Relay Block Components Courtesy of GENERAL MOTORS CORP.

Fuse	Rating	Description
SEO- 6 - WAY BLK		Not Used
TRAILER- 6 - WAY BRN		Trailer Provisions or Off Road Lamps
UPFIT- 4 - WAY CRM		Upfitter Provisions
SL RIDE- 6 - WAY GRY		Not Used
HDLNR 2- 6 - WAY CRM		Air Temperature Assembly - Inside, Blower Motor Control Processor, HVAC Actuators, Inside Rearview Mirror
BODY- 12 - WAY WHT		B Pillar Courtesy Lamps - LR/RR, Door Courtesy Lamps - LR/RR, Driver/Passenger Seat Module, Heated Seat Module - LR/RR, Rear Window Defogger Grid
DEFOG RELAY		Rear Window Defogger Grid
HDLNR 1- 12 - Way BRN		Courtesy/Reading Lamps - Left/Right Front, Courtesy Reading Lamps - Mid/Rear, Garage Door Opener, Inside Rearview Mirror, Vanity Mirror Lamps - Left/Right
SPARE RELAY		Not Used
CB SEAT	30A	Driver/Passenger Seat Modules
CB RT DOOR	25A	Front Passenger Door Module (FPDM), Window Switch - RR
SPARE- 4 - WAY GRY		Not Used
INFO-12 - WAY BLK		Not Used

Fig. 9: Instrument Panel Relay Block Legend Courtesy of GENERAL MOTORS CORP.

UNDERHOOD FUSE BLOCK

NOTE: Underhood fuse block is located at left front corner of engine compartment. See Fig. 10 .

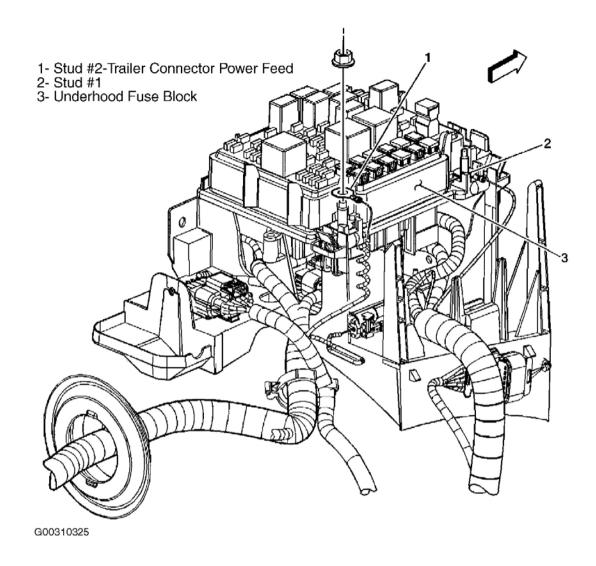


Fig. 10: Locating Underhood Fuse Block Courtesy of GENERAL MOTORS CORP.

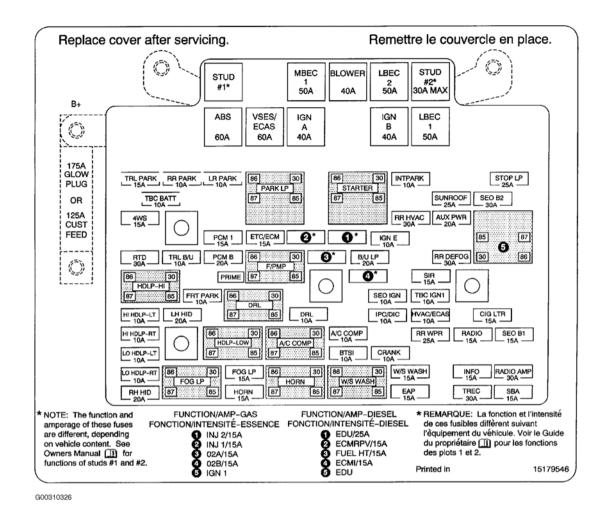


Fig. 11: Identifying Underhood Fuse Block Components Courtesy of GENERAL MOTORS CORP.

Fuse	Rating	Description
STUD 1 Fuse	40A	Trailer Wiring
MBEC Fuse	50A	SEAT CB, RT DOOR CB
BLOWER Fuse	40A	HVAC Blower Motor - High Speed
LBEC 2 Fuse	50A	LOCKS Fuse, DDM Fuse, PDM Fuse, AUX PWR 2 Fuse
STUD 2 Fuse	30A	Trailer Wiring, Off Road Lamps
ABS Fuse	60A	Electronic Brake Control Module (EBCM)
VSES/ECAS Fuse	60A	ECAS Relay
IGN A Fuse	40A	Ignition Switch RUN, START, RUN/START/ACCY, STARTER Relay
IGN B Fuse	40A	Ignition Switch RUN/ACC, RUN/START
LBEC 1 Fuse	50A	FLASH Fuse, TBC 2A Fuse, TBC 2B Fuse, TBC 2C Fuse, LT DOORS Fuse
TRL PARK Fuse	15A	Trailer Wiring
RR PARK Fuse	10A	Tail/Stop Lamp - Right, License Lamp - Right, Side Marker Lamp - Right Rear
LR PARK Fuse	10A	Tail/Stop Lamp - Left, License Lamp - Left, Side Marker Lamp - Left Rear
INTPARKRF Fuse	10A	SIR Defeat Switch, Clearance Lamps, Marker Lamps, Trailer Jumper
STOP LP Fuse	25A	Stop Lamp Switch
TBC BATT Fuse	10A	BCM
PARK LP Relay		TRLR PARK Fuse,LR PARK Fuse,RR PARK Fuse,F PARK Fuse, MARKER LP Fuse
STARTER Relay		Starter
SUNROOF Fuse	25A	Sunroof Relay
SEO B2 Fuse	30A	Electronic Brake Control Module (EBCM)
4WSFuse	15A	EVAP Canister Vent Solenoid
RR HVAC	30A	Not Used
AUX PWR 1 Fuse	20A	Accessory Outlets - Console

Fig. 12: Underhood Fuse Block Legend - 1 Of 3 (2003) Courtesy of GENERAL MOTORS CORP.

Fuse	Rating	Description
STUD 1 Fuse	40A	Trailer Wiring
MBEC Fuse	50A	SEAT CB, RT DOOR CB
BLOWER Fuse	40A	HVAC Blower Motor - High Speed
LBEC 2 Fuse	50A	LOCKS Fuse, DDM Fuse, PDM Fuse, AUX PWR 2 Fuse
STUD 2 Fuse	30A	Trailer Wiring, Off Road Lamps
ABS Fuse	60A	Electronic Brake Control Module (EBCM)
VSES/ECAS Fuse	60A	ECAS Relay
IGN A Fuse	40A	Ignition Switch RUN, START, RUN/START/ACCY, STARTER Relay
IGN B Fuse	40A	Ignition Switch RUN/ACC, RUN/START
LBEC 1 Fuse	50A	FLASH Fuse, TBC 2A Fuse, TBC 2B Fuse, TBC 2C Fuse, LT DOORS Fuse
TRL PARK Fuse	15A	Trailer Wiring
RR PARK Fuse	10A	Tail/Stop Lamp - Right, License Lamp - Right, Side Marker Lamp - Right Rear
LR PARK Fuse	10A	Tail/Stop Lamp - Left, License Lamp - Left, Side Marker Lamp - Left Rear
INT PARK RF Fuse	10A	SIR Defeat Switch, Clearance Lamps, Marker Lamps, Trailer Jumper
STOP LP Fuse	25A	Stop Lamp Switch
TBC BATT Fuse	10A	BCM
PARK LP Relay		TRLR PARK Fuse, LR PARK Fuse, RR PARK Fuse, F PARK Fuse, MARKER LP Fuse
STARTER Relay		Starter
SUNROOF Fuse	25A	Sunroof Relay
SEO B2 Fuse	30A	Electronic Brake Control Module (EBCM)
4WS Fuse	15A	EVAP Canister Vent Solenoid
RR HVAC	30A	Rear HVAC Module - w/C69
AUX PWR 1 Fuse	20A	Accessory Outlets - Console

Fig. 13: Underhood Fuse Block Legend - 1 Of 3 (2004) Courtesy of GENERAL MOTORS CORP.

PCM I Fuse	15A	Evaporative Emission (EVAP) Canister Purge Solenoid, Powertrain Control Module (PCM), Mass Air Flow (MAF) Sensor/Intake Air Temperature (IAT) Sensor
ETC/ECM Fuse	15A	Throttle Actuator Control (TAC), Electronic Brake Control Module (EBCM)
INJ 1 Fuse	15A	Odd Ignition Coils, Odd Fuel Injectors
INJ 2 Fuse	15A	Even Ignition Coils, Even Fuel Injectors
IGN E Fuse	10A	A/C Compressor Relay, I/P Cluster, Turn/Hazard Switch
RTD Fuse	30A	Not Used
TRL B/U Fuse	10A	BCM Module, Trailer Connector
PCM B Fuse	20A	Fuel Pump Relay, PCM
F/PMP Relay		Fuel Pump
O2 Sensor A Fuse	15A	Heated Oxygen Sensors - Left/Right Before Catalytic Converter
B/U LP Fuse	20A	Park/Neutral Position Switch (PNP)
RR DEFOG Fuse	30A	DEFOG Relay
HDLP-HI Relay		High Beam - Left, High Beam - Right
O2 B Fuse	15A	Heated Oxygen Sensors - Left/Right After Catalytic Converter
SIR Fuse	15A	Inflatable Restraint I/P Module Disable Switch, Inflatable Restraint Sensing and Diagnostic Module (SDM)
FRT PARK Fuse	10A	LF/RF Park/Turn Lamps, LF/RF Side Marker Lamps
SEO IGN Fuse	10A	Rear Defogger Relay
TBC IGN 1 Fuse	10A	Body Control Module (BCM)
HI HDLP - LT	10A	Headlamp - High Beam - Left
LH HID		Not Used
DRL Relay		DRL - Left,DRL - Right
DRL Fuse	10A	Daytime Running Lamps (DRL) Relay
IPC/DIC Fuse	10A	Instrument Panel Cluster (IPC)
HVAC/ECAS Fuse	10A	HVAC Control Module, Air Suspension Module

Fig. 14: Underhood Fuse Block Legend - 2 Of 3 (2003-04) Courtesy of GENERAL MOTORS CORP.

15A	Cigar Lighter, Data Link Connector (DLC)
10A	Highbeam Headlamp - Right
	Headlamp - Low Beam - Left, Headlamp - Low Beam - Right
	A/C Compressor Clutch Assembly
10A	A/C Compressor Clutch Relay
25A	Rear Window Wiper Motor
15A	Radio, Rear Seat Audio (RSA)
15A	Heated Seat Module - LR/RR, Garage Door Opener
10A	Headlamp - Low Beam - Left
10A	Stoplamp Switch, Floor Shifter Shift Lock Control Solenoid
10A	Ignition Switch, PCM Module
25A	Headlamp - Low Beam - Right
	Not Used
	Not Used
	Horn - Low Note, Horn - High Note
	Front Windshield Washer Motor and Module
15A	W/S WASH Relay, Front Windshield Washer Motor and Module
15A	Vehicle Communication Interface Module (VCIM)
30A	Radio Amplifier
	Not Used
15A	Horn - High/Low Note
	Not Used
30A	Transfer Case Control Module
	Not Used
	10A 10A 25A 15A 10A 10A 10A 25A 15A 30A 15A 30A

Fig. 15: Underhood Fuse Block Legend - 3 Of 3 (2003) Courtesy of GENERAL MOTORS CORP.

CIG LTR Fuse	15A	Cigar Lighter, Data Link Connector (DLC)
HI HDLP RT Fuse	10A	Highbeam Headlamp - Right
HDLP-LOW Relay		Headlamp - Low Beam - Left, Headlamp - Low Beam - Right
A/C COMP Relay		A/C Compressor Clutch Assembly
A/C COMP Fuse	10A	A/C Compressor Clutch Relay
RR WPR	25A	Rear Window Wiper Motor
RADIO Fuse	15A	Radio, Rear Seat Audio (RSA)
SEO B1 Fuse	15A	Heated Seat Module - LR/RR, Garage Door Opener
LO HDLP - LT Fuse	10A	Headlamp - Low Beam - Left
BTSI Fuse	10A	Stoplamp Switch, Floor Shifter Shift Lock Control Solenoid
CRANK Fuse	10A	Ignition Switch, PCM Module
LO HDLP - RT Fuse	10A	Headlamp - Low Beam - Right
FOG LP Relay		Not Used
FOG LP Fuse	15A	Not Used
HORN Relay		Horn - Low Note, Horn - High Note
W/S WASH Relay		Front Windshield Washer Motor and Module
W/S WASH Fuse	15A	W/S WASH Relay, Front Windshield Washer Motor and Module
INFO Fuse	15A	Vehicle Communication Interface Module (VCIM)
RADIO AMP Fuse	30A	Radio Amplifier
RH HID Fuse	20A	Not Used
HORN Fuse	15A	Horn - High/Low Note
EAP Fuse	15A	Not Used
TREC Fuse	30A	Transfer Case Control Module
SBA Fuse	15A	Not Used

Fig. 16: Underhood Fuse Block Legend - 3 Of 3 (2004) Courtesy of GENERAL MOTORS CORP.