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BUZZERS, RELAYS & TIMERS

BUZZERS, RELAYS & TIMERS LOCATION

Component	Location
A/C Compressor Relay	On left front of engine compartment, in ECM
	housing.
Auxiliary Water Pump Relay	On left front of engine compartment, in ECM
	housing.
Daytime Running Lamp (DRL) Relay	On right side of steering column, on relay box.
Door Lock Relay	Mounted on lower right "A" pillar, behind BCM.
Driver Seat Heater Relay	Under left side of dash.
ECM Relay	On left front of engine compartment, in ECM housing.
Engine Controls Power Relay	On left front of engine compartment, in ECM housing.
Fan Control Relay (5)	On left front of engine compartment, in ECM
	housing.
Fuel Pump Relay	On left front of engine compartment, in ECM
	housing.
Heated Outside Rear View Mirror & Rear Window	On right side of steering column, on relay box.
Defogger Relay	
Horn Relay	On right side of steering column, on relay box.
Left Headlamp Relay (High Beam)	On right side of steering column, on relay box.
Low Beam Relay	On right side of steering column, on relay box.
Multi-Function Relay	Under left side of dash.
Park Lamp Relay	On right side of steering column, on relay box.
Passenger Seat Heater Relay	Under left side of dash.
Rear Seat Cushion Seat Heater Relay (Left/Right)	Underneath left side of rear seats.
Rear Suspension Leveling Air Compressor Relay	On right side of steering column, on relay box.
Right Headlamp Relay (High Beam)	On right side of steering column, on relay box.
Secondary Air Injection Pump Relay	On left front of engine compartment, in ECM housing.
Turn Signal Lamp Flasher	On right side of steering column, on relay box.
Windshield Wiper Motor Relay	On left front of engine compartment, in ECM housing.

CIRCUIT PROTECTION DEVICES

CIRCUIT PROTECTION DEVICES LOCATION

Component	Location
Fuse Block	Mounted to dash, on lower left side of steering
	column.
Power Distribution Fuse Block	On left front of engine compartment, attached to
	ECM housing.
Relay Box	To right side of steering column.

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CONTROL UNITS

CONTROL UNITS LOCATION

CONTROL CIVID ECCRITION	
Component	Location
Blower Controller/Control Module	Behind right side of dash, part of HVAC module.
Body Control Module (BCM)	Mounted on right "A" pillar, behind trim panel.
Cruise Control Module	Right rear of engine compartment, attached to lower
	rail.
Driver Seat Adjuster Memory Module	On underside of driver's seat.
Electronic Brake/Traction Control Module	On left front of engine compartment, mounted to
(EBTCM)	lower rail.
Engine Control Module (ECM)	On left front of engine compartment, in ECM
	housing. See <u>Fig. 1</u> .
Inflatable Restraint Sensing & Diagnostic & Seat	Under center console, near parking brake lever. See
Belt Pretensioner Module	<u>Fig. 6</u> .
Power Steering Control Module	Under left side of dash.
Radio Antenna Amplifier	On top of rear deck, under trim panel.
Radio Speaker Amplifier	In rear compartment, in tray attached to rear deck.
Remote Control Door Lock Receiver	In rear compartment, below left side of rear window
	trim panel.
Sound Processor Interface	In rear compartment, below left side of rear window
	trim panel.
Sun Roof Actuator	At front center of roof, above rearview mirror.
Theft Deterrent Module	Mounted to ignition lock cylinder, upper right side of
	steering column.
Transmission Control Module (TCM)	Behind right side of dash.

MOTORS

MOTORS LOCATION

Component	Location
Auxiliary Engine Coolant Fan No. 1	On front left side of radiator.
Auxiliary Engine Coolant Fan No. 2	On front right side of radiator.
Blower Motor	Behind right side of dash, part of blower controller.
ECM Cooling Blower	Left rear of engine compartment, attached to ECM housing.
Electric Cooling Fan	On front center of engine compartment, behind radiator.
Fuel Pump	Under rear of vehicle, inside fuel tank.
Heater Water Auxiliary Pump	On left front of engine compartment. See Fig. 5 .
Rear Sunshade Motor	On rear deck, under trim panel.
Rear Suspension Leveling Air Compressor	On right front of vehicle. See Fig. 8 .
Secondary Air Injection Pump	On left front rail, under wheelhouse.
Sun Roof Actuator Motor	Front center of roof, above inside rearview mirror.
Water Auxiliary Pump	On left front of engine compartment.
Windshield Washer Pump	In washer solvent reservoir.
Windshield Wiper Motor	Center rear of engine compartment.

SENDING UNITS & SENSORS

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SENDING UNITS & SENSORS LOCATION

Component	Location
Accelerator Pedal Position (APP) Sensor	On mounting bracket, on top of accelerator pedal.
Air Duct Temperature Sensor (Left/Right)	Behind right side of dash, part of HVAC module.
Ambient Air Outside Temperature Sensor	Behind lower left front fascia. See Fig. 7 .
Automatic Level Control Sensor	Attached to right side of rear differential. See Fig. 8.
Brake Fluid Minimum Capacity Sensor	Part of brake master cylinder reservoir cap.
Camshaft Position (CMP) Sensor	On front of engine block. See <u>Fig. 3</u> .
Cooling Fluid Minimum Capacity Sensor	Inside engine coolant overflow reservoir.
Crankshaft Position (CKP) Sensor	On left rear of engine block. See Fig. 1 .
Engine Coolant Temperature Gauge Sensor	Mounted in coolant bridge.
Engine Coolant Temperature (ECT) Sensor	Mounted in coolant bridge. See <u>Fig. 1</u> .
Engine Oil Level Sensor	In lower right front of engine block. See Fig. 4 .
Front Disc Brake Pad Wear Sensor (Left/Right)	Attached to respective front brake caliper.
Front Wheel Speed Sensors (2)	Attached to respective front steering knuckle.
Fuel Sender	Under rear of vehicle, inside of fuel tank.
Fuel Tank Pressure Sensor	Under rear of vehicle, inside of fuel tank.
Headlamp Automatic Control Ambient Light Sensor	Mounted on top of dash.
Heated Oxygen Sensor (HO2S) (Bank 1 Position 1)	In right front pipe of exhaust catalytic converter.
Heated Oxygen Sensor (HO2S) (Bank 1 Position 2)	In right rear pipe of exhaust catalytic converter.
Heated Oxygen Sensor (HO2S) (Bank 2 Position 1)	In left front pipe of exhaust catalytic converter.
Heated Oxygen Sensor (HO2S) (Bank 2 Position 2)	In left rear pipe of exhaust catalytic converter.
Inflatable Restraint Side Impact Sensor (Left/Right)	In lower corner of respective front side door.
Intake Air Temperature (IAT) Sensor	Right front of engine compartment.
Knock Sensor (KS) Bank 1	On right side of engine. See <u>Fig. 2</u> .
Knock Sensor (KS) Bank 2	On left side of engine. See <u>Fig. 3</u> .
Mass Airflow (MAF) Sensor	In air intake passage, between air cleaner &
	resonance chamber. See <u>Fig. 1</u> .
Output Shaft Speed (OSS) Sensor	Left rear of transmission.
Rear Wheel Speed Sensors (2)	Mounted inboard on respective side of rear axle
Thurstin Desiring (TD) Con	differential.
Throttle Position (TP) Sensor	On throttle body assembly. See Fig. 2.
Vehicle Speed Sensor (VSS) Assembly	On left rear of transmission housing.

SOLENOIDS & SOLENOID VALVES

SOLENOIDS & SOLENOID VALVES LOCATION

Component	Location
Automatic Transmission Shift Lock Control Solenoid	At left of shift lever.
Brake Pressure Modulator Valve	Attached to EBTCM.
Defroster Valve Actuator	Behind right side of dash, part of HVAC module.
Evaporative (EVAP) Purge Solenoid Valve	On right rear of intake manifold plenum. See Fig. 1 .
Evaporative (EVAP) Tank Solenoid Valve	On top of fuel tank.
Fuel Tank Filler Door Lock Actuator	Inside rear compartment, near fuel door filler.
Idle Air Control (IAC) Valve	On left side of intake plenum.
Inside Air Valve Actuator	Behind right side of dash, part of HVAC module.
Intake Plenum Switch-Over Solenoid Valve	On left rear of engine. See <u>Fig. 2</u> .

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Intake Resonance Switch-Over Solenoid Valve	Attached to rear of resonance chamber. See Fig. 2.
Mode Valve Actuator (Floor)	Behind right side of dash, part of HVAC module.
Power Steering Fluid Flow Control Valve Actuator	Attached to power steering pump.
Rear Compartment Lid Lock Release Actuator	Attached to rear compartment lid.
Recirculation Vacuum Solenoid Valve	Behind left side of dash, part of HVAC module.
Secondary Air Injection Pump Solenoid Valve	On front center of engine compartment, under secondary air injection switch-over valve. See Fig.
	<u>5</u> .
Temperature Valve Actuator (Left/Right)	Behind respective side of dash, mounted to HVAC
	module.
Water Cut-Off Vacuum Solenoid Valve	Behind left side of dash, mounted to HVAC module.

SWITCHES

SWITCHES LOCATION

Component	Location
A/C Compressor Refrigerant Pressure Switch	On left front of engine compartment, mounted in A/C
	compressor/condenser hose. See $\underline{\mathbf{Fig. 5}}$.
A/C Load Switch	On left front of engine compartment, mounted in A/C
	compressor/condenser hose. See <u>Fig. 5</u> .
Automatic Transmission Range Switch	On left side of transmission housing.
Automatic Transmission Shift Lock Control Switch	At right of shift lever.
Automatic Transmission Shift Lock/Unlock Switch	At left of shift lever.
Cruise Control Release Switch	Attached to brake pedal.
Engine Oil Pressure Gauge Switch	Lower right front of engine. See Fig. 4.
Park Brake Indicator Switch	In center console, attached to park brake lever. See
	<u>Fig. 6</u> .
Primary Coolant Fan Temperature Switch	In upper left side of radiator.
Seat Belt Switch	Part of driver's seat belt buckle.
Secondary Cooling Fan Temperature Switch	In lower left side of radiator.
Starter Motor Switch	On lower right side of engine, attached to starter
	motor. See <u>Fig. 4</u> .
Stoplight Switch	Attached to brake pedal.
Wide Open Throttle (WOT) Switch	Attached to throttle cable.
Windshield Washer Solvent Level Switch	Inside windshield washer solvent reservoir.

MISCELLANEOUS

MISCELLANEOUS LOCATION

Component	Location
A/C Compressor Diode	At A/C compressor clutch coil connector.
Condenser	Near ignition coil.
Coolant Fan Test Connector	On left front of engine compartment, in ECM
	housing.
Data Link Connector (DLC)	Attached to dash carrier, lower left side of steering
	column.
Driver Seat Belt Pretensioner	On lower right side of driver seat.
ECM Housing	On left front of engine compartment. See Fig. 1.

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Engine Coolant Fan Resistor	On left side of engine compartment, mounted beneath
	battery. See Fig. 5 .
Generator	Attached to right lower front of engine. See Fig. 4 .
Ignition Coil (6)	Next to left/right camshaft cover.
Inflatable Restraint Steering Wheel Module Coil	Mounted on steering column.
Passenger Seat Belt Pretensioner	On lower left side of passenger seat.

CONNECTORS

CONNECTORS LOCATION

Component	Location
C100 (Black, 10 Pin)	In left front of engine compartment.
C101 (Gray, 6 Pin)	In left front of engine compartment.
C102 (Brown, 6 Pin)	In left front of engine compartment, behind battery.
C105 (White, 20 Pin)	In left front of engine compartment, behind battery.
C106 (Blue, 20 Pin)	In left front of engine compartment, behind battery.
C108 (Black, 2 Pin)	In right rear of engine compartment.
C110 (Black, 9 Pin)	In ECM housing.
C111 (Gray, 6 Pin)	In left front of engine compartment.
C112 (Black, 7 Pin)	At top front of engine.
C200A (Light Green, 80 Pin)	At lower left "A" pillar.
C200B (Blue, 43 Pin)	At lower left "A" pillar.
C201 (Black, 2 Pin)	At cellular telephone microphone.
C205 (White, 9 Pin)	Attached to automatic transmission control, to right
	of shift lever.
C210 (Black, 42 Pin)	At lower right "A" pillar, next to BCM.
C218	I/P wiring harness to VIU wiring harness.
C301 (White, 9 Pin)	At base of right "B" pillar.
C303 (Black, 15 Pin)	At lower left "B" pillar.
C304 (Black, 15 Pin)	At lower right "B" pillar.
C310 (Gray, 20 Pin)	Under driver seat.
C315A (Gray, 2 Pin)	Under driver seat.
C315B (Black, 8 Pin)	Under driver seat.
C315C	Under driver seat.
C315D	Under driver seat.
C316	Under passenger seat.
C316C	Under passenger seat.
C316D	Under passenger seat.
C317	Under driver seat.
C318	Under passenger seat.
C320 (Black, 9 Pin)	Under left side of rear seat.
C400 (Black, 8 Pin)	Beneath vehicle, near front of fuel tank.
C401 (Gray, 6 Pin)	In rear compartment, near right stop/taillamp.
C403 (Black, 4 Pin)	Body wiring harness to roof wiring harness.
C405 (White, 9 Pin)	On rear compartment lid, under trim panel.
C500 (Black, 40 Pin)	On rear compartment lid, under trim panel.
C600 (Black, 40 Pin)	At lower right "A" pillar.

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GROUNDS

GROUNDS LOCATION

Component	Location
G100	On engine, below power steering pump.
G103	At left front of engine compartment, near C102.
G200	At lower left "A" pillar, above C200.
G201	Mounted near relay box.
G400	On lower left corner of rear compartment, near left
	stop/taillamp.

SPLICES

SPLICES LOCATION

Component	Location
S100	Forward lamp wiring harness, 26 cm from C100.
S101	Forward lamp wiring harness, 26 cm from C100.
S102	Forward lamp wiring harness, 26 cm from C100.
S103	Body wiring harness, 27 cm from P107.
S104	Body wiring harness, 83 cm from P103.
S105	Body wiring harness, 83 cm from P103.
S106	Body wiring harness, 83 cm from P103.
S107	Body wiring harness, at EBCM connector C2 breakout.
S108	A/C control wiring harness, 12 cm from C111 breakout.
S109	A/C control wiring harness, 12 cm from C111 breakout.
S110	A/C control wiring harness, 12 cm from C111 breakout.
S111	A/C control wiring harness, 12 cm from C111 breakout.
S112	A/C control wiring harness, inside ECM housing, near P104.
S113	A/C control wiring harness, inside ECM housing, near P104.
S114	A/C control wiring harness, inside ECM housing, near P104.
S115	A/C control wiring harness, inside ECM housing, near P104.
S116	A/C control wiring harness, inside ECM housing, near P104.
S117	A/C control wiring harness, inside ECM housing, near P104.
S118	A/C control wiring harness, inside ECM housing, near P104.
S120	ECM wiring harness, in ECM housing, near ECM connector.
S121	ECM wiring harness, in ECM housing, near ECM

	connector
S123	ECM wiring harness, in ECM housing, near ECM connector
S124	ECM wiring harness, in ECM housing, near ECM
3127	connector
S125	A/C control wiring harness, 12 cm from C111
	breakout
S127	ECM wiring harness, in ECM housing, near ECM
	connector
S128	ECM wiring harness, in ECM housing, near ECM
	connector
S130	ECM wiring harness, in ECM housing, near ECM
	connector
S131	ECM wiring harness, in ECM housing, near ECM
	connector
S132	ECM wiring harness, 10 cm from ignition coil
	breakout
S133	Body wiring harness, 120 cm from C200 breakout
S134	Body wiring harness, 120 cm from C200 breakout
S135	Body wiring harness, 120 cm from C200 breakout
S136	Body wiring harness, 5 cm from C200 breakout
S145	Windshield washer nozzle heater wiring harness, 68 cm from C108
S146	Windshield washer nozzle heater wiring harness, 68
	cm from C108
S150	Fuel injector wiring harness, near C112
S160	A/C control wiring harness, inside ECM housing near P104
S200	I/P wiring harness, near DLC branch
S201	I/P wiring harness, on headlamp switch connector
	branch, near breakout
S203	Body wiring harness, 3 cm from BCM breakout
S205	I/P wiring harness, 17 cm from P106
S206	I/P wiring harness, near multifunction relay K134 breakout
S207	I/P wiring harness, on headlamp switch connector
3207	branch, near breakout
S210	I/P wiring harness, near multifunction relay K134
	connector branch
S211	I/P wiring harness, near DLC branch
S212	I/P wiring harness, near multifunction relay K134 breakout
S213	I/P wiring harness, near DLC breakout
S214	I/P wiring harness, near DLC breakout
S215	I/P wiring harness, near DLC breakout
S217	I/P wiring harness, near multifunction relay K134
	breakout
S218	I/P wiring harness, near DLC breakout
S220	I/P wiring harness, near DLC breakout

S222	I/P wiring harness, near G201 breakout.
S223	I/P wiring harness, near G201 breakout.
S224	I/P wiring harness, near G201 breakout.
S225	I/P wiring harness, near G201 breakout.
S226	I/P wiring harness, near G201 breakout.
S227	I/P wiring harness, near G201 breakout.
S228	I/P wiring harness, near G201 breakout.
S229	I/P wiring harness, near IPC breakout.
S231	I/P wiring harness, near IPC breakout.
S232	I/P wiring harness, near heater & A/C control breakout.
S235	A/C control & module wiring harness, on rear of HVAC module.
S236	A/C control & module wiring harness, on rear of HVAC module.
S241	I/P wiring harness, near DLC breakout.
S242	Radio speaker amplifier wiring harness, near C210 connector breakout.
S245	I/P wiring harness, near multifunction relay K134 breakout.
S246	I/P wiring harness, near multifunction relay K134 breakout.
S248	I/P wiring harness, near IPC breakout.
S250	I/P wiring harness, near IPC breakout.
S251	I/P wiring harness, near G201 breakout.
S252	I/P wiring harness, near G201 breakout.
S260	Body wiring harness, near G200 breakout.
S261	Body wiring harness, near G200 breakout.
S262	I/P wiring harness, near DLC breakout.
S263	I/P wiring harness, near multifunction relay K134 breakout.
S264	Body wiring harness, near G200 breakout.
S266	Body wiring harness, near G200 breakout.
S267	Body wiring harness, near G200 breakout.
S270	Body wiring harness, 62 cm from C200 breakout, toward driver's side.
S271	Body wiring harness, 62 cm from C200 breakout, toward driver's side.
S272	Body wiring harness, 62 cm from C200 breakout, toward driver's side.
S273	Body wiring harness, 62 cm from C200 breakout, toward driver's side.
S301	Sunshade illuminated mirror wiring harness, 4 cm from C305 breakout.
S302	Sunshade illuminated mirror wiring harness, 4 cm from C305 breakout.
S304	Body wiring harness, under driver door rocker panel.
S305	Body wiring harness, console wiring branch, 5 cm

Component		Location from breakout.
S306	Forv	vard Bandy wiring harness, 260nsolerwining branch, 5 cm
		C100. from breakout.
S307	Forv	van Boldnyn pvin vinnig ngahamasses, sha 26 on fin rfigham "A" pillar, under
		C100. conduit.
S302	Forv	van Boldyn pviving ngalamerse, sha 26 on infightin "A" pillar, under
0202	D	C100. conduit.
S309		odyBwityingihangdrasmesseihaswoof Pilght. "A" pillar, under
S104		ody wiring harness, 83 cm from P103. conduit.
\$3 0 \$		ody wiring harness 83 cm from P103 breakout.
S106	B	ouv withe namess, of em nom 1 175.
\$ 107	Bod	y Body wiring harness 27 cm from RCDLR breakout.
S312		Body wiring harness 12 cm from conduit.
S108 S313	A	C control wiring harness, 12 cm from conduit. Body wiring harness, 12 cm from conduit. Body wiring harness, 12 cm from conduit.
		1 1
S109 S314	A	C control wiring harness, 12 cm from conduit. Body wiring harness 23 par from CDLR breakout.
§316	Α	C confrod white harress 2 cm from C200 breakout.
S317	A	Body wiring harness, lidalse calkle fit. "A" pillar, under
S111	Λ	C control wiring harness, 12 cm from conduit.
S318		Body wiring harfields J. Soveral from C200 breakout.
S312	Δ/	C control wiring harness, hasido EleM'A" pillar, under
5212	""	conduit.
S320		Body wiring harness, base of left "A" pillar, under
5520		conduit.
S321		Body wiring harness, base of left "A" pillar, under
		conduit.
S322		Body wiring harness, base of left "A" pillar, under
		conduit.
S323		Body wiring harness, base of left "A" pillar, under
		conduit.
S325		Body wiring harness, 10 cm from C303 breakout.
S326		Body wiring harness, base of left "A" pillar, under
		conduit.
S327		Body wiring harness, base of left "A" pillar, under
		conduit.
S330		Rear seat heater wiring harness, 8 cm from C320
		breakout.
S335		Rear seat heater wiring harness, 8 cm from C320
22.12		breakout.
S340		Rear seat heater wiring harness, 8 cm from C320
62.45		breakout.
S345		Rear seat heater wiring harness, 8 cm from C320
\$400		breakout.
S400		Body wiring harness, 23 cm from RCDLR breakout.
S401		Rear license lamp wiring harness, near C401 breakout.
\$402		
S402		Rear license lamp wiring harness, near C401 breakout.
		oreakout.

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S403	Rear compaltonosintgjohenir PolyMarness, 6 cm from
S113	A/C control wiring harness, inside ECM C405 breakout.
S411	Body wiring harlmessing, anafrend RCDLR breakout.
S 500	A/C contitotiveiridigdrawie in side is CNI cm from outside
	housing, neanted mirror breakout.
S505	A/C contitoriveir ideg drawnic in gith side second common outside
	housing, neant housing, neant housing, neant housing, neant housing, mirror breakout.
S500	A/C control Driving barness ingsideness M 6 cm from C500
	housing, near P104. breakout.
S503	A/C contitorious diagram is significant significant from outside
	housing, neanteless. mirror breakout.
S508	A/C control Driving barness ingsliden ESS M26 cm from C500
	housing, near P104. breakout.
S\$06	ECM wiring Dairners sijon r Ecil ving dar ingssnear cm from outside
	ECM cranecitor. mirror breakout.
S6Q0	ECM wiring than the assenge CM objusting gleanness, 26 cm from
	ECM connector. C600 breakout.
S603	ECM wiring northpassenge CM blowsing gleanness, 26 cm from
	ECM connector. C600 breakout.
S602	ECM wiring northpassen get Nobbousing gleanness, 26 cm from
	ECM connector. C600 breakout.
S6Q3	A/CRitoritysintengdomrweising2hannessm26 cm from C600
	C111 breakout.branch breakout.
STQO	ECM wiring hatrness, dndr Writing dsamgesse 278 cm from P700.
S800	Right rear door Wring 122 nest on from P800.

COMPONENT LOCATION GRAPHICS

NOTE: Figures may show multiple component locations. Refer to appropriate table for proper figure references.

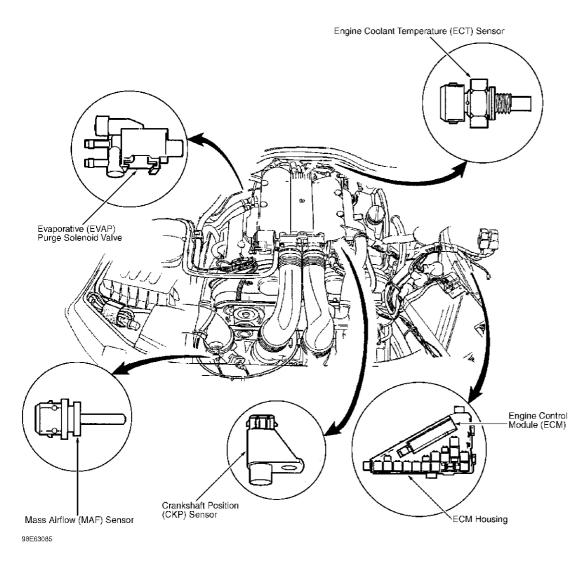


Fig. 1: Top Of Engine
Courtesy of GENERAL MOTORS CORP.

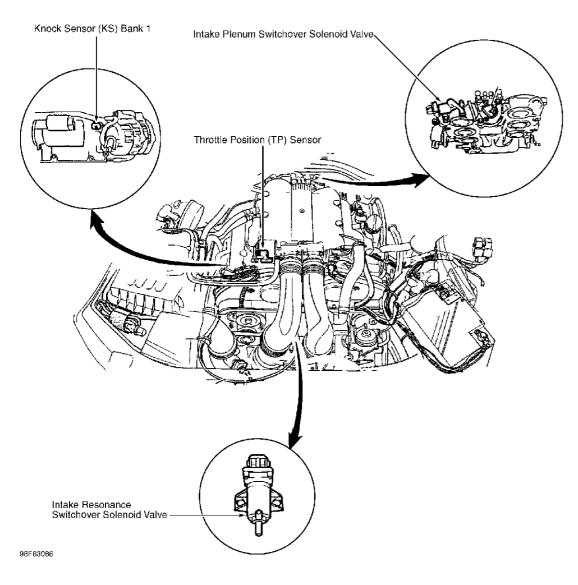


Fig. 2: Top Of Engine
Courtesy of GENERAL MOTORS CORP.

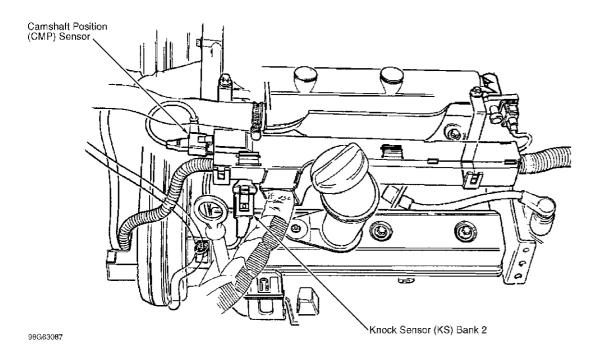


Fig. 3: Front Of Engine Block
Courtesy of GENERAL MOTORS CORP.

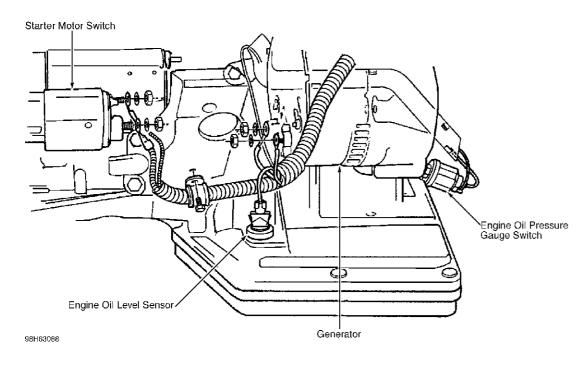


Fig. 4: Lower Front Of Engine
Courtesy of GENERAL MOTORS CORP.

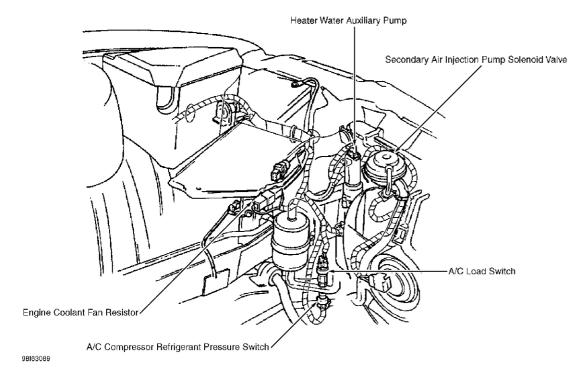


Fig. 5: Left Front Of Engine Compartment Courtesy of GENERAL MOTORS CORP.

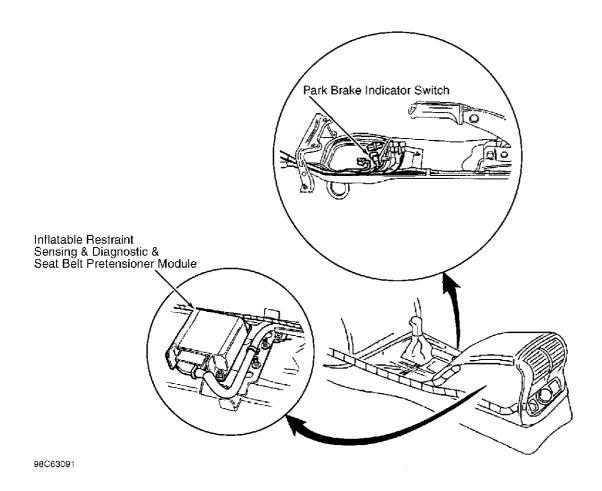


Fig. 6: Center Console
Courtesy of GENERAL MOTORS CORP.

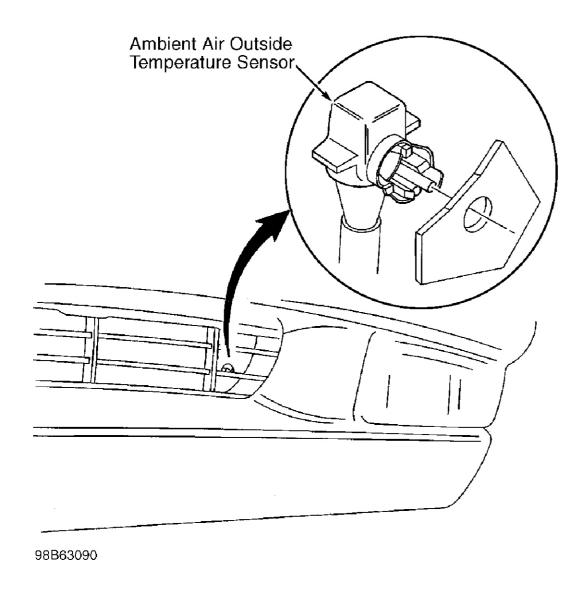


Fig. 7: Grille
Courtesy of GENERAL MOTORS CORP.

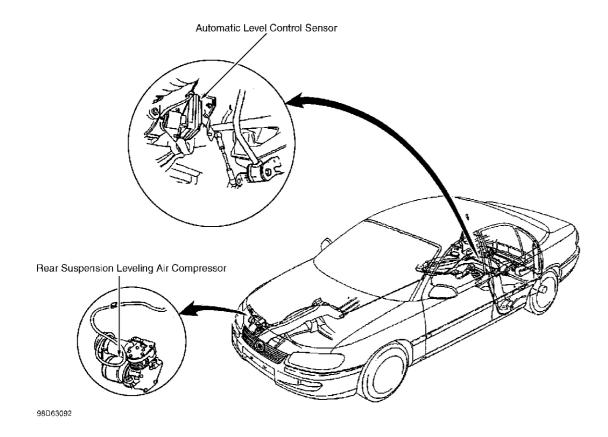


Fig. 8: Vehicle

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Courtesy of GENERAL MOTORS CORP.