

The US state of California required all 1991 new cars to have a computer that would not only facilitate this recording of faults, but provide a common method of retrieving them across brands and models [citation]. It was an open format, in other words.

The “Middle” Year Volvos: 1996-1998

OBD-II diagnostic trouble codes are 4-digit, preceded by a letter:

- P for engine and transmission
- B for Body
- C for Chassis
- and U for Network

Please help us add to this by posting your additions to this topic.

On Board DTC (850)	Generic OBD Code	Meaning of Code	More Info
A-1 Transmission			
111		No faults found	😊
112		Solenoid S1 short circuit to battery voltage	
113		Transmission control module (TCM) fault	
114		Program selector open circuit or short circuit to supply	
121		Solenoid S1 short circuit to ground or control module fault	
122		Solenoid S1 open circuit	
123		Solenoid STH short circuit to battery voltage	viewtopic.php?t=16229
124		Mode selector faulty or short circuit to ground	viewtopic.php?p=63292

131		Solenoid STH open/short circuit or control module fault	
132		Transmission control module(TCM) fault	
134		Faulty load signal from ignition control module	
141		Oil temperature sensor short circuit to ground	
142		Oil temperature sensor open circuit	
143		Kickdown switch faulty or short to ground	
211		Transmission control module (TCM) fault	
212		S2 solenoid short circuit to battery	
213		Throttle position (TPS) signal too high	
221		S2 solenoid short circuit to ground or control module fault	
222		S2 solenoid open circuit	
223		Throttle position (TPS) sensor signal too low	
231		Throttle position (TPS) sensor sporadic	
232		Speedometer signal missing	
233	P0500	Incorrect speedometer signal	viewtopic.php?f=1&t=17383
235		High Oil temperature	
245		Open or short in Torque limiting circuit	
311		RPM signal from transmission missing	
312		RPM signal from transmission faulty	

313		Faulty signal from gear position sensor (PNP)
321		Shift time too long
322		Incorrect gear ratio
323		Lock up slips or is not engaged
331		Short circuit to battery in SL circuit
332		SL solenoid open or control module fault
333		SL solenoid short or control module fault
A2 ? Fuel System		
111		No faults detected
112		Fault in ECM
115	P0201	Injector 1
121	P0102 (low), P0103 (high)	MAF sensor signal
123	P0117 (low), P0118 (high)	ECT signal
125	P0202	Injector 2
131		RPM sensor signal missing
132		Battery voltage
135	P0203	Injector 3
143	P0326	Front knock sensor signal
145	P0204	Injector 4
153	P0136 (faulty), P0137(low), P0138 (high)	Rear HO2S signal
154	P0402	EGR system leakage
155	P0205	Injector 5

212	P0130 (missing/faulty), P0131 (low), P0132 (high), P0133 (slow)	Front HO2S signal	
214	P0336	RPM sensor signal sporadic	
223	P1505 (low), P1506 (high)	IAC valve opening signal	
225		A/C pressure sensor signal	
231	P0171 (part load), P0172 (part load)	Long term fuel trim, part load	P0172 code broken elbow
232	P0171 (lower limit)	Long term fuel trim, idling	
233	P0172 (part load & upper limit)	Long term idle air trim	P0172 code broken elbow
241	P0400	EGR system flow malfunction	
245	P1507 (low), P1508 (high)	IAC valve closing signal	
311		VSS signal	
314		CMP sensor signal	
315	P0440	EVAP system	
325		Memory failure	
335	P1617, P1618	Request for MIL lighting from TCM	/viewtopic.php?f=1&t=27973
411	P0122 (low), P0123 (high)	TP sensor signal	
413	P1416 (Faulty), P1417 (Low), P1418 (High)	EGR temp sensor signal	
414		Boost pressure reduction from TCM	
416		Temperature warning level 1	
432	P0331	Rear knock sensor signal	
433	P0331	Front HO2S slow response	
435	P0133 (slow),	Front HO2S slow response	
436		Rear HO2S compensation	

443	P0422	Three way cat. Efficiency	/forums/viewtopic.php?f=1&t=22996 California emissions test with p0422 and p1171
444	P1307 (low), P1308 (high)	Acceleration signal	
451	P0301	Misfire cylinder 1	
452	P0302	Misfire cylinder 2	
453	P0303	Misfire cylinder 3	
454	P0304	Misfire cylinder 4	
455	P0305	Misfire cylinder 5	
513	P1405	Temperature warning level 2	
514		Engine cooling fan low speed signal	
521	P0135 (low/high)	Front HO2S Preheating	
522	P0141 (low/high)	Rear HO2S Preheating	
531	P1101	Power stage group A	
532	P1102	Power stage group B	
533		Power stage group C	
534		Power stage group D	
535		TC control valve signal	
541	P0444 (low), P0445 (high)	EVAP valve signal	
542	P0300	Misfire more than one cylinder	
543	P1310	Misfire at least one cylinder	
544	P0300	Misfire more than one cylinder, three way cat damage	
545	P1310	Misfire at least one cylinder, three way cat damage	
551	P0301	Misfire cylinder 1, three way cat damage	

552	P0302	Misfire cylinder 2, three way cat damage
553	P0303	Misfire cylinder 3, three way cat damage
554	P0304	Misfire cylinder 4, three way cat damage
555	P0305	Misfire cylinder 5, three way cat damage
A3 ? ABS		
111		No DTC set
121		Left front wheel sensor, faulty signal <40 km/h
122		Right front wheel sensor, faulty signal <40 km/h
123		Left rear wheel sensor, faulty signal <40 km/h
124		Right rear wheel sensor, faulty signal <40 km/h
125		Signal faulty from at least one wheel sensor for a long period
135		Control Module faulty
141		Faulty pedal sensor, shorted to ground or supply
142		Faulty brake pedal switch, open or short
143		Control module faulty
144		Brake discs overheated
151		Left front wheel sensor, open/short to battery
152		Right front wheel sensor, open/short to battery
155		Rear axle sensor open/short to battery

211		Left front wheel sensor, not signal on moving off	
212		Right front wheel sensor, no signal on moving off	
213		Left rear wheel sensor, no signal on moving off	
214		Right rear wheel sensor, no signal on moving off	
On Board DTC (850)	Generic OBD Code	Meaning of Code	Repair/Info Location (850, 1st Gen 70 Series)
215		Valve relay, open/short	
221		Left front wheel sensor, ABS operation signal missing	
222		Right front wheel sensor, ABS operation signal missing	
223		Left rear wheel sensor, ABS operation signal missing	
224		Right rear wheel sensor, ABS operation signal missing	
231		Left front wheel sensor, signal missing	
232		Right front wheel sensor, signal missing	
235		Rear axle sensor, signal missing	
311		Left front wheel sensor, open/short	
312		Right front wheel sensor, open/short	
313		Left rear wheel sensor, open/short	
314		Right rear wheel sensor, open/short	
321		Left front wheel sensor, irregular >40 km/h	

322	Right front wheel sensor, irregular >40 km/h
323	Left rear wheel sensor, irregular >40 km/h
324	Left rear wheel sensor, irregular >40 km/h
411	Right rear wheel sensor, irregular >40 km/h
412	Left front wheel inlet valve, open/short
413	Left front wheel return valve, open/short
414	Right front wheel inlet valve, open/short
415	Rear valve open/short
421	Right front wheel return valve, open/short
422	Rear wheel return valve circuit, open/short
423	Traction control system valve, open/short
424	Pressure switch for TRACS, faulty or short circuit
441	Control module faulty
442	Pump pressure low
443	Pump motor, electrical or mechanical fault
444	No power supply to valves in hydraulic unit
A6 ? Ignition	
111	No DTC set
112	Control Module fault

123	Engine Coolant Temperature Sensor (ECT) from Control module missing or faulty
131	Engine speed (RPM) sensor signal missing
142	Control Module Fault
143	Knock sensor (KS) missing or faulty
144	Ignition control module load signal missing
154	EGR system flow too high in system
214	Engine speed (RPM) sensor signal missing sporadically
224	Engine Coolant Temperature sensor (ECT) signal missing or faulty
234	Throttle Position (TPS) signal missing at idle
241	EGR system flow too low in system
243	Throttle Position sensor (TPS) signal missing at idle
311	Vehicle speed signal missing or faulty
314	Camshaft Position sensor (CMP) signal missing or faulty
324	Camshaft Position sensor (CMP) signal missing sporadically
411	Throttle position sensor (TPS) signal from fuel injection system missing or faulty
413	EGR temperature sensor signal faulty

432	Control module box temperature too high level 1
433	Knock sensor (KS) signal missing or faulty
513	Control module box temperature too high, level 2
A7 ? Combined Instrument (Trip Computer)	
112	Fuel gauge short circuit
113	Fuel gauge open circuit
121	Temp. sensor interval too short
122	Temp. sensor interval too long
123	Digital output 48 pulse short circuit to supply
131	Digital output 12 pulse short circuit to supply
132	No RPM sensor signal
133	Tank signal to trip computer short to supply
B1 Electronic climate control	
111	No fault
121	Outside temperature sensor shorted to ground
122	Outside temperature sensor open circuit or shorted to 12 volts
123	Driver's side interior temperature sensor shorted to ground
124	Driver's side interior temperature sensor open circuit or shorted to 12 volts

125	Passenger's side interior temperature sensor shorted to ground(earth)
126	Passenger's side interior temperature sensor open circuit or shorted to 12 volts
131	Driver's side air duct temperature sensor shorted to ground(earth)
132	Driver's side air duct temperature sensor open circuit or shorted to 12 volts
133	Passenger's side air duct temperature sensor shorted to ground(earth)
134	Passenger's side air duct temperature sensor open circuit or shorted to 12 volts
135	No signal from engine coolant temperature sensor
141	Faulty signal from driver's side temperature selector switch
143	Faulty signal from passenger's side temperature selector switch
145	Faulty signal from function selector switch
151	Signal from fan speed sensor missing or too high
152	Signal from fan speed sensor shorted to earth
211	Driver's side damper motor position sensor open circuit or shorted to 12 volts
212	Driver's side damper motor position sensor shorted to earth

221	Passenger's side damper motor position sensor open circuit or shorted to 12 volts
222	Passenger's side damper motor position sensor shorted to earth
231	Ventilation damper motor position sensor open circuit or shorted to 12 volts
232	Ventilation damper motor position sensor shorted to earth
233	Floor/defrost damper motor position sensor open circuit or shorted to 12 volts
234	Floor/defrost damper motor position sensor shorted to earth
235	Recirculation damper motor position sensor open circuit or shorted to 12 volts
236	Recirculation damper motor position sensor shorted to earth
311	Driver's side damper motor shorted to earth or shorted to 12 volts
312	Passenger's side damper motor shorted to earth or shorted to 12 volts
313	Ventilation damper motor shorted to earth or shorted to 12 volts
314	Floor/defrost damper motor shorted to earth or shorted to 12 volts
315	Recirculation damper motor shorted to earth or shorted to 12 volts

321	Driver's side damper motor active too long
322	Passenger's side damper motor active too long
323	Ventilation damper motor active too long
324	Floor/defrost damper motor active too long
325	Recirculation damper motor active too long
411	Blower fan seized or drawing excessive current
412	Driver's side interior temperature sensor inlet fan shorted to earth
413	No control voltage at driver's side interior temperature sensor inlet fan
414	Driver's side interior temperature sensor inlet fan seized
415	Passenger's side interior temperature sensor inlet fan shorted to earth
416	No control voltage at passenger's side interior temperature sensor inlet fan
417	Passenger's side interior temperature inlet fan seized
418	No control signal to blower fan power stage
419	Faulty diagnostic signal from blower fan power stage
420	ECU fault in program memory

511	Damper motor limit position self-adjustment not carried out
B2 ? Cruise Control	
111	No faults detected
112	Abnormal speed signal
122	Speed has not exceeded 22mph or no speed signal (not a code to worry about)
211	Control module malfunction
212	Malfunction in the circuit to the vacuum pump or regulator
B5 ?SRS	
111	No fault detected
112	Sensor module fault
127	SRS lamp open/short circuit
211	Drivers airbag short circuit
212	Drivers airbag open circuit
213	Drivers airbag short circuit to ground
214	Drivers airbag short circuit to supply
221	Passenger airbag short circuit
222	Passenger airbag open circuit
223	Passenger airbag short circuit to ground
224	Passenger airbag short circuit to supply
231	Left belt tensioner short circuit