

FORD OBD1 TROUBLE CODES LIST



2-Digit Codes

Code	Definition
Code 11	System PASS
Code 12	Cannot control rpm during KOER Self-Test high rpm check
Code 13	Cannot control rpm during KOER Self-Test low rpm check
Code 14	PIP Circuit failure
Code 15	PCM Read Only Memory (ROM) test failed
Code 16	Rpm too low to perform HO ₂ S test
Code 18	SPOUT circuit open
Code 18	IDM circuit failure/ SPOUT circuit grounded
Code 19	Failure In PCM Internal voltage
Code 21	ECT out of Self-Test range MAP/BARO out of Self-Test range
Code 22	MAP/BARO out of Self-Test range
Code 23	TP out of Self-Test range
Code 24	IAT out of Self-Test range
Code 26	MAF out of Self-Test range
Code 29	Insufficient input from the Vehicle Speed Sensor (VSS)
Code 31	EVP circuit below minimum voltage
Code 32	EVP voltage below closed limit
Code 33	EGR valve opening not detected
Code 34	EVP voltage above closed limit
Code 35	EVP circuit above maximum voltage
Code 41	HO ₂ S circuit indicates system lean (right HO ₂ S)
Code 41	No HO ₂ S switch detected (right HO ₂ S)
Code 42	HO ₂ S circuit indicates system rich (right HO ₂ S)
Code 44	Secondary Air Injection system Inoperative (right side)
Code 45	Secondary Air Injection upstream during Self-Test
Code 46	Secondary Air Injection not bypassed during Self-Test
Code 51	ECT Indicated -40 C (-40 F) /circuit open

Code 53	TP circuit above maximum voltage
Code 54	IAT Indicated -4000 (-40°F) /circuit open
Code 56	MAF circuit above maximum voltage
Code 61	ECT Indicated 123 C (254 F) / circuit grounded
Code 63	TP circuit below minimum voltage
Code 64	IAT indicated 123 C (254 F) I circuit grounded
Code 66	MAF circuit below minimum voltage
Code 67	Park/Neutral Position (PNP) switch circuit open - A/C on during Self-Test
Code 77	Brief WOT not sensed during Self-Test / Operator error
Code 79	A/C on/Defrost on during Self-Test
Code 81	Secondary -Air Injection Diverter (AIRD) solenoid circuit failure
Code 82	Secondary Air Injection Bypass (AIRS) solenoid circuit failure
Code 84	EGR Vacuum Regulator (EVR) circuit failure
Code 85	Canister Purge (CANP) circuit failure
Code 87	Fuel pump primary circuit failure
Code 91	HO2S circuit Indicates system lean (left HO2S)
Code 91	No HO2S switch detected (left HO2S)
Code 92	HO2S circuit indicates system rich (left HO2S)
Code 56	MAF circuit above maximum voltage
Code 61	ECT Indicated 123 C (254 F) / circuit grounded
Code 63	TP circuit below minimum voltage
Code 64	IAT indicated 123 C (254 F) I circuit grounded
Code 66	MAF circuit below minimum voltage
Code 67	Park/Neutral Position (PNP) switch circuit open - A/C on during Self-Test
Code 77	Brief WOT not sensed during Self-Test / Operator error
Code 79	A/C on/Defrost on during Self-Test
Code 81	Secondary -Air Injection Diverter (AIRD) solenoid circuit failure
Code 82	Secondary Air Injection Bypass (AIRS) solenoid circuit

	failure
Code 94	Secondary Air Injection system Inoperative (left side)
Code 95	Fuel pump secondary circuit failure

3-Digit Codes

Code	Definition
Code 111	System checks OK
Code 112	Intake Air Temperature (IAT) sensor is/was low or grounded - IAT
Code 113	IAT sensor is/was high or open - IAT
Code 114	IAT sensor out of range - IAT
Code 116	Engine Coolant (ECT) sensor out of range - ECT
Code 117	ECT sensor is/was low or grounded - ECT
Code 118	ECT sensor is/was high or open - ECT
Code 121	Throttle Position (TP) sensor out of range - TPS
Code 122	TP low (possibly grounded or open circuit) - TPS
Code 123	TP is/was high or short to power - TPS
Code 124	TP voltage was higher than expected - Fuel control
Code 125	TP voltage was lower than expected - Fuel control
Code 126	MAP or BARO sensor out of range - ">MAP
Code 128	MAP vacuum has not been changing - check vacuum lines - ">MAP
Code 129	No MAP or Mass Air Flow sensor change during "goose" test - MAP MAF
Code 136	Oxygen sensor not switching/system lean Left or Front HO2S - Fuel control
Code 137	Oxygen sensor not switching/system rich Left or Front HO2S - Fuel control
Code 138	Fault in Cold Start Injector circuit - Fuel control
Code 139	Oxygen sensor not switching Left or Front HO2S - Fuel control
Code 144	Oxygen sensor not switching Single, Right or Rear HO2S - Fuel control
Code 157	Mass Air Flow signal is/was low or grounded - MAF
Code 158	MAF sensor is/was high or short to power - MAF
Code 159	MAF sensor is/was out of range - MAF
Code 167	No Throttle Position sensor change in "goose" test (must get at least 25% rotation) - TPS
Code 171	Oxygen sensor not switching - system was at adaptive

	limits - Single, Right or Rear HO2S - Fuel control
Code 172	Oxygen sensor not switching - system is or was lean - Single, Right or Rear HO2S - Fuel control
Code 173	Oxygen sensor not switching - system is or was rich - Single, Right or Rear HO2S - Fuel control
Code 174	Oxygen sensor was slow in switching Single, Right or Rear HO2S - Fuel control
Code 175	Oxygen sensor not switching - system was at adaptive limits - Left or Front HO2S - Fuel control
Code 176	Oxygen sensor not switching - system is or was lean Left or Front HO2S - Fuel control
Code 177	Oxygen sensor not switching - system was rich Left or Front HO2S - Fuel control
Code 178	Oxygen sensor was slow in switching Left or Front HO2S - Fuel control
Code 179	Fuel system was rich at part throttle Single, Right or Rear HO2S - Fuel control
Code 181	Fuel system was lean at part throttle Single, Right or Rear HO2S - Fuel control
Code 182	Fuel system was rich at idle Single, Right or Rear HO2S - Fuel control
Code 183	Fuel system was lean at idle Single, Right or Rear HO2S - Fuel control
Code 184	Mass Air (MAF) output higher than expected - Fuel control
Code 185	Mass Air (MAF) output lower than expected - Fuel control
Code 186	Injector pulse width longer than expected or Mass Air Flow (MAF) lower than expected - Fuel control
Code 187	Injector pulse width shorter than expected or Mass Air Flow (MAF) higher than expected - Fuel control
Code 188	Fuel system was rich at part throttle - Left or Front HO2S - Fuel control
Code 189	Fuel system was lean at part throttle - Left or Front HO2S - Fuel control
Code 191	Fuel system was rich at idle - Left or Front HO2S - Fuel control
Code 192	Fuel system was lean at idle - Left or Front HO2S - Fuel control

	control
Code 193	Failure in Flexible Fuel (FF) sensor circuit - Fuel control
Code 194	Perform cylinder balance test to check for inoperative injectors
Code 195	Perform cylinder balance test to check for inoperative injectors
Code 211	Ignition PIP signal was erratic or missing - Ignition Systems
Code 212	Ignition TACH signal was erratic (module/wiring) or SPOUT circuit fault - Ignition Systems
Code 213	Ignition SPOUT or SAW circuit open or shorted - Ignition Systems
Code 214	Error in Cylinder ID (CID) circuit or signal - Ignition Systems
Code 215	Primary circuit failure - ignition coil 1 - Ignition Systems
Code 216	Primary circuit failure - ignition coil 2 - Ignition Systems
Code 217	Primary circuit failure - ignition coil 3 - Ignition Systems
Code 218	IDM signal open or high or left coil pack failure - Ignition Systems
Code 219	SPOUT circuit failure, timing defaulted to 10 degrees - follow code 213 diagnosis
Code 222	IDM open or high or right coil pack failure - Ignition Systems
Code 223	Dual Plug (DPI), SPOUT or IDM circuit fault - Ignition Systems
Code 224	Failure in ignition coil primary circuit - Ignition Systems
Code 225	Knock sensor not tested (ignore if not pinging) - KS
Code 226	Ignition Diagnostic Monitor (IDM) signal fault - Ignition Systems
Code 232	EI primary coil circuit failure - Ignition Systems
Code 238	EI primary circuit failure - ignition coil 4 - Ignition Systems
Code 311	AIR system not working - Single, Right or Rear HO2S - Air Injection

Code 312	AIR not diverting - Air Injection
Code 313	AIR not bypassing - Air Injection
Code 314	AIR inoperative, Left or Front HO2S - Air Injection
Code 326	Pressure Feedback EGR shows low pressure EGR not seating or not seating intermittantly - PFE
Code 327	EGR feedback signal is/was low - EVR or PFE
Code 328	EGR Valve Position (EVP) is/was low - EVR
Code 332	EGR did not open/respond during test or if memory code, did not open intermittantly - EVR or PFE
Code 334	EVP sensor is/was high - EVR
Code 335	EGR feedback signal is/was out of range - EVR or PFE
Code 336	PFE sensor signal is/was was high - ">PFE
Code 337	EGR feedback signal is/was was high - EVR
Code 338	Cooling system did not heat up (check cooling system / thermostat operation)
Code 339	Cooling system overheated (check cooling system / thermostat operation)
Code 341	Octane jumper installed (information only code to notify you if it is installed)
Code 411	Idle speed system not controlling idle properly (generally idle too high) - ISC
Code 412	Idle speed system not controlling idle properly (generally idle too low) - ISC
Code 452	Vehicle Speed Sensor (VSS) problem
Code 511	No power to PCM pin 1 or bad PCM (processor)
Code 512	Memory power (PCM pin 1) was interrupted - Was battery disconnected?
Code 513	Replace processor (PCM) (internal failure)
Code 519	PSP switch/circuit open - PSP h Pedal Position (CPP) circuit fault - PNP
Code 521	Wheel not turned during test or PSP problem – PSP
Code 522	Park/Neutral Position (PNP) or Clutch Pedal Position (CPP) circuit fault – PNP transmission MLP sensor out of range in park – Transmissions
Code 524	Problem in low speed fuel pump circuit – Power / Fuel Pump Circuits
Code 525	Park/Neutral Position (PNP) or Clutch Pedal Position

	(CPP) circuit fault – PNP
Code 528	System shows voltage at pin 10 (is A/C on ?) or pin 30 (PNP, CPP switch) - PNP
Code 529	Data Communications Link to processor failure Service any EEC codes, erase memory and retest If code is still present refer to instrument cluster diagnosis manual
Code 533	Data Communications Link to instrument cluster failure - see 529
Code 536	Brake On Off open or shorted to ground - BOO
Code 538	System did not receive "goose" test - TESTS
Code 539	System shows voltage at PCM pin 10 Is A/C on ?
Code 542	Fuel pump open, bad ground or always on - - Power / Fuel Pump Circuits
Code 543	Fuel pump monitor circuit shows no power - Power / Fuel Pump Circuits (Service 556 code first if present) Fuel pump relay or battery power feed was open - Power / Fuel Pump Circuits
Code 551	Problem in Intake Manifold Runner Control (IMRC) solenoid/circuit - Solenoids
Code 552	AIRB solenoid/circuit failure - Solenoids
Code 553	AIRD solenoid/circuit failure - Solenoids
Code 554	Fuel Press Regulator Control solenoid/circuit fault - Power / Fuel Pump Circuits
Code 556	Fuel pump relay primary circuit fault - Power / Fuel Pump Circuits
Code 557	Low speed pump relay primary circuit fault - Power / Fuel Pump Circuits
Code 558	EGR vacuum regulator solenoid/circuit failure - EVR or PFE or Solenoids
Code 559	A/C relay primary circuit fault - A/C and Fan Circuits
Code 563	High Fan Control (HFC) circuit failure - A/C and Fan Circuits
Code 564	Fan Control (FC) circuit failure - A/C and Fan Circuits
Code 565	Canister Purge 1 solenoid/circuit failure - Solenoids
Code 566	transmission 3/4 shift solenoid/circuit - Transmissions
Code 569	Canister Purge 2 solenoid/circuit failure - Solenoids

Code 578	A/C pressure sensor VREF short to ground - A/C and Fan Circuits
Code 579	ACP sensor did not change with A/C on - A/C and Fan Circuits
Code 581	Cooling fan current was excessive - A/C and Fan Circuits
Code 582	Open cooling fan circuit - A/C and Fan Circuits
Code 583	Fuel pump current was excessive - Power / Fuel Pump Circuits
Code 584	Open power ground circuit - Power / Fuel Pump Circuits
Code 585	A/C clutch current was excessive - A/C and Fan Circuits
Code 586	Open circuit in A/C clutch - A/C and Fan Circuits
Code 587	Communication problem between PCM and Variable Control Relay Module (VCRM) - Power / Fuel Pump Circuits
Code 617	Transmission shift failure (1/2 shift) - Transmissions
Code 618	Transmission shift failure (2/3 shift) - Transmissions
Code 619	Transmission shift failure (3/4 shift) - Transmissions
Code 621	Solenoid/circuit failure - shift solenoid 1 - Transmissions
Code 622	Solenoid/circuit failure - shift solenoid 2 - Transmissions
Code 624	Solenoid/circuit failure -Electronic Pressure Control (EPC) current is high - Transmissions
Code 625	Solenoid/circuit failure - Electronic Pressure Control (EPC) current is low - Transmissions
Code 626	Transmission Coast Clutch (CCS) Solenoid/circuit fault - Transmissions
Code 627	Torque Converter Clutch circuit fault - Transmissions
Code 628	Excessive converter clutch slippage - Transmissions
Code 629	Torque Converter Clutch circuit fault - Transmissions
Code 631	Overdrive Cancel Light circuit problem - Transmissions
Code 632	E4OD - Transmission Control Switch (TCS) should be cycled once between engine ID and Goose test

Code 633	4x4L switch should be in 4x2 or 4x4 high for the test
Code 634	Park/Neutral Position (PNP) or Clutch Pedal Position (CPP) circuit fault Electronic shift transmission - Manual Lever Position (MLP) sensor out of range in Park-Transmissions
Code 636	Transmission Oil Temperature (TOT) sensor out of range - Transmissions
Code 637	TOT sensor is/was high or open - Transmissions
Code 638	TOT sensor is/was low or grounded - Transmissions
Code 639	Transmission Speed sensor (TSS) circuit fault - Transmissions
Code 641	Transmission solenoid/circuit failure Shift Solenoid 3 - Transmissions
Code 643	Torque Converter Clutch (TCC) circuit - Transmissions
Code 645	Transmission 1st gear failure - Transmissions
Code 646	Transmission 2nd gear failure - Transmissions
Code 647	Transmission 3rd gear failure - Transmissions
Code 648	Transmission 4th gear failure - Transmissions
Code 649	Transmission EPC system failure - Transmissions
Code 651	Transmission EPC solenoid/circuit fault - Transmissions
Code 652	Torque Converter Clutch (TCC) circuit fault - Transmissions
Code 654	Transmission selector not in PARK - Transmissions
Code 656	Torque Converter Clutch (TCC) slip - Transmissions
Code 657	Transmission temperature was excessive - Transmissions
Code 998	Did not pass Key On Engine Off test yet (Get 111 in KOEO first) Transmission Electronic Pressure Control (EPC) solenoid/circuit fault – Transmissions