



FORD OBD1 TROUBLE CODES LIST

Compiled by **OBDCodeX**



www.obdcodex.com

2 Digit Codes

Code	Definition
Code 11	System OK
Code 12	Idle Speed Control motor or Air Bypass not controlling idle properly (generally idle too low) – ISC
Code 13	ISC did not respond properly (extends to touch throttle then retracts for KOEO) – ISC
Code 13	Idle Speed Control motor or Air Bypass not controlling idle properly (generally idle too high)
Code 13	ISC sticking, open ITS circuit or TP sticking
Code 14	Ignition pickup (PIP) was erratic – Ignition Systems
Code 14	E4OD Transmission diesel RPM sensor – Diesel RPM sensor
Code 15	No Keep Alive Memory power to PCM pin 1 or bad PCM (Memory Test Failure)
Code 15	KAM (pin 1) was interrupted (was battery disconnected ?)
Code 16	1 9L & 2 5L – Throttle stop set too high – IDLE or Idle Set Procedures
Code 16	2 3L – RPM's too low – IDLE
Code 16	Electronic ignition – IDM circuit fault – Ignition Systems
Code 17	1 9L & 2 5L – Throttle stop set too low – IDLE

Code	Definition
Code 18	Check base timing & advance function - Timing Tests
Code 18	Ignition TACH signal erratic - Ignition Systems
Code 18	Spark Angle Word (SAW) circuit failure (1 9L SFI)
Code 19	No Vehicle Power (pins 37 + 57) or bad PCM VPWR Diagnosis
Code 19	Erratic idle during test (reset throttle & retest) - Idle Set Procedures
Code 19	Electronic ignition Cylinder ID sensor/circuit problem - Ignition Systems
Code 20	Cylinder #2 failed cylinder balance test
Code 21	Engine Coolant Temperature (ECT) sensor out of range - ECT
Code 22	MAP (vacuum) or BARO signal out of range - MAP
Code 23	Throttle sensor out of range or throttle set too high - TPS
Code 24	Intake Air Temperature (IAT) or Vane Air Temperature (VAT) sensor out of range - IAT VAT
Code 25	Knock sensor not tested (ignore if not pinging) - KS
Code 26	Mass Air Flow (MAF) or Vane Air Flow (VAF) out of range - MAF VAF

Code	Definition
Code 26	Transmission Oil Temperature (TOT) sensor out of range, Transmissions
Code 27	Vehicle Speed Sensor problem - VSS
Code 28	Vane Air Temperature (VAT) sensor out of range - VAT
Code 28	2 3L w/Electronic Ignition - Cyl ID, IDM low or right coil pack failure - Ignition Systems
Code 29	Vehicle Speed Sensor problem - VSS
Code 30	Cylinder #3 failed cylinder balance test
Code 31	EVP - EVP signal is/was out of range - EVP
Code 31	EVR - EVP signal is/was low - EVR
Code 31	PFE - PFE signal is/was low - PFE
Code 32	EVP - EGR not responding properly during test - EVP
Code 32	EVR - EVP signal is/was low - EVR
Code 32	PFE - PFE shows low pressure, EGR not seating or memory, not seating intermittently - PFE
Code 33	ALL - EGR did not open/ respond during test or if memory code, did not open intermittently - EVP EVR PFE

Code	Definition
Code 34	EVP - EGR did not respond properly during test - EVP
Code 34	EVR - EVP sensor is/was high - EVR
Code 34	PFE - PFE sensor is/was out of range - PFE
Code 35	EVP - Engine RPM's too low to test EGR system - EVP
Code 35	EVR - EVP sensor signal is/was high - EVR
Code 35	PFE - PFE sensor signal is/was high - PFE
Code 38	Idle Tracking Switch signal was intermittent - ISC
Code 39	Transmission Torque Converter clutch not engaging - Transmissions
Code 40	Cylinder #4 failed cylinder balance test
Code 41	System lean - Fuel control
Code 41	System was lean for 15 seconds or more (no HO2S switching) - Fuel control
Code 42	System rich - Fuel control
Code 42	System was rich for 15 seconds or more (no HO2S switching) - Fuel control
Code 43	HO2S sensor not reading (run at 2000 rpm's for 2 minutes and retest - check for HO2S switching)
Code 43	Was lean at WOT for 3 seconds or more - Fuel control

Code	Definition
Code 44	AIR system inoperative - Air Injection
Code 45	AIR not Diverting (AIRD) - Air Injection
Code 45	Electronic Ignition - coil primary circuit failure - Ignition Systems
Code 46	AIR Bypass (AIRB) not working - Air Injection
Code 46	Electronic Ignition - primary circuit failure coil 2 - Ignition Systems
Code 47	Low flow unmetered air (check for small vacuum leaks, injector o'rings, gaskets etc)
Code 47	E4OD transmission 4x4 switch/circuit problem - Transmissions
Code 48	High flow unmetered air (check for large vacuum leak, inlet hoses etc)
Code 48	Electronic Ignition - coil primary circuit failure - Ignition Systems
Code 49	Electronic Ignition - spout signal circuit problem - Ignition Systems
Code 49	Transmission 1/2 shift problem - Transmissions
Code 50	Cylinder #5 failed cylinder balance test
Code 51	Engine Coolant Temperature (ECT) sensor signal is/was too high - ECT
Code 52	Power Steering Pressure Switch/circuit open - PSP

Code	Definition
Code 52	Did you turn wheel during test ?
Code 53	Throttle Position sensor too high - TPS
Code 54	Intake Air Temperature (IAT) or Vane Air Temperature (VAT) signal high - IAT VAT
Code 55	No or low (under 7.5 V) Key Power to PCM pin 5
Code 56	Vane Air Flow (VAF) or Mass Air Flow (MAF) sensor high - VAF MAF
Code 56	Transmission Oil Temperature sensor too high - Transmissions
Code 57	Intermittent in Park/Neutral/ Switch or Neutral Pressure switch circuit - PNP or Transmissions
Code 58	Idle Tracking Switch (ITS) signal problem ISC
Code 58	Vane Air Temperature (VAT) sensor out of range or open - VAT
Code 59	AXOD 4/3 circuit fault - Transmissions
Code 59	3.0L SHO - Low speed fuel pump circuit problem - Power / Fuel Pump Circuits
Code 59	Transmission 2/3 shift problem - Transmissions
Code 60	Cylinder #6 failed cylinder balance test
Code 61	Engine Coolant Temperature (ECT) sensor is or was too low - ECT
Code 62	AXOD (KOEO only) 3/2 circuit short to ground - Transmissions

Code	Definition
Code 62	AXOD (KOEO AND KOER) 4/3 circuit failure – Transmissions
Code 62	E4OD excessive converter clutch slippage – Transmissions
Code 63	Throttle Position Sensor (TPS) signal too low TPS
Code 64	Intake Air Temperature (IAT) or Vane Air Temperature (VAT) signal low or grounded – IAT VAT
Code 65	Check intermittent HO2S (signal or ground) – Fuel Control
Code 65	E4OD truck – cycle OD cancel switch after engine ID is received – Transmissions
Code 65	1984 3 8L ONLY – O, M Battery voltage high (check for electrical system overcharging)
Code 66	Vane Air Flow (VAF) or Mass Air Flow (MAF) signal low – VAF MAF
Code 66	Transmission Oil Temperature (TOT) signal low (possibly grounded) – Transmissions
Code 67	Park/Neutral circuit fault – PNP
Code 67	Transmission Manual Lever Position (MLP) sensor circuit – Transmissions
Code 67	Intermittent Park Neutral Position (PNP) sensor fault – PNP
Code 68	Idle Tracking Switch (ITS) circuit (possibly grounded) – ISC

Code	Definition
Code 68	Vane Air Temperature (VAT) sensor out of range or grounded - VAT
Code 68	3 8L AXOD -Transmission Temperature Switch (TTS) open - Transmissions
Code 68	Electronic Transmission - Transmission Oil Temperature (TOT) sensor was overheated - Transmissions
Code 69	AXOD transmission (O) 3/2 switch closed (possible short circuit) - Transmissions
Code 69	AXOD (M) 3/2 switch open (poss short to power) - Transmissions
Code 69	E4OD 3/4 shift problem - Transmissions
Code 70	3 8L AXOD - Data link to instrument cluster fault Service any other EEC codes, erase memory and retest If code is still present refer to instrument cluster diagnosis manual
Code 71	1 9L TBI, 2 3L TBI, 2 5L TBI - ITS signal was grounded when throttle should have been opening ITS-ISC ISC motor problem or Idle Tracking Switch (ITS) signal wire shorted to ground - ISC
Code 71	1 9L MFI - PCM re-initialized Possible electrical noise, case ground or intermittent VPWR problem - VPWR Diagnosis
Code 71	3 8L AXOD - Data link to instrument cluster fault - See code 70

Code	Definition
Code 72	No MAP or MAF change in "goose" test - retest, check for frequency or voltage change - MAP MAF
Code 72	1 9L MFI - VPWR circuit to PCM was intermittent - VPWR Diagnosis
Code 72	2 3L T/C - PCM re-initialized Possible electrical noise, case ground or intermittent VPWR problem - VPWR Diagnosis
Code 72	3 8L AXOD - Message center data link circuit fault - See code 70
Code 73	Rerun test, if 73 is still output replace TPS
Code 73	No Throttle Position Sensor (TPS) change in "goose" test Must get at least 25% throttle rotation - TPS
Code 74	Was brake depressed after engine ID was received ?
Code 74	Brake On Off (BOO) signal open or short to ground - BOO
Code 75	Brake On Off (BOO) signal shorted to power - BOO
Code 76	Vane Air Flow (VAF) did not respond to "goose" test - VAF
Code 77	System did not receive "goose" test - see TESTS
Code 78	VPWR circuit to PCM was intermittent or the PCM is bad VPWR Diagnosis

Code	Definition
Code 79	A/C is on or pin 10 is shorted to power
Code 80	Cylinder #8 failed cylinder balance test
Code 81	Boost control solenoid - Solenoids
Code 81	AIRD solenoid - Solenoids and Air Injection
Code 81	3 0L SHO - Inlet Air Solenoid - Solenoids
Code 82	2 3L TC - Fan Control wire shorted to ground - A/C and Fan Circuits
Code 82	AIRB solenoid - Solenoids and Air Injection
Code 82	3 8L SC - Super Charger Bypass Solenoid - Solenoids
Code 83	High Electro Drive Fan circuit fault - A/C and Fan Circuits
Code 83	EGR Control solenoid - Solenoids
Code 83	3 0L SHO - Low Speed Fuel Pump Relay circuit - Power / Fuel Pump Circuits
Code 84	EGR Vacuum Regulator - Solenoids
Code 84	EGR cutoff solenoid - Solenoids
Code 84	EGR Vent solenoid - Solenoids
Code 85	2 3L T/C Automatic - 3/4-4/3 Shift solenoid - Transmissions
Code 85	CANP solenoid (ALL 1989) - Solenoids

Code	Definition
Code 85	1 9L MFI – System has corrected rich condition – Fuel control
Code 86	2 3L or 2 9L Truck – A4LD 3/4 shift solenoid – Transmissions
Code 86	(M) 1 9L MFI – System has corrected lean condition – Fuel control
Code 87	Fuel pump circuit fault (check inertia switch) – Power / Fuel Pump Circuits
Code 87	Vehicles with 2BBL carb – Temperature Compensated Accelerator Pump Solenoid – Solenoids (M) intermittent in fuel pump primary circuit – Power / Fuel Pump Circuits NOTE: On some Escorts with automatic seat belts this code is normal IN MEMORY due to the wiring
Code 88	Throttle Kicker Solenoid – Solenoids
Code 88	Variable Voltage Choke relay circuit fault – VVC
Code 88	Fan Control circuit fault – A/C and Fan Circuits
Code 88	A4LD – Converter Clutch Override solenoid – Transmissions
Code 88	Electronic Ignition – IDM, DPI or spout circuit fault – Ignition Systems
Code 89	A4LD – Converter Clutch Override solenoid – Transmissions
Code 89	AXOD Torque Converter Control solenoid circuit – Transmissions

Code	Definition
Code 89	Exhaust Heat Control (heat riser) solenoid circuit - Solenoids
Code 90	All cylinders passed cylinder balance test
Code 91	System running lean - Fuel control
Code 91	Transmission SS 1 circuit/solenoid problem - Transmissions
Code 92	System running rich - Fuel control
Code 92	Transmission SS 2 circuit/solenoid problem - Transmissions
Code 93	Throttle linkage binding or bad ISC motor ISC HO2S not reading Fuel control
Code 93	Transmission TCC circuit/solenoid problem - Transmissions
Code 94	AIR system inoperative - Air Injection
Code 94	Transmission TCC circuit/solenoid problem - Transmissions
Code 95	Fuel pump: open, bad ground or always on - Power / Fuel Pump Circuits
Code 95	AIR not Diverting (AIRD) - Air Injection
Code 95	Possible bad fuel pump ground or open between fuel pump and pin 8 at PCM (Fuel Pump Monitor signal) - Power / Fuel Pump Circuits

Code	Definition
Code 96	Fuel pump monitor circuit shows no power – Power / Fuel Pump Circuits
Code 96	AIR Bypass (AIRB) not working – Air Injection
Code 96	(Service 87 code first if present) Fuel pump relay or battery power feed was open – Power / Fuel Pump Circuits
Code 97	E4OD OD cancel light circuit failure – Transmissions
Code 98	Did not pass KOEO yet (Get 11 in KOEO first)
Code 98	Transmission EPC circuit/solenoid failure – Transmissions
Code 99	ISC needs to learn (Let idle for 2 minutes, Erase memory and retest)
Code 99	Transmission EPC circuit/solenoid failure – Transmissions

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	Definition
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 141	O2 sensor circuit indicates system lean (both sides)
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	Definition
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	Definition
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
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	Definition
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	Definition
Code 232	El primary coil circuit failure – Ignition Systems
Code 238	El primary circuit failure – ignition coil 4 – Ignition Systems
Code 244	Camshaft position (CMP) sensor failure
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	Definition
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 461	Engine over speed was detected
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	Power steering pressure switch did not change state during KOER test
Code 522	Vehicle not in PARK or NEUTRAL during KOEO

Code	Definition
Code 524	When the PCM commanded the fuel pump on, voltage was not detected on FPM
Code 525	Vehicle in gear or A/C on during Self-Test
Code 526	Neutral pressure switch closed or A/C on
Code 527	Neutral drive switch open or A/C on
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 532	Data communications link or electronic instrument cluster circuit failure
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
Code 543	(Service 556 code first if present) Fuel pump relay or battery power feed was open – Power / Fuel Pump Circuits

Code	Definition
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	Definition
Code 571	Egr atmospheric regulator circuit failure
Code 572	Egr vacuum regulator circuit failure
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 593	Oxygen sensor heater circuit failure
Code 617	Transmission shift failure (1/2 shift) - Transmissions
Code 618	Transmission shift failure (2/3 shift) - Transmissions

Code	Definition
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 623	Overdrive light circuit failure
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	Definition
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	Definition
Code 652	Torque Converter Clutch (TCC) circuit fault – Transmissions
Code 653	Transmission control switch was not cycled during koer self-test
Code 654	Transmission selector not in PARK – Transmissions
Code 656	Torque Converter Clutch (TCC) slip – Transmissions
Code 657	Transmission temperature was excessive – Transmissions
Code 659	High vehicle speed detected while the vehicle was in PARK
Code 667	Transmission manual lever position sensor circuit shorted
Code 668	Transmission manual lever position sensor circuit open
Code 675	MLP circuit voltage was out of the expected range
Code 691	4WD switch circuit failure
Code 998	Did not pass Key On Engine Off test yet (Get 111 in KOEO first)
Code 998	Transmission Electronic Pressure Control (EPC) solenoid/circuit fault – Transmissions