

FAULT CODE DEFINITIONS FOR FORD EEC-IV SYSTEMS*

*Note that this information is for car EEC-IV systems. Truck codes may differ. Consult your vehicle's service manual for detailed meaning related to your vehicle.

Test conditions:

O = Key on Engine Off (KOEO)

R = Key on Engine Running (KOER)

C = Continuous Memory

Code	Test	Meaning
11	O,R,C	System OK
12	R	RPM at idle out of range / high
13	O,R,C	RPM at idle out of range / low
14	O,C	Ignition profile pickup (PIP) failure
15	O	PCM Read Only Memory (ROM) test failed
15	C	Power interruption to computer memory or PCM Keep Alive Memory (KAM) test failed
16	R	RPM too low during engine run self tests or oxygen sensor out of range or throttle not closing
17	R	Curb idle speed out of range
18	R,C	SPOUT circuit open or IDM circuit failure (SPOUT circuit grounded)
18	C	IDM circuit failure / SPOUT circuit grounded
19	O	No power to EEC processor or failure in PCM internal voltage
19	R	Erratic RPM signal at idle
19	C	CID sensor failure
21	O,R,C	Cooling temperature sensor out of specified range or ECT out of range
22	O,R,C	Manifold Absolute Pressure (MAP) or BARO sensor out of range
23	O,R,C	Throttle Position (TP) sensor signal out of range
24	O,R	Intake Air Charge Temperature sensor or vane air temperature sensor or EDIS fault
25	R	Knock not sensed during Dynamic Response Test
26	O,R	Mass air flow sensor or vane air flow sensor or transmission temperature sensor fault
27	C	Vehicle speed sensor or EDIS fault
28	O,R	Vane air temperature sensor; EDIS or DIS fault
29	C	Insufficient input from Vehicle Speed Sensor
31	O,R,C	Canister or EGR valve control system or EVP circuit below minimum voltage
32	O,R,C	Canister or EGR valve control system signal out of spec or EVP voltage low
33	R,C	Canister or EGR control system not operating properly
34	O,R,C	Canister or EGR valve control circuit or EVP voltage high
35	O,R,C	EGR signal voltage too high or RPM below spec during engine run test or EVP voltage high
38	C	Idle control circuit open
39	C	Automatic overdrive circuit failure (transmission failure)
41	R	Injectors out of balance on 5.0L SEFI; EGO sensor voltage low (except 5.0L SEFI)
41	C	EGO sensor signal out of range (except 5.0L SEFI); fuel pressure out of range - 5.0L SEFI
42	R	Fuel pressure out of range on 5.0L SEFI
42	R,C	EGO sensor rich (except 5.0L SEFI)
43	C	Lean EGO at wide open throttle
43	R	EGO sensor not hot enough for engine run self-test
44	R	Thermactor air system fault
45	R,C	Thermactor air upstream or EDIS or DIS system failure
46	R,C	Thermactor air is not bypassed or EDIS or DIS system failure
47	R	EGO sensor signal out of range or vane air flow too low
48	R	Air flow high at idle
48	C	Distributorless Ignition System (DIS) coil pack circuit failure

Code	Test	Meaning
49	C	SPOUT, EDIS, or SAW signal problem
51	O,C	Coolant temperature sensor out of range indicated - 40°C / circuit is open
52	R	Power Steering Pressure Switch (PSPS) circuit out of range
53	O,C	Throttle Position (TP) sensor above maximum voltage
54	O,C	Intake Air charge temperature sensor indicates -40°C / circuit open; vane air flow sensor out of range
55	R	Open connection in ignition key circuit, 83-88 3.8L TBI
55	R	Charging system out of range for 83-88 (ex. 3.8L TBI)
56	O,R,C	Mass or vane air flow sensor above maximum voltage transmission sensor failure
57	C	Neutral Position Switch (NPS) circuit fault, 89-90 All
58	O	CFI / Idle air control circuit failure, EFI vane air control circuit fault
58	C	Vane air temperature sensor out of range
58	R	Idle air control circuit failure
59	O,C	Transmission throttle pressure switch failure (except 3.8L SHO)
59	O,C	3.0L SHO and 3.3L supercharged; low speed fuel pump circuit fault
61	O,C	Engine coolant temperature sensor indicated 254°F / circuit grounded
62	O	Transmission clutch fault
63	O,C	Throttle Position (TP) circuit fault, below minimum voltage
64	O,C	Vane air temperature sensor fault or intake air temperature indicated 254°F / circuit grounded
65	O,R,C	Overdrive Cancel Switch not changing state (E40D), Charging or fuel system fault; transmission fault
66	O,C	Mass air flow sensor fault, below minimum voltage
67	O,R,C	Neutral Drive Switch fault, switch circuit open / Air conditioner on during self-test
67	C	Air conditioner clutch switch fault
68	O,R,C	Idle Tracking Switch; vane air temp sensor or transmission temperature switch
69	O,C	Vehicle speed sensor or transaxle fault
71	C	Idle Tracking Switch fault or electrical interference
72	C	System power circuit fault or electrical interference
72	R	Manifold Absolute Pressure (MAP) sensor out or range
73	R	Throttle Position (TP) sensor fault
74	R	Brake On/Off (BOO) switch fault
75	R	Brake On/Off (BOO) switch fault
76	R	Vane air flow sensor fault
77	R	Operator error during Dynamic Response Test
78	C	Power interrupt
79	O	Air Conditioner "ON" during self-test / defrost on
81	O	Air diverter solenoid fault, intake air control circuit fault / air injection diverter
82	O	Air diverter solenoid circuit fault or supercharger bypass circuit fault
83	O	EGR control circuit fault (3L CFI, 2.3L EFI, ex. turbo)
83	O,C	Low speed fuel pump relay circuit fault, all 1980-88, 1989-90 SHO
83	O,C	EGR solenoid circuit fault 1989-90 SHO
83	O	Cooling fan circuit fault 2.3L turbo, 2.5L, 3.8L, 3.8L EFI only
84	O,R	EGR control circuit failure

Code	Test	Meaning
85	O,R	Canister Purge Solenoid or transaxle shift control circuit failure 2.3L turbo failure
86	C	Low fuel pressure or transaxle problem
87	O,R,C	Fuel pump primary circuit fault
88	O	Clutch converter circuit fault 2.3L turbo, DIS fault
89	O	Converter Clutch Control (CCC) solenoid circuit failure; lock up solenoid fault
91	R,C	EGO sensor problem due to fuel pressure or injectors out of balance
92	R,C	EGO sensor problem due to fuel pressure or injectors out of balance / transaxle shift fault
93	O,R	Throttle position sensor fault during self-test; EGO sensor fault; transaxle clutch solenoid fault
94	R	Thermactor air system fault; transaxle switch solenoid fault; secondary air injection system inoperative (left side)
95	O,C	Fuel pump secondary circuit fault
96	R	Air diverter circuit fault
96	O,C	Fuel pump secondary circuit fault
97	R	Air diverter circuit fault
98	R	Exhaust gas oxygen sensor fault or overdrive cancel indicator light circuit fault
99	R	Computer detected hard fault / EGO sensor fault / electronic pressure control solenoid circuit fault
111	O,C,R	System PASS
112	O,C	Electronic pressure control circuit failure or system has not learned to control idle speed
113	O,C	Intake air charge temperature sensor above maximum voltage / -40°C indicated
114	O,R	Air charge temperature sensor higher or lower than expected voltage
116	O,R	Engine coolant temperature higher or lower than expected
117	O,C	Engine coolant temperature sensor below minimum voltage / 254°F indicated
118	O,C	Engine coolant temperature sensor above maximum voltage / 0-40°C indicated
121	O,R,C	Throttle Position sensor above or below normal or position voltage inconsistent with MAF sensor
122	O,C	Throttle Position sensor below minimum voltage
123	O,C	Throttle Position sensor above maximum voltage
124	C	Throttle Position sensor above normal
125	C	Throttle Position sensor below normal
126	O,R,C	Manifold absolute pressure (MAP) or barometer sensor (BARO) above or below normal
128	C	Manifold absolute pressure sensor / vacuum hose disconnected / damaged
129	R	Insufficient manifold absolute pressure sensor (MAP) or mass air flow (MAF) change during dynamic response test
136	R	Heated exhaust gas oxygen sensor fault during KOER indicated lean bank #2
137	R	Heated exhaust gas oxygen sensor fault indicates rich bank #2
138	O,R,C	Cold start injectors flow insufficient KOER test
139	C	Heated exhaust gas oxygen sensor switch fault bank #2
144	C	Heated exhaust gas oxygen sensor switch fault bank #1
157	C	Manifold Air Flow sensor fault, low voltage
158	O,C	Manifold Air Flow sensor fault, high voltage
159	O,R	Manifold Air Flow sensor fault, above or below normal
167	R	Throttle Position sensor fault during dynamic response test

FAULT CODE DEFINITIONS FOR FORD EEC-IV SYSTEMS - continued...

Test conditions:

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Code	Test	Meaning
171	C	Heated oxygen sensor fault/not switching bank #1 or fuel system at adaptive limits
172	R,C	Heated oxygen sensor fault/lean bank #1
173	R,C	Heated exhaust gas oxygen sensor fault/rich bank #1
175	C	Heated exhaust gas oxygen sensor fault/not switching bank #2 or fuel system at adaptive limits
176	O	PCM Read Only Memory (ROM) test failed
177	C	Heated exhaust gas oxygen sensor fault/lean bank #2
179	C	Heated exhaust gas oxygen sensor fault unable to switch/rich during part throttle bank #1
181	C	Heated exhaust gas oxygen sensor fault unable to switch/lean during part throttle bank #1
182	C	Fuel mixture rich bank #1
183	C	Fuel mixture lean bank #1
184	C	Manifold air flow sensor above normal
185	C	Manifold air flow sensor below normal
186	C	Fault in injector pulse width circuit or mass air flow circuit
187	C	Fault in injector pulse width circuit or mass air flow circuit
188	C	Heated exhaust gas oxygen sensor fault unable to switch/rich during part throttle bank #2
189	C	Heated exhaust gas oxygen sensor fault unable to switch/lean during part throttle bank #2
191	C	Fuel mixture rich bank #2
192	C	Fuel mixture lean bank #2
193	O	Flexible fuel sensor circuit fault
211	C	Profile Ignition Pickup (PIP) circuit fault
212	C	Loss of ignition diagnostic monitor signal/SPOUT circuit grounded
213	R	Spark output circuit/SPOUT circuit open
214	C	Cylinder identification circuit failure
215	C	DIS fault ignition system - coil #1
216	C	DIS fault ignition system - coil #2
217	C	DIS fault ignition system - coil #3
218	C	Loss of Ignition Diagnostic Monitor (IDM)/left side
219	C	Spark output signal/no advance timing/defaulted to 10° SPOUT circuit open
221	C	Distributorless ignition system/spark timing fault
222	C	Distributorless ignition system - loss of right side Ignition Diagnostic Monitor (IDM) signal
223	C	Distributorless ignition system - loss of dual plug inhibit (DPI) control
224	C	Loss of IDM input to processor/spout circuit ground/ coil 1,2,3 or 4
225	R	Knock sensor fault during engine run self-test
226	C	Electronic Distributorless Ignition System (EDIS) problem, Ignition Diagnostic Monitor (IDM) signal
227	C	Electronic Distributorless Ignition System (EDIS) problem, Crankshaft Position Sensor (CPS) problem
232	C	Electronic Distributorless Ignition System (EDIS) Coil 1,2,3 or 4 circuit fault
233	C	Electronic Distributorless Ignition System (EDIS); Spark Advance Word (SAW) signal error
238	C	Distributorless Ignition System (DIS) coil #4 circuit fault
239	C	Electronic Distributorless Ignition System (EDIS) Crankshaft Position Sensor (CPS) signal fault
241	C	Ignition Diagnostic Monitor (IDM) signal pulse width transmission error

Code	Test	Meaning
242	C	DIS system operating in failure mode
243	C	Electronic Distributorless Ignition System secondary circuit fault in coil 1,2,3 or 4
311	R	Thermactor air system/fault during engine run self-test
312	R	Thermactor air system/fault during engine run self-test
313	R	Thermactor air system/air not bypassed during engine run self-test
314	R	Thermactor air system/fault during engine run self-test
326	R,C	EGR sensor circuit voltage lower than expected
327	O,R,C	EGR valve position circuit below minimum voltage
328	O,R,C	Valve position sensor fault/EGR closed valve voltage lower than expected
332	R,C	Insufficient EGR flow detected
334	-	EGR closed valve voltage high
335	O	EGR sensor circuit voltage higher or lower than expected during KOEO
336	R,C	EGR sensor circuit voltage higher than expected / exhaust pressure high
337	O,R,C	EGR sensor circuit above maximum voltage
411	R	Cannot control RPM during KOER low RPM check
412	R	Cannot control RPM during KOER high RPM check
452	R	Vehicle Speed Sensor (VSS) signal fault
511	O	Read Only Memory (ROM) test failure
512	C	Keep Alive Memory (KAM) test failure
513	C	PCM internal voltage failure
519	O	Power Steering Pressure Switch circuit open
521	R	Power Steering Pressure Switch circuit fault
522	O	Vehicle not in Park or Neutral during KOEO
525	O	Vehicle was in gear
528	C	Clutch switch circuit fault
529	C	Data communications link circuit fault
533	C	Electronic instrument cluster circuit or data communications link circuit failure
536	R,C	Brake On/Off (BOO) circuit not activated during KOER
538	R	Insufficient RPM change during KOER Dynamic Response Test/Invalid cylinder balance test due to throttle movement during test
539	O	AC on/Defrost on during KOEO
542	O,C	Fuel pump secondary circuit fault
543	O,C	Fuel pump secondary circuit fault
551	R	Idle Air Control (IAC) solenoid circuit fault
552	O	Thermactor air bypass solenoid circuit fault
553	O	Thermactor air diverter solenoid circuit fault
555	R	SBS circuit fault
556	O,C	Fuel pump relay primary circuit fault
558	O	EGR valve regulator solenoid circuit fault
563	O	High Speed Electro Drive Fan circuit fault
564	O	Electro Drive Fan circuit fault
565	O	Canister purge solenoid circuit fault
569	O	Auxiliary canister purge circuit fault
617	C	Transmission problem (1-2 shift error)
618	C	Transmission problem (2-3 shift error)

Code	Test	Meaning
619	C	Transmission problem (3-4 shift error)
621	O	Shift Solenoid #1 circuit fault
622	O	Shift Solenoid #2 circuit fault
624	O,C	Electronic Pressure Control solenoid circuit fault
625	O	Electronic Pressure Control solenoid circuit fault
626	O	Coast Clutch solenoid circuit fault
627	O,C	Converter Clutch Control solenoid circuit fault
628	C	Excessive converter clutch slippage
629	O	Converter clutch solenoid circuit fault
631	O	Overdrive transmission cancel indicator light fault
632	R	Overdrive transmission cancel switch/no action during self engine run test
633	O	4x4 switch is closed during KOEO self-test
634	C	Manual lever position voltage out of range
636	O,R	Transmission oil temperature out of range
637	O,C	Transmission oil temperature voltage above max.
638	O,C	Transmission oil temperature voltage below min.
639	R,C	Turbin speed sensor out of range/insufficient input from transmission speed sensor
641	O	Shift Solenoid #3 circuit fault
645	C	Transmission - incorrect gear ratio - first gear
646	C	Transmission - incorrect gear ratio - second gear
647	C	Transmission - incorrect gear ratio - third gear
648	C	Transmission - incorrect gear ratio - fourth gear
649	C	Electronic Pressure Control Circuit solenoid higher or lower than expected
651	C	Electronic Pressure Control Circuit solenoid failure
652	O	Modulated Lock-up Torque Converter clutch solenoid circuit fault
654	O	Not in Park during KOEO self-test
998	R	Operating in failure mode
NO CODES		Unable to initiate self-test or unable to output self-test codes
CODES NOT LISTED		Service codes displayed are not applicable to the vehicle being tested