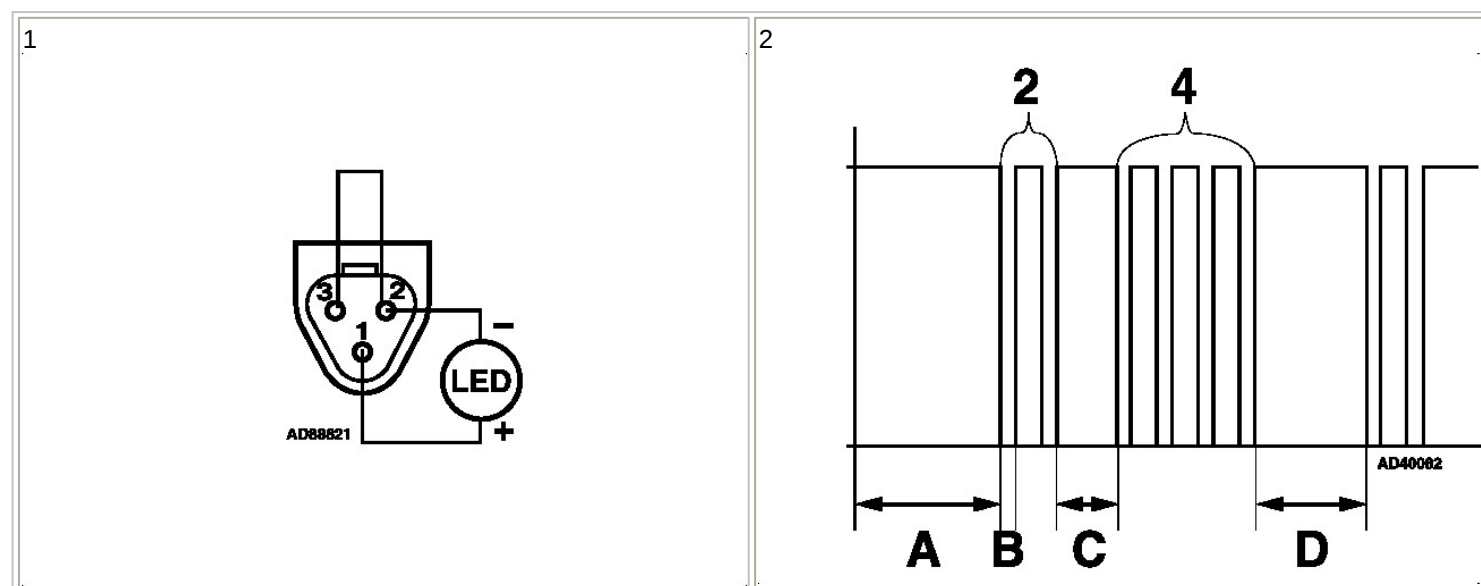


Accessing

- Engine at normal operating temperature.
- Ensure ignition switched OFF.
- Bridge data link connector (DLC) terminals 2 and 3 [Fig. 1](#).
- Connect LED test lamp negative connection to DLC terminal 2 [Fig. 1](#).
- Connect LED test lamp positive connection to DLC terminal 1 [Fig. 1](#).
- Switch ignition ON.
- Check that LED illuminates.
- Trouble codes are displayed after 10-25 seconds [Fig. 2](#) [A].
- Note trouble codes. Compare with trouble code table.
- Trouble codes are displayed by illuminated LED switching OFF for approximately 1 second [Fig. 2](#) [B].
- Each trouble code consists of two groups. LED illuminates for approximately 2 seconds between each group [Fig. 2](#) [C].

NOTE: Trouble codes ending in '0' are displayed with only 1 group.

- LED illuminates for approximately 5 seconds between each trouble code [Fig. 2](#) [D].
- For example: Trouble code 24 displayed.
- Trouble code(s) are displayed twice.



Trouble code identification

Flash type	Fault location	Probable cause
10	Command code	-
11	System pass	-
12	Volume air flow (VAF) sensor 1	Wiring, VAF sensor, air leak, air restriction, ECM
13	<u>Engine coolant temperature (ECT) sensor</u>	Wiring, ECT sensor, ECM
14	<u>Intake air temperature (IAT) sensor</u>	Wiring, IAT sensor, ECM
15	<u>Throttle position (TP) sensor</u>	Wiring, TP sensor, ECM
17	<u>Manifold absolute pressure (MAP) sensor</u>	Wiring, MAP sensor, ECM
18	Battery voltage - low	Wiring, battery
19	Keep Alive Memory (KAM) failure	<u>ECM</u>
20	Separation code	-
21	Ignition signal - erratic	Wiring, CKP sensor, alternator
22	Volume air flow (VAF) sensor 1 - voltage high	Wiring, VAF sensor, ECM
23	<u>Engine coolant temperature (ECT) sensor - voltage high</u>	Wiring, ECT sensor, ECM
24	<u>Intake air temperature (IAT) sensor</u>	Wiring, IAT sensor, ECM
25	<u>Throttle position (TP) sensor - voltage high</u>	Wiring, TP sensor, ECM
27	<u>Manifold absolute pressure (MAP) sensor - voltage high</u>	Wiring, MAP sensor, ECM
28	<u>Heated oxygen sensor (HO2S) - mixture rich</u>	Wiring, fuel supply, injector control, HO2S, ECM
31	Memory failure	<u>ECM</u>
32	Volume air flow (VAF) sensor 1 - voltage low	Wiring, VAF sensor, ECM
33	<u>Engine coolant temperature (ECT) sensor - voltage low</u>	Wiring, ECT sensor, ECM
34	<u>Intake air temperature (IAT) sensor</u>	Wiring, IAT sensor, ECM
35	<u>Throttle position (TP) sensor - voltage low</u>	Wiring, TP sensor, ECM
36	Volume air flow (VAF) sensor 2 - voltage low	Wiring, VAF sensor, ECM
37	<u>Manifold absolute pressure (MAP) sensor - voltage low</u>	Wiring, MAP sensor, ECM
38	<u>Heated oxygen sensor (HO2S) - mixture weak</u>	Wiring, fuel supply, injector control, HO2S, ECM
41	Volume air flow (VAF) sensor 1 - signal	Wiring, VAF sensor, ECM
42	<u>Manifold absolute pressure (MAP) sensor - signal</u>	Wiring, MAP sensor, ECM
43	<u>Throttle position (TP) sensor - signal</u>	Wiring, TP sensor, ECM
44	Blip test (throttle open) not performed	-
45	<u>Vehicle speed sensor (VSS)</u>	Wiring, VSS, ECM
46	<u>Idle air control (IAC) valve - maximum engine speed</u>	Wiring, IAC valve, ECM
47	<u>Idle air control (IAC) valve - minimum engine speed</u>	Wiring, IAC valve, ECM
48	Closed throttle position (CTP) switch (CFi)	Wiring, CTP switch, ECM
48	<u>Idle air control (IAC) valve (except CFi)</u>	Wiring, IAC valve, ECM
49	Exhaust gas recirculation (EGR) valve	Wiring, restricted/leaking EGR pipes, EGR valve, ECM
50	Identification code for engine control module (ECM)	-
51	AC 'ON' during test	-
52	AT in 'D' during test	-
53	Octane plug 1 - short circuit	-
54	Octane plug 2 - short circuit	-
55	Idle speed adjust - short circuit	-
56	Knock sensor (KS)	Wiring, fuel quality, ignition timing, KS, ECM

Manufacturer: Ford

Engine code: LJE

Tuned for:

Model: Escort ('91) 1,6

Output: 79 (108) 6000

Year: 1990-93

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57	Throttle opened too early during test	-
58	Phasing of ignition pick-up/spark output signals	Wiring, CKP sensor, ignition control module (ICM), ECM
59	Mixture adjustment resistor	Wiring, air leaks, vacuum leaks, MAP sensor, mixture adjustment resistor, injectors, spark plugs
60	Start of service set mode	-
61	Power loss - cylinder 1	Compression, spark plugs
62	Power loss - cylinder 2	Compression, spark plugs
63	Power loss - cylinder 3	Compression, spark plugs
64	Power loss - cylinder 4	Compression, spark plugs
65	Brake pedal position (BPP) switch - ON/OFF (DOHC)	Wiring, BPP switch, ECM
67	Fuel temperature switch	Wiring, fuel temperature switch
68	Turbocharger (TC) wastegate regulating valve	Wiring, valve, turbocharger, ECM
69	Turbocharger (TC) wastegate regulating valve	Wiring, valve, turbocharger, ECM
70	End of service set mode	-
71	Secondary air injection (AIR) solenoid	Wiring, AIR solenoid, blocked/leaking pipes, ECM
72	Exhaust gas recirculation (EGR) solenoid - EFi	Wiring, blocked/leaking pipes, EGR solenoid, ECM
72	Turbocharger (TC) wastegate regulating valve	Wiring, TC wastegate regulating valve, blocked/leaking pipes, ECM
73	Evaporative emission (EVAP) canister purge valve	Wiring, EVAP canister purge valve, ECM
74	Fuel pump	Wiring, fuel pump relay, fuel pump, ECM
75	Torque converter clutch (TCC) lock-up solenoid	Wiring, lock-up solenoid, transmission fault, ECM
76	Brake pedal position (BPP) switch - AT	Wiring, BPP switch, brake pedal, ECM
77	Kickdown actuated	-
78	Power steering pressure (PSP) switch - not activated	Wiring, PSP switch, power steering pump, power steering system pressure, ECM
81	Exhaust gas recirculation (EGR) solenoid	Wiring, blocked/leaking pipes, EGR solenoid, ECM
82	Exhaust gas recirculation (EGR) backpressure transducer - voltage below minimum	Wiring, blocked/leaking pipes, EGR backpressure transducer, ECM
83	Exhaust gas recirculation (EGR) backpressure transducer - voltage high	Wiring, blocked/leaking pipes, EGR backpressure transducer, ECM
84	Exhaust gas recirculation (EGR) backpressure transducer - voltage low	Wiring, blocked/leaking pipes, EGR backpressure transducer, ECM
91	Heated oxygen sensors (HO2S) - multi-plugs interchanged	Wiring, multi-plugs

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