

TROUBLESHOOTING

TROUBLESHOOTING HINTS

1. Engine troubles are usually not caused by the EFI system. When troubleshooting, always first check the condition of the other systems.

(a) Electronic source

- Battery
- Fusible links
- fuses

(b) Body ground

(c) Fuel supply

- Fuel leakage
- Fuel filter
- Fuel pump

(d) Ignition system

- Spark plug
- High-tension cord
- Distributor
- Igniter and ignition coil

(e) Air induction system

- Vacuum leaks

(f) Emission control system

- PCV system
- EGR system

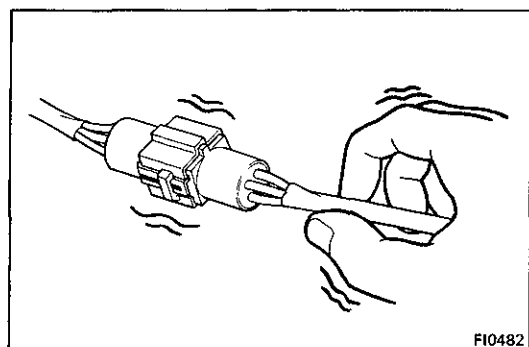
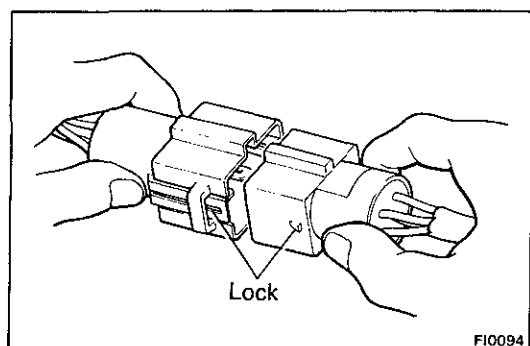
(g) Others

- Ignition timing (ESA system)
- Idle speed

2. The most frequent cause of problems is simply a bad contact in wiring connectors. Always make sure that connections are secure.

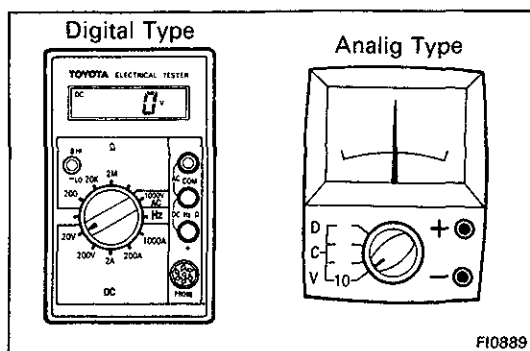
When inspecting the connector, pay particular attention to the following points:

- (a) Check to see that the terminals are not bent.
- (b) Check to see that the connector is pushed in completely and locked.



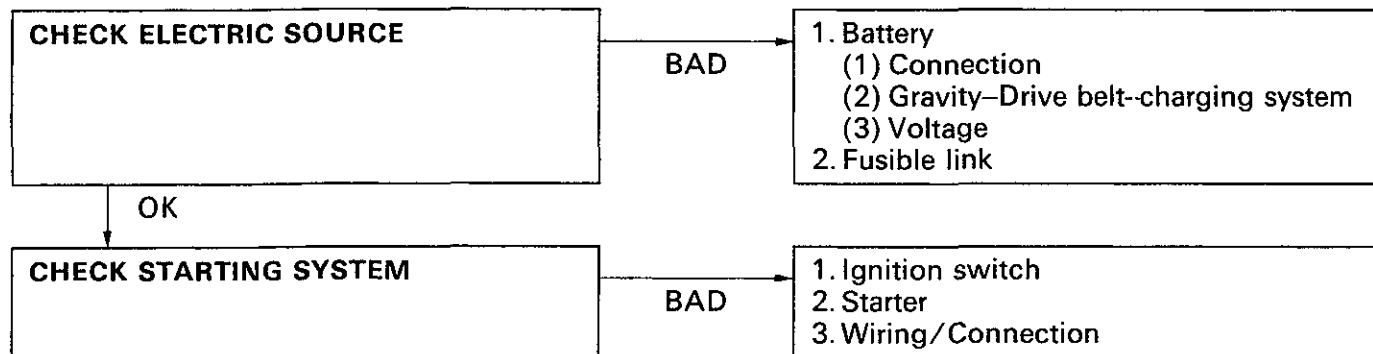
- (c) Check to see that there is no signal change when the connector is slightly tapped or wiggled.

3. Sufficiently troubleshoot for other causes before replacing the ECU. The ECU is of high quality and it is expensive.

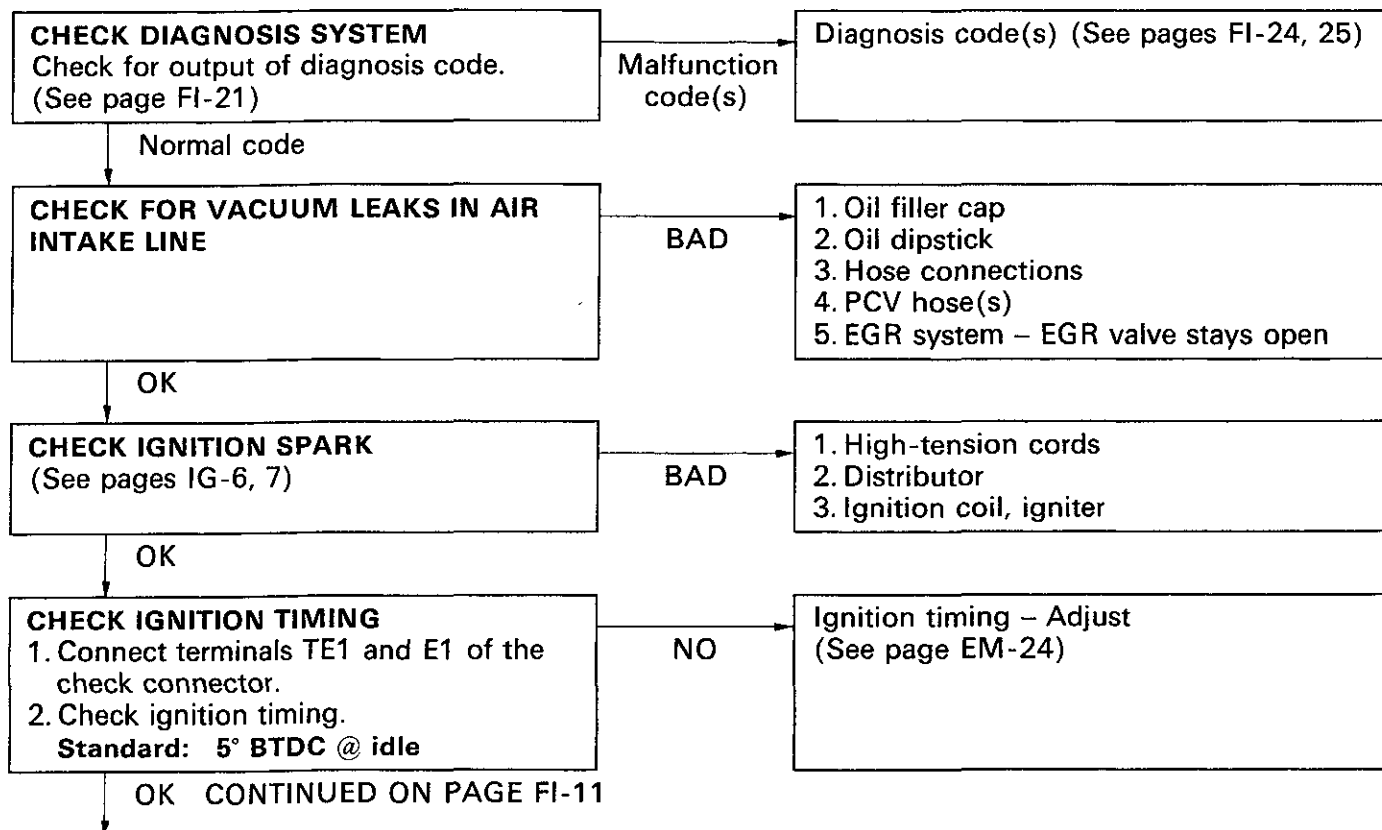


4. Use a volt/ohmmeter with high impedance (10 k Ω /V minimum) for troubleshooting of the electrical circuit. (See page FI-27)

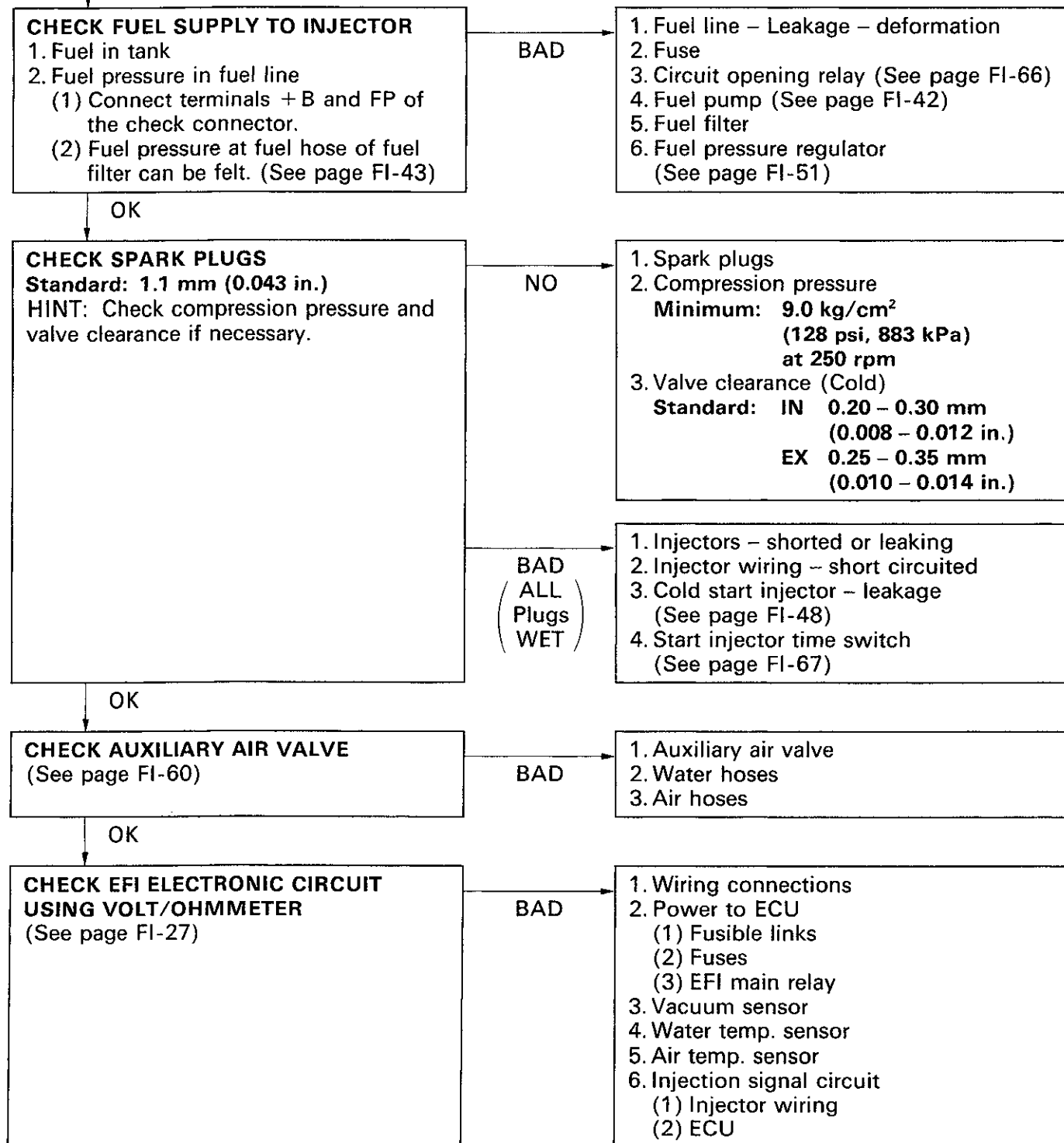
TROUBLESHOOTING PROCEDURES SYMPTOM – DIFFICULT TO START OR NO START (ENGINE WILL NOT CRANK OR CRANKS SLOWLY)

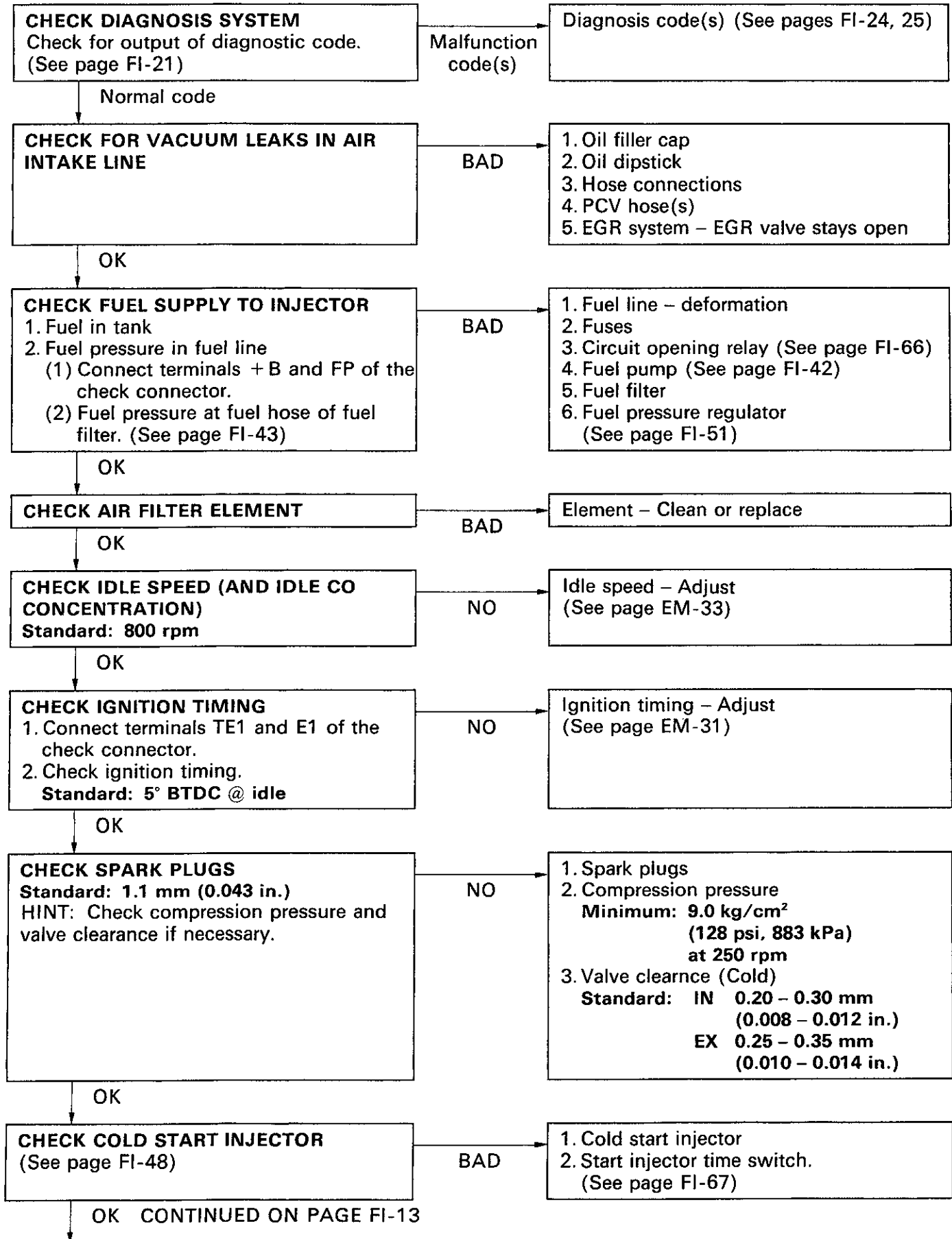


SYMPTOM – DIFFICULT TO START OR NO START (CRANKS OK)

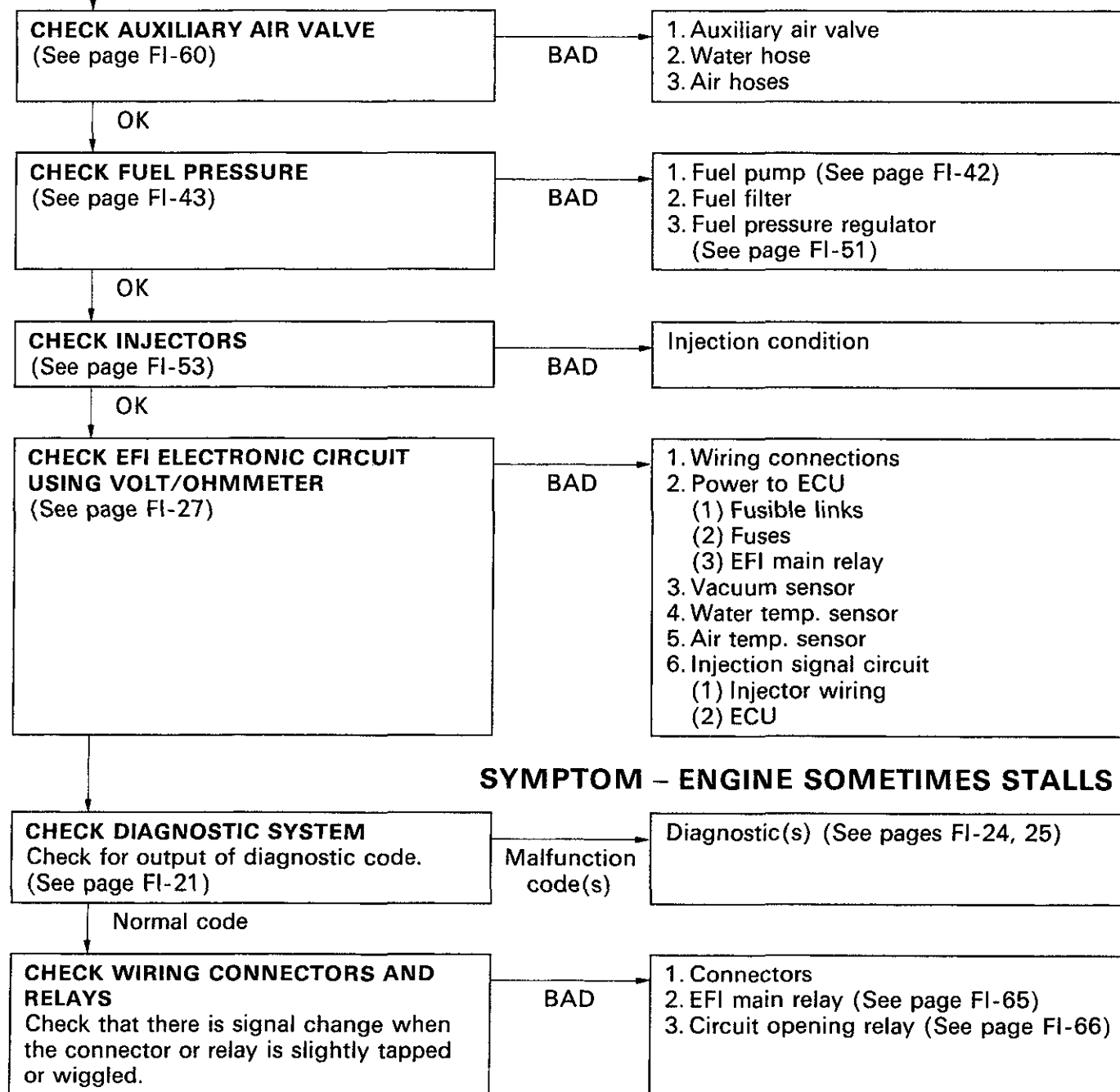


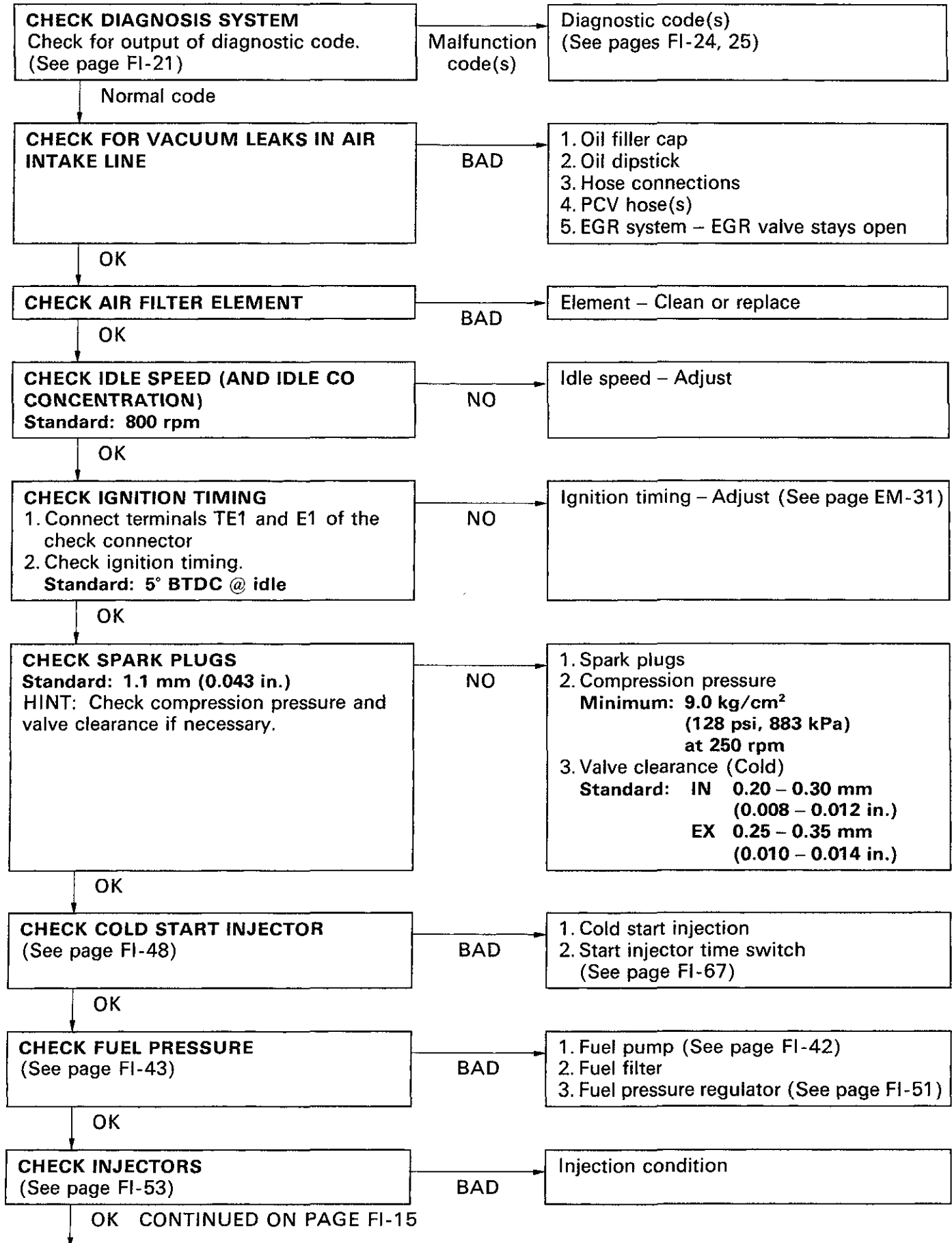
OK CONTINUED FROM PAGE FI-10



SYMPTOM – ENGINE OFTEN STALLS

OK CONTINUED FROM PAGE FI-12



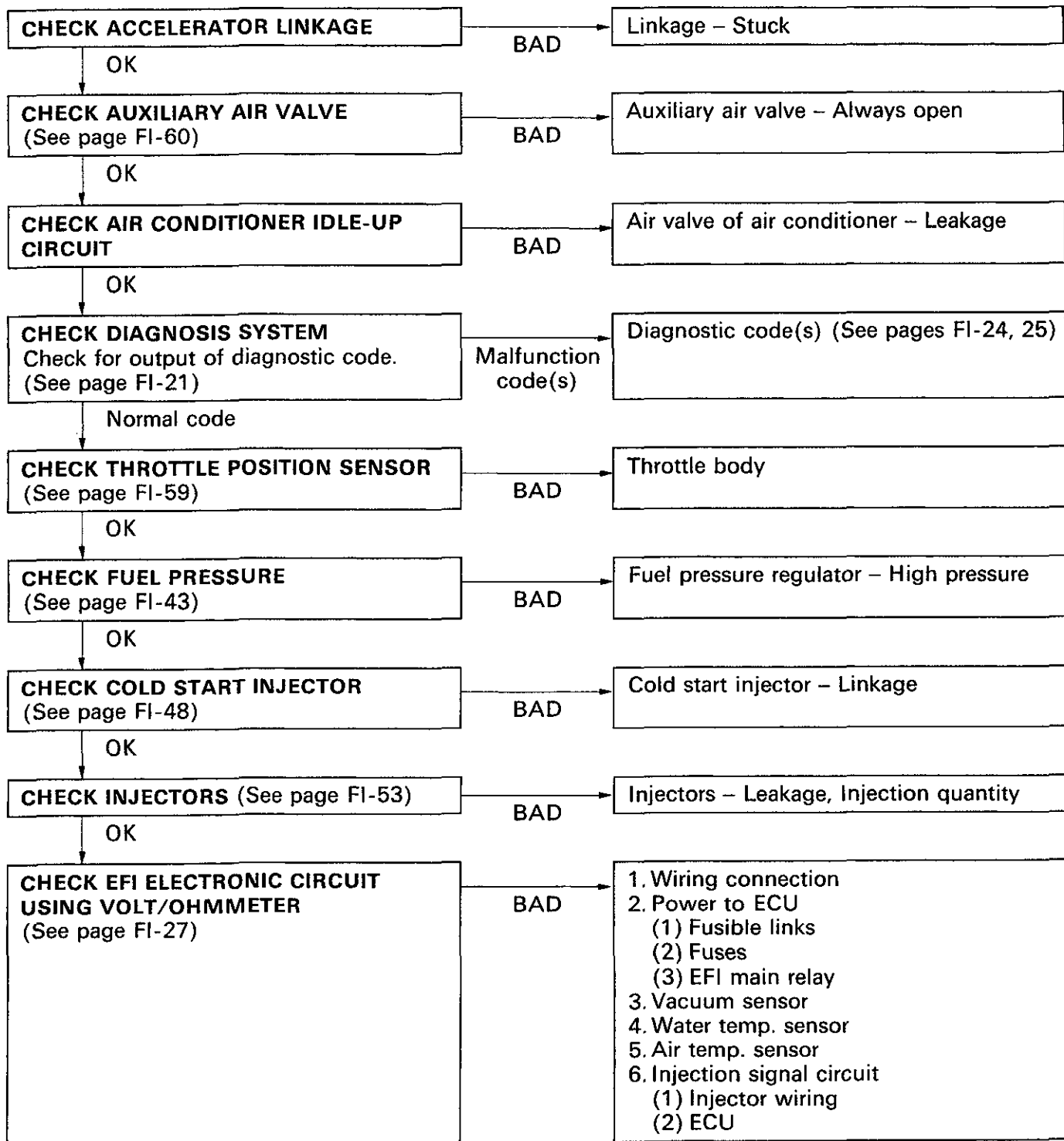
SIMPTOM – ROUGH IDLING AND/OR MISSING

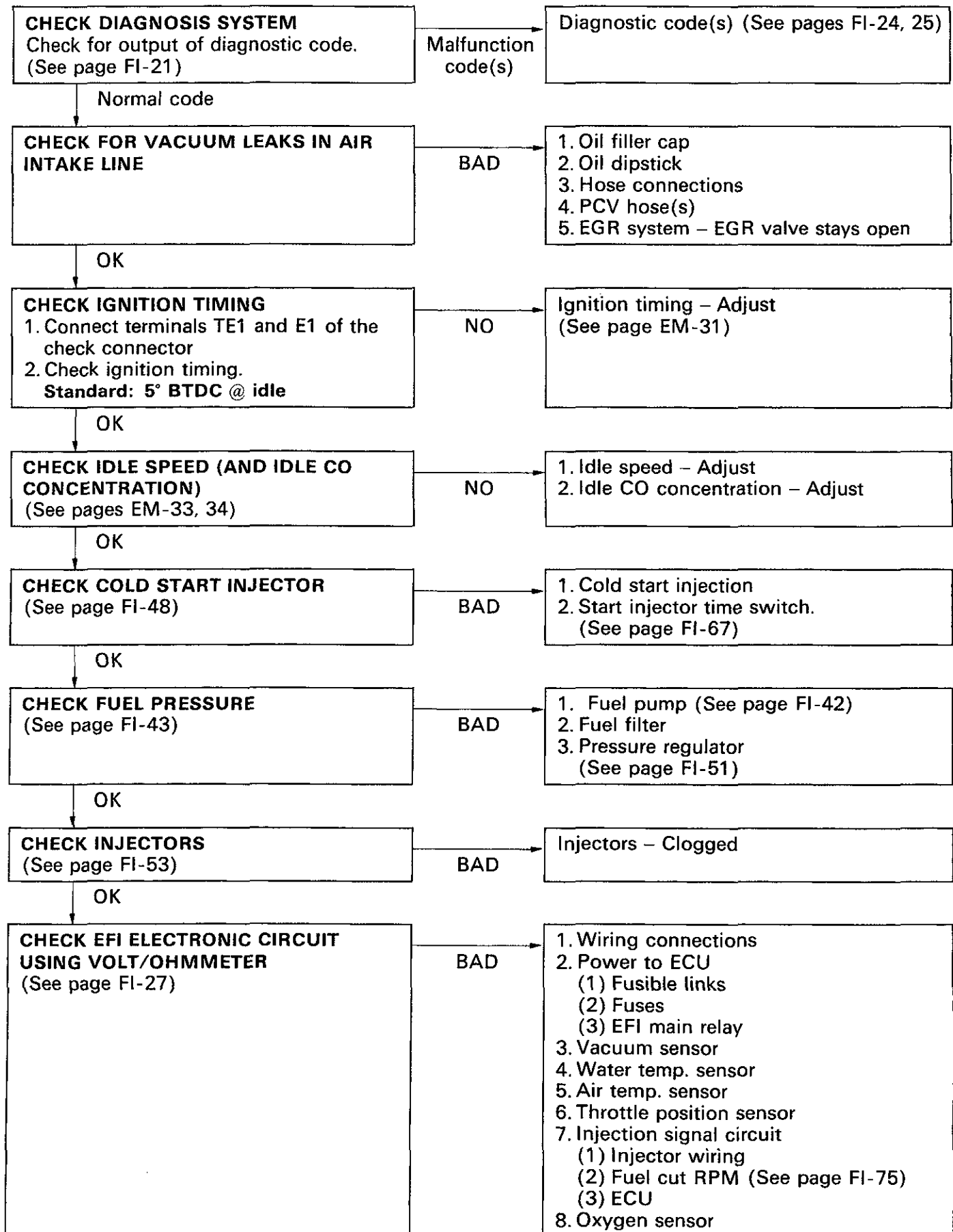
OK CONTINUED FROM PAGE FI-14

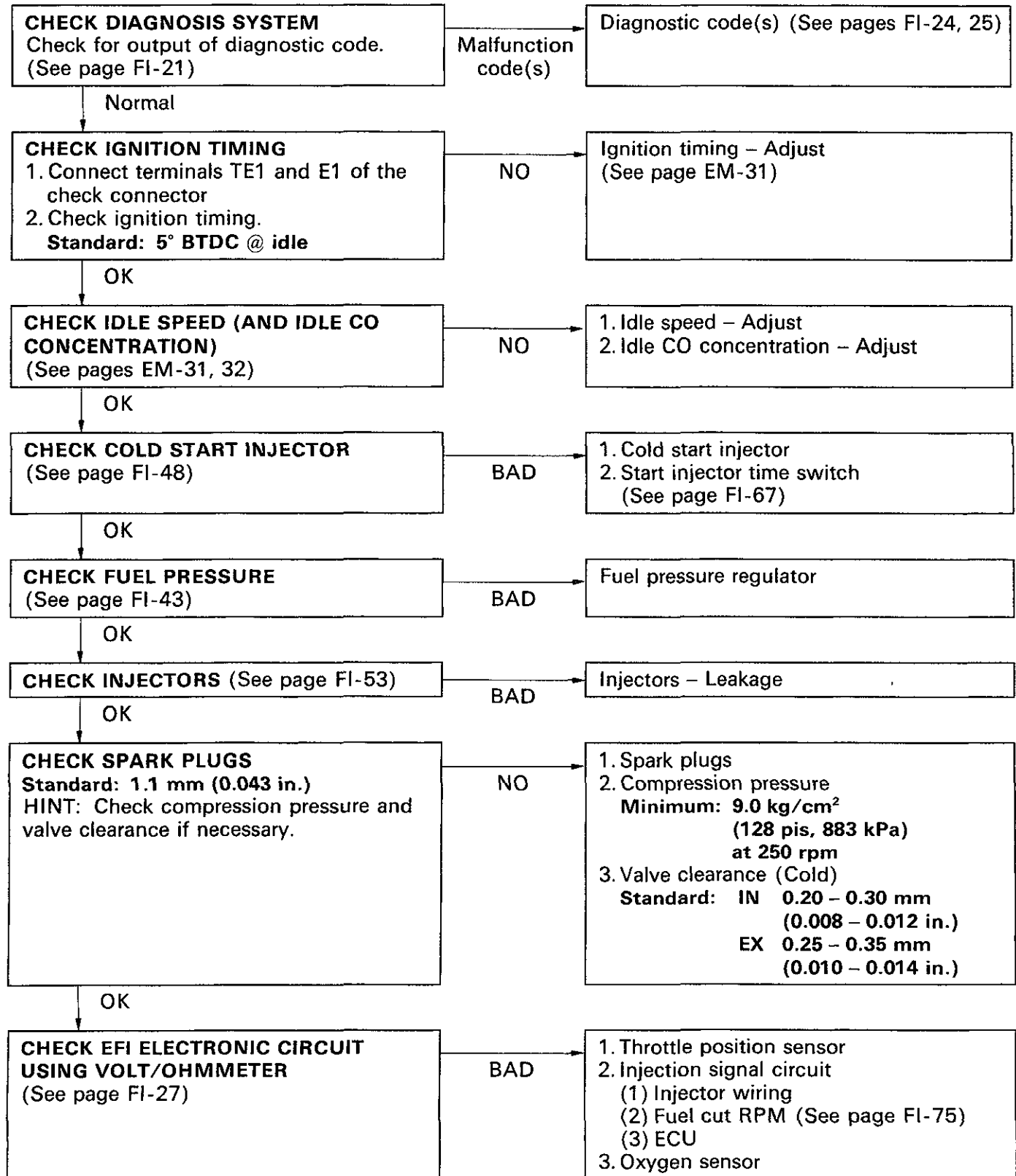
**CHECK EFI ELECTRONIC CIRCUIT
USING VOLT/OHMMETER**
(See page FI-27)

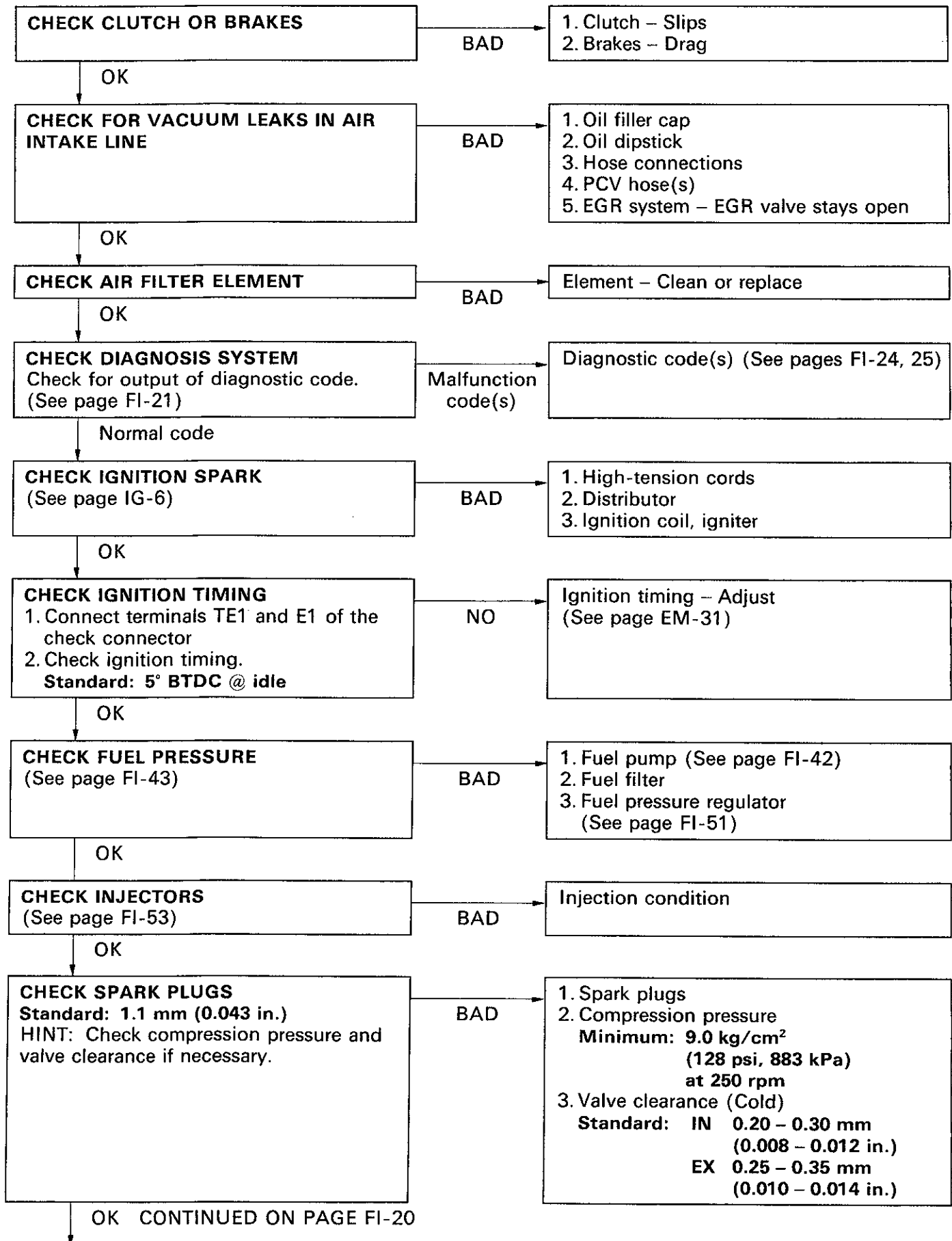
BAD

1. Wiring connections
2. Power to ECU
 - (1) Fusible links
 - (2) Fuses
 - (3) EFI main relay
3. Vacuum sensor
4. Water temp. sensor
5. Air temp. sensor
6. Injection signal circuit
 - (1) Injector wiring
 - (2) ECU
- Oxygen sensor

SYMPTOM – HIGH ENGINE IDLE SPEED (NO DROP)

SYMPTOM – ENGINE BACKFIRES-Lean Fuel Mixture

SYMPTOM – MUFFLER EXPLOSION (AFTER FIRE)-Rich Fuel Mixture-Misfire

SYMPTOM – ENGINE HESITATES AND/OR POOR ACCELERATION

OK CONTINUED FROM PAGE FI-19

**CHECK EFI ELECTRONIC CIRCUIT
USING VOLT/OHMMETER**
(See page FI-27)

BAD

1. Wiring connections
2. Power to ECU
 - (1) Fusible links
 - (2) Fuses
 - (3) EFI main relay
3. Vacuum sensor
4. Water temp. sensor
5. Air temp. sensor
6. Throttle position sensor
7. Injection signal circuit
 - (1) Injector wiring
 - (2) ECU