

PROBLEM SYMPTOMS TABLE

When the malfunction code is not confirmed the DTC check and the problem still can not be confirmed in the basic inspection, then proceed to this step and perform troubleshooting according to the numbered order given in the table below.

Symptom	Suspect Area	See page
Does not crank (Difficult to start)	1. Starter 2. Starter relay	ST-28 ST-49
No initial combustion (Difficult to start)	1. ECU power source circuit 2. Pre-heating system 3. Compression 4. Emission ECU 5. Injection pump	DI-35 ST-1 EG-7* EC-3 EG-111
Cold engine (Difficult to start)	1. Pre-heating system 2. STA signal circuit 3. Water temp. sensor 4. Injection nozzle 5. Fuel filter 6. Emission ECU 7. Injection pump	ST-1 DI-26 DI-1B FU-1 EG-86 EC-3 EG-111
Hot engine (Difficult to start)	1. STA signal circuit 2. Injection nozzle 3. Fuel filter 4. Emission ECU 5. Injection pump	DI-26 FU-1 EG-86 EC-3 EG-111
Soon after starting (Engine stall)	1. Fuel filter 2. Emission ECU 3. Injection pump	EG-86 EC-3 EG-111
Others (Engine stall)	1. ECU power source circuit 2. Emission ECU 3. Injection pump	DI-35 EC-3 EG-111
Incorrect first idle (Poor idling)	1. Water temp. sensor 2. Fuel filter 3. Emission ECU 4. Injection pump	DI-1B EG-86 EC-3 EG-111
High engine idle speed (Poor idling)	1. Throttle position sensor 2. Water temp. sensor 3. Vehicle speed sensor 4. Emission ECU 5. Injection pump	EC-5 DI-1B DI-24 EC-3 EG-111

*: See Pub. No. RM520E.

Symptom	Suspect Area	See page
Lower engine idle speed (Poor idling)	1. Injection nozzle 2. EGR system 3. Water temp. sensor 4. Vehicle speed sensor 5. Compression 6. Valve clearance 7. Fuel line (Air feed) 8. Emission ECU 9. Injection pump	FU-1 EC-5 DI-18 DI-24 EG-7 * EG-8 * – EC-3 EG-111†
Rough idling (Poor idling)	1. Injection nozzle 2. Fuel line (Air feed) 3. Pre-heating system 4. EGR system 5. Throttle position sensor 6. Pickup sensor 7. Compression 8. Valve clearance 9. Emission ECU 10. Injection pump	FU-1 – ST-1 EC-5 EC-5 EC-5 EG-7 * EG-8 * EC-3 EG-111†
Hunting at hot engine (Poor idling)	1. Injection nozzle 2. ECU power source circuit 3. Throttle position sensor 4. Compression 5. Fuel line (Air feed) 6. Valve clearance 7. Emission ECU 8. Injection pump	FU-1 DI-35 EC-5 EG-7 * – EG-8 * EC-3 EG-111†
Hunting at cold engine (Poor idling)	1. Pre-heating system 2. Injection nozzle 3. ECU power source circuit 4. Pickup sensor 5. Water temp. sensor 6. Compression 7. Fuel line (Air feed) 8. Valve clearance 9. Emission ECU 10. Injection pump	ST-1 FU-1 DI-35 EC-5 DI-18 EG-7 * – EG-8 * EC-3 EG-111†
Hesitation/Poor acceleration (Poor driveability)	1. Injection nozzle 2. Fuel filter 3. EGR system 4. Throttle position sensor 5. Pickup sensor 6. Compression 7. Emission ECU 8. Injection pump	FU-1 EG-86† EC-5 EC-5 EC-5 EG-7 * EC-3 EG-111†

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DIAGNOSTICS – ENGINE (5L)

Symptom	Suspect Area	See page
Knocking (Poor driveability)	1. Injection nozzle 2. EGR system 3. Pickup sensor 4. Water Temp. sensor 5. Emission ECU	FU-1 EC-5 EC-5 DI-13 EC-3
Black smoke (Poor driveability)	1. Injection nozzle 2. EGR system 3. Throttle position sensor 4. Emission ECU 5. Injection pump	FU-1 EC-5 EC-5 EC-3 EG-111
White smoke (Poor driveability)	1. EGR system 2. Pre-heating system 3. Injection nozzle 4. Pickup sensor 5. Fuel filter 6. Water Temp. sensor 7. Emission ECU 8. Injection pump	EC-5 ST-1 FU-1 EC-5 EG-86* DI-13 EC-3 EG-111
Surging/Hunting (Poor driveability)	1. Injection nozzle 2. Throttle position sensor 3. Emission ECU 4. Injection pump	FU-1 EC-5 EC-3 EG-111

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