DI31N–05

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–6 ST–20
Cold engine (Difficult to start)	1. STA signal circuit 2. Injection nozzle 3. Fuel filter 4. Engine ECU 5. Injection pump	DI–43 FU–8 FU–1 IN–20 FU–15
Hot engine (Difficult to start)	1. STA signal circuit 2. Injection nozzle 3. Fuel filter 4. Throttle Body 5. Engine ECU 6. Injection pump	DI–43 FU–8 FU–1 ED–3 IN–20 FU–15
Soon after starting (Engine stall)	1. Fuel filter 2. Engine ECU power source circuit 3. Engine ECU 4. Injection pump	FU–1 DI–49 IN–20 FU–15
Others (Engine stall)	1. Engine ECU power source circuit 2. Spill control valve relay circuit 3. Engine ECU 4. Injection pump	DI–49 DI–60 IN–20 FU–15
Incorrect first idle (Poor idling)	1. Fuel filter 2. Engine ECU 3. Injection pump	FU–1 IN–20 FU–15
High engine idle speed (Poor idling)	1. STA signal circuit 2. Throttle position sensor 3. Water temp. sensor 4. Vehicle speed sensor 5. Engine ECU 6. Injection pump	DI–43 ED–3 ED–15 DI–39 IN–20 FU–15
Lower engine idle speed (Poor idling)	1. Injection nozzle 2. Compression 3. Throttle body 4. Valve clearance 5. Fuel line (Air beed) 6. Engine ECU 7. Injection pump 8. Water temp. sensor	FU–8 EM–2 ED–3 EM–4 – IN–20 FU–15 ED–15
Rough idling (Poor idling)	1. Injection nozzle 2. Fuel line (Air beed) 3. Pre–heating control circuit 4. Compression 5. Throttle position sensor 6. Crankshaft position sensor 7. Valve clearance 8. Engine ECU 9. Injection pump	FU–8 – ST–2 EM–2 ED–3 ED–3 EM–4 IN–20 FU–15

Hunting at hot engine (Poor idling)	1. Injection nozzle 2. Engine ECU power source circuit 3. Compression 4. Fuel line (Air beed) 5. Valve clearance 6. Engine ECU 7. Injection pump	FU–8 DI–49 EM–2 – EM–4 IN–20 FU–15
Hunting at cold engine (Poor idling)	1. Injection nozzle 2. Engine ECU power source circuit 3. Pre–heating control circuit 4. Compression 5. Fuel line (Air beed) 6. Valve clearance 7. Engine ECU 8. Injection pump	FU–8 DI–49 ST–2 EM–2 – EM–4 IN–20 FU–15
Hesitation/ Poor acceleration (Poor driveability)	1. Injection nozzle 2. Fuel filter 3. Compression 4. Engine ECU 5. Injection pump	FU–8 FU–1 EM–2 IN–20 FU–15
Knocking (Poor driveability)	1. Injection nozzle 2. Engine ECU 3. Crankshaft posistion sensor 4. Spill control valve circuit 5. Water temp. sensor	FU–8 IN–20 ED–21 DI–60 ED–15
Black smoke (Poor driveability)	1. Injection nozzle 2. Engine ECU 3. Injection pump 4. Spill control valve circuit 5. Throttle body 6. Throttle position sensor 7. Intake air temp. sensor	FU–8 IN–20 FU–15 DI–60 ED–3 ED–3 ED–17
White smoke (Poor driveability)	1. Pre–heating control circuit 2. Injection nozzle 3. Fuel filter 4. Engine ECU 5. Injection pump 6. Crankshaft position sensor 7. Throttle body 8. Water temp sensor	ST–2 FU–8 FU–1 IN–20 FU–15 ED–21 ED–3 ED–15
Surging/ Hunting (Poor driveability)	1. Injection nozzle 2. Engine ECU 3. Injection pump 4. Throttle position sensor	FU–8 IN–20 FU–15 ED–3