DI31N–12

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	★
	3. Neutral start switch circuit (A/T)	★
Cold engine (Difficult to start)	1. Intake heater control circuit	★
	2. STA signal circuit	★
	3. Heater idle–up switch circuit	★
	4. Injection nozzle	FU–1
	5. Fuel filter	★
	6. Engine ECU	ED–11
	7. Injection pump	★
Hot engine (Difficult to start)	1. STA signal circuit	★
	2. Injection nozzle	FU–1
	3. Fuel filter	★
	4. Compression	★
	5. Engine ECU	ED–11
	6. Injection pump	★
Soon after starting (Engine stall)	1. Fuel filter	★
	2. ECU power source circuit	★
	3. Engine ECU	ED–11
	4. Injection pump	★
Others (Engine stall)	1. ECU power source circuit	★
	2. Spill valve relay circuit	★
	3. Engine ECU	ED–11
	4. Injection pump	★
Incorrect first idle (Poor idling)	1. Fuel filter	★
	2. Engine ECU	ED–11
	3. Injection pump	★
High engine idle speed (Poor idling)	1. A/C signal circuit	★
	2. STA signal circuit	★
	3. Engine ECU	ED–11
	4. Injection pump	★
Lower engine idle speed (Poor idling)	1. A/C signal circuit	★
	2. Injection nozzle	FU–1
	3. EGR control circuit	★
	4. Compression	★
	5. Valve clearance	★
	6. Fuel line (Air beed)	–
	7. Engine ECU	ED–11
	8. Injection pump	★
Rough idling (Poor idling)	1. Injection nozzle	FU–1
	2. Fuel line (Air beed)	–
	3. Intake heater control circuit	★
	4. EGR control circuit	★
	5. Compression	★
	6. Valve clearance	★
	7. Engine ECU	ED–11
	8. Injection pump	★

Symptom	Suspect Area	See page
Hunting at hot engine (Poor idling)	1. Injection nozzle	FU–1
	2. ECU power source circuit	★
	3. Compression	★
	4. Fuel line (Air beed)	–
	5. Valve clearance	★
	6. Engine ECU	ED–11
	7. Injection pump	★
Hunting at cold engine (Poor idling)	1. Injection nozzle	FU–1
	2. ECU power source circuit	★
	3. Intake heater control circuit	★
	4. Compression	★
	5. Fuel line (Air beed)	–
	6. Valve clearance	★
	7. Engine ECU	ED–11
	8. Injection pump	★
Hesitation/ Poor acceleration (Poor driveability)	1. Injection nozzle	FU–1
	2. Fuel filter	★
	3. EGR control circuit	★
	4. Compression	★
	5. Engine ECU	ED–11
	6. Injection pump	★
Knocking (Poor driveability)	1. Injection nozzle	FU–1
	2. EGR control circuit	★
	3. Engine ECU	ED–11
Black smoke (Poor driveability)	1. Injection nozzle	FU–1
	2. EGR control circuit	★
	3. Engine ECU	ED–11
	4. Injection pump	★
White smoke (Poor driveability)	1. EGR control circuit	★
	2. Intake heater control circuit	★
	3. Injection nozzle	FU–1
	4. Fuel filter	★
	5. Engine ECU	ED–11
	6. Injection pump	★
Surging/ Hunting (Poor driveability)	1. Injection nozzle	FU–1
	2. Engine ECU	ED–11
	3. Injection pump	★

★: See Pub. No. RM617E