PROBLEM SYMPTOMS TABLE

DI31N-02

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	ST-20
	2. Starter relay	ST-35
, , ,	3. Neutral start switch circuit (A/T)	DI-108
	1. Intake heater control circuit	DI-80
	2. STA signal circuit	DI-105
	3. Heater idle-up switch circuit	DI-11 5
Cold engine (Difficult to start)	4. Injection nozzle	FU-43
	5. Fuel filter	FU-1
	6. Engine ECU	ED-17
	7. Injection pump	FU-11 <mark>3</mark>
	1. STA signal circuit	DI-105
	2. Injection nozzle	FU-43
	3. Fuel filter	FU-1
Hot engine (Difficult to start)	4. Compression	EM-2
	5. Engine ECU	ED-17
	6. Injection pump	FU-11 <mark>3</mark>
	1. Fuel filter	FU-1
	2. ECU power source circuit	DI-76
Soon after starting (Engine stall)	3. Engine ECU	ED-17
	4. Injection pump	FU-113
	1. ECU power source circuit	DI-76
	2. Spill valve relay circuit	DI-11[3
Others (Engine stall)	3. Engine ECU	ED-17
	4. Injection pump	FU-113
	1. Fuel filter	FU-1
Incorrect first idle (Poor idling)	2. Engine ECU	ED-17
·	3. Injection pump	FU-113
	1. A/C signal circuit	DI-93
High engine idle speed (Poor idling)	2. STA signal circuit	ED-5
	3. Engine ECU	ED-17
	4. Injection pump	FU-113
Lower engine idle speed (Poor idling)	1. A/C signal circuit	DI-93
	2. Injection nozzle	FU-43
	3. EGR control circuit	DI-85
	4. Compression	EM-2
	5. Valve clearance	EM-9
	6. Fuel line (Air beed)	_
	7. Engine ECU	ED-17
	8. Injection pump	FU-11 <mark>3</mark>
Rough idling (Poor idling)	1. Injection nozzle	FU-43
	2. Fuel line (Air beed)	_
	3. Intake heater control circuit	DI-80
	4. EGR control circuit	DI-85
	5. Compression	EM-2
	6. Valve clearance	EM-9
	7. Engine ECU	ED-17
	8. Injection pump	FU-11 <u>3</u>

DIAGNOSTICS - ENGINE

Symptom	Suspect Area	See page
Hunting at hot engine (Poor idling)	Injection nozzle ECU power source circuit Compression	FU-43 DI-76 EM-2
	4. Fuel line (Air beed)5. Valve clearance6. Engine ECU7. Injection pump	- EM-9 ED-17 FU-11⊠
Hunting at cold engine (Poor idling)	 Injection nozzle ECU power source circuit Intake heater control circuit Compression Fuel line (Air beed) Valve clearance Engine ECU Injection pump 	FU-43 DI-76 DI-80 EM-2 - EM-9 ED-17 FU-113
Hesitation/ Poor acceleration (Poor driveability)	 Injection nozzle Fuel filter EGR control circuit Compression Engine ECU Injection pump 	FU-36 FU-1 DI-85 EM-2 ED-17 FU-118
Knocking (Poor driveability)	Injection nozzle EGR control circuit Engine ECU	FU-36 DI-85 ED-17
Black smoke (Poor driveability)	1. Injection nozzle 2. EGR control circuit 3. Engine ECU 4. Injection pump	FU-36 DI-85 ED-17 FU-11 <mark>3</mark>
White smoke (Poor driveability)	 EGR control circuit Intake heater control circuit Injection nozzle Fuel filter Engine ECU Injection pump 	DI-85 DI-80 FU-36 FU-1 ED-17
Surging/ Hunting (Poor driveability)	Injection nozzle Engine ECU Injection pump	FU-43 ED-17 FU-11[3