DI064–09

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*1 ST–18*2
No initial combustion (Difficult to start)	1. ECU power source circuit 2. Pre–heating system 3. Compression 4. Emission ECU 5. Injection pump	DI–47 ST–1 EG–7*1 EC–6 EG–111*1
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–36 DI–22 FU–3*2 EG–86*1 EC–6 EG–111*1
Hot engine (Difficult to start)	1. STA signal circuit 2. Injection nozzle 3. Fuel filter 4. Emission ECU 5. Injection pump	DI–36 FU–3*2 EG–86*1 EC–6 EG–111*1
Soon after starting (Engine stall)	1. Fuel filter 2. Emission ECU 3. Injection pump	EG–86*1 EC–6 EG–111*1
Others (Engine stall)	1. ECU power source circuit 2. Emission ECU 3. Injection pump	DI–47 EC–6 EG–111*1
Incorrect first idle (Poor idling)	1. Water temp. sensor 2. Fuel filter 3. Emission ECU 4. Injection pump	DI–25 EG–86*1 EC–6 EG–111*1
High engine idle speed (Poor idling)	5. Throttle position sensor 6. Water temp. sensor 7. Vehicle speed sensor 8. Emission ECU 9. Injection pump	EC–10 DI–22 DI–33 EC–6 EG–111*1

*1: See Pub. No. RM520E
*2: See Pub. No. RM582E

Symptom	Suspect Area	See page
Lower engine idle speed (Poor idling)	1. Injection nozzle	FU–3*2
	2. EGR system	EC–10
	3. Water temp. sensor	DI–22
	4. Vehicle speed sensor	DI–33
	5. Compression	EG–7*1
	6. Valve clearance	EG–8*1
	7. Fuel line (Air beed)	–
	8. Emission ECU	EC–6
	9. Injection pump	EG–111*1
Rough idling (Poor idling)	1. Injection nozzle	FU–3*2
	2. Fuel line (Air beed)	–
	3. Pre–heating system	ST–1
	4. EGR system	EC–10
	5. Throttle position sensor	EC–10
	6. Pickup sensor	EC–10
	7. Compression	EG–7*1
	8. Valve clearance	EG–8*1
	9. Emission ECU	EC–6
	10.Injection pump	EG–111*1
Hunting at hot engine (Poor idling)	1. Injection nozzle	FU–3*2
	2. ECU power source circuit	DI–47
	3. Throttle position sensor	EC–10
	4. Compression	EG–7*1
	5. Fuel line (Air beed)	–
	6. Valve clearance	EG–8*1
	7. Emission ECU	EC–6
	8. Injection pump	EG–111*1
Hunting at cold engine (Poor idling)	1. Pre–heating system	ST–1
	2. Injection nozzle	FU–3*2
	3. ECU power source circuit	DI–47
	4. Pickup sensor	EC–10
	5. Water temp. sensor	DI–22
	6. Compression	EG–7*1
	7. Fuel line (Air beed)	–
	8. Valve clearance	EG–8*1
	9. Emission ECU	EC–6
	10.Injection pump	EG–111*1
Hesitation/Poor acceleration (Poor driveability)	1. Injection nozzle	FU–3*2
	2. Fuel filter	EG–86*1
	3. EGR system	EC–10
	4. Throttle position sensor	EC–10
	5. Pickup sensor	EC–10
	6. Compression	EG–7*1
	7. Emission ECU	EC–6
	8. Injection pump	EG–111*1

*: See Pub. No. RM520E
*2: See Pub. No. RM582E

Symptom	Suspect Area	See page
Knocking (Poor driveability)	1. Injection nozzle	FU–3*2
	2. EGR system	EC–10
	3. Pickup sensor	EC–10
	4. Water temp. sensor	DI–22
	5. Emission ECU	EC–6
Black smoke (Poor driveability)	1. Injection nozzle	FU–3*2
	2. EGR system	EC–10
	3. Throttle position sensor	EC–10
	4. Emission ECU	EC–6
	5. Injection pump	EG–111*
White smoke (Poor driveability)	1. EGR system	EC–10
	2. Pre–heating system	ST–1
	3. Injection nozzle	FU–3*2
	4. Pickup sensor	EC–10
	5. Fuel filter	EG–86*
	6. Water temp. sensor	DI–22
	7. Emission ECU	EC–6
	8. Injection pump	EG–111*
Surging/Hunting (Poor driveability)	1. Injection nozzle	FU–3*2
	2. Throttle position sensor	EC–10
	3. Emission ECU	EC–6
	4. Injection pump	EG–111*

*: See Pub. No. RM520E
*2: See Pub. No. RM582E