DI3UC–01

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	ST–15*
	2. Starter relay 12V type	ST–8
	24V type	ST–26*
No initial combustion (Difficult to start)	1. ECU power source circuit	DI–38
	2. Pre–heating system	ST–1
	3. Compression	EM–30*
	4. Emission ECU	EC–10
	5. Injection pump	FU–46*
Cold engine (Difficult to start)	1. Pre–heating system	ST–1
	2. STA signal circuit	DI–27
	3. Water temp. sensor	DI–17
	4. Injection nozzle	FU–1
	5. Fuel filter	FU–9*
	6. Emission ECU	EC–10
	7. Injection pump	FU–46*
Hot engine (Difficult to start)	1. STA signal circuit	DI–27
	2. Injection nozzle	FU–1
	3. Fuel filter	FU–9*
	4. Emission ECU	EC–10
	5. Injection pump	FU–46*
Soon after starting (Engine stall)	1. Fuel filter	FU–9*
	2. Emission ECU	EC–10
	3. Injection pump	FU–46*
Others (Engine stall)	1. ECU power source circuit	DI–38
	2. Emission ECU	EC–10
	3. Injection pump	FU–46*
Incorrect first idle (Poor idling)	1. Water temp. sensor	DI–17
	2. Fuel filter	FU–9*
	3. Emission ECU	EC–10
	4. Injection pump	FU–46*
High engine idle speed (Poor idling)	1. Throttle position sensor	DI–22
	2. Water temp. sensor	DI–17
	3. Vehicle speed sensor	DI–25
	4. Emission ECU	EC–10
	5. Injection pump	FU–46*
Lower engine idle speed (Poor idling)	1. Injection nozzle	FU–1
	2. EGR system	EC–10
	3. Water temp. sensor	DI–17
	4. Vehicle speed sensor	DI–25
	5. Compression	EM–30*
	6. Valve clearance	EM–19*
	7. Fuel line (Air breed)	–
	8. Emission ECU	EC–10
	9. Injection pump	FU–46*

*: See Pub. No. RM172E

Symptom	Suspect Area	See page
Rough idling (Poor idling)	1. Injection nozzle	FU–1
	2. Fuel line (Air bleed)	–
	3. Pre–heating system	ST–1
	4. EGR system	EC–10
	5. Throttle position sensor	DI–22
	6. Pickup sensor	FU–46*
	7. Compression	EM–30*
	8. Valve clearance	EM–19*
	9. Emission ECU	EC–10
	10. Injection pump	FU–46*
Hunting at hot engine (Poor idling)	1. Injection nozzle	FU–1
	2. ECU power source circuit	DI–38
	3. Throttle position sensor	DI–22
	4. Vacuum sensor	EC–6
	5. Compression	EM–30*
	6. Fuel line (Air bleed)	–
	7. Valve clearance	EM–19*
	8. Emission ECU	EC–10
	9. Injection pump	FU–46*
Hunting at cold engine (Poor idling)	1. Pre–heating system	ST–1
	2. Injection nozzle	FU–1*
	3. ECU power source circuit	DI–38
	4. Pickup sensor	FU–46*
	5. Vacuum sensor	EC–6
	6. Water temp. sensor	DI–17
	7. Compression	EM–30*
	8. Fuel line (Air bleed)	–
	9. Valve clearance	EM–19*
	10. Emission ECU	EC–10
	11. Injection pump	FU–46*
Hesitation/Poor acceleration (Poor driveability)	1. Injection nozzle	FU–1
	2. Fuel filter	FU–9*
	3. EGR system	EC–10
	4. Throttle position sensor	DI–22
	5. Pickup sensor	FU–46*
	6. Compression	EM–30*
	7. Emission ECU	EC–10
	8. Injection pump	FU–46*
Knocking (Poor driveability)	1. Injection nozzle	FU–1
	2. EGR system	EC–10
	3. Pickup sensor	FU–46*
	4. Water temp. sensor	DI–17
	5. Emission ECU	EC–10
	6. Injection pump	FU–46*
Black smoke (Poor driveability)	1. Injection nozzle	FU–1
	2. EGR system	EC–10
	3. Throttle position sensor	DI–22
	4. Pickup sensor	FU–46*
	5. Vacuum sensor	EC–6
	6. Emission ECU	EC–10
	7. Injection pump	FU–46*

*: See Pub. No. RM172E

Symptom	Suspect Area	See page
White smoke (Poor driveability)	1. EGR system	EC–10
	2. Pre–heating system	ST–1
	3. Injection nozzle	FU–1
	4. Pickup sensor	FU–46*
	5. Fuel filter	FU–9*
	6. Water temp. sensor	DI–17
	7. Emission ECU	EC–10
	8. Injection pump	FU–46*
Surging/ Hunting (Poor driveability)	1. Injection nozzle	FU–1
	2. Throttle position sensor	DI–22
	3. Pickup sensor	FU–46*
	4. Vacuum sensor	EC–6
	5. E–VRV	EC–10
	6. Emission ECU	EC–10
	7. Injection pump	FU–46*

*: See Pub. No. RM172E