054JF–23

PROBLEM SYMPTOMS TABLE

When the malfunction code is not confirmed during the diagnostic trouble code check and no problem can be confirmed in the basic inspection, proceed to this problem symptoms tables and troubleshoot according to the numbered order given below.

Symptoms	Suspected Area	See Page
Engine not crank (difficult to start)	1. Starter	19–1
	2. STARTER relay	19–1
	3. ECT sensor	10–1
Cold engine (difficult to start)	1. STA signal circuit	05–159
	2. Injector	11–2
	3. Fuel filter	–
	4. Compression	14–1
	5. ECM	10–3
	6. Supply pump	11–3
	7. Fuel pressure sensor	11–3
	8. Diesel throttle	11–3
Hot engine (difficult to start)	1. STA signal circuit	05–159
	2. Injector	11–2
	3. Fuel filter	–
	4. Compression	14–1
	5. ECM	10–3
	6. Supply pump	11–3
	7. Fuel pressure sensor	11–3
	8. Diesel throttle	11–3
Soon after starting (engine stall)	1. Fuel filter	–
	2. Injector	11–2
	3. ECM power source circuit	05–152
	4. ECM	10–3
	5. Supply pump	11–3
	6. Fuel pressure sensor	11–3
	7. Diesel throttle	11–3
Others (engine stall)	1. ECM power source circuit	05–152
	2. Injector	11–2
	3. ECM	10–3
	4. Supply pump	11–3
	5. Fuel pressure sensor	11–3
	6. Diesel throttle	11–3
Incorrect first idle (poor idling)	1. Fuel filter	–
	2. Injector	11–2
	3. ECM	10–3
	4. Supply pump	10–3
	5. Fuel pressure sensor	11–3
High engine idle speed (poor idling)	1. Injector	11–2
	2. STA signal circuit	05–159
	3. ECM	10–3
	4. Supply pump	10–3
	5. Fuel pressure sensor	11–3
Lower engine idle speed (poor idling)	1. Injector	11–2
	2. Compression	14–1
	3. Valve clearance	14–5
	4. Fuel line (Air bleed)	11–3
	5. ECM	10–3
	6. Supply pump	10–3
	7. Fuel pressure sensor	11–3
	8. Diesel throttle	11–3

Rough idling (poor idling)	1. Injector 2. Fuel line (Air bleed) 3. Compression 4. Valve clearance 5. ECM 6. Supply pump 7. Fuel pressure sensor 8. Diesel throttle	11–2 – 14–1 14–5 10–3 11–3 11–3 11–3
Hunting at hot engine (poor idling)	1. Injector 2. ECM power source circuit 3. Compression 4. Fuel line (Air bleed) 5. Valve clearance 6. ECM 7. Supply pump 8. Fuel pressure sensor 9. Diesel throttle	11–2 05–152 14–1 – 14–5 10–3 11–3 11–3 11–3
Hunting at cold engine (poor idling)	1. Injector 2. ECM power source circuit 3. Compression 4. Fuel line (Air bleed) 5. Valve clearance 6. ECM 7. Supply pump 8. Fuel pressure sensor 9. Diesel throttle	11–2 05–152 14–1 – 14–5 10–3 11–3 11–3 11–3
Hesitation/Poor acceleration (poor driveability)	1. Injector 2. Fuel filter 3. Compression 4. ECM 5. Supply pump 6. Fuel pressure sensor 7. Diesel throttle	11–2 – 14–1 10–3 11–3 11–3 11–3
Knocking (poor driveability)	1. Injector 2. ECM 3. Supply pump 4. Fuel pressure sensor	11–2 10–3 11–3 11–3
Black smoke (poor driveability)	1. Injector 2. ECM 3. Supply pump 4. Fuel pressure sensor 5. Diesel throttle	11–2 10–3 11–3 11–3 11–3
White smoke (poor driveability)	1. Injector 2. Fuel filter 3. ECM 4. Supply pump 5. Fuel pressure sensor 6. Diesel throttle	11–2 – 10–3 11–3 11–3 11–3
Surging/Hunting (poor driveability)	1. Injector 2. ECM 3. Supply pump 4. Fuel pressure sensor	11–2 10–3 11–3 11–3