1. Engine Trouble in General

NOTE:

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A : Very often

- B : Sometimes
- C : Rarely

A, B and C shown in the RANK of table refer to the possibility of reason for the trouble in order ("Very often" to "Rarely").

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
1. Engine will not start.			
1) Starter does not turn.	Starter	Defective battery-to-starter harness	В
		Defective starter switch	С
		Defective inhibitor switch or neutral switch	С
		Defective starter	В
	 Battery 	 Poor terminal connection 	A
		Run-down battery	A
		Defective charging system	В
	Friction	• Seizure of crankshaft and connecting rod bearing	С
		Seized camshaft	С
		Seized or stuck piston and cylinder	С
2) Initial combustion does	Starter	Defective starter	С
not occur.	• Fuel injection system <re< td=""><td>ef. to 2-7 [T6A0].></td><td>A</td></re<>	ef. to 2-7 [T6A0].>	A
	Fuel line	Defective fuel pump and relay	A
		Lack of or insufficient fuel	В
	Belt	Defective	В
		Defective timing	В
	Compression	Incorrect valve clearance	С
		Loosened spark plugs or defective gasket	С
		Loosened cylinder head bolts or defective gasket	С
		Improper valve seating	С
		Defective valve stem	С
		Worn or broken valve spring	В
		Worn or stuck piston rings, cylinder and piston	С
		Incorrect valve timing	В
		Improper engine oil (low viscosity)	В
3) Initial combustion	• Fuel injection system <re< td=""><td>ef. to 2-7 [T6A0].></td><td>A</td></re<>	ef. to 2-7 [T6A0].>	A
occurs.	 Intake system 	Defective intake manifold gasket	В
		Defective throttle body gasket	В
	Fuel line	Defective fuel pump and relay	С
		Clogged fuel line	С
		Lack of/or insufficient fuel	В
	• Belt	Defective	В
		Defective timing	В
	Compression	Incorrect valve clearance	С
		Loosened spark plugs or defective gasket	С
		Loosened cylinder head bolts or defective gasket	С
		Improper valve seating	С
		Defective valve stem	С
		Worn or broken valve spring	В
		Worn or stuck piston rings, cylinder and piston	С
		Incorrect valve timing	В
		Improper engine oil (low viscosity)	В

2-3b [K100] 1. Engine Trouble in General

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
4) Engine stalls after initial	• Fuel injection system <re< td=""><td></td><td>A</td></re<>		A
combustion.	 Intake system 	 Loosened or cracked intake duct 	В
		Loosened or cracked PCV hose	С
		 Loosened or cracked vacuum hose 	C
		 Defective intake manifold gasket 	В
		Defective throttle body gasket	В
		Dirty air cleaner element	С
	Fuel line	Clogged fuel line	С
		Lack of or insufficient fuel	В
	Belt	Defective	В
		Defective timing	В
	Compression	Incorrect valve clearance	С
		Loosened spark plugs or defective gasket	С
		Loosened cylinder head bolts or defective gasket	С
		Improper valve seating	С
		Defective valve stem	С
		Worn or broken valve spring	В
		Worn or stuck piston rings, cylinder and piston	С
		Incorrect valve timing	В
		Improper engine oil (low viscosity)	В
2. Rough idle and engine	• Fuel injection system <re< td=""><td></td><td>A</td></re<>		A
stall	Intake system	Loosened or cracked intake duct	A
		Loosened or cracked PCV hose	A
		Loosened or cracked vacuum hose	A
		Defective intake manifold gasket	В
		Defective throttle body gasket	В
		Defective PCV valve	С
		Loosened oil filler cap	В
		Dirty air cleaner element	С
	Fuel line	Defective fuel pump and relay	С
		Clogged fuel line	С
		Lack of/or insufficient fuel	В
	Belt	Defective timing	С
	Compression	Incorrect valve clearance	B
		Loosened spark plugs or defective gasket	B
		Loosened cylinder head bolts or defective gasket	B
		Improper valve seating	B
		Defective valve stem	C
		Worn or broken valve spring	B
		Worn or stuck piston rings, cylinder and piston	B
		Incorrect valve timing	A
		Improper engine oil (low viscosity)	B
	Lubrication system	Incorrect oil pressure	B
		Defective rocker cover gasket	C
	Cooling system	Overheating	C C
	Others	Malfunction of evaporative emission control system	
			A B
		Stuck or damaged throttle valve	
		Accelerator cable out of adjustment	C

DIAGNOSTICS

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
3. Low output, hesitation	 Fuel injection system <re< li=""> </re<>		A
and poor acceleration	 Intake system 	Loosened or cracked intake duct	A
		Loosened or cracked PCV hose	A
		Loosened or cracked vacuum hose	В
		 Defective intake manifold gasket 	В
		Defective throttle body gasket	В
		Defective PCV valve	В
		Loosened oil filler cap	В
		Dirty air cleaner element	A
	Fuel line	Defective fuel pump and relay	В
		Clogged fuel line	В
		Lack of/or insufficient fuel	С
	Belt	Defective timing	В
	Compression	Incorrect valve clearance	В
		Loosened spark plugs or defective gasket	В
		Loosened cylinder head bolts or defective gasket	В
		Improper valve seating	В
		Defective valve stem	С
		Worn or broken valve spring	B
		Worn or stuck piston rings, cylinder and piston	C
		Incorrect valve timing	A
		Improper engine oil (low viscosity)	B
	 Lubrication system 	Incorrect oil pressure	B
	Cooling system	Overheating	C
		Over cooling	C
	Others	Malfunction of evaporative emission control system	A
I. Surging	Fuel injection system <re< td=""><td></td><td>A</td></re<>		A
. Ourging	Intake system	Loosened or cracked intake duct	A
		Loosened of cracked Intake duct Loosened or cracked PCV hose	A
		Loosened of cracked r cv nose Loosened or cracked vacuum hose	A
		Defective intake manifold gasket	B
		Defective finance manifold gasket Defective throttle body gasket	
			B
		Defective PCV valve	B
		Loosened oil filler cap	B
		Dirty air cleaner element	B
	• Fuel line	Defective fuel pump and relay	B
		Clogged fuel line	B
		Lack of/or insufficient fuel	<u> </u>
	Belt	Defective timing	B
	 Compression 	Incorrect valve clearance	B
		Loosened spark plugs or defective gasket	C
		Loosened cylinder head bolts or defective gasket	C
		Improper valve seating	C
		Defective valve stem	C
		Worn or broken valve spring	C
		Worn or stuck piston rings, cylinder and piston	C
		Incorrect valve timing	A
		Improper engine oil (low viscosity)	В
	 Cooling system 	Overheating	В
	Others	Malfunction of evaporative emission control system	C

2-3b [K100] 1. Engine Trouble in General

DIAGNOSTICS

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
5. Engine does not return	• Fuel injection system <re< td=""><td>.f. to 2-7 [T6A0].></td><td>А</td></re<>	.f. to 2-7 [T6A0].>	А
to idle.	 Intake system 	Loosened or cracked vacuum hose	А
	• Others	Stuck or damaged throttle valve	А
		Accelerator cable out of adjustment	В
6. Dieseling (Run-on)	• Fuel injection system <re< td=""><td>f. to 2-7 [T6A0].></td><td>А</td></re<>	f. to 2-7 [T6A0].>	А
	Cooling system	Overheating	В
	• Others	Accelerator cable out of adjustment	В
7. After burning in exhaust	• Fuel injection system <re< td=""><td>f. to 2-7 [T6A0].></td><td>А</td></re<>	f. to 2-7 [T6A0].>	А
system	Intake system	Loosened or cracked intake duct	С
		Loosened or cracked PCV hose	С
		Loosened or cracked vacuum hose	В
		Defective PCV valve	В
		Loosened oil filler cap	С
	• Belt	Defective timing	В
	Compression	Incorrect valve clearance	В
		Loosened spark plugs or defective gasket	С
		Loosened cylinder head bolts or defective gasket	С
		Improper valve seating	В
		Defective valve stem	С
		Worn or broken valve spring	С
		Worn or stuck piston rings, cylinder and piston	С
		Incorrect valve timing	А
	Lubrication system	Incorrect oil pressure	С
	Cooling system	Over cooling	С
	• Others	Malfunction of evaporative emission control system	С
8. Knocking	• Fuel injection system <re< td=""><td>f. to 2-7 [T6A0].></td><td>А</td></re<>	f. to 2-7 [T6A0].>	А
	 Intake system 	Loosened oil filler cap	В
	• Belt	Defective timing	В
	Compression	Incorrect valve clearance	С
		Incorrect valve timing	В
	Cooling system	Overheating	А
9. Excessive engine oil	Intake system	Loosened or cracked PCV hose	А
consumption		Defective PCV valve	В
		Loosened oil filler cap	С
	Compression	Defective valve stem	А
		Worn or stuck piston rings, cylinder and piston	А
	Lubrication system	• Loosened oil pump attaching bolts and defective gasket	В
		Defective oil filter seal	В
		Defective crankshaft oil seal	В
		Defective rocker cover gasket	В
		Loosened oil drain plug or defective gasket	В
		Loosened oil pan fitting bolts or defective oil pan	В

DIAGNOSTICS

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
10. Excessive fuel con- sumption	• Fuel injection system <ref. 2-7="" [t6a0].="" to=""></ref.>		A
	 Intake system 	Dirty air cleaner element	A
	• Belt	Defective timing	В
	Compression	Incorrect valve clearance	В
		Loosened spark plugs or defective gasket	С
		Loosened cylinder head bolts or defective gasket	С
		Improper valve seating	В
		Defective valve stem	С
		Worn or broken spring	С
		Worn or stuck piston rings, cylinder and piston	В
		Incorrect valve timing	В
	 Lubrication system 	Incorrect oil pressure	С
	 Cooling system 	Over cooling	С
	Others	Accelerator cable out of adjustment	В