

19. Engine Trouble in General

S103095

A: INSPECTION

S103095A10

NOTE:

"RANK" shown in the chart refer to the possibility of reason for the trouble in order ("Very often" to "Rarely")

A — Very often

B — Sometimes

C — Rarely

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
1. Engine will not start.			
1) Starter does not turn.	<ul style="list-style-type: none"> ● Starter ● Battery ● Friction 	<ul style="list-style-type: none"> ● Defective battery-to-starter harness ● Defective starter switch ● Defective inhibitor switch or neutral switch ● Defective starter ● Poor terminal connection ● Run-down battery ● Defective charging system ● Seizure of crankshaft and connecting rod bearing ● Seized camshaft ● Seized or stuck piston and cylinder 	<ul style="list-style-type: none"> B C C B A A B C C C
2) Initial combustion does not occur.	<ul style="list-style-type: none"> ● Starter ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Fuel line ● Belt ● Compression 	<ul style="list-style-type: none"> ● Defective starter ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Defective fuel pump and relay ● Lack of or insufficient fuel ● Defective ● Defective timing ● Incorrect valve clearance ● Loosened spark plugs or defective gasket ● Loosened cylinder head bolts or defective gasket ● Improper valve seating ● Defective valve stem ● Worn or broken valve spring ● Worn or stuck piston rings, cylinder and piston ● Incorrect valve timing ● Improper engine oil (low viscosity) 	<ul style="list-style-type: none"> C A A B B B C C C C B C B C

ENGINE TROUBLE IN GENERAL

ENGINE TROUBLE IN GENERAL

Mechanical

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
2. Rough idle and engine stall	● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.>		A
	● Intake system	● Loosened or cracked intake duct ● Loosened or cracked PCV hose ● Loosened or cracked vacuum hose ● Defective intake manifold gasket ● Defective throttle body gasket ● Defective PCV valve ● Loosened oil filter cap ● Dirty air cleaner element	A A A B B C B C
	● Fuel line	● Defective fuel pump and relay ● Clogged fuel line ● Lack of or insufficient fuel	C C B
	● Belt	● Defective timing	C
	● Compression	● Incorrect valve clearance ● Loosened spark plugs or defective gasket ● Loosened cylinder head bolts or defective gasket ● Improper valve seating ● Defective valve stem ● Worn or broken valve spring ● Worn or stuck piston rings, cylinder and piston ● Incorrect valve timing ● Improper engine oil (low viscosity)	B B B C B A B
	● Lubrication system	● Incorrect oil pressure ● Defective rocker cover gasket	B C
	● Cooling system	● Overheating	C
	● Others	● Malfunction of evaporative emission control system ● Stuck or damaged throttle valve ● Accelerator cable out of adjustment	A B C

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Mechanical

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
5. Engine does not return to idle.	<ul style="list-style-type: none"> ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Intake system ● Others 	<ul style="list-style-type: none"> ● Loosened or cracked vacuum hose ● Stuck or damaged throttle valve ● Accelerator cable out of adjustment 	A A A B
6. Dieseling (Run-on)	<ul style="list-style-type: none"> ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Cooling system ● Others 	<ul style="list-style-type: none"> ● Overheating ● Malfunction of evaporative emission control system 	A B B
7. After burning in exhaust system	<ul style="list-style-type: none"> ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Intake system ● Belt ● Compression ● Lubrication system ● Cooling system ● Others 	<ul style="list-style-type: none"> ● Loosened or cracked intake duct ● Loosened or cracked PCV hose ● Loosened or cracked vacuum hose ● Defective PCV valve ● Loosened oil filler cap ● Defective timing ● Incorrect valve clearance ● Loosened spark plugs or defective gasket ● Loosened cylinder head bolts or defective gasket ● Improper valve seating ● Defective valve stem ● Worn or broken valve spring ● Worn or stuck piston rings, cylinder and piston ● Incorrect valve timing ● Incorrect oil pressure ● Over cooling ● Malfunction of evaporative emission control system 	A C C B B C B C C C B C B C C C C A C C C C C A
8. Knocking	<ul style="list-style-type: none"> ● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.> ● Intake system ● Belt ● Compression ● Cooling system 	<ul style="list-style-type: none"> ● Loosened oil filter cap ● Defective timing ● Incorrect valve clearance ● Incorrect valve timing ● Overheating 	A B B C B A
9. Excessive engine oil consumption	<ul style="list-style-type: none"> ● Intake system ● Compression ● Lubrication system 	<ul style="list-style-type: none"> ● Loosened or cracked PCV hose ● Defective PCV valve ● Loosened oil filter cap ● Defective valve stem ● Worn or stuck piston rings, cylinder and piston ● Loosened oil pump attaching bolts and defective gasket ● Defective oil filter seal ● Defective crankshaft oil seal ● Defective rocker cover gasket ● Loosened oil drain plug or defective gasket ● Loosened oil pan fitting bolts or defective oil pan 	A B C A A B B B B B B

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Mechanical

TROUBLE	PROBLEM PARTS, ETC.	POSSIBLE CAUSE	RANK
10. Excessive fuel consumption	● "EN" section <Ref. to EN-2 PROCEDURE, Basic Diagnostic Procedure.>		A
	● Intake system	● Dirty air cleaner element	A
	● Belt	● Defective timing	B
	● Compression	● Incorrect valve clearance ● Loosened spark plugs or defective gasket ● Loosened cylinder head bolts or defective gasket ● Improper valve seating ● Defective valve stem ● Worn or broken valve spring ● Worn or stuck piston rings, cylinder and piston	B C C B C B
	● Lubrication system	● Incorrect oil pressure	C
	● Cooling system	● Over cooling	C
	● Others	● Accelerator cable out of adjustment	B