

QUICK DIAGNOSIS CHART [ZJ, Z6]

B3E010318881W33

X: Applicable

Possible factor																						
		Starter motor malfunction (Mechanical or electrical)	Starter circuit including ignition switch is open	Improper engine oil level	Low or dead battery	Charging system malfunction	Improper engine compression	Improper valve timing	Hydrolocked engine	Improper engine oil viscosity	Improper dipstick	Base engine malfunction	Drive plate or flywheel are seized.	Improper tension or damaged drive belts	Improper engine coolant level	Water and anti-freeze mixture is improper.	Cooling system malfunction (Radiator, hoses, overflow system, thermostat, etc.)	Cooling fan system malfunction	Engine or transaxle mounts are improperly installed.	Cooling fan seat is improper.	Accelerator cable free play misadjustment	Fuel quality
Troubleshooting item																						
1	Melting of main or other fuses																					
2	MIL illuminates	x	x		x	x			x				x									
3	Will not crank																					
4	Hard to start/long crank/erratic start/erratic crank																					x
5	Engine stalls. After start/at idle						x	x	x													x
6	Cranks normally but will not start						x	x	x													x
7	Slow return to idle																	x				
8	Engine runs rough/rolling idle						x	x														x
9	Fast idle/runs on																			x		
10	Low idle/stalls during deceleration																					
11	Engine stalls/quits. Acceleration/cruise						x	x														x
	Engine runs rough. Acceleration/cruise						x	x														x
	Misses. Acceleration/cruise						x	x														x
	Buck/jerk. Acceleration/cruise/ deceleration						x	x														x
	Hesitation/stumble. Acceleration						x	x														x
	Surges. Acceleration/cruise						x	x														x
12	Lack/loss of power. Acceleration/cruise						x	x														x
13	Knocking/pinging. Acceleration/cruise						x										x					
14	Poor fuel economy						x	x							x		x	x				x
15	Emission compliance						x	x				x					x					
16	High oil consumption/leakage									x	x	x										
17	Cooling system concerns. Overheating													x	x	x	x	x				
18	Cooling system concerns. Runs cold																x	x				
19	Exhaust smoke						x					x					x					
20	Fuel odor (in engine compartment)																					
21	Engine noise			x								x		x					x			
22	Vibration concerns (engine)													x					x	x		
23	A/C does not work sufficiently.																					
24	A/C is always on or A/C compressor runs continuously.																					
25	A/C is not cut off under WOT conditions.																					
26	Exhaust sulfur smell																					x
27	Spark plug condition						x					x										
28	ATX concerns. Upshift/downshift engagement																					
		See 0503, TROUBLESHOOTING																				

B3E0103W001

X: Applicable

Possible factor		Variable valve timing system malfunction	Variable tumble control malfunction	Engine overheating	Air cleaner element clogging or restriction	Air leakage from intake-air system (Loose tubes, cracks, gaskets, brackage)	Intake-air temperature is too hot	IAC valve improper operation	Idle learning of IAC system is not completed	Throttle body malfunction	Variable intake-air control malfunction	Vacuum leakage (Vacuum hose damage, misrouting)	Ignition coil malfunction (e.g. open, short or cracks)	Initial ignition timing misadjustment (CKP sensor & crankshaft pulley misadjustment)	Spark plug malfunction	Ignition coil malfunction	CKP sensor is damaged, (e.g. open or short circuits)	Crankshaft pulley is damaged	Improper gap between CKP sensor and pulse wheel	Fuel pump malfunction (Mechanically or electrically)	Pressure regulator malfunction	Fuel hoses restriction or clogging
Troubleshooting item																						
1	Melting of main or other fuses																					
2	MIL illuminates	x	x					x			x						x					
3	Will not crank																					
4	Hard to start/long crank/erratic start/erratic crank				x	x		x				x			x	x	x	x	x	x	x	x
5	Engine stalls. After start/at idle	x		x	x	x		x				x	x	x	x	x	x	x	x	x	x	x
6	Cranks normally but will not start			x	x	x		x				x	x	x	x	x	x	x	x	x	x	x
7	Slow return to idle									x												
8	Engine runs rough/rolling idle	x		x	x	x		x	x			x		x	x	x	x	x	x	x	x	x
9	Fast idle/runs on					x				x												
10	Low idle/stalls during deceleration					x		x				x										
11	Engine stalls/quits. Acceleration/cruise		x	x	x	x		x		x					x	x	x	x	x	x	x	x
	Engine runs rough. Acceleration/cruise		x	x	x	x		x		x					x	x	x	x	x	x	x	x
	Misses. Acceleration/cruise		x	x	x	x		x		x					x	x	x	x	x	x	x	x
	Buck/jerk. Acceleration/cruise/ deceleration		x	x	x	x		x		x					x	x	x	x	x	x	x	x
	Hesitation/stumble. Acceleration		x	x	x	x		x		x					x	x	x	x	x	x	x	x
	Surges. Acceleration/cruise		x	x	x	x		x		x					x	x	x	x	x	x	x	x
12	Lack/loss of power. Acceleration/cruise	x	x	x	x	x	x			x	x	x			x		x	x	x	x	x	x
13	Knocking/pinging. Acceleration/cruise			x																x	x	
14	Poor fuel economy	x	x		x						x				x	x					x	
15	Emission compliance				x	x				x		x			x	x				x	x	x
16	High oil consumption/leakage											x										
17	Cooling system concerns. Overheating																					
18	Cooling system concerns. Runs cold																					
19	Exhaust smoke				x										x	x				x	x	x
20	Fuel odor (in engine compartment)																				x	
21	Engine noise					x						x										
22	Vibration concerns (engine)																					
23	A/C does not work sufficiently.																					
24	A/C is always on or A/C compressor runs continuously.																					
25	A/C is not cut off under WOT conditions.																					
26	Exhaust sulfur smell											x								x	x	x
27	Spark plug condition				x										x		x			x	x	x
28	ATX concerns. Upshift/downshift engagement																					
See 0503, TROUBLESHOOTING																						

B3E0103/W002

X: Applicable

Possible factor		Injectors malfunction (Leakage or clogging, inoperative)	Fuel leakage from fuel system (including insulator, injector O-ring)	Fuel filters restriction or clogging	CMP sensor is damaged. (e.g. open or short circuit)	Camshaft is damaged	Improper air/fuel mixture ratio control	Exhaust system restriction or clogging	Catalytic converter malfunction	EGR system malfunction	EVAP control system malfunction	Fuel into evaporative purge hose	Check valve (two-way) malfunction	PCV valve malfunction	Constant voltage supply circuit malfunction	Main relay malfunction (Mechanically or electrically)	PCM or sensor GND circuit open or short	ECT sensor malfunction	TR switch misadjustment (ATX)	TR switch malfunction (ATX)	Brake switch and related circuit malfunction	Manifold absolute pressure sensor and related circuit malfunction	HO2S (Front and/or Rear) and related circuit
Troubleshooting item																							
1	Melting of main or other fuses																						
2	MIL illuminates				x		x			x								x	x		x	x	x
3	Will not crank																			x			
4	Hard to start/long crank/erratic start/erratic crank			x			x	x		x	x			x			x						x
5	Engine stalls. After start/at idle	x	x				x	x		x	x			x		x							x
6	Cranks normally but will not start	x	x				x	x		x	x			x	x	x							x
7	Slow return to idle																	x					
8	Engine runs rough/rolling idle	x		x	x	x	x	x		x	x			x			x						x
9	Fast idle/runs on																	x					
10	Low idle/stalls during deceleration						x				x								x		x		x
11	Engine stalls/quits. Acceleration/cruise	x		x	x	x	x	x		x	x	x	x	x	x	x							x
	Engine runs rough. Acceleration/cruise	x		x	x	x	x	x		x	x	x	x	x	x	x							x
	Misses. Acceleration/cruise	x		x	x	x	x	x		x	x	x	x	x	x	x							x
	Buck/jerk. Acceleration/cruise/deceleration	x		x	x	x	x	x		x	x	x	x	x	x	x							x
	Hesitation/stumble. Acceleration	x		x	x	x	x	x		x	x	x	x	x	x	x							x
	Surges. Acceleration/cruise	x		x	x	x	x	x		x	x	x	x	x	x	x							x
12	Lack/loss of power. Acceleration/cruise	x			x	x	x			x	x			x				x					
13	Knocking/pinging. Acceleration/cruise				x																		
14	Poor fuel economy			x	x	x	x																
15	Emission compliance			x	x	x	x	x	x	x	x												x
16	High oil consumption/leakage														x								
17	Cooling system concerns Overheating																						
18	Cooling system concerns Runs cold																						
19	Exhaust smoke	x												x									
20	Fuel odor (in engine compartment)		x								x												
21	Engine noise																						
22	Vibration concerns (engine)																						
23	A/C does not work sufficiently.																						
24	A/C is always on or A/C compressor runs continuously.																						
25	A/C is not cut off under WOT conditions.																						
26	Exhaust sulfur smell			x							x												
27	Spark plug condition	x	x				x											x					
28	ATX concerns Upshift/downshift engagement																						

See 0503, TROUBLESHOOTING

B3E0103/W003

		X: Applicable													
Possible factor		IAT sensor and related circuit malfunction	Barometric pressure sensor malfunction	Neutral or clutch switch and related circuit malfunction (MTX)	MAF sensor and related circuit malfunction	Knock sensor and related circuit malfunction	TP sensor and related circuit malfunction	TP sensor misadjustment (including looseness)	P/S pressure switch and related circuit malfunction	Improper refrigerant charging amount	A/C relay (A/C control signal circuit malfunction)	A/C compressor magnetic clutch malfunction	Improper load signal input	Clutch slippage (MTX)	ATX related parts malfunction
Troubleshooting item															
1	Melting of main or other fuses														
2	MIL illuminates	x	x	x	x	x	x								x
3	Will not crank														
4	Hard to start/long crank/erratic start/erratic crank				x										
5	Engine stalls. After start/at idle	x							x	x					x
6	Cranks normally but will not start														x
7	Slow return to idle														
8	Engine runs rough/rolling idle	x						x	x	x		x			
9	Fast idle/runs on											x			
10	Low idle/stalls during deceleration	x	x	x	x	x	x		x						x
11	Engine stalls/quits. Acceleration/cruise	x		x	x	x	x	x	x	x		x	x	x	
	Engine runs rough. Acceleration/cruise	x		x	x	x	x	x	x	x		x	x	x	
	Misses. Acceleration/cruise			x	x	x	x	x	x	x		x	x	x	
	Buck/jerk. Acceleration/cruise/ deceleration			x	x	x	x	x	x	x		x	x	x	
	Hesitation/stumble. Acceleration	x		x	x	x	x	x	x	x		x	x	x	
	Surges. Acceleration/cruise			x	x	x	x	x	x	x		x	x	x	
12	Lack/loss of power. Acceleration/cruise	x		x	x			x	x			x	x	x	
13	Knocking/pinging. Acceleration/cruise	x		x	x										
14	Poor fuel economy			x									x		x
15	Emission compliance	x													
16	High oil consumption/leakage														
17	Cooling system concerns. Overheating							x	x						
18	Cooling system concerns. Runs cold														
19	Exhaust smoke														
20	Fuel odor (in engine compartment)														
21	Engine noise													x	x
22	Vibration concerns (engine)														x
23	A/C does not work sufficiently.								x	x	x				x
24	A/C is always on or A/C compressor runs continuously.										x	x			
25	A/C is not cut off under WOT conditions.					x	x								
26	Exhaust sulfur smell														
27	Spark plug condition		x	x											
28	ATX concerns. Upshift/downshift engagement	See 0503, TROUBLESHOOTING													

B3E0103W004