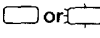










Troubleshooting

Troubleshooting Guide [With CATA]

NOTE: Across each row in the chart, the systems that could be sources of a symptom are ranked in the order they should be inspected starting with ①. Find the symptom in the left column, read across to the most likely source, then refer to the page listed at the top of that column. If inspection shows the system is OK, try the next most likely system ②, etc.

PAGE	SYSTEM	PGM-FI							
		ECU	OXYGEN SENSOR	MANIFOLD ABSOLUTE PRESSURE SENSOR	TDC/CRANK/CYL SENSOR	COOLANT TEMPERATURE SENSOR	THROTTLE ANGLE SENSOR	INTAKE AIR TEMPERATURE SENSOR	ATMOSPHERIC PRESSURE SENSOR
SYMPTOM		152	156,158	162	168	174	176	178	182
CHECK ENGINE WARNING LIGHT TURNS ON		 or 							
SELF-DIAGNOSIS INDICATOR (LED) BLINKS		① or *	① or ④	③ or ⑤	④ or ⑧ or ⑨	⑥	⑦	⑩	⑬
ENGINE WON'T START		③			③				
DIFFICULT TO START ENGINE WHEN COLD		(BU)		③	③	①			③
IRREGULAR IDLING	WHEN COLD FAST IDLE OUT OF SPEC	(BU)				③			
	ROUGH IDLE	(BU)		③					
	WHEN WARM IDLE SPEED TOO HIGH	(BU)							
	WHEN WARM IDLE SPEED TOO LOW	(BU)							
FREQUENT STALLING	WHILE WARMING UP	(BU)				③			
	AFTER WARMING UP	(BU)							③
POOR PERFORMANCE	MISFIRE OR ROUGH RUNNING	(BU)			③				
	FAILS EMISSION TEST	(BU)	③	②					
	LOSS OF POWER	(BU)		③			②		

* if codes other than those listed above are indicated, count the number of blinks again. If the indicator is in fact blinking these codes, substitute a known-good ECU and recheck. If the indication goes away, replace the original ECU.

(BU): When the Check Engine warning light and the self-diagnosis indicator are on, the back-up system is in operation. Substitute a known-good ECU and recheck. If the indication goes away, replace the original ECU.












PGM-FI		A/T FI Signal A	A/T FI Signal B	IDLE CONTROL		FUEL SUPPLY		AIR INTAKE	EMISSION CONTROL	
IGNITION OUTPUT SIGNAL	VEHICLE SPEED SENSOR			ELEC- TRONIC AIR CONTROL VALVE	OTHER IDLE CONTROLS	FUEL INJECTOR	OTHER FUEL SUPPLY		EGR CONTROL SYSTEM	OTHER EMISSION CONTROLS
184	186	188	190	194	192	210	208	221	235	232
15	17	30	31	14		16			12	
①						②	③			
					②					
				①	②					
				①		②			③	
				①	②					
				①		②				
				①	②		③			
				③	①		②		③	
				③		①			③	
						②	③			①
						③	①	③		③

Troubleshooting

Troubleshooting Guide [Without CATA]







NOTE: Across each row in the chart, the systems that could be sources of a symptom are ranked in the order they should be inspected starting with ①. Find the symptom in the left column, read across to the most likely source, then refer to the page listed at the top of that column. If inspection shows the system is OK, try the next most likely system ②, etc.

PAGE		SYSTEM	PGM-FI						
			ECU	MANIFOLD ABSOLUTE PRESSURE SENSOR	TDC/CRANK/CYL SENSOR	COOLANT TEMPERA- TURE SENSOR	THROTTLE ANGLE SENSOR	INTAKE AIR TEMPERA- TURE SENSOR	IMA SENSOR
SYMPTOM		152	162	168	174	176	178	180	182
CHECK ENGINE WARNING LIGHT TURNS ON		 or 							
SELF-DIAGNOSIS INDICATOR (LED) BLINKS		① or *	③ or ⑤	④ or ⑧ or ⑨	⑥	⑦	⑩	⑪	⑬
ENGINE WON'T START		③		③					
DIFFICULT TO START ENGINE WHEN COLD		BU	③	③	①				③
IRREGULAR IDLING	WHEN COLD FAST IDLE OUT OF SPEC	BU			③				
	ROUGH IDLE	BU	③						
	WHEN WARM IDLE SPEED TOO HIGH	BU							
	WHEN WARM IDLE SPEED TOO LOW	BU							
FREQUENT STALLING	WHILE WARMING UP	BU			③				
	AFTER WARMING UP	BU							③
POOR PERFORMANCE	MISFIRE OR ROUGH RUNNING	BU		③					
	FAILS EMISSION TEST	BU	②						
	LOSS OF POWER	BU	③				②		

* if codes other than those listed above are indicated, count the number of blinks again. If the indicator is in fact blinking these codes, substitute a known-good ECU and recheck. If the indication goes away, replace the original ECU.

(BU): When the Check Engine warning light and the self-diagnosis indicator are on, the back-up system is in operation. Substitute a known-good ECU and recheck. If the indication goes away, replace the original ECU.



PGM-FI		IDLE CONTROL				FUEL SUPPLY		AIR INTAKE	EMISSION CONTROL
IGNITION OUTPUT SIGNAL	VEHICLE SPEED SENSOR	A/T FI Signal A	A/T FI Signal B	ELECTRONIC AIR CONTROL VALVE	OTHER IDLE CONTROLS	FUEL INJECTOR	OTHER FUEL SUPPLY		
184	186	188	190	194	192	210	208	221	232
									
⑮	⑰	③①	③①	⑭		⑮			
①						②	③		
					②				
				①	②				
				①		②			
				①	②				
				①		②			
				①	②		③		
				③	①		②		
				③		①			
						②	③		①
						③	①	③	③