	CONDITION	RESULT	TROUBLE CODE	TROUBLE FLAG	RETAINED IN MEMORY WITH	CHECK ENGINE LIGHT	OPTIONAL FAULT LIGHT
1	ENGINE OIL PRESSURE SWITCH INDICATES LOW OIL PRESSURE	LOW FOR 1 COMPLETE SECOND - ENGINE SHUTDOWN OCCURS (AFTER 5 SECOND BYPASS DELAY UPON STARTUP)		2	NO	FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED	
2	ENGINE OVERHEATING DETECTED	COOLANT TEMPERATURE INDICATES OVER HEATING CONDITION (AFTER 40 SECOND HOT SOAK TIME DELAY UPON STARTUP)		3	NO	FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED	
3	AUXILIARY DEVICE INDICATES FAULT (CUSTOMER DEFINED)	FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED		4	NO		FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED
4	AUXILIARY DEVICE INDICATES FAULT (CUSTOMER DEFINED)	FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED		5	NO		FLASHES CONTINUOUSLY - ALERTS OPERATOR ENGINE SHUTDOWN HAS OCCURRED
5	BEGINNING OF DIAGNOSTIC ROUTINE	NO FAULT CONDITION EXITS - SIGNIFIES BEGINNING OF FLASH CODES	12		YES-ALWAYS PRESENT	ALWAYS FLASHES CODE 12 AT THE BEGINNING OF DIAGNOSTIC CYCLE- SIGNIFIES CIRCUIT IS OPERATIONAL	
6	ENGINE COOLANT SENSOR INDICATES SHORT CIRCUIT OR EXTREME OVERHEATING OF ENGINE (COOLANT TEMP >= 266 F)	TROUBLE CODE IS STORED IN MEMORY	14	3	CODE RETAINED IN MEMORY	UPON INITIAL FAULT- CHECK ENGINE LIGHT WILL FLASH CONTINUOUSLY ALERTING OPERATOR ENGINE SHUTDOWN HAS OCCURRED - UPON RESTART, "CHECK ENGINE" LAMP IS ON CONTINUOUS INDICATING CODE WAS STORED	
7	ENGINE COOLANT SENSOR INDICATES OPEN CIRCUIT	TROUBLE CODE IS STORED IN MEMORY	15		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
8	PEDAL POSITION SENSOR OVER VOLTAGE (OVER 4.5 VOLTS)	TROUBLE CODE IS STORED IN MEMORY	21		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
9	PEDAL POSITION SENSOR UNDER VOLTAGE (0 VOLTS)	TROUBLE CODE IS STORED IN MEMORY	22		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
10	AIR TEMPERATURE SENSOR INDICATES OPEN CIRCUIT	TROUBLE CODE IS STORED IN MEMORY	23		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
11	AIR TEMPERATURE SENSOR INDICATES SHORT CIRCUIT	TROUBLE CODE IS STORED IN MEMORY	24		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
12	MAP SENSOR CIRCUIT INDICATES HIGH VOLTAGE (4.98 V OR ABOVE)	TROUBLE CODE IS STORED IN MEMORY	33		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
13	MAP SENSOR CIRCUIT INDICATES SHORT TO GROUND	TROUBLE CODE IS STORED IN MEMORY	34		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
14	OXYGEN SENSOR - LEAN CONDITION DETECTED	TROUBLE CODE IS STORED IN MEMORY	44		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	
15	OXYGEN SENSOR - RICH CONDITION DETECTED	TROUBLE CODE IS STORED IN MEMORY	45		CODE RETAINED IN MEMORY	ON CONTINUOUS WHILE ENGINE IS RUNNING INDICATING CODE WAS STORED	