

2002 MY for Shift Solenoid "D" Control Circuit (Shift Solenoid Valve S4) Monitor (P0768)

To return to monitor description, see page [Cm-368](#).

MONITOR STRATEGY

Required sensors/Components	Main	Shift solenoid valve No.4
	Sub	None
Frequency of operation	Continuous	
Duration	3UZ-FE (SC430)	Less than 10 sec.
	Except 3UZ-FE (SC430)	0.032 sec.
MIL operation	Immediate	
Sequence of operation	None	

TYPICAL ENABLING CONDITIONS

Item	Specification	
	Minimum	Maximum
The monitor will run whenever the following DTCs are not present.	See page In-39	

Engine family	Item	Specification	
		Minimum	Maximum
1MZ-FE, 2AZ-FE, 1AZ-FE, 3RZ-FE, 2ZZ-GE	Condition (A)		
	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	—
	Condition (B)		
	Solenoid	OFF	
	Time after solenoid OFF to ON	More than 0.008 sec.	—
3UZ-FE (SC430)	Low resistance		
	Solenoid	ON (2 times)	
	High resistance		
	Solenoid	OFF (2 times)	
3UZ-FE (LS430, GS430)	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	—

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
1MZ-FE, 2AZ-FE, 1AZ-FE, 3RZ-FE, 2ZZ-GE	Either (A) or (B) is met	
	Condition (A)	
	Number of solenoid ON/OFF change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 8 Ω or less)	2 times Fail, 2 times (0.016 sec.)
	Condition (B)	
	Number of solenoid ON/OFF change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 100 k Ω or more)	2 times Fail, 2 times (0.016 sec.)
3UZ-FE (SC430)	Low resistance	
	Solenoid resistance	8 Ω or less
	High resistance	
	Solenoid resistance	100 k Ω or more
3UZ-FE (LS430, GS430)	Number of solenoid ON/OFF change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 8 Ω or less)	2 times Fail, 2 times (0.016 sec.)