

2002 MY for Shift Solenoid "B" Electrical (Shift Solenoid Valve S2) Monitor (P0758)

2002 MY for Pressure Control Solenoid "B" Electrical (Shift Solenoid Valve SL2) Monitor (P0758)

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MONITOR STRATEGY

Required sensors/Components	Main	Shift solenoid valve No.2
	Sub	None
Frequency of operation	Continuous	
Duration	1AZ-FE, 2AZ-FE, 1MZ-FE (RX300, ES300, CAMRY, HIGH LANDER)	1 sec.
	1MZ-FE (SIENNA, AVALON, CAMRY SOLARA), 3RZ-FE, 5VZ-FE, 2UZ-FE, 3UZ-FE (LS430, GS430), 2JZ-GE, 2ZZ-GE, 1ZZ-FE (CELICA), 1NZ-FE	0.032 sec.
	3UZ-FE (SC430), 1ZZ-FE (COROLLA)	Less than 10 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 (RX300, HIGH LANDER, CAMRY)	Condition (A)		
	Battery voltage	10 V or more	Less than 12 V
	Target duty ratio	–	Less than 75 %
	Starter	OFF	
	Condition (B)		
	Battery voltage	12 V or more	–
	Starter	OFF	
1MZ-FE (SIENNA, AVALON, CAMRY SOLARA), 3RZ-FE, 5VZ-FE, 2UZ-FE, 2ZZ-GE, 1ZZ-FE (CELICA)	Condition (A)		
	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	–
	Condition (B)		
	Solenoid	OFF	
	Time after solenoid ON to OFF	More than 0.008 sec.	–
2AZ-FE, 1AZ-FE, 1MZ-FE (ES300)	Starter	OFF	
	Solenoid current cut status	Not cut	
	Battery voltage	11 V or more	–
	CPU commanded duty	19 % or more	–
1NZ-FE	Range check (Low resistance)		
	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	–
	Range check (High resistance)		
	Solenoid	OFF	
	Time after solenoid ON to OFF	More than 0.008 sec.	–
3UZ-FE (SC430), 1ZZ-FE (COROLLA)	Range check (Low resistance)		
	Solenoid	ON (2 times)	
	Range check (High resistance)		
	Solenoid	OFF (2 times)	
3UZ-FE (LS430, GS430), 2JZ-GE	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	–

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
1MZ-FE (RX300, HIGH LANDER, CAMRY)	(A) & (B)	
	Output signal duty	100 % or more
1MZ-FE (SIENNA, AVALON, CAMRY SOLARE), 3RZ-FE, 5VZ-FE, 2UZ-FE, 2ZZ-GE, 1ZZ-FE (CELICA)	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.)
1MZ-FE (ES300), 1AZ-FE, 2AZ-FE	Solenoid status from IC	Fail
3UZ-FE (SC430), 1ZZ-FE (COROLLA)	Range check (Low resistance)	
	Solenoid resistance	8 Ω or less
	Range check (High resistance)	
	Solenoid resistance	100 k Ω or more
3UZ-FE (LS430, GS430), 2JZ-GE	Number of solenoid ON/OFF change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 8 Ω less)	2 times Fail, 2 times (0.016 sec.)
1NZ-FE	Range check (Low resistance)	
	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.)
	Range check (High resistance)	
	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.)