

2003 MY for Torque Converter Clutch Circuit Electrical (Shift Solenoid Valve SL (DSL)) Monitor (P0743 / P0773)

To return to monitor description, see page [Cm-471](#).

MONITOR STRATEGY

Required sensors/Components	Main	Shift solenoid valve SL (DSL)
	Sub	None
Frequency of operation	Continuous	
Duration	0.032 sec.	
MIL operation	2 driving cycles	
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
1AZ-FE, 2AZ-FE, 2ZZ-GE, 1MZ-FE (ES300, RX300, HIGH LANDER, CAMRY)	Low resistance		
	Solenoid duty	—	100 %
	Time after solenoid duty becomes 100 %	More than 0.008 sec.	—
	High resistance		
	Solenoid duty	0 %	—
	Time after solenoid duty becomes 0 %	More than 0.008 sec.	—
Except 1AZ-FE, 2AZ-FE, 2ZZ-GE, 1MZ-FE (ES300, RX300, HIGH LANDER, CAMRY)	Low resistance		
	Solenoid	ON	
	Time after solenoid OFF to ON	More than 0.008 sec.	—
	High resistance		
	Solenoid	OFF	
	Time after solenoid ON to OFF	More than 0.008 sec.	—

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
1GR-FE, 1ZZ-FE, 2UZ-FE, 5VZ-FE, 1NZ-FE, 1MZ-FE (CAMRY SOLARA, AVALON, SIENNA)	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)	1 time 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 kΩ or more)	1 time Fail, 2 times (0.016 sec.)

1AZ-FE, 2AZ-FE (CAMRY, CAMRY SOLARA, HIGH LANDER), 2ZZ-GE, 1MZ-FE (ES300, RX300, HIGH LANDER, CAMRY)	Low resistance	
	Number of solenoid 0 %/100 % change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 8 Ω or less)	2 times Fail, 2 times (0.016 sec.)
	High resistance	
	Number of solenoid 0 %/100 % 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.)
2RZ-FE, 3RZ-FE	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, 4 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 less)	2 times Fail, 4 times (0.016 sec.)
2AZ-FE (CAMRY Supplement)	Low resistance	
	Number of solenoid 0 %/100 % change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 8 Ω or less)	1 time Fail, 1 time (0.016 sec.)
	High resistance	
	Number of solenoid 0 %/100 % change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 100 k Ω or more)	1 time Fail, 1 time (0.016 sec.)