2002 MY for Torque Converter Clutch Circuit Electrical (Shift Solenoid Valve SL (DSL)) Monitor (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
1MZ–FE (RX300, HIGH LANDER)	**Condition (A)**		
	Solenoid duty	100 %	–
	Time after solenoid duty becomes 100 %	More than 0.008 sec.	–
	Condition (B)		
	Solenoid duty	0 %	–
	Time after solenoid duty becomes 0 %	More than 0.008 sec.	–
1MZ–FE (SIENNA)	**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, 2ZZ–GE, 1MZ–FE (ES300, CAMRY)	**Condition (A)**		
	Solenoid duty	100 %	–
	Time after solenoid duty becomes 100 %	More than 0.008 sec.	–
	Condition (B)		
	Solenoid duty	0 %	–
	Time after solenoid duty becomes 0 %	More than 0.008 sec.	–

1MZ–FE (AVALON, CAMRY SOLARA), 3RZ–FE, 5VZ–FE, 2UZ–FE, 1ZZ–FE (CELICA), 1NZ–FE	**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.	–
1ZZ–FE (COROLLA)	**Low resistance**		
	Solenoid	ON (2 times)	
	High resistance		
	Solenoid	OFF (2 times)	

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
1MZ–FE (RX300, HIGH LANDER)	**Either (A) or (B) is met.**	
	Condition (A)	
	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.)
	Condition (B)	
	Number of solenoid 0 %/100 % change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 100 kΩ or more)	2 times Fail, 2 times (0.016 sec.)
1MZ–FE (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.)
2AZ–FE, 1AZ–FE, 2ZZ–GE, 1MZ–FE (ES300, CAMRY)	**Either (A) or (B) is met.**	
	Condition (A)	
	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.)
	Condition (B)	
	Number of solenoid 0 %/100 % change with intelligent power MOS diagnosis signal failure (Fail at solenoid resistance 100 kΩ or more	2 times Fail, 2 times (0.016 sec.)
1MZ–FE (AVALON, CAMRY SOLARA), 3RZ–FE, 5VZ–FE, 1ZZ–FE (CELICA), 1NZ–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)	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.)

2UZ–FE	**Either (A) or (B) is met.**	
	Low resistance	
	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.)
	High resistance	
	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.)
1ZZ–FE (COROLLA)	**Low resistance**	
	Solenoid resistance	8 Ω or less
	High resistance	
	Solenoid resistance	100 kΩ or more