

2001 MY for Shift Solenoid "D" Performance (Shift Solenoid Valve S4) Monitor (P0765)

To return to monitor description, see page [Cm-320](#).

MONITOR STRATEGY

Required sensors/Components	Main	Shift solenoid valve No.4
	Sub	None
Frequency of operation	Continuous	
Duration	Less than 10 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 LAND-ER), 1AZ-FE	Condition (A)			
	Engine coolant temperature	60 °C (140 °F) or more	–	
	Transmission range	"D"		
	Transmission fluid temperature	–20 °C (–4 °F) or more	–	
	Condition (B)			
	ECM selected gear	3rd		
	Throttle valve opening angle	15 % or more	–	
	Vehicle speed	10 km/h (6 mph) or more	–	
	Condition (C)			
	ECM selected gear	4th		
	Throttle valve opening angle	15 % or more	–	
	Vehicle speed	10 km/h (6 mph) or more	–	
	2AZ-FE (HIGH LANDER)	Condition (A)		
		Engine coolant temperature	60 °C (140 °F) or more	–
Transmission range		"D"		
Transmission fluid temperature		–20 °C (–4 °F) or more	–	
Condition (B)				
ECM selected gear		3rd		
Throttle valve opening angle		5 % or more	–	
Vehicle speed		10 km/h (6 mph) or more	–	
Condition (C)				
ECM selected gear		4th		
Throttle valve opening angle		5 % or more	–	
Vehicle speed		10 km/h (6 mph) or more	–	

1MZ-FE (ES300), 2ZZ-GE	Condition (A)		
	Engine coolant temperature	60 °C (140 °F) or more	–
	Transmission range	"D"	
	Transmission fluid temperature	–20 °C (–4 °F) or more	–
	Condition (B)		
	ECM selected gear	3rd	
	Throttle valve opening angle	7 % or more	–
	Vehicle speed	10 km/h (6 mph) or more	–
	Condition (C)		
	ECM selected gear	4th	
	Throttle valve opening angle	7 % or more	–
	Vehicle speed	10 km/h (6 mph) or more	–

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
1MZ-FE (RX330, ES300), 2ZZ-GE, 1AZ-FE	Following condition met a. or b.	
	It is necessary 2 judgments/driving cycle 1st judgment; temporary flag ON 2nd judgment; pending fault code ON	
	a. = (A) & (B)	
	Input speed/Output speed (NC/NO)	$0.95 \leq \text{NC/NO} < 1.09$
	b. = (A) & (C)	
	Input speed/Output speed (NC/NO)	$1.34 \leq \text{NC/NO} < 1.48$
1MZ-FE (HIGH LANDER), 2AZ-FE (HIGH LANDER)	Following condition met a. or b.	
	It is necessary 2 judgments/driving cycle 1st judgment; temporary flag ON 2nd judgment; pending fault code ON	
	a. = (A) & (B)	
	Intermediate speed/Output speed (NC/NO)	$0.95 \leq \text{NC/NO} < 1.09$
	b. = (A) & (C)	
	Intermediate speed/Output speed (NC/NO)	$1.34 \leq \text{NC/NO} < 1.48$