

2004 MY for Shift Solenoid "D" Performance (Shift Solenoid Valve S4) Monitor (P0766)

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	OFF malfunction (A) & ON malfunction (B) 1 sec. OFF malfunction (B) 1.2 sec. ON malfunction (A) 0.8 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
All models	Condition (A)		
	Engine coolant temperature	10 °C (50 °F) or more	–
	Transmission range	"D"	
	Transmission fluid temperature	–20 °C (–4 °F) or more	–
	Transmission fluid temperature sensor "A" circuit	Not circuit malfunction	
	ECT sensor circuit	Not circuit malfunction	
	Turbine speed sensor circuit	Not circuit malfunction	
	Intermediate shaft speed sensor "A" circuit	Not circuit malfunction	
	Output shaft speed sensor circuit	Not circuit malfunction	
	Pressure control solenoid "A" circuit	Not circuit malfunction	
	Pressure control solenoid "B" circuit	Not circuit malfunction	
	Pressure control solenoid "C" circuit	Not circuit malfunction	
	Shift solenoid "D" circuit	Not circuit malfunction	
	Shift solenoid "E" circuit	Not circuit malfunction	
	Torque converter clutch solenoid circuit	Not circuit malfunction	
	OFF malfunction (A)		
	ECM selected gear	5th	
	Throttle valve opening angle	5 % or more	–
	Vehicle speed	10 km/h (6 mph) or more	–
	OFF malfunction (B)		
	ECM lock-up command	ON	
	ECM selected gear	3rd or 4th or 5th	
	Throttle valve opening angle	10 % or more	–
	Vehicle speed	25 km/h (16 mph) or more	Less than 100 km/h (62 mph)
	ON malfunction (A)		
	ECM selected gear	4th or 5th	
	Throttle valve opening angle	4.5 % or more at engine speed 1,900 rpm (condition vary with engine speed)	–
	ON malfunction (B)		
	ECM selected gear	4th	
	Throttle valve opening angle	5 % or more	–
	Vehicle speed	10 km/h (6 mph) or more	–

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection criteria	Threshold
All models	OFF malfunction	
	Following condition met (a. and b.) or (c. and d.)	
	It is necessary 2 judgments/driving cycle 1st judgment; temporary flag ON 2nd judgment; pending fault code ON	
	a. = (A) & OFF malfunction (A)	
	Intermediate speed/Output speed (NC/NO)	$1.44 \leq \text{NC/NO} < 1.58$
	b. = (A) & OFF malfunction (B)	
	Engine speed – Input speed (NE – NT)	Less than 35 rpm
	c. = (A) & ON malfunction (A)	
	Input speed/Intermediate shaft speed (NT/NC)	$0.64 \leq \text{NT/NC} < 0.74$
	d. = (A) & ON malfunction (B)	
	Intermediate shaft speed/Output speed (NC/NO)	$1.02 \leq \text{NC/NO} < 1.16$