

2004 MY for Shift Solenoid "B" Performance (Shift Solenoid Valve S2) Monitor (P0776)

2004 MY for Pressure Control Solenoid "B" Performance (Shift Solenoid Valve SL2) Monitor (P0776)

To return to monitor description, see page [Cm-158](#).

MONITOR STRATEGY

Required sensors/Components	Main	Shift solenoid valve No.2
	Sub	None
Frequency of operation	Continuous	
Duration	(A) & OFF malfunction (A) 1.8 sec. (A) & OFF malfunction (B), (C) 0.8 sec. (A) & ON malfunction (A), (B) 0.8 sec. (A) & ON malfunction (C) 0.4 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	
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 speed sensor circuit	Not circuit malfunction
	Pressure control solenoid "A" (SL1) circuit	Not circuit malfunction
	Pressure control solenoid "B" (SL2) circuit	Not circuit malfunction
	Pressure control solenoid "C" (SL3) circuit	Not circuit malfunction
	Shift solenoid "D" (S4) circuit	Not circuit malfunction
	Shift solenoid "E" (SR) circuit	Not circuit malfunction
	Torque converter clutch solenoid (DSL) circuit	Not circuit malfunction
	OFF malfunction (A)	
	ECM lock-up command	OFF
	Vehicle speed	– Less than 60 km/h (37 mph)
	Throttle valve opening angle	10 % or more –
	OFF malfunction (B)	
	ECM selected gear	1st
	Vehicle speed	– Less than 40 km/h (25 mph)
	Throttle valve opening angle	4.5 % or more at engine speed 1,900 rpm (condition vary with engine speed) –

All models	OFF malfunction (C)		
	ECM selected gear	3rd	
	Throttle valve opening angle	4.5 % or more at engine speed 1,900 rpm (condition vary with engine speed)	—
	OFF malfunction (D)		
	ECM selected gear	4th or 5th	
	ON malfunction (A)		
	ECM selected gear	1st	
	Vehicle speed	—	Less than 40 km/h (25 mph)
	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	3rd	
	Throttle valve opening angle	7.0 % or more at output speed 1,400 rpm (condition vary with output speed)	—
	Malfunction of pressure control so- lenoid "B" & "C"	Not detected	
	ON malfunction (C)		
	Throttle valve opening angle	7.0 % or more at output speed 1,050 rpm (condition vary with output speed)	—
	Malfunction of pressure control so- lenoid "B"	Not detected	

TYPICAL MALFUNCTION THRESHOLDS

All models	Following conditions met (a. and b. and c. and d.) or (e. and f. and g.)	
	a. = (A) & OFF malfunction (A)	
	Engine speed – Input speed (NE – NT)	Less than 35 rpm
	b. = (A) & OFF malfunction (B)	
	Input speed/Intermediate speed (NT/NC)	$0.93 \leq NT/NC \leq 1.07$
	c. = (A) & OFF malfunction (C)	
	Input speed/Intermediate speed (NT/NC)	$0.93 \leq NT/NC \leq 1.07$
	d. = (A) & ON malfunction (D)	
	Input speed/Intermediate speed (NT/NC)	$0.64 \leq NT/NC \leq 0.74$
	e. = (A) & ON malfunction (A)	
	Input speed/Intermediate speed (NT/NC)	$2.72 \leq NT/NC \leq 2.86$
	f. = (A) & ON malfunction (B)	
	Input speed – Intermediate speed (NT – NC)	700 rpm or more
	g. = (A) & ON malfunction (C)	
	Input speed – Intermediate speed (NT – NC)	< 500 rpm or ≥ 700 rpm