

2001 to 2003 MY Shift Lever Switch Monitor (P0820, P1781)

To return to monitor description, see page [Sm-3](#).

MONITOR STRATEGY

Required sensors/Components	Main	Shift lever switch
	Sub	None
Frequency of operation	Continuous	
Duration	0.5 sec. or more	
MIL operation	Immediate	
Sequence of operation	None	

TYPICAL ENABLING CONDITIONS

None

TYPICAL MALFUNCTION THRESHOLDS

Either of the following conditions is met:

- (1) The combination of the 8 shift lever switch signals, ON and OFF, does not meet the value specified in table 1.

Table 1:

Shift Lever Position	SW1	SW2	SW3	SW4	SW1C	SW2C	SW3C	SW4C	Detected Shift Position	Value of Shift Lever Position
R	OFF	ON	OFF	OFF	ON	OFF	ON	ON	R	210
Between R and N	OFF	ON	OFF	ON	ON	OFF	ON	ON	N	218
	OFF	ON	OFF	OFF	ON	ON	ON	ON		242
	OFF	ON	OFF	ON	ON	ON	ON	ON		250
	OFF	ON	OFF	ON	ON	ON	ON	OFF		122
	OFF	ON	OFF	ON	ON	OFF	ON	OFF		90
N	OFF	OFF	OFF	ON	ON	ON	ON	OFF		120
Between N and S	OFF	OFF	OFF	ON	ON	ON	ON	ON		248
	OFF	OFF	ON	ON	ON	ON	ON	OFF		124
	OFF	OFF	ON	ON	ON	ON	ON	ON		252
	OFF	OFF	ON	OFF	ON	ON	ON	ON		244
	OFF	OFF	ON	ON	ON	ON	OFF	ON		188
S	OFF	OFF	ON	OFF	ON	ON	OFF	ON	S	180
Between S and –	OFF	ON	ON	OFF	ON	ON	OFF	ON		182
–	OFF	ON	ON	OFF	ON	OFF	OFF	ON	–	150
Between S and +	ON	OFF	ON	OFF	ON	ON	OFF	ON	S	181
+	ON	OFF	ON	OFF	OFF	ON	OFF	ON	+	165

- (2) The combination of the 8 shift lever switch signals, ON and OFF, meets the value specified in table 2, 5 times or more.

Table 2:

SW1	SW2	SW3	SW4	SW1C	SW2C	SW3C	SW4C	Value of Shift Lever Position
OFF	OFF	ON	OFF	ON	ON	OFF	ON	164
ON	ON	ON	OFF	OFF	OFF	OFF	ON	151
OFF	ON	ON	OFF	ON	OFF	OFF	ON	148
ON	ON	ON	OFF	OFF	ON	OFF	ON	167
OFF	ON	ON	OFF	ON	OFF	ON	ON	214
ON	OFF	ON	OFF	OFF	ON	ON	ON	229
OFF	ON	ON	ON	ON	OFF	OFF	ON	158
ON	OFF	ON	ON	OFF	ON	OFF	ON	173

COMPONENT OPERATING RANGE

The combination of the 8 shift lever switch signals, ON and OFF, meets the value specified in table 1.