



4.19 Rough Road signal

4.19.1 Description

The SLABS/ABS control module transmits a PWM signal indicating rough road for misfire detection disablement. The ECM has input diagnostics for this signal.

There are three plausibility checks of the PWM signal during which a fault is detected if: -

1. The PWM signal is greater than a threshold indicating an electrical short to battery positive.
2. The PWM signal is less than a threshold indicating an electrical short to ground.
3. The PWM signal is greater than 44.92% but less than 55.08% indicating an error with the SLABS/ABS control module.

Rough Road Signal								
Component/ System	Fault Codes	Monitoring Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameter	Enable Conditions	Time Required	MIL Illumination
Rough Road Signal	P1590	plausibility checking of the PWM signal from the anti- lock brake ECM	PWM signal	44.92 % < signal < 55.08 % signal < 10.16 % signal > 89.84%	ignition engine state	on not starting	2.0 sec/ continuous	no MIL illumination (misfire defaults to enabled)
	P1591		PWM signal					
	P1592		PWM signal					

If the above table does not include details of the following enabling conditions: - IAT, ECT, vehicle speed range, and time after engine start-up then the state of these parameters has no influence upon the execution of the monitor.