



Oxygen Sensor Monitoring – Discovery Series II

Component/ System	Fault Codes	Monitoring Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameter	Enable Conditions	Time Required	MIL Illumination	
Oxygen Sensor (front)	P0133/53	response rate	oxygen sensor signal period (over 50 periods)	> 2.2 sec	engine speed engine load catalyst temperature (model) IAT EVAP canister purge status transfer gears	1400 < rpm < 2600 2.0 < TL msec < 5.0 > 340 °C • 65.25 °C Off or on > 20 sec	immediately/ once per driving cycle	two driving cycles	
	P1170/73	sensor ageing	rich shift delay Time	< -1.0 or > 1.0 sec	O2S post catalyst control transfer gears	active high range	30 sec		
	P1129	exchanged oxygen sensors connector	fuel control factor or	bank 1 > 1.22 and bank 2 < 0.77 bank 1 < 0.77 and bank 2 > 1.22			high range	8.0 sec	
					heater on transfer gears	> 90 sec high range			
	P0134/54	O2S circuit continuity	voltage or voltage (front & rear)	0.399V < voltage < 0.598V voltage > 0.199V	over run fuel cut off	> 3.0 sec	15 sec/continuous 0.1 sec/continuous		
	P0132/52	range check (high)	voltage	voltage > 1.081V			5.1 sec/continuous		
	P0130/50	O2S short circuit	voltage	voltage < 0.0399V	O2S post catalyst voltage	• 0.501V	20 sec/continuous		
				or	ECT battery voltage time after start ECT at power down	< 39.75 °C > 8.016V > 1.0 sec > 60 °C	0.1 sec/continuous		
				0.062V • voltage < 0.399V	O2S post catalyst voltage	• 0.501V	20 sec/continuous		