## ENGINE CONTROL SYSTEM SERVICE DATA

031UU-01

Throttle body		
Standard throttle valve opening percentage		60% or more
Accelerator pedal position sensor		
· · ·	Standard voltage	0.6 to 1.0 V
Mass air flow meter assy		
Resistance	1 (+B) - 2 (E2G)	
	at -20°C (-4°F)	13.6 to 18.4 kΩ
	at 20°C (68°F)	2.21 to 2.69 kΩ
	at 60°C (140°F)	0.493 to $0.667$ kΩ
Camshaft timing oil control valve assy		
Resistance	at 20°C (68°F)	6.9 to 7.9 $\Omega$
Accelerator pedal rod assy		
Resistance	2 (VPA2) - 3 (EP1)	5.0 kΩ or less
	5 (VPA1) - 1 (EP2)	5.0 k $\Omega$ or less
	6 (VCP1) - 3 (EP1)	1.5 to 6.0 kΩ
	4 (VCP2) - 1 (EP2)	1.5 to 6.0 k $\Omega$
Throttle body assy		
Resistance	at 20°C (68°F)	
	2 (M+) - 1 (M-)	0.3 to 100 Ω
	5 (VC) - 3 (E2)	1.2 to 3.2 kΩ
E.F.I. engine coolant temperature sensor		
Resistance	Approx. 20°C (68°F)	2.32 to 2.59 k $\Omega$
	Approx. 80°C (176°F)	0.310 to 0.326 kΩ
Knock sensor		
Resistance	at 20°C (68°F)	120 to 280 kΩ
EFI, C/OPN relay		
Specified condition	3 – 5	10 k $\Omega$ or higher
	3 – 5	Below 1 $\Omega$ (when battery voltage is applied to terminals 1 and 2)
F/PMP relay		
Specified condition	3 – 4	Below 1 Ω
	3 – 4	10 k $\Omega$ or higher
		(when battery voltage is applied to terminals 1 and 2)

LEXUS LS430