

# ENGINE TUNING AND DATA

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Ignition Timing	Fully mapped digital ignition		
Valve Clearances	Inlet and exhaust	0.30 to 0.36 mm (0.012 to 0.014 in)	
Spark Plugs	Make/type: 2.9 litre vehicles	Champion N3C	
	3.6 litre vehicles	Champion RC9 YC	
	Gap	0.64mm (0.025 in)	
Ignition Coil	Make/type: 2.9 litre vehicles	Bosch (blue self-adhesive label)	
	3.6 litre vehicles	Bosch (yellow self adhesive label)	
	Primary resistance at 20°C(68°F)	0.5 ohms ± 10%	
	Secondary resistance	6 K ohms ± 10%	
	Secondary inductance	31H ± 20%	
	Consumption: stationary	5.0 to 6.5 amps	
	running	2.5 to 3.0 amps	
Distributor	Make/type 2.9 litre vehicles	Bosch PVF6	
	3.6 litre vehicles	Lucas DHT6	
	Rotation of rotor (looking down at rotor)	Clockwise	
	Resistance rotor arm 2.9 litre vehicles	1 K ohm (Bosch type)	
	Resistance rotor arm 3.6 litre vehicles	1 K ohm (Lucas type)	
	Firing order	1,5,3,6,2,4 (No 1 cylinder at front)	
Spark plug lead resistances	2.9 litre engine	3.6 litre engine	
	No 1 9.8 to 23 K ohm	No 1 5.6 to 13.2 K ohm	
	2 8.3 to 19.5 K ohm	2 6 to 14 K ohm	
	3 8.3 to 19.5 K ohm	3 6.6 to 15.5 K ohm	
	4 10 to 29.5 K ohm	4 7.7 to 18.2 K ohm	
	5 10.2 to 24 K ohm	5 9.5 to 22.3 K ohm	
	6 10.8 to 25.3 K ohm	6 9.1 to 21.4 K ohm	
	Kinglead 1.8 to 4.1 K ohm	Kinglead 1.8 to 4.1 K ohm	
Fuel Injection Equipment	Digital	Lucas microprocessor system (9 CU)	
	Fuel pressure	3 bar (43 lbf/in <sup>2</sup> )	
Exhaust Emission	Exhaust gas analyser reading at engine idle speed	1 to 2% max CO at 700 rev/min without air injection – (not applicable for catalyst vehicles)	
Idle Speed	700 ± 50 rev/min	700 ± 50 rev/min	
Compression Pressure	2.9 Engines	3.6 Engines	
	European	210-230 lbf/in <sup>2</sup>	160-170 lbf/in <sup>2</sup>
	Federal	200-220 lbf/in <sup>2</sup>	160-170 lbf/in <sup>2</sup>
	Rest of the World	200-220 lbf/in <sup>2</sup>	150-160 lbf/in <sup>2</sup>
Differential between cylinders	10 lbf/in <sup>2</sup> (max)	10 lbf/in <sup>2</sup> (max)	

NOTE: Compressions to be checked with all sparking plugs removed, the throttle wide open, the engine at operating temperature and cranking speed of 300 rpm (minimum).