5.8L ENGINE MECHANICAL SPECIFICATIONS

Description		English Specifications	Metric Specifications
Valve springs (cont'd)			
Free length (approx.):			
Intake:		2.0600	52.3200
Exhaust:		1.8800	47.7500
Valve spring assembled height			
Intake:		1.75-1.81	44.45-45.97
Exhaust:		1.58-1.64	40.13-41.66
Valve spring out of square:		5/64 (0.078)	1.9800
Valve Stem Diameter			
Standard			
Intake:		0.3415-0.3423	8.67-8.69
Exhaust:		0.3410-0.3418	8.66-8.68
0.015 Oversize			
Intake:		0.3565-0.3573	9.06-9.08
Exhaust:		0.3561-0.3568	9.04-9.06
0.030 Oversize			
Intake:		0.3715-0.3723	9.44-9.46
Exhaust:		0.3711-0.3718	9.43-9.44
Crankshaft and Flywheel			
Main bearing journals			
Diameter:		2.9994-3.0002	76.185-76.205
TIR Maximum runout:	7	0.0020	0.0508
Maximum out of round:		0.0006	0.0152
Thrust face runout TIR maximum:		0.0010	0.0254
Maximum taper per inch/mm:		0.0005	0.0127
Thrust bearing journal length:		1.137-1.139	28.88-28.93
Main and rod bearing journal			
Finish RMS maximum: 12			
Main bearing thrust face			
Finish RMS maximum: 25 front/20 rear			
Connecting rod journal			
Diameter:		2.3103-2.3111	58.6816-58.7019
Taper per inch/cm maximum:		0.0006	0.0152
Crankshaft free end-play:		0.004-0.008	0.102-0.203
Flywheel clutch face run-out:		0.0100	0.2540
Crankshaft Bearings			
Connecting rod bearing to crankshaft clearance selective fit			
Desired:		0.0008-0.0015	0.020-0.038
Allowable:		0.0008-0.0025	0.0203-0.0635
Bearing wall thickness			
Standard:		0.572-0.577	14.53-14.66
0.002 undersize:		0.573-0.578	14.55-14.68
Main bearing to crankshaft selective fit			
Desired:		0.0008-0.0015	0.0200-0.0381
No. 1 bearing:		0.0001-0.0015	0.00254-0.0381
All other bearings:		0.0005-0.0015	1.0127-1.0381
Allowable:		1.0008-1.0026	1.020-1.066
No. 1 bearing:		1.0001-1.0020	1.00254-1.0508
All other bearings:		1.0005-1.0024	1.0127-1.0609
Bearing wall thickness			
Standard		0.0957-0.0960	2.430-2.438
No. 1 upper bearing:		0.0961-0.0966	2.441-2.454
All other bearings:		0.0957-0.0962	2.431-2.443
0.002 undersize			
No. 1 bearing:		0.0958-0.0962	2.433-2.443
All other bearings:		0.0958-0.0963	2.433-2.446
Connecting rods			
Piston pin bore or bushing I.D.:		0.9097-0.9112	23.106-23.144
Rod bearing bore I.D.:		2.4265-2.4273	61.633-61.653
Connecting rod bore max. out of round:		0.0004	0.0102
Rod length center to center:		5.9545-5.9575	151.244-151.321
Connecting rod alignment maximum total difference			
Twist:		0.0240	3.1500
Service limit:		0.0230	0.5840
Bend:	8	0.0120	0.3048
Rod to crankshaft assembled side clearance:		0.010-0.020	0.254-0.508
Service limit:		0.0230	0.5840