7.5L ENGINE MECHANICAL SPECIFICATIONS

Description		English Specifications	Metric Specifications
Valves (cont'd)			
Valve head diameter			
Intake:		1.965-1.989	49.911-50.521
Exhaust:		1.646-1.661	41.808-42.189
Maximum valve face runout:		0.00200	0.05080
Valve springs			
Valve spring compression pressure @ specified height			
Intake:	6	76-84 lbs. @ 1.81 in.	34.47-38.10 kg @ 45.97mm
		218-240 lbs. @ 1.33 in.	98.89-108.86 kg. @ 33.78mm
Exhaust:		76-84 lbs. @ 1.81 in.	34.47-38.10 kg @ 45.97mm
		218-240 lbs. @ 1.33 in.	98.89-108.86 kg. @ 33.78mm
Free length (approx.)			
Intake:		2.06000	52.32400
Exhaust:		2.06000	52.32400
Valve spring assembled height			
Intake:		1.790-1.830	45.466-46.482
Exhaust:		1.790-1.830	45.466-46.482
Valve spring out of square:		5/64 (0.078)	1.98000
Valve Stem Diameter			
Standard			
Intake:		0.3415-0.3423	8.68-8.69
Exhaust:		0.3415-0.3423	8.68-8.69
0.015 Oversize			
Intake:		0.3565-0.3573	9.06-9.08
Exhaust:		0.3565-0.3573	9.06-9.08
0.030 Oversize			
Intake:		0.3715-0.3723	9.44-9.46
Exhaust:		0.3715-0.3723	9.44-9.46
Crankshaft and Flywheel			
Main bearing journals			
Diameter:		2.9994-3.0002	76.1847-76.2051
TIR Maximum runout:	7	0.00200	0.05080
Maximum out of round:		0.00060	0.01524
Thrust face runout TIR maximum:		0.00100	0.02540
Maximum taper per inch/mm:		0.00050	0.01270
Thrust bearing journal length:		1.124-1.126	28.5496-28.6004
Main and rod bearing journal			
Finish RMS maximum: 12			
Main bearing thrust face			
Finish RMS maximum: 25 front/23 rear			
Connecting rod journal			
Diameter:		2.4992-2.5000	63.4797-63.5000
Taper per inch/mm maximum:		0.00060	0.01520
Crankshaft free end-play:		0.0040-0.0080	0.1020-0.2030
Crankshaft Bearings			
Connecting rod bearing to crankshaft clearance selective fit			
Desired:		0.0008-0.0015	0.020-0.038
Allowable:		0.0007-0.0025	0.0178-0.0635
Bearing wall thickness			
Standard:		0.0757-0.0762	1.923-1.935
0.002 undersize:		0.0767-0.0772	1.948-1.961
Main bearing to crankshaft selective fit			
Desired:		0.0008-0.0015	0.020-0.038
Allowable:		.0008-.0026	0.0200-0.0660
Bearing wall thickness			
Standard:		0.0955-0.0960	2.426-2.38
0.002 undersize:		0.0965-0.0970	2.451-.2.464
Connecting rods			
Piston pin bore or bushing I.D.:		1.0386-1.0393	26.380-26.398
Rod bearing bore I.D.:		2.2390-2.2398	56.87-56.89
Connecting rod bore max. out of round:		0.00040	0.01016
Rod length center to center:		6.6035-6.6065	168.529-169.291
Connecting rod alignment maximum total difference			
Twist:	8	0.02400	0.61000
Bend:	8	0.01200	0.30480
Rod to crankshaft assembled side clearance:		0.010-0.020	0.254-0.508
Service limit:		0.02300	0.58400