

5.8L ENGINE MECHANICAL SPECIFICATIONS

Description	English Specifications	Metric Specifications
Cylinder Block		
Cylinder bore		
Standard size:	4.0000-4.0048	101.600-101.722
Maximum out-of-round:	0.0015	0.0381
Maximum taper:	0.0100	0.2540
Main bearing		
Bore diameter:	3.1922-3.1930	81.08-81.10
Crankshaft to rear face of block runout (TIR max.):	0.0050	0.1270
Distributor shaft bearing bore diameter:	.5155-.5170	13.09-13.13
Head gasket surface flatness:		
Overall:	0.0060	0.1524
In any 6 in. (152.4mm):	0.0030	0.0080
Head gasket Surface finish (RMS):	60-150	-
Tappet bore diameter:	0.8752-0.8767	22.23-22.69
Cylinder Head		
Combustion chamber volume	3.70-3.88 cid	60.6-63.6 cc
Valve guide bore diameter		
Intake:	0.3433-0.3443	8.719-8.745
Exhaust:	0.3433-0.3443	8.719-8.745
Valve seat		
Maximum runout:	0.0020	0.0051
Gasket surface flatness		
Overall:	0.0060	0.1524
In any 6 in. (152.4mm):	0.0030	0.0762
Valve Rocker Arm Shaft, Pushrods and Tappets		
Rocker arm lift ration to 1: 1.59		
Pushrod runout TIR maximum:	0.0150	0.3810
Valve tappet or lifter		
Standard diameter:	0.8740-0.8745	22.199-22.212
Clearance to bore:	0.0007-0.0027	0.0178-0.0068
Hydraulic lifter leakdown rate:	10 to 50 seconds for 1/16 travel	
Collapsed tappet gap		
Allowable:	0.092-0.192	2.337-4.876
Desired:	0.112-0.172	2.845-4.369
Valves		
Valve stem to guide clearance		
Intake:	0.0010-0.0027	0.00254-0.0686
Exhaust:	0.0015-0.0032	0.0381-0.0813
Valve head diameter		
Intake:	1.770-1.794	44.958-45.567
Exhaust:	1.453-1.468	36.906-37.287
Maximum valve face runout:	0.0020	0.0508
Valve springs		
Valve spring compression pressure @ specified height		
Intake:	74-82 lbs. @ 1.78 in.	33.57-37.19 kg @ 45.21mm
	190-210 lbs. @ 1.20 in.	86.18-95.25 kg @ 30.48mm
Exhaust:	76-84 lbs. @ 1.6 in.	34.47-38.10 kg @ 40.64mm
	190-210 lbs. @ 1.20 in.	86.18-95.25 kg @ 30.48mm
Free length (approx.):		
Intake:	2.0600	52.3200
Exhaust:	1.8800	47.7500