

## 5.0L ENGINE MECHANICAL SPECIFICATIONS

Description	English Specifications	Metric Specifications
<b>General Information</b>		
Type	90° V8 Overhead Valve Engine	
Displacement	302 cu. in.	5.0L (4949cc)
Number of Cylinders	8	
Bore	4.00 in.	101.6mm
Stroke	3.00 in.	76.2mm
Compression ratio	8.9:1	
Firing order	1-5-4-2-6-3-7-8	
Oil Pressure	40-60 psi @ 2000 RPM (engine hot)	
<b>Cylinder head</b>		
Cylinder head-to-engine block surface warpage	0.003 in. (0.0762mm) in a 6.0 in. (152.4mm) span	
Valve seat width		
Intake valves	0.060-0.080 in.	1.524-2.032mm
Exhaust valve	0.060-0.080 in.	1.524-2.032mm
Valve seat angle—Intake and exhaust valves	45°	
Valve guide bore diameter—Intake and exhaust valves	0.3433-0.3443	8.720-8.745mm
<b>Valves, valve springs and camshaft</b>		
Camshaft journal diameter		
No. 1	2.0815 in.	52.8701mm
No. 2	2.0665 in.	52.4891mm
No. 3	2.0515 in.	52.1081mm
No. 4	2.0365 in.	51.7271mm
No. 5	2.0215 in.	51.3461mm
Camshaft-to-bearing clearance	0.001-0.003 in.	0.0254-0.0762mm
Camshaft thrust clearance	0.007 in. max	0.1778mm max
Camshaft lobe lift		
Intake valve	0.2637 in.	6.69798mm
Exhaust valve	0.2801 in.	7.11454mm
Camshaft runout	0.005 in. max	0.127mm
Valve stem diameter		
Intake valves	0.3415-0.3423 in.	8.6741-8.6944mm
Exhaust valves	0.3410-0.3418 in.	8.6614-8.6817mm
Valve guide-to-valve stem clearance		
Intake valves	0.0010-0.0027 in.	0.0254-0.0686mm
Exhaust valves	0.0015-0.0032 in.	0.0381-0.08128mm
Valve face angle limit	44°	
Valve head diameter		
Intake valve	1.837-1.847 in.	46.660-46.914mm
Exhaust valve	1.536-1.546 in.	39.01-39.27mm
Valve head radial runout	0.002 in.	0.0508mm
Valve spring free length (approximate)	1.84 in.	46.7mm
Intake valve spring	2.06 in.	52.324mm
Exhaust valve spring	1.88 in.	47.752mm
Valve spring preload		
Intake valve spring	74-82 lbs. @ 1.78 in.	33.6-37.2kg @ 45.21mm
Exhaust valve spring	76-84 lbs. @ 1.60 in.	34.5-38.1kg @ 40.64mm
Valve spring installed height		
Intake valve spring	1.75-1.81 in.	44.45-45.974mm
Exhaust valve spring	1.58-1.64 in.	40.132-41.656mm
Valve spring out-of-square	0.078 in.	1.9812mm
Rocker arm ratio	1.62:1	