
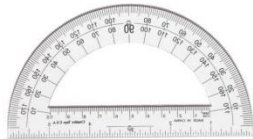






## WHAT YOU WILL NEED...

Apart from the typical tools you will need (appropriate wrenches, sockets, hammers, screw drivers, gasket scrapers, feeler gauges, and the like...), there are some specialized tools you will also require:

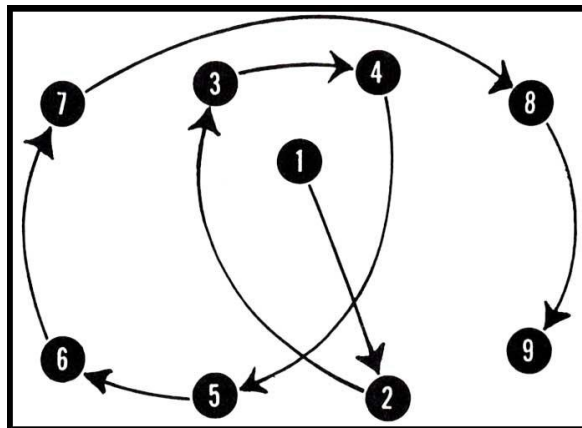
<p><b>Micrometer</b></p> 	<p><b>Protractor</b></p> 
<p><b>Dial Indicator or Depth Micrometer</b></p> 	<p><b>Torque Wrench</b></p> 
<p><b>Bore Gauge or Telescoping Gauge</b></p> 	<p><b>Calipers</b> <i>Vernier, Dial, or Digital</i></p> 

Also, it is a good idea to have some type of cleaning and/or degreasing solution on hand as well as lint-free rags. Remember, one of the most important rules of engine assembly is, **KEEP IT CLEAN!**

## ENGINE BUILD SPECIFICATIONS – CASE® 504BDT (Small Main)

<b>MAIN CAP BOLTS:</b>	Without Washers: 145-155 ft/lbs With Washers: 200-210 ft/lbs
<b>CONNECTING ROD BOLTS:</b>	95-105 ft/lbs
<b>INTAKE MANIFOLD BOLTS:</b>	35-42 ft/lbs
<b>EXHAUST MANIFOLD BOLTS:</b>	25-30 ft/lbs
<b>FLYWHEEL BOLTS:</b>	Without Washers: 180-190 ft/lbs With Hardened Washers: 230-250 ft/lbs
<b>VIBRATION DAMPER:</b>	100-110 ft/lbs
<b>CYLINDER LINER PROTRUSION/RECESSION:</b>	Protrusion: .0015" - .0055"
<b>PISTON PROTRUSION:</b>	.001"-.013"
<b>CRANKSHAFT (TRUST) END PLAY:</b>	.003" - .015"
<b>CAMSHAFT GEAR BOLT:</b>	195-205 ft/lbs
<b>VALVE CLEARANCE (Set Cold):</b>	Intake: .015"   Exhaust: .025"
<b>CYLINDER HEAD BOLTS:</b>	70, 140, 210 ft/lbs
<b>FIRING ORDER:</b>	1 – 5 – 3 – 6 – 2 – 4

### CYLINDER HEAD TORQUE SEQUENCE:



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