

Cylinder Measurements (Use with questions 2 through 16)

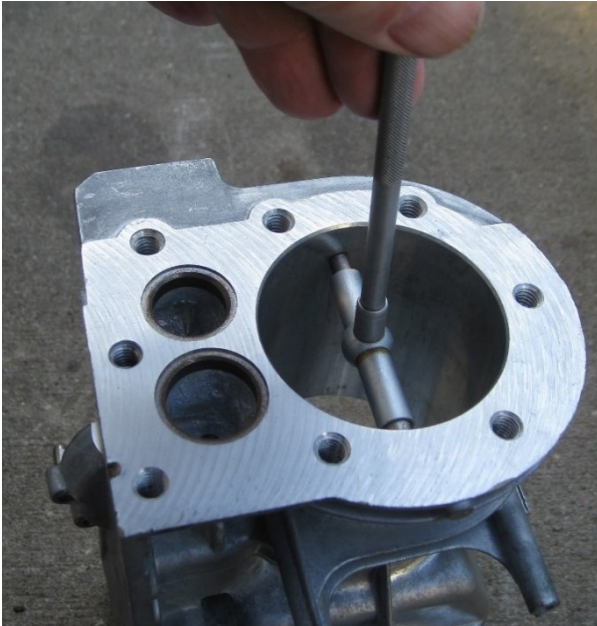


Figure 1. Illustration of using a telescoping gauge to measure the bore (diameter) of the

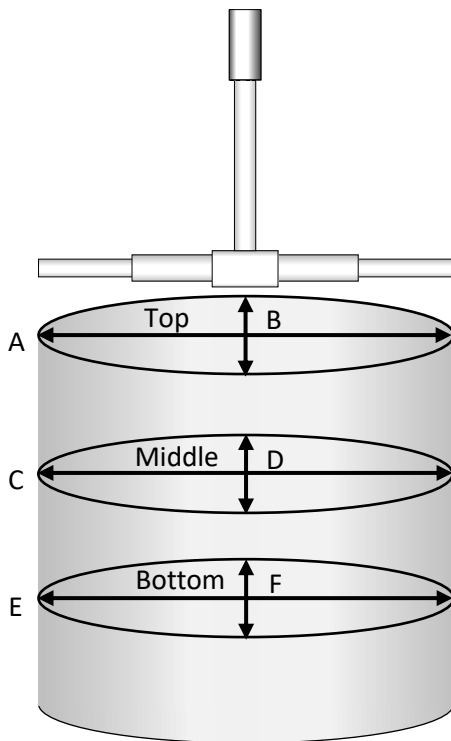


Figure 3. Locations of measurements in the cylinder. A, C and E are parallel with crankshaft. B, D and F are perpendicular to crankshaft.



Micrometer is a two- to three-inch micrometer.

Figure 2. Illustration of using an English micrometer to take a reading from the telescoping gauge.

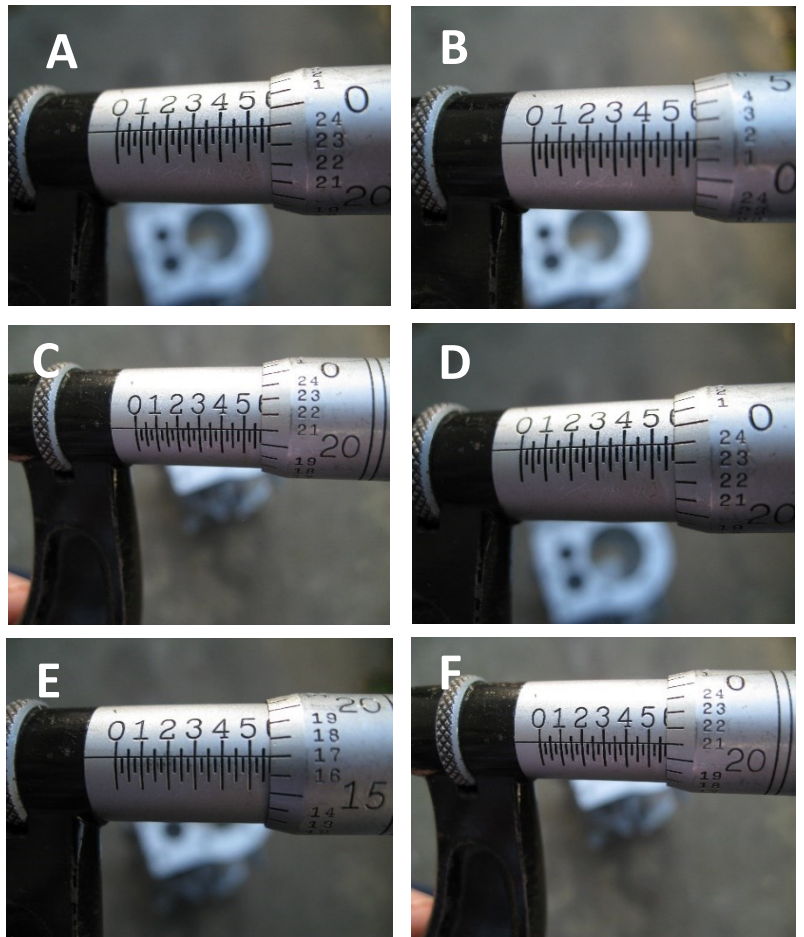


Figure 4. Micrometer readings from each location.

Ring End Gap Measurements (Use with questions 17 through 23)



Figure 5. Illustration of using a feeler gauge to check end gap of rings.



Figure 6. These two feeler gauges together are used to check top compression ring end gap. Use the combined feeler gauges to calculate the ring end gap.



Figure 7. These two feeler gauges together are used to check middle compression ring end gap. Use the combined feeler gauges to calculate the ring end gap.



Figure 8. These two feeler gauges together are used to check oil ring end gap. Use the combined feeler gauges to calculate the ring end gap.

Ring Gap Rejection Sizes				
Basic Model Series	Compression Ring		Oil Ring	
Aluminum Block 60000, 80000, 90000, 100000, 110000, 120000, 130000, 170000, 190000, 250000	Inches 0.035	Millimeters 0.90	Inches 0.045	Millimeters 1.14
Cast Iron Block 23000, 240000, 300000, 320000	Inches 0.030	Millimeters 0.75	Inches 0.035	Millimeters 0.90

Crankshaft Measurements (Use with questions 24 through 30)

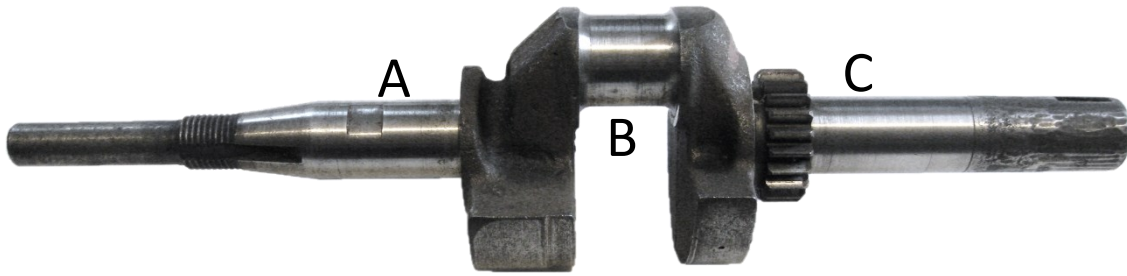


Figure 9. Crankshaft for Briggs and Stratton Model 90203

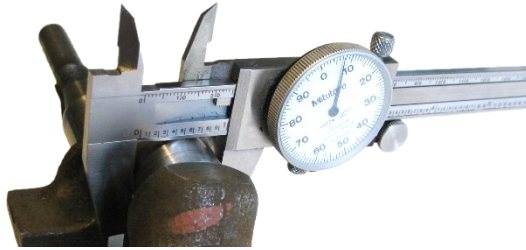


Figure 10. A dial caliper was used to measure the diameter of the crankshaft journals at A, B, and C.

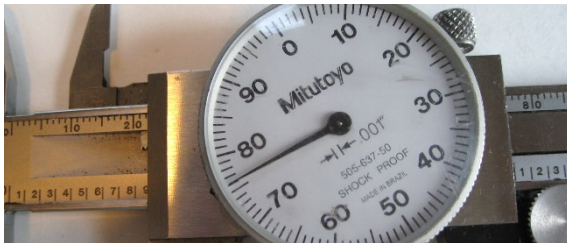


Figure 11. A dial caliper reading at point A.

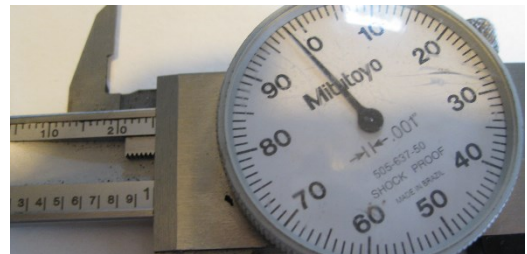


Figure 12. A dial caliper reading at point B.

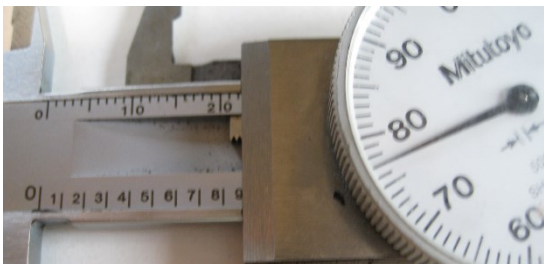


Figure 13. A dial caliper reading at point C.

(Use with questions 17 through 30)

BRIGGS AND STRATTON SPECIFICATIONS

COMMON SPECIFICATIONS FOR ALL SINGLE CYLINDER "L" HEAD ENGINE MODLES (page 1)

	BASIC MODEL SERIES	OIL CAPACITY Fl. Ozs.	ARMATURE AIR GAP INCHES	TORQUE SPECIFICATIONS				VALVE CLEARANCE	
				FLYWHEEL NUT FT.LBS.	CYLINDER HEAD IN.LBS	CONN. ROD IN.LBS	CRANKCASE COVER OR SUMP IN.LBS	INTAKE INCHES	EXHAUST INCHES
A L U M I N U M	60000	H 21	.006 .010	55	140	100	85	.005 .007	.007 .009
	80000	H 21	.006 .010	55	140	100	85	.005 .007	.007 .009
	90000	H 21 V 18	.006 .010	55	140	100	85	.005 .007	.007 .009
	10A900, 10B900, 10C900	V 18	.006 .010	60	140	100	85	.005 .007	.007 .009
	100200, 100900	H 21 V 18	.006 .010	55	140	100	120	.005 .007	.007 .009
	100700	V 18	.006 .010	55	140	100	85	.005 .007	.007 .009
	110000	H 21 V 18*	.006 .010	55	140	100	85	.005 .007	.007 .009
	120000	V 28	.006 .010	55	140	100	85	.005 .007	.007 .009
	130000	H 21 V 28	.010 .014	60	140	100	120	.005 .007	.007 .009
	170000	H 44 V 36	.010 .014	65	165	165	140	.005 .007	.007 .009
	190000	H 48 V 48	.010 .014	65	185	165	140	.005 .007	.007 .009
	220000	H 48 V 48	.010 .014	65	185	165	140	.005 .007	.007 .009
	250000	H 48 V 48	.010 .014	65	185	165	140	.005 .007	.007 .009
C A S T I R O N	280000 except 286700	V 48	.010 .014	65	185	Sec. 9 Table 4	140Δ 200Δ	.005 .007	.007 .009
	286700	V 48	.010 .014	65	185	Sec. 9 Table 4	140Δ 200Δ	.004 .006	.007 .009
	230000	H 64	.010 .014	145	190	190	90 mag. 190 PTO	.007 .009	.017 .019
	240000	H 64	.010 .014	145	190	190	90 mag. 190 PTO	.007 .009	.017 .019
	300000	H 64	.010 .014	145	190	190	90 mag. 190 PTO	.007 .009	.017 .019
	320000	H 64	.010 .014	145	190	190	90 mag. 190 PTO	.007 .009	.017 .019

■ H for Horizontal Crankshaft & V for Vertical Crankshaft, ♦ Governed Idle, See Sec. 5 for adjustment procedures, * Right Angle Drive 21 Fl. Ozs.

Δ See Section 11, TABLE NO. 5

(Use with questions 17 through 30)

BRIGGS AND STRATTON SPECIFICATIONS

COMMON SPECIFICATIONS FOR ALL SINGLE CYLINDER "L" HEAD ENGINE MODLES (page 2)

	BASIC MODEL SERIES	STANDARD CYLINDER BORE INCHES	CRANKSHAFT						
			STROKE INCHES	STANDARD CRANKPIN JOURNAL INCHES	JOURNAL REJECT SIZES INCHES			END PLAY	
					MAGNETO	CRANKPIN	PTO	HORIZONTAL INCHES	VERTICAL INCHES
A L U M I N U M	60000	<u>2.3740</u> 2.3750	1.500	Not required	.873	.870	.873	<u>.002</u> .008	-
	80000	<u>2.3740</u> 2.3750	1.750	<u>.9983</u> .9988	.873	.996	.873	<u>.002</u> .008	-
	90000	<u>2.5615</u> 2.5625	1.750	<u>.9983</u> .9988	.873	.996	.873	<u>.002</u> .010	<u>.002</u> .030
	10A900, 10B900, 10C900	<u>2.5615</u> 2.5625	1.876	<u>.8731</u> .8739	.873	.872	.873	<u>.002</u> .030	<u>.002</u> .030
	100200, 100900	<u>2.4990</u> 2.5000	2.125	<u>.9983</u> .9988	.873	.996	.998	<u>.002</u> .008	<u>.002</u> .008
	100700	<u>2.5615</u> 2.5625	1.940	<u>.9983</u> .9988	.873	.996	1.060	<u>.002</u> .030	<u>.002</u> .030
	110000	<u>2.7802</u> 2.7812	1.940	<u>.9983</u> .9988	.873	.996	.873	<u>.002</u> .008	<u>.002</u> .008
	120000	<u>2.6875</u> 2.6885	2.020	▪ <u>.9983</u> .9988 ▫ <u>1.0983</u> 1.0991	.873	.996	1.060	<u>.002</u> .030	<u>.002</u> .030
	130000	<u>2.5615</u> 2.5625	2.438	<u>.9983</u> .9988	.873	.996	.998	<u>.002</u> .008	<u>.002</u> .008
	170000	<u>2.9990</u> 3.0000	2.375	<u>1.0920</u> 1.0924	.997 1.179 •	1.090	1.179	<u>.002</u> .008	<u>.002</u> .008
	190000	<u>2.9990</u> 3.0000	2.750	<u>1.1239</u> 1.1243	.997 1.179 •	1.122	1.179	<u>.002</u> .030	<u>.002</u> .030
	220000	<u>3.4365</u> 3.4375	2.375	<u>1.2489</u> 1.2493	1.376	1.247	1.376	<u>.002</u> .030	<u>.002</u> .030
	250000	<u>3.4365</u> 3.4375	2.265	<u>1.2489</u> 1.2493	1.376	1.247	1.376	<u>.002</u> .030	<u>.002</u> .030
	280000 except 286700	<u>3.4365</u> 3.4375	3.062	<u>1.2489</u> 1.2493	1.376	1.247	1.376	<u>.002</u> .023	<u>.002</u> .023
	286700	<u>3.4365</u> 3.4375	3.062	<u>1.2489</u> 1.2493	1.376	1.247	1.376	<u>.002</u> .023	<u>.002</u> .023
C A S T I R O N	230000	<u>2.9990</u> 3.0000	3.250	<u>1.1840</u> 1.1868	1.3769	1.1844	1.3769	<u>.002</u> .008	<u>.002</u> .008
	240000	<u>3.0615</u> 3.0625	3.250	<u>1.3114</u> 1.3118	Ball	1.3094	Ball	<u>.002</u> .008	<u>.002</u> .008
	300000	<u>3.4365</u> 3.4375	3.250	<u>1.3114</u> 1.3118	Ball	1.3094	Ball	<u>.002</u> .008	<u>.002</u> .008
	320000	<u>3.5615</u> 3.5625	3.250	<u>1.3114</u> 1.3118	Ball	1.3094	Ball	<u>.002</u> .008	<u>.002</u> .008

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