

# TOLERANCES and WEAR LIMITS

## TYPE 1600 C ENGINE

Measuring Point		Tolerance (new)	Wear Limit	
1. Piston/cylinder clearance	mm	0.041 - 0.059	0.20	
	in.	.0016 - .0023	.0079	
2. Piston ring gap	mm	0.25 - 0.50	0.95	
	in.	.010 - .020	.037	
3. Compression ring/groove clearance	Ring 1	mm	0.075 - 0.107	0.30
		in.	.0030 - .0042	.0118
	Ring 2	mm	0.060 - 0.080	0.30
		in.	.0024 - .0031	.0118
	Ring 3	mm	0.035 - 0.062	0.30
		in.	.0014 - .0024	.0118
4. Oil ring/groove clearance	mm	0.025 - 0.052	0.30	
	in.	.0010 - .0020	.0118	
5. Crankshaft/main bearing clearance (end-play)	mm	0.130 - 0.180	0.30	
	in.	.0051 - .0071	.0118	
6. Crankshaft journal/main bearing clearance	Bearing 1	mm	0.028 - 0.078	0.170
		in.	.0011 - .0031	.0067
	Bearing 2 and 3	mm	0.035 - 0.090	0.170
		in.	.0014 - .0035	.0067
	Bearing 4	mm	0.040 - 0.104	0.170
		in.	.0016 - .0041	.0067

Measuring Point		Tolerance (new)	Wear Limit	
7. Depth of recess to web	mm in.	3.10 - 3.15 .1220 - .1240	- -	
8. Width of oil seal surface	mm in.	8.250 - 9.250 .3248 - .3642	-	
9. Valve springs				
Free length	mm in.	49.00 1.93	-	
Installed length				
Intake	mm in.	42.5 1.67	-	
Exhaust	mm in.	41.5 1.63	-	