

Piston Pins	
0.912 x 2.287 x 0.121W CH 87g LW	9900159
0.927 x 2.288 x 0.129W CH 93g LW	9900184
0.792 x 2.250 x 0.140W CH 83g	9900211
0.866 x 2.406 x 0.177W CH 118g	6458160
0.867 x 2.288 x 0.178W CH 112g	9900107
0.912 x 2.287 x 0.171W CH 116g	6458152
0.927 x 2.288 x 0.168W CH 118g	6457808
0.928 x 2.288 x 0.169W CH 118g	9900536
0.930 x 2.288 x 0.170W CH 119g	9900538
0.945 x 2.287 x 0.177W CH 125g	9900079
0.975 x 2.519 x 0.172W CH 130g	9311348
0.984 x 2.287 x 0.162W CH 122g	9299391
0.990 x 2.520 x 0.180W CH 148g	7758139
1.094 x 2.520 x 0.163W CH 153g	9839256
0.927 x 2.288 x 0.188W CH 128g HD	6457147
0.928 x 2.288 x 0.188W CH 128g HD	9900108
0.929 x 2.244 x 0.189W R 127g HD	6455117
0.990 x 2.520 x 0.220W CH 171g HD	9866438

LW = Light Weight
HD = Heavy Duty
CH = Chamfered
W = Wall Thickness
R = Radiused

Sport Compact Pins	
20 x 50.8mm CH 84g	9900293
21 x 50mm CH 98g	9900109
22 x 52mm CH 103g	5859988
22 x 58.11mm CH 112g	9900106
23 x 57.404mm CH 124g	9298392

Clips (each)	
.792" x 1.6mm no tang Clip	9900215
.866" x 1.6mm no tang Clip	2042968
.912" x 1.6mm no tang Clip	6458129
.927" x 1.6mm no tang Clip	6441489
.927" x 1.6mm w/ tang Clip	6436901
.945" x 1.6mm no tang Clip	9900539
.990" x 1.6mm no tang Clip	6458137

Sport Compact Clips (each)	
20mm x 1.6mm no tang	9900112
21mm x 1.6mm no tang	9900110
22mm x 1.6mm no tang	2042968
23mm x 1.6mm no tang	6458129
23mm OE Subaru (double tang)	9298265

PREPARING THE RINGS Drop in ring sets typically require no adjustment to end gaps, but MAHLE recommends that the rings be checked for minimum end gap. File fit rings require individual gap adjustments to the top and second rings. This allows you to set the ring gap precisely to your exact needs. The following chart gives suggested minimum ring end gaps for various applications. If running aggressive boost or nitrous applications it may be necessary to increase end gaps.

PROPER RING GAP MEASUREMENT (See chart) A torque plate is highly recommended to insure correct measurements. The ring should be square in the bore, 1 inch down from the deck. Measure the end gap with a feeler gauge or other measuring device.

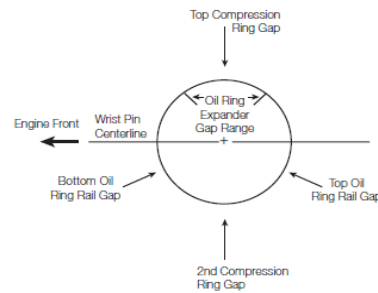
Application	Top Ring	Second Ring	Oil Ring Rail
High Performance Street - NA	Bore x 0.0045"	Bore x 0.0040"	Min 0.015"
Circle Track, Drag Racing - NA	Bore x 0.0050"	Bore x 0.0060"	Min 0.015"
Nitrous up to 200HP (25HP/cyl)	Bore x 0.0060"	Bore x 0.0050"	Min 0.015"
Nitrous over 200HP (25HP/cyl)	Bore x 0.0070"	Bore x 0.0070"	Min 0.015"
Turbo/Supercharged up to 15lb	Bore x 0.0060"	Bore x 0.0050"	Min 0.015"
Turbo/Supercharged over 15lb	Bore x 0.0070"	Bore x 0.0070"	Min 0.015"
Diesel - Turbocharged	Bore x 0.0060"	Bore x 0.0055"	Min 0.015"

OIL CONTROL RING TENSION MMS highly recommends that all wet sump or aluminum block applications use standard tension. Standard tension (3mm) expander sets are available to supplement the "ML-043" sets which are low tension.

PROPER RING FILING

The ring gap should be filed using the proper ring gap filing tool. Ring gap should only be filed in an inward direction and square to the ring sides.

PROPER RING ALIGNMENT



Due to the nature of performance applications, this information should not be considered absolute. Final decisions concerning the installation and use of these products is ultimately the responsibility of the customer.

WARNING: Tight ring gap clearances may cause major engine damage.