

FILE FIT END GAPS - HIGH PERFORMANCE ENGINES

A common practice in racing applications is file fitting piston ring end gaps. Most Hastings Tough Guy™ Racing Rings are available in file fit (+.005") oversizes. Professional racers and high performance engine builders understand that the exact setting of the ring end gaps by file fitting is beneficial to obtaining the precise engine efficiency desired.

Today's performance piston designs are moving the top compression ring higher for optimum performance. This creates even higher operating temperatures, therefore requiring a larger top compression ring end gap. Also, improved thermal efficiency of a hypereutectic piston alloy keeps more usable heat in the combustion chamber with less heat moving down through the piston onto the piston skirt and into the oil.

Use the chart below to determine the ring end gap. Multiplying bore size x ring end gap factor.
Example: 4.125" bore x .0080" ring end gap factor = .033" minimum ring end gap.

FUEL APPLICATION	RING END GAP FACTOR
Street Normally Aspirated	.0065"
Drag Fuel and Alcohol	.0075"
Street Nitrous, Supercharged; Street Towing; Circle Track Unrestricted & Alcohol; Marine	.0080"

PLASTIGAGE CHECKS BEARING CLEARANCES

Check bearing clearances the modern, fast, accurate way with Hastings Plastigage. Plastigage is a special extruded plastic thread with accurately controlled "crush" properties. It is extremely handy for checking main and connecting rod bearing clearances, oil pump cover-to-gear clearances, and for many other clearance checks.

Each box of Plastigage contains 12 strips in individually calibrated envelopes, usually enough to check 12 engines. Available in four clearance ranges.



Part No.	Size	Envelope Color
HPG1	.001 to .003" -- .025 to .076 mm	Green
HPR1	.002 to .006" -- .051 to .152 mm	Red
HPB1	.004 to .009" -- .102 to .229 mm	Blue
HPY1	.009 to .020" -- .23 to .51 mm	Yellow

