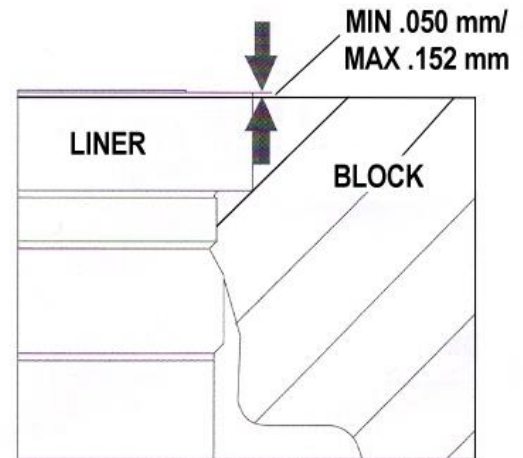


CORRECT STEPS FOR MEASURING CYLINDER LINER PROTRUSION

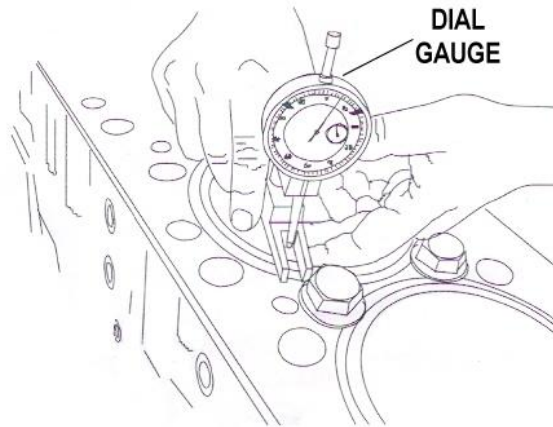
Consult the engine manufacturer's specifications for the correct Cylinder Liner Protrusion from the following measuring points:

1. Cylinder Liner Protrusion from the counter bore
2. Maximum protrusion variation between adjacent liners
3. Maximum protrusion variation under one cylinder head



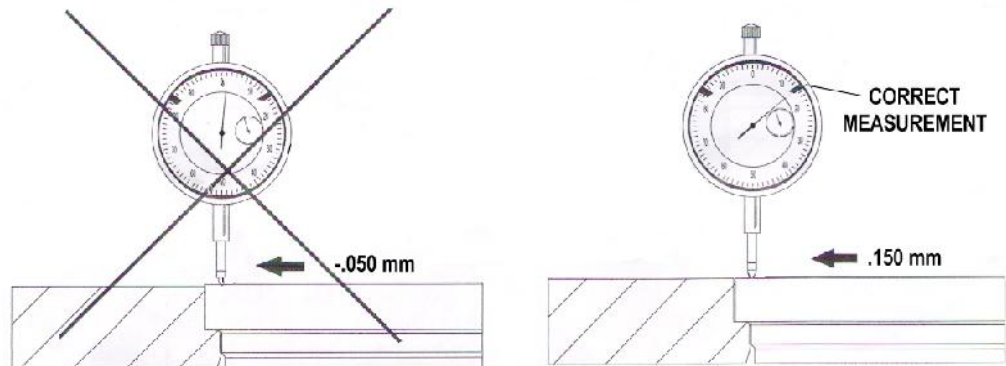
If correctly installed, the new Liner should fit snugly on the cylinder block and protrude out from the cylinder bore.

Using a dial gauge, the protrusion must be measured, checked and verified to be within the engine manufacturer's specifications.



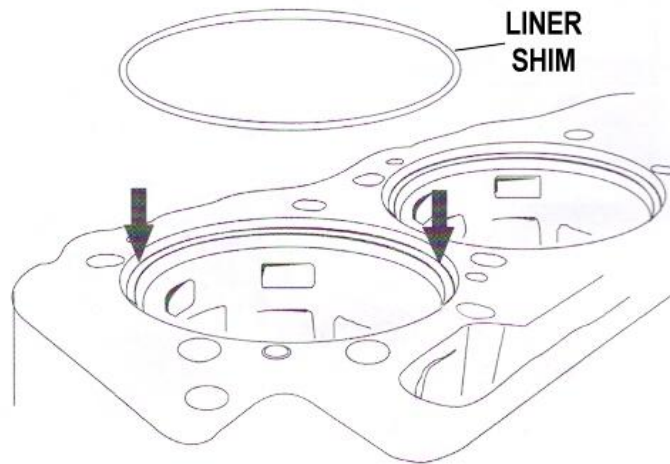
Any specification that does not match the engine manufacturer's specifications will not guarantee that the liner will seal the combustion chamber.

If the liner protrusion is wrong or uneven, it can result in cylinder liner flange fractures, liner distortion or head gasket failure.

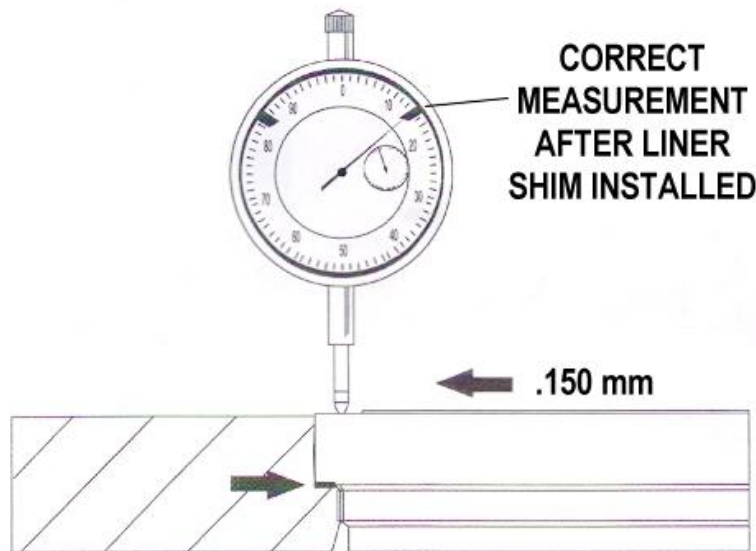


If the new cylinder liner measures less than the engine manufacturer's specification, you must correct the protrusion height with cylinder liner shims or with an oversized flange height cylinder liner.

DO NOT USE MORE THAN ONE SHIM PER LINER.



Make sure to re-check the liner protrusion after installing the liner shim and before final assembly of the engine.



Consult the engine manufacturer's specifications for the correct Cylinder Liner Protrusion height. Each engine manufacturer uses different protrusion heights.



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