

High Clearance Valve Assembly

A high clearance valve assembly is used to increase the fixed clearance volume of a cylinder end. A high clearance assembly is comprised of a valve spacer, a special retainer, and a gasket. The spacer is placed between the cylinder valve seat and the valve body.



The cylinder DataBook lists the number of high clearance assemblies that can be provided with each cylinder and the percent of added fixed clearance for each assembly. A new cylinder purchased with high clearance assemblies will also be supplied with standard valve retainers.

Cylinders of the class 3SG-CE and 3-5/8SG-CE show the availability of high clearance valve assemblies in the performance software. These cylinder classes do not use the traditional spacers as shown above, but utilize high clearance crank end head designs to add the clearance. The clearance defined for these cylinder classes are machined as part of the cranks end head and are not removable valve spacers.

Hanging guard design valves cannot be outfitted with high clearance valve assemblies. Gas flows around the circumference of these valves. Installing a spacer would block the gas flow.

Below is a drawing of a hanging guard design valve.



Also see: <u>Clearance Volume</u>