

## Cylinder Head Model High Performance Plates



When a cylinder head is installed on the block, substantial valve seat distortion can be measured from the stresses induced upon the head, thus compromising the valve seal. Having the ability to grind or cut the valve seats in this distorted condition is advantageous to proper valve-to-seat sealing.

The Cylinder Head Model (H) plate is drilled and tapped to accept the installation of the cylinder head to the plate using O.E.M. length cylinder head bolts or aftermarket studs and the proper gasket. With the head installed on the plate, valve seat distortion is duplicated during the machining process, producing a substantially more efficient valve seal. Many cylinder heads show a 5-10% improvement in leak down when valve seats are machined in this manner.



Some clearancing of the sidewall of the plate may be necessary to fit large grinding stones or cutters into the combustion chamber on some applications. Optional threaded Steel Inserts can be installed on any Head Plate by request.

## Counterbore Model Plates



The Counterbored (CB) Model Honing Plate is popular with machinists who want to bore with the Honing Plate installed, using an existing portable, or deck-mounted type boring bar.

The CB Honing Plate incorporates all of the standard features, plus, has counterbores machined on its top surface at the head-bolt hole locations, providing a flat deck surface when used with the Bolts and Washers provided.



In order to maintain the closest possible block distortion, it is necessary to use the same type of cylinder head gasket that will be used during final engine assembly when conducting the honing operation using the CB Model Honing Plate.

## Production Model Plates



The Production (PM) Model Honing Plate is designed specifically for high-volume engine rebuilding shops, which must use a honing plate on the ever-increasing number of ultra-lightweight cylinder blocks being produced today. On many of these blocks, the factory used a honing plate during machining and mandates the use of a Honing Plate when rebuilding.

The PM Plate incorporates all of the standard features, plus is specially machined to work without a cylinder head gasket installed, thus eliminating additional cost in parts inventory and assembly time during installation.

Heat-treated Steel Inserts (T-Washers) are installed in the top surface of the Plate at the head bolt hole locations for increased durability and longevity when used in a production environment. Also, a set of equal-length O.E.M. style Head Bolts and Washers are included. These special features combine to make the Production Model the easiest, most cost-effective and durable Honing Plate available.



While the Production Model honing plate is not intended for high performance use, it is designed to exceed all O.E.M. honing plate requirements. PM Honing Plates are available in cast iron and billet steel only.