



## Precision Engineered Honing Plates



BHJ manufactures Honing Plates to fit more than 400 engine applications in all sizes, from single-cylinder to V-12s and is recognized worldwide as the authority in Honing Plate development and production today. Since the conception of the initial Honing Plate designs that were introduced by BHJ Products in early 1975, continued research and development has brought numerous design improvements that bring us to the models available today.

Head-bolt torque can dramatically distort cylinders and cylinders can not be bored or honed accurately if cylinder dimensions change so significantly after assembly. Rings won't seal well and scuffing is likely to occur if the engine overheats. Use of BHJ Honing Plates rectifies all of these problems, leading to more consistent tolerances, better sealing and more power.

### Honing Plate Standard Features:

1-3/4" thick Meehanite Cast Iron or Cast Aluminum give maximum rigidity and resistance to permanent distortion and most closely simulate the stresses induced on the cylinder wall by the cylinder head when it is torqued in place. In addition, these materials have essentially the same coefficient of expansion as cylinder heads, important to those honing at operating temperature.

Cast Iron Plates are Blanchard Ground on both sides flat and parallel within precision commercial tolerances.

Aluminum R Model Plates are supplied with heat-treated Steel Inserts (T-Washers) in all bolt holes standard.

Plates are manufactured with .090"-.095" larger bore size than the largest standard engine bore diameter found in the applicable engine family in most applications, allowing the Plate to accommodate .060" over-bore. This maintains full gasket firing ring compression, thus further enhancing bore distortion. Special bore diameters are available upon request.

Head-bolt holes are precision machined to factory tolerances and special bolt hole sizes are also available.

Clearance holes for locating dowels are machined over-size to allow visual alignment before torquing. Indexed or "Dialed In" dowel holes are also available upon request. (See DID description in Options section on page 19.)

All Honing Plates are shipped in a durable, protective Wooden Case.

## R Model High Performance Plates



The R Model Honing Plate is the established standard for duplicating cylinder bore distortion and is a must for any high performance engine application. Used by top machine shops, racing teams and racers alike, the R Model is acknowledged to be the finest, most accurate honing plate on the market today.

The R Model incorporates all of the standard features listed above, plus is specially machined, and in most cases, supplied with D.O.M. steel Spacers and Washers, to duplicate cylinder head height and facilitate the use of the OEM-length head bolts or aftermarket studs during the honing operation. Optional machining is also available for Hot-Hone applications.



In order to maintain the closest possible block distortion, it is necessary to use the same type of cylinder head gasket, as well as the same type of bolt or stud set that will be used during final engine assembly during the honing operation when using the R Model Honing Plate. Some engines require that both cylinder banks be torqued to better simulate final assembly conditions during honing. Additionally, industry tradition dictates that the Honing Plate should be of a similar material as the heads being used in final assembly, thus a cast iron Honing Plate is preferred when using cast iron heads in final assembly and an aluminum Plate used when aluminum heads will be installed.