

## Bor-Tru Kit



The Bor-Tru is a specially designed Blueprinting Fixture for establishing correct cylinder bore and dowel locations on semi-finished cylinder blocks, as well as any stock factory block, when a sufficient overbore will allow correction of out-of-position cylinders.

The Bor-Tru Kit is the only commercially available Fixture that enables the machinist to quickly and accurately locate the cylinder bores over the correct crankshaft journal location. When properly installed, the Bor-Tru references from the rear main surface or rear main thrust surface (depending on block configuration) as a zero datum for front-to-rear positioning of the fixture on the deck surface. Other applications, such as the Chevrolet LS-Series (shown above left) may align at different locations in the block. In addition, the Bor-Tru spaces the bores at the correct center-to-center distance from one another.

Provisions have also been made for correction of cylinder head dowel-hole locations for both solid and ring/split dowel applications. This is accomplished by installation of drill bushings in the dowel-hole locations of the Deck Plate, at the correct dowel hole locations. In the standard configuration, the I.D. of the Drill Bushings used is on size to the dowel O.D. Special, oversized-I.D. Drill Bushings are also available to facilitate the use of a specially ground Cutter to oversize the existing hole for installation of a stepped dowel pin.



The Bor-Tru Kit consists of one Deck Plate, which is engine family specific, one pair of universal Alignment Bars, which fit any V-8 or V-6 engine application, one Set-Up Spacer, plus all fasteners necessary for assembly. Optional Counterboring of the Plate Bolt Holes is available for use with a deck-mounted or portable boring bar, or any type of boring equipment that must contact the deck surface of the block while boring.

Once the initial Bor-Tru Kit has been purchased, subsequent upgrades can be made for other engine families by purchasing Bor-Tru Step-Up Kits. Step-Up Kits include one Deck Plate and one Set-Up Spacer.

Use of the Bor-Tru Kit requires the 2" Precision Support Bar and Main Bearing Bore Adapter Rings, which are sold separately and shown on page 5. A prerequisite to use of the Bor-Tru is a perfectly square deck surface, which can be achieved by use of the Blok-Tru, which is shown on page 6.

### Cutter for Bor-Tru Stepped Dowels

The dowel-hole location in the deck surfaces of the block can be corrected with this specially-ground Cutter and the Bor-Tru Kit.

With the installation of special I.D. drill bushings in the Bor-Tru Plate, this cutter will precisely machine the dowel holes to accept a stepped dowel on the correct centerline.



Putting the dowel holes in the proper relationship to the corrected cylinder bores ensures proper combustion chamber alignment over the cylinder bores.

### Bor-Tru Stepped Dowels

Bor-Tru Stepped Dowels press fit into the oversized holes created by the Bor-Tru Dowel Cutter (shown left) as part of the dowel-hole blueprinting process.

The large diameter end of the dowel inserts into the block, leaving the stepped-down end above the deck surface, to properly fit the O.E.M. ring/split-dowel diameter in the head. This ensures correct alignment of the cylinder head chambers over the bore in the block.



Sizes are available for big block Chevrolet, big block Ford and small block Ford.