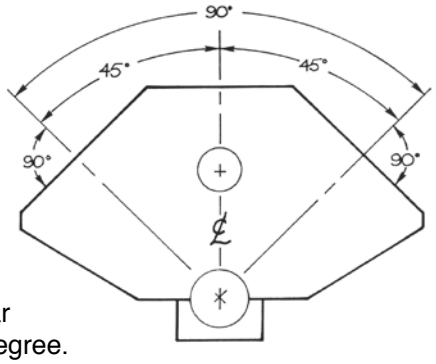
Blok-Tru (BT1)



BHJ's Blok-Tru engine block Blueprinting Fixture corrects improperly machined deck surfaces, commonly caused by factory machine tolerances and production line inaccuracies. This precision-machined Fixture has a true 45-degree angle machined at each side of its own centerline. The Blok-Tru Index Plate, when installed on the cam-crank centerline of the block, is then referenced to roll over and correctly index the block into position for the resurfacing operation. An optional upgrade allows the Blok-Tru to also work with Ford's Triton/Modular blocks, which lack a cam tunnel by design.

When the Blok-Tru is set-up and used in the prescribed manner, all angular dimensions shown in the illustration can be held within five minutes of one degree. Top engine builders across the country rely on the Blok-Tru to provide the level of accuracy necessary for today's performance requirements.

Common issues improved after using the Blok-Tru include:

Twisted Blocks: On a twisted block, it is necessary to choose a point on the deck surface to use as a reference point for set-up. As a result, you may be compounding the out-of-square condition.

Uneven Deck Clearance: Deck clearance often varies between the top and bottom edges of the piston due to the deck surface not being at 90 degrees to the bore. On race engines where deck clearances are held on the verge of piston to head contact, any discrepancy in deck angle means lost compression.

Bores Not At 90 Degrees: Since most production lines use the pan rails as the reference point, it is common to find the bores at angles other than the intended 45 degrees when referenced from the cam-crank centerline.

Cam and Ignition Timing Variations: If you have run into cam timing variations between cylinders on opposite banks, it may not be the fault of the camshaft. Again, since most blocks are machined from the pan rails, the cylinder "V" may not be at 45 degrees when referenced from each side of the cam-crank centerline.

O-Ring Groove Variations: If you are cutting O-Ring grooves on a boring stand which references from the pan rails, it is not uncommon to have drastic depth variations.

Poor Intake Manifold Fit: This condition is usually blamed on the intake manifold. However, if the included angle of the deck surfaces is not 90 degrees or if the top of the block has the incorrect angle, the manifold may not be at fault.

Block Deck-Height Measurements: The Blok-Tru is marked with the height from the crankshaft centerline to index surface. A simple measurement from the block deck surface to the index surface of the Blok-Tru plate, added to the Plate's marked dimension gives you the deck height. This measurement can be easily made using our Deck Height Micrometer, shown on page 8.

The Blok-Tru can be tailored to fit virtually all automotive resurfacing machines, as well as conventional vertical and horizontal milling machines. The Blok-Tru is offered in Kit form to fit several of the more popular resurfacers, or can be put together with the individual components necessary to suit your application.

Blok-Tru Basic Kit (BT1-B)

The Blok-Tru Basic Kit is the necessary starting point for tailoring the Blok-Tru to fit resurfacing machines supplied with a 2" diameter support bar from the manufacturer. The Blok-Tru Basic Kit consists of a precision-machined Index Plate, Cam Tunnel Alignment Cones, Cam Tunnel Clamping Hardware and accommodations for optional hardware to allow machining the Ford Triton/Modular O.H.C. blocks.

Use of the Blok-Tru Basic Kit requires the 2" Precision Support Bar and Main Bearing Bore Adapter Rings, which are sold separately and shown on page 5. Existing Blok-Tru Index Plates may also be upgraded to work with the Ford Triton/Modular, by sending the plate to BHJ for machining and parts.