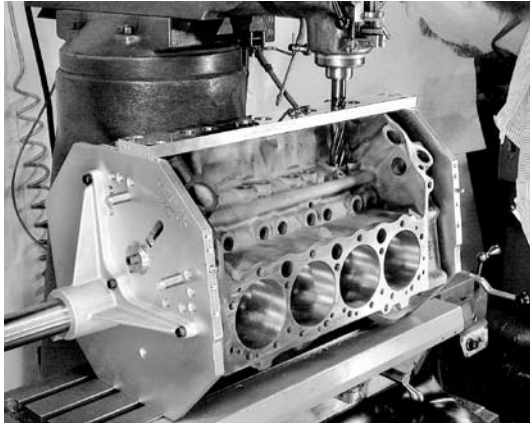


Lifter-Tru Kit

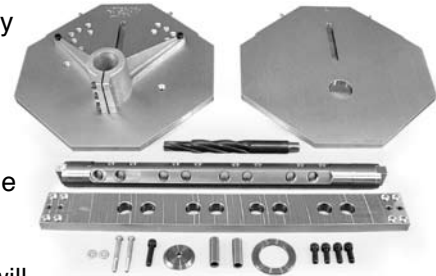


BHJ's Lifter-Tru Kit blueprinting fixture allows machinists to re-machine the lifter bores and correct their position in an engine block front-to-rear and up-and-down, as well as to restore the correct lifter bore angle as referenced from the cam-crank centerline. In addition, blocks without finished lifter bosses may also be machined with new lifter bores, with the addition of optional cutters in the process.

The cylinder block is fixtured at the prescribed angle while a Piloted Cutter is precisely guided from both above and below the lifter bore. Typically this operation is performed in a vertical milling machine, but a valve seat and guide machine, or even a large drill press can be used. Minimum working height required from table to drive source for S.B. Chevrolet is 18.375". All other applications require 20.5" of clearance from the table to the collet. The machine used must have

the ability to run between 40 and 60 RPM and a coolant mixture of water-soluble cutting oil, mixed with water and applied in either a flood or high-pressure spray mist is required.

Kit contents include one pair of End Plates with Support Bracket, one Cam Tunnel Mandrel, one Upper Guide Plate, one Piloted Cutter, a pair of Angle Adapter Blocks (when necessary) and a Hardware Kit containing all of the necessary Positioning and Clamping Hardware for set-up.



Once an initial Lifter-Tru Kit has been purchased, a Lifter-Tru Step-Up Kit will provide the minimum number of parts necessary to machine a different family of engine without duplicating parts supplied in the initially-purchased Kit.

The Piloted Cutter supplied with the kit is available in .843", .875", or .906" diameter for enlarging existing lifter bores as well as 1" diameter for installation of lifter bore sleeves. The .843", .875" and .906" cutters are also used to rough-finish lifter bore sleeves prior to final honing with the BHJ's Lifter Bore Hone, which is sold separately and shown on page 11.



Additional Piloted Cutters may be purchased separately and include a variety of sizes and configurations, including .937" and 1.062" diameters, as well as Long-Pilot Cutters (2.200" pilot length, vs. 2.00" standard) for blocks with tall lifter bosses.

Special Cutters are also available to add lifter bores to roughed-in blocks, which commonly do not have finished lifter bores (right). These three Cutters include a Piloted End Mill (bottom) to spotface the top of the boss, a self-starting Center Drill (center) and a Roughing Drill (top), which prepare the block for the final lifter-bore cutting process.



Lifter Bore Sleeves are available in both SAE 660 bronze and A-48 cast iron in a variety of sizes to suit Chevrolet, Ford and Chrysler. All sizes are available in standard 1" O.D. as well as 1.062" O.D. Special sizes and configurations are available and can be quoted upon request. See Page 11.

Use of the Lifter-Tru Kit requires the 2" Precision Support Bar and Main Bearing Bore Adapter Rings for installation, which are sold separately and shown on page 5.

Accessories available to compliment the Lifter-Tru include:

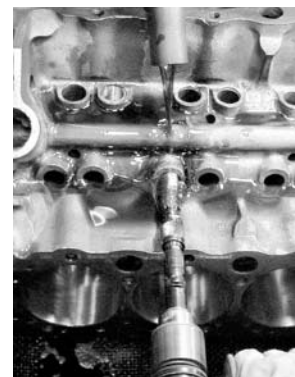
- Bushing Drivers** for Lifter Bore Sleeve installation
- Oil Galley Drills** for cross-drilling Lifter Bore Sleeves after installation
- Alignment Pilot** for gauging clean up at the next larger lifter bore diameter before machining
- Angle Adapter Feet** for operating on the table of a fixed-head type machine
- Special Angle Adapter Blocks** for motors with raised cam tunnels
- Cam Tunnel Mandrel Adapter Sleeves** mount Cam Tunnel Mandrel in blocks with oversize cam bearing bores
- Lifter Bore Honing Kit** for finish-honing the I.D. of lifter bores or Lifter Bore Sleeves
- 1.062" Step-Up Kits** allow installation of 1.062" Lifter Bore Sleeves for all applications

Lifter Bore Honing Kit



BHJ's Lifter Bore Honing Kit contains everything needed to make fast work of final-sizing lifter bores. The rigid style Hone utilizes a friction Thimble and feed Wedge for increasing diameter and is operated with a 1/2" drill motor. With a diameter range from .843" through .937", this one Kit will accommodate Chevrolet, Ford, Mopar and Jesel lifter bores.

The Lifter Bore Honing Kit consists of one Hone Assembly, two Honing Stones (one coarse, one fine), one Stone Shim, four Spacer Shoes (one each of .843, .875, .906, and .937) and is supplied in a foam-padded, plastic Storage Case. Replacement Stones, Shoes and all other Service Parts are always available.



Block

Lifter Bore Sleeves



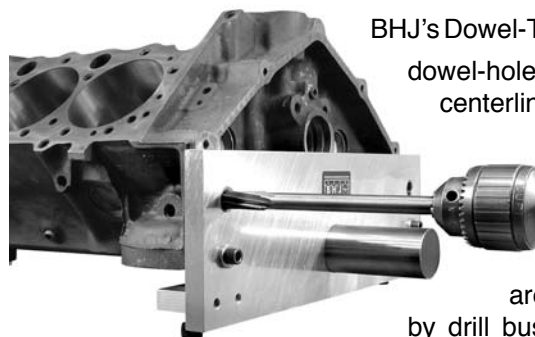
BHJ's Lifter Bore Sleeves are available in both SAE 660 Bronze and A-48 Cast Iron in a variety of sizes to suit standard Chevrolet, Ford and Chrysler I.D. applications. Standard Lifter Bore Sleeve (Lifter Bushing) sizes are nominal 1" O.D., by 1.500" long and are of a standard "Barrel Bushing" design.

All Sleeves are made-to-order and sized per the application. Press-fit O.D. sizes are dependent upon the size lifter being used, as well as the hole in the block into which the Sleeves will be installed. This hole-size must be specified when ordering to ensure proper press fit during installation. Longer Sleeve lengths are also available for applications with tall lifter bosses or other performance applications. Lengths of 1.600" through 2.00" are available for most I.D./O.D. combinations and must be specified when ordering. Shouldered, or other custom Sleeve design configurations can be accommodated on a special order basis.

Bronze Sleeves are also available in .937" I.D. for Jesel and other aftermarket lifter applications. Standard 1" O.D. as well as special 1.062" O.D. are also available for all I.D. sizes, though it is recommended that .937" Bushings use the 1.062" O.D. to maintain greater wall thickness. Cast iron Sleeves are available in longer lengths and special configurations mentioned above, but are not available in .937" I.D. or 1.062" O.D.

Quantity price breaks are available on all sizes at 25, 50, 100 and 200+ units, per size.

Dowel-Tru Kit



BHJ's Dowel-Tru Kit is a blueprinting fixture that quickly and easily corrects bellhousing dowel-hole locations by placing them in the correct relationship to the crankshaft centerline. As a result, the Dowel-Tru eliminates the time-consuming operation of "dialing-in" bell housings using troublesome offset dowels.

Once the Fixture is installed on the block, the Dowel-Tru Plate is adjusted into position using a pair of jackscrews and then secured to the block in preparation for machining. The dowel-hole locations are then re-machined with a supplied, special size Reamer, guided

by drill bushings in the fixture plate. Special Stepped Dowels are installed into the engine block after machining is complete.



The Dowel-Tru Kit is available to fit most popular GM, Ford and Mopar blocks and includes an application-specific Alignment Plate, six Stepped Dowels and one special Reamer.

Additional Stepped Dowels are available in Six Packs, in Standard Length, or Extra-Long when a motor plate will be used in the chassis. Use of the Dowel-Tru Kit requires the 2" Precision Support Bar and Main Bearing Bore Adapter Rings, which are sold separately and shown on page 5.