



#### WISECO PISTON COMPANY, INC. , LIMITED WARRANTY

WISECO warrants this product will be free from defects in material and workmanship for thirty (30) days following date of original purchase. If the product is found by WISECO to be defective, such products will, at WISECO'S option, be replaced or repaired at cost to WISECO. All products alleged by Purchaser to be defective must be returned to WISECO, postage prepaid, within thirty (30) days warranty period. This limited warranty does not cover labor or other costs or expenses incidental to the repair and/or replacement of products or parts.

This limited warranty does not apply to any product which has been used in a hi-performance application, or racing or is subject to misuse, mishandling, misapplication, neglect (including but not limited to improper maintenance), accident, improper installation, modification (including but not limited to use of unauthorized parts or attachments), or adjustment or repair performed by anyone other than WISECO.

The parties hereto expressly agree that the purchaser's sole and exclusive remedy against WISECO shall be for the repair or replacement of the defective product as provided in this limited warranty. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as WISECO is willing and able to repair or replace defective goods.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOT EXPRESSLY SET FORTH HEREIN. ANY PRODUCT WHICH MAY BE SOLD BY WISECO BUT WHICH IS NOT MANUFACTURED BY WISECO IS NOT WARRANTED BY WISECO, BUT IS SOLD ONLY WITH THE WARRANTIES, IF ANY, OF THE MANUFACTURERS THEREOF.

WISECO'S liability (whether under the theories of breach of contract or warranty, negligence or strict liability) for its products shall be limited to repairing or replacing parts found by WISECO to be defective, or at WISECO'S option, to refund the purchase price of such product. In no event shall WISECO be liable for incidental or consequential damages arising out of or in connection with the product. Consequential damages shall include, without limitation, loss of use, income or profit, or losses sustained as the result of injury (including death) to any person, or loss of or damage to property.

Any claim by purchaser regarding this product shall be deemed waived by the purchaser unless submitted in writing to WISECO within the earlier of (i) fifteen (15) days following the date Purchaser discovered, or by reasonable inspection should have discovered, any claimed breach of this limited warranty, or (ii) thirty (30) days following the date of original purchase. Any cause of action for breach of this limited warranty shall be brought within six months from the date the alleged breach was discovered or should have been discovered, whichever occurs first.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## HARLEY-DAVIDSON® V-ROD BIG BORE KIT INSTALLATION INSTRUCTIONS



WISECO PISTON COMPANY, INC.  
7201 Industrial Park Blvd. Mentor Ohio 44060



# V-ROD BIG BORE KIT INSTALLATION INSTRUCTIONS

**Kit Number: CK139**

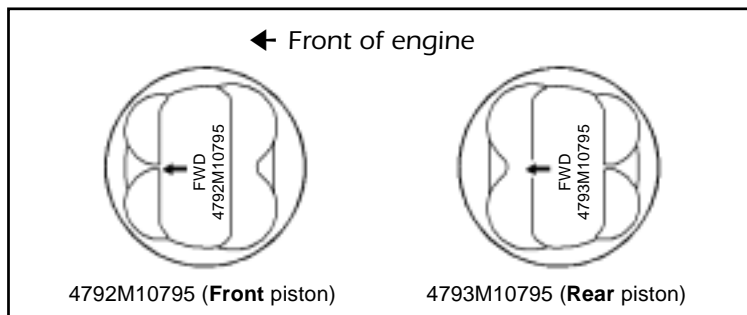
Front piston - 4792M10795  
Rear piston - 4793M10795

**NOTE:** THIS WISECO BIG BORE KIT IS FOR **RACE-ONLY USE**, AND IS NOT INTENDED FOR USE ON ANY PUBLIC ROAD OR HIGHWAY.

**WARNING:** THIN INSTALLATION OF THE WISECO V-ROD BIG BORE KIT REQUIRES EXTENSIVE, HIGHLY ACCURATE MACHINING OF THE CRANKCASE. DUE TO THE UNIQUE DESIGN AND CRITICAL FEATURES OF THIS MODIFICATION, CRANKCASE MACHINING **MUST** BE PERFORMED BY WISECO OR A WISECO AUTHORIZED MACHINING FACILITY. PLEASE CONTACT WISECO FOR A LIST OF APPROVED MACHINING FACILITIES.

**FAILURE TO USE A WISECO APPROVED MACHINING FACILITY MAY RESULT IN ENGINE DAMAGE OR CATASTROPHIC ENGINE FAILURE.**

PISTON RING PREPARATION, CYLINDER LINER INSTALLATION, AND PISTON INSTALLATION, MUST BE PERFORMED BY AN EXPERIENCED ENGINE BUILDER. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN SERIOUS ENGINE DAMAGE.



For further information call the Wiseco Tech Line:  
440-951-6600

## CYLINDER PREPARATION

The cylinder sleeves provided with the Wiseco V-Rod big bore kit have been finished honed to size and the piston to cylinder clearance has been set. Prior to installation, the sleeves must be washed in hot soapy water (not parts washer solvent) and dried. Coat the bore surface with motor oil and wipe it with a white towel. If the towel shows any remaining grit, repeat the hot soapy water washing process until the towel will only show clean motor oil.

**CAUTION:** Test fit the cleaned sleeve (without O-Rings installed) into the engine block. Sleeve should drop into position. If sleeve will not easily drop into position, warm the engine block with a hair dryer until sleeve will drop into position. Remove sleeve, then continue installation procedures.

From the bottom side of the sleeve, gently roll the 2-cylinder sleeve O-rings into the two grooves on each sleeve. Apply motor oil to the O-rings and gently install the sleeves into the block until bottomed.

**CAUTION:** DO NOT ATTEMPT TO INSTALL SLEEVES WITHOUT LUBRICATING THE O-RINGS. FAILURE TO LUBRICATE O-RINGS COULD RESULT IN TORN OR DAMAGED O-RINGS THAT WOULD NOT BE EVIDENT UNTIL ENGINE WAS STARTED. INCORRECTLY INSTALLED O-RINGS CAN RESULT IN CATASTROPHIC ENGINE DAMAGE.

**NOTE:** REFER TO THE OEM SERVICE MANUAL FOR ALL TORQUE SPECIFICATIONS

## PISTON RING PREPARATION

**Wiseco V-Rod pistons incorporate an advanced 2 ring system**

- The top ring is file-fit, and as such, requires that the end gap must be cleared. The proper end gap clearance is .016-.018" with the ring installed squarely in the bore. The top ring must be installed on the piston with the dot marking toward the top of the piston.
- The oil ring is comprised of the expander and two rails. Install the expander first, and then the rails. Check to make sure the expander tips have not overlapped. It is not necessary to clearance the end gaps on the oil rails. The rails should be installed without modification.

## PISTON INSTALLATION

The Wiseco V-Rod big bore kit is supplied with pistons that are front and rear cylinder specific. Install the front piston 4792M10795 in the front cylinder with the arrow facing the front of the engine. Install the rear piston 4793M10795 in the rear cylinder with the arrow facing the front of the engine. A piston ring compressor is required to install the pistons into the cylinders.