



A Division of Thiessen Products, Inc.

## INSTRUCTION SHEET FOR JIMS® 120", 131" & 135" ENGINE PISTON SETS

**JIMS® Twin Cam Piston sets are CNC milled from aerospace forged 2618 aluminum alloy.**

### PISTON SETS

Use on JIMS 135" or 131" "A" Engines:  
No. 1386-1357 "A" Piston Set, - Std size  
No. 1386-1356 "A" Piston Set, - +.005"  
No. 1386-1355 "A" Piston Set, - +.010"

Use on JIMS 120" Piston "A" Engines:  
No. 1286-1357 "A" Piston Set, - Std size  
No. 1286-1356 "A" Piston Set, - +.005"  
No. 1286-1355 "A" Piston Set, - +.010"

Use on JIMS 131" Piston "B" Engines:  
No. 1586-1357 "B" Piston Set, - Std size  
No. 1586-1356 "B" Piston Set, - +.005"  
No. 1586-1355 "B" Piston Set, - +.010"

Use on JIMS 120" Piston "B" Engines:  
No. 1486-1357 "B" Piston Set, - Std size  
No. 1486-1356 "B" Piston Set, - +.005"  
No. 1486-1355 "B" Piston Set, - +.010"

### RING SETS

Use on JIMS 135" or 131" Pistons "A" or "B" Engines:  
No. 1386-1354 "B" Piston Set, - Std size  
No. 1386-1805 "B" Piston Set, - +.005"  
No. 1386-1806 "B" Piston Set, - +.010"

Use on JIMS 120" Pistons "A" or "B" Engines:  
No. 1286-1354 "B" Piston Set, - Std size  
No. 1286-1805 "B" Piston Set, - +.005"  
No. 1286-1806 "B" Piston Set, - +.010"

### WRIST PIN CLIPS

No. 1604K Use on all .927" wrist pins

### NOTE: READ ALL INSTRUCTIONS BEFORE PERFORMING WORK!

Prior to fitting these Pistons, please read and follow the procedures and safety precautions to reduce the risk of personal injury.

### IF YOU DO NOT KNOW WHAT YOU ARE DOING, DO NOT DO IT!

**JIMS® IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK.**

If you are not sure about any of the procedures in these instructions, have a reputable H-D repair shop perform these procedures for you.

### Step 1 – Piston to Cylinder Clearance .002 to .0025 at 68°F.

A. Maintaining a minimum clearance between the cylinder wall and the piston will require a longer break in period, but will prolong the life of the pistons and rings.

B. Maintaining a loose fit will not require as long of a break in period, however, the loose fit will decrease the pistons and rings life.

C. Cylinders should be honed with 240-280 grit stone. Follow the T/C, H-D Service Manual for boring, and honing procedures. Use JIMS No. **1208-1361** Torque Plates when honing JIMS 120" (4 1/8" Bore T/C cylinders). For 131" or 135" use JIMS No. **1308-1316** with 4.313" bore. Follow the Instructions with Tool.

#### Recommended tools for performing cylinder honing, piston ring fitment:

1. JIMS No. 1308-1316 Cylinder torque plates for 131" for 4.313" bore.
2. JIMS No. 1208-1316 Cylinder torque plates for 120" for 4.125" bore.
3. JIMS No. 1235 Piston ring expander tool.
4. JIMS No. 1235 Piston ring expander tool.
5. JIMS No. 1255 Piston ring end gap grinder tool.
6. JIMS No. 3201 Piston ring end gap tool.
7. JIMS No. 769 Wrist pin clip installer / remover tool.
8. JIMS No. 908 Feeler gauge set
9. Precision cylinder hone
10. 3/8" Drive 0-25 ft - lbs torque wrench
11. 3/8" Drive 12 point deep socket.
12. Non - abrasive scouring pad & dish soap, for cleaning cylinder bores.

*Performance Parts For Harley-Davidson Motorcycles*

555 DAWSON DRIVE, CAMARILLO, CA 93012 PHONE 805-482-6913 • FAX 805-482-9224  
VISIT US ON THE WEB AT WWW.JIMSUSA.COM



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D. Measure pistons at the widest point across the front and back (perpendicular to wristpin bore).

**See Figure 1.**

E. For more instruction on ring sizing and fitment to cylinder etc. see [www.jimsusa.com](http://www.jimsusa.com) and go to No.1208-1352 Box 2 instructions.

### Ring End Gap Measurement

- Piston Ring end gap range:
- Top ring: .017" to .022"
- Second ring: .022" to .030"
- Oil control Rails: .015" to .030"

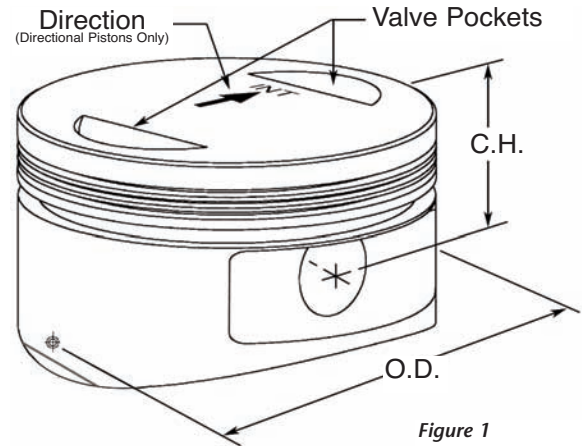


Figure 1

**CUSTOMER SUPPORT: FOR ANY QUESTIONS ON INSTALLATION OR SERVICE, PLEASE CONTACT JIMS® TECHNICAL DEPARTMENT - 805-482-6913.**

### WARRANTY PROVISIONS:

All JIMS® Parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of 6 (six) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at JIMS® option if the parts are returned to us by the purchaser within the 6 (six) month warranty period or within 10 (ten) days thereafter. In the event warranty service is required, the original purchaser must call or write JIMS® immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action. A part suspected of being defective must not be replaced by a Dealer without prior Authorization from JIMS®. If it is deemed necessary for JIMS® to make an evaluation to determine whether the part is defective, it must be packaged properly to prevent further damage and be returned prepaid to JIMS® with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by JIMS® and the part was found to be defective, repair, replacement, or credit will be granted.

### ADDITIONAL WARRANTY PROVISIONS

1. JIMS® shall have no obligation in the event a JIMS® part is modified by any other person or organization.
2. JIMS® shall have no obligation if a JIMS® part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the part.
3. JIMS® shall not be liable for any consequential or incidental damages resulting from the failure of a JIMS® Part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in nonconforming condition, or for any other breach of contract or duty between JIMS® and a customer.
4. JIMS® Parts are designed exclusively for use in Harley-Davidson® Motorcycles. JIMS® Shall have no warranty or liability obligation if a JIMS® part is used in any other application.
5. Any JIMS® parts or tools that are returned and replaced become the property of JIMS® and will not be Returned under any circumstance.

**THANK YOU FOR PURCHASING JIMS® AMERICAN MADE PRODUCTS.  
LOG ON TO [WWW.JIMSUSA.COM](http://WWW.JIMSUSA.COM) FOR MORE INFORMATION  
ON ADDITIONAL PRODUCTS AVAILABLE FROM JIMS.**

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