



TWIN CAM

Unmatched  
PERFORMANCE  
& DURABILITY



Serving Harley-Davidson dealers and motorcycle shops since 1983

[www.jprecision.com](http://www.jprecision.com)

## PORTING

Dealer Price    Retail Price

Piston to valve clearance must be checked with all performance head work.  
Cast piston usually require more clearance. Don't forget to send them to us with the heads.

|     |            |  |         |         |
|-----|------------|--|---------|---------|
| 655 | STAGE II   | (For stock casting from 88" to 107") Upgraded intake and exhaust port design and CNC ported. Includes: valve guides, valve seals, High Performance BEEHIVE Spring kit, 1.900" intake valves and 1.585" exhaust valves  | Call us | 799.00  |
| 656 | STAGE IIB  | (For stock & aftermarket castings) Same as Stage II, except for the intake port which is redesigned and raised by welding to increase velocity; allowing for a crisper throttle response. Includes: valve guides, valve seals, High Performance BEEHIVE Spring kit, 1.900" intake valves and 1.585" exhaust valves | Call us | 1150.00 |
| 657 | STAGE IIIB | (For stock castings): Same as Stage IIB. Includes: valve guides, valve seals, High Performance BEEHIVE Spring kit, 1.940" intake valves and 1.585" exhaust valves, intake valve seats.   | Call us | 1250.00 |
| 658 | STAGE IVB  | (For stock castings) Ultimate modification for your factory casting. Includes: valve guides, valve seals, High Performance BEEHIVE Spring kit, 1.990" intake valves and 1.585" exhaust valves, intake valve seats.   | Call us | 1275.00 |
| 654 | STAGE V    | (For stock castings) We install 2.150" intake, 1.650" exhaust valves and modify the ports accordingly. Intake valve angle is modified and rocker arm geometry is corrected.  | Call us | 1495.00 |
| 653 | STAGE V    | (For 120R, JIMS 131...) We install 2.150" intake, 1.650" exhaust valves and modify the ports accordingly. Intake valve angle is modified and rocker arm geometry is corrected.   | Call us | 1275.00 |
| 652 |            | Spring kit upgrades for Twin Cam. Maximum recommended lift .675", Titanium Retainers   |         | 137.50  |

## HEAD WORK OPTIONS

Dealer Price    Retail Price

|     |   |         |        |
|-----|---|---------|--------|
| 650 | Intake manifold porting (Carburator)  | Call us | 45.94  |
| 651 | Screaming Eagle 50mm injection manifold porting (must be disassembled) except for the throttle plate        | Call us | 65.63  |
| 649 | Intake manifold porting (Hurricane)   | Call us | 91.88  |
| 254 | MACHINE 2 head for compression release valves (machining only)  | Call us | 78.75  |
| 255 | MACHINE 2 heads for compression release valves (includes 1 set of AV&V compression release valves) JCR10B-2 | Call us | 124.69 |
| 257 | MACHINE 2 heads for electric compression release valves (machining only)                                    | Call us | 98.44  |
| 607 | PISTON valve pockets machined for valve clearance (2 pistons)   | Call us | 59.06  |
| 613 | Check and adjust cc on Twin Cam / EVO / Sportster   | Call us | 56.25  |

## CYLINDER HEADS

Dealer Price    Retail Price

### OVERALL REBUILD 2 HEADS

Includes

- 4 new AV&V valve guides and valve seals
- Head gasket faces resurfaced
- Valves centerless grinded
- Set-up spring pressure & reassembly
- Soda blast combustion chambers & ports
- CNC seat job
- Ultrasonic washed

|     |   |         |               |
|-----|---|---------|---------------|
| 200 | <b>Overall rebuild 2 heads</b>                            | Call us | <b>373.75</b> |
| 201 | <b>Overall rebuild 2 heads + High Flow seat job</b>       | Call us | <b>398.75</b> |
| 202 | <b>Overall rebuild 2 heads without guides replacement</b> | Call us | <b>323.75</b> |

### ESTHETIC

|     |                                  |         |       |
|-----|----------------------------------|---------|-------|
| 103 | DISASSEMBLE & degrease 2 heads   | Call us | 37.50 |
| 105 | SODA BLAST carbon out of 2 heads | Call us | 36.88 |



## CYLINDER HEADS (con't)

Dealer Price    Retail Price

### ESTHETIC (con't)

|     |   |         |            |
|-----|---|---------|------------|
| 114 | HILITE fins (2 heads)                               | Call us | 50.00      |
| 115 | WELD & rebuild cooling fins                         | Call us | 31.25 & up |
| 116 | ULTRASONIC cleaning of 2 heads (ready for assembly) | Call us | 43,75      |

### VALVE SEATS

|     |  |         |            |
|-----|--|---------|------------|
| 204 | CNC 3 ANGLE seat job (2 heads)                               | Call us | 65.63      |
| 205 | CNC HP seat job (2 heads)                                    | Call us | 91.88      |
| 210 | MACHINE & install 1 valve seat (valve seat included)         | Call us | 87.50      |
| 211 | MACHINE & install 4 valve seats (valve seats included)       | Call us | 196.88     |
| 213 | WELD & repair valve seat receiver hole (valve seat included) | Call us | 87.50 & up |

### VALVE GUIDES

|     |  |         |             |
|-----|--|---------|-------------|
| 218 | REMOVE, install & fit 1 valve guide (labor only)   | Call us | 25.00       |
| 219 | REMOVE, install & fit 4 valve guides (labor only)  | Call us | 52.50       |
| 223 | WELD & REPAIR valve guide receiver hole to std (includes 1 new valve guide & valve seat) | Call us | 150.00 & up |
| 224 | BORE CLEAN damaged valve guide receiver hole   | Call us | 78.75       |

### VALVES

|     |                              |         |       |
|-----|------------------------------|---------|-------|
| 231 | CLEAN carbon out of 1 valve  | Call us | 5.00  |
| 228 | RECONDITION 1 valve          | Call us | 8.75  |
| 229 | RECONDITION 4 valves         | Call us | 26.25 |
| 227 | CLEAN & RECONDITION 4 valves | Call us | 39.38 |

### RESURFACING

|     |  |         |        |
|-----|--|---------|--------|
| 234 | RESURFACE 2 heads .005" or less                              | Call us | 55.13  |
| 235 | RESURFACE 2 heads .006" & up                                 | Call us | 65.63  |
| 242 | ANGLE MACHINE 2 combustion chambers & resurface gasket faces | Call us | 131.25 |

### SPARK PLUGS

|     |   |         |        |
|-----|---|---------|--------|
| 245 | INSTALL 1 spark plug helicoil                                       | Call us | 36.25  |
| 247 | WELD & repair cracked spark plug hole (helicoil included) (2 heads) | Call us | 160.00 |
| 250 | MACHINE 2 heads dual plug   | Call us | 184.75 |

## CYLINDERS

Dealer Price    Retail Price

### ESTHETIC

|     |  |         |        |
|-----|--|---------|--------|
| 125 | HILITE cooling fins on 2 cylinders         | Call us | 60.00  |
| 127 | HILITE cooling fins & Paint on 2 cylinders | Call us | 156.25 |

### BORING & HONING

|     |   |         |        |
|-----|---|---------|--------|
| 303 | BORE, HONE & fit 2 cylinders with stress plates | Call us | 131,25 |
| 304 | SAME AS ABOVE but for 4" to 4 1/8" bore         | Call us | 150.94 |
| 305 | SAME AS ABOVE but for 4 1/8" bore & up          | Call us | 170.63 |
| 307 | HONE & FIT only, 2 cylinders with stress plates | Call us | 76.13  |



# MACHINING SERVICES FOR TWIN CAM Engines (1999 – up)

## CYLINDERS (con't)

|     |   | Dealer Price | Retail Price |
|-----|---|--------------|--------------|
| 308 | BORE, HONE & fit 2 cylinders from 3.875" to 3.927" with stress plates   | Call us      | 170.63       |
| 309 | BORE, HONE & fit 2 cylinders from 1450cc. to 1550cc. with stress plates | Call us      | 223.13       |
| 310 | BORE, HONE & fit 2 cylinders from 1450cc to 107" with stress plates     | Call us      | 255.94       |

## MISCELLANEOUS

|     |  |         |       |
|-----|--|---------|-------|
| 318 | REFACE 2 cylinders - lower decks               | Call us | 49.88 |
| 319 | REFACE 2 cylinders - upper decks               | Call us | 63.00 |
| 320 | REFACE 2 S&S cylinders - upper decks w/2 steps | Call us | 85.31 |

## CRANKS

|     |   | Dealer Price | Retail Price |
|-----|---|--------------|--------------|
| 404 | CHECK alignment only & tig weld crank pin   | Call us      | 95.63        |
| 405 | DISASSEMBLE, inspect, reassemble & align crank & tig weld crank pin (for misaligned crank)  | Call us      | 229.50       |
| 406 | DISASSEMBLE, inspect, reassemble & align crank & tig weld crank pin (for misaligned crank)<br>+ Hone & Fit for new Rod Bearings (Sold separately) | Call us      | 267.75       |
| 407 | SAME AS PREVIOUS + Dynamic balancing  | Call us      | 369.75       |
| 408 | SLEEVE damaged pinion shaft end (bushing section) (on already disassembled flywheels)   | Call us      | 162.50       |
| 409 | COMPLETE CRANK REBUILD (includes new H-Beam rods, crank pin & bearing)  | Call us      | 809.63       |
| 410 | "B" to "A" PINION SHAFT CONVERSION (on already disassembled flywheels)  | Call us      | 161.25       |
| 411 | STRAIGHTEN TC 96" sprocket shaft  | Call us      | 31.88        |
| 412 | Rebuild S/E ROD   | Call us      | 183.75       |
| 413 | Small end conn. rod   | Call us      | 106.25       |
| 414 | Replace and ream 2 W Pin Bush   | Call us      | 35.70        |
| 422 | Grind solder of the crankpin  | Call us      | 31.25        |

## ENGINE CASES

|       |   | Dealer Price | Retail Price |
|-------|---|--------------|--------------|
| 505   | BORE CASE for big bore cylinders (case must be assembled & torqued, unnecessary to remove cylinder studs) | Call us      | 196.88       |
| 506   | TIMKEN RACE CONVERSION (Timken bearing not included)  | Call us      | 328.13       |
| 508   | SLEEVE one damaged cam bearing receiver hole  | Call us      | 196.88       |
| 509   | Crank case machining for cam clearance  | Call us      | 72.19        |
| 532   | Install Timken cups   | Call us      | 36.75        |
| 517   | Bore, Hone & fit 4 lifter holes   | Call us      | 98.44        |
| 517-1 | Bore, Hone & fit 1 lifter hole  | Call us      | 63.00        |

## MISCELLANEOUS

|     |   | Dealer Price | Retail Price |
|-----|---|--------------|--------------|
| 606 | REFACE & polish 4 rocker arms                         | Call us      | 63.00        |
| 608 | TC CAM Support plate bushing replacement (labor only) | Call us      | 45.94        |