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MACHINING SERVICES FOR EVOLUTION Big Twin Engines (1984-1999)

PORTING

			Dealer Price	Retail Price
659	STAGE II	(From 80" to 96"): 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
660	STAGE IIB	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
661	STAGE IIIB	Same as stage IIB plus we install 1.940" intake valves & oversize seats and increase the intake port area, resulting in peak horsepower increase. 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
662	STAGE IVB	Ultimate modification for 3 3/4" & up bore engines. We install 1.990" intake & 1.585" exhaust valves and enlarge the ports accordingly. 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

HEAD WORK OPTIONS

			Dealer Price	Retail Price
650	Intake manifold porting (carburetor)		Call us	45.94
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) JCR10A-2		Call us	124.69
607	PISTON valve pockets machined for valve clearance (2 pistons)		Call us	59.06
652	Spring kit upgrades for Evolution Big Twin. Maximum recommended lift .675", Titanium Retainers		Call us	137.50

CYLINDER HEADS

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

			Dealer Price	Retail Price
200	Overall rebuild 2 heads		Call us	373.75
201	Overall rebuild 2 heads + High Flow seat job		Call us	398.75
202	Overall rebuild 2 heads without guides replacement		Call us	323.75

ESTHETIC

			Dealer Price	Retail Price
105	SODA BLAST carbon out of 2 heads		Call us	36.88
107	GLASS BEAD 2 previously painted heads		Call us	112.50
108	GLASS BEAD 2 unpainted heads		Call us	85.94
109	SAND BLAST, 2 painted head (ready to paint)		Call us	50.00
110	SAND BLAST & paint 2 heads		Call us	137.50
111	SAND BLAST, paint & highlight 2 heads		Call us	166.25
114	HIGHLIGHT 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



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CYLINDER HEADS (con't)

Dealer Price Retail Price

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	106.25

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
251	DUAL PLUG modification (2 heads)	Call us	160.00

MISCELLANEOUS

260	REMOVE broken exhaust stud & install helicoil	Call us	68.75
262	WELD & REPAIR damaged combustion chamber	Call us	31.25 & up

CYLINDERS

Dealer Price Retail Price

ESTHETIC

120	GLASS BEAD 2 cylinders	Call us	63.00
121	GLASS BEAD 2 previously painted cylinders	Call us	98.44
122	SAND BLAST 2 cylinders (ready to paint)	Call us	49.88
123	SAND BLAST & PAINT 2 cylinders black (paint included)	Call us	111.56
125	HIGHLIGHT cooling fins on 2 cylinders	Call us	60.00
126	SAND BLAST, PAINT & HIGHLIGHT 2 cylinders	Call us	156.25



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CYLINDERS (con't)

Dealer Price Retail Price

BORING & HONING

Note: For EVO cylinders that are sent with base gaskets still adhered (late H-D gaskets are very difficult to remove), we will remove the gaskets by machining the lower deck. This operation also trues the cylinder lower deck.

307	HONE & FIT only, 2 cylinders with stress plates	Call us	76.13
312	BORE, HONE & fit 2 cylinders with stress plates	Call us	118.13
313	SAME for 3 5/8" bore	Call us	131.25
314	SAME for 3 13/16" bore & up	Call us	144.38

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

415	RECONDITION, assemble & true 1 crank & connecting rods (complete job, labor only) Rod races replacement	Call us	281.25 add 28.00
416	SAME as previous + Dynamic balancing	Call us	418.75
418	RECONDITION, glass bead & fit 2 connecting rods	Call us	123.75
423	SLEEVE damaged pinion shaft end (bushing section)	Call us	162.50
426	MACHINE 1 S&S flywheel for thrust washer	Call us	52.50
425	CHANGE & precision grind new inner race sleeve on pinion shaft (EVO late model) Race not included	Call us	106.25
420	REPLACE rod races (labor only)	Call us	43.75
421	STRAIGHTEN pinion shaft	Call us	36.25

ENGINE CASES

Dealer Price Retail Price

ESTHETIC

130	GLASS BEAD unpainted engine case (oil galleries masked)	Call us	81.25
131	GLASS BEAD painted engine case (oil galleries masked)	Call us	106.250
133	SAND BLAST engine case (oil galleries masked) ready to paint	Call us	60.00
135	OIL GALLERY spot weld removal & installation of 1/8 NPT plug (allows better oil gallery clean up)	Call us	51.50
134	MASK & PAINT engine case	Call us	106.25
136	ULTRASONIC cleaning engine cases	Call us	56.25

MISCELLANEOUS

510	BORE case for big bore cylinders (case must be assembled & torqued, unnecessary to remove cylinder studs)	Call us	196.88
512	RESURFACE engine case deck (cylinder studs must be removed)	Call us	105.00
513	WELD & repair left case primary O ring lip (studs must be removed)	Call us	165.00
515	HELICOIL timing plug hole	Call us	45.94
518	OVERSIZE bore, breather gear hole .030"	Call us	72.19
519	SLEEVE breather gear hole (welding extra if required)	Call us	231.25
521	REMOVE & reinstall new case pinion bearing race + HONE & FIT (race not included)	Call us	131.25
523	HONE & FIT pinion bearing race	Call us	70.81
524	SLEEVE cam bearing hole	Call us	196.56
526	MACHINE left case for oversize bearing race insert	Call us	575.00



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ENGINE CASES (con't)

Dealer Price Retail Price

MISCELLANEOUS

527	MACHINE engine case supports	Call us	105.00
528	CONVERT EVO case to Shovel style (includes 8 long helicoils)	Call us	362.50
530	Replace & Fit Cam bushing (labor only)	Call us	49.88
531	Replace & Fit pinion bushing (labor only)	Call us	32.81
532	Replace TIMKEN cups + "C" clip	Call us	36.75

MISCELLANEOUS

Dealer Price Retail Price

606	REFACE & polish 4 rocker arms	Call us	63.00
609	REBUSH & align hone 4 rocker arms (labor only)	Call us	76.13
610	HONE & fit 4 oversize tappets	Call us	81.25