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<b>LABOR PRICES ONLY - DOES NOT INCLUDE PARTS</b>	75.00	Effective 1/1/2015
Flat rate - \$73.00 hr.		<a href="#">Page 2</a>
should always try to get at least \$45.00 hr.(things that take too much time)	<b>HOUR</b>	<b>COST</b>
<b>BALANCING - (Prep work extra)</b>		\$75.00
<b>(stock engines, strokers &amp; light or heavy Bob wts. are made by time only)</b>		
V-8 including sending to Jerry	<b>3.50</b>	\$263.00
V-8 with Bob wt. - Information furnished	<b>2.75</b>	\$207.00
6 cylinder	<b>3.25</b>	\$244.00
6 cylinder with Bob wt. - Information furnished	<b>2.25</b>	\$169.00
4 cylinder	<b>2.95</b>	\$222.00
4 cylinder with Bob wt. - Information furnished	<b>1.83</b>	\$138.00
Semi-Balance within 2 grams per rod & piston	<b>0.10</b>	\$8.00
<b>Additional Work Is Extra</b>		
<b>INSTALL CAM BEARINGS</b>		
<b>Tight Cam - extra by time</b>		\$75.00
Passenger car & light trucks	<b>0.50</b>	\$38.00
Heavy truck & big tractor	<b>0.63</b>	\$48.00
<b>CLEANING HEADS</b>		
4 cylinder & V-8s cast or 1 pr of ex manifolds	<b>0.25</b>	\$19.00
Aluminum 4 cylinder & V-8s <i>incl. glass bead</i>	<b>0.50</b>	\$38.00
Aluminum 6 cylinder <i>incl. glass bead</i>	<b>0.50</b>	\$38.00
6 cylinder	<b>0.25</b>	\$19.00
<b>Large tractor type head</b>		
<b>CLEANING BLOCKS &amp; INSPECTION</b>		
<b>(includes removal of cam bearings, soft plugs &amp; oil galley plugs)</b>		
Passenger Car & Light Trucks	<b>1.00</b>	\$75.00
Medium Truck, Tractor and when extra work is obvious	<b>1.25</b>	\$94.00
Large Truck & Tractor	<b>1.75</b>	\$132.00
<b>CLEANING - MISCELLANEOUS</b>		
Clean intake <b>with</b> tin pan riveted on. Bake R&R tin, flux for cranks.	<b>0.50</b>	\$38.00
Clean intake <b>without</b> tin pan riveted on	<b>0.25</b>	\$19.00
Valve cover, Pan, F. cover, etc.	<b>0.13</b>	\$10.00

<b>MILLING - BLOCKS larger than automotive +\$24.00</b>	<b>75.00</b>	<b>Page 3</b>
	<b>HOUR</b>	<b>COST</b>
<b>Passenger Cars &amp; Light Trucks</b>		
4 cylinder <i>aluminum</i> + \$11.00	<b>1.25</b>	<b>\$94.00</b>
6 cylinder <i>aluminum</i> + \$11.00	<b>1.25</b>	<b>\$94.00</b>
V-8 (both sides) & V-6 <i>aluminum</i> + \$18.00	<b>1.88</b>	<b>\$141.00</b>
<b>3rd side/Topside</b>	<b>0.50</b>	<b>\$38.00</b>
<b>EXHAUST MANIFOLDS &amp; INTAKE MANIFOLDS</b>		
times listed are average - additional time will be priced higher		
4 cylinder	<b>0.60</b>	<b>\$45.00</b>
6 cylinder	<b>0.60</b>	<b>\$45.00</b>
Intake manifolds <b>V type</b>	<b>1.13</b>	<b>\$85.00</b>
<b>MILLING - HEADS less than .020 over .020 + 50%</b>		
<b>Passenger Cars &amp; Light Trucks</b>		
4 cylinder & V-8 & 3 cylinder	<b>0.50</b>	<b>\$38.00</b>
5 cylinder & V-10	<b>0.60</b>	<b>\$45.00</b>
4 cylinder & V-8 aluminum	<b>0.66</b>	<b>\$50.00</b>
5 cylinder & V-10 aluminum	<b>0.70</b>	<b>\$53.00</b>
6 cylinder	<b>0.66</b>	<b>\$50.00</b>
6 cylinder aluminum	<b>0.75</b>	<b>\$57.00</b>
6.9, 7.3, 6.2, 6.5, Diesel Heads <b>with inserts</b>	<b>1.13</b>	<b>\$85.00</b>
6 cylinder Integral Head 250 Chevy	<b>1.00</b>	<b>\$75.00</b>
<b>Set up charge when setting up on 4 legs (Ecotec)</b>	<b>0.19</b>	<b>Add \$15.00</b>
<b>Trucks and Tractors</b>		
Small 4 cylinder & V-8	<b>0.50</b>	<b>\$38.00</b>
Medium 4 cylinder & V-8	<b>0.66</b>	<b>\$50.00</b>
Large 4 cylinder	<b>1.00</b>	<b>\$75.00</b>
Small 6 cylinder	<b>0.66</b>	<b>\$50.00</b>
Medium 6 cylinder & 6L Ford Powerstroke	<b>1.00</b>	<b>\$75.00</b>
Large 6 cylinder & 5.9 Cummins	<b>1.40</b>	<b>\$105.00</b>
6.6 GM Duramax	<b>1.10</b>	<b>\$83.00</b>
<b>Set up charge when setting up on 4 legs</b>		<b>Add \$15.00</b>

<b>CRANKSHAFT GRINDING</b>	<b>75.00</b>	<b>Page 4</b>
	<b>HOUR</b>	<b>COST</b>
<b>Common Automotive Crank (350 Chevy)</b>	<b>2.12</b>	<b>\$159.00</b>
+20% when not buying brg		
<b>Uncommon Small Crank (Small Tractors, Antiques)</b>	<b>2.55</b>	<b>\$192.00</b>
<b>Medium Cranks (5.9 Cummins)</b>	<b>3.32</b>	<b>\$249.00</b>
<b>Large Cranks</b>	<b>4.40</b>	<b>\$330.00</b>
1 Journal - <b>small</b> - \$96.00 first    \$10.00 each additional		
1 Journal - <b>large</b> - \$110.00 first    \$15.00 each additional		
Weld Journal	<b>1.61</b>	<b>\$118.00</b>
Grind Crank for 377 - 383 Chevy <i>Cheaper to buy crank new</i>		
<b>WE DO NOT FILET GRIND</b>		
<b>EXAMPLE: 350 Chevy crank \$159.00 with brg. / \$192.00 w/o brg.</b>		
<b>Small automotive size industrial crank or odd automotive - \$192.00 with or w/o brg.</b>		
<b>POLISHING CRANKS</b>		
Cars & Light Trucks - clean, check for straightness, measure & polish	<b>0.63</b>	<b>\$48.00</b>
Large Trucks & Tractors - clean, check for straightness, measure & polish	<b>0.75</b>	<b>\$57.00</b>
Extra Large Trucks & Tractors - 855 Cummins, 3406 CAT (same as above)	<b>1.13</b>	<b>\$85.00</b>
<b>(ones too heavy to put in polisher)</b>		
<b>CONNECTING ROD WORK - R &amp; R OF PISTONS &amp; RODS</b>		
R & R Rods on Pistons - <b>full floating rods</b>	<b>0.05</b>	<b>\$4.00</b>
R & R Rods on Pistons - <b>press fit</b>	<b>0.10</b>	<b>\$8.00</b>
<b>Singles</b> <b>by time when saving piston</b>	<b>0.20</b>	<b>\$15.00</b>
<b>Sets of 3 or less</b>	<b>0.10</b>	<b>\$8.00</b>
<b>Install Pistons on Rods only</b>	<b>0.08</b>	<b>\$6.00</b>
<b>EXAMPLE: customer presses their rods off</b>		

<b>PIN FITTING and R &amp; R BUSHING additional stuff by time</b>	<b>75.00</b>	<b>Page 5</b>
	<b>HOURLY</b>	<b>COST</b>
Pins up to 1 1/4" hone to fit only	<b>0.15</b>	<b>\$12.00</b>
Pins 1 1/4" to 2" hone to fit only	<b>0.23</b>	<b>\$18.00</b>
Pins over 2" hone to fit only	<b>0.30</b>	<b>\$23.00</b>
Install Bushing up to 1 1/4" R & R only	<b>0.05</b>	<b>\$4.00</b>
Install Bushing 1 1/4" to 2" R & R only	<b>0.05</b>	<b>\$4.00</b>
Install Angled Bushings R & R only	<b>0.08</b>	<b>\$6.00</b>
<b>One rod only - add 50%</b>		
<b>RECONDITIONING RODS</b>		
Small Rods (Passenger Cars & Light Trucks) <b>3 or less rod(s) \$28.00</b>	<b>0.25</b>	<b>\$19.00</b>
Meduim Rods (Medium Trucks & Tractors) - <b>over 2 3/4" by time</b>	<b>0.38</b>	<b>\$29.00</b>
Large Rods (Large Trucks & Tractors) - <b>notched rod parting by time</b>	<b>0.75</b>	<b>\$57.00</b>
<b>Touch up - notched rod parting average to easy by time</b>	<b>0.38</b>	<b>\$29.00</b>
R & R Rod Bolts	<b>0.05</b>	<b>\$4.00</b>
<b>If less than 3 - add 50% each</b>		<b>\$6.00</b>
<b>Align Rods (Included in reconditioning)</b>		
Align Rods - <b>less than 4</b>	<b>0.09</b>	<b>\$7.00</b>
Align Rods - <b>in sets of 4 or more</b>	<b>0.06</b>	<b>\$5.00</b>
<b>CYLINDER OPERATIONS - add 20% when not buying pistons include inspect &amp; prep block</b>		
	<b>w/ Pistons</b>	<b>w/o Pistons</b>
<b>3 cylinder</b>	<b>75.00</b>	<b>\$90.00</b>
<b>4 cylinder</b>	<b>100.00</b>	<b>\$120.00</b>
<b>6 cylinder</b>	<b>150.00</b>	<b>\$180.00</b>
<b>8 cylinder</b>	<b>200.00</b>	<b>\$240.00</b>
<b>10 cylinder</b>	<b>250.00</b>	<b>\$300.00</b>
<b>Cylinder Reboring and Honing</b>		
up to 4.400 - <b>add 20% no pistons \$29.00</b>	<b>0.33</b>	<b>\$25.00</b>
<b>+ \$5.50 per cylinder for every oversize cut over normal</b>		
4.400 to 5.3" - <b>add 20% no pistons \$35.00</b>	<b>0.40</b>	<b>\$30.00</b>
Bore and Hone <b>with torque plates. Price for each cyl.</b>	<b>0.13</b>	<b>\$10.00</b>
Deglaze cylinders	<b>0.08</b>	<b>\$6.00</b>
Rebore <b>single</b> cylinders	<b>0.75</b>	<b>\$57.00</b>
Rebore <b>any one or two</b> cylinders (like Wisconsin TF)	<b>0.41</b>	<b>\$31.00</b>
Large over bore on Motorcycle over .040	<b>0.75</b>	<b>\$57.00</b>
<b>Honing cylinder to fit pistons after boring</b>	<b>0.04</b>	<b>\$3.00 per .001</b>
bore 2 cylinders <b>+.125 Motor Cycle</b>	<b>2.00</b>	<b>\$150.00</b>
<b>Set ups 15 minutes each</b>	<b>0.25</b>	<b>\$19.00</b>

<b>CYLINDER SLEEVES INSTALLED</b>	<b>75.00</b>	<b>Page 6</b>
	<b>HOURLY</b>	<b>COST</b>
One sleeve to 4.4 - ID <b>2 or more -10%</b>	<b>1.25</b>	<b>\$94.00</b>
Sleeves over 4.4 - ID <b>2 or more -10%</b>	<b>1.50</b>	<b>\$113.00</b>
<b>Wedge sleeves - add 50% (like 534 Ford)</b>		
Vega block sleeve & deck ( <b>flanged sleeves</b> )	<b>5.00</b>	<b>\$375.00</b>
8 N Ford Tractor - <b>bore and install flanged sleeves and deck</b>	<b>5.00</b>	<b>\$375.00</b>
<b>Bore and Install flanged sleeves</b>	<b>2.00</b>	<b>\$150.00</b>
		Each
Sleeve one cylinder engine cast iron block <b>single cylinder block</b>	<b>2.00</b>	<b>\$150.00</b>
<b>Valve Seats Installed - include starter seat</b>		
1 seat (B & I) x 2 in block	<b>0.30</b>	<b>\$23.00</b>
		Each
2 or more seats (B & I) x 2 in block <b>aluminum heads +50%</b>	<b>0.15</b>	<b>\$12.00</b>
		Each
1 seat (R & R)	<b>0.15</b>	<b>\$12.00</b>
		Each
2 or more seats (R & R)	<b>0.10</b>	<b>\$8.00</b>
		Each
<b>If over 2 1/4" (I.D.) add 50%</b>		
<b>Knurl Valve Guides</b>	<b>0.05</b>	<b>\$4.00</b>
		Each
<b>O.S. Valve Guides</b>	<b>0.05</b>	<b>\$4.00</b>
<b>Valve Guides Installed - labor only plus guides</b>		Each
401 Ford Diesel <b>extra long &amp; fat</b>	<b>0.17</b>	<b>\$13.00</b>
		Each
Cut and Install Guides up to 7/16" stems (B & I) <b>average</b>	<b>0.10</b>	<b>\$8.00</b>
		Each
Bronze K Liners <b>K Liners \$1.50 each      \$7.50 includes guides</b>	<b>0.08</b>	<b>\$6.00</b>
		Each
R&R K Liners	<b>0.05</b>	<b>\$4.00</b>
<b>Guides Replaced (2 or less) - double price</b>		
R & R Guides - <b>cast heads</b>	<b>0.05</b>	<b>\$4.00</b>
R & R Guides - <b>aluminum</b>	<b>0.07</b>	<b>\$6.00</b>
		Each
<b>Valve Operations</b>		
<b>Valve Seat Grinding &amp; Valve Grinding - alone</b>		
Passenger Cars & Light Trucks - <b>no cleaning valves &amp; seats</b>	<b>0.05</b>	<b>\$4.00</b>
<b>Cleaning per Valve &amp; Seat</b>	<b>0.05</b>	<b>\$4.00</b>
		Each
Truck and Tractor ( <b>heavy</b> ) - <b>no cleaning valves &amp; seats</b>	<b>0.07</b>	<b>\$6.00</b>
<b>Cleaning per Valve &amp; Seat</b>	<b>0.07</b>	<b>\$6.00</b>

<b>VALVE JOBS - cont.</b>	<b>75</b>	<b>Page 7</b>
	<b>Hours</b>	<b>COST</b>
<b>Valve Jobs (cast iron OHV type, 2 valves per cylinder)</b>		
<b>Includes</b> disassemble, clean, flux for cracks, inspect, grind seats, grind valves, check spring pressures, and assemble. <b>All other needed work is extra.</b>		
<b>Based on \$24.00 per cylinder for adj. valve train cars &amp; pickups</b>		
<b>\$26.50 per cylinder for nonadj. valve train cars &amp; pickups</b>		
4 cylinder cars & light trucks - <b>adj.</b> valve train	<b>1.3</b>	<b>\$98.00</b>
<b>nonadj.</b> valve train	<b>1.6</b>	<b>\$120.00</b>
6 cylinder & V-6 cars & light trucks - <b>adj.</b> valve train	<b>2.1</b>	<b>\$158.00</b>
<b>nonadj.</b> valve train	<b>2.4</b>	<b>\$180.00</b>
8 cylinder & V-8 cars & light trucks - <b>adj.</b> valve train	<b>2.6</b>	<b>\$195.00</b>
<b>nonadj.</b> valve train	<b>2.9</b>	<b>\$218.00</b>
V-10 cars & light trucks - <b>adj.</b> valve train	<b>3.4</b>	<b>\$255.00</b>
<b>nonadj.</b> valve train	<b>3.7</b>	<b>\$278.00</b>
<b>All aluminum heads +\$21.00 per head</b>		
<b>4 valves per cylinder +100%</b>		
<b>3 valves per cylinder +50%</b>		
<b>1 cylinder valve job - (Briggs, Wisconsin)</b>	<b>0.5</b>	<b>\$38.00</b>
<b>Flat head V-8, 6 cylinder, 4 cylinder</b>	<b>0.55</b>	<b>\$42.00</b>
<b>Includes</b> disassemble, clean ( <b>block cleaning extra</b> ), flux for cracks, inspect, grind seats, grind valves, check spring pressures, assembly and adjust valves ( <b>All other needed work extra</b> ) with adj. valve train		<b>Per Cyl</b>
<b>Valve Adjustment (Based on 4 cyl, +50% for 6 cyl, +100% for 8 cyl.)</b>		
<b>Shim Buckets (4 Valve per cyl)</b>	<b>1.5</b>	<b>\$113.00</b>
<b>Shims +\$5.00 each</b>		
<b>Hydraulic Buckets (2 Valves per cyl)</b>	<b>0.5</b>	<b>\$38.00</b>
<b>Hydraulic Buckets (4 Valves per cyl)</b>	<b>1</b>	<b>\$75.00</b>
<b>Solid Buckets (2 Valves per cyl)</b>	<b>1.35</b>	<b>\$102.00</b>
<b>Solid Buckets (4 Valves per cyl)</b>	<b>2.5</b>	<b>\$188.00</b>
<b>Adjustable Screws (2 Valves per cyl)</b>	<b>0.5</b>	<b>\$38.00</b>
<b>Adjustable Screws (4 Valves per cyl)</b>	<b>0.75</b>	<b>\$57.00</b>
<b>Disassemble, Clean, Assemble Honda Vtec Assembly</b>	<b>1</b>	<b>\$75.00</b>
*Adjustment Extra*		
<b>Do Not Disassemble valve train, bleed lifters &amp; assemble valve train Customer's responsibility</b>		

VALVE JOBS - cont.	75.00	Page 8
There will be additional charges for odd variations to any valve job.		
	<b>HOURS</b>	<b>COST</b>
If valve train needs dis. & reassembled and adj.	0.79	\$60.00
Heavy Truck & Tractor (2 valves per cylinder)		
Based on \$26.00 per cylinder for adj. valve train		
\$28.00 per cylinder for nonadj. valve train <b>ALL DIESEL</b>		
4 cylinder H.D. adj.	1.50	\$113.00
nonadj.	1.64	\$123.00
6 cylinder H.D. adj.	2.27	\$171.00
nonadj.	2.45	\$184.00
8 cylinder H.D. adj.	3.03	\$228.00
nonadj.	3.27	\$246.00
6.9 & 7.3 IHC, Ford V-8 diesel <b>BOTH HEADS</b>	3.27	\$246.00
6.2 & 6.5 Chevy V-8 diesel <b>BOTH HEADS</b>	3.27	\$246.00
2 cylinder John Deere	1.00	\$75.00
Pressure test heads - average	0.75	\$57.00
Exception - S.B. & B.B. Chevy & ones we have plate for & 3.9, 318, 360 Chrys.	0.50	\$38.00
<b>MISCELLANEOUS HEAD OPERATIONS</b>		
Assemble High Performance Aftermarket Heads	1.00	\$75.00
Vacuum test head - <b>all</b>	0.23	\$18.00
Touch up Valve & Seat after vacuum testing	0.23	\$18.00
Tear down head for price estimate - <b>all</b>	0.23	\$18.00
Straighten aluminum head - <b>minimum average</b>	1.75	\$132.00
Enlarge Valve Seats	0.08	\$6.00
R & R Valve Stem Seals	0.04	\$3.00
R & R press in Rocker Studs less than 4 +50%	0.14	\$11.00
Remove, drill, tap and install screw-in Rocker Arm Studs (V-8) with guideplates	2.50 3.00	\$188.00 \$225.00
Pin Rocker Studs	0.08	\$6.00
Repair plug threads in 4.6 / 5.4 / 6.8 Ford		
If in vehicle approx.	1.82	\$137.00
Inserts 51459 <b>each</b>		\$18.90
<b>On Bench</b>	0.50	\$38.00
V-8		
eliminate push rod holes	0.75	\$57.00
cut rocker pads (bosses)	0.75	\$57.00
remove studs	0.75	\$57.00



MISCELLANEOUS HEAD OPERATIONS - cont.	75.00	Page 9
	HOURS	COST
Resurface Rockers - \$6.00 each in sets - otherwise	0.12	\$9.00
Cut guides down for positive seals Individual	0.05	\$4.00
Full set (16)	0.50	\$38.00
Machine for special H.P. valve spring	0.08	\$6.00
Machine guides for special seals	0.08	\$6.00
HELI-COILS INSTALLED (up to 1/2") - includes heli-coil or insert	0.14	\$11.00
Any spark plug size - insert	0.38	\$29.00
heli-coil 3 or more 1/2 price	0.17	\$13.00
Drill & tap broken bolts - average	0.33	\$25.00
MAGNIFLUXING - (cleaning extra)		
Heads on a stripped clean head	0.05	\$4.00
Tractor head	0.07	\$6.00
Blocks already cleaned	0.45	\$34.00
FLYWHEELS		
Surfacing flywheels:		
up thru 12"	0.75	\$57.00
12" up thru 14"	0.80	\$60.00
14" up thru 16" & ALL Tractor	0.85	\$64.00
Remove dowels	0.15	\$12.00
Step flywheels +50%		
Install flywheel ring gear	0.40	\$30.00
SHOT BLAST - must be baked and cleaned first		
Smaller heads	0.25	\$19.00
Larger heads	0.38	\$29.00
Cranks	0.30	\$23.00
Rods	0.04	\$3.00
Blocks - small	0.50	\$38.00
Blocks - large	0.64	\$48.00

MISCELLANEOUS OPERATIONS	75.00	Page 10
	HOUR	COST
Shop rate for special jobs	per hour	\$75.00
Pinning cracks <i>plus tap &amp; bits &amp; pins</i>	per hour	\$75.00
Turn automotive Drums & Rotors		21.00 ea
R & R Cam Gear	0.30	\$23.00
Drill & Tap Crank Snout	0.38	\$29.00
R & R Rod Bolts	0.05	\$4.00
Extra hard bolts like EFI Ford 460	0.50	\$38.00
Remove broken bolts - <i>average</i>	0.33	\$25.00
R & R Soft Plugs in block	0.38	\$29.00
<b>6.2 &amp; 6.5 Chevy Diesel outer main bolt thread insert to repair cracked holes:</b>		
1st Insert	0.50	\$38.00
Each additional Insert		\$19.00
Cost of Insert		\$17.00 each
K-Line between seats on 6.2 & 6.5 (includes pressure test)		\$41.00 each
<b>6.9 L. Ford Oil Injectors</b>		
Remove and press in Injectors	0.50	\$38.00
Install Injectors	0.50	\$38.00
Check Injectors (6.9 & 7.3) alignment	0.20	\$15.00
<b>PISTON KNURLING</b>		
Piston knurling to 4 1/4"	0.18	\$14.00
4 1/4" and up	0.20	\$15.00
<b>+50% for 2 or less</b>		14" up thru 16" & ALL