



Island D. Automotive Machine

Island D Automotive Machine Ltd.

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 GST 83405 3290 RT0001

Invoice

Bill To

Lookup 14 Ram Hemi 6.4L, Long Block
 Description
 Usage 0

Mobile |
 Mobile |
 Email |

Invoice # 4814
 Work Order # 4221
 Purchase Order # 217
 Service Advisor Cody M.
 Technician Ryan B.

Invoice Date 10/30/2024 4:18 PM
 Appointment 2/7/2024 1:56 PM
 Promised 2/7/2024 1:56 PM

Service

Strip Short Block, and Estimate

Strip engine, inspect components, measure bore condition, check block surface.

Labor

\$251.25 EGP

Sub \$251.25

Machinist Notes

Crankshaft Journal Spec: Mains- 2.5585" - 2.5595" Rods- 2.1257" - 2.1263"
 Crankshaft Undersize Recommended: Mains 0.020" Maybe 0.010" would need to try first

Perform Industrial Hot Tank and Magnaflux Engine Block, Gas engine

-Submerge Engine Block into a caustic hot water solution that is capable to remove the heaviest oils, dirt and grime while stripping most paints from the ferrous surfaces. The engine parts are submerged in the solution for many hours, allowing all the internal galleries and passages to be completely cleaned. A caustic hot tank does not remove the rust from ferrous items. **Not safe for Aluminum, Ferrous engine components only.** -Utilize fluorescent iron oxide particles, and a strong magnetic field to locate cracks, seems, dents, or leaks on iron and iron-based alloy metals that would otherwise be impossible to see with the naked eye.

Labor

\$167.50 EGP

Sub \$167.50

Machinist Notes

Cylinder Bore Spec: 4.090"
 Cylinder Bore Measured: 4.092"
 Cylinder Bore Oversize Recommended: 1st Oversize

Knurl Main Caps

Labor

\$67.50 EGP

Sub \$67.50

Align Hone Block (8) Cylinder w/ setup

Labour

\$307.50 EGP

Sub \$307.50

Bore & Hone (8) Cylinder w/ setup (Rottler CNC)

State-of-the-art Rottler CNC creating a true constant and accurate crosshatch angle the entire length of the bore increasing oil retention while reducing oil consumption extending engine life and reliability.

Labour

\$400.00 EGP

Sub \$400.00

Machinist Notes

Cylinder Bore Oversize: 1st Oversize

Re-surface Block Deck (8) Cylinder w/ setup (Rottler CNC)

Perform re-surfacing with State of the art Rottler CNC surfacer.

Payment due on receipt. Interest at .066% per day (24% per annum) charged on outstanding balances.

Labour			\$195.00 EGP
		Sub	\$195.00
Machinist Notes			
Material removed from block surface: 0.004"			
Install Cam Bearings & Frost plug			
Labour			\$167.50 EGP
		Sub	\$167.50
Machine & Micro-polish (8) Cylinder Crankshaft w/ setup			
Machine material from Crankshaft Journals to proper OEM specifications. Journals are then Micro-polished to correct Ra finish.			
Labour			\$330.00 EGP
		Sub	\$330.00
Machinists notes:			
Bearings required: 0.010" / 0.010"			
Install New Rod Bolts, Torque and Check Big Ends of Connecting Rod			
Labour			\$130.00 EGP
		Sub	\$130.00
Install Piston(s) & Inspect alignment			
Labour			\$110.00 EGP
		Sub	\$110.00
File Fit Piston Ring(s) w/ setup			
Labor			\$83.75 EGP
		Sub	\$83.75
Balance Rotating Assembly (V8)			
Balance crankshaft, connecting rods, pistons, rings, bearings, balancer, flywheel and or flexplate Additional charges may apply if heavy metal needs to be added			
Labor			\$473.75 EGP
		Sub	\$473.75
Drill and Instal Heavy Metal			
Labor			\$125.00 EGP
Heavy Metal	2 Unit		\$181.76 GP
		Sub	\$306.76
Perform Industrial Jet Clean: Cylinder-Head			
Solvent-free process using pressurized hot water and specialized industrial detergents with rust inhibitors to clean parts. Safe for Aluminum.			
Labor			\$67.50 EGP
		Sub	\$67.50
Install Valve Seals - Spin test Valves (8) Cylinder-Head (2) Valves per Cylinder			
Labour			\$180.00 EGP
		Sub	\$180.00
Re-surface (4) Cylinder-Head (V8-PAIR) Rottler CNC			
Perform re-surfacing with State of the art Rottler CNC surfacer. Super Fine Surface Finish – Direct Drive precision ball screws and linear slideways combined with infinitely variable speeds and feeds allows surface finish as low as 2Ra to 6Ra. Today's MLS (Multi Layer Steel) head gaskets require super fine finish to seal combustion pressure and oil and water.			
Labour			\$156.25 EGP
		Sub	\$156.25
Machinists notes:			
Material removed from Cylinder Head: 0.003"			
Final Clean and Paint			
Solvent-free process using pressurized hot water and specialized industrial detergents with rust inhibitors to clean parts. Safe for Aluminum. Clean oil gallery with brush and soapy water. Install oil gallery Plugs			
Labor			\$106.25 EGP
		Sub	\$106.25

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Assemble Engine Long Block - V8 (CAUTION PISTON OIL SQUIRTERS)

Labor		\$1,248.75 EGP
Piston Set w/ Rings	1 Unit	\$1,106.78 GP
Freight from USA		\$60.00 GP
Brokerage		\$40.00 GP
Main Bearing Set	1 Unit	\$165.65 GP
Rod Bearing Set	8 Unit	\$104.24 GP
Freight		\$60.00 GP
Cam Bearing Set	1 Unit	\$46.22 GP
Rod Bolts	16 Unit	\$186.40 GP
Thrust Washer Set	1 Unit	\$17.16 GP
Oil Pump	1 Unit	\$214.49 GP
Oil Pump Pickup	1 Unit	\$105.67 GP
Oil Pan Gasket	1 Unit	\$256.45 GP
Timing Cover Gasket	1 Unit	\$88.12 GP
Rear Crankshaft Seal	1 Unit	\$64.43 GP
Freight		\$60.00 GP
Camshaft	1 Unit	\$690.00 GP
Lifter Kit (Front)	2 Unit	\$506.90 GP
Lifter Kit (Rear)	2 Unit	\$506.90 GP
Push Rod Exhaust	8 Unit	\$40.32 GP
Push Rod Intake	8 Unit	\$40.32 GP
Timing Set	1 Unit	\$336.36 GP
Oil Cooler	1 Unit	\$174.00 GP
Oil Cooler Gasket Set	1 Unit	\$130.97 GP
Oil Filter Adapter O-Ring (Inner)	1 Unit	\$19.01 GP
Oil Filter Adapter O-Ring	1 Unit	\$45.94 GP
Oil Filter	1 Unit	\$15.64 GP
Frost Plug Set	1 Unit	\$35.96 GP
Freight		\$40.00 GP
		Sub \$6,406.68

Machinist Notes , Customer must replace MDS Solenoids. Seized in block broken upon removal. Exhaust Manifolds are cracked and require replacement. Block heater broke upon removal. Customer supplied head gasket set and head bolts. Customer to install MDS Solenoids, VVT Solenoid, Block Heater, Spark Plugs, and Damper Bolt (Old bolt should be replaced) .

Piston Clearance: 0.004"
 Piston Protrusion: -0.015"
 Rod Bearing: 0.0022"
 Main Bearing: 0.002"
 End Play: 0.004"
 Top Ring: 0.016" Second Ring: 0.020"
 Oil Ring: 0.018"

Counter Sale

Push Rod Intake	1 Unit	\$5.04 GP
Push Rod Intake	8 Unit	\$40.32 GP
Push Rod Exhaust	8 Unit	\$40.32 GP
Freight		\$40.00 GP
		Sub \$125.68

Machinist Notes

-Customer needed a full set in a panic, took x 16 pushrods from this job for PO 207 , Could not move to separate invoice as parts were received here already
 - Customer needed one for other unit in a panic. Took one from engine build and this is a replacement

Total Parts	\$5,165.37
Total Labor	\$4,567.50
Total Sublet	\$300.00
Total Before Taxes & Miscellaneous Charges	\$10,032.87
(*) Shop Supplies / Hazardous Waste / Environmental Compliance Fees	\$244.68 GP
(G) Canadian Goods and Services Tax (GST)	\$513.88

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