

**N.C. Mechanical LTD.**

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FT09-1
Invoice for RO #845

Service Advisor: N M

Posted Date: 11/28/24 at 10:56 PM

Client: Marksmen Vegetation INC

Vehicle: 2007 Bron LH375

Marksmen Vegetation INC	2007 Bron LH375 VIN: 06M111166 License: N/A Unit #: E2113 Color: N/A Odometer In: 3546 / Out: 3546	RO # 845 PO # - Time-In: 11/16/24 at 03:24 PM Save Parts: No
Phone:		
Email:		

Client concerns:

- Hydraulic pump leaking into gear drive case

1 - Pump and motor Diag				
Tech: NM				
Nov 18th- Arrive at unit, was asked in test all pumps. -Mulcher pump @ 210PSI charge spec is 350PSI -Mulcher motors- R.H @ 4GPM L.h. @ 3GPM tested at 210PSI charge and pump in neutral. -Went to test traction pumps, disscconnected brakes to keep them applied. Unit does walk through both brakes. Chage of R.H. pump is 430PSI & L.H. pump is at 450PSI Both healthy.				
Labor:	Went to drain gear drive case, had to heat drain plug as it was siezed. Found bumt oil inside of case. Drained bellhousing found bumt oil in their too. Bore scoped both cases. Could exactly identify which pump group was leaking. Relayed information to operations manager, packed up and headed back to shop.	6.00 hrs	\$155.00	\$930.00
	Nov 25th- Arrive at unit, remove air filter assembly, remove all hydraulic lines from pumps, and pull pumps. Noticed drive coupler shaft is starting to wear. Removed lines off of head motors and split head motors, they are very rusty and l.h shaft seal is starting to leak.	8.00 hrs	\$155.00	\$1,240.00
Fee:	Shipping from Edge equipment			\$55.00
✓ Approved on 12/27/24 at 08:57 PM		Subtotal \$2,225.00 + est. Tax \$111.25		\$2,336.25

2 - Pump & Motor parts actual			
Note: **They had to replace head motor shafts and that is the price that got adjusted, also adjusted gearbox bearing and seal price**			
Mulcher pump - Repairs required - seal kit, charge pump, swash plate, pistons, retainer plate, ball guide, spring, charge pump coupler, lapping and testing			
Head motors - Repairs required Both - seal kit, barrel, pistons, shaft assembly (optional, worn out splines), lapping and testing			
Traction pump 1 - Repairs required - seal kit, bearings, piston rings, shaft, geroler, lever arm, cradle liners, lapping and testing			
Traction pump 2 - repairs required - seal kit, pistons, barrel, geroler, swash plate, hold down bars, lever arm, cradles, retainer plate, lapping and testing (welded unit)			
Implement pump - Repairs required - seal kit, bearings, piston rings, shaft, end cap, lapping and testing			
Parts:	Rear engine seal - 528-5683	1	\$212.37
	Head pump - H1P165	1	\$8,970.00
	Head motors	2	\$15,640.00
	Traction pump #1	1	\$5,400.00
	Gearbox bearing and seals	1	\$960.50
	Implement pump	1	\$2,760.00
	Traction pump 2	1	\$5,760.00
✓ Approved on 11/28/24 at 10:47 PM		Subtotal \$39,702.87 + est. Tax \$1,985.14	
		\$41,688.01	

3 - Pump Motor, gear drive rebuild & install

Tech: HILLAS, NM

Labor:	Dec 19th 2024 set up bobcat to lift gear drive. lifted it into the air and started removal of gears. and flange caps. set gears on ground and wrapped up for the day	1.50 hrs	\$145.00	\$217.50
	Dec 19th 2024 - removed bearings from gear drives, installed new bearings and seals cleaned sealing surfaces and started installing gear drives.	1.50 hrs	\$145.00	\$217.50
	Dec 22 - Haul pumps and gear drive to unit location, assist with install, cleaned mounting surfaces for mulcher head drive motors, installed both drive motors and all lines, assist with rear main seal install and install fly wheel and drive coupler, prep for install of pump gear drive	4.50 hrs	\$100.00	\$450.00
	Dec 22nd - Arrive at unit, had to fight and work out coupler on flywheel, once removed, pulled rear crank seal and cleaned surfaces, had to modify crank seal installer to accommodate wear sleeve, once modified, installed seal and wear sleeve. Installed flywheel, coupler, and drive coupler	6.00 hrs	\$160.00	\$960.00
	Dec 23rd - Arrive at unit, installed gear drive, installed all pumps, started hooking up pumps, had mulcher and implement pump left. return to shop	6.50 hrs	\$160.00	\$1,040.00
	Dec 24th - Arrive at unit, finish hooking up all pumps, installed new charge filter for traction pumps, top up gear drive oil level, install air filter housing and electrical, prime pumps until charge pressure is achieved. Test and run unit, find mulcher pump is now at 400PSI charge pressure with head spinning or chained @ W.O.T. unit is ready for service. return to shop	4.50 hrs	\$160.00	\$720.00
✓ Approved on 12/27/24 at 08:57 PM			Subtotal \$3,605.00 + est. Tax \$180.25	\$3,785.25

RO Fees

Fee:	Shop supplies	\$306.08
Subtotal		\$306.08

GST#729 672 923 RT0001

Make all cheques payable to N.C. Mechanical Ltd.

Thank you for your business!

An express Mechanic's lien is acknowledged on vehicle to secure the amount of repairs there of. N.C. Mechanical LTD. will not be held responsible for loss or damage to vehicle in our lot or articles left in vehicle incase of fire, theft, accident or any other cause beyond our control. Any deposits are subject to forfeit if cancelled.

Total due in 15 days. Overdue accounts subject to a service charge of 1% per month.

Vehicles not retrieved within 15 days N.C. Mechanical LTD after repair, service or diagnose is finished will be subject to a storage fee of \$25/day.

All rates or subject to change without prior notice.

Total Repair Order & Signature:

Total Jobs:	\$45,477.87
Total Fees:	\$361.08
Subtotal:	\$45,838.95
Taxes:	\$2,291.95
Grand Total:	\$48,130.90
BALANCE DUE:	\$28,130.90

X

Completed Transactions

12/27/24	Marksman Vegetation INC	\$20,000.00	Other Payment	Electronic transfer
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