

Perih Heavy Duty Inc
RR1
Gilbert Plains, MB R0L 0X0, CA
perihhd@gmail.com
204-648-3122



Invoice: 67
Date: 7/20/2020

Bill To
Penner Bros Logging
RR#2
Grandview, MB R0L 0Y0, CA
P: 1-204-546-2752

Remit Payment To
Perih Heavy Duty Inc
RR1
Gilbert Plains, MB R0L 0X0, CA

Service Order	Terms	Due Date	Authorizer	Customer PO	Unit #
1128	COD	7/20/2020	Lowell Penner		1

Item	Description	Quantity	Rate	Amount
Complaint: Remove Broken Bolts on Control Valve Cause: Customer request				
Labor	Correction: Hydraulics / Lines/Hoses / Removed broken bolts on line off of control valve that customer was not able to loosen. Bolts were quite tight and not easily accessible. Removed line and made new one on site. Installed line on machine and ran to test for leaks. - 7/20/2020	2.50000	\$100.00	\$250.00

Sub Total \$250.00

Drive to unit

Labor	Drive to unit (Service Call) Travel to Machine at Vimy RR#2, Grandview, MB	1.75000	\$110.00	\$192.50
Sub Total				\$192.50

Unit: 1 VIN: 1FFBHF0XHD0210160
Hitachi ZX210F-3
Engine: 13,907 Hours

Labor \$442.50
Shop Supplies \$15.00

Pre Tax Total \$457.50

GST (5.0000% of \$457.50) \$22.88

PST (7.0000% of \$457.50) \$32.03

Total \$512.41

Payments & Credits \$0.00

Balance Due \$512.41

GST# 753299528

Perih Heavy Duty Inc .
RR1
Gilbert Plains, MB R0L 0X0, CA
perihhd@gmail.com
204-648-3122



Invoice: 557
Date: 3/3/2022

Bill To
Penner Bros Logging
RR#2
Grandview, MB R0L 0Y0, CA
P: 1-204-546-2752

Remit Payment To
Perih Heavy Duty Inc
RR1
Gilbert Plains, MB R0L 0X0, CA

Service Order	Terms	Due Date	Authorizer	Customer PO	Service Writer	Unit #
1376	Net 30	4/2/2022	Lowell Penner		Perih, Steven	1

Item	Description	Quantity	Rate	Amount
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Complaint: Reseal Main Control Valve

Cause: Customer request

Labor	Correction:	25.50000	\$100.00	\$2,550.00
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Hydraulics / Valve / Brought processor into pole shed to remove and reseal main control valve. Removed panel over top of control valve. Tagged, removed and capped off all hydraulic lines off of control valve. Removed pilot signal manifold from control valve and swung off to the side to remove hydraulic lines from side of control valve. Removed valve body mount bolts and rigged up crane to lift control valve from machine. Brought control valve to shop and washed off all dirt and debris for control valve to be split and resealed.

Put valve on bench and completely disassembled. Assembled with all new o-rings, seals and back up rings. Brought control valve back out to machine and set onto pedestal and installed all mount bolts. Reinstalled all hydraulic and electrical to control valve and changed o-rings on flange fittings as needed. Reinstalled pilot signal manifold onto top of control valve and installed all pilot lines to top and bottom of spool caps. Reinstalled hydraulic cooler lines and changed o-rings on steel pipes to top and bottom of control valve.

Reinstalled all hose clamps and hard mounts for steel lines. Filled machine with existing oil and topped up with new. Bled pumps.

Ran machine and ran through functions to bleed out air and checked for leaks found no leaks on control valve and all functions working properly. Brought machine out of pole shed and washed off control valve, engine and pump compartments. Reinstalled all panels and bottom plates on unit. Ran processor again and checked for leaks found that some pilot lines on top of valve were leaking.

Made new lines and installed. - 3/2/2022

Parts	O-Ring	12.00000	\$6.6619	\$79.94
Parts	O-Ring	6.00000	\$5.6854	\$34.11
Parts	O-Ring	10.00000	\$2.0615	\$20.62
Parts	O-Ring	6.00000	\$5.859	\$35.15

Item	Description	Quantity	Rate	Amount
Parts	O-Ring	2.00000	\$3.1031	\$6.21
Parts	Packing	2.00000	\$3.1031	\$6.21
Parts	O-Ring	3.00000	\$4.6438	\$13.93
Parts	O-Ring	2.00000	\$2.0615	\$4.12
Parts	O-Ring	5.00000	\$5.2894	\$26.45
Parts	O-Ring	21.00000	\$5.247	\$110.19
Parts	O-Ring	16.00000	\$4.611	\$73.78
Parts	Packing	12.00000	\$6.996	\$83.95
Parts	O-Ring	4.00000	\$4.611	\$18.44
Parts	O-Ring	1.00000	\$5.247	\$5.25
Parts	O-Ring	23.00000	\$4.0068	\$92.16
Parts	O-Ring	13.00000	\$8.9994	\$116.99
Parts	O-Ring	4.00000	\$6.413	\$25.65
Parts	Back Up Ring	4.00000	\$7.0596	\$28.24
Parts	Packing	2.00000	\$4.77	\$9.54
Parts	Back Up Ring	2.00000	\$5.4166	\$10.83
Parts	O-Ring	11.00000	\$6.4448	\$70.89
Parts	O-Ring	2.00000	\$7.3776	\$14.76
Parts	O-Ring	5.00000	\$6.148	\$30.74
Parts	O-Ring	3.00000	\$7.8016	\$23.40
Parts	O-Ring	3.00000	\$8.9888	\$26.97
Parts	0404 Female JIC 90 Degree Crimp Fitting	3.00000	\$13.7025	\$41.11
Parts	0406 Female JIC Crimp Fitting	2.00000	\$6.0615	\$12.12
Parts	0406 Female JIC 90 Degree Crimp Fitting	2.00000	\$20.2095	\$40.42
Parts	0606 Female JIC Crimp Fitting	2.00000	\$6.7095	\$13.42
Parts	0404 Female 45 Degree JIC Crimp Fitting	1.00000	\$18.063	\$18.06
Parts	-06 5000psi Arctic Hydraulic Hose	1.00000	\$4.494	\$4.49
Parts	-04 5800psi Arctic Hydraulic Hose	7.00000	\$3.962	\$27.73
Parts	Rando HDZ 32	4.00000	\$105.0452	\$420.18
			Subtotal	\$4,096.05

Complaint: Remove Engine And Repair Broken Front Cover

Cause: Customer request

(Inspection)

Item	Description	Quantity	Rate	Amount
Labor	Correction: Engine / Fuel / Brought processor into pole shed for engine removal to repair broken front cover for A/C mount. Removed all panels and covers to access engine compartment. Drained coolant and engine oil into suitable containers and removed exhaust bracket, muffler and heat shield. Supported pump with strap across the top of compartment and separated pump from bell housing on engine. Removed all electrical, air and coolant lines and removed fan shrouding brackets and removed fan from fan hub. Rigged up crane to engine and removed engine mounts and lifted engine from machine and brought to shop and washed engine for disassembly of front cover. Removed all brackets and pulleys from front cover and removed engine oil pan. Removed front cover and cleaned off all sealant from block. Installed new front cover with ultra gray sealant and torqued bolts to spec. Installed new gaskets and seals as well. Checked over a/c bracket for reinstall and found that both bolts that hold bracket to block were broken off inside block had to drill bolts and remove from block and installed new bolts into bracket. Reinstalled all brackets and installed new front seal and reinstalled fan belt pulleys. Installed oil pan with new gasket as well. Lifted engine into machine and reinstalled pump onto bell housing and reinstalled heat shield and muffler bracket. Reinstalled all electrical, coolant and fuel lines onto engine and reinstalled all mount bolts. Installed all air pipes and filled engine with 5w-40 engine oil and changed engine oil filter that was charged to customer at Coop. Ran engine and checked for leaks found no leaks on engine. Brought unit to front of shop and began removing air pipe from across top of engine to access valve cover to remove and replace injectors, as that was what I had diagnosed the miss to be and the blue haze that was coming from the exhaust. Had a tough time getting laptop to connect as we have been having issues getting computer to connect to this machine for a while. Finally was able to get laptop connected as it should. Removed injectors from engine. Scoped cylinders with camera to inspect and cylinders and pistons looked good. Programmed new injector trim codes and installed new denso injectors into engine. Torqued hold down bolts and reinstalled injector return rail and injector harness and reinstalled valve cover assembly. Reinstalled all brackets and air pipe across top of engine and ran engine. Engine runs smooth now and no longer has blue haze from exhaust. Topped up fluids. Installed new A/C belt and vacuumed system. Charged A/C to spec. Pressures are good and system cycles well and blows cold. Cleaned cab filter. - 3/2/2022	37.50000	\$100.00	\$3,750.00
Parts	Chevron 5W40 5 Gallon	1.00000	\$179.6452	\$179.65
Parts	Chevron 5w40 1 Gallon	2.00000	\$42.1012	\$84.20
Parts	-12 Flange O-ring	12.00000	\$2.8644	\$34.37
Parts	-16 Flange O-Ring	6.00000	\$7.15015	\$42.90
Parts	Belt	1.00000	\$21.81	\$21.81
Parts	Cover	1.00000	\$404.6326	\$404.63
Parts	Seal	1.00000	\$81.5246	\$81.52
Parts	Gasket	1.00000	\$5.353	\$5.35
Parts	Gasket	1.00000	\$6.1056	\$6.11
Parts	Gasket	1.00000	\$33.8776	\$33.88
Parts	Gasket	1.00000	\$187.8956	\$187.90

Item	Description	Quantity	Rate	Amount
Parts	Isuzu Fuel Injector	4.00000	\$585.00	\$2,340.00
Parts	Delo 50/50 Coolant	5.00000	\$17.50	\$87.50
Parts	R-134a Refridgerant	3.50000	\$10.00	\$35.00
Parts	Gasket	4.00000	\$8.2998	\$33.20
Parts	Gasket	4.00000	\$2.8302	\$11.32
Parts	Gasket	1.00000	\$2.3002	\$2.30
Parts	Celcius Concentrate Coolant 3.78L	1.00000	\$19.99	\$19.99
			Subtotal	\$7,361.63

Freight

\$135.00

Unit: 1 VIN: 1FFBHF0XHD0210160

Hitachi ZX210F-3

Engine: 15,272 Hours

Labor \$6,300.00**Parts** \$5,157.68**Shop Supplies** \$185.00**Pre Tax Total** \$11,777.68**GST (5.0000% of \$11,777.68)** \$588.88**PST (7.0000% of \$11,777.68)** \$824.44**Total** \$13,191.00**Payments & Credits** \$0.00**Balance Due** \$13,191.00

GST# 753299528