



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	01
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via		Purchase Order
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11	
120933	328D		PE5030L038795	12/13/14	3000 X

SEGMENT# 1 S 498 NA 09/05/24 09/09/24
SERVICE CALL CALDER 780-984-2094

ADDITIONAL DESCRIPTION:

- SEPTEMBER 9
- SEPTEMBER 11

10102001	LABOR	410.00
	SEGMENT TOTAL==>	410.00

SEGMENT# 2 S 498 NA 09/05/24 09/09/24

CHECK AND ADVISE UNIT KEEPS DERATING

COMPLAINT:

- 001569.31 - Engine in Derate Condition
- 000105.00 - Intake Manifold Air Temperature Signal

Extremely High

CORRECTION:

- SEPTEMBER 9, - TECH 498:

Got parts and traveled out to the unit. Located the unit on site. Started the unit and operated the unit. Found there was 3 active codes. Found codes 94.18 ecu, 105.00 ecu and 1569.31 ecu were active. Checked the diagnostics for the codes. Tested and went through the diagnostics for code 105.00 ecu. Found the air intake temperature sensor on the intake tube was faulty and was open. Removed and replaced the sensor. Connected to service advisor and reprogrammed the ecu. Tested unit operation and found code 94.18 ecu was still active. Removed the fuel pickup tubes from the fuel tank and blew out the lines to make sure there was no debris stuck in there. Remove the fuel filter and replaced

CONTINUED ON PAGE 02

A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH (24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	02
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via		Purchase Order
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11	
120933	328D		PE5030L038795	12/13/14	3000 X

the fuel filter. Operated the unit for quite some time and found the code was still coming up. Tested the unit several different times to try to get the unit to derate and it did.

-

- SEPTEMBER 11,

Got parts and traveled back out to the unit. Tested the fuel pressure sensor and it was good. Operated the unit and watched the fuel pressure through the diagnostics and found the fuel pressure is dipping down to 22 psi which is too low and the 94.18 ecu code is thrown. Removed the cab hardware. Removed the fuel hoses from the fuel transfer and removed the mounting hardware from the transfer pump which took some time since the engine was really warm. Removed the fuel transfer pump and installed a new fuel transfer pump. Applied blue Loctite to the mounting bolts and installed the hardware which took some time to install cause of the tight space. Installed the fuel hoses and tightened the clamps. Lowered the cab and fastened the hardware. Tested unit operation, no other issues found. The unit was running the unit with no issues. No issues at this time.

-

- SEPTEMBER 18,

Customer called back. Codes are back. Recommend unit come into shop.

ENV50	ENVIRO CHARGE	1	.55	.55
RE525016	THERMOCOUPLE	1	78.25	78.25
	Temperature Sensor			
RE533026	FILTER ELEMENT	1	45.92	45.92

CONTINUED ON PAGE 03

A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH (24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	03
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via	Purchase Order	
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11	
120933	328D		PE5030L038795	12/13/14	3000 X
RE534346	FUEL PUMP	1		273.43	273.43
				PARTS	398.15
				LABOR	1350.00
10102001			SEGMENT TOTAL==>		1748.15

SEGMENT# 3 S 1279 NA 09/05/24 10/08/24
CHECK AND ADVISE DERATE (SHOP)
checked over machine for cause of codes and created
estimate for repairs

	LABOR	320.00
10102001	SEGMENT TOTAL==>	320.00

SEGMENT# 4 S 1279 NA 09/05/24 10/22/24
REPAIR AIR TEMP CODES
confirmed issues with air temp and cooling codes
created estimate for repairs
drained coolant
replaced plugged and damaged rad and thermostat
replaced cracked cap
removed and replaced plugged and damaged intercooler
replaced faulty sensors
replaced stuck fan bypass valve
refilled cooling system and cleared codes
operated unit for a couple of hours
codes did not return

AT364586	Radiator	1 N	1138.26	1138.26
AT383864	Valve	1	823.64	823.64
AT406231	Intercooler	1 N	1402.76	1402.76
KV14384	CAP *	1	14.36	14.36
KV26154	ISOLATOR	1	45.85	45.85

CONTINUED ON PAGE 04

**A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.**

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, Inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE
RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	04
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via		Purchase Order
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS	
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11		
120933	328D		PE5030L038795	12/13/14	3000 X	
RE525016	THERMOCOUPLE	1		78.25		78.25
	Temperature Sensor					
RE526916	THERMOSTAT	1		77.48		77.48
TY26576	COOL-GARD II	1		58.32		58.32
T158424	Washer	2 N		8.59		17.18
19M7785	BOLT	2		2.20		4.40
				PARTS		3660.50
				LABOR		800.00
10102001			SEGMENT TOTAL==>			4460.50

SEGMENT# 5 S 1279 NA 09/05/24 10/22/24
REPAIR FUEL PRESSURE CODES - 94.18
confirmed low fuel pressure code 94.18 active intermitantly
disconnected fuel hose from pick up tube
removed tube and confirmed tube was clear
reinstalled tube and installed missing hose and inline fuel
filter
raised cab and disconnected return hoses from rear of head
replaced fuel rail check valve and reconnected hoses
cleared codes
after fuel tank was drained and flushed, operated unit for
several hours and found codes did not return
check fuel pressure in diagnostic menu and confirmed fuel
pressure within spec
fuel system maintains 31-32 PSI at all times
codes did not return

ENV50	ENVIRO CHARGE	1	.55	.55
PMFF149	FUEL FILTER	1	11.79	11.79
RE537400	Tee Fitting	1 N	106.36	106.36
65127	5/16 HOSE FUEL	1	2.97	2.97

CONTINUED ON PAGE 05

**A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.**

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch			
EDMONTON			
Date	Time	Page	
11/22/24	11:44:48 (O)	05	
Account No.	Phone No.	Invoice No.	
4924668	7804924668	S73638	
Ship Via		Purchase Order	
KEY IN BOX			
		Salesperson	
		MDO / MAI	

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS	
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11		
120933	328D		PE5030L038795	12/13/14	3000 X	
				PARTS		121.67
				LABOR		480.00
10102001				SEGMENT TOTAL==>		601.67

SEGMENT# 6 S 1279 NA 09/05/24
RESEAL INJECTION SYSTEM
not needed, fuel system repairs were successful

SEGMENT# 7 S 1279 NA 09/05/24 10/22/24
REPLACE TURBO
raised cab and removed muffler
disconnected turbo hoses and removed hardware
removed failed turbo and installed new turbo using new
gaskets and hardware
reconnected hoses
replaced cracked exhaust pipe, could cause major fire
reinstalled muffler
drained engine oil and replaced filter
refilled engine oil and operated unit - 5W40
unit operated correctly now and topped up oil

ENV06	OIL ENVIRO FEE	14	.06	.84
ENV50	ENVIRO CHARGE	1	.55	.55
RE30241	CLAMP, EXHAUST	1	117.37	117.37
RE519626	OIL FILTER	1	23.22	23.22
RE532722	Turbocharger	1	1534.24	1534.24
R515197	GASKET	1	3.56	3.56
R516662	SCREW	4	9.24	36.96
R524238	GASKET	1	7.45	7.45
TY22462	CLAMP	2	1.41	2.82
TY27742L	5W40 SYN BULK	14	11.36	159.04

CONTINUED ON PAGE 06

**A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.**

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	06
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via	Purchase Order	
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS	
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11		
120933	328D		PE5030L038795	12/13/14	3000 X	
T244875	Exhaust Pipe		1	999.50		999.50
				PARTS		2885.55
				LABOR		640.00
10102001			SEGMENT TOTAL==>			3525.55

SEGMENT# 8 S 1279 NA 09/05/24 11/13/24
CLEAN FUEL TANK *** AS PER CUSTOMER***
removed skid plate
drained fuel tank and flushed
reinstalled drain plug
refilled fuel tank to full and added fuel conditioner
washed area where fuel was drained

	LABOR	240.00
10102001	SEGMENT TOTAL==>	240.00

SEGMENT# 9 5 1279 NA 09/05/24 11/14/24
RESEAL OIL PAN 14.00 14.00
found oil pan leaking after other repairs were completed
customer approved engine removal for reseal
drained coolant and engine oil
removed grill and fan
disconnected and removed cooling package
removed HVAC system and muffler
disconnected wiring and hoses from engine
removed engine and removed oil pan
cleaned gasket material from oil pan and block
resealed oil pan and reinstalled
replaced loose dipstick and tube
reinstalled and connected engine to pump
fastened engine with engine mounts

CONTINUED ON PAGE 07

**A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.**

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE
RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch		
EDMONTON		
Date	Time	Page
11/22/24	11:44:48 (O)	07
Account No.	Phone No.	Invoice No.
4924668	7804924668	S73638
Ship Via		Purchase Order
KEY IN BOX		
		Salesperson
		MDO / MAI

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11	
120933	328D		PE5030L038795	12/13/14	3000 X
reassembled machine in reverse order					
refilled coolant and engine oil					
started unit and operated					
topped up fluids					
confirmed leaks did not persist					
unit operates correctly					
reinstalled skid plat and side shields					
RH engine shield is bent and does not fit correctly					
ENV06	OIL ENVIRO FEE	13		.06	.78
RE541534	DIPSTICK	1		138.14	138.14
R44302	TIE STRAP	10		.44	4.40
R531938	Dipstick Tube	1		34.12	34.12
TY26576	COOL-GARD II	2		58.32	116.64
TY27742L	5W40 SYN BULK	13		11.36	147.68
03M7185	BOLT	1		.65	.65
14M7396	NUT	1		1.65	1.65
24H1122	STEEL WASH	1		.95	.95
30509	SEALANT 5900	1		66.43	66.43
65128	HOSE 3/8	2		3.56	7.12
	PARTS				518.56
	LABOR				2240.00
10102001	SEGMENT TOTAL==>				2758.56

SEGMENT#10 A 9999 NA	09/05/24 11/22/24			
TRUCKING				
DELIVERY OF SKID STEER \$200.00				
LEE TRUCKING	LEE TRUCKING	1	200.00	200.00
	PARTS			200.00
10102001	SEGMENT TOTAL==>			200.00

CONTINUED ON PAGE 08

A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, Inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



West Edmonton
17104 - 118 Ave., Edmonton, AB, T5S 2L7
Tel: 780.452.2790 Fax: 780.451.2678
www.horizonagturf.com

Ship to:

IN STORE PICKUP

Invoice to:

UNIVERSITY OF ALBERTA
116 STREET 85 AVENUE NW
SUPPLY MANAGEMENT SERVICE
EDMONTON AB T6G 2R3

Branch			
EDMONTON			
Date	Time	Page	
11/22/24	11:44:48 (O)	08	
Account No.	Phone No.	Invoice No.	
4924668	7804924668	S73638	
Ship Via		Purchase Order	
KEY IN BOX			
		Salesperson	
		MDO / MAI	

SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
120933	328D SKID STEER LO	5878	1T0328DKJA0188523	12/15/11	
120933	328D		PE5030L038795	12/13/14	3000 X

***** WORK ORDER TOTALS *****

PARTS	7784.43
LABOR	6480.00
Fuel	165.00
Shop Supplies	250.00
SUB TOTAL==>	14679.43
GST #70762 9879 RT0001	733.99
CUSTOMER TOTAL	15413.42

**A SERVICE CHARGE ON OVERDUE ACCOUNTS AT THE RATE OF 2 % PER MONTH
(24 % PER ANNUM). STORAGE FEES WILL BE CHARGED AFTER 30 DAYS.**

I hereby authorize the above work to be done along with the use of necessary materials, You and your employees may operate above machine for purposes of testing, Inspection or delivery at my risk, I agree to pay cash on delivery of machine or on terms satisfactory with you and until paid in full an express mechanics lien is acknowledged on above machine to secure the amount of repairs thereto, It is understood that this company assumes no responsibility for loss or damage by theft or fire to machine placed with them for storage, sale, repair or while field testing, Items left for 30 days after completion date will be subject to storage fees,



SIGNATURE

RECEIVED ABOVE IN GOOD ORDER AND TERMS AGREED TO



1719366 Alberta Ltd.
 RR 2 Site 2 Box 7, Millet AB, T0C 1Z0
 780-387-5730
www.e3quality.ca
 GST # 832686042

Invoice Number:	2023-12-1023	Invoice Date:	5-Nov-24
Customer Name:	U of A - Dairy Div	Equipment:	JD 328D Skidsteer
	F83 Agri-Food Discovery Pl	Unit Hours:	5858 hrs
	6020-118 ST Edmonton, AB	Serial Number:	
	T6G2E1		

Labour				
Date	Activity	Hours	Rate	Cost
	Shop Rate	16.5	\$ 110.00	\$1,815.00
	Service Call		\$ 135.00	\$0.00
	Travel Per Km		\$ 3.00	\$0.00
	Weekend Call out fee - Per Call (Winter Hours)		\$ 100.00	\$0.00
	Rush Part Pick Up		\$ 50.00	\$0.00
Total Labour Cost				\$1,815.00

Third Party Expense				
Date	Activity	Hours	Rate	Cost
				\$0.00
				\$0.00
				\$0.00
Total Cost				\$0.00

Parts and Materials				
	Description	Quantity	Unit Cost	Cost
91243	Starter	1	\$239.09	\$239.09
shop	0W40 Engine oil	14	\$13.06	\$182.84
shop	Diesel Fuel	115	\$1.12	\$128.80
shop	75W90	36	\$16.36	\$588.96
shop	Electrical connectors	1	\$36.35	\$36.35
	Shop Consumables		8%	\$145.20
Total Parts & Materials				\$1,321.24

Payment accepted by, debit, cheque, Visa, Mastercard and EFT
All payments made with a credit card will have 3% added
 Please make cheques out to 1719366 AB Ltd
 E-Transfers can be sent to etlarsen@xplornet.com
 Contact Terri Larsen @ 780-387-5730 for more information
All invoices past 30 days are subject to finance charges
 Thank you for your business!

Subtotal	\$3,136.24
GST	\$156.81
Total	\$3,293.05

E3 Quality Mechanical Work Order Action Notes	
Diagnose:	
	unit would crank over slow- diag bad starter - starter was replaced
	drained all fluids and fuel as well as removed all filters
	cleaned out all dirt around fuel tank to find bolts holding fuel tanks
	diagnosed how to remove fuel tank, but engine would need to be pulled
	decided to create transfer pump to suck out fuel from tank
	removed chain case covers, clean magnets, cleaned cover and re-siliconed gasket
	torqued to spec
	flushed out fuel tank (with 15L diesel)
	filled right side of chain case
	removed tail light, broken ground cable and hook for hood latch
	fill left gear case
	changed all filters and topped oil
	changed broken tail light and installed new battery cable
	blew out rad
	installed side panels, secured cab, ran unit and test drove
	unit died after 2 minutes due to fuel restriction, went through all fuel lines, none were blocked
	fill low fuel tank, checked filter and all good
	new secondary fuel pump not getting fuel so blew back supply and that unblocked the line
	took the float out and looked into tank and found rubber latex glove causing issues
	removed glove, all ran good
	Client came to pick up unit - unit would not start
	part 2 for further details
Thank you for supporting local, we look forward to working with you again!	

I hereby authorize the repair work hereinafter set forth to be done along with the necessary material and agree that you are not responsible for loss or damage to equipment or articles left in equipment in case of fire, theft or any other cause beyond your control or for any delays caused by unavailability of parts or delays in parts by the supplier or transporter. I hereby grant you and/or your employees permission to operate the equipment herein described on streets, highway or elsewhere for the purpose of testing and/or inspection. An express mechanics lien is hereby acknowledged on above vehicle to secure the amount of repairs thereto. I understand that I have the right to know before authorizing my repairs what the repairs to my equipment will be and what their costs will be. You need not obtain approval from me prior to performing repairs what the repairs will be or their cost if the total amount for such repairs does not exceed authorized amount.



1719366 Alberta Ltd.
 RR 2 Site 2 Box 7, Millet AB, T0C 1Z0
 780-387-5730
www.e3quality.ca
 GST # 832686042

Invoice Number:	2023-12-1023 PART B	Invoice Date:	5-Nov-24
Customer Name:	U of A - Dairy Div	Equipment:	JD 328D Skidsteer
	F83 Agri-Food Discovery Pl	Unit Hours:	5858 hrs
	6020-118 ST Edmonton, AB	Serial Number:	
	T6G2E1		

Labour				
Date	Activity	Hours	Rate	Cost
	Shop Rate	137	\$ 110.00	\$15,070.00
	Service Call		\$ 135.00	\$0.00
	Travel Per Km		\$ 3.00	\$0.00
	Weekend Call out fee - Per Call (Winter Hours)		\$ 100.00	\$0.00
	Rush Part Pick Up		\$ 50.00	\$0.00
Total Labour Cost				\$15,070.00

Third Party Expense				
Date	Activity	Hours	Rate	Cost
				\$0.00
				\$0.00
				\$0.00
Total Cost				\$0.00

Parts and Materials				
	Description	Quantity	Unit Cost	Cost
41518	filter, seal kit, water pump, gaskets, belt tensioner, coupling, orings, washers	1	\$12,384.23	\$12,384.23
39888	filters, tail lamp, battery cable,	1	\$600.60	\$600.60
44311	bearing kit, screw ,gasket, coupling	1	\$491.37	\$491.37
72230	battery	1	\$242.70	\$242.70
40527	connectors	1	\$14.47	\$14.47
37696	head clean and resurface	1	\$1,312.66	\$1,312.66
46764	shim, screw, washer, gaskets	1	\$2,272.44	\$2,272.44
46334	returned gasket and coupling - not required	1	-\$208.44	-\$208.44
35507	JD service call - set timing of Cam and crank with specialty tool	1	\$906.25	\$906.25
46771	sleeve	1	\$129.57	\$129.57
30002	2 pails of 10W30	1	\$289.93	\$289.93
531665	hyd hose assy	1	\$74.45	\$74.45
	Shop Consumables		0%	\$0.00
Total Parts & Materials				\$18,510.22

Payment accepted by, debit, cheque, Visa, Mastercard and EFT
All payments made with a credit card will have 3% added
 Please make cheques out to 1719366 AB Ltd
 E-Transfers can be sent to etlarsen@xplornet.com
 Contact Terri Larsen @ 780-387-5730 for more information
All invoices past 30 days are subject to finance charges
 Thank you for your business!

Subtotal	\$33,580.22
GST	\$1,679.01
Total	\$35,259.23

E3 Quality Mechanical Work Order Action Notes	
Diagnose:	
	Client came to pick up unit - unit would not start only crank no start pulled back into shop
	diagnoses required - Timing to be a concern due to use of either used by client
	talked to client about removing and disassembling engine for further diagnoses
	tore down unit to remove engine from machine, removed all elec. Hyds and pumps from unit
	removed cooling pack from rear of machine to be able to remove engine, removed engine
	disassembly of engine front timing cover
	strip cylinder head noticed that valves had contacted pistons and load up for transport to head shop
	completed estimate for customer and received go-a-head to repair bare minimum for unit to run
	mount engine on stand and clean/check all engine components
	continue to clean, inspect and rebuild engine
	start prep work for reassembly
	did not replace any pistons, got head back, installed head with new gaskets, installed new injectors and pumping units. Found friction washer for camgear failed, which caused engine to drop out of time, installed new friction washer and new bolt.
	Had to have JD dealer out to set timing due to requirement of special tools. Finished reassembly of engine, all new gaskets
	drain fuel and hydraulic tanks in order to clean area that tank sits in - required in order for tank to be strapped into place properly
	clean bolts on engine components, finish cleaning tub and reinstall hyd and fuel tanks
	Installed engine back into unit, installed hyd pumps and all electrical that was removed, installed cooling packs.
	filled unit with 10W30 break-in and coolant
	fired unit up, unit runs and sounds good
	test ran unit around yard, inspected for leaks
	all sounds and looks good.
	recommended to client to NOT use ether on unit, as this can potentially cause unit to jump out of time.
Thank you for supporting local, we look forward to working with you again!	