



34421 Vye Road
Abbotsford, BC
V2S 7P6

Phone : (604) 850-0009
Fax : (604) 854-1908

Bill To:

MCRAE'S POWER SWEEPING LTD
BOX 78
28944 DOWNES ROAD
ALDERGROVE BC V4W 2T7

Ph. (604) 856-8344

109 - 44195 Yale Road
Chilliwack, BC
V2R 4H2

Phone : (604) 793-9990
Fax : (604) 793-9909

Invoice No. 0000333775

Account No.	Page
MCR002	Page 1 of 6
TT Invoice Date	
February 19, 2019	
Work Order No.	
0000946517	



Associate Dealer

Service

Parts

www.tektruck.com

Warranty

Printed: 2/19/2019 10:48:43AM

Printed by:DB*

PO Number		Payment Terms		PST Number		Location	Created	Closed	Order Date
turbo		Net 30 days				AB	SD	DB*	January 2, 2019
UNIT: S08		YEAR: 2008				VIN #:	1HTMMAAN78H665211		
MAKE: INTERNATIONAL		LICENSE:				ENGINE:	MAXXFORCE DT		
MODEL: 4300		MILEAGE: 425,753				HOURS:	22,826		
Ordered	Shipped	B/O	Item	Description				Loc.	Rate Amount

Check complaint of engine miss & smoking
Went to bring unit into shop, batteries low – Use shop truck to charge/boost & get unit running
Perform RCT, #6 is showing low & the engine code shows #4 balance extended
Perform injector cutout test, shows #4 injector/cylinder low
Disassemble interior to remove doghouse
Pull unit outside & blow out loose dirt from engine
Jan 10/19
Remove airline/valve for aux brake valve & remove valve cover
Rotate engine to check all rocker clearances, ok
Remove hi-pressure manifold & #4 injector
TDC & air up cylinder, piston dropped
Pull #6 & check cylinder, same (piston dropped) with air pressure – Possible fuel/oil from removing injector
TDC #4 again, blow out & brake clean cylinder
Air up with blow gun, piston does not drop – Either hole, crack or damaged ring
Button up engine to get unit outside, air up (had to hook up aux brake valve)
Drain fluids & remove all related parts to access & remove cylinder head
Strip down cylinder head & prep to send out for repair/reman
Remove oil pan, pistons, liners & all related parts
Clean & inspect block, found cam shaft damaged – Needs to be replaced
Side of engine oily, oil module leaking
Remove hood, rad/CAC & all related parts to access front timing covers
Remove outer timing cover & related parts to remove rear cover
Replace worn #1 camshaft bearing
Replace worn/faulty cam shaft & related parts
Clean & install rear gear cover with new gaskets
Install all related gear parts & install front cover with new oil pump, seals & related parts
Reseal hi-pressure pump & install

...continued



34421 Vye Road
Abbotsford, BC

V2S 7P6

Phone : (604) 850-0009

Fax : (604) 854-1908

Bill To:

MCRAE'S POWER SWEEPING LTD

BOX 78

28944 DOWNES ROAD

ALDERGROVE BC V4W 2T7

Ph. (604) 856-8344

109 - 44195 Yale Road
Chilliwack, BC

V2R 4H2

Phone : (604) 793-9990

Fax : (604) 793-9909

COPY

Invoice No. 0000333775

Account No.	Page
MCR002	Page 3 of 6
TT Invoice Date	
February 19, 2019	
Work Order No.	
0000946517	



Associate Dealer

Service

Parts

www.tektruck.com

Warranty

Printed: 2/19/2019 10:48:43AM

Printed by:DB*

PO Number		Payment Terms		PST Number		Location		Created	Closed	Order Date	
turbo		Net 30 days				AB		SD	DB*	January 2, 2019	
UNIT:	S08			YEAR:	2008			VIN #:	1HTMMAAN78H665211		
MAKE:	INTERNATIONAL			LICENSE:				ENGINE:	MAXXFORCE DT		
MODEL:	4300			MILEAGE:	425,753			HOURS:	22.826		
Ordered	Shipped	B/O	Item	Description					Loc.	Rate	Amount
1	1		1842130C3	THERMOSTAT PKG, DT570, DT466					CRA	132.17	132.17
14	14		1883597C1	BOLT, MAIN BEARING					CSND	21.81	305.34
5	5		7094780C1	STUD, EXHAUST PREVAILING TORQUE					CRGE	38.67	193.35
5	5		1841365C3	BOLT, EXH MANIFOLD					CSCM	15.46	77.30
4	4		40066R1	NUT, TURBO FLANGE M8					CSLK	1.13	4.52
12	12		1873884C2	BOLT, CON ROD					CSJE	15.91	190.92
2	2		1873161C2	BOLT, M12X1.75X70MM					CGG	18.28	36.56
4	4		1818402C2	RING, OIL DRAIN TUBE					CREC	4.44	17.76
1	1		1841018C2	GASKET, FRONT COVER					CTA	107.87	107.87
1	1		1841019C1	GASKET, FRONT COVER					CTA	33.09	33.09
1	1		1836243C1	GASKET, WATER INLET					CRCC	18.90	18.90
1	1		SO12	1894239C92 KIT, CAMSHAFT & LIFTER					SO	2,281.89	2,281.89
1	1		SUBFR	FREIGHT IN					SO	214.38	214.38
1	1		1841016C1	GASKET, FRONT COVER					SO	67.47	67.47
1	1		1841017C1	GASKET, FRONT COVER					SO	28.42	28.42
1	1		SUBFR	FREIGHT					SO	20.00	20.00
1	1		1821023C1	HOSE, OIL SUPPLY					SO	58.83	58.83
8	8		1823281C1	BOLT, M8X1.25X40MM					SRET	6.23	49.84
1	1		1842530C93	KIT, OIL COOLER ELEMENT					COP	815.79	815.79
1	1		1841479C1	SEAL, COOLANT HSG					CSNI	33.27	33.27

...continued



34421 Vye Road
Abbotsford, BC

V2S 7P6

Phone : (604) 850-0009

Fax : (604) 854-1908

Bill To:

MCRAE'S POWER SWEEPING LTD

BOX 78

28944 DOWNES ROAD

ALDERGROVE BC V4W 2T7

Ph. (604) 856-8344

109 - 44195 Yale Road
Chilliwack, BC

V2R 4H2

Phone : (604) 793-9990

Fax : (604) 793-9909

Invoice No. 0000333775

Account No.	Page
MCR002	Page 4 of 6
TT Invoice Date	
February 19, 2019	
Work Order No.	
0000946517	



Associate Dealer

Service

Parts

www.tektruck.com

Warranty

Printed: 2/19/2019 10:48:43AM

Printed by:DB*

PO Number		Payment Terms		PST Number		Location		Created	Closed	Order Date	
turbo		Net 30 days				AB		SD	DB*	January 2, 2019	
UNIT: S08		YEAR: 2008		VIN #: 1HTMMAAN78H665211							
MAKE: INTERNATIONAL		LICENSE:		ENGINE: MAXXFORCE DT							
MODEL: 4300		MILEAGE: 425,753		HOURS: 22,826							
Ordered	Shipped	B/O	Item	Description	Loc.	Rate	Amount				
1	1		1842124C91	KIT, OIL COOLER MODULE SEAL	BTAB	112.76	112.76				
1	1		1876109C93	KIT, OIL PUMP GEN 2	SO	1,235.14	1,235.14				
1	1		675424C1	BEARING, FRT CAM	SO	94.86	94.86				
1	1		1820287C2	BOLT, IDLER GEAR	CSEZ	20.15	20.15				
1	1		40055R1	BOLT, IDLER GEAR	CRLN	18.28	18.28				
1	1		1836005C1	GASKET, PUMP INJ	BTAA	29.90	29.90				
1	1		1836235C1	GASKET, COMPRESSOR	BTAB	52.93	52.93				
1	1		SO12	CLEAN & FLUSH EGR COOLER ASSY.	SO	127.79	127.79				
1	1		SO12	REMAN CYLINDER HEAD	SO	2,256.10	2,256.10				
2	2		SUBFR	FREIGHT (IN - OUT)	SO	70.00	140.00				
3	3		1823356C92	KIT, CYLINDER LINER SHIMS	CSCL	324.35	973.05				
5	5		AM720	CLEANER, PARTS/BRAKE	BHA	4.56	22.79				
1	1		59813	SILICONE, ULTRA BLACK 300ml	BHG	22.87	22.87				
1	1		24215	THREADLOCKER, BLUE 10ML GEL	BUA	18.17	18.17				
1	1		1841348C1	SEAL, WATER PUMP	BTAA	25.42	25.42				
1	1		1841350C1	SEAL, OIL PUMP	CSJS	24.50	24.50				
1	1		07481	DISC, ROLOC 2" MEDIUM	AJG	1.96	1.96				
1	1		1879755C1	SEAL, HI-PRESSURE OIL LINE	CRJM	3.50	3.50				
1	1		1842105C1	SEAL, HI PRES OIL ELBOW	CSNK	5.68	5.68				
1	1		SO12	1850500C92 GASKET, VALVE COVER W/ UVCH	SO	654.20	654.20				

...continued



34421 Vye Road
Abbotsford, BC

V2S 7P6

Phone : (604) 850-0009

Fax : (604) 854-1908

Bill To:

MCRAE'S POWER SWEEPING LTD

BOX 78

28944 DOWNES ROAD

ALDERGROVE BC V4W 2T7

Ph. (604) 856-8344

109 - 44195 Yale Road
Chilliwack, BC

V2R 4H2

Phone : (604) 793-9990

Fax : (604) 793-9909

Invoice No. 0000333775

Account No. Page

MCR002 Page 5 of 6

TT Invoice Date

February 19, 2019

Work Order No.

0000946517



Associate Dealer

Service

Parts

www.tektruck.com

Warranty

Printed: 2/19/2019 10:48:43AM

Printed by:DB*

PO Number		Payment Terms		PST Number	Location	Created	Closed	Order Date
turbo		Net 30 days			AB	SD	DB*	January 2, 2019
UNIT: S08		YEAR: 2008		VIN #: 1HTMMAAN78H665211				
MAKE: INTERNATIONAL		LICENSE:		ENGINE: MAXXFORCE DT				
MODEL: 4300		MILEAGE: 425,753		HOURS:		22.826		
Ordered	Shipped	B/O	Item	Description	Loc.	Rate	Amount	
1	1		SUBFR	FREIGHT IN	SO	70.00	70.00	
6	6		1841650C1	WASHER, ROCKER SUPPORT WHITE CLIP	CTP	0.93	5.58	
1	1		568-213	O RING, BUNA	BRA15	0.30	0.30	
1	1		SO12	1875326C92 DUCT ASSY, INLET	SO	299.57	299.57	
2	2		ZBJD836029-1	STRAP, 15" WIDE BLACK TIE	AJE	0.28	0.56	
1	1		AF25707	FILTER, AIR	WALL	65.51	65.51	
1	1		SO12	7753-0001 HOSE, CAC	SO	61.57	61.57	
2	2		3557857C1	CLAMP, CAC HOSE	DOP	58.25	116.50	
5	5		1844447C1	SEAL, EGR COOLER O-RING PINK	CSLC	15.02	75.10	
1	1		DOR902-5102CD	CAP, COOLANT 15 LB	AGC	21.19	21.19	
5	5		16-834X52	ANTIFREEZE, ELC 50/50 4L	DISP	11.45	57.27	
5	5		ECOANT	ECO FEE, ANTIFREEZE 4LT	SO	1.20	6.00	
33	33		ZJB222290990	OIL, DELO 400 15W40 CK4 (BULK)	SHOP	4.60	151.83	
33	33		ECOB	ECO FEE, BULK OIL PER LT	SO	0.10	3.30	
1	1		7094706C1	HOSE, EGR COOLANT	CPG	14.05	14.05	
4	4		1873940C6	HOSE, EGR COLD SIDE	CPGA	13.58	54.32	
15	15		ZBJD836019-1	STRAP, 7" BLACK TIE	AJE	0.07	1.05	
8	8		1878634C1	CLAMP, EGR HOSE	CPG	47.41	379.28	
1	1		ZBJD882350	CONNECTOR, BUTT 14-16 BLUE	AAN	0.56	0.56	
1	1		HC20-263	CLAMP, FLEX SEAL	AJL	8.48	8.48	



34421 Vye Road
Abbotsford, BC
V2S 7P6

Phone : (604) 850-0009
Fax : (604) 854-1908

Bill To:

MCRAE'S POWER SWEEPING LTD
BOX 78
28944 DOWNES ROAD
ALDERGROVE BC V4W 2T7

Ph. (604) 856-8344

109 - 44195 Yale Road
Chilliwack, BC
V2R 4H2

Phone : (604) 793-9990
Fax : (604) 793-9909

Invoice No. 0000333775

Account No.	Page
MCR002	Page 6 of 6
TT Invoice Date	
February 19, 2019	
Work Order No.	
0000946517	



Associate Dealer

Service

Parts

www.tektruck.com

Warranty

Printed: 2/19/2019 10:48:43AM

Printed by:DB*

PO Number	Payment Terms	PST Number	Location	Created	Closed	Order Date
turbo	Net 30 days		AB	SD	DB*	January 2, 2019
UNIT: S08		YEAR: 2008		VIN #:	1HTMMAAN78H665211	
MAKE: INTERNATIONAL		LICENSE:		ENGINE:	MAXXFORCE DT	
MODEL: 4300		MILEAGE: 425,753		HOURS:	22,826	
Ordered	Shipped	B/O	Item	Description	Loc.	Rate Amount

PAID
4106
MAR 25 2019

POSTED

ok'd by
Jen & Dan

TERMS: STRICTLY CASH UNLESS ARRANGEMENTS MADE. 2% INTEREST CHARGED ON OVERDUE ACCOUNTS. GST# R136944287

I hereby authorize the repair work herein set forth to be done along with necessary material and agree that to the extent permitted by law, you are not responsible for loss or damage to vehicle or articles left in vehicle 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 shipment by the supplier or transporter. I hereby grant you and / or your employees permission to operate the vehicle herein described on streets, highways, or elsewhere for the purpose of testing and / or inspection. Until payment in full of the within account, I hereby acknowledge the existence of a mechanic's lien in favour of the within dealer on the vehicle described herein in respect of the material supplied and services rendered under this work order for the full amount charged therefor. I further acknowledge that the said lien shall continue in force at all times, whether the vehicle is in my possession or possession of the dealer, until the within account is paid in full. While the vehicle is in my possession it shall at all times be subject to repossession on demand by the dealer until the within account is paid in full.

INDEBTEDNESS IS HEREBY ACKNOWLEDGED IN THE SUM OF \$ _____ BEING ALL OR THE BALANCE OWING FOR REPAIRS, PARTS & ACCESSORIES DESCRIBED IN THIS WORK ORDER.

DATE: _____

SIGNATURE: _____

** SPECIAL ORDER PARTS SUBJECT TO 20% RESTOCKING CHARGE PLUS APPLICABLE FREIGHT - ELECTRICAL COMPONENTS, SEASONAL PRODUCTS & OPEN KITS ARE NON-RETURNABLE
* CORES MUST BE RETURNED IN 60 DAYS.

DATE: _____ SIGNATURE: _____

CHARGE ACCOUNTS NET 30 DAYS FROM DATE OF INVOICE

Parts	Labour	Shop Supplies	Sublet	Sub Total	G.S.T	P.S.T	Total	Amount Due
16,508.02	11,072.00	199.00	0.00	27,779.02	1,388.95	1,944.53	31,112.50	31,112.50



Invoice

Frontier Power Products ULC
7983 Progress Way
Delta, BC Canada V4G 1A3
Tel: 604-946-5531
Fax: 604-946-8524
www.frontierpower.com

Invoice Number **373441**
Customer Code **McRaSep**
Fax # **604-856-0763**

Sold To

McRae's Septic Tank Services Ltd
PO Box 78
28944 Downes Rd
Aldergrove, BC V4W 2T7

Ship To

McRae's Septic Tank Services Ltd
PO Box 78
28944 Downes Rd, BC
V4W 2T7

Invoice Date	Ordered by	Purchase Order Number
Aug11/21	Dennis Linnen	Dennis S08
Net 30 Days	Rick Byzitter	Delta
Terms	Salesperson	F.O.B.
		Customer - pickup
		Ship Via

Ordered	Quantity	B/O	Product Number	Description	Each	Amount
1	1	s/n	PE4045J020635	4045TF270I99R John_Deere Engin	12070.00	12070.00
				Per agreement, core must be returned within 30 days.		
				Core must be complete per the supplied replacement engine.		
				Subtotal		\$12,070.00
				G.S.T./H.S.T.		603.50
				BC Provincial Sales Tax		844.90
				Invoice Total		\$13,518.40

COPY

PAID
SEP 28 2021
13063

ST Registration number R101898013.

Please call for authorization before returning goods.

Frontier Power Products Ltd. will remain the sole and only owner of these goods until total payment of same is received by Frontier. Service charges of 18% per annum will be charged on overdue accounts.

New equipment, new parts and factory rebuilt assemblies are warranted by the manufacturer, and are subject to their time limits and conditions. Service work and assemblies rebuilt by Frontier are warranted for 90 days from the date of delivery unless otherwise specified in writing.

All claims must be made immediately on discovery, within the above time limits, to be eligible for warranty consideration. Improper installation, misuse or improper servicing or maintenance will void all warranties. Consequential damage, downtime and freight charges are not covered by warranties.

REVISED



Important Information Regarding New Replacement Engines

New replacement engines that do not meet current emissions regulations are permitted under certain circumstances. This is true in both the USA and Canada.

It is required by law that the old engine be returned to the seller of the replacement engine.

You may not keep the "core" or used engine. The core must be returned and destroyed so it cannot be returned to service. The core must be completely assembled, in "as removed" condition, drained of all fluids and mounted on the new engine shipping stand. You may not keep component parts, such as the ECU, from the core engine or return an engine from a different application. Additional charges may apply if the core does not meet the criteria.

Age limits for eligible Replacement Label Engines;

Revised 16 Jun 2019

⌘ Non-road mobile equipment 40 years ⌘ Stationary applications 15 years

This requirement is not imposed by Frontier Power Products ULC. It is federal law per federal regulation § 1068.240 and 40 CFR 60.4210(i).

Please return your complete core engine, freight prepaid, to:

Frontier Power Products
9204 37Ave NW
Edmonton, AB T6E 5L4
Attn: Jeremy Hastings

You have **thirty (30) days from the date of sale of the replacement engine to return the core.** If, for any reason, you are unable to return the core engine on time, please contact your sales representative to let us know when it will be returned.

Thank you for your understanding and cooperation.

Revised 16 Jun 2019

By signing this statement, you are acknowledging your understanding of this requirement. Please return the signed acknowledgment to your Frontier Power Products sales representative. The shipment or pick up can then be made.

Company Name:

City:

Name:

Title:

New John Deere Replacement Engine Model:

Serial No:

Revised 28 Jun 2019

To Replace Old Engine;

Make:

Model:

Serial No:

Application; ☒ Non-Road Mobile 40 years old or newer ☐ Stationary 15 years old or newer

Signature _____

Date _____

Section B

Please fill out the following information COMPLETELY before an order for a new non-current tier replacement engine is placed:

Serial number of engine being replaced:

Reason(s) why a new non-certified replacement engine is being sought:

Envelope size will not work, exhaust will not fit, cooling package will not fit in existing enclosure.

It is required that the engine being replaced be returned to John Deere once it is replaced with the new replacement engine. See MIB11-01, dated 27 January 2011 for additional details.

Distributor:

Address:

City, Prov:

Phone No.:

Email:

Signature: *Rick Byzitter*

Date:

By the signature above I acknowledge that the information provided above is accurate, and I take sole responsibility for ensuring that the engine which is replaced by the new, non-certified replacement engine will be returned to John Deere per instructions found in MIB11-01 mentioned above. *I further understand that failure to take possession and return the engine being replaced is a violation of Federal Law and subject to civil penalty.*

Approved by:



Frontier Power Products Ltd.

(Engine Distributor)

Date: *08/12/2021*

PHYSICAL AND PERFORMANCE CHARACTERISTICS

This chart is offered as a guide, not a definitive list, of an engine's physical and performance characteristics. Other physical and performance characteristics may exist and be considered.

PHYSICAL CHARACTERISTICS	Does the certified engine have the SAME Characteristic?	Explanation
Cooling System	YES	If the certified engine requires only minor upgrades to the radiator(s), then the certified engine has the same physical characteristic.
Mounts	YES	If the certified engine requires only minor changes to the mounts, then the certified engine has the same physical characteristic.
Air Inlet System	MAYBE	If the certified engine requires that only the piping needs to be modified to suit the turbocharger, the certified engine has the same physical characteristic. If the certified engine requires that the piping and the turbocharger need modification, then the certified engine has a different physical characteristic.
Exhaust System	MAYBE	If certified engine requires that only the piping needs to be modified to adapt to the turbocharger, then the certified engine has the same characteristic. If the certified engine requires a change to the whole exhaust system, then the certified engine has a different physical characteristic.
Control System	MAYBE	If certified engine requires the same electronics, then the certified engine has the same characteristic. If the certified engine requires different electronics, engineering judgment is required to determine whether the modifications needed for the new electronics make the certified engine significantly different.
Dimensions/Weight	MAYBE	Engineering judgment determines that the certified engine will fit into the engine compartment, then the certified engine is different.
PERFORMANCE CHARACTERISTICS*		
HP/Speed/Torque	YES	If certified engine meets the requirements of the equipment & their customer, then the certified engine has the same performance characteristics.
Engine Life	YES	If the certified engine meets the expectations of the customer after the useful engine life, the same performance characteristics.

The physical and performance characteristics listed in this table apply to nonroad engines only. Fuel consumption, smoke, emissions, operation characteristics, and changes in maintenance intervals do not affect the performance of the engine.

Service Replacement Questionnaire

To ensure compliance with EPA, CARB and Environment Canada regulations, please complete the following questionnaire prior to placing an order for a new, non-certified replacement engine:

1. Customer/Dealer Name (sold to): Inv No.
☒ Customer ☐ Dealer DTAC case# (if applicable):
2. Manufacturer of the engine being replaced? (Cat, Cummins, DDC, etc.)
3. Is this a "stationary" or "non-road mobile" application?
4. Model year of the engine being replaced?
Age? (years since installation)
5. Model number & serial number of the engine being replaced?
6. Is the engine being replaced a current tier engine? ☐ Yes ☒ No
What level of certification does it have? (Tier level)
7. Provide the following information for the engine being replaced:
Horsepower & Rated Speed: HP @ RPM
Peak Torque (if applicable): ft/lbs (N/A if unknown)
EPA Category:
OEM Equipment Manufacturer: Brand name; "Unknown" not acceptable
Model year of equipment:
8. Distributor Name: **Frontier Power Products Ltd. (2E9006)**
9. Replacement (new) engine model & serial number:
10. Does the manufacturer of the engine being replaced have a current tier engine available for this application? ☐ Yes ☒ No
If **Yes**, continue to question 11
If **No**, and replacing a competitive engine with a John Deere engine, continue to Question 11
If **No**, and replacing a John Deere engine, continue to **Section B** (see Page 2)
11. Does John Deere Power Systems have a current tier engine available for this application? ☐ Yes ☒ No
If **Yes**, continue to question 12
If **No**, continue to **SECTION B** (see Page 2)
12. Does the current tier engine have the same physical or performance characteristics as the engine being replaced? (see attachment for definitions of physical and performance characteristics for guidance – Page 3) ☐ Yes ☒ No
If **Yes**, a current tier engine must be used
If **No**, continue to **SECTION B** (see Page 2)