

Date	Time	04
01/22/19	21:00:19 (B)	Invoice No.
Account No.	Phone No.	

SERVICE INVOICE

STK#/FLEET#
11003564

SPRAYER (HAARBERG) <
4830

HRS PIN/EIN
2096 N04830X003564

WARRANTY DATE HRS
04/14/10

Remove high pressure fuel lines.
Remove fuel injectors.

Install new injectors.

Install in reverse order and test operation.

CRSE501934

DZ104957

DZ104958

DZ104959

H23125

RE522878

RE541922

RE57190

R123575

R515044

R518543

R519484

R519486

R519487

R519488

R519489

R519582

R520121

R520672

R524497

R72328

SE501934

Injection Nozzl

Fuel Line

Fuel Line

Fuel Line

PLUG

FILTER ELE

Filter Element

SEAL

O-RING

FITTING

O-RING

CAP SCREW

CAP SCREW

GASKET

GASKET

GASKET

SLEEVE

CAP SCREW

Cap Screw

GASKET

O-RING

INJECTION NOZZL

Injection Nozzle Reman

FLANGE NUT

SCREW

SCREW

6-

2 N

2 N

2 N

7

1

1

1

7 N

6 N

2

1

12 N

3

6

1

6

3

2 N

1

1

6 N

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STK#/FLEET#	HRS	PIN/EIN	WARRANTY DATE	HRS
11003564			04/14/10	
SPRAYER (HAARBERG) <	2096	N04830X003564		
4830				

PARTS
LABOR

10700005

SEGMENT TOTAL==>

SEGMENT# 8 C 545 ASSOCIATED 12/05/18 01/02/19 02/28/19
ADJUST VALVES
Note; labor reduced, shared job.

LABOR

10700005

SEGMENT TOTAL==>

SEGMENT# 9 C 545 NA 12/05/18 01/03/19 02/28/19
LOWER RADIATOR HOSE, R&R
AT13740 DRAIN VALV 1
RE56098 CLAMP 4
R196306 HOSE 1
R248704 HOSE 1

PARTS
LABOR

10700005

SEGMENT TOTAL==>

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

PARTS
LABOR
EPA DISPOSAL FE
SHOP SUPPLIES
TOTAL FARMPLAN

7868.40

348161

Date	Time	Page
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11003564	SPRAYER (HAARBERG) <	2096	N04830X003564	04/14/10
4830				

PARTS
LABOR

10700005

SEGMENT TOTAL==>

SEGMENT#	8	C	545	ASSOCIATED	12/05/18	01/02/19	02/28/19
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ADJUST VALVES

Note; labor reduced, shared job.

LABOR

10700005

SEGMENT TOTAL==>

SEGMENT#	9	C	545	NA	12/05/18	01/03/19	02/28/19
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LOWER RADIATOR HOSE, R&R

AT13740

DRAIN VALV

RE56098

CLAMP

R196306

HOSE

R248704

HOSE

PARTS
LABOR

SEGMENT TOTAL==>

10700005

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

PARTS
LABOR

EPA DISPOSAL FE
SHOP SUPPLIES
TOTAL FARMPLAN

7868.40

Date	Time	Page
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SERVICE INVOICE

STK#/FLEET#	HRS	PIN/EIN	WARRANTY DATE	HRS
11003564		2096 N04830X003564	04/14/10	
SPRAYER (HAARBERG) < 4830				

PARTS
LABOR

SEGMENT TOTAL==>

10700005

SEGMENT# 8 C 545 ASSOCIATED 12/05/18 01/02/19 02/28/19
ADJUST VALVES
Note; labor reduced, shared job.

LABOR

SEGMENT TOTAL==>

10700005

SEGMENT# 9 C 545 NA 12/05/18 01/03/19 02/28/19
LOWER RADIATOR HOSE, R&R
AT13740 DRAIN VALV 1
RE56098 CLAMP 4
R196306 HOSE 1
R248704 HOSE 1

PARTS
LABOR

SEGMENT TOTAL==>

10700005

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

PARTS
LABOR
EPA DISPOSAL FE
SHOP SUPPLIES
TOTAL FARMPLAN

7868.40

Date	Time	Invoice No.
01/22/19	21:00:19 (B)	01
Account No.	Phone No.	

SERVICE INVOICE

STK#/FLEET# 11003564 SPRAYER (HAARBERG) < 4830
 HRS 2096 PIN/EIN N04830X003564
 WARRANTY DATE 04/14/10 HRS

SEGMENT# 1 C 545 NA 12/05/18 12/12/18 02/28/19

DIAGNOSE FUEL SENSOR CODES

Heated to operating temperature.
 Code is not active.
 Checked harness to WIF sensor.
 Performed wiggle test.
 Performed continuity test.
 Found water separator sediment bowl missing from filter.
 Install new bowl and sensor.
 Test ran and still could not get code to become active.

DIESELFUEL
 FRT
 RE51650
 RE519696

DIESEL 20
 FREIGHT CHARGE 1
 SEDIMENT BOWL 1 N
 SENSOR 1

PARTS
 LABOR

SEGMENT TOTAL==>

10700005

SEGMENT# 2 C 545 NA 12/05/18 12/13/18 02/28/19

DIAGNOSE BATTERY DRAW

Attempt to jump start.
 Hook up battery charger and let sit.
 Brought unit into shop.
 Check and clean terminals.
 Perform draw test.
 Remove ground points by batteries and clean.
 Could not locate cause of draw.
 Load test batteries.
 Replace battery.

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SERVICE INVOICE

STK#/FLEET#		HRS	PIN/EIN	WARRANTY DATE	HRS
11003564	SPRAYER (HAARBERG) <	1666	N04830X003564	04/14/10	
	4830				

REPAIR# 1 C 545 NA 08/22/16 08/22/16 08/31/16

DIAGNOSE HYDROSTAT

- Checked over.
- Checked oil level, within specifications.
- Heated oil to operating temperature.
- Checked speed range inputs on motors.
- Found shift magnetism operating properly.
- Checked charge pressure, within specifications.
- Performed performance test, within specifications.
- Performed neutral charge pressure test, within specifications.
- Tested reverse boost engage pressure, within specifications.
- Tested can drain on front 2 motors.
- Front motors failed test.
- Tested rear motors, within specifications.

10700005 LABOR REPAIR TOTAL==>

REPAIR# 2 C 545 NA 08/22/16 08/23/16 08/31/16

REPAIR HYDROSTAT

- Drained oil.
- Bled air from suspension.
- Removed wheel.
- Removed hoses and wires.
- Swapped fittings to new motor.
- Replaced motor.
- Reassembled.
- Replaced oil in all 4 hubs.

AN203010 FILTER

SERVICE INVO

STK#/FLEET#

11003564

statement.

SPRAYER (HAARBERG) <
4830

HRS	PIN/EIN
1666	N04830X003564

WARRANTY DATE	HRS
04/14/10	

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SERVICE INVOICE

***** STK#/FLEET#	HRS	PIN/EIN	WARRANTY DATE	HRS
11003564	SPRAYER (HAARBERG) <	1240	N04830X003564	
4830				

PARTS
LABOR

10700033 REPAIR TOTAL==>

REPAIR# 3 C 383 NA 02/19/15 02/21/15 02/28/15

REPAIR BATTERY DRAIN.

TESTED FOR BATTERY DRAW.

FOUND THAT RADIO WAS CAUSING DRAW.

INSPECTED RADIO AND FOUND LOOSE GROUND CONNECTION.

RE-TESTED AND FOUND THAT DRAIN ON BATTERIES WAS GONE.

LABOR

10700033 REPAIR TOTAL==>

REPAIR# 4 C 381 NA 02/19/15 02/21/15 02/28/15

CENTER FRAME REPAIRS

INSTALLED NEW FOLD BRACKET, WEAR PLATES, AND FOLD LINKS.

UNFOLDED SPRAYER AND ADDED THREE CENTER FRAME SHIMS PER SIDE.

CONDUCTED OPERATIONAL TEST.

AKK12671	Bracket	2 N
AN307155	BOOM LINK	2 S
AN406652	Bracket	2 N
H84374	BUSHING	8 N
N314067	SHIM	6 N
N412209	Plate	4 N
N412223	Wear Plate	4 N
N412225	Plate	2 N
14M7698	LOCK NUT	4 N
14M7726	Lock Nut	8 N
19M9410	SCREW	2 N
19M9701	Screw	8 N

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11003564	SPRAYER (HAARBERG) < 4830	1240	N04830X003564		
19M9858	SCREW	6	N		
				PARTS	
				LABOR	
10700033				REPAIR TOTAL==>	

REPAIR# 5 C 381 FUELFLUSH 02/19/15 02/21/15 02/28/15
 FLUSH EUI FUEL SYSTEM
 WARM ENGINE TO OPERATING TEMPARATURE.
 R&R FUEL SUPPLY LINE AND INSTALL FLUSHING UNIT.
 IDLE FOR 5 MINUTES.
 SURGE 5 TO 10 MINUTES FROM LOW/HIGH IDLE.
 IDLE ENGINE @ 75% RPM UNTIL SOLUTION IS GONE.
 REASSEMBLE AND CHECK PERFORMANCE.

RE522878	FUEL FILTER	1	
RE541922	Filter Element	1	
SW10967P1	FUEL FILTER	1	S
TY26827	32OZ FUEL CLNR	1	S
TY27017	FUEL CLEANER	1	S

PARTS
LABOR

10700033 REPAIR TOTAL==>

REPAIR# 6 C 381 NA 02/19/15 02/21/15 02/28/15
 TREAD ADJUST SHIMS, ADJUST
 JACK UP AXLE ASSEMBLY.
 TORQUE SHIM BOLTS TO SPECIFICATION.
 ADJUST TREAD FULL IN AND FULL OUT.

T77814	O-RING	4	
X1JS43-4-4	FITTING	2	
X302-4-RL	1/4" HYD HOSE	59	

PARTS

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SERVICE INVOICE

STK#/FLEET# HRS PIN/EIN WARRANTY DATE HRS

11003564 SPRAYER (HAARBERG) < 1240 N04830X003564

4830

LABOR

10700033 REPAIR TOTAL==>

REPAIR# 7 C 381 NA 02/19/15 02/21/15 02/28/15

ADJUST SCISSOR SUSPENSION

INSTALLED SHIMS TO ALL FOUR SCISSOR SUSPENSIONS.

GREASED ALL JOINTS.

JD7844	ZERK	1
N209346	SHIM	12 S
11M7032	COTTER PIN	14

PARTS

LABOR

10700033 REPAIR TOTAL==>

REPAIR# 8 C 381 NA 02/19/15 02/21/15 02/28/15

REPLACE AIR BLEED LINE ON RADIATOR

INSTALLED NEW BLEED LINE TO RADIATOR OVER FLOW TANK.

SECURED BLEED LINE TO HYDRAULIC STEEL LINES RUNNING ON THE TOP OF THE ENGINE.

ADDED COOLANT TO THE SYSTEM.

R226342	Hose	1 N
R248396	HOSE	1 N
R44302	TIE BAND	4

PARTS

LABOR

10700033 REPAIR TOTAL==>

REPAIR# 9 C 381 ROTATETIR 02/19/15 02/21/15 02/28/15

ROTATE TIRES FOR SPAYERS

JACKUP AND SUPPORT ON SAFETY STAND.

ROTATE TIRES FRONT TO BACK.

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11003564	SPRAYER (HAARBERG) < 4830	1240	N04830X003564		

TORQUE WHEEL HARDWARE TO SPECIFICATION.
TEST DRIVE AND RETORQUE WHEEL HARDWARE.

LABOR
10700033 REPAIR TOTAL==>

REPAIR# 10 C 381 NA 02/19/15 02/21/15 02/28/15

RESEAL LOAD SENSE VALVE.
CLEANED EXTERIOR OF COMBINATION VALVE.
REMOVED LOAD SENSE JAM VALVE.
REMOVED OLD O-RINGS.
INSTALLED NEW SEAL KIT.
TIGHTENED JAM VALVE TO SPEC WITH SOLENOID.
CONDUCTED RUN TEST.

AH209121	SEAL KIT	1	
			PARTS
			LABOR
10700033			REPAIR TOTAL==>

REPAIR# 11 C 381 NA 02/19/15 02/21/15 02/28/15

MISC REPAIRS.
SECURED REAR BRAKE LINES.
REPLACED AIR DRYER MUFFLER.
REPLACED RIGHT AND LEFT SIDE SOLUTION HOSE RUNNING BETWEEN
INNER AND OUTER BOOM SECTIONS.

AH164497	LAMP	1
AN204970	MUFFLER	1 N
G10M	METRIC 10.9	3
H77698	TIE BAND	64
R44302	TIE BAND	6
TY25755	1-1/4 HOSE	20
TY26575	1G PREMIX	1

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11003564				
	SPRAYER (HAARBERG) <	1240	N04830X003564	
	4830			
XCL-29	Hose Clamp	1		
			PARTS	
			LABOR	
10700033			REPAIR TOTAL==>	

REPAIR# 12 C 381 NA 02/19/15 02/21/15 02/28/15

BASIC SERVICE

SERVICE ENGINE OIL AND FILTER.

SERVICE ENGINE AIR FILTERS.

SERVICE CAB AIR FILTERS.

SERVICE ENGINE FUEL FILTERS.

SERVICE HYDRAULIC AND HYDRO FILTERS.

GREASE AT ALL GREASE POINTS.

RUN AND CHECK FOR LEAKS.

AN203010	HYD. FILTER	3 S	
TY22076	2.5G 10W30 T/G	6 O	
TY25744	SYN. GREASE	3	
TY26372	SYN 80W140 QT.	8 S	

PARTS
LABOR
REPAIR TOTAL==>

10700033

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

PARTS
LABOR
DEL VEH SEMI
ENVIRO FEE
PRIORITY SVC DI
SERV ACCESORIES
SUB TOTAL==>

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11003564	SPRAYER (HAARBERG) < 4830	1240	N04830X003564		

COLORADO ST 2.9%
WASH COUNTY CO 1.5%
AKRON CITY 2.5%
FARMPLAN CHARGE

726425

10345.42

21st Century
EQUIPMENT LLC

Ship to:

SAME AS BELOW

Invoice to:

Branch		*REPRINT*	
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Account No.	Phone No.	Invoice No.	
Ship Via		Purchase Order	
		Salesperson	

SERVICE INVOICE

STK#/FLEET#

11003564

SPRAYER (HAARBERG) <
4830

HRS PIN/EIN

1666 N04830X003564

WARRANTY DATE

04/14/10

HRS

REPAIR# 1 C 545 NA

08/22/16 08/22/16 08/31/16

DIAGNOSE HYDROSTAT

Checked over.

Checked oil level, within specifications.

Heated oil to operating temperature.

Checked speed range inputs on motors.

Found shift magnetism operating properly.

Checked charge pressure, within specifications.

Performed performance test, within specifications.

Performed neutral charge pressure test, within specifications.

Tested reverse boost engage pressure, within specifications.

Tested can drain on front 2 motors.

Front motors failed test.

Tested rear motors, within specifications.

10700005

LABOR
REPAIR TOTAL==>

REPAIR# 2 C 545 NA

08/22/16 08/23/16 08/31/16

REPAIR HYDROSTAT

Drained oil.

Bled air from suspension.

Removed wheel.

Removed hoses and wires.

Swapped fittings to new motor.

Replaced motor.

Reassembled.

Replaced oil in all 4 hubs.

AN203010 FILTER

2

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Ship to:

Invoice to:

Branch

Date

Time

Page

09/17/16

23:01:51 (B)

02

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Invoice No.

Ship Via

Purchase Order

Salesperson

SERVICE INVOICE

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11003564

SPRAYER (HAARBERG) <
4830

HRS

1666

PIN/EIN

N04830X003564

WARRANTY DATE

04/14/10

HRS

AN208051

Hydraulic Filter

HYDRAULIC MO

1 N

CRAN208051

LESS CORE

1-

14063

11.8 Cable tie

1

PARTS

LABOR

10700005

REPAIR TOTAL==>

REPAIR# 3 C 545 NA

08/22/16 08/23/16 08/31/16

BOOM FOLD SENSOR

Checked over.

Replaced sensor.

Tested.

AKK16814

SENSOR

1

FRT

FREIGHT CHARGE

1

R26375

O-RING

1

PARTS

LABOR

10700005

REPAIR TOTAL==>

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

PARTS

LABOR

EPA DISPOSAL FE

SHOP SUPPLIES

TOTAL FARMPLAN

398892

XXXXXX0765

6357.55

SERVICE INVOICE

STK#/FLEET#

11003564

statement.

SPRAYER (HAARBERG) <
4830

HRS PIN/EIN
1666 N04830X003564

WARRANTY DATE
04/14/10

HRS