Midwest Machinery Co. PO Box 123 516 1st Street E Madison, MN 56256

Phone: (320) 598-7575





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Invoice To Account No: 826624 SERVICE INVOICE Invoice Number: 9480962 Invoice Date 01/30/2023 Location: Work Order Number: 811850 Payment Type: Finance Phone Number: Page: 1 of 2 Make/Model: Meter Serial Number: EQ Id: Fleet No: 2019 JOHN DEERE S770 860 1H0S770SCK0805708 1H0S770SCK0805708

Gen- Retail

COMPLAINT:

02 General Repairs

CAUSE:

CORRECTION:

Replaced the feederhouse drive chain and unload drive chain.

Drive shaft hanger bearing was loose. Removed u-joint from primary countershaft gearbox. Slide front half of drive shaft out. Unbolted hanger bearing from combine and removed rear half of the drive shaft. Found the 2 rear u-joints had flat spots and stiff. Removed u-joints from the drive shaft. Pressed in new u-joints. Cut rubber isolator off of the hanger bearing. Installed puller onto the bearing and pulled from the shaft. Cleaned up and pressed on a new hanger bearing. Pressed on dust cover. Reinstalled rear drive shaft and bolted hanger bearing into place. Lined yokes up and installed front drive shaft. Torqued front u-joint bolts.

Cast shoe auger idler had a rough bearing. Removed idler. Removed snap ring and pressed out bearing. Pressed in new bearing and installed snap ring. Reinstalled idler.

Loosened the tailings elevator chain. Removed a half link and re-tensioned the chain.

Loading auger gearbox output shaft bearings loose. Removed active yield sensor, rear cross auger cover, and drive pulley shields. Installed puller onto the drive pulley. Pulled pulley off of the shaft. Folded loading auger down. Removed end hanger bearing bracket and slid the auger out enough to get gearbox out. Unbolted the gearbox and lifted out of its sump. Drained oil from the gearbox and disassembled. Pushed output shaft out. Replaced bearings and assembled with new bearings and seal. Assembled gearbox and filled with oil. Reinstalled gearbox into the sump and reassembled all shields.

Upper feederhouse belt was cracked. Disassembled upper variable pulleys to get belt off. Removed reel pump hose as last fall hose had been rubbed through and rerouted by customer. Removed hosed and cut end off of the pump end. Installed a 45 degree fitting to make more clearance between the belts when reinstalled. Replaced the upper belt. Customer wanted direct drive kit installed onto the feederhouse as well. Removed rest of the upper variable pulleys. Installed new direct drive brackets and pulley. Assembled tensioner bracket and pulleys and installed. Removed the reverser variable pulleys and cam. Slid on new direct drive pulley onto the reverser. Torqued nut to spec and install locking plate. Installed belt onto pulleys and tensioned. Installed upper shields and found bolt holds of the shield did not line up with the bracket holes. Drilled new holes in the shield and bolts shields in place.

Took combine outside and ran machine, checked over and all ok.

<u>PartNumber</u>	<u>Description</u>	Quantity	List Price	Extended Price	Taxed Ind
24M7207	WASHER	1,00	0,60	\$0.60	N
AE42998	TAPERED RO	1.00	61.31	\$61.31	N
AH131860	SEAL	1.00	35,71	\$35.71	N
AH168588	Pulley	-1.00	851.70	-\$350.00	N
Comment: RETU	RNED OUT OF BH84417			,	
AH207922	UNIVERSAL	2.00	189.95	\$379.90	Ñ
AH229100	BEARING KI	1.00	188.58	\$188.58	N
AKK15137	BEARING	1.00	97.56	\$97.56	N
AXE53952	Roller Cha.	1,00	257,24	\$257.24	N
AXE80368	LINK CHAIN	1.00	160,03	\$160.03	N
BH84417	FXD SPD DR	1.00	1,253,10	\$1,253.10	N N
H137328	LOCK NUT	1.00	1,23	\$1.23	N N
H149361	LOCK NUT	1.00	4.64	\$4.64	N

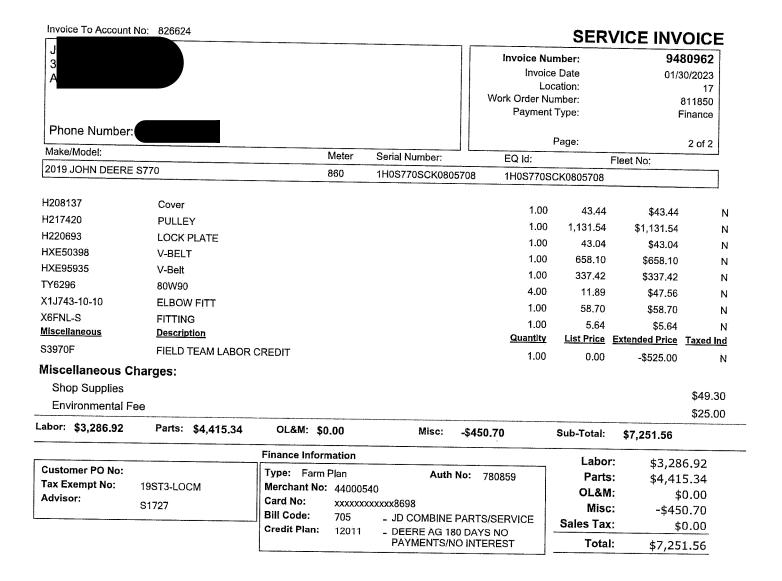
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TERMS AND CONDITIONS

This purchase(s) is subject to the terms of the Multi-Use Account, a service of John Deere Financial, f.s.b. I grant the issuer a purchase money security interest, except as limited in that agreement, in the goods described.

Received by:	Date:
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Invoice To Account No: 105 SERVICE INVOICE Invoice Number: 9289100 Invoice Date 08/19/2022 Location: 17 Work Order Number: 759263 Payment Type: Account Phone Number: Page: 1 of 2 Make/Model: Meter Serial Number: EQ Id: Fleet No: 2019 JOHN DEERE \$770 595 1H0S770SCK0805708 1H0S770SCK0805708

/POWERGARD WAR-01 Warranty

COMPLAINT:

HYDRAULIC OIL IS TRANSFERRING FROM RESERVOIR TO MAIN ENGINE GEAR CASE.

KEY PART NUMBER THAT CAUSED THE FAILURE: DE20413

QUANTITY: 2

METER READING: 595 DOWNTIME: UNKNOWN FAILURE MODE: LEAKED

FAILURE AREA: TRANSMISSION BRAKE, PRODRIVE

DTAC CASE: 2073919

DTAC SOLUTIONS USED: 91559

HOURS OF DIAGNOSTIC TIME SPENT TO FIND THE PROBLEM: 18.00

CAUSE:

INSPECTED AND FOUND O-RINGS WERE FLAT AND OUTER SEALS HAD GROOVES IN THEM, LEAKING HYDRAULIC OIL INTO THE TRANSMISSION

CORRECTION:

Combine had been transferring oil from the hydraulic reservoir to the main engine gearcase. Customer stated about 1 gallon a day. Unbolted and split the main hydraulic pump and the transmission supply pump. Cavity in between pumps was dry. No leak detected. Removed brake lines and fittings. Installed DR fitting and pressurized each brake. Pressure would drop about 50 PSI in 15 minutes. According to Service Advisor, pressure drop was within spec. Followed Service Advisor diagnostics. Drained hydraulic oil. Removed the case drain line from the hydro motor. Pressurized the motor case. Unbolted the motor from the transmission to check the shaft seal with the case pressurized. No leak was detected coming from the shaft seal. Next step of the Service Advisor diagnostics was to pressurize the hydro pump. Removed all lines from the pump as Service Advisor had said. Installed DR fitting. Used hand pump and pressurized hydro pump. Took some time to get pressurized as oil had drained out when removing the lines. Got pressurized. Held 60 PSI without dropping pressure over an hour. Created DTAC case #2073919. DTAC recommended to look at the service brake seals. Took combine in wash bay and washed off excess oil. Jacked combine up. Removed final drive drive shafts. Drained transmission oil. Removed accumulator from the right side. Removed service brake line and capped. Unbolted the service brake assembly from the transmission. Set assembly onto bench. Removed cap from brake line. Applied air to the brake piston. Removed piston. Cleaned up piston. Replaced inner and outer seals. Reinstalled piston. Installed brake assembly into transmission. Installed accumulator and brake line. Installed drive shaft. Repaired the left brake piston as well. Assembled combine. Ran and checked operation. Everything was working good.

<u>PartNumber</u>	<u>Description</u>	Quantity	List Price	Extended Price	Tayed Ind
AR69445	HYGARD SHOP OIL (QT)	11.00	5.25	\$50.60	N
DE20413	Seal	2.00	149.84	\$299.68	N
DE20414	Seal	2.00	127.33	\$254.66	N
R63226	Ring	2.00	11.79	\$23.58	N.
Miscellaneous	Description	Quantity	List Price		
P3750 Comment: AZ428	FREIGHT	1.00	10.45	\$10.45	N
P5283	WARRANTY DEDUCTIBLE	1.00	0.00	-\$500.00	N

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Invoice To Account No: 105 SERVICE INVOICE Invoice Number: 9289100 Invoice Date 08/19/2022 Location: Work Order Number: 759263 Payment Type: Account Phone Number: Page: 2 of 2 Make/Model: Meter Serial Number: EQ ld: Fleet No: 2019 JOHN DEERE S770 595 1H0S770SCK0805708 1H0S770SCK0805708

Labor: \$2,739.80 Parts: \$628.52 OL&M: \$0.00 Misc: -\$489.55 Sub-Total: \$2,878.77 Labor: \$2,739.80 **Customer PO No:** Parts: \$628.52 Tax Exempt No: ST3-INTERNAL OL&M: \$0.00 Advisor: S1727 Misc: -\$489.55 Sales Tax: \$0.00 Total: \$2,878.77

TERMS AND CONDITIONS

Received by: Date:

PO Box 123 516 1st Street E

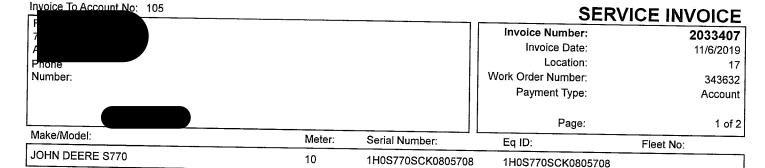
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Fax: (320) 598-3069





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/WARRANTY-P01 Warranty

COMPLAINT:

LEFT REAR WHEEL BOLTS ARE MISSING.

KEY PART NUMBER THAT CAUSED THE FAILURE: H168476

QUANTITY: 3 DOWNTIME: NONE FAILURE MODE: LOOSE

FAILURE AREA: LEFT REAR WHEEL

DTAC CASE: NA

DTAC SOLUTIONS USED: NA

HOURS OF DIAGNOSTIC TIME SPENT TO FIND THE PROBLEM: NA

CAUSE:

BOLTS CAME LOOSE, FELL OUT, AND WENT MISSING.

CORRECTION:

REPAIRS WERE DONE IN THE FIELD. REAR WHEEL BOLTS CAME LOOSE AND FELL OUT. INSTALLED 3 NEW BOLTS. TIGHTENED ALL BOLTS AND TORQUED TO SPEC.

Labor: \$228.62	Parts: \$15.39	OL&M: \$0.00	Misc: \$0.00	Sub-Total: \$244.01	_
Part Number H168476	Description SCREW		Quantity Lis 3.00	st Price Extended Price Taxed 5.13 \$15.39	N

WARRANTYDRIVETIME Warranty

COMPLAINT:

WARRANTY DRIVE TIME

CORRECTION:

WARRANTY DRIVE TIME

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Invoice To Account No: 10	05				SERVIC	E INVOICE
Number:				Invoice Num Invoice I Loca Work Order Num Payment T	nber: Date: ation: nber:	2033407 11/6/2019 17 343632 Account
Make/Model:				P	age:	2 of 2
		Meter:	Serial Number:	Eq ID:	F	leet No:
JOHN DEERE S770		10	1H0S770SCK08057	708 1H0S770SCF	K0805708	
WARRANTYDRIVETIME	Warranty					
Labor: \$36.61	Parts: \$0.00	OL&M:	\$0.00	Misc: \$0.00	Sub-Total:	\$36.61

Customer PO No:

Tax Exempt No:

ST3-INTERNAL

Advisor:

1723

* * * DOCUMENT COPY * * *

Sales Tax: \$0.00 **Grand Total:** \$280.62

\$265.23

\$15.39

\$0.00

\$0.00

Labor:

Parts:

OL&M:

Misc:

TERMS AND CONDITIONS

Terms are Net 30. A finance charge of 1 1/2% per month (18% annual percentage rate) will be added to all past due invoices except where prohibited by law. All returned checks are subject to a \$30.00 returned check fee.

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Invoice To Account No: 105 SERVICE INVOICE Invoice Number: 2039693 Invoice Date: 11/14/2019 Location: 17 Number: Work Order Number: 342137 Payment Type: Account Page: 1 of 2 Make/Model: Meter: Serial Number: Eq ID: Fleet No: JOHN DEERE S770 5 1H0S770SCK0805708 1H0S770SCK0805708

/WARRANTY-P01 Warranty

COMPLAINT: REPAIR OIL LEAK.

KEY PART NUMBER THAT CAUSED THE FAILURE: R107768

QUANTITY: NA

DOWNTIME: UNKNOWN FAILURE MODE: LOOSE

FAILURE AREA: MAIN HYDRAULIC VALVE, HEAVY DUTY

DTAC CASE: NA

DTAC SOLUTIONS USED: NA

HOURS OF DIAGNOSTIC TIME SPENT TO FIND THE PROBLEM: 0.50

CAUSE

INSPECTED AND FOUND PLUG WAS LOOSE CAUSING O-RING TO BE DAMAGED.

CORRECTION:

Checked over for leak. Found plug was loose causing o-ring to leak on main hydraulic valve stack. Unbolted valve stack from combine. Removed plug. Replaced o-ring. Installed and tightened plug. Installed valve on combine. Cleaned up area around valve. Ran and checked for leaks. All was ok

<u>Part Number</u> 51M7041	<u>Description</u> O-RING		Quantity List Price 1.00 2.17	Extended Price Taxed Ind \$2.17
Labor: \$298.73	Parts: \$2.17	OL&M: \$0.00	Misc: \$0.00	Sub-Total: \$300.90

WARRANTYDRIVETIME Warranty

COMPLAINT:

WARRANTY DRIVE TIME

CORRECTION:

WARRANTY DRIVE TIME

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Invoice To Account No: 105 **SERVICE INVOICE** Invoice Number: 2039693 Invoice Date: 11/14/2019 Location: 17 Number: Work Order Number: 342137 Payment Type: Account Page: 2 of 2 Make/Model: Meter: Serial Number: Eq ID: Fleet No: JOHN DEERE S770 5 1H0S770SCK0805708 1H0S770SCK0805708

WARRANTYDRIVETIME Warranty

Labor: \$72.70	Parts: \$0.00	OL&M:	\$0.00	Misc: \$0.00	Sub-Total:	\$72.70
Customer PO No:					Labor:	\$371.43
					Parts:	\$2.17
Tax Exempt No:	ST3-INTERNAL				OL&M:	\$0.00
Advisor:	1727				Misc:	\$0.00
					Sales Tax:	\$0.00
* * * DOC	JMENT COPY * * *				Grand Total:	\$373.60

TERMS AND CONDITIONS

Terms are Net 30. A finance charge of 1 1/2% per month (18% annual percentage rate) will be added to all past due invoices except where prohibited by law. All returned checks are subject to a \$30.00 returned check fee.