

**ZIEGLER CAT**901 West 94th Street  
Minneapolis MN 55420-4236**ZIEGLER CAT**MINNESOTA  
IOWA  
MISSOURI  
WISCONSIN952-888-4121 800-352-2812  
515-957-3800 800-342-7002  
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Invoice Number: SW080168409

Date: 12/30/19

Account No.: 0568920

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Quantity	Item	N/R	Description	Unit Price	Extended
TROUBLESHOOT ELECTRICAL					
TROUBLESHOOT FAULT CODES					
REPAIR PROCESS COMMENTS:					
#5 AND #6 REMOTES NOT CALIBRATED. CONNECTED FLOW					
METER, BLOCKED OFF OIL COOLERS AND HEATED HYD					
OIL. PERFORMED CALIBRATIONS ON REMOTES. CHECKED					
OPERATION, OK. CHECKED FOR OTHER FAULTS, OK					
			F/R LBR	670.00	*
SEGMENT 01 TOTAL				670.00	T
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REPAIR REACTION ARM					
RIGHT					
RIGHT REACTION ARM FAILED					
CAUSE OF FAILURE:					
SEAL FAILED					
RESULTANT DAMAGE:					
LEAKED OIL, BRGS FAILED					
REPAIR PROCESS COMMENTS:					
RIGHT SIDE OF TRACTOR HAS GRINDING NOISE. BROUGHT					
INTO STEAM BAY AND CLEANED RIGHT SIDE					
UNDERCARRRIGE. BROUGHT IN SHOP AND PUT ON STANDS.					
INSPECTED AND FOUND OIL LEAKED OUT OF REACTION					
ARM AND THE BRGS WERE FAILED. REMOVED REAR DRIVE					
WHEELS, BOGIE WHEEL ASSEMBLY AND REMOVED REACTION					
ARM. REMOVED REQUIRED ITEMS, CLEANED AND					
INSTALLED ON EXCHANGE REACTION ARM, INSTALLED					
REACTION ARM AND TORQUED COLLETS PER 4 STEP					
TORQUING PROCEDURE. REINSTALLED DRIVERS AND BOGIE					
ASSEMBLY.					
1	7X-2575		BOLT	S	7.30
4	3009746X1		NUT	S	2.91
4	400080X1		WASHER/HARD 22IDX3S		.80
2	400260X1		BOLT/U 88MM STL M2N		26.60
2	505183D1		PLUG/ASY MAGNETIC S		10.70
1	561598D2X		MT800 UPDATE RH RAN		5952.00
1			CORE CHARGE	N	2000.00
1-			NO CREDIT	N	.00
TOTAL PARTS				SEG. 80	8048.74 *
				F/R LBR	1638.00 *
SEGMENT 80 TOTAL				9686.74	T
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ALIGN TRACK BELT					
ALIGN TRACKS					
REPAIR PROCESS COMMENTS:					
ALIGNING TRACKS AFTER REPLACING RT REACTION ARM.					
ADJUSTED AND COULD NOT GET TRACKS TO ALIGN, FOUND					
FRONT LEFT IDLER WAS BROKEN AND THE INSIDE IDLER					
WAS TAKING ALL THE PRESSURE OF THE TRACK,					
AFFECTING BOTH TRACK ALIGNMENTS. LEFT SIDE					
REACTION ARM WAS NOT STRAIGHT ON AXLE SHAFT,					
LOOSENED COLLETS AND CENTERED PROPERLY, TORQUED					
COLLET WITH 4 STEP PROCEDURE. CHECKED OIL IN LEFT					
REACTION ARM, OK. CHECK PLUGS STRIPPED, REPLACED					
WITH NEW. CHECKED AFTER REPLACING IDLER ON SEG					
82, BOTH TRACKS ALIGNED PROPERLY. 2 LOCK PLATES					
FOR ADJUSTING BOLTS WERE MISSING. 2 LOCKING PLATE					
RETAINING BOLTS WERE BROKE OFF. DRILLED AND					



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	REMOVED BROKEN BOLTS, REPLACED MISSING PARTS.				
2	CH202-8633		PLATE/LOCK N	16.00	32.00
2	CH202-9701		SPACER/19.05ODX13IN	4.89	9.78
2	400055X1		BOLT N	.80	1.60
2	400381X1		WASHER/HARD-13.5IDN	5.38	10.76
	TOTAL PARTS		SEG. 81		54.14 *
			F/R LBR		630.00 *
	SEGMENT 81 TOTAL				684.14 T
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	REPAIR IDLER/IDLER WHEEL FRONT LEFT OUTER IDLER WHEEL BROKEN. REPAIR PROCESS COMMENTS: FRONT LEFT OUTER IDLER WHEEL BROKEN. DETENSIONED LEFT TRACK, PUT MACHINE ON STAND. REMOVED 7 WHEEL WEIGHTS FROM OUTER IDLER WHEEL. FOUND DISH WAS BROKE OUT OF CENTER OF WHEEL. REMOVED AND REPLACED WITH REMAN IDLER, CORE DAMAGED, NO CORE CREDIT. REASSEMBLED IDLER AND WEIGHTS, TIGHTENED TRACK AND ALIGNED ON SEG 81.				
1	504784D2R		IDLER WHEEL-REMAN N	1567.00	1567.00
1			CORE CHARGE N	430.00	430.00
1-			NO CREDIT N	.00	.00
	TOTAL PARTS		SEG. 82		1997.00 *
	TOTAL LABOR		SEG. 82		1161.50 *
	SEGMENT 82 TOTAL				3158.50 T
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	SERVICE SUPPLIES AND ENVIRONMENTAL CHARGES				441.35 T
	MN SALES TAX-6.875%				724.71 T
	STCLOUD MN CITY TAX				52.71 T
	STEARNS TRANSIT .25%				26.35 T
	*** C O D ***				
	*** INVOICE COPY ***				
	DUE BY 10TH OF THE NEXT MONTH				
	INVOICE TOTAL				15,444.50