

# Maxim Crane Works, LP

## 5 Year Maintenance History Summary

2768

100 ton

GROVE RT9100

2001

Maxim performs scheduled Preventative Maintenance ("PMs) procedures at least every 90 days and more periodically depending on crane usage. Maxim performs a comprehensive crane inspection at each PM interval, before and after each crane rental and annually in accordance with OSHA and ANSI requirements. Maxim installed its computerized maintenance management system in 2004, attached is a standard cost summary of workorders documented since system installation. All workorders exceeding \$10,000, representing rebuild activities and major component replacement, are attached for review.

Region	Unit #	Type	WO #	Date Closed	Labor Code	WO Description	\$ Parts	\$ Labor	\$ Total
CER	2768	RT	4091	6/17/2003		CABLE/WIRE RESTRING BLOCK GET READY FOR RENT	-	192	192
CER	2768	RT	5100	6/25/2003		COMPUTER SYSTEMS COMPUTOR PROBLM	-	96	96
CER	2768	RT	6094	7/3/2003		HYDRAULIC HYD LEAK	-	216	216
CER	2768	RT	6976	7/16/2003		HYDRAULIC HYD.LEAK	-	312	312
CER	2768	RT	7392	7/21/2003		INSPECTIONS INSPECTION	-	168	168
CER	2768	RT	8166	8/6/2003		ELECTRICAL ELECTRICAL	-	144	144
CER	2768	RT	10036	8/12/2003		BOOM UNLOAD DAMAGED JIB OFF TRAILER	1,634	48	1,682
CER	2768	RT	14973	9/18/2003		ELECTRICAL WONT START	235	720	955
CER	2768	RT	15781	9/29/2003		PREVENTATIVE MAINTENANCE CHECK CHARGING SYSTEM	235	120	355
CER	2768	RT	16229	10/7/2003		HYDRAULIC LEAK	68	72	140
CER	2768	RT	18060	10/9/2003		PREVENTATIVE MAINTENANCE MAKE READY	85	2,784	2,869
CER	2768	RT	16050	10/10/2003		PREVENTATIVE MAINTENANCE HYDRAULIC LEAK	12	528	540
CER	2768	RT	33952	1/16/2004		HYDRAULIC HYD OIL LEAK	-	96	96
CER	2768	RT	36560	2/2/2004		HYDRAULIC HYD OIL LEAK	-	120	120
CER	2768	RT	42323	3/5/2004		PREVENTATIVE MAINTENANCE REPAIR OUTRIGGER PAD	-	312	312
CER	2768	RT	70129	7/30/2004		PREVENTATIVE MAINTENANCE MAKE READY	139	852	991
CER	2768	RT	72985	8/2/2004		HYDRAULIC ELEC. PROBLEM	-	48	48
CER	2768	RT	75243	8/31/2004		OUTRIGGERS OUTRIGGER PROBLEM	-	216	216
CER	2768	RT	78055	9/13/2004		DRIVE TRAIN WHEEL SEAL LEAKS	-	736	736
CER	2768	RT	75890	9/27/2004		ELECTRICAL ELEC. PROBLEM	217	256	473
CER	2768	RT	93398	11/16/2004		HYDRAULIC HYD. LEAK	-	48	48
CER	2768	RT	96494	12/6/2004		ELECTRICAL ELEC. PROBLEM	-	96	96
CER	2768	RT	96915	12/13/2004		OUTRIGGERS OUTRIGGER PAD FINGERS	30	144	174
CER	2768	RT	101528	3/7/2005		HYDRAULIC HYD. LEAK	1,164	2,400	3,564
CER	2768	RT	118333	4/12/2005		HYDRAULIC LOCKOUT VALVE NEEDS REPAIR	43	192	235
CER	2768	RT	117098	4/12/2005		ELECTRICAL REPLACE STARTER	338	216	554
CER	2768	RT	107693	4/12/2005		HOIST / WINCH CHECK HOIST CABLE	982	240	1,222
CER	2768	RT	125635	5/5/2005		HYDRAULIC HYD. LEAK	-	48	48
CER	2768	RT	116483	5/20/2005		PREVENTATIVE MAINTENANCE PM-A SERVICES	66	192	258
CER	2768	RT	128526	5/31/2005		POST RENTAL INSPECTIONS INSPECTION	-	304	304
CER	2768	RT	127635	6/13/2005		FRAME AND CHASSIS SIDE PANEL	1,738	64	1,802
CER	2768	RT	130115	7/20/2005		HYDRAULIC REMOVE AND REPAIR SWIVEL	7,794	9,528	17,322
CER	2768	RT	116484	8/8/2005		PREVENTATIVE MAINTENANCE PM-B SERVICES	66	-	66
CER	2768	RT	128740	8/15/2005		POST RENTAL INSPECTIONS 00128526 - CREATED FROM INSPECTION WORK ORDER	2,091	4,712	6,803
CER	2768	RT	147637	8/16/2005		ENGINE ENGINE PROBLEMS	2,044	-	2,044
CER	2768	RT	146213	8/22/2005		COMPUTER SYSTEMS COMPUTER PROBLEM	-	400	400
CER	2768	RT	155293	10/6/2005		ENGINE ENGINE PROBLEM	2,038	-	2,038
CER	2768	RT	161078	10/31/2005		HYDRAULIC HYDRAULIC PUMP PROBLEM / COMPUTER PROBLEM	1,853	1,816	3,669
CER	2768	RT	162937	11/16/2005		PREVENTATIVE MAINTENANCE PM A SERVICE.	94	240	334
CER	2768	RT	169019	12/1/2005		HEATING AND AIR CONDITIONING CAB HEATER INOP./ KILL SOLENOID PROBLEM./ MUFFLER	977	1,216	2,193
CER	2768	RT	171519	12/7/2005		INSPECTIONS ANNUAL INSPECTION	-	144	144
CER	2768	RT	176332	12/29/2005		ELECTRICAL STARTING PROBLEM	111	696	807
CER	2768	RT	171859	1/13/2006		HYDRAULIC TRANSMISSION LEAK	228	152	380
CER	2768	RT	168223	1/13/2006		PREVENTATIVE MAINTENANCE PM B SERVICE.	127	384	511
CER	2768	RT	179495	1/20/2006		POST RENTAL INSPECTIONS BARE RENTAL RETURN	-	96	96
CER	2768	RT	184915	2/9/2006		POST RENTAL INSPECTIONS BARE RENTAL RETURN	-	576	576
CER	2768	RT	186051	2/23/2006		HYDRAULIC HYDRAULIC LEAK / CHECK MAIN WINCH CABLE.	1,183	552	1,735
CER	2768	RT	186108	3/24/2006		DISPATCH NON BILLABLE FUEL CRANE	-	1,932	1,932
CER	2768	RT	195278	3/27/2006		PREVENTATIVE MAINTENANCE PM A SERVICE	51	216	267

Region	Unit #	Type	WO #	Date Closed	Labor Code	WO Description	\$ Parts	\$ Labor	\$ Total
CER	2768	RT	195280	4/7/2006	INSPECTIONS	CHECK OVER FOR BARE RENTAL / TRANSMISSION PROBLEM.	2,850	1,260	4,110
CER	2768	RT	198979	4/10/2006	INSPECTIONS	3RD PARTY INSPECTION	250	-	250
CER	2768	RT	199733	4/10/2006	INSPECTIONS	INSPECTION	250	-	250
CER	2768	RT	198977	4/10/2006	POST RENTAL INSPECTIONS	00198780 - CREATED FROM INSPECTION WORK ORDER	443	2,076	2,519
CER	2768	RT	200297	4/14/2006	ELECTRICAL	ELEC. PROBLEM	-	288	288
CER	2768	RT	212468	6/8/2006	HYDRAULIC	HYD. LEAK	-	336	336
CER	2768	RT	213186	6/14/2006	HOIST / WINCH	REPLACE HOIST CABLE	990	432	1,422
CER	2768	RT	214674	6/20/2006	ENGINE	FUEL PROBLEM	-	240	240
CER	2768	RT	216791	6/28/2006	HYDRAULIC	HYD. LEAK	-	288	288
CER	2768	RT	225869	8/8/2006	HYDRAULIC	REPAIRED LEAKS	-	216	216
CER	2768	RT	228357	8/17/2006	HYDRAULIC	HYD. LEAKS	60	144	204
CER	2768	RT	237553	9/27/2006	HYDRAULIC	REPAIR HYD. LEAK	-	144	144
CER	2768	RT	242156	10/19/2006	HYDRAULIC	REPAIR HYD. LEAK REPAIR GAUGES	-	288	288
CER	2768	RT	245968	11/6/2006	PREVENTATIVE MAINTENANCE	ENGINE SERVICE	37	288	325
CER	2768	RT	247584	11/14/2006	HYDRAULIC	HYD. LEAK	-	384	384
CER	2768	RT	254382	12/15/2006	ENGINE	CHECK ENGINE	-	192	192
CER	2768	RT	256378	12/30/2006	FABRICATION	FABRICATION	-	384	384
CER	2768	RT	257079	1/16/2007	POST RENTAL INSPECTIONS	MAKE READY	-	624	624
CER	2768	RT	258308	1/16/2007	ENGINE	REPAIR ENG. ON POWER SMOKING BAD	1,942	-	1,942
CER	2768	RT	264335	2/7/2007	COMPUTER SYSTEMS	ATB PROBLEM	-	240	240
CER	2768	RT	267456	2/22/2007	INSPECTIONS	CERT3	250	-	250
CER	2768	RT	265288	2/27/2007	ENGINE	REPAIR ENGINE	-	468	468
CER	2768	RT	268314	3/7/2007	POST RENTAL INSPECTIONS	00268313 - CREATED FROM INSPECTION WORK ORDER	450	1,440	1,890
CER	2768	RT	274302	3/29/2007	POST RENTAL INSPECTIONS	OFF RENT INSPECTION	-	120	120
CER	2768	RT	267077	4/5/2007	ENGINE	REMOVE AND REPLACE ENG.	16,692	960	17,652
CER	2768	RT	273522	4/11/2007	ENGINE	UNIT NOT RUNNING RIGHT	180	1,560	1,740
CER	2768	RT	274303	4/16/2007	POST RENTAL INSPECTIONS	00274302 - CREATED FROM INSPECTION WORK ORDER	-	432	432
CER	2768	RT	282040	5/12/2007	INSPECTIONS	CHECK OUT FOR RENT	-	456	456
CER	2768	RT	285026	5/21/2007	PREVENTATIVE MAINTENANCE	PMA SERVICES	152	780	932
CER	2768	RT	268313	5/30/2007	POST RENTAL INSPECTIONS	OFF RENT INSPECTION	441	360	801
CER	2768	RT	286237	6/1/2007	ENGINE	ENGINE	-	48	48
CER	2768	RT	289260	6/22/2007	HYDRAULIC	BOOM	72	864	936
CER	2768	RT	295269	8/2/2007	ENGINE	OIL LEAK	368	2,196	2,564
CER	2768	RT	299716	8/4/2007	ELECTRICAL	ATB SWITCH	-	240	240
CER	2768	RT	305084	9/6/2007	INSPECTIONS	CHECK OUT FOR RENT	-	192	192
CER	2768	RT	308278	10/5/2007	POST RENTAL INSPECTIONS	00308277 - CREATED FROM INSPECTION WORK ORDER	1,248	2,808	4,056
CER	2768	RT	307619	10/8/2007	ENGINE	WON'T START	142	396	538
CER	2768	RT	314629	10/16/2007	HYDRAULIC	HYD. LEAK	-	96	96
CER	2768	RT	312696	10/17/2007	HYDRAULIC	HYD. LEAK	114	288	402
CER	2768	RT	307621	10/24/2007	ENGINE	ENGINE SERVICE	30	-	30
CER	2768	RT	316850	10/29/2007	PREVENTATIVE MAINTENANCE	NEEDS PMA SERVICE	76	-	76
CER	2768	RT	316244	10/29/2007	INSPECTIONS	CHECK OUT FOR RENT	-	1,248	1,248
CER	2768	RT	317792	11/14/2007	HYDRAULIC	BOOM HOIST PROBLEMS	-	696	696
CER	2768	RT	323922	12/4/2007	ELECTRICAL	NO START	169	72	241
CER	2768	RT	339085	2/6/2008	ENGINE	NEEDS FUEL FILTERS	6	192	198
CER	2768	RT	341424	2/18/2008	INSPECTIONS	NEEDS ANNUAL INSPECTION	-	288	288
CER	2768	RT	353010	4/23/2008	COMPUTER SYSTEMS	NEEDS ATB CABLE REPLACED OR CUT BACK	-	96	96
CER	2768	RT	356403	5/7/2008	PREVENTATIVE MAINTENANCE	NEEDS PMA SERVICE	28	216	244
CER	2768	RT	357243	5/12/2008	ELECTRICAL	PROBLEM WITH SUPERLIFT	-	600	600

Region	Unit #	Type	WO #	Date Closed	Labor Code	WO Description	\$ Parts	\$ Labor	\$ Total
CER	2768	RT	358520	6/2/2008	CABLE/WIRE	NEED TO CUT CABLE BACK	-	192	192
CER	2768	RT	358278	6/2/2008	HYDRAULIC	OUTRIGGER HOSE BROKE	-	288	288
CER	2768	RT	362883	6/19/2008	HYDRAULIC	OUTRIGGER HOSE LEAKING	-	96	96
CER	2768	RT	362026	6/23/2008	ELECTRICAL	ENGINE PROBLEM	-	864	864
CER	2768	RT	366693	7/21/2008	HYDRAULIC	CALL-OUT HYD OIL LEAK	-	1,284	1,284
CER	2768	RT	370535	8/6/2008	HYDRAULIC	CUSTOMER REPORTED CRANE LEAKING HYD OIL	-	144	144
CER	2768	RT	372307	8/13/2008	COMPUTER SYSTEMS	CUSTOMER REPORTED COMPUTER PROBLEMS	-	144	144
CER	2768	RT	374765	9/2/2008	COMPUTER SYSTEMS	NO AC WORK	12	48	60
CER	2768	RT	376794	9/5/2008	ENGINE	NO START	185	96	281
CER	2768	RT	377186	10/13/2008	ELECTRICAL	NO ANTI-TWO BLOCK	100	852	952
CER	2768	RT	382762	10/20/2008	HYDRAULIC	BLOWN HOSE ON THE STEERING	-	48	48
CER	2768	RT	384827	11/6/2008	HYDRAULIC	BLOWN HOSE	-	456	456
CER	2768	RT	388003	11/14/2008	INSPECTIONS	NEEDS THIRD PARTY INSPECTION	500	-	500
CER	2768	RT	387680	11/17/2008	PREVENTATIVE MAINTENANCE	NEEDS PMA SERVICE	21	192	213
CER	2768	RT	387617	11/17/2008	INSPECTIONS	MAKE READY FOR RENT	-	384	384
CER	2768	RT	388758	11/25/2008	COMPUTER SYSTEMS	COMPUTER NOT READING WEIGHTS	1,897	1,128	3,025
CER	2768	RT	390849	12/11/2008	PREVENTATIVE MAINTENANCE	REPLACE SAFETY LATCH ON BALL	273	-	273
CER	2768	RT	389280	12/18/2008	INSPECTIONS	INSPECT HEADACHE BALL	105	-	105
CER	2768	RT	396494	3/13/2009	PREVENTATIVE MAINTENANCE	REPAIR BOOM LIFT CYLINDERS,REPAIR RADIATOR,REPAIR	19,751	7,296	27,047
CER	2768	RT	413612	5/7/2009	HYDRAULIC	FILL HYDRAULIC TANK	-	24	24

# Work Order Estimate

Work Order #	130115
Branch	JAC
Bill to Branch	JAC
Customer Number	0
Equipment Model	RT9100
Equipment Class	100
Description of Problem	
Work Order Desc.	REMOVE AND REPAIR SWIVEL
Reviewed by	
Reviewers Comments	
Review Date	

Authorized By	Approved Dennis Wagner
Authorized Date	
Created By	STEVES
Date Opened	05/17/2005
Equipment Number	2768
Equipment Make	GROVE
Equipment Category	70

	<i>Estimate</i>	<i>Actual</i>
Labor Total \$	\$6,864.00	\$14,412.00
Parts Total \$	\$5,561.00	\$7,794.44
Misc Charge	\$0.00	\$0.00
<b>Total \$</b>	<b>\$12,425.00</b>	<b>\$22,206.44</b>

## Labor

		0	\$0.00	35.5	\$1,848.00
4977	CHECK SWIVEL	3	\$144.00	2	\$96.00
5629	REMOVE HDY. SWIVEL ASSY,	60	\$2,880.00	64	\$3,552.00
5640	RECONDITION HYD. SWIVEL	20	\$960.00	4.5	\$216.00
5781	INSTALL HYD SWIVEL ASSY	60	\$2,880.00	170	\$8,700.00
Totals:		143	\$6,864.00	276	\$14,412.00

## Parts

		1	\$861.00	30	\$156.72
	TUBE ASSY	0	\$0.00	1	\$1,856.00
	REBUILT PARTS	0	\$0.00	1	\$4,285.00
	OUTSIDE REBUILD	0	\$0.00	0	\$0.00
	OUTSIDE REBUILD	1	\$4,700.00	0	\$0.00
EP	ENGINE PARTS	0	\$0.00	2	\$160.70
GS	GASKET	0	\$0.00	2	\$43.80
HC	HYDRAULIC COMPONENTS	0	\$0.00	5	\$700.00
SL	SEAL	0	\$0.00	1	\$592.22
Totals:		2	\$5,561.00	42	\$7,794.44

## Other

	Nothing Found				
Totals:					

# Work Order Estimate

Work Order #	267077
Branch	JAC
Bill to Branch	JAC
Customer Number	0
Equipment Model	RT9100
Equipment Class	100
Description of Problem	S/N 60311242
Work Order Desc.	REMOVR AND REOLACE ENG.
Reviewed by	Rob Pearce
Reviewers Comments	
Review Date	02/20/2007

Authorized By	Approved Randy Johnston
Authorized Date	02/21/2007
Created By	STEVES
Date Opened	02/21/2007
Equipment Number	2768
Equipment Make	GROVE
Equipment Category	70

	<i>Estimate</i>	<i>Actual</i>
Labor Total \$	\$1,680.00	\$960.00
Parts Total \$	\$15,820.00	\$16,692.07
Misc Charge	\$0.00	\$0.00
<b>Total \$</b>	<b>\$17,500.00</b>	<b>\$17,652.07</b>

## Labor

Code	Description	Hours	Rate	Quantity	Amount
4726	REMOVE & REPLACE ENGINE	35	\$1,680.00	10	\$600.00
5288	TROUBLE SHOOT COMPUTER MALFUNCTION & REPAIR	0	\$0.00	5	\$360.00
Totals:		35	\$1,680.00	15	\$960.00

## Parts

Code	Description	Quantity	Rate	Quantity	Amount
	OUTSIDE REBUILD	0	\$0.00	1	\$3,359.36
	OUTSIDE REBUILD	1	\$2,500.00	0	\$0.00
EL	ELECTRICAL	0	\$0.00	1	\$0.00
EN	WHOLE ENGINES	1	\$13,320.00	1	\$13,320.00
EP	ENGINE PARTS	0	\$0.00	1	\$0.00
GS	GASKET	0	\$0.00	1	\$10.84
SL	SEAL	0	\$0.00	1	\$1.87
VV	VALVES	0	\$0.00	1	\$0.00
Totals:		2	\$15,820.00	7	\$16,692.07

## Other

	Nothing Found				
Totals:					

# Work Order Estimate

Work Order #	396494
Branch	RAC
Bill to Branch	RAC
Customer Number	0
Equipment Model	RT9100
Equipment Class	100
Description of Problem	SWING LOCK AND HOUSE LOCK
Work Order Desc.	REPAIR BOOM LIFT CYLINDERS,REPAIR RADIATOR,REPAIR
Reviewed by	Rob Pearce
Reviewers Comments	
Review Date	01/19/2009

Authorized By	Approved Randy Johnston
Authorized Date	01/19/2009
Created By	BOBBYL
Date Opened	01/20/2009
Equipment Number	2768
Equipment Make	GROVE
Equipment Category	70

	Estimate	Actual
Labor Total \$	\$3,744.00	\$7,296.00
Parts Total \$	\$8,315.31	\$19,751.01
Misc Charge	\$0.00	\$0.00
Total \$	\$12,059.31	\$27,047.01

## Labor

900	CLEAN RADIATOR EXTERIOR	2	\$96.00	8	\$384.00
4140	INSPECT SWING LOCK OPERATION	2	\$96.00	0	\$0.00
4535	INSPECT SWING GEAR/MOTOR	5	\$240.00	0	\$0.00
4716	STEAM CLEAN UNIT FOR REPAIR	8	\$384.00	8	\$384.00
4735	R&R RADIATOR	6	\$288.00	40	\$1,920.00
4783	INSPECT RADIATOR & HOSES	2	\$96.00	8	\$384.00
4891	INSPECT SWING GEAR BOX & OIL LEVEL	3	\$144.00	16	\$768.00
5317	R&R BOOM HOIST CYLINDER	30	\$1,440.00	8	\$384.00
5320	R&R CONTROL CABLE	6	\$288.00	16	\$768.00
5385	TOUCH UP PAINT	0	\$0.00	40	\$1,920.00
5555	INSPECT HOUSE LOCK	4	\$192.00	0	\$0.00
5591	REPLACE RADIATOR CAP	2	\$96.00	0	\$0.00
6021	REMOVE OR INSTALL COUNTERWEIGHTS	0	\$0.00	8	\$384.00
6168	R&R SWING BRAKE LEVER	8	\$384.00	0	\$0.00
Totals:		78	\$3,744.00	152	\$7,296.00

## Parts

	OUTSIDE RADIATOR REPAIR	0	\$0.00	1	\$225.00
	OUTSIDE HYDRAULIC	0	\$0.00	1	\$16,880.00
	OUTSIDE REBUILD	2	\$7,000.00	0	\$0.00
BR	BRAKES	1	\$71.88	1	\$101.06
CB	CABLE ASSEMBLY	2	\$92.63	2	\$136.82
CM	COMPUTER	0	\$0.00	1	\$165.75
EL	ELECTRICAL	0	\$0.00	1	\$92.95
HW	HARDWARE	2	\$654.60	2	\$759.42
SK	SEAL KIT	2	\$496.20	2	\$701.01
ST	STARTERS	0	\$0.00	2	\$689.00
Totals:		9	\$8,315.31	13	\$19,751.01

## Other

	Nothing Found				
Totals:					