

Date Opened: 7/23/2020  
Est. Compl Date: 7/23/2020  
Current Status: Order Closed  
Service Type: Warranty Work Order  
Comp Code: 008P - .ARM, Stick, Stick Boom, 2nd Boom, Jib, Jib Boom  
Work Code: E2 - INSPECT MACHINE, SYSTEM OR COMPONENT & REPORT RESULTS

Originator: 631173 -  
Assigned To: -  
Job Location: K - Kent  
Work Location: Shop

Job Description: REPAIR CRACKED ARM AND BOOM

## WARRANTY DISPATCH SHEET

Mfg	Model #	Serial #	Equip #	Current SMR	Est. Hours
KO	PC490LC-11	85074	601164		

[Click Here for Site map location](#)

Komatsu America International

Customer Reference: 1481184-K L B Construction Inc (Bill-PO Req)

Contact Name: JENS JOHANSEN

Phone Number: 425-508-1587

Customer #: 1537555

Customer PO: WARRANTY/POLICY

Customer Eq #:

[info@klbconstruction.com](mailto:info@klbconstruction.com)

### THE FOLLOWING INFORMATION IS REQUIRED FOR ALL WARRANTY WORK ORDERS:

MAKE SURE THE FOLLOWING REQUIREMENTS ARE COMPLETE FOR ALL WARRANTY WORK ORDERS:

- ☐ 1) HOUR METER READING
- ☐ 2) SERIAL NUMBER
- ☐ 3) PHOTOS
  - a) DATA PLATE
  - b) HOUR METER
  - c) AREA OF FAILURE
  - d) FAILED PART
- ☐ 4) FAILED PART # or #'s (CIRCLE FAILED PART NUMBERS ABOVE)
- ☐ 5) COMPLETED WORK ORDER STORY INCLUDING:
  - a) COMPLAINT
  - b) CAUSE
  - c) CORRECTION
- ☐ 6) OIL SAMPLES IF REQUIRED
- ☐ 7) CUSTOMER COMPLAINT DESCRIPTION
- ☐ 8) TESTS PERFORMED INCLUDING TEST VALUES
- ☐ 9) CAUSE OF FAILURE including FAILED PART NUMBERS
- ☐ 10) WORK PERFORMED and CORRECTION
- ☐ 11) WARRANTY RETURN PARTS STORED LOCATION:\_\_\_\_\_

### Work Requested

.ARM, Stick, Stick Boom, 2nd Boom, Jib, Jib Boom  
INSPECT MACHINE, SYSTEM OR COMPONENT & REPORT RESULTS  
Complaint - Crack in Arm  
3429 121st st sw Lynnwood

### Tests Performed

Visual inspection confirmed customer complaint

### Cause Of Failure:

### Work Performed

Stick and Boom Crack Repair  
For the stick: ground off paint to expose the surface and path of the crack  
Carbon arced out all material in that path  
The crack followed more than one path through that joint  
Removed all damaged material  
Ground out all carbon left from carbon arc process  
Tacked on run off tabs on either end of the crack to move the stress off the corners of

the stick  
Used ER7018 1/8 and 5/32 size electrodes to fill and cap the groove  
Contoured the welds to ramp them and allow a smooth transition from stick top plate to casting  
Cut off and smoothed runoff tabs  
Fabricated fishplate for stick  
Stamped stick serial number info onto it  
Fit and welded with 3 passes fishplate to stick  
Primed and painted  
For the boom: had the boom side window removed to allow access to the cracked area  
Removed as much grease from the boom area by hand as possible to avoid fire hazards  
Wrapped interior of the cab and all areas below the boom with fire blankets  
Removed paint from crack  
Carbon arced out the damaged material  
Re-welded the groove and smoothed it out to maintain the surrounding weld bead profiles  
Sanded off paint in the area where the fishplate would go  
Fabricated new fishplates for both sides of the boom  
Fit the fishplates in place using clamps  
Dog and wedged the fishplate to remove and gaps or unevenness  
Tacked around the fishplate in multiple places  
Welded out each side in a back step sequence to allow all tie-ins to penetrate  
Used a needle scaler to remove slag and peen the welds  
Lightly sanded welds and fishplate surfaces for paint  
Primed and painted  
Photographed all the repairs throughout  
Wrote service

**Parts Detail**

Line#	MM Part Number	Mfg Part Number	Description	Qty Ordered	Qty B/O	Qty Actual	Status
1.00	MSSTPLT3/8"	PLATE 3/8 X 48	STEEL PLATE (PER SQ FT)	1		1	
273.00	KO1400076H1	1400076H1	PAINTNATYELLOW	1		1	
		Stocking Part / Old Part # Exists / PC300&400LC-6					
274.00	KO1400012H2	1400012H2	YELLOW PRIMER 1	1		1	
		Stocking Part / Old Part # Exists /					
275.00	MSSTPLT3/8"	PLATE 3/8 X 48	STEEL PLATE (PER SQ FT)	4		4	
276.00	MSSTSHT10GA	STSHT10GA	10 GA SHEET HR	2		2	
280.00	MSSTPLT3/8"	PLATE 3/8 X 48	STEEL PLATE (PER SQ FT)	4		4	
281.00	KO1400076H1	1400076H1	PAINTNATYELLOW	1		1	
		Stocking Part / Old Part # Exists / PC300&400LC-6					
282.00	KO1400012H2	1400012H2	YELLOW PRIMER 1	1		1	
		Stocking Part / Old Part # Exists /					
283.00	QWRRT CAB GLASS	RT CAB GLASS.QWR	REPLACE CAB GLASS	1		1	



Unit No. H-148  
Diesel Engine

Unit: Komatsu  
Make Model 480-5  
Serial No. 85074  
Site

Compartment: Diesel Engine  
Name  
Make  
Model  
Serial No.  
Capacity:

Customer: KLB CONSTRUCTION(LAKESIDE IND)  
P O Box 158  
Lynnwood WA 98087  
USA

DIAGNOSIS  
All wear rates normal. Abrasive and other contaminant levels are acceptable. Viscosity within specified operating range. Action: Resample next service interval to further monitor.

ANALYST: Sam Smith Portland

Normal

Severe

Abnormal

Caution

Normal

LEGEND

DATE SAMPLED	11-Aug-22	28-Apr-22	11-Feb-22	28-Oct-21	08-Jul-21	22-Apr-21
DATE RECEIVED	23-Aug-22	03-May-22	25-Feb-22	10-Nov-21	19-Jul-21	26-May-21
DATE REPORTED	23-Aug-22	04-May-22	01-Mar-22	11-Nov-21	23-Jul-21	08-Jun-21
LAB NO.						
SIF NO.	40111384854	40111348855	40111326897	40111293064	40111252925	40111233593
TIME ON UNIT	Hrs	Hrs				
TIME ON OIL	8540	8292	8037	7764	7423	7185
OIL BRAND	Chevron	Chevron	Chevron	Chevron	Chevron	Chevron
OIL TYPE	Delo 400 LE	Delo 400 LE	Delo 400 LE	Delo 400 LE	Delo 400 LE	Delo 400 LE
OIL GRADE	SAE 15W40	SAE 15W40	SAE 15W40	SAE 15W40	SAE 15W40	SAE 15W40
OIL ADDED						
FILTER						
OIL CHANGED	Not Changed	Changed	Not Changed	Changed	Not Changed	Changed
W/O NUMBER						

Metals (ppm)						
Iron (Fe)	19	37	20	27	18	26
Chromium (Cr)	<1	1	<1	<1	<1	<1
Lead (Pb)	4	19	3	19	2	14
Copper (Cu)	3	4	2	4	3	3
Tin (Sn)	<1	<1	<1	<1	<1	<1
Aluminium (Al)	2	3	2	3	2	3
Nickel (Ni)	<1	2	<1	<1	<1	<1
Silver (Ag)	<1	<1	<1	<1	<1	<1
Titanium (Ti)	<1	<1	<1	<1	<1	<1
Vanadium (V)	<1	<1	<1	<1	<1	<1

Contaminants (ppm)						
Silicon (Si)	6	9	6	6	6	5
Sodium (Na)	8	4	3	4	3	3
Potassium (K)	2	5	<1	3	3	2

Additives (ppm)						
Magnesium (Mg)	885	955	854	853	829	759
Calcium (Ca)	1760	1832	1656	1578	1531	1544
Barium (Ba)	<1	<1	<1	1	2	<1
Phosphorus (P)	966	921	844	873	821	758
Zinc (Zn)	1066	1099	1004	993	958	876
Molybdenum (Mo)	35	11	2	3	3	3
Boron (B)	106	66	57	54	51	35

Contaminants						
Water (%)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Coolant	No	No	No	No	No	No

Physical Tests						
Viscosity (cSt 100C)	13.8	13.7	13.3	14.1	13.9	13.7
Fuel (%)	<1	<1	<1	<1	<1	1.20
Soot (%) Infrared	0.2	0.4	0.2	0.3	0.1	0.3

Physical / Chemical						
Base Number (mgKOH/g)	4.5	2.4	3.8	3.5	3.6	2.3
Oxidation (Abs/0.1mm)	20	25	20	25	21	24
E2412/D7414						
Nitration (Abs/0.1mm) E2412	11	13	11	13	12	13

Normal

Severe

Abnormal

Caution

Normal

Normal

Severe

Abnormal

Caution

Normal



## LUBE CHECKLIST

### 250 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <u>H148</u>		JOB # <u>118</u>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <u>8540</u>	
OTHER		LOCATION <u>Fall City</u>	
TYPE OF SERVICE	<input checked="" type="checkbox"/> 250 HR <input type="checkbox"/> 750 HR <input type="checkbox"/> 1250 HR <input type="checkbox"/> 1750 HR		

### FLUID / FILTERS CHANGED

ENGINE OIL & FILTER CHANGE? <u>no</u> FRONT / REAR	ENGINE OIL SAMPLE TAKEN? <u>yes</u> FRONT / REAR	FUEL FILTER CHANGED & SCREEN CLEANED? <u>no</u>
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### FLUID LEVELS CHECKED

1 <input checked="" type="checkbox"/> ENGINE F R	5 <input checked="" type="checkbox"/> REAR DIFF	9 <input checked="" type="checkbox"/> CIRCLE DR	13 <input checked="" type="checkbox"/> SWING DR.
2 <input checked="" type="checkbox"/> TRANS F R	6 <input checked="" type="checkbox"/> FINALS RF/LF	10 <input checked="" type="checkbox"/> SPEED REDUCER	14 <input checked="" type="checkbox"/> COOLANT <u>    </u> F°
3 <input checked="" type="checkbox"/> HYDRAULIC	7 <input checked="" type="checkbox"/> FINALS RR/LR	11 <input checked="" type="checkbox"/> SPINDEL L R	
4 <input checked="" type="checkbox"/> FRONT DIFF.	8 <input checked="" type="checkbox"/> TANDEMS R L	12 <input checked="" type="checkbox"/> STEERING	

OTHERS:

### CHECKED

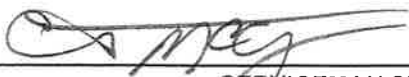
16 <input checked="" type="checkbox"/> AIR FILTERS	23 <input checked="" type="checkbox"/> PARKING BRAKE	30 <input checked="" type="checkbox"/> TURN SIGNALS	37 <input checked="" type="checkbox"/> EXPOSED WIRING
17 <input checked="" type="checkbox"/> BATTERIES	24 <input checked="" type="checkbox"/> INHIBITOR	31 <input checked="" type="checkbox"/> FAN BELTS	38 <input checked="" type="checkbox"/> GRAB IRONS
18 <input checked="" type="checkbox"/> ALTERNATOR	25 <input checked="" type="checkbox"/> AIR TANKS	32 <input checked="" type="checkbox"/> GREASED FITTINGS	39 <input checked="" type="checkbox"/> ROPS/FOPS
19 <input checked="" type="checkbox"/> BRAKE RESERVE	26 <input checked="" type="checkbox"/> UNIV. JOINTS	33 <input checked="" type="checkbox"/> BREATHERS	40 <input checked="" type="checkbox"/> SEAT BELT CONDITION
20 <input checked="" type="checkbox"/> GAUGES	27 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	34 <input checked="" type="checkbox"/> FIRE EX CHG.	41 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
21 <input checked="" type="checkbox"/> HORN	28 <input checked="" type="checkbox"/> PRE-CLEANER	35 <input checked="" type="checkbox"/> BACK ALARM	
22 <input checked="" type="checkbox"/> ROTATING BEACON	29 <input checked="" type="checkbox"/> CAPS, COVERS	36 <input checked="" type="checkbox"/> BRAKE LIGHTS	

OTHER:

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added



SERVICEMAN SIGNATURE

8-11-22

DATE



"An Equal Opportunity/Affirmative Action Employer"





## LUBE CHECKLIST

### 500 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <b>H148</b>		JOB # <b>056</b>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <b>8292</b>	
OTHER		LOCATION <b>Feet Way</b>	
TYPE OF SERVICE <input checked="" type="checkbox"/> 500 HR <input type="checkbox"/> 1500 HR			

### FLUID / FILTERS CHANGED

1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR	3 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED?	5 <input type="checkbox"/> WINCH FILTER CHANGED?
2 <input type="checkbox"/> TRANSMISSION FILTER CHANGED?	4 <input checked="" type="checkbox"/> FUEL FILTER CHANGED AND SCREEN CLEANED?	6 <input type="checkbox"/> CHANGED HYD STEERING FILTER (OHT)

### OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

7 <input checked="" type="checkbox"/> ENGINE F R	11 <input type="checkbox"/> REAR DIFF.	15 <input type="checkbox"/> CIRCLE DR.	19 <input checked="" type="checkbox"/> SWING DR.
8 <input type="checkbox"/> TRANS F R	12 <input checked="" type="checkbox"/> FINALS RF/LF	16 <input type="checkbox"/> SPEED REDUCER	20 <input type="checkbox"/> COOLANT _____ F°
9 <input checked="" type="checkbox"/> HYDRAULIC	13 <input type="checkbox"/> FINALS RR/LR	17 <input type="checkbox"/> SPINDLE L R	
10 <input type="checkbox"/> FRONT DIFF.	14 <input type="checkbox"/> TANDEMS R-L	18 <input type="checkbox"/> STEERING	
OTHERS:			

### CHECKED

22 <input checked="" type="checkbox"/> AIR FILTERS	30 <input type="checkbox"/> INHIBITOR	38 <input checked="" type="checkbox"/> GREASED FITTINGS	46 <input checked="" type="checkbox"/> SEAT BELT CONDITION
23 <input checked="" type="checkbox"/> BATTERIES	31 <input type="checkbox"/> AIR TANKS	39 <input checked="" type="checkbox"/> BREATHERS	47 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
24 <input checked="" type="checkbox"/> ALTERNATOR	32 <input type="checkbox"/> UNIV. JOINTS	40 <input checked="" type="checkbox"/> FIRE EX CHG.	
25 <input type="checkbox"/> BRAKE RESERVE	33 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	41 <input checked="" type="checkbox"/> BACK ALARM	
26 <input checked="" type="checkbox"/> GAUGES	34 <input checked="" type="checkbox"/> PRE-CLEANER	42 <input type="checkbox"/> BRAKE LIGHTS	48 <input type="checkbox"/> FRONT AXLE BEARING(MTG)
27 <input checked="" type="checkbox"/> HORN	35 <input checked="" type="checkbox"/> CAPS, COVERS	43 <input checked="" type="checkbox"/> EXPOSED WIRING	49 <input type="checkbox"/> RECOIL OIL COMPARTMENT (HIGH TRACK)
28 <input type="checkbox"/> ROTATING BEACON	36 <input type="checkbox"/> TURN SIGNALS	44 <input checked="" type="checkbox"/> GRAB IRONS	50 <input type="checkbox"/> HYD. STEERING FILTER (OHT)
29 <input type="checkbox"/> PARKING BRAKE	37 <input checked="" type="checkbox"/> FAN BELTS	45 <input checked="" type="checkbox"/> ROPS/FOPS	
OTHER:			

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

*[Signature]*

SERVICEMAN SIGNATURE

**4-28-22**

DATE



"An Equal Opportunity/Affirmative Action Employer"

*[Signature]*



# LUBE CHECKLIST

## 250 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT #	H-148	JOB #	0562	W.O. #	
MODEL	SERIAL NO.		HOUR METER READING		
				8037 HCL	
OTHER			LOCATION		
TYPE OF SERVICE			<input checked="" type="checkbox"/> 250 HR <input type="checkbox"/> 750 HR <input type="checkbox"/> 1250 HR <input type="checkbox"/> 1750 HR		

### FLUID / FILTERS CHANGED

ENGINE OIL & FILTER CHANGE?	ENGINE OIL SAMPLE TAKEN?	FUEL FILTER CHANGED & SCREEN CLEANED?
N FRONT / REAR	Y FRONT / REAR	N

### FLUID LEVELS CHECKED

1 <input checked="" type="checkbox"/> ENGINE F R	5 <input type="checkbox"/> REAR DIFF	9 <input checked="" type="checkbox"/> CIRCLE DR	13 <input checked="" type="checkbox"/> SWING DR.
2 <input type="checkbox"/> TRANS F R	6 <input type="checkbox"/> FINALS RF/LF	10 <input checked="" type="checkbox"/> SPEED REDUCER	14 <input type="checkbox"/> COOLANT _____ F°
3 <input checked="" type="checkbox"/> HYDRAULIC	7 <input checked="" type="checkbox"/> FINALS RR/LR	11 <input type="checkbox"/> SPINDEL L R	
4 <input type="checkbox"/> FRONT DIFF.	8 <input type="checkbox"/> TANDEM SR L	12 <input type="checkbox"/> STEERING	

OTHERS:

### CHECKED

16 <input checked="" type="checkbox"/> AIR FILTERS	23 <input type="checkbox"/> PARKING BRAKE	30 <input type="checkbox"/> TURN SIGNALS	37 <input checked="" type="checkbox"/> EXPOSED WIRING
17 <input checked="" type="checkbox"/> BATTERIES	24 <input type="checkbox"/> INHIBITOR	31 <input checked="" type="checkbox"/> FAN BELTS	38 <input checked="" type="checkbox"/> GRAB IRONS
18 <input checked="" type="checkbox"/> ALTERNATOR	25 <input type="checkbox"/> AIR TANKS	32 <input checked="" type="checkbox"/> GREASED FITTINGS	39 <input checked="" type="checkbox"/> ROPS/FOPS
19 <input type="checkbox"/> BRAKE RESERVE	26 <input type="checkbox"/> UNIV. JOINTS	33 <input checked="" type="checkbox"/> BREATHERS	40 <input checked="" type="checkbox"/> SEAT BELT CONDITION
20 <input checked="" type="checkbox"/> GAUGES	27 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	34 <input checked="" type="checkbox"/> FIRE EX CHG.	41 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
21 <input checked="" type="checkbox"/> HORN	28 <input type="checkbox"/> PRE-CLEANER	35 <input checked="" type="checkbox"/> BACK ALARM	
22 <input type="checkbox"/> ROTATING BEACON	29 <input checked="" type="checkbox"/> CAPS, COVERS	36 <input type="checkbox"/> BRAKE LIGHTS	

OTHER:

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: Sample Note

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE

DATE



# LUBE CHECKLIST

## 1000/2000 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <b>H148</b>		JOB # <b>095</b>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <b>7764</b>	
OTHER		LOCATION <b>Rox-y</b>	
TYPE OF SERVICE <input type="checkbox"/> 1000 HR <input checked="" type="checkbox"/> 2000 HR			

### FLUID / FILTERS CHANGED

- |   |   |  |
|---|---|--|
| 1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR | 6 <input checked="" type="checkbox"/> FUEL FILTER CHANGED & SCREEN CHANGED? | 11 <input checked="" type="checkbox"/> DIFFERENTIAL OIL CHANGED? |
| 2 <input checked="" type="checkbox"/> TRANSMISSION FILTER CHANGED?              | 7 <input checked="" type="checkbox"/> WINCH FILTER CHANGED?                 | 12 <input checked="" type="checkbox"/> BRAKE SYSTEM OIL CHANGED? |
| 3 <input checked="" type="checkbox"/> TRANSMISSION OIL CHANGED?                 | 8 <input checked="" type="checkbox"/> FINAL DRIVE OIL CHANGED? RF/LF/RR/LR? | 13 <input checked="" type="checkbox"/> SWING DRIVE OIL?          |
| 4 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED?                 | 9 <input checked="" type="checkbox"/> COOLANT CHANGED                       |  |
| 5 <input checked="" type="checkbox"/> HYDRAULIC OIL CHANGED?                    | 10 <input checked="" type="checkbox"/> STEERING SYSTEM OIL CHANGED?         |  |

### OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

- |  |   |  |   |
|--|---|--|---|
| 14 <input checked="" type="checkbox"/> ENGINE F R  | 18 <input checked="" type="checkbox"/> REAR DIFF.   | 22 <input checked="" type="checkbox"/> CIRCLE DR.    | 26 <input checked="" type="checkbox"/> SWING DR.        |
| 15 <input checked="" type="checkbox"/> TRANS F R   | 19 <input checked="" type="checkbox"/> FINALS RF/LF | 23 <input checked="" type="checkbox"/> SPEED REDUCER | 27 <input checked="" type="checkbox"/> COOLANT _____ F° |
| 16 <input checked="" type="checkbox"/> HYDRAULIC   | 20 <input checked="" type="checkbox"/> FINALS RR/LR | 24 <input checked="" type="checkbox"/> SPINDLE L R   |   |
| 17 <input checked="" type="checkbox"/> FRONT DIFF. | 21 <input checked="" type="checkbox"/> TANDEM O R L | 25 <input checked="" type="checkbox"/> STEERING      |   |

OTHERS:

### CHECKED

- |  |   |  |   |
|--|---|--|---|
| 29 <input checked="" type="checkbox"/> AIR FILTERS     | 39 <input checked="" type="checkbox"/> UNIV. JOINTS         | 49 <input checked="" type="checkbox"/> BRAKE LIGHTS                                  | 57 <input checked="" type="checkbox"/> COND OF ROPS & MOUNT BOLTS     |
| 30 <input checked="" type="checkbox"/> BATTERIES       | 40 <input checked="" type="checkbox"/> AIR FILTER INDICATOR | 50 <input checked="" type="checkbox"/> EXPOSED WIRING                                | 58 <input checked="" type="checkbox"/> STARTING AND CHARGING SYSTEM   |
| 31 <input checked="" type="checkbox"/> ALTERNATOR      | 41 <input checked="" type="checkbox"/> PRE-CLEANER          | 51 <input checked="" type="checkbox"/> GRAB IRONS                                    | 59 <input checked="" type="checkbox"/> ENGINE NOISE, SMOKE, LEAKS     |
| 32 <input checked="" type="checkbox"/> BRAKE RESERVE   | 42 <input checked="" type="checkbox"/> CAPS, COVERS         | 52 <input checked="" type="checkbox"/> ROPS/FOPS                                     | 60 <input checked="" type="checkbox"/> SEAT BELT CONDITION            |
| 33 <input checked="" type="checkbox"/> GAUGES          | 43 <input checked="" type="checkbox"/> TURN SIGNALS         | 53 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED | 61 <input checked="" type="checkbox"/> BRAKE ACCUMULATOR CHARGE (OHT) |
| 34 <input checked="" type="checkbox"/> HORN            | 44 <input checked="" type="checkbox"/> FAN BELTS            | 54 <input checked="" type="checkbox"/> ENGINE VALVE ADJ.                             | 62 <input checked="" type="checkbox"/> MAIN FRAME BODY SUPP. (OHT)    |
| 35 <input checked="" type="checkbox"/> ROTATING BEACON | 45 <input checked="" type="checkbox"/> GREASED FITTINGS     | 55 <input checked="" type="checkbox"/> INTAKE _____ EXHAUST                          |   |
| 36 <input checked="" type="checkbox"/> PARKING BRAKE   | 46 <input checked="" type="checkbox"/> BREATHERS            | 56 <input checked="" type="checkbox"/> VALVE COVER GASKET REPL                       |   |
| 37 <input checked="" type="checkbox"/> INHIBITOR       | 47 <input checked="" type="checkbox"/> FIRE EX CHG.         | 56 <input checked="" type="checkbox"/> TRANS OPER. NOISE, LEAKS                      |   |
| 38 <input checked="" type="checkbox"/> AIR TANKS       | 48 <input checked="" type="checkbox"/> BACK ALARM           |  |   |

OTHER:

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

*[Signature]*

SERVICEMAN SIGNATURE

**10-28-21**

DATE



"An Equal Opportunity/Affirmative Action Employer"



## LUBE CHECKLIST

### 250 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <b>4148</b>		JOB # <b>094</b>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <b>7423</b>	
OTHER		LOCATION <b>Kenmore</b>	
TYPE OF SERVICE	<input checked="" type="checkbox"/> 250 HR <input type="checkbox"/> 750 HR <input type="checkbox"/> 1250 HR <input type="checkbox"/> 1750 HR		

### FLUID / FILTERS CHANGED

ENGINE OIL & FILTER CHANGE? <b>NO</b> FRONT / REAR	ENGINE OIL SAMPLE TAKEN? <b>yes</b> FRONT / REAR	FUEL FILTER CHANGED & SCREEN CLEANED? <b>no</b>
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### FLUID LEVELS CHECKED

1 <input checked="" type="checkbox"/> ENGINE F R	5 <input checked="" type="checkbox"/> REAR DIFF	9 <input checked="" type="checkbox"/> CIRCLE DR	13 <input checked="" type="checkbox"/> SWING DR.
2 <input checked="" type="checkbox"/> TRANS F R	6 <input checked="" type="checkbox"/> FINALS RF/LF	10 <input checked="" type="checkbox"/> SPEED REDUCER	14 <input checked="" type="checkbox"/> COOLANT _____ F°
3 <input checked="" type="checkbox"/> HYDRAULIC	7 <input checked="" type="checkbox"/> FINALS RR/LR	11 <input checked="" type="checkbox"/> SPINDEL L R	
4 <input checked="" type="checkbox"/> FRONT DIFF.	8 <input checked="" type="checkbox"/> TANDEMS R L	12 <input checked="" type="checkbox"/> STEERING	
OTHERS:			

### CHECKED

16 <input checked="" type="checkbox"/> AIR FILTERS	23 <input checked="" type="checkbox"/> PARKING BRAKE	30 <input checked="" type="checkbox"/> TURN SIGNALS	37 <input checked="" type="checkbox"/> EXPOSED WIRING
17 <input checked="" type="checkbox"/> BATTERIES	24 <input checked="" type="checkbox"/> INHIBITOR	31 <input checked="" type="checkbox"/> FAN BELTS	38 <input checked="" type="checkbox"/> GRAB IRONS
18 <input checked="" type="checkbox"/> ALTERNATOR	25 <input checked="" type="checkbox"/> AIR TANKS	32 <input checked="" type="checkbox"/> GREASED FITTINGS	39 <input checked="" type="checkbox"/> ROPS/FOPS
19 <input checked="" type="checkbox"/> BRAKE RESERVE	26 <input checked="" type="checkbox"/> UNIV. JOINTS	33 <input checked="" type="checkbox"/> BREATHERS	40 <input checked="" type="checkbox"/> SEAT BELT CONDITION
20 <input checked="" type="checkbox"/> GAUGES	27 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	34 <input checked="" type="checkbox"/> FIRE EX CHG.	41 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
21 <input checked="" type="checkbox"/> HORN	28 <input checked="" type="checkbox"/> PRE-CLEANER	35 <input checked="" type="checkbox"/> BACK ALARM	
22 <input checked="" type="checkbox"/> ROTATING BEACON	29 <input checked="" type="checkbox"/> CAPS, COVERS	36 <input checked="" type="checkbox"/> BRAKE LIGHTS	
OTHER:			

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added



SERVICEMAN SIGNATURE

**7-8-21**

DATE



"An Equal Opportunity/Affirmative Action Employer"

**AW**





# LUBE CHECKLIST

## 500 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <u>H-148</u>		JOB # <u>0520</u>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <u>7185 Hrs</u>	
OTHER		LOCATION	
TYPE OF SERVICE <input checked="" type="checkbox"/> 500 HR <input type="checkbox"/> 1500 HR			

### FLUID / FILTERS CHANGED

- |   |   |  |
|---|---|--|
| 1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR | 3 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED?               | 5 <input type="checkbox"/> WINCH FILTER CHANGED?             |
| 2 <input type="checkbox"/> TRANSMISSION FILTER CHANGED?                         | 4 <input checked="" type="checkbox"/> FUEL FILTER CHANGED AND SCREEN CLEANED? | 6 <input type="checkbox"/> CHANGED HYD STEERING FILTER (OHT) |

### OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

- |  |   |  |   |
|--|---|--|---|
| 7 <input checked="" type="checkbox"/> ENGINE F R | 11 <input type="checkbox"/> REAR DIFF.              | 15 <input checked="" type="checkbox"/> CIRCLE DR.    | 19 <input checked="" type="checkbox"/> SWING DR.        |
| 8 <input type="checkbox"/> TRANS F R             | 12 <input type="checkbox"/> FINALS RF/LF            | 16 <input checked="" type="checkbox"/> SPEED REDUCER | 20 <input checked="" type="checkbox"/> COOLANT _____ F° |
| 9 <input checked="" type="checkbox"/> HYDRAULIC  | 13 <input checked="" type="checkbox"/> FINALS RR/LR | 17 <input type="checkbox"/> SPINDLE L R              |   |
| 10 <input type="checkbox"/> FRONT DIFF.          | 14 <input type="checkbox"/> TANDEMS R L             | 18 <input type="checkbox"/> STEERING                 |   |

OTHERS:

### CHECKED

- |  |   |   |  |
|--|---|---|--|
| 22 <input checked="" type="checkbox"/> AIR FILTERS | 30 <input type="checkbox"/> INHIBITOR                       | 38 <input checked="" type="checkbox"/> GREASED FITTINGS | 46 <input checked="" type="checkbox"/> SEAT BELT CONDITION                           |
| 23 <input checked="" type="checkbox"/> BATTERIES   | 31 <input type="checkbox"/> AIR TANKS                       | 39 <input checked="" type="checkbox"/> BREATHERS        | 47 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED |
| 24 <input checked="" type="checkbox"/> ALTERNATOR  | 32 <input type="checkbox"/> UNIV. JOINTS                    | 40 <input checked="" type="checkbox"/> FIRE EX CHG.     |  |
| 25 <input type="checkbox"/> BRAKE RESERVE          | 33 <input checked="" type="checkbox"/> AIR FILTER INDICATOR | 41 <input checked="" type="checkbox"/> BACK ALARM       |  |
| 26 <input checked="" type="checkbox"/> GAUGES      | 34 <input checked="" type="checkbox"/> PRE-CLEANER          | 42 <input type="checkbox"/> BRAKE LIGHTS                | 48 <input type="checkbox"/> FRONT AXLE BEARING (MTG)                                 |
| 27 <input checked="" type="checkbox"/> HORN        | 35 <input checked="" type="checkbox"/> CAPS, COVERS         | 43 <input checked="" type="checkbox"/> EXPOSED WIRING   | 49 <input type="checkbox"/> RECOIL OIL COMPARTMENT (HIGH TRACK)                      |
| 28 <input type="checkbox"/> ROTATING BEACON        | 36 <input type="checkbox"/> TURN SIGNALS                    | 44 <input checked="" type="checkbox"/> GRAB IRONS       | 50 <input type="checkbox"/> HYD. STEERING FILTER (OHT)                               |
| 29 <input type="checkbox"/> PARKING BRAKE          | 37 <input checked="" type="checkbox"/> FAN BELTS            | 45 <input checked="" type="checkbox"/> ROPS/FOPS        |  |

OTHER:

### WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: 600-319-3841, 600-319-4801, 600-211-1341, 600-185-6110, samples etc

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE

DATE



"An Equal Opportunity/Affirmative Action Employer"

*AW*



EQUIPMENT FILE

Questions? Contact  
Kent, WA (800) 669-2425

Sold To: KLB Construction Inc  
3405 121st Street SW  
PO Box 158  
Mukilteo WA 98275

Ship To: K L B Construction Inc  
3429 121st Street SW  
Lynnwood WA 98087

Page: 1 of 1  
Date: 9/23/2020  
Customer # 1481184  
Ship To #: 1672781  
Order #: 1346025 SO  
Pick Branch: K  
Order Branch: K  
[www.modernmachinery.com](http://www.modernmachinery.com)

SALES ORDER PACKING SLIP

Order Date: 8/6/2020 Customer PO: PC490LC-11  
Pick Date: 8/6/2020 Ship Instr: ANDY TO DELIVER  
Originator: TWHEELER  
Model: Serial #:

Delivered by:  
Freight Terms:  
Ship Method: PSSR Delivery  
A/R Message: Ship to ONLY / PO Required

Item Number	Description	Location	Qty Ordered	Qty Shipped	Qty B/O	UM	Price	Ext. Amount
KO2083200610	TRACK LINK ASS	AISLE1	1	1		EA	8,188.22	8,188.22
KO2083205200	SHOE BOLT KIT	WL0804	13	13		EA	69.41	902.33

Modern installed

Material may not be returned without prior authorization. Claims for damage and/or shortage must be made within fifteen days from the date of shipment.

Modern Machinery provides innovative solutions and products to make our customers more productive, competitive and profitable.



Customer # 1481184  
Work Order # 24902901  
Customer PO # THANKS FOR YOUR BUSINESS

Page: 1 of 2  
Invoice # 2628639  
Invoice Date: 11/23/2020  
Printed Date: 11/24/2020

Questions? Contact:  
Kent, WA (800) 669-2425  
Credit Department: (406) 523-1103

PLEASE REMIT TO: PO Box 16660, Missoula, MT 59808-6660

www.modernmachinery.com

EQUIPMENT FILE

Sold To:

KLB Construction Inc  
3405 121st Street SW  
PO Box 158  
Mukilteo, WA 98275

Ship To:

KLB Construction Inc  
3405 121st Street SW  
PO Box 158  
Mukilteo, WA 98275

### SERVICE FINAL INVOICE

Contact Name: JENS JOHANSEN  
Phone: (425) 508-1587 Email: jensj@klbconstruction.com

H148

WAO5A 3992

#### WO Segment : 24902901

Manufacturer	Model	Serial #	Equipment #	Hours/ Miles	Customer Equip #
Komatsu	PC490LC-11	85074	601164	5	

Work Code: B5 REMOVE & INSTALL

WO Type: Retail

Component Code: 02EU .WALK ON GROUP, Use for Track Chains & Pads as an Assembly

#### Work Requested:

.WALK ON GROUP, Use for Track Chains & Pads as an Assembly

REMOVE & INSTALL

#### Work Performed:

Pulled machine up to shop.  
Removed the left/right track assemblies, wrapped tracks up for transport.  
Pad swapped performed @ Missoula.  
Once track assemblies arrived, Re-Installed them on the machine.  
Adjusted the track tension and test operated the machine with no further concerns.  
Labor Breakdown-27hrs@138/hr.

#### Labor Detail:

Labor Subtotal: 1,320.00

#### Parts Detail:

Part Number	Description	Qty Actual	Unit Price	Amount
99	FREIGHT	22	1.00	22.00
KO0406407525	SNAP RING	2	11.67	23.34
KO0715501025	RING WEAR	2	14.23	28.46
KO0937000100	PACKING	2	57.63	115.26
KO2083054150	SEAL	2	66.00	132.00
KO2083241210	BOLT	7	3.40	23.80
KO2083241220	NUT	7	2.33	16.31
KO2083241261	SEAL	1	16.20	16.20
MSSTPLT5/8A572	5/8" PLATE A 572	1	17.34	17.34



Customer # 1481184  
Work Order # 24902901  
Customer PO # THANKS FOR YOUR  
BUSINESS

Page: 2 of 2  
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Invoice Date: 11/23/2020  
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Questions? Contact:  
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Credit Department: (406) 523-1103

**PLEASE REMIT TO: PO Box 16660, Missoula, MT 59808-6660**

[www.modernmachinery.com](http://www.modernmachinery.com)

Parts Subtotal: 394.71

**Invoice Totals:** Labor Total 1,320.00

Parts Total 394.71

Invoice Tax Total 171.47

**Invoice Total: \$ 1,886.18**

Invoice #	Customer PO #	Customer #	Terms	Total Invoice Amount
2628639	THANKS FOR YOUR BUSINESS	1481184	Due 30 Days from Invoice	\$ 1,886.18

**Incoming / Outgoing Machine Quality Assurance Inspection**

Customer: H-148 Date: 7-15-20  
 Model: PC496 LC-11 S/N: 85074  
 W/O #: 13299 Hours: 10466  
 Checkmark = OK; X = Needs Repair; NA = Not Applicable

Authorization # \_\_\_\_\_  
 P O # \_\_\_\_\_

Fluid Checks		In	Out	Comments
1 Engine Oil:	✓	✓		
2 Engine Coolant:	✓	✓		
3 Transmission:	NA	✓		
4 Hydraulic:	✓	✓		
5 Finals:	✓	✓		
6 Differentials:	NA	✓		
7 Attachment:	NA	✓		
8 Bevel:	NA	✓		
9 Pump Drive:	✓	✓		
10 Swing/Circle:	✓	✓		
11 Swing Grease	✓	✓		
12 Tandems:	NA	✓		
13 Pivot Shaft:	NA	✓		
14 Fuel:	✓	✓		
15 Service Brakes:	NA	✓		
16 Lubricate Machine:	✓	✓		
17 SOS All	X	✓		low reserve in leaks
18 Batteries	✓	✓		last service 6/100
19 Recoil Housings	NA	✓		
20 Transfer Drive	NA	✓		
21 Feeder Planetaries	NA	✓		

Visual Checks	In	Out	Comments:
22 Leaks	X	✓	eng oil
23 Loose Hdw	✓	✓	
24 Undercarriage	X	✓	kinched track links - Modern
25 Attachments	X	✓	coupler cracked
26 Under Guards	X	✓	bent missey
27 Air/Pre Cleaners	X	✓	outer full of dust
28 Cab/Glass/Clean?	✓	✓	
29 Latches	✓	✓	
30 Rails/Steps	✓	✓	
31 Tires/Press	NA	✓	
32 Seat/Belt	✓	✓	

Ops Checks	In	Out	Comments:
33 Heater/AC	✓	✓	
34 Belts/Pulleys	X	✓	Replace belts
35 Travel Alarm	✓	✓	
36 Swing/Parking Brake	✓	✓	
37 Service brakes	NA	✓	
38 Starting	✓	✓	
39 Steering	✓	✓	
40 Transmission	✓	✓	
41 Gauges	✓	✓	CA3725 Nox sensor
42 Hydraulics	✓	✓	
43 Implements	X	✓	stick been cracked - modern
44 Linkage/Pins	X	✓	shin boom - stick

**Repair Recommendation:**  
 (continued on back)

Incoming Inspector: Neal  
 Outgoing Inspector: Neal



- 1 Perform incoming inspection
- 2 Kinked Track links
- 3 Replace sprockets
- 4 Remount Fire extinguisher
- 5 Crack on boom LH side near base-contacted Modern for guidance
- 6 Crack on stick just down from where cyl attaches
7. Quick coupler cracks.

[illegible]

# WORK ORDER

NO. 00000 EQUIPMENT# H-148 LOCATION Shop DATE 7-15-20

HOURS 2466 MILEAGE            MECH Neal DATE COMP. 8-3-20

DESCRIPTION OF WORK Periodic inspection

ITEM	REPAIRS MADE	MECH
------	--------------	------

[illegible]