UEBM002400

SHOP MANUAL

KOMATSU®

PC750SE-7K
PC750LC-7K

MACHINE MODEL	SERIAL NUMBER
PC750SE-7K	**K40001 AND UP**
PC750LC-7K	**K40001 AND UP**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require.
  Materials and specifications are subject to change without notice.
- PC750SE/PC750LC-7K mount the SAA6D140E-3 engine.
  For details of the engine, see the 140-3 Series Engine Shop Manual.

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WEIGHT TABLE

⚠ This weight table is a guide for use when transporting or handling components

Unit: kg

Machine model	PC750SE-7K	PC750LC-7K
Serial Number	K40001 and up	K40001 and up
Engine assembly	2,554	2,554
• Engine	1,720	1,720
• PTO (incl. lubricating piping)	500	500
• No. 1 pump	165	165
• No. 2 pump	150	150
• Control, PTO lubrication pump	19	19
Radiator assembly	260	260
Oil cooler assembly	200	200
Hydraulic tank (excl. hydraulic oil)	664	664
Revolving frame (incl. left and right decks)	6,960	6,960
Operator's cab	293	293
Swing machinery	490 × 2	490 × 2
Swing motor assembly	57 × 2	57 × 2
Travel motor assembly	130 × 2	130 × 2
L.H. 5-spool control valve	245	245
R.H. 4-spool control valve	240	240
Center swivel joint	69	69
Counterweight	9,800	9,800
Track frame assembly	19,854	20,626
• Center frame	5,550	5,550
• Track frame	2,630 × 2	2,880 × 2
• Carrier roller	51.8 × 6	51.8 × 6
• Track roller	136 × 16	136 × 18
• Idler cushion assembly	782 × 2	782 × 2
• Idler	450 × 2	450 × 2
• Final drive assembly	1,344 × 2	1,344 × 2
• Swing circle assembly	1,405	1,405

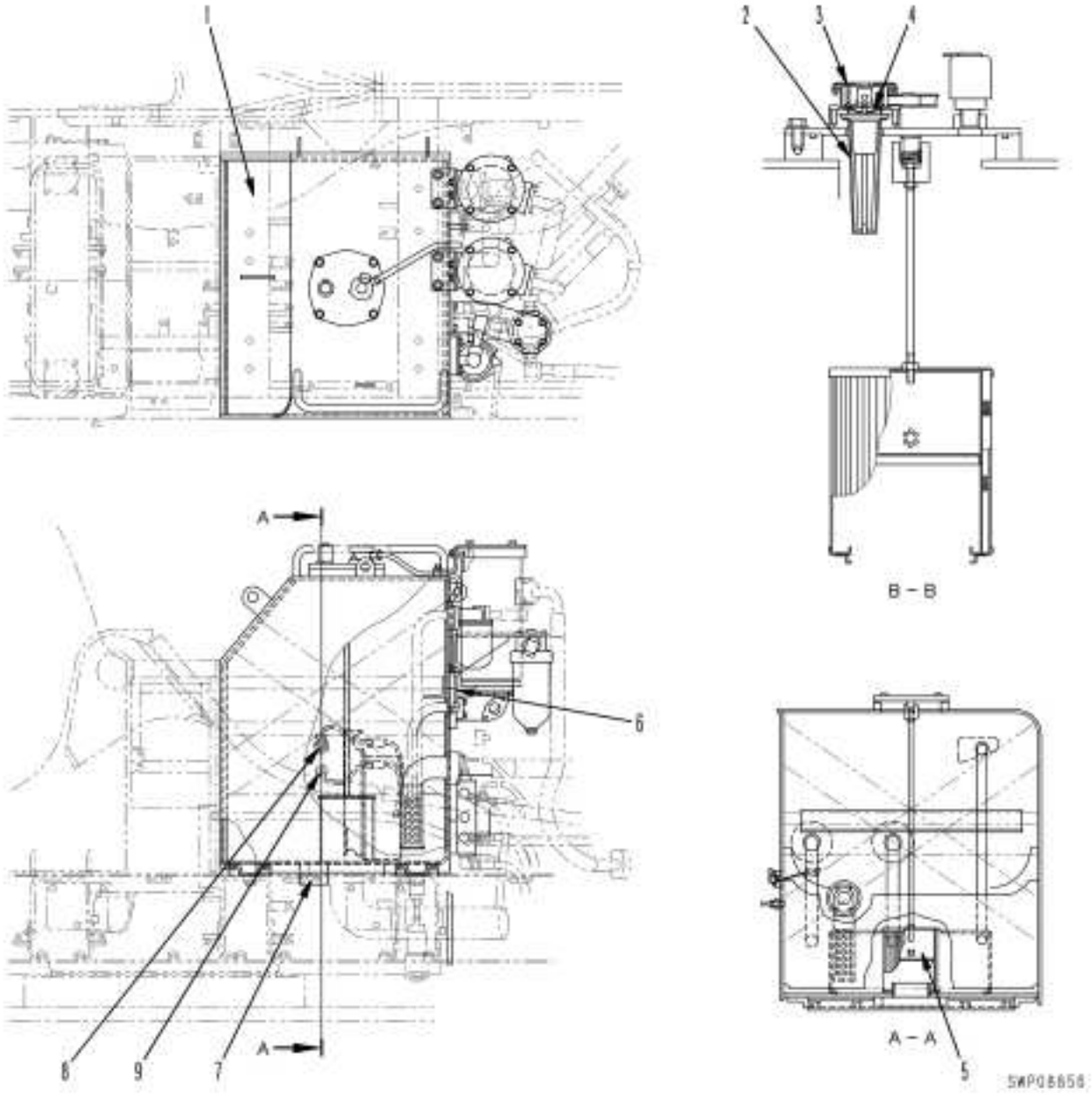
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Unit: kg

Machine model	PC750SE-7K	PC750LC-7K
Serial Number	K40001 and up	K40001 and up
Track shoe assembly		
• Narrow shoe (610 mm)	7,550	—
• Standard shoe (710 mm)	8,350	—
• Wide shoe (810 mm)	8,880	10,020
• Wide shoe (910 mm)	9,520	—
• Wide shoe (1,010 mm)	10,160	11,520
• Wide shoe (1,110 mm)	—	12,270
Boom assembly (excl. piping)	6,850	7,420
Arm assembly (excl. piping)	3,160	3,035
Bucket assembly (excl. piping)	3,435	2,960
Boom cylinder assembly	790 × 2	790 × 2
Arm cylinder assembly	497 × 2	881
Bucket cylinder assembly	933	506
Boom foot pin	45.2 × 2	45.2 × 2
Boom cylinder foot pin	33.8 × 2	33.8 × 2
Boom cylinder top pin	32.5 × 2	32.5 × 2
Boom-arm connecting pin	105	105
Arm cylinder foot pin	24 × 2	53.6
Arm cylinder top pin	24 × 2	30
Link-arm connecting pin	56.1	56.1
Link-bucket connecting pin	62.2	62.2
Bucket cylinder top pin	84.5	49.3
Bucket cylinder foot pin	43.8	25.3
Arm-bucket connecting pin	91.4	91.4
Link assembly	445	410.4

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HYDRAULIC TANK



1. Hydraulic tank
2. Strainer
3. Oil filler cap
4. Pressure valve
5. Suction strainer
6. Sight gauge
7. Drain valve
8. Hydraulic oil level sensor
9. Hydraulic oil temperature sensor

Specifications

Tank capacity	: 729 ℓ
Amount of oil inside tank	: 482 ℓ (at H level)

Pressure valve

Relief cracking pressure	: 16.7 ± 6.9 kPa {0.17 ± 0.07 kg/cm²}
Suction cracking pressure	: 0 – 0.49 kPa {0 – 0.005 kg/cm²}

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Error Code in Electrical System E979 (Rail press. high)

User Code	Error Code	Failure Code	Failure phenomenon	Rail press. high (Engine controller system)
E11	E979	AD00L2		
Failure content	• The signal circuit of the common rail fuel pressure sensor detected high pressure (level 1).			
Response from controller	• The machine is driven with limited output. • When the failure cause disappears of itself, the machine operation returns to normalcy.			
Phenomenon occurring on machine	• The output lowers (The engine output lowers about 20% and the pump absorption torque is reduced). • The output lowers (Only the pump absorption torque is reduced). • The engine speed does not rise above low idling.			
Relative information	• Input from the common rail pressure sensor (voltage and pressure) can be checked in the monitoring function. (Code No. 36401: Common rail pressure sensor voltage, 36400: Common rail fuel pressure)			

Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting
	1	Related systems defective	If any other error code or failure code is displayed, carry out troubleshooting for it first.
	2	Fuel used improper	Fuel used may be improper. Check it directly.
	3	Electric system of common rail fuel pressure sensor defective	Carry out troubleshooting for error code [E977].
	4	Mechanical system of common rail fuel pressure sensor defective	The common rail fuel pressure sensor may have a mechanical defect. Check it directly.
	5	Overflow valve defective	The overflow valve may have trouble of breakage of spring, wear of seat, or fixing of ball. Check it directly.
	6	Overflow piping clogged	The overflow piping may be clogged. Check it directly.
	7	Pressure limiter defective	The pressure limiter may have a mechanical defect. Check it directly.

Error Code in Electrical System E97A (Rail press. abnormal)

User Code	Error Code	Failure Code	Failure phenomenon	Rail press. abnormal (Engine controller system)
E11	E97A	AD00MA		
Failure content	• The signal circuit of the common rail fuel pressure sensor detected high pressure (level 2).			
Response from controller	• The machine is driven with limited output. • Even after the failure cause disappears of itself, the machine operation does not return to normalcy, unless the engine starting switch is once turned OFF.			
Phenomenon occurring on machine	• The output lowers (The engine output lowers about 20% and the pump absorption torque is reduced). • The output lowers (Only the pump absorption torque is reduced). • The engine speed does not rise above low idling.			
Relative information	• Input from the common rail pressure sensor (voltage and pressure) can be checked in the monitoring function. (Code No. 36401: Common rail pressure sensor voltage, 36400: Common rail fuel pressure)			

Presumed cause and standard value in normalcy	Cause		Standard value in normalcy and references for troubleshooting
	1	Common rail-related device defective	Carry out troubleshooting for error code [E979].

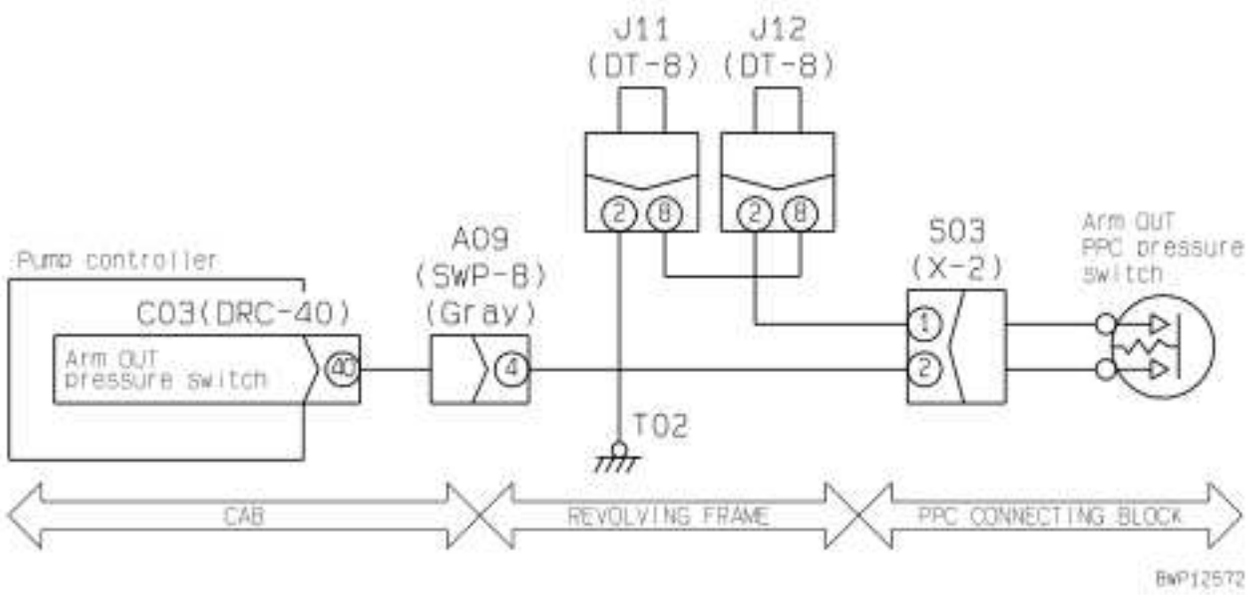
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E-22 "Arm OUT" is not correctly displayed in monitor function

Failure information	• "Arm OUT" is not correctly displayed in monitor function	"Arm OUT" is not correctly displayed in the monitor function (special function) on the monitor panel.
Relative information	—	

Presumed cause and standard value in normalcy		Cause	Standard value in normalcy and references for troubleshooting			
	1	Arm OUT PPC hydraulic switch defect (Internal disconnection and short-circuiting)	★ Turn the engine starting switch OFF for the preparations, and keep the engine running during the troubleshooting.			
			S03 (male)	L.H. work equipment control lever	Resistance value	
			Between (1) and (2)	NEUTRAL	Above 1 MΩ	
				Arm OUT	Below 1 Ω	
	2	Disconnection of wiring harness (Disconnection or defective contact with connector)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Wiring harness between C03 (female) (40) and S03 (female) (2)		Resistance value	Below 1 Ω
			Wiring harness between S03 (female) (1) to J12 to J11 and grounding		Resistance value	Below 1 Ω
	3	Grounding fault of wiring harness (Contact with grounding (GND) circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.			
			Between wiring harness between C03 (female) (40) and S03 (female) (2) and grounding		Resistance value	Above 1 MΩ
	4	Short-circuiting of wiring harness (Contact with 24 V circuit)	★ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.			
			Between wiring harness between C03 (female) (40) and S03 (female) (2) and grounding		Voltage	Below 1 V
	5	Pump controller defective	★ Turn the engine starting switch OFF for the preparations, and start the engine during the troubleshooting.			
			C03	L.H. work equipment control lever	Voltage	
			Between (40) and grounding	NEUTRAL	20 – 30 V	
				Arm OUT	Below 1 V	

Electrical Circuit Diagram for Arm OUT PPC Hydraulic Switch



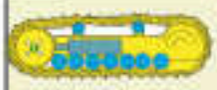
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UNDERCARRIAGE INSPECTION

(Program form No.: **********)

KUC

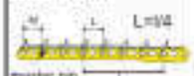
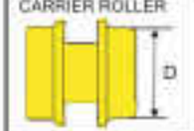
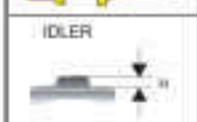
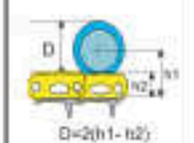
Komatsu Undercarriage Inspection



Customer name:

Address:

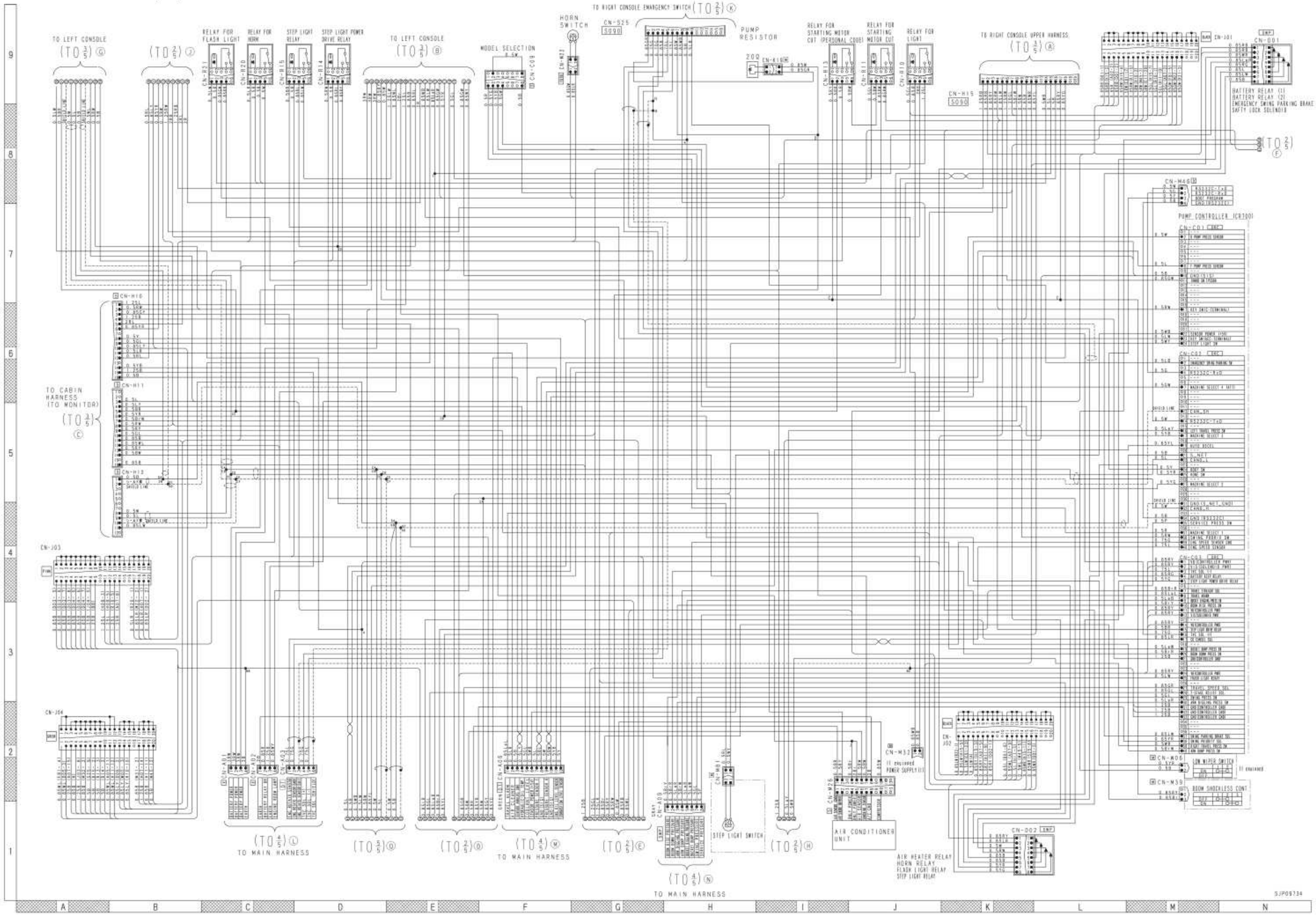
Model	PC750-7	Serial#	Equip#	Work Order No	
Location		SMR		Wet, AR, HD or Dry	DRY
Soil condition		Dealer		Shoe width (mm)	
Working condition		Inspector		Shoe type	DOUBLE
Insp.Date(yyyy/mm/dd)			(yyyy/mm/dd)	Wear type	NORMAL

			New	100% Wear	Measured mm	Wear %	SMR New	SMR Rebuilt	Hours on Parts:	Comments/Observation
LINK PITCH 	R	LH	1042.4	1054.4						
		RH	1042.4	1054.4						
	M	LH	260.60	263.60						
		RH	260.60	263.60						
 LINK HEIGHT	H	LH	156.0	143.0						
		RH	156.0	143.0						
BUSHING 	D	LH	87.5	82.5			New	Turned		
		RH	87.5	82.5			New	Turned		
GROUSER HIGHT 	H	LH	50.0	25.0						
		RH	50.0	25.0						
CARRIER ROLLER 	Front	LH	175.0	155.0						
		RH	175.0	155.0						
	Rear	LH	175.0	155.0						
		RH	175.0	155.0						
IDLER 	Front	LH	22.5	28.5						
		RH	22.5	28.5						
	Rear	LH	22.5	28.5						
		RH	22.5	28.5						
TRACK ROLLER  D=2(h1- h2)	1	LH	255.0	243.0						
	2	LH	255.0	243.0						
	3	LH	255.0	243.0						
	4	LH	255.0	243.0						
	5	LH	255.0	243.0						
	6	LH	255.0	243.0						
	7	LH	255.0	243.0						
	8	LH	255.0	243.0						
	9	LH	255.0	243.0						
	10	LH	255.0	243.0						
	1	RH	255.0	243.0						
	2	RH	255.0	243.0						
	3	RH	255.0	243.0						
	4	RH	255.0	243.0						
	5	RH	255.0	243.0						
	6	RH	255.0	243.0						
	7	RH	255.0	243.0						
	8	RH	255.0	243.0						
	9	RH	255.0	243.0						
	10	RH	255.0	243.0						
SPROCKET 	H	LH	0.0	6.0						
		RH	0.0	6.0						

Remarks:

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ELECTRICAL CIRCUIT DIAGRAM (1/5)



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