SEBM005706

SHOP MANUAL

KOMATSU®

avance LOADER

WA120-3

MACHINE MODEL	SERIAL NUMBER
WA120-3 **(4-speed transmission specification)**	**50001 and up**
WA120-3A **(3-speed transmission specification)**	**50001 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.
- WA120-3 mount the 6D95L and S4D102E engine.
  For details of the engine, see the 95 and 102 Series Engine Shop Manual.

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SPECIFICATIONS

WA120-3

Machine model				WA120-3	
Serial No.				50001 – 52999	53001 and up
Weight	Operating weight		kg	7,660	
	Distribution (front)		kg	3,150	
	Distribution (rear)		kg	4,510	
Performance	Bucket capacity (piled) (With BOC)		m^3	1.4	
	Rated load		kg	2,240	
	Travel speed	FORWARD 1st	km/h	7.0	
		FORWARD 2nd	km/h	11.7	
		FORWARD 3rd	km/h	21.2	
		FORWARD 4th	km/h	34.5	
		REVERSE 1st	km/h	7.4	
		REVERSE 2nd	km/h	12.2	
		REVERSE 3rd	km/h	22.0	
		REVERSE 4th	km/h	35.0	
	Max. rimpull	(Forward)	N (kg)	74,500 (7,600)	
		(Reverse)	N (kg)	70,100 (7,150)	
	Gradeability		deg	25	
	Min. turning radius	Center of outside wheel	mm	4,470	
		Outside portion of chassis	mm	5,180	
Dimensions	Overall length (with BOC)		mm	5,975	
	Overall width (chassis)		mm	2,250	
	Bucket width		mm	2,390	
	Overall height (top of cab)		mm	3,075	
		(Bucket raised)	mm	4,545	
	Wheelbase		mm	2,600	
	Tread		mm	1,780	
	Min. ground clearance		mm	400	
	Height of bucket hinge pin		mm	3,450	
	Dumping clearance (tip of bucket edge)		mm	2,760	
		(tip of BOC)	mm	2,700	
	Dumping reach (tip of bucket edge)		mm	945	
		(tip of BOC)	mm	975	

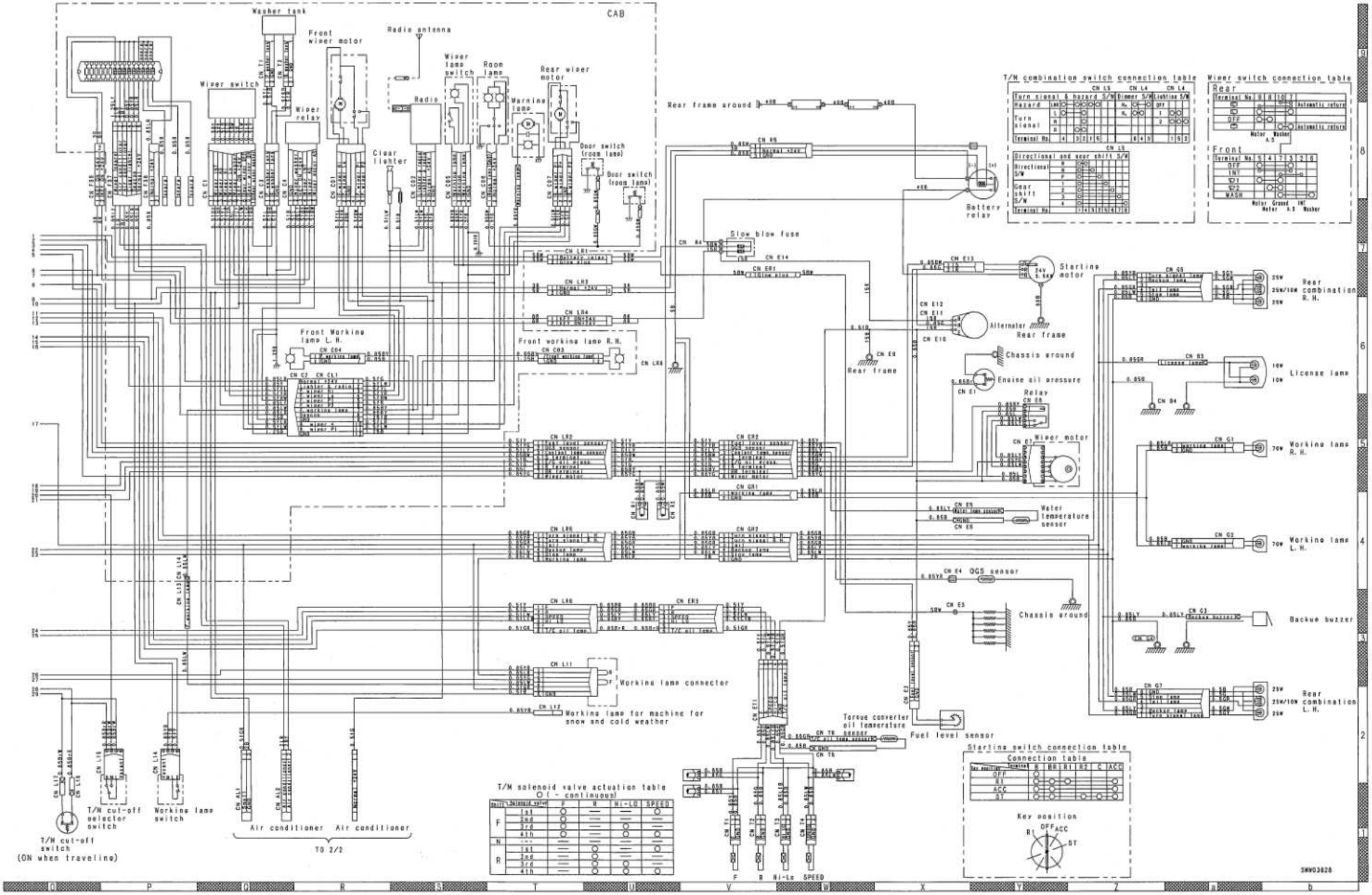
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Machine model			WA120-3	
Serial No.			50001 – 52999	53001 and up
Dimensions	Bucket dump angle	deg	47	
	Bucket tilt angle (SAE travel posture)	deg	46	
	Digging depth (10° dump) (tip of bucket edge)	mm	205	
	(tip of BOC)	mm	235	
Engine	Model		Komatsu 6D95L	Komatsu S4D102E-1
	Type		4-cycle, water-cooled, in-line, 6-cylinder, direct injection	4-cycle, water-cooled, in-line, 4-cylinder, direct injection
	No. of cylinders – bore x stroke	mm	6 – 95 x 115	4 – 102 x 120
	Piston displacement	ℓ (cc)	4.89 (4,890)	3.92 (3,920)
	Flywheel horsepower	kW (HP)/rpm	63 (85)/2,400	63 (85)/2,400
	Maximum torque	Nm (kgm)/rpm	332 (33)/1,600	348 (35.5)/1,600
	Fuel consumption ratio	g/kWh (g/HPh)	231 (172)	231 (172)
	High idling speed	rpm	2,600	2,600
	Low idling speed	rpm	750	825
	Starting motor		24 V 5.5 kW	24 V 4.5 kW
	Alternator		24 V 35 A	24 V 35 A
	Battery		12 V 110 Ah x 2	12 V 110 Ah x 2
Power train	Torque converter		3-element, 1-stage, single-phase (Komatsu TCA30-6A)	
	Transmission		Spur gear, constant-mesh multiple-disc, hydraulically actuated, modulation type, F4 - R4	
	Reduction gear		Spiral bevel gear	
	Differential		Straight bevel gear, torque proportioning	
	Final drive		Planetary gear, single reduction	
Axle, wheel	Drive type		Front/rear-wheel drive	
	Front axle		Fixed-frame, semi-floating	
	Rear axle		Center pin support type, semi-floating	
	Tire		16.9-24-10PR (L-2)	
	Wheel rim		W15L x 24	
	Inflation pressure Front tire	kPa (kg/cm²)	235 (2.4)	
	Rear tire	kPa (kg/cm²)	235 (2.4)	
Brakes	Main brake		Front/rear wheel independent braking wet-type sealed disc brakes with hydraulic booste	
	Parking brake		Thrust shaft (transmission shaft) braking, wet-type disc brake, mechanical type	

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Machine model				WA120-3	
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Steering system	Type			Articulated type	
	Structure			Fully hydraulically Power steering	
Hydraulic system	Hydraulic pump type (Hydraulic and Steering pump)			Gear type (SAL(2)45)	
	Delivery		//min.	115	
	Control valve	Set pressure for work equipment	MPa (kg/cm²)	Spool type 20.59 {210}	
		Set pressure for steering	MPa (kg/cm²)	Orbit-roll valve type 18.6 {190}	
	Cylinder	Boom cylinder No. – bore x stroke	mm	Reciprocating piston 2 – 100 x 606	
		Bucket cylinder No. – bore x stroke	mm	Reciprocating piston 1 – 100 x 424	
		Steering cylinder No. – bore x stroke	mm	Reciprocating piston 2 – 60 x 340	
Work equipment	Link type			Single link	
	Bucket edge type			Flat edge with BOC	

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