CRAWLER EXCAVATOR

SERVICE MANUAL

R22-7

HYUNDAI

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Model				Robex22-7
Machine weight	Canopy rubber		kg	2,080
	Canopy steel			2,130
	Cabin rubber			2,200
	Cabin steel			2,250
Standard bucket capacity/width			m^3/mm	0.06 / 450
Engine	Type			MITSUBISHI L3E
	Displacement		cc	952
	Rated output		kW(PS) / min^{-1}	12.5(17) / 2,400
Dimensions	Overall length		mm	4,075
	Overall width		mm	1,380
	Overall height		mm	2,250
Working range	Max.digging depth		mm	2,365
	Max.vertical digging depth		mm	1,795
	Max.digging height		mm	3,745
	Max.dumping height		mm	2,510
	Max.digging radius		mm	4,065
	Reach at ground		mm	3,965
	Min. turning radius	front	mm	1,745
		swing	mm	1,405
	Rear turning radius		mm	1,255
	Boom swing angle L/R		deg	80 / 50
Performance	Max.digging force(Bucket)		kN	16.3
	Max.digging force(Arm)		kN	11.2
	Max.drawbar pull		kN	16.2
	Travel speed(low) / (high)		km / h	2.2 / 3.8
	Slew speed		min^{-1}	11.5
	Gradeability		Angle	30°
Hydraulic system	Pump	Type		Piston × 2+Gear
		Oil flow	ℓ / min	24.0 × 2+15.4
	P.T.O	Oil flow	ℓ / min	48.0
	Main relief pressure		MPa	18.6 × 2+17.2
Underbody	Dozer blade width×height		mm	1,380 × 280
	Shoe width×tumbler center		mm	230 × 1,325
	Ground pressure	Cabin rubber	kPa	33.5
		Cabin steel		34.2
	Type of travelling motor			Piston
	Crawler tension system			Grease cylinder
Capacity	Hyd.oil capacity		ℓ	33.0
	Fuel capacity		ℓ	29.0
	Engine oil capacity		ℓ	3.5
	Cooling water capacity		ℓ	5.6
	Noise level LwA/LpA		dB	93 / 82

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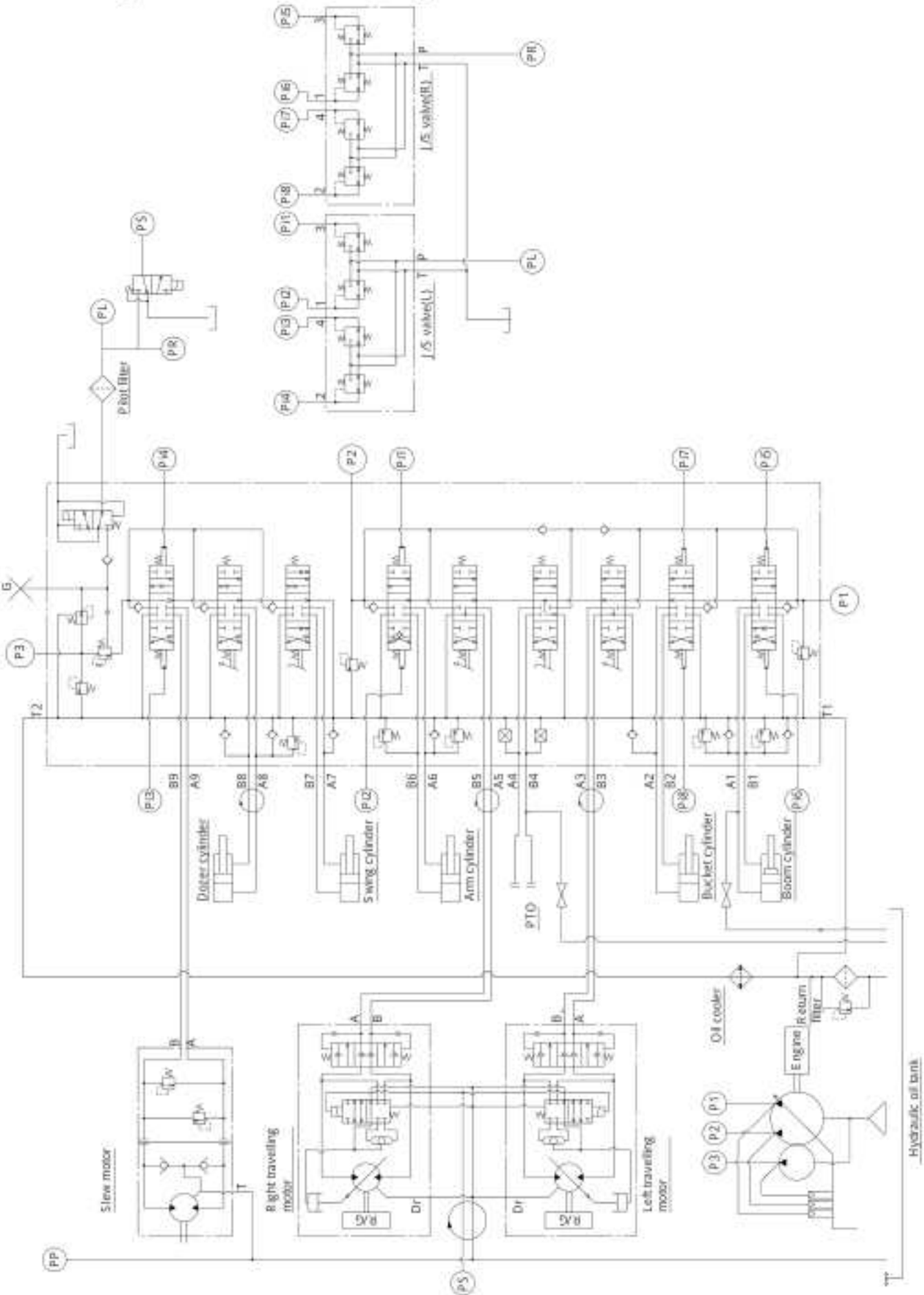
2-4 Weight list

Unit: kg

Part name		Part name	
Boom	70	Slew bearing	29
Arm	40	Track frame	179
Bucket	57	Dozer	74
Dump link	9.4	Crawler(steel)	84×2
Bucket link(R)	1.7	Crawler(rubber)	59×2
Bucket link(L)	2.0	Idler	8×2
Boom joint pin	2.0	Adjust cylinder	12×2
Arm joint pin	1.7	Track roller	5.0×6
Bucket pin	1.7×2	Sprocket	4×2
Bucket link pin	1.5	Slew motor	15
Swing post	36	Turning motor	25×2
Swing post pin	4.1	Joystick	2.0×2
Swing frame	258	Engine	94
Hydraulic oil tank	28	Radiator	7.0
Fuel tank	16	Battery	12
Engine cover(A)(B)	24	Seat plate	16.5
Engine cover(C)	8.0	Swivel joint	11
Counter weight	200	Pump	15
Boom cylinder	20	Pump frange	9
Arm cylinder	20	Control valve	23
Bucket cylinder	17	Tops roof	110
Swing cylinder	16	Cabin	230
Dozer cylinder	13		

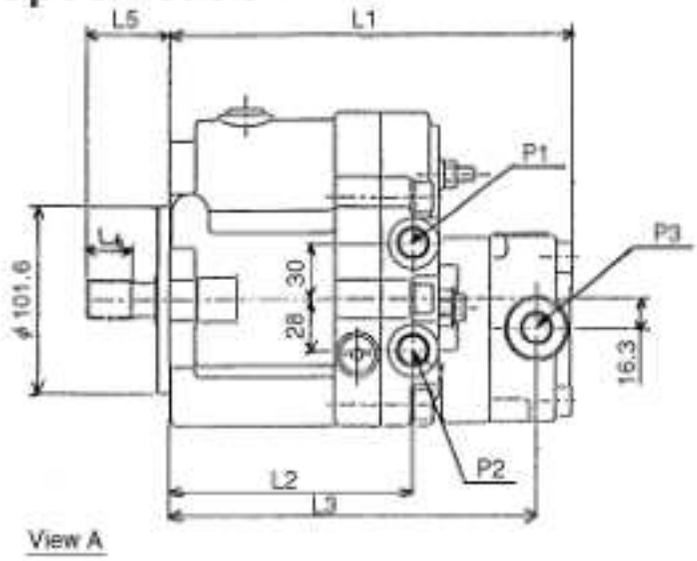
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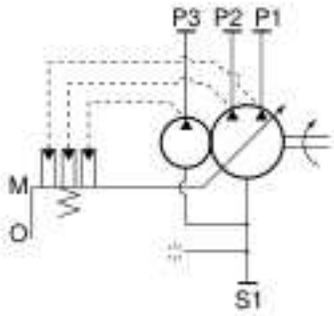
2-8 Hydraulic circuit diagram

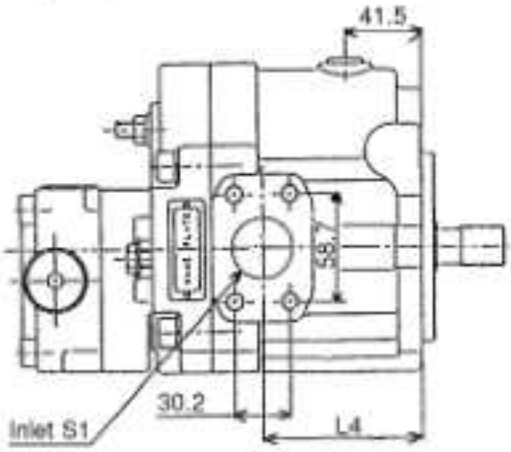


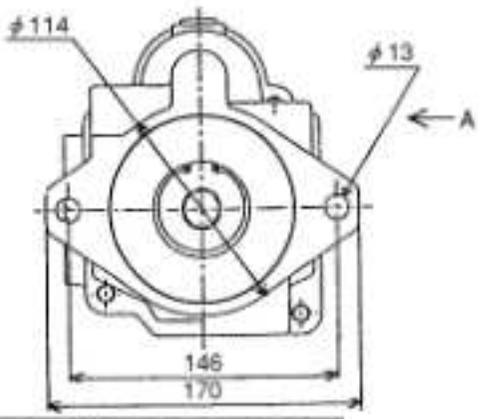
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5-1 Specification









pump type		PVD-08-20L3PS-6G-4920A
Port size	S1	SAE J518b-1 1/4
	P1	PF3/8
	P2	PF3/8
	P3	PF3/8
L1		221mm
L2		134mm
L3		201.5mm
L4		88mm
L5		45mm
L6		24mm
Displacement(rev)	P1	10mm
	P2	10mm
	P3	6.4mm
Rated pressure	P1	18.6MPa(190kgf/cm^2)
	P2	18.6MPa(190kgf/cm^2)
	P3	17.2MPa(175kgf/cm^2)
Direction of rotation		Clockwise seen from shaft side
Weight		15kg

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19 TROUBLESHOOTING

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