

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins B5.9-C
Type	4-cycle, turbocharged, charge air cooled, diesel engine, low emission
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	102 × 120mm(4.02" × 4.72")
Piston displacement	5880cc(359cu in)
Compression ratio	17.3 : 1
Rated gross horse power(SAE J1995)	166Hp at 1950rpm(124kW at 1950rpm)
Maximum torque at 1500rpm	68.4kgf · m(495lbf · ft)
Engine oil quantity	14.2 l (3.8U.S. gal)
Dry weight	505kg(1113lb)
High idling speed	2150+ 50rpm
Low idling speed	1000 ± 100rpm
Rated fuel consumption	173g/Hp · hr at 1950rpm
Starting motor	Nippon denso(24V-4.5kW)
Alternator	Delco Remy (24V-50A)
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement axial piston pump
Capacity	2 × 113cc/rev
Maximum pressure	330kgf/cm ² (4694psi) [360kgf/cm ² (5120psi)]
Rated oil flow	2 × 220 l /min (58.1U.S. gpm/ 48.4U.K. gpm)
Rated speed	1950rpm

[] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40kgf/cm ² (570psi)
Rated oil flow	29.3 l /min(7.7U.S. gpm/6.4U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools double-block
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm ² (4695psi) [360kgf/cm ² (5120psi)]
Overload relief valve pressure	390kgf/cm ² (5550psi)

[]: Poer boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	151cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	59kgf · m(427lb · ft)
Brake release pressure	33~50kgf/cm ² (470~711psi)
Reduction gear type	2 - stage planetary
Swing speed	12.5rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	360kgf/cm ² (5120psi)
Counter balance valve	Applied
Capacity(Max/min)	160/65cc/rev

7) POWER TRAIN

Item	Description	Specification	
Transmission	Type	2 speed power shift transmission	
	Gear ratio	1st	5.35
		2nd	1.39
Parking brake	Type	Multi disc brake integrated in transmission	
	Maximum braking power	168kgf · m(2390lb · ft)	
Axle	Type	4 wheel drive with differential	
	Gear ratio	13.55	
	Brake	Multi disc brake	

8) REMOTE CONTROL VALVE

Item	Specification	
Type	Pressure reducing type	
Operating pressure	Minimum	6.5kg/cm ² (92psi)
	Maximum	26kg/cm ² (370psi)
Single operation stroke	Lever	82.7mm(3.3in)

9) CYLINDER

Item	Specification	
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 120 × ∅ 85 × 1290mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 140 × ∅ 100 × 1510mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 125 × ∅ 85 × 1055mm
	Cushion	Extend only
Dozer cylinder	Bore dia × Rod dia × Stroke	∅ 120 × ∅ 85 × 226mm
	Cushion	Extend only
Outrigger cylinder	Bore dia × Rod dia × Stroke	∅ 130 × ∅ 80 × 427mm
	Cushion	-
Adjust boom cylinder	Bore dia × Rod dia × Stroke	∅ 160 × ∅ 100 × 1040mm
	Cushion	Extend only

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
STD	0.80m ³ (1.05yd ³)	0.70m ³ (0.92yd ³)	5	1090mm(42.9")	1210mm(47.6")
OPT	0.51m ³ (0.67yd ³)	0.45m ³ (0.59yd ³)	3	700mm(27.6")	820mm(32.3")
	0.87m ³ (1.14yd ³)	0.75m ³ (0.98yd ³)	5	1000mm(39.4")	1120mm(44.1")
	0.92m ³ (1.20yd ³)	0.80m ³ (1.05yd ³)	5	1150mm(45.3")	1270mm(50.0")
	1.10m ³ (1.44yd ³)	0.96m ³ (1.26yd ³)	5	1320mm(52.0")	1440mm(56.7")
	1.20m ³ (1.57yd ³)	1.00m ³ (1.31yd ³)	5	1400mm(55.1")	1520mm(60.0")
	1.34m ³ (1.75yd ³)	1.15m ³ (1.50yd ³)	6	1550mm(61.1")	1670mm(65.7")
	◆0.74m ³ (0.97yd ³)	0.65m ³ (0.85yd ³)	5	985mm(38.8")	-
	◆0.90m ³ (1.18yd ³)	0.80m ³ (1.05yd ³)	5	1070mm(42.1")	-
	◆1.05m ³ (1.37yd ³)	0.92m ³ (1.20yd ³)	5	1430mm(56.3")	-
	◎0.87m ³ (1.14yd ³)	0.75m ³ (0.98yd ³)	5	1140mm(44.9")	-
	■0.75m ³ (0.98yd ³)	0.65m ³ (0.85yd ³)	-	1790mm(70.5")	-

◆ : Heavy duty bucket

◎ : Rock bucket(Heavy)

■ : Slope finishing bucket