

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB 6.7
Type	4-cycle turbocharged 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	107 × 124 mm (4.2" × 4.9")
Piston displacement	6700 cc (409 cu in)
Compression ratio	17.2 : 1
Rated gross horse power (SAE J1995)	143 Hp (107 kW) at 2100 rpm
Maximum torque	59.1 kgf · m (428 lbf · ft) at 1500 rpm
Engine oil quantity	24 l (6.3 U.S. gal)
Dry weight	556 kg (1226 lb)
High idling speed	2150 ± 50 rpm
Low idling speed	800 ± 100 rpm
Rated fuel consumption	172.5 g/Hp · hr at 2100 rpm
Starting motor	Nippon densor (24 V - 4.5 kW)
Alternator	Delco remy (24 V - 50 A)
Battery	2 × 12 V × 100 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 80 cc/rev
Maximum pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Rated oil flow	2 × 168 l /min (44.4 U.S. gpm / 37.0 U.K. gpm)
Rated speed	2100 rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	31.5 l /min (8.3 U.S. gpm/6.9 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools two-block
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	72 cc/rev
Relief pressure	285 kgf/cm ² (4053 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	25 kgf · m (181 lbf · ft)
Brake release pressure	15~50 kgf/cm ² (213~711 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	380 kgf/cm ² (5400 psi)
Counter balance valve	Applied
Capacity	107 cc/rev

7) POWER TRAIN

Item	Description		Specification
Transmission	Type		2 speed power shift transmission
	Gear ratio	1st	4.87
		2nd	1.20
Parking brake	Type		Multi disc brake integrated in transmission
	Maximum braking torque		2124 kgf · m (15360 lbf · ft)
Axle	Type		4 wheel drive with differential
	Gear ratio		15.43
	Brake		Multi disc brake

8) CYLINDER

Item			Specification
Boom cylinder	Bore dia × Rod dia × Stroke		∅ 105 × ∅ 75 × 1075mm
	Cushion		Extend only
Arm cylinder	Bore dia × Rod dia × Stroke		∅ 115 × ∅ 80 × 1138mm
	Cushion		Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke		∅ 100 × ∅ 70 × 840mm
	Cushion		Extend only
Dozer cylinder	Rear	Bore dia × Rod dia × Stroke	∅ 100 × ∅ 65 × 236mm
	Front	Bore dia × Rod dia × Stroke	∅ 100 × ∅ 65 × 240mm
	Cushion		Extend only
Outrigger cylinder	Bore dia × Rod dia × Stroke		∅ 110 × ∅ 75 × 475mm
	Cushion		-
Adjust cylinder	Bore dia × Rod dia × Stroke		∅ 145 × ∅ 90 × 613mm
	Cushion		Extend only
Adjust boom cylinder	Bore dia × Rod dia × Stroke		∅ 105 × ∅ 75 × 975mm
	Cushion		Extend only

9) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
Standard	※ 0.58 m ³ (0.76 yd ³)	0.50 m ³ (0.65 yd ³)	5	1030 mm (40.6")	1130 mm (44.5")
Option	0.23 m ³ (0.30 yd ³)	0.20 m ³ (0.26 yd ³)	3	520 mm (20.5")	620 mm (24.4")
	0.40 m ³ (0.52 yd ³)	0.35 m ³ (0.46 yd ³)	4	760 mm (29.9")	860 mm (33.9")
	0.46 m ³ (0.60 yd ³)	0.40 m ³ (0.52 yd ³)	4	850 mm (33.5")	950 mm (37.4")
	0.52 m ³ (0.68 yd ³)	0.45 m ³ (0.59 yd ³)	5	935 mm (36.8")	1035 mm (40.7")
	0.65 m ³ (0.85 yd ³)	0.55 m ³ (0.72 yd ³)	5	1110 mm (43.7")	1210 mm (47.6")
	0.71 m ³ (0.93 yd ³)	0.60 m ³ (0.78 yd ³)	5	1205 mm (47.4")	1305 mm (51.4")
	◎ 0.55 m ³ (0.72 yd ³)	0.45 m ³ (0.59 yd ³)	-	1800 mm (70.9")	-
	★ 0.45 m ³ (0.59 yd ³)	0.40 m ³ (0.52 yd ³)	-	1520 mm (59.8")	-

◎ : Slope finishing bucket

★ : Ditch cleaning bucket