4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB6.7
Type	4-cycle turbocharged and charge air-cooled diesel engine.
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	6730 cc (409 cu in)
Compression ratio	17.2 : 1
Rated gross horse power	145 hp at 2100 rpm
Maximum gross torque at 1400rpm	69 kgf · m (499 lbf · ft)
Engine oil quantity	18 ℓ (4.8 U.S. gal)
Dry weight	485 kg (1069 lb)
High idling speed	2230 ± 50rpm
Low idling speed	950 ± 25 rpm
Rated fuel consumption (at rated)	254 g/kw · hr
Starting motor	Nippondenso 228000-7902 (24 V-3.7 kW)
Alternator	Delco Remy 24SI (24V-70Amp)
Battery	2 × 12V × 80Ah

2) MAIN PUMP

Item	Specification
Type	Variable piston pump
Capacity	74 cc/rev
Maximum operating pressure	280 kgf/cm^2 (3980 psi)
Rated operating speed	2100 rpm
Rated output flow	155 ℓ /min (40.9 U.S.gpm)

3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandern helical gear pump	
Capacity	9.1 cc/rev	9.1 cc/rev
Maximum operating pressure	150 kgf/cm^2 (2130 psi)	
Rated operating speed	2100 rpm	
Rated output flow	19 ℓ /min (5.0 U.S.gpm)	19 ℓ /min (5.0 U.S.gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool (sectional block)
Operating method	Hydraulic pilot assist
Main relief valve set pressure	280 kgf/cm^2 (3980 psi)
Overload relief valve set pressure	340 kgf/cm^2 (4840 psi) / ★150 kgf/cm^2 (2130 psi)

★ : Bucket dump

5) REMOTE CONTROL VALVE

Item		Specification
Type		Joystick (or with aux lever)
Control pressure	Minimum	3.7 kgf/cm^2 (52.6 psi)
	Maximum	30 kgf/cm^2 (427 psi)

6) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 110 × ø 65 × 738 mm
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 95 × ø 50 × 745 mm
Steering cylinder	Bore dia × Rod dia × Stroke	ø 65 × ø 40 × 429 mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG160
	Type	Single-stage, single-phase
	Ratio	2.348 : 1
Transmission	Type	Full-automatic power shift
	Gear shift	Forward fourth gear, reverse third gear
	Control	Electrical single lever type, kick-down system
	Pump rated flow	85 ℓ /min (22.5 U.S.gpm) at 2000 rpm
Axle	Drive devices	4-wheel drive
	Front	Front fixed location
	Rear	Oscillation ± 12˚ of center pin-loaded
Wheels	Tires	20.5-25, 16PR (L3)
Brakes	Travel	Four-wheel, wet-disc type, full hydraulic
	Parking	Spring applied, hydraulic released brake on front axle
Steering	Type	Full hydraulic, articulated
	Steering angle	40˚ to both right and left angle, respectively