

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	104 × 132mm(4.1" × 5.2")
Piston displacement	6730cc(409cu in)
Compression ratio	17.2 : 1
Rated gross horse power	145hp at 2100rpm
Maximum gross torque at 1400rpm	69kgf · m(500lb · ft)
Engine oil quantity	16 l (4.2 U.S. gal)
Dry weight	485kg(1069lb)
High idling speed	2230 ± 50rpm
Low idling speed	950 ± 25rpm
Rated fuel consumption	254g/kw · hr
Starting motor	Nippondenso 228000-7902 (24V)
Alternator	Delco Remy 24SI(24V-70Amp)
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Fixed displacement tandem helical gear pump
Capacity	46+41cc/rev
Maximum operating pressure	220kgf/cm ² (3129psi)
Rated operating speed	2100rpm
Rated output flow	179 l /min(47.3U.S.gpm)

3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem helical gear pump	
Capacity	16.8cc/rev	8.2cc/rev
Maximum operating pressure	150kgf/cm ² (2130psi)	
Rated operating speed	2100rpm	
Rated output flow	29 l /min(7.7U.S.gpm)	17 l /min(4.5U.S.gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool(sectional block)
Operating method	Hydraulic pilot assist
Main relief valve set pressure	220kgf/cm ² (3129psi)
Overload relief valve set pressure	240kgf/cm ² (3414psi)

5) REMOTE CONTROL VALVE

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

6) CYLINDER

Item	Specification
Boom cylinder	Bore dia × Rod dia × Stroke ø 120 × ø 70 × 738mm
Bucket cylinder	Bore dia × Rod dia × Stroke ø 140 × ø 75 × 505mm
Steering cylinder	Bore dia × Rod dia × Stroke ø 65 × ø 40 × 429mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG160
	Type	Single-stage, single-phase
Transmission	Type	Full-automatic power shift
	Gear shift	Forward fourth gear, reverse third gear
	Adjustment	Electrical single lever type, kick-down system
Axle	Drive devices	4-wheel drive
	Front	Front fixed location
	Rear	Oscillation $\pm 12^\circ$ 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