

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB5.9-C
Type	4-cycle turbocharged, charge air cooled diesel engine
Control type	Electronic control
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 x stroke	102 x 120mm(4.02" x 4.72")
Piston displacement	5880cc(359cu in)
Compression ratio	16.3 : 1
Rated gross horse power	218ps at 2200rpm
Maximum gross torque at 1500rpm	96kgf · m(692lbf · ft)
Engine oil quantity	16 (4.2 U.S. gal)
Wet weight	459kg(1012lb)
High idling speed	2370 ± 50rpm
Low idling speed	900 ± 50rpm
Rated fuel consumption	155g/ps · hr
Starting motor	Nippondenso 228000-7902 (24V)
Alternator	Delco Remy 22SI(24V-70Amp)
Battery	2 x 12V x 200Ah

2) MAIN PUMP

Item	Specification
Type	Fixed displacement tandem gear pump
Capacity	68+63cc/rev
Maximum operating pressure	210kgf/cm ² (2990psi)
Rated oil quantity	283 /min(74.8U.S.gpm / 62.0U.K.gpm)
Rated speed	2200rpm

3) FAN+BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem helical gear pump	
Capacity	22.9cc/rev	11.9cc/rev
Maximum operating pressure	180kgf/cm ² (2560psi)	
Rated operating speed	48 /min(18.2U.S.gpm)	25 /min(6.6U.S.gpm)
Rated output flow	2200rpm	

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool
Operating method	Hydraulic pilot assist
Main relief valve pressure	210kgf/cm ² (2990psi)
Overload relief valve pressure(Boom)	240kgf/cm ² (3410psi)

5) REMOTE CONTROL VALVE

Item	Specification	
Type	Pressure reducing type	
Operating	Minimum	5.8kgf/cm ² (82.5psi)
	Maximum	19kgf/cm ² (270psi)
Single operation stroke	Lever	70mm(2.8in)

6) CYLINDER

Item		Specification
Boom cylinder	Bore dia x Rod dia x Stroke	Ø 160 x Ø 90 x 757mm
Bucket cylinder	Bore dia x Rod dia x Stroke	Ø 180 x Ø 90 x 530mm
Steering cylinder	Bore dia x Rod dia x Stroke	Ø 80 x Ø 45 x 440mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification	
Transmission	Model	4WG210	
	Type	Converter	Single-stage, single-phase
		Transmission	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	23.5-25, 20PR(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	