

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB5.9-C
Type	4-cycle turbocharged, 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	17.5 : 1
Rated gross horse power	175ps at 2200rpm
Maximum gross torque at 1500rpm	82kgf · m(590lbf · ft)
Engine oil quantity	16 (4.2 U.S. gal)
Wet weight	432kg(952lb)
High idling speed	2330 ± 50rpm
Low idling speed	950 ± 50rpm
Rated fuel consumption	166g/ps · hr
Starting motor	Nippondenso 228000-7902 (24V-7.5kW)
Alternator	Delco Remy 22SI(24V-70Amp)
Battery	2 x 12V x 160Ah

2) MAIN PUMP

Item	Specification
Type	Fixed displacement double helical gear pump
Capacity	51+51cc/rev
Maximum operating pressure	210kgf/cm ² (2990psi)
Rated oil quantity	220 /min(58.1U.S.gpm / 48.4U.K.gpm)
Rated speed	2200rpm

3) FAN + BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem gear pump	
Capacity	19cc/rev	9.5cc/rev
Maximum operating pressure	180kgf/cm ² (2560psi)	
Rated oil quantity	40 /min(10.6U.S.gpm)	20 /min(5.3 U.S.gpm)
Rated speed	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	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 × Rod dia × Stroke	Ø 140 × Ø 75 × 750mm
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø 160 × Ø 80 × 475mm
Steering cylinder	Bore dia × Rod dia × Stroke	Ø 70 × Ø 45 × 436mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification	
Transmission	Model	4WG190	
	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 ± 13° of center pin-loaded	
Wheels	Tires	20.5-25, 16PR(L3)	
	Travel	Four-wheel, wet-disc type, full hydraulic	
Brakes	Parking	Spring applied, hydraulic released brake on front axle	
Steering	Type	Full hydraulic, articulated	
	Steering angle	40° to both right and left angle, respectively	