

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins B3.9-C
Type	4-cycle turbocharged diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Firing order	1-3-4-2
Combustion chamber type	Direct injection type
Cylinder bore × stroke	102 × 120mm(4.0" × 4.7")
Piston displacement	3920cc(239cu in)
Compression ratio	17.5 : 1
Rated gross horse power	96ps at 2200rpm
Maximum gross torque at 1500rpm	39kgf · m(282lbf · ft)
Engine oil quantity	11 (2.9U.S. gal)
Wet weight	338kg(745lb)
High idling speed	2420 ± 50rpm
Low idling speed	950 ± 50rpm
Rated fuel consumption	171.4g/ps.h
Starting motor	Nippon denso(24V)
Alternator	Delco-Remy(24V-50AMP)
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Fixed displacement tandem gear pump
Capacity	29+26cc/rev
Maximum operating pressure	210kgf/cm ² (2987psi)
Rated oil quantity	125 /min(33U.S.gpm)
Rated speed	2200rpm

3) BRAKE PUMP

Item		Specification
Type		Fixed displacement tandem gear pump
Capacity		5cc/rev
Maximum operating pressure		150kgf/cm ² (2130psi)
Rated oil quantity		11 /min(2.9U.S.gpm)

4) MAIN CONTROL VALVE

Item		Specification
Type		2 spool
Operating method		Hydraulic pilot assist
Main relief valve pressure		210kgf/cm ² (2987psi)
Overload relief valve pressure		240kgf/cm ² (3414psi)

5) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating	Minimum	5.8kgf/cm ² (82.5psi)
	Maximum	30kgf/cm ² (427psi)
Single operation stroke	Lever	77mm(3.0in)

6) CYLINDER

Item		Specification
Boom cylinder	Bore dia x Rod dia x Stroke	Ø 95 x Ø60 x 675mm
Bucket cylinder	Bore dia x Rod dia x Stroke	Ø110 x Ø65 x 510mm
Steering cylinder	Bore dia x Rod dia x Stroke	Ø 60 x Ø35 x 370mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG100
	Type	Single-stage, single-phase
Transmission	Type	Semi-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 $\pm 11^\circ$ of center pin-loaded
Wheels	Tires	15.5-25, 12PR(L2)
Brakes	Travel	Four-wheel, wet-disc type, full hydraulic
	Parking	Mechanical drum brake on transmission output shaft
Steering	Type	Full hydraulic, articulated
	Steering angle	40° to both right and left angle, respectively