

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Mitsubishi D04FD-TAA
Type	4-cycle turbocharged charge air cooled 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 × 130mm (4.02" × 5.12")
Piston displacement	4249cc (259cu in)
Compression ratio	16.5 : 1
Rated gross horse power (SAE J1995)	126Hp at 2000rpm (94kW at 2000rpm)
Maximum torque at 1700rpm	47.4kgf · m (345lbf · ft)
Engine oil quantity	18.5 l (4.9U.S. gal)
Dry weight	420kg (926lb)
High idling speed	2100 ± 50rpm
Low idling speed	800 ± 100rpm
Rated fuel consumption	170.6g/Hp · hr at 2000rpm
Starting motor	Mitsubishi 24V-5.0kW
Alternator	Mitsubishi 24V-50A
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 80cc/rev
Maximum pressure	330kgf/cm ² (4694psi) [360kgf/cm ² (5120psi)]
Rated oil flow	2 × 168 l /min (44.4U.S. gpm/ 37.0U.K. gpm)
Rated speed	2100rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	35kgf/cm ² (500psi)
Rated oil flow	31.5 l /min(8.3U.S. gpm/7.0U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools two-block
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm ² (4695psi)[360kgf/cm ² (5120psi)]
Overload relief valve pressure	380kgf/cm ² (5400psi)

[]: Pooer boost

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	117.8cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	56kgf · m(405lbf · ft)
Brake release pressure	20kgf/cm ² (284psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4695psi)
Reduction gear type	Planetary & differential type
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	8kgf/cm ² (114psi)
Braking torque	49.3kgf · m(357lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm ² (92psi)
	Maximum	26kgf/cm ² (370psi)
Single operation stroke	Lever	61mm (2.4in)
	Pedal	123mm (4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 1090mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 120 × ø 85 × 1340mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 950mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R180LC-7A	Option	500mm (20")	0.49kgf/cm ² (6.97psi)	51	2750mm (9' 0")
	Standard	600mm (24")	0.42kgf/cm ² (5.97psi)	51	2850mm (9' 4")
	Option	700mm (28")	0.36kgf/cm ² (5.12psi)	51	2950mm (9' 8")
	Option	800mm (32")	0.32kgf/cm ² (4.55psi)	51	3050mm (10' 0")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R180LC-7	STD	0.76m ³ (0.99yd ³)	0.65m ³ (0.85yd ³)	5	1060mm(41.7")	1180mm(46.5")
	OPT	0.39m ³ (0.51yd ³)	0.34m ³ (0.44yd ³)	3	620mm(24.4")	740mm(29.1")
		0.50m ³ (0.65yd ³)	0.44m ³ (0.58yd ³)	4	760mm(29.9")	880mm(34.6")
		0.64m ³ (0.84yd ³)	0.55m ³ (0.72yd ³)	5	920mm(36.2")	1040mm(40.9")
		0.89m ³ (1.16yd ³)	0.77m ³ (1.01yd ³)	6	1220mm(48.0")	1340mm(52.8")
		1.05m ³ (1.37yd ³)	0.90m ³ (1.18yd ³)	6	1400mm(55.1")	1520mm(59.8")
		◆0.69m ³ (0.90yd ³)	0.62m ³ (0.81yd ³)	5	990mm(39.0")	-

◆ : Heavy duty bucket