

7. 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 (260cu in)
Compression ratio	16.5 : 1
Rated gross horse power (SAE J1995)	119Hp (89kW) at 2000rpm
Maximum torque	45.4kgf · m (328lb · ft) at 1700rpm
Engine oil quantity	18.5 l (4.9U.S. gal)
Dry weight	420kg (930lb)
High idling speed	2100 ± 50rpm
Low idling speed	850 ± 100rpm
Rated fuel consumption	231 ± 7g/kW.hr (170 ± 5g/Ps.hr) at 2000rpm
Starting motor	24V-5.0kW
Alternator	24V-50A
Battery	2 × 12V × 80Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 65cc/rev
Maximum pressure	330kgf/cm ² (4690 psi) [360kgf/cm ² (5120psi)]
Rated oil flow	2 × 130 l /min (34.3U.S. gpm / 28.6U.K. gpm)
Rated speed	2000rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40kgf/cm ² (570psi)
Rated oil flow	30 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 (5540psi)

[]: Poer boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	64.3cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	25kgf · m (181lb · ft)
Brake release pressure	30~50kgf/cm ² (427~711psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	360kgf/cm ² (5120psi)
Counter balance valve	Applied
Capacity	107cc/rev

7) POWER TRAIN

Item	Description	Specification	
Transmission	Type	2 speed power shift transmission	
	Gear ratio	1st	4.87
		2nd	1.20
Parking brake	Type	Multi disc brake integrated in transmission	
	Maximum braking torque	2124kgf · m (15360lbf · ft)	
Axle	Type	4 wheel drive with differential	
	Gear ratio	15.43	
	Brake	Multi disc brake	

8) REMOTE CONTROL VALVE

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

9) CYLINDER

Item	Specification		
Boom cylinder	Bore dia × Rod dia × Stroke	ø 105 × ø 75 × 1075mm	
	Cushion	Extend only	
Arm cylinder	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 1188mm	
	Cushion	Extend and retract	
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 70 × 855mm	
	Cushion	Extend only	
Dozer cylinder	Rear	Bore dia × Rod dia × Stroke	ø 100 × ø 65 × 236mm
	Front	Bore dia × Rod dia × Stroke	ø 100 × ø 65 × 240mm
	Cushion	Extend only	
Outrigger cylinder	Bore dia × Rod dia × Stroke	ø 110 × ø 75 × 475mm	
	Cushion	-	
Adjust cylinder	Bore dia × Rod dia × Stroke	ø 145 × ø 90 × 613mm	
	Cushion	Extend only	
Adjust boom cylinder	Bore dia × Rod dia × Stroke	ø 105 × ø 75 × 975mm	
	Cushion	Extend only	

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
Standard	※ 0.58m ³ (0.76yd ³)	0.50m ³ (0.65yd ³)	5	1030mm (40.6")	1130mm (44.5")
Option	0.23m ³ (0.30yd ³)	0.20m ³ (0.26yd ³)	3	520mm (20.5")	620mm (24.4")
	0.40m ³ (0.52yd ³)	0.35m ³ (0.46yd ³)	4	760mm (29.9")	860mm (33.9")
	0.46m ³ (0.60yd ³)	0.40m ³ (0.52yd ³)	4	850mm (33.5")	950mm (37.4")
	0.52m ³ (0.68yd ³)	0.45m ³ (0.59yd ³)	5	935mm (36.8")	1035mm (40.8")
	0.65m ³ (0.85yd ³)	0.55m ³ (0.72yd ³)	5	1110mm (43.7")	1210mm (47.6")
	0.71m ³ (0.93yd ³)	0.60m ³ (0.78yd ³)	6	1205mm (47.4")	-
	0.55m ³ (0.72yd ³)	0.45m ³ (0.59yd ³)	-	1800mm (70.9")	-
	★0.45m ³ (0.59yd ³)	0.40m ³ (0.52yd ³)	-	1520mm (59.8")	-

※ : Slope finishing bucket

★ : Ditch cleaning bucket