

## 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
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 <sup>2</sup> (4690psi)[360kgf/cm <sup>2</sup> (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	35kgf/cm <sup>2</sup> (500psi)
Rated oil flow	30 l /min(8.3U.S. gpm/7.0U.K. gpm)

### 4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm <sup>2</sup> (4690psi) [360kgf/cm <sup>2</sup> (5120psi)]
Overload relief valve pressure	380kgf/cm <sup>2</sup> (5540psi)

[ ]: Power boost

### 5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	64.3cc/rev
Relief pressure	240kgf/cm <sup>2</sup> (3410psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	25kgf · m(180lbf · ft)
Brake release pressure	33~50kgf/cm <sup>2</sup> (426~710psi)
Reduction gear type	2 - stage planetary

### 6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm <sup>2</sup> (4690psi)
Capacity(max / min)	90.3/56cc/rev
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	6.0kgf/cm <sup>2</sup> (85psi)
Braking torque	40.6kgf · m(294lbf · ft)

## 7) REMOTE CONTROL VALVE

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

## 8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 105 × ∅ 75 × 1075mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 115 × ∅ 80 × 1188mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 100 × ∅ 70 × 855mm
	Cushion	Extend only
Dozer cylinder(Optional)	Bore dia × Rod dia × Stroke	∅ 100 × ∅ 70 × 270mm
	Cushion	-

※ 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
R140LC-7A	Standard	600mm(24")	0.36kgf/cm <sup>2</sup> (5.12psi)	46	2600mm( 8' 6")
	Option	500mm(20")	0.43kgf/cm <sup>2</sup> (6.11psi)	46	2500mm( 8' 2")
		700mm(28")	0.32kgf/cm <sup>2</sup> (4.55psi)	46	2700mm( 8' 10")
R140LCD-7A	Option	500mm(20")	0.45kgf/cm <sup>2</sup> (6.40psi)	46	2500mm( 8' 2")
	Standard	600mm(24")	0.38kgf/cm <sup>2</sup> (5.40psi)	46	2600mm( 8' 6")
R140LCM-7A	Standard	800mm(32")	0.32kgf/cm <sup>2</sup> (4.55psi)	47	2840mm( 9' 4")

## 10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R140LC-7A	Standard	※ 0.58m <sup>3</sup> (0.76yd <sup>3</sup> )	0.50m <sup>3</sup> (0.65yd <sup>3</sup> )	5	1000mm(39.4")	1100mm(43.3")
	Option	0.23m <sup>3</sup> (0.30yd <sup>3</sup> )	0.20m <sup>3</sup> (0.26yd <sup>3</sup> )	3	520mm(20.5")	620mm(24.4")
		0.40m <sup>3</sup> (0.52yd <sup>3</sup> )	0.35m <sup>3</sup> (0.46yd <sup>3</sup> )	4	750mm(29.5")	850mm(33.5")
		0.46m <sup>3</sup> (0.60yd <sup>3</sup> )	0.40m <sup>3</sup> (0.52yd <sup>3</sup> )	4	840mm(33.1")	940mm(37.0")
		0.52m <sup>3</sup> (0.68yd <sup>3</sup> )	0.45m <sup>3</sup> (0.59yd <sup>3</sup> )	5	915mm(36.0")	1015mm(40.0")
		0.65m <sup>3</sup> (0.85yd <sup>3</sup> )	0.55m <sup>3</sup> (0.72yd <sup>3</sup> )	5	1105mm(43.5")	1205mm(47.4")
		0.71m <sup>3</sup> (0.93yd <sup>3</sup> )	0.60m <sup>3</sup> (0.78yd <sup>3</sup> )	6	1190mm(46.9")	1290mm(50.8")
		★0.45m <sup>3</sup> (0.59yd <sup>3</sup> )	0.40m <sup>3</sup> (0.52yd <sup>3</sup> )	-	1520mm(59.8")	-
		0.55m <sup>3</sup> (0.72yd <sup>3</sup> )	0.45m <sup>3</sup> (0.59yd <sup>3</sup> )	-	1800mm(70.9")	-

: Slope finishing bucket

★ : Ditch cleaning bucket