

## 8. SPECIFICATIONS FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Mitsubishi S4K-T
Type	4-cycle turbocharged diesel engine, low emission
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	17:1
Rated gross horse power(SAE J1995)	94Hp at 1950rpm(70kW at 1950rpm)
Maximum torque at 1400rpm	37.9kgf · m(274lb · ft)
Engine oil quantity	17.5 l (4.6U.S. gal)
Dry weight	380kg(838lb)
High idling speed	2165+ 50rpm
Low idling speed	1050 ± 50rpm
Rated fuel consumption	177.4g/Hp · hr at 1950rpm
Starting motor	Mitsubishi 24V-5.0kW
Alternator	Mitsubishi 24V-50A
Battery	2 × 12V × 80Ah

### 2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 57.5cc/rev
Maximum pressure	330kgf/cm <sup>2</sup> (4694psi) [360kgf/cm <sup>2</sup> (5120psi)]
Rated oil flow	2 × 112 l /min (2 × 29.6U.S.gpm)
Rated speed	1950rpm

[ ]: Poer 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	29.3 l /min(7.7U.S.gpm/6.4U.K.gpm)

### 4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools mono-block
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm <sup>2</sup> (4695psi)[360kgf/cm <sup>2</sup> (5120psi)]
Overload relief valve pressure	380kgf/cm <sup>2</sup> (5550psi)

[ ]: Pooer boost

### 5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	64.3cc/rev
Relief pressure	240kgf/cm <sup>2</sup> (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	25kgf · m <sup>2</sup> (181lbf · ft)
Brake release pressure	33~50kgf/cm <sup>2</sup> (469~711psi)
Reduction gear type	2 - stage planetary
Swing speed	13.0rpm

### 6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm <sup>2</sup> (4695psi)
Reduction gear type	2 stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	Less then 9kgf/cm <sup>2</sup> (128psi)
Braking torque	24.36kgf · m <sup>2</sup> (176lbf · 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	∅ 95 × ∅ 70 × 1015mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 110 × ∅ 75 × 1070mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 95 × ∅ 65 × 855mm
	Cushion	Extend only
Dozer cylinder	Bore dia × Rod dia × Stroke	∅ 100 × ∅ 70 × 240mm
	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
R110-7	Standard	500mm(20")	0.39kgf/cm <sup>2</sup> (5.55psi)	46	2490mm( 8' 2")
	Option	600mm(24")	0.34kgf/cm <sup>2</sup> (4.84psi)	46	2590mm( 8' 6")
	Option	700mm(28")	0.30kgf/cm <sup>2</sup> (4.27psi)	46	2690mm( 8' 10")

## 10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R110-7	STD	0.45m <sup>3</sup> (0.59yd <sup>3</sup> )	0.40m <sup>3</sup> (0.52yd <sup>3</sup> )	4	830mm(32.7")	940mm(37.0")
	OPT	0.30m <sup>3</sup> (0.39yd <sup>3</sup> )	0.27m <sup>3</sup> (0.35yd <sup>3</sup> )	3	610mm(24.0")	720mm(28.3")
		0.40m <sup>3</sup> (0.52yd <sup>3</sup> )	0.44m <sup>3</sup> (0.58yd <sup>3</sup> )	4	760mm(29.9")	870mm(34.3")
		0.50m <sup>3</sup> (0.65yd <sup>3</sup> )	0.45m <sup>3</sup> (0.59yd <sup>3</sup> )	4	900mm(35.4")	1010mm(39.8")
		0.59m <sup>3</sup> (0.77yd <sup>3</sup> )	0.52m <sup>3</sup> (0.68yd <sup>3</sup> )	5	1020mm(40.2")	1130mm(44.5")