

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Yanmar 4TNE94
Type	4-cycle
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	94 × 100mm(3.70" × 3.94")
Piston displacement	2776cc(169.5cu in)
Compression ratio	18 : 1
Rated gross horse power(SAE J1349)	58.5Ps at 2500rpm(43kw at 2500rpm)
Maximum torque at 1600rpm	19.4kgf · m(140lb · ft)
Engine oil quantity	9.7 l (2.6U.S. gal)
Dry weight	250kg(551lb)
High idling speed	2600 + 50rpm
Low idling speed	1150 ± 50rpm
Rated fuel consumption	167g/Hp · hr
Starting motor	S13-204(12V)
Alternator	LR140-714(12V-40Amp)
Battery	1 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement piston pump
Capacity	2 × 21cc/rev
Maximum pressure	210kgf/cm ² (2987psi)
Rated oil flow	2 × 53 l /min (1.4.0U.S. gpm/ 11.7U.K. gpm)
Rated speed	2500rpm (Clockwise viewed from shaft end)

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump
Capacity	16.2/6.5cc/rev
Maximum pressure	170/30(peak : 150)kgf/cm ² (2418/427[peak : 2134]psi)
Rated oil flow	40.3/16.3 l /min(10.7/4.3U.S. gpm, 8.9/3.6U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spool
Operating method	Hydraulic pilot system
Main relief valve pressure	210kgf/cm ² (2987psi)
Overload relief valve pressure	230kgf/cm ² (3271psi)

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	39.1cc/rev
Relief pressure	170kgf/cm ² (2418psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	11.5kgf · m(83lb · ft)
Brake release pressure	25~50kgf/cm ² (356~711psi)
Reduction gear type	2 - stage planetary
Swing speed	10rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Capacity(Max/min)	80/30.2cc/rev
Relief pressure	210kg/cm ² (2987psi)

7) POWER TRAIN

Item	Description	Specification	
Transfer box	Type	2 speed hydrostatic and gear box	
	Gear ratio	1st	6.357
		2nd	1.961
Parking brake	Type	Multi disc brake integrated in rear axle	
	Maximum braking power	125kgf · m(904lbf · ft)	
Axle	Type	4 wheel drive with differential	
	Gear ratio	8.67	
	Brake	Multi disc brake	

8) REMOTE CONTROL VALVE

Item	Specification	
Type	Pressure reducing type	
Gear ratio	Minimum	5kg/cm ² (71psi)
	Maximum	20kg/cm ² (284psi)
Single operation spool stroke	6.5/8.5mm(0.26/0.33in)	

9) CYLINDER

Item	Specification	
Boom cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 55 × ø 620mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 85 × ø 50 × ø 760mm
	Cushion	Retract only
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 80 × ø 50 × ø 580mm
	Cushion	-
Dozer cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 55 × ø 159mm
	Cushion	-
Boom swing cylinder	Bore dia × Rod dia × Stroke	ø 95 × ø 50 × ø 631mm
	Cushion	-

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	PCSA heaped	CECE heaped		Without side cutter	With side cutter
Standard	0.18m ³ (0.24yd ³)	0.15m ³ (0.20yd ³)	5	705mm(27.8")	770mm(30.3")
Option	0.06m(0.08yd ³)	0.05m ³ (0.07yd ³)	3	315mm(12.4")	360mm(14.2")
	0.18m(0.24yd ³)	0.15m ³ (0.20yd ³)	5	550mm(21.7")	610mm(24.0")