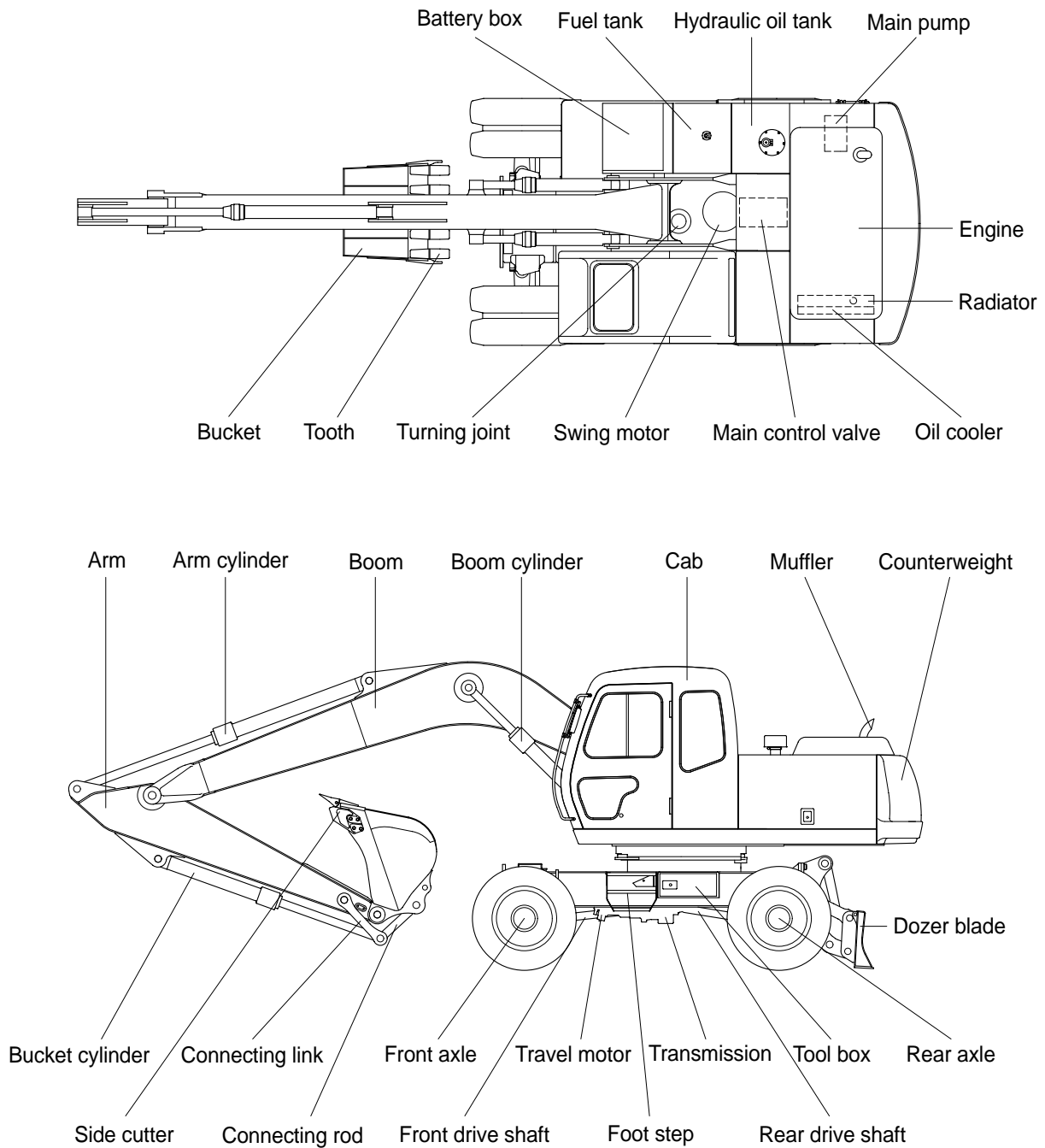


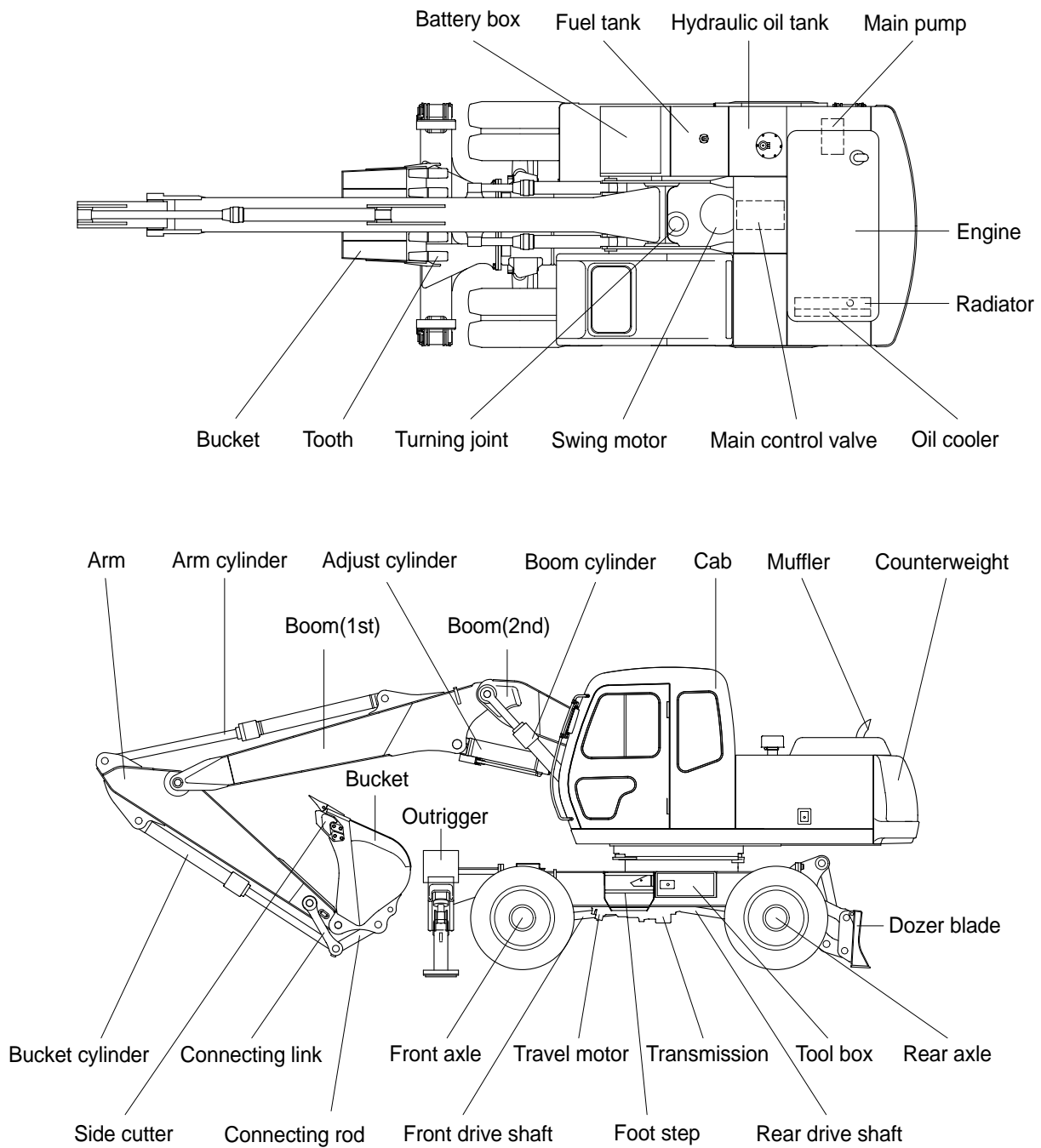
GROUP 2 SPECIFICATION

1. MAJOR COMPONENTS

1) EQUIPPED WITH ONE PIECE BOOM

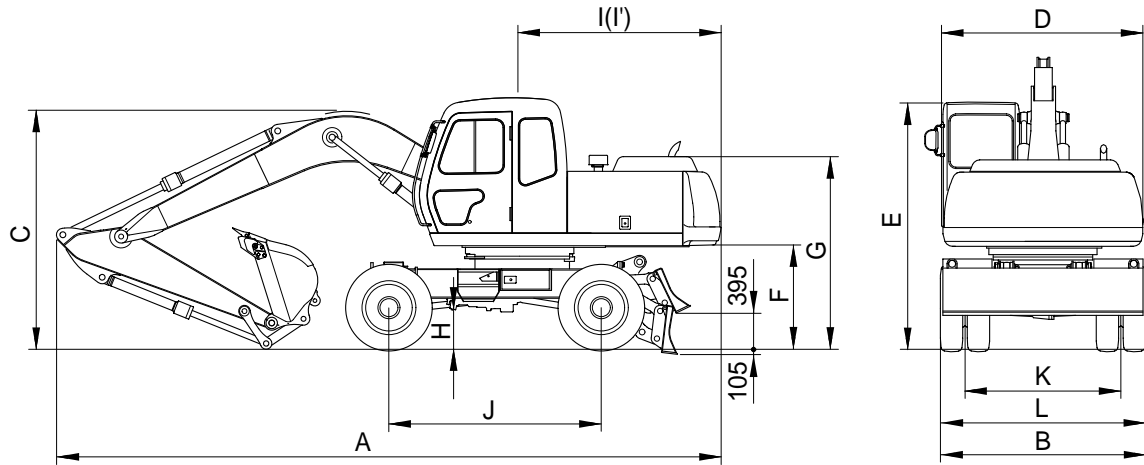


2) EQUIPPED WITH TWO PIECE BOOM



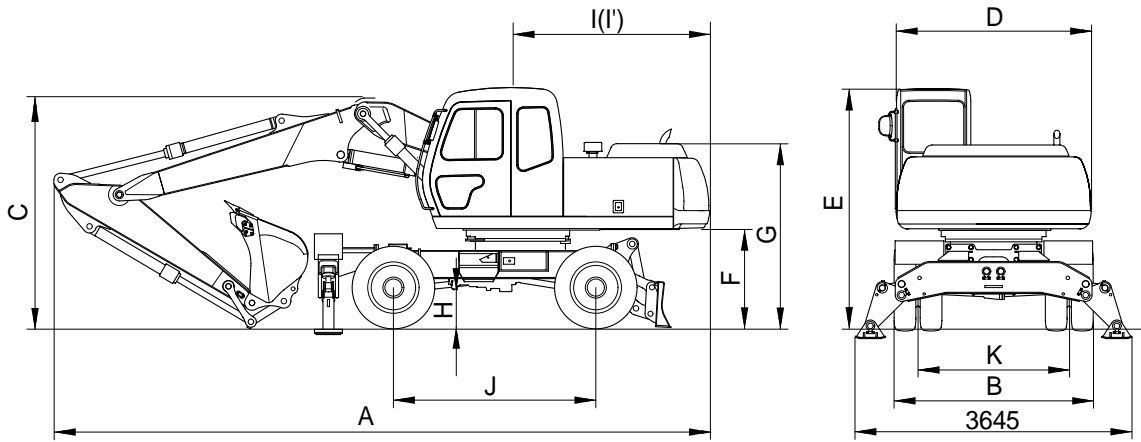
2. SPECIFICATIONS

1) 4.6m(15' 0") ONE PIECE BOOM, 2.1m(6' 11") ARM AND REAR DOZER BLADE



Description		Unit	Specification
Operating weight		kg(lb)	12500(27560)
Bucket capacity(PCSA heaped), standard		m ³ (yd ³)	0.51(0.67)
Overall length	A	mm(ft-in)	7780(25' 6")
Overall width	B		2490(8' 2")
Overall height	C		3060(10' 0")
Superstructure width	D		2470(8' 1")
Cab height	E		3030(9' 11")
Ground clearance of counterweight	F		1220(4' 0")
Engine cover height	G		2330(7' 7")
Minimum ground clearance	H		365(1' 2")
Rear-end distance	I		2260(7' 5")
Rear-end swing radius	I'		2260(7' 5")
Wheel base	J		2600(8' 6")
Tread	K		1914(6' 3")
Dozer blade width	L		2490(8' 2")
Travel speed	Low	km/hr(mph)	7.8(4.9)
	High		30(18.7)
Swing speed		rpm	14.3
Gradeability		Degree(%)	30(58)

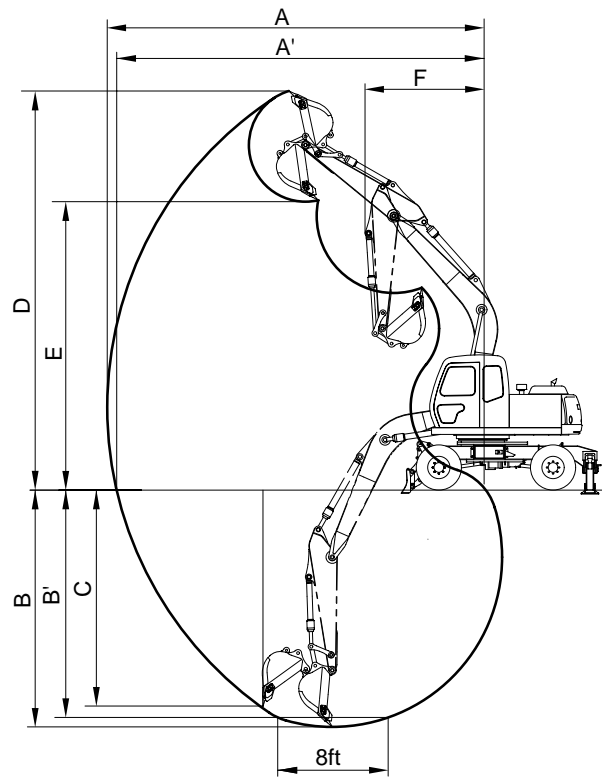
2) 4.9m(16' 1") TWO PIECE BOOM(CYL TYPE), 2.1m(6' 11") ARM AND FRONT OUTRIGGER, REAR DOZER BLADE



Description		Unit	Specification
Operating weight		kg(lb)	13900(30640)
Bucket capacity(PCSA heaped), standard		m ³ (yd ³)	0.51(0.67)
Overall length	A	mm(ft-in)	8130(26' 8")
Overall width	B		2490(8' 2")
Overall height	C		3060(10' 0")
Superstructure width	D		2470(8' 1")
Cab height	E		3030(9' 10")
Ground clearance of counterweight	F		1220(4' 0")
Engine cover height	G		2330(7' 7")
Minimum ground clearance	H		365(1' 2")
Rear-end distance	I		2260(7' 5")
Rear-end swing radius	I'		2260(7' 5")
Wheel base	J		2600(8' 6")
Tread	K		1914(6' 3")
Travel speed	Low	km/hr(mph)	7.8(4.9)
	High		30(18.7)
Swing speed		rpm	14.3
Gradeability		Degree(%)	30(58)

3. WORKING RANGE

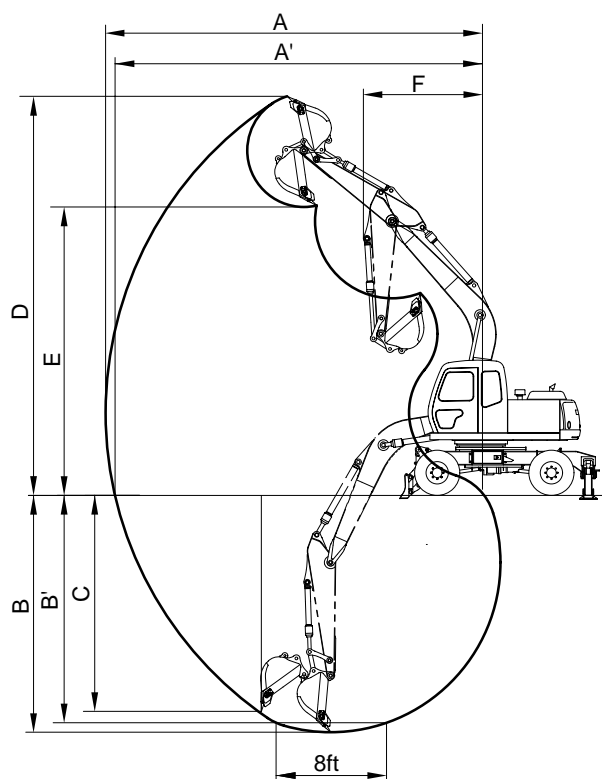
1) 4.6m(15' 1") ONE PIECE BOOM



Description		1.9m(6' 3") Arm	2.1m(6' 11") Arm	2.5m(8' 2") Arm	2.75m(9' 0") Arm	3.0m(9' 10") Arm
Max digging reach	A	7750mm(25' 5")	7920mm(26' 0")	8330mm(27' 4")	8560mm(28' 1")	8780mm(28'10")
Max digging reach on ground	A'	7520mm(24' 8")	7700mm(25' 3")	8120mm(26' 8")	8340mm(27' 4")	8590mm(28' 2")
Max digging depth	B	4630mm(15' 2")	4830mm(15'10")	5230mm(17' 2")	5480mm(18' 0")	5730mm(18'10")
Max digging depth (8ft level)	B'	4370mm(14' 4")	4580mm(15' 0")	5020mm(16' 6")	5280mm(17' 4")	5550mm(18' 3")
Max vertical wall digging depth	C	4100mm(13' 5")	4240mm(13'11")	4770mm(15' 8")	4970mm(16' 4")	5260mm(17' 3")
Max digging height	D	8410mm(27' 7")	8490mm(27'10")	8820mm(28'11")	8920mm(29' 3")	9080mm(29' 9")
Max dumping height	E	5980mm(19' 7")	6060mm(19'11")	6370mm(20'11")	6480mm(21' 3")	6640mm(21' 9")
Min swing radius	F	2600mm(8' 6")	2670mm(8' 9")	2630mm(8' 8")	2650mm(8' 8")	2650mm(8' 8")
Bucket digging force	SAE	80.4[88.0]kN	80.4[88.0]kN	80.4[88.0]kN	80.4[88.0]kN	80.4[88.0]kN
		8200[8970]kgf	8200[8970]kgf	8200[8970]kgf	8200[8970]kgf	8200[8970]kgf
		18080[19780]lbf	18080[19780]lbf	18080[19780]lbf	18080[19780]lbf	18080[19780]lbf
	ISO	93.2[101.9]kN	93.2[101.9]kN	93.2[101.9]kN	93.2[101.9]kN	93.2[101.9]kN
		9500[10390]kgf	9500[10390]kgf	9500[10390]kgf	9500[10390]kgf	9500[10390]kgf
		20940[22910]lbf	20940[22910]lbf	20940[22910]lbf	20940[22910]lbf	20940[22910]lbf
Arm digging force	SAE	72.6[79.3]kN	69.6[76.2]kN	59.8[65.4]kN	56.9[62.2]kN	53.9[59.0]kN
		7400[8090]kgf	7100[7770]kgf	6100[6670]kgf	5800[6340]kgf	5500[6020]kgf
		16310[17840]lbf	15650[17130]lbf	13450[14700]lbf	12790[13980]lbf	12130[13270]lbf
	ISO	76.5[83.7]kN	73.6[80.4]kN	61.8[67.6]kN	58.8[64.3]kN	54.9[60.1]kN
		7800[8530]kgf	7500[8200]kgf	6300[6890]kgf	6000[6560]kgf	5600[6130]kgf
		17200[18810]lbf	16530[18080]lbf	13890[15190]lbf	13230[14460]lbf	12350[13510]lbf

[] : Power boost

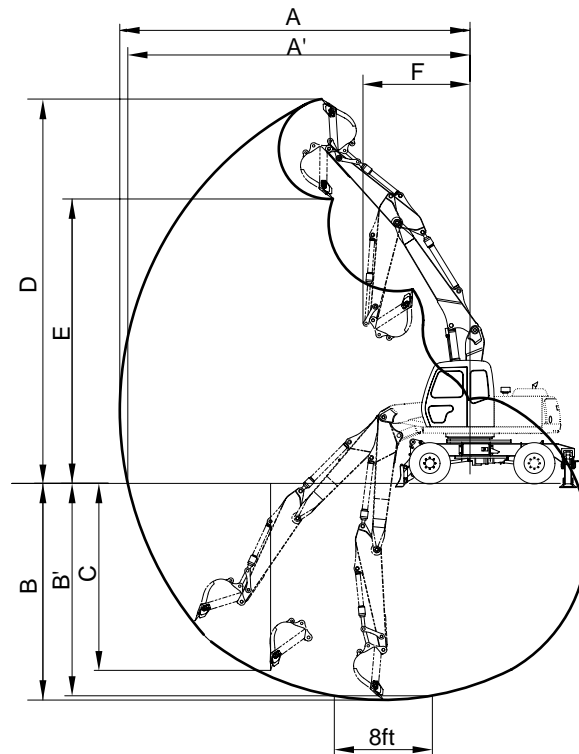
2) 4.1m(13' 5") ONE PIECE BOOM



Description		1.9m(6' 3") Arm	2.1m(6' 11") Arm
Max digging reach	A	7240mm (23' 9")	7410mm (24' 4")
Max digging reach on ground	A'	7000mm (23' 0")	7170mm (23' 6")
Max digging depth	B	4220mm (13' 10")	4420mm (14' 6")
Max digging depth (8ft level)	B'	3950mm (13' 0")	4160mm (13' 8")
Max vertical wall digging depth	C	3670mm (12' 0")	3810mm (12' 6")
Max digging height	D	7970mm (26' 2")	8040mm (26' 5")
Max dumping height	E	5540mm (18' 2")	5610mm (18' 5")
Min swing radius	F	2330mm (7' 8")	2400mm (7' 10")
Bucket digging force	SAE	80.4[88.0]kN	80.4[88.0]kN
		8200[8970]kgf	8200[8970]kgf
		18080[19780]lbf	18080[19780]lbf
	ISO	93.2[101.9]kN	93.2[101.9]kN
		9500[10390]kgf	9500[10390]kgf
		20940[22910]lbf	20940[22910]lbf
Arm digging force	SAE	72.6[79.3]kN	69.6[76.2]kN
		7400[8090]kgf	7100[7770]kgf
		16310[17840]lbf	15650[17130]lbf
	ISO	76.5[83.7]kN	73.6[80.4]kN
		7800[8530]kgf	7500[8200]kgf
		17200[18810]lbf	16530[18080]lbf

[]: Power boost

3) 4.9m(16' 1") TWO PIECE BOOM(CYL TYPE)



Description		1.9m(6' 3") Arm	2.1m(6' 11") Arm	2.5m(8' 2") Arm
Max digging reach	A	8130mm (26' 8")	8310mm (27' 3")	8720mm (28' 7")
Max digging reach on ground	A'	7920mm (26' 0")	8100mm (26' 7")	8520mm (27' 11")
Max digging depth	B	4790mm (15' 9")	4990mm (16' 4")	5390mm (17' 8")
Max digging depth (8ft level)	B'	4680mm (15' 4")	4870mm (16' 0")	5290mm (17' 4")
Max vertical wall digging depth	C	4040mm (13' 3")	4210mm (13' 10")	4650mm (15' 3")
Max digging height	D	9100mm (29' 10")	9210mm (30' 3")	9560mm (31' 4")
Max dumping height	E	6620mm (21' 9")	6730mm (22' 1")	7080mm (23' 3")
Min swing radius	F	2650mm (8' 8")	2800mm (9' 2")	2660mm (8' 8")
Bucket digging force	SAE	80.4[88.0]kN	80.4[88.0]kN	80.4[88.0]kN
		8200[8970]kgf	8200[8970]kgf	8200[8970]kgf
		18080[19780]lbf	18080[19780]lbf	18080[19780]lbf
	ISO	93.2[101.9]kN	93.2[101.9]kN	93.2[101.9]kN
		9500[10390]kgf	9500[10390]kgf	9500[10390]kgf
		20940[22910]lbf	20940[22910]lbf	20940[22910]lbf
Arm digging force	SAE	72.6[79.3]kN	69.6[76.2]kN	59.8[65.4]kN
		7400[8090]kgf	7100[7770]kgf	6100[6670]kgf
		16310[17840]lbf	15650[17130]lbf	13450[14700]lbf
	ISO	76.5[83.7]kN	73.6[80.4]kN	61.8[67.6]kN
		7800[8530]kgf	7500[8200]kgf	6300[6890]kgf
		17200[18810]lbf	16530[18080]lbf	13890[15190]lbf

[] : Power boost

4. WEIGHT











Item	R130W-3	
	kg	lb
Upperstructure assembly	3800	8380
Main frame weld assembly	1060	2340
Engine assembly	410	904
Main pump assembly	86	190
Main control valve assembly	135	300
Swing motor assembly	107	235
Hydraulic oil tank assembly	195	430
Fuel tank assembly	95	210
Counterweight	1900	4190
Cab assembly	560	1235
Lower frame weld assembly	1265	2790
Swing bearing	186	410
Travel motor assembly	87	192
Turning joint	76	170
Transmission assembly	125	276
Front axle assembly	470	1340
Rear axle assembly	350	772
Dozer blade assembly	660	1455
Front attachment assembly(4.6m boom, 2.1m arm, 0.51m ³ PCSA heaped bucket)	2204	4900
4.6m one piece boom assembly	790	1740
4.9m two piece boom assembly	962	2120
2.1m arm assembly	351	775
0.51m ³ PCSA heaped bucket assembly	440	970
Boom cylinder assembly	123	270
Arm cylinder assembly	153	340
Bucket cylinder assembly	97	215
Bucket control linkage assembly	84	185
2.5m arm assembly	376	830
Oscillating cylinder assembly	30	70
Front outrigger assembly	798	1760
Rear outrigger assembly	788	1740
Two piece boom cylinder assembly	115	250
Two piece adjust cylinder assembly	60	130
Outrigger cylinder assembly	78	170
Blade cylinder assembly	47	104

5. LIFTING CAPACITIES

1) ROBEX 130W-3











(1) 4.6m(15' 1") boom, 2.1m(6' 11") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

-  : Rating over-front
-  : Rating over-side or 360 degree











Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb					*2850 *6280	*2850 *6280			*2790 *6150	1600 3530	6.45 (21.2)
4.5m (15ft)	kg lb					*3220 *7100	2920 6440	*3070 *6770	1750 3860	2350 5180	1240 2730	7.24 (23.8)
3.0m (10ft)	kg lb			*5990 *13210	5120 11290	*4100 *9040	2700 5950	3150 6940	1670 3680	2120 4670	1090 2400	7.59 (24.9)
1.5m (5ft)	kg lb			*8400 *18520	4490 9900	4860 10710	2470 5450	3040 6700	1570 3460	2080 4590	1050 2310	7.59 (24.9)
Ground Line	kg lb			*8710 *19200	4290 9460	4690 10340	2320 5110	2950 6500	1500 3310	2230 4920	1130 2490	7.23 (23.7)
-1.5m (-5ft)	kg lb	*7010 *15450	*7010 *15450	*8700 *19180	4290 9460	4640 10230	2280 5030			2700 5950	1380 3040	6.44 (21.1)
-3.0m (-10ft)	kg lb	*11030 *24320	*11030 *24320	*7320 *16140	4430 9770	4730 10430	2360 5200					

- Note
1. Lifting capacity are based on SAE J1097 and ISO 10567.
 2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 3. The load point is a hook located on the back of the bucket.
 4. *indicates load limited by hydraulic capacity.











(2) 4.6m(15' 1") boom, 2.1m(6' 11") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb					*2850 *6280	*2850 *6280			*2790 *6150	1880 4140	6.45 (21.2)
4.5m (15ft)	kg lb					*3220 *7100	*3220 *7100	*3070 *6770	2060 4540	*2890 *6370	1480 3260	7.24 (23.8)
3.0m (10ft)	kg lb			*5990 *13210	*5990 *13210	*4100 *9040	3190 7030	*3430 *7560	1980 4370	*3020 *6660	1310 2890	7.59 (24.9)
1.5m (5ft)	kg lb			*8400 *18520	5490 12100	*5080 *11200	2950 6500	*3850 *8490	1880 4140	3020 6660	1270 2800	7.59 (24.9)
Ground Line	kg lb			*8710 *19200	5280 11640	5680 12520	2800 6170	4140 9130	1800 3970	3250 7170	1360 3000	7.23 (23.7)
-1.5m (-5ft)	kg lb	*7010 *15450	*7010 *15450	*8700 *19180	5290 11660	*5690 *12540	2750 6060			*3440 *7580	1660 3660	6.44 (21.1)
-3.0m (-10ft)	kg lb	*11030 *24320	*11030 *24320	*7320 *16140	5430 11970	*4810 *10600	2830 6240					











(3) 4.6m(15' 1") boom, 1.9m(6' 3") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb					*3050 *6720	*3050 *6720			*2910 *6420	1980 4370	6.24 (20.5)
4.5m (15ft)	kg lb					*3400 *7500	3400 7500	*2700 *5950	2040 4500	*3010 *6640	1540 3400	7.05 (23.1)
3.0m (10ft)	kg lb			*6400 *14110	6090 13430	*4270 *9410	3180 7010	*3540 *7800	1970 4340	*3130 *6900	1360 3000	7.42 (24.3)
1.5m (5ft)	kg lb			*7450 *16420	5460 12040	*5210 *11490	2950 6500	*3940 *8690	1880 4140	3140 6920	1330 2930	7.42 (24.3)
Ground Line	kg lb			*8630 *19030	5300 11680	*5740 *12650	2810 6190	*4180 *9220	1810 3990	3390 7470	1430 3150	7.05 (23.1)
-1.5m (-5ft)	kg lb	*7370 *16250	*7370 *16250	*8580 *18920	5330 11750	*5670 *12500	2780 6130			*3500 *7720	1770 3900	6.23 (20.4)
-3.0m (-10ft)	kg lb			*7040 *15520	5500 12130							











(4) 4.6m(15' 1") boom, 1.9m(6' 3") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb					*3050 *6720	2990 6590			*2910 *6420	1690 3730	6.24 (20.5)
4.5m (15ft)	kg lb					*3400 *7500	2900 6390	*2700 *5950	1730 3810	2450 5400	1300 2870	7.05 (23.1)
3.0m (10ft)	kg lb			*6400 *14110	5050 11130	*4270 *9410	2690 5930	3140 6920	1660 3660	2200 4850	1130 2490	7.42 (24.3)
1.5m (5ft)	kg lb			*7450 *16420	4460 9830	4860 10710	2470 5450	3040 6700	1570 3460	2160 4760	1100 2430	7.42 (24.3)
Ground Line	kg lb			*8630 *19030	4310 9500	4700 10360	2330 5140	2970 6550	1510 3330	2330 5140	1190 2620	7.05 (23.1)
-1.5m (-5ft)	kg lb	*7370 *16250	*7370 *16250	*8580 *18920	4340 9570	4670 10300	2310 5090			2860 6310	1480 3260	6.23 (20.4)
-3.0m (-10ft)	kg lb			*7040 *15520	4490 9900							











(5) 4.6m(15' 1") boom, 2.5m(8' 2") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb									*2590 *5710	1650 3640	6.94 (22.8)
4.5m (15ft)	kg lb					*2840 *6260	*2840 *6260	*2830 *6240	2090 4610	*2690 *5930	1320 2910	7.67 (25.2)
3.0m (10ft)	kg lb			*5180 *11420	*5180 *11420	*3750 *8270	3240 7140	*3200 *7050	1990 4390	2800 6170	1180 2600	8.00 (26.2)
1.5m (5ft)	kg lb			*7840 *17280	5620 12390	*4810 *10600	2980 6570	*3680 *8110	1880 4140	2760 6080	1150 2540	8.00 (26.2)
Ground Line	kg lb	*3640 *8020	*3640 *8020	*8610 *18980	5300 11680	*5550 *12240	2800 6170	*4050 *8930	1790 3950	2940 6480	1220 2690	7.66 (25.1)
-1.5m (-5ft)	kg lb	*6150 *13560	*6150 *13560	*8900 *19620	5250 11570	*5730 *12630	2730 6020	*4090 *9020	1760 3880	*3220 *7100	1450 3200	6.93 (22.7)
-3.0m (-10ft)	kg lb	*9240 *20370	*9240 *20370	*7840 *17280	5350 11790	*5150 *11350	2770 6110			*3180 *7010	2100 4630	5.61 (18.4)











(6) 4.6m(15' 1") boom, 2.5m(8' 2") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb									2590 5710	1390 3060	6.94 (22.8)
4.5m (15ft)	kg lb					*2840 *6260	*2840 *6260	*2830 *6240	1770 3900	2130 4700	1100 2430	7.67 (25.2)
3.0m (10ft)	kg lb			*5180 *11420	*5180 *11420	*3750 *8270	2750 6060	3170 6990	1680 3700	1930 4250	970 2140	8.00 (26.2)
1.5m (5ft)	kg lb			*7840 *17280	4610 10160	*4810 *10600	2500 5510	3040 6700	1570 3460	1900 4190	940 2070	8.00 (26.2)
Ground Line	kg lb	*3640 *8020	*3640 *8020	*8610 *18980	4300 9480	4690 10340	2320 5110	2940 6480	1480 3260	2020 4450	1000 2200	7.66 (25.1)
-1.5m (5ft)	kg lb	*6150 *13560	*6150 *13560	*8900 *19620	4260 9390	4610 10160	2260 4980	2910 6420	1450 3200	2380 5250	1200 2650	6.93 (22.7)
-3.0m (10ft)	kg lb	*9240 *20370	*9240 *20370	*7840 *17280	4350 9590	4660 10270	2290 5050			*3180 *7010	1760 3880	5.61 (18.4)













(7) 4.6m(15' 1") boom, 2.75m(9' 10") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb							*1900 *4190	*1900 *4190	*2460 *5420	1540 3400	7.20 (23.6)
4.5m (15ft)	kg lb							*2640 *5820	2100 4630	*2560 *5640	1250 2760	7.90 (25.9)
3.0m (10ft)	kg lb			*4630 *10210	*4630 *10210	*3500 *7720	3270 7210	*3040 *6700	2000 4410	2670 5890	1110 2450	8.22 (27.0)
1.5m (5ft)	kg lb			*7410 *16340	5700 12570	*4600 *10140	3000 6610	*3550 *7830	1880 4140	2630 5800	1080 2380	8.22 (27.0)
Ground Line	kg lb	*3630 *8000	*3630 *8000	*8830 *19470	5300 11680	*5420 *11950	2800 6170	*3970 *8750	1780 3920	2790 6150	1140 2510	7.89 (25.9)
-1.5m (-5ft)	kg lb	*5840 *12870	*5840 *12870	*8960 *19750	5210 11490	*5710 *12590	2710 5970	*4090 *9020	1730 3810	*3110 *6860	1350 2980	7.19 (23.6)
-3.0m (-10ft)	kg lb	*8620 *19000	*8620 *19000	*8110 *17880	5290 11660	*5300 *11680	2730 6020			*3160 *6970	1890 4170	5.94 (19.5)
-4.5m (-15ft)	kg lb			*5700 *12570	5550 12240							













(8) 4.6m(15' 1") boom, 2.75m(9' 0") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius								At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg lb							*1900 *4190	1810 3990	2430 5360	1300 2870	7.20 (23.6)
4.5m (15ft)	kg lb							*2640 *5820	1790 3950	2020 4450	1030 2270	7.90 (25.9)
3.0m (10ft)	kg lb			*4630 *10210	*4630 *10210	*3500 *7720	2780 6130	*3040 *6700	1690 3730	1840 4060	910 2010	8.22 (27.0)
1.5m (5ft)	kg lb			*7410 *16340	4680 10320	*4600 *10140	2510 5530	3050 6720	1570 3460	1800 3970	880 1940	8.22 (27.0)
Ground Line	kg lb	*3630 *8000	*3630 *8000	*8830 *19470	4310 9500	4690 10340	2320 5110	2940 6480	1470 3240	1910 4210	930 2050	7.89 (25.9)
-1.5m (-5ft)	kg lb	*5840 *12870	*5840 *12870	*8960 *19750	4220 9300	4590 10120	2240 4940	2880 6350	1430 3150	2220 4890	1110 2450	7.19 (23.6)
-3.0m (-10ft)	kg lb	*8620 *19000	*8620 *19000	*8110 *17880	4290 9460	4620 10190	2250 4960			3070 6770	1570 3460	5.94 (19.5)
-4.5m (-15ft)	kg lb			*5700 *12570	4530 9990							









(9) 4.6m(15' 1") boom, 3.0m(9' 10") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius										At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
														m(ft)
6.0m (20ft)	kg lb							*2020 *4450	*2020 *4450			*2340 *5160	1430 3150	7.48 (24.5)
4.5m (15ft)	kg lb							*2470 *5450	2120 4670			*2440 *5380	1170 2580	8.15 (26.7)
3.0m (10ft)	kg lb					*3260 *7190	*3260 *7190	*2890 *6370	2010 4430	*1700 *3750	1310 2890	2540 5600	1050 2310	8.46 (27.8)
1.5m (5ft)	kg lb			*6990 *15410	5790 12760	*4400 *9700	3020 6660	*3420 *7540	1890 4170	*2100 *4630	1260 2780	2500 5510	1020 2250	8.46 (27.8)
Ground Line	kg lb	*3610 *7960	*3610 *7960	*8650 *19070	5320 11730	*5300 *11680	2800 6170	*3890 *8580	1780 3920	*1740 *3840	1210 26370	2640 5820	1070 2360	8.14 (26.7)
-1.5m (-5ft)	kg lb	*5560 *12260	*5560 *12260	*8980 *19800	5190 11440	*5680 *12520	2690 5930	*4080 *8990	1720 3790			*3000 *6610	1250 2760	7.47 (24.5)
-3.0m (-10ft)	kg lb	*8050 *17750	*8050 *17750	*8310 *18320	5240 11550	*5410 *11930	2700 5950					*3080 *6790	1700 3750	6.29 (20.6)
-4.5m (-15ft)	kg lb			*6260 *13800	5460 12040									









(10) 4.6m(15' 1") boom, 3.0m(9' 10") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius										At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
														m(ft)
6.0m (20ft)	kg lb							*2020 *4450	1840 4060			*2270 5000	1200 2650	7.48 (24.5)
4.5m (15ft)	kg lb							*2470 *5450	1800 3970			1910 4210	970 2140	8.15 (26.7)
3.0m (10ft)	kg lb					*3260 *7190	2810 6190	*2890 *6370	1700 3750	*1700 *3750	1080 2380	1740 3840	860 1900	8.46 (27.8)
1.5m (5ft)	kg lb			*6990 *15410	4760 10490	*4400 *9700	2530 5580	3050 6720	1580 3480	2080 4590	1030 2270	1710 3770	820 1810	8.46 (27.8)
Ground Line	kg lb	*3610 *7960	*3610 *7960	*8650 *19070	4320 9520	4700 10360	2320 5110	2930 6460	1470 3240	*1740 *3840	990 2180	1800 3970	870 1920	8.14 (26.7)
-1.5m (-5ft)	kg lb	*5560 *12260	*5560 *12260	*8980 *19800	4200 9260	4580 10100	2220 4890	2870 6330	1410 3110			2080 4590	1020 2250	7.47 (24.5)
-3.0m (-10ft)	kg lb	*8050 *17750	*8050 *17750	*8310 *18320	4240 9350	4580 10100	2220 4890					2780 6130	1410 3110	6.29 (20.6)
-4.5m (-15ft)	kg lb			*6260 *13800	4450 9810									









(11) 4.9m(16' 1") two piece boom, 2.1m(6' 11") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius						At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
										m(ft)
6.0m (20ft)	kg lb			*2510 *5530	*2510 *5530			*2520 *5560	1360 3000	6.92 (22.7)
4.5m (15ft)	kg lb			*2990 *6590	2880 6350	*2790 *6150	1720 3790	2110 4650	1070 2360	7.65 (25.1)
3.0m (10ft)	kg lb	*6100 *13450	4860 10710	*3900 *8600	2610 5750	3120 6880	1610 3550	1910 4210	930 2050	7.98 (26.2)
1.5m (5ft)	kg lb			4770 10520	2340 5160	2990 6590	1490 3280	1880 4140	900 1980	7.98 (26.2)
Ground Line	kg lb	*6100 *13450	4070 8970	4580 10100	2190 4830	2890 6370	1410 3110	2000 4410	960 2120	7.64 (25.1)
-1.5m (-5ft)	kg lb	*8510 *18760	4110 9060	4540 10010	2160 4760	2870 6330	1390 3060	2370 5220	1170 2580	6.91 (22.7)
-3.0m (-10ft)	kg lb			4630 10210	2230 4920					









(12) 4.9m(16' 1") two piece boom, 2.1m(6' 11") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius						At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
										m(ft)
6.0m (20ft)	kg lb			*2510 *5530	*2510 *5530			*2520 *5560	1620 3570	6.92 (22.7)
4.5m (15ft)	kg lb			*2990 *6590	*2990 *6590	*2790 *6150	2040 4500	*2610 *5750	1290 2840	7.65 (25.1)
3.0m (10ft)	kg lb	*6100 *13450	5920 13050	*3900 *8600	3110 6860	*3170 *6990	1930 4250	*2740 *6040	1150 2540	7.98 (26.2)
1.5m (5ft)	kg lb			*4870 *10740	2830 6240	*3620 *7980	1810 3990	2760 6080	1110 2450	7.98 (26.2)
Ground Line	kg lb	*6100 *13450	5060 11160	5470 12060	2670 5890	*3960 *8730	1720 3790	2950 6500	1190 2620	7.64 (25.1)
-1.5m (-5ft)	kg lb	*8510 *18760	5100 11240	*5560 *12260	2640 5820	*3990 *8800	1710 3770	*3170 *6990	1430 3150	6.91 (22.7)
-3.0m (-10ft)	kg lb			*5010 *11050	2710 5970					













(13) 4.9m(16' 1") two piece boom, 1.9m(6' 3") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius						At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
										m(ft)
6.0m (20ft)	kg lb			*2680 *5910	*2680 *5910			*2620 *5780	1710 3770	6.71 (22.0)
4.5m (15ft)	kg lb	*3830 *8440	*3830 *8440	*3160 *6970	*3160 *6970	*2920 *6440	2020 4450	*2710 *5970	1350 2980	7.46 (24.5)
3.0m (10ft)	kg lb	*6540 *14420	5800 12790	*4070 *8970	3090 6810	*3270 *7210	1920 4230	*2840 *6260	1200 2650	7.81 (25.6)
1.5m (5ft)	kg lb			*5000 *11020	2830 6240	*3700 *8160	1810 3990	2870 6330	1160 2560	7.80 (25.6)
Ground Line	kg lb	*5970 *13160	5090 11220	5540 12210	2680 5910	*4000 *8820	1730 3810	3080 6790	1250 2760	7.46 (24.5)
-1.5m (-5ft)	kg lb	*8400 *18520	5160 11380	*5560 *12260	2660 5860	*3970 *8750	1730 3810	*3240 *7140	1520 3350	6.70 (22.0)
-3.0m (-10ft)	kg lb			*4880 *10760	2760 6080					













(14) 4.9m(16' 1") two piece boom, 1.9m(6' 3") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius						At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
										m(ft)
6.0m (20ft)	kg lb			*2680 *5910	*2680 *5910			*2620 *5780	1430 3150	6.71 (22.0)
4.5m (15ft)	kg lb	*3830 *8440	*3830 *8440	*3160 *6970	2860 6310	*2920 *6440	1700 3750	2200 4850	1120 2470	7.46 (24.5)
3.0m (10ft)	kg lb	*6540 *14420	4760 10490	*4070 *8970	2590 5710	3110 6860	1610 3550	1990 4390	980 2160	7.81 (25.6)
1.5m (5ft)	kg lb			4760 10490	2340 5160	2990 6590	1500 3310	1960 4320	950 2090	7.80 (25.6)
Ground Line	kg lb	*5970 *13160	4100 9040	4600 10140	2200 4850	2910 6420	1420 3130	2100 4630	1020 2250	7.46 (24.5)
-1.5m (-5ft)	kg lb	*8400 *18520	4160 9170	4570 10080	2190 4830	2900 6390	1420 3130	2510 5530	1250 2760	6.70 (22.0)
-3.0m (-10ft)	kg lb			4680 10320	2280 5030					

(15) 4.9m(16' 1") two piece boom, 2.5m(8' 2") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade down.

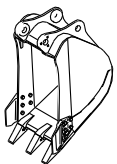
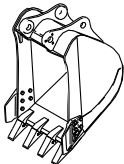
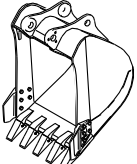
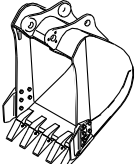
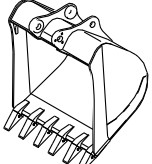
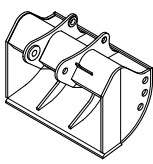
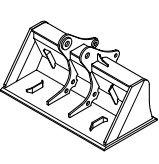
Load point height		Load radius										At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
														m(ft)
6.0m (20ft)	kg lb							*2410 *5310	2120 4670			*2350 *5180	1430 3150	7.40 (24.3)
4.5m (15ft)	kg lb					*2640 *5820	*2640 *5820	*2540 *5600	2070 4560			*2440 *5380	1160 2560	8.08 (26.5)
3.0m (10ft)	kg lb			*5290 *11660	*5290 *11660	*3570 *7870	3170 6990	*2950 *6500	1950 4300	*1970 *4340	1270 2800	*2550 *5620	1030 2270	8.39 (27.5)
1.5m (5ft)	kg lb			*5940 *13100	5340 11770	*4600 *10140	2870 6330	*3450 *7610	1810 3990	*2460 *5420	1220 2690	2530 5580	1000 2200	8.39 (27.5)
Ground Line	kg lb			*6110 *13470	5070 11180	*5330 *11750	2680 5910	*3850 *8490	1710 3770			2690 5930	1060 2340	8.07 (26.5)
-1.5m (-5ft)	kg lb	*5080 *11200	*5080 *11200	*8610 *18980	5050 11130	*5560 *12260	2610 5750	*4000 *8820	1670 3680			*2960 *6530	1260 2780	7.39 (24.2)
-3.0m (-10ft)	kg lb			*7880 *17370	5180 11420	*5220 *11510	2660 5860							

(16) 4.9m(16' 1") two piece boom, 2.5m(8' 2") arm equipped with 0.51m³(PCSA heaped) bucket and rear dozer blade up.

Load point height		Load radius										At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
														m(ft)
6.0m (20ft)	kg lb							*2410 *5310	1790 3950			2300 5070	1190 2620	7.40 (24.3)
4.5m (15ft)	kg lb					*2640 *5820	*2640 *5820	*2540 *5600	1750 3860			1920 4230	950 2090	8.08 (26.5)
3.0m (10ft)	kg lb			*5290 *11660	5090 11220	*3570 *7870	2660 5860	*2950 *6500	1630 3590	*1970 *4340	1040 2290	1750 3860	830 1830	8.39 (27.5)
1.5m (5ft)	kg lb			*5940 *13100	4320 9520	*4600 *10140	2380 5250	3000 6610	1500 3310	2060 4540	990 2180	1720 3790	810 1790	8.39 (27.5)
Ground Line	kg lb			*6110 *13470	4070 8970	4590 10120	2190 4830	2880 6350	1400 3090			1820 4010	860 1900	8.07 (26.5)
-1.5m (-5ft)	kg lb	*5080 *11200	*5080 *11200	*8610 *18980	4060 8950	4520 9960	2130 4700	2840 6260	1360 3000			2110 4650	1020 2250	7.39 (24.2)
-3.0m (-10ft)	kg lb			*7880 *17370	4170 9190	4570 10080	2180 4810							

6. BUCKET SELECTION GUIDE

1) ONE PIECE BOOM


						
0.22m ³ PCSA heaped bucket	0.4~0.46m ³ PCSA heaped bucket	※ 0.51m ³ PCSA heaped bucket	0.58~0.63m ³ PCSA heaped bucket	0.70m ³ PCSA heaped bucket	◆ 0.45m ³ PCSA heaped bucket	■ 0.55m ³ PCSA heaped bucket


Capacity		Width		Weight	Recommendation(One piece boom)						
					4.6m(15' 1") boom					4.1m(13' 5") boom	
PCSA heaped	CECE heaped	Without side cutter	With side cutter		1.9m arm (6' 3")	2.1m arm (6' 11")	2.5m arm (8' 2")	2.75m arm (9' 0")	3.0m arm (9' 10")	1.9m arm (6' 3")	2.1m arm (6' 11")
0.22m³ (0.29yd³)	0.20m³ (0.26yd³)	520mm (20.5")	620mm (24.4")	310kg (680lb)							
0.40m³ (0.52yd³)	0.35m³ (0.46yd³)	760mm (29.9")	860mm (33.9")	385kg (850lb)							
0.46m³ (0.60yd³)	0.40m³ (0.52yd³)	850mm (33.5")	950mm (37.4")	405kg (890lb)							
※ 0.51m³ (0.67yd³)	0.45m³ (0.59yd³)	935mm (36.8")	1035mm (40.8")	440kg (970lb)							
0.58m³ (0.76yd³)	0.50m³ (0.65yd³)	1030mm (40.6")	1130mm (44.5")	455kg (1005lb)							
0.63m³ (0.82yd³)	0.55m³ (0.72yd³)	1110mm (43.7")	1210mm (47.6")	470kg (1040lb)							
0.70m³ (0.92yd³)	0.60m³ (0.78yd³)	1205mm (47.4")	—	485kg (1070lb)							
◆0.45m³ (0.59yd³)	0.40m³ (0.52yd³)	1520mm (59.8")	—	410kg (900lb)							
■0.55m³ (0.72yd³)	0.45m³ (0.59yd³)	1800mm (70.9")	—	585kg (1290lb)							


※ : Standard bucket

◆ : Ditching bucket

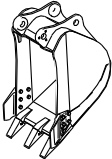
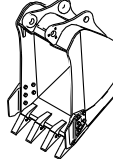
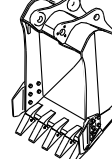
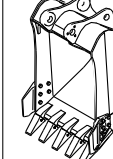
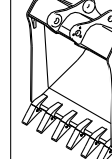
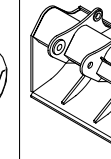
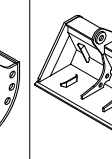
■ : Slope finishing bucket

 Applicable for materials with density of 2000kg/m³ (3370lb/yd³) or less

 Applicable for materials with density of 1600kg/m³ (2700lb/yd³) or less

 Applicable for materials with density of 1100kg/m³ (1850lb/yd³) or less

2) TWO PIECE BOOM


						
0.22m³ PCSA heaped bucket	0.4~0.46m³ PCSA heaped bucket	※ 0.51m³ PCSA heaped bucket	0.58~0.63m³ PCSA heaped bucket	0.70m³ PCSA heaped bucket	◆ 0.45m³ PCSA heaped bucket	■ 0.55m³ PCSA heaped bucket


Capacity		Width		Weight	Recommendation(Two piece boom)		
					4.90m(16' 1") boom		
PCSA heaped	CECE heaped	Without side cutter	With side cutter		1.9m arm (6' 3")	2.1m arm (6' 11")	2.5m arm (8' 2")
0.22m³ (0.29yd³)	0.20m³ (0.26yd³)	520mm (20.5")	620mm (24.4")	310kg (680lb)			
0.40m³ (0.52yd³)	0.35m³ (0.46yd³)	760mm (29.9")	860mm (33.9")	385kg (850lb)			
0.46m³ (0.60yd³)	0.40m³ (0.52yd³)	850mm (33.5")	950mm (37.4")	405kg (890lb)			
※ 0.51m³ (0.67yd³)	0.45m³ (0.59yd³)	935mm (36.8")	1035mm (40.8")	440kg (970lb)			
0.58m³ (0.76yd³)	0.50m³ (0.65yd³)	1030mm (40.6")	1130mm (44.5")	455kg (1005lb)			
0.63m³ (0.82yd³)	0.55m³ (0.72yd³)	1110mm (43.7")	1210mm (47.6")	470kg (1040lb)			
0.70m³ (0.92yd³)	0.60m³ (0.78yd³)	1205mm (47.4")	—	485kg (1070lb)			
◆ 0.45m³ (0.59yd³)	0.40m³ (0.52yd³)	1520mm (59.8")	—	410kg (900lb)			
■ 0.55m³ (0.72yd³)	0.45m³ (0.59yd³)	1800mm (70.9")	—	585kg (1290lb)			


※ : Standard bucket

◆ : Ditching bucket

■ : Slope finishing bucket

 Applicable for materials with density of 2000kg/m³ (3370lb/yd³) or less

 Applicable for materials with density of 1600kg/m³ (2700lb/yd³) or less

 Applicable for materials with density of 1100kg/m³ (1850lb/yd³) or less

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item		Specification
Model		Cummins B3.9-C
Type		4-cycle turbocharged 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 × 120mm(4.02" × 4.72")
Piston displacement		3900cc(238cu in)
Compression ratio		16.5 : 1
Rated gross horse power(SAE J1349)		110Hp at 2200rpm(82kw at 2200rpm)
Maximum torque at 1500rpm		42kgf · m(302lb · ft)
Engine oil quantity		10 l (2.6U.S. gal)
Dry weight		329kg(725lb)
High idling speed		2457 ± 50rpm
Low idling speed		950 ± 100rpm
Rated fuel consumption		167.6g/Hp · hr
Starting motor		Delco Remy 28MT(24V)
Alternator		Delco Remy(24V-50Amp)
Battery		2 × 12V × 100Ah

2) MAIN PUMP

Item		Specification
Type		Variable displacement bent axis piston pump
Capacity		2 × 60cc/rev
Pressure	Rated	320kg/cm ² (4550psi)
	Maximum(Power boost)	350kg/cm ² (4978psi)
Rated oil flow		2 × 130 l /min(34.3U.S. gpm/ 28.6U.K. gpm)
Rated speed		2200rpm(Clockwise viewed from shaft end)

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	10cc/rev
Maximum pressure	40 ⁺² ₀ kg/cm ² (570psi)
Rated oil flow	22 l /min(5.8U.S. gpm/4.8U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spool
Operating method	Hydraulic pilot system
Main relief valve pressure	320kg/cm ² (4550psi)/[350kg/cm ² (4980psi)]
Overload relief valve pressure	380kg/cm ² (5400psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	79cc/rev
Relief pressure	220kg/cm ² (3130psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	12kg · m(87lb · ft)
Brake release pressure	20~50kg/cm ² (285~710psi)
Reduction gear type	2 - stage planetary
Swing speed	14.3rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Capacity(Max/min)	114.7/45cc/rev
Relief pressure	360kg/cm ² (5120psi)
Counter balance valve	Applied

7) POWER TRAIN

Item	Description		Specification
Transmission	Type		2 speed power shift transmission
	Gear ratio	1st	5.35
		2nd	1.39
Parking brake	Type		Multi disc brake integrated in transmission
	Maximum braking power		168kgf · m(2390lb · ft)
Axle	Type		4 wheel drive with differential
	Gear ratio		13.26
	Brake		Multi disc brake

8) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	5.5kg/cm ² (78psi)
	Maximum	19.5kg/cm ² (277psi)
Single operation stroke	Lever	82.7mm(3.3in)

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	Bore dia × Rod dia × Stroke	ø 100 × ø 65 × 210mm
	Cushion	Extend only
Outrigger cylinder	Bore dia × Rod dia × Stroke	ø 125 × ø 75 × 475mm
	Cushion	-
2 piece boom cylinder	Bore dia × Rod dia × Stroke	ø 105 × ø 75 × 975mm
	Cushion	-
2 piece adjust cylinder	Bore dia × Rod dia × Stroke	ø 145 × ø 90 × 610mm
	Cushion	-

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	PCSA heaped	CECE heaped		Without side cutter	With side cutter
Standard	0.51m ³ (0.67yd ³)	0.45m ³ (0.59yd ³)	5	935mm(37")	1035mm(41")
Option	0.22m ³ (0.29yd ³)	0.20m ³ (0.26yd ³)	3	520mm(20")	620mm(24")
	0.40m ³ (0.52yd ³)	0.35m ³ (0.46yd ³)	4	760mm(30")	860mm(34")
	0.46m ³ (0.60yd ³)	0.40m ³ (0.52yd ³)	4	850mm(33")	950mm(37")
	0.58m ³ (0.76yd ³)	0.50m ³ (0.65yd ³)	5	1030mm(41")	1130mm(44")
	0.63m ³ (0.82yd ³)	0.55m ³ (0.72yd ³)	5	1110mm(44")	1210mm(47")
	0.70m ³ (0.92yd ³)	0.60m ³ (0.78yd ³)	6	1205mm(47")	-
	◆0.45m ³ (0.59yd ³)	0.40m ³ (0.52yd ³)	-	1520mm(60")	-
	■0.55m ³ (0.72yd ³)	0.45m ³ (0.59yd ³)	-	1800mm(71")	-

◆ : Ditching bucket

■ : Slope finishing bucket

8. RECOMMENDED OILS

Use only oils listed below or equivalent.

Do not mix different brand oil.

Service point	Kind of fluid	Capacity l (U.S. gal)	Ambient temperature °C(°F)						
			-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)
Engine oil pan	Engine oil	10(2.6)					SAE 30		
			SAE 10W						
Transmission case		3.8(1.0)				SAE 10W-30			
						SAE 15W-40			
Swing drive	Gear oil	2.5(0.7)							
Final drive		1.0 × 4(0.3 × 2)					SAE 85W-140		
Front axle	Gear oil	11(2.9)							
Rear axle		11(2.9)					SAE 85W-90		
Hydraulic tank	Hydraulic oil	Tank: 120(31.7) System: 240(63.4)							
							ISO VG 32		
							ISO VG 46		
								ISO VG 68	
Fuel tank	Diesel fuel	250(66.1)							
							ASTM D975 NO.1		
								ASTM D975 NO.2	
Fitting (Grease nipple)	Grease	As required							
							NLGI NO.1		
								NLGI NO.2	
Radiator (Reservoir tank)	Mixture of antifreeze and water 50 : 50	24(6.3)							
							Ethylene glycol base permanent type		

SAE : Society of Automotive Engineers

API : American Petroleum Institute

ISO : International Organization for Standardization

NLGI : National Lubricating Grease Institute

ASTM : American Society of Testing and Material