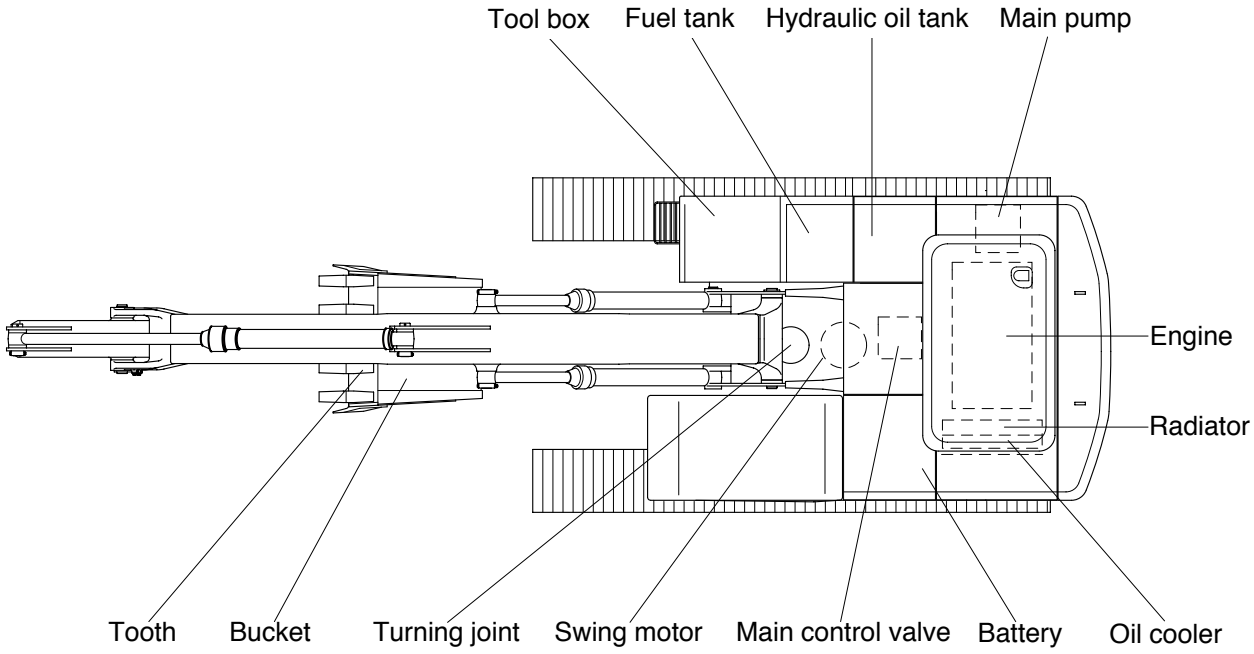
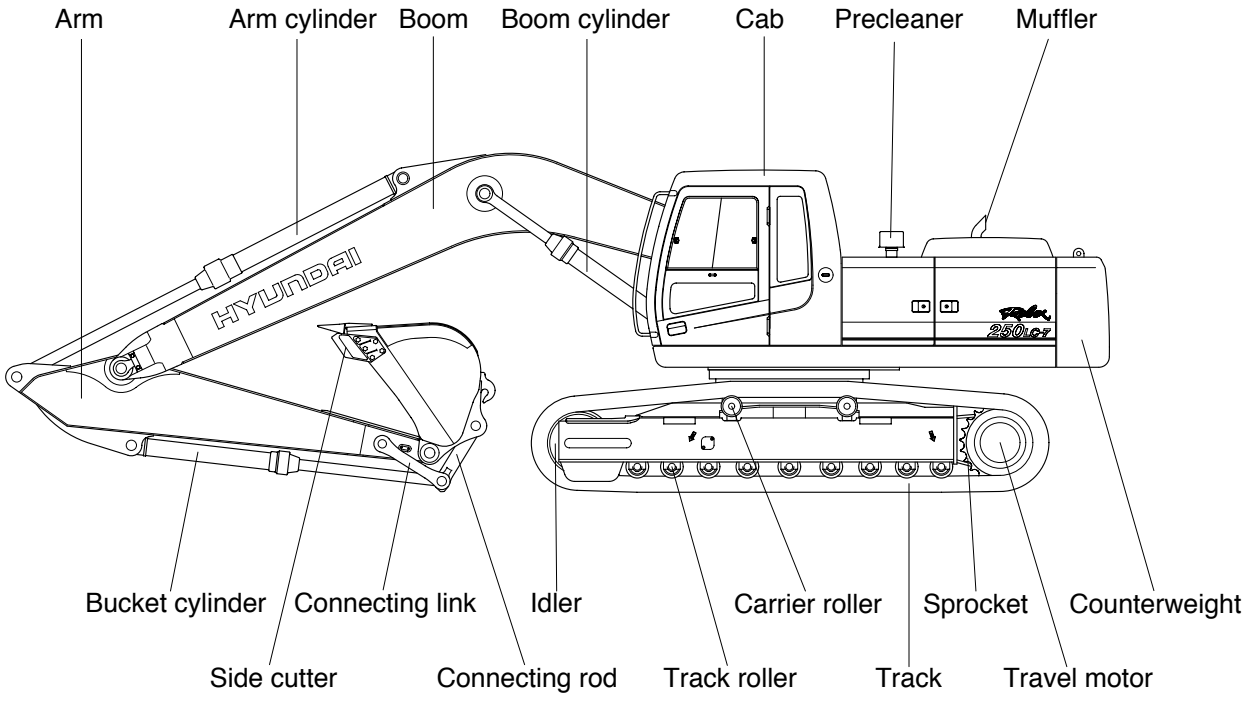
GROUP 2 SPECIFICATIONS

1. MAJOR COMPONENT

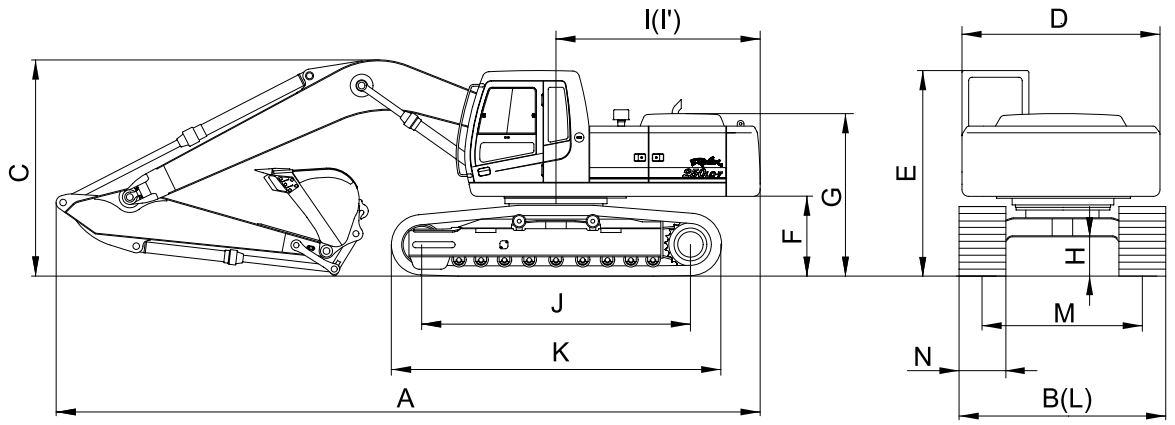




25072SP00

2. SPECIFICATIONS

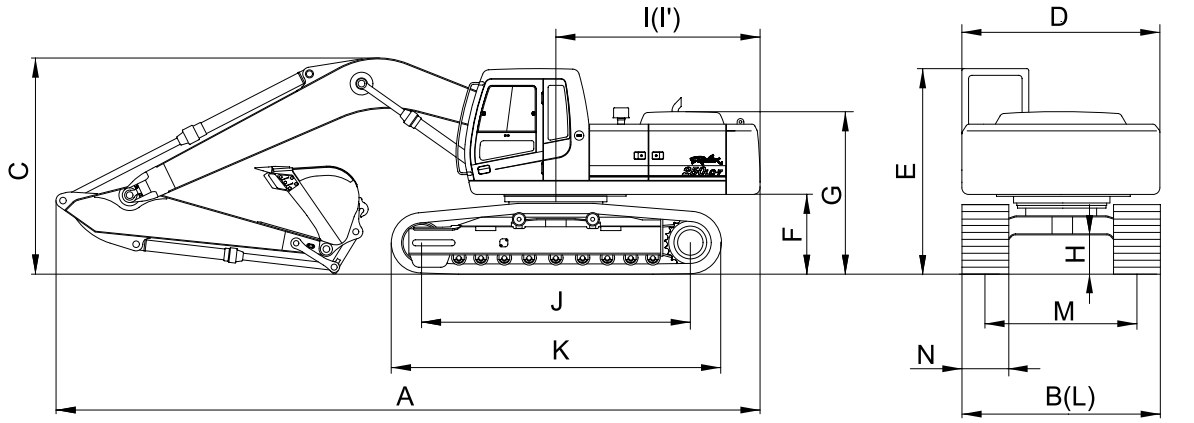
1) R250LC-7



25072SP01

Description		Unit	Specification
Operating weight		kg(lb)	25200(55600)
Bucket capacity(SAE heaped), standard		$m^3(yd^3)$	1.08(1.41)
Overall length	A	mm(ft-in)	9920(32' 7")
Overall width, with 600mm shoe	B		3180(10' 5")
Overall height	C		3220(10' 7")
Superstructure width	D		2840(9' 4")
Overall height of cab	E		2990(9' 10")
Ground clearance of counterweight	F		1115(3' 8")
Engine cover height	G		2427(7' 12")
Minimum ground clearance	H		480(1' 7")
Rear-end distance	I		2870(9' 5")
Rear-end swing radius	I'		2965(9' 9")
Distance between tumblers	J		3830(12' 7")
Undercarriage length	K		4640(15' 3")
Undercarriage width	L		3180(10' 5")
Track gauge	M		2580(8' 6")
Track shoe width, standard	N		600(24")
Travel speed(Low/high)		km/hr(mph)	3.5/5.5(2.2/3.4)
Swing speed		rpm	12.6
Gradeability		Degree(%)	35(70)
Ground pressure(600mm shoe)		$kgf/cm^2(psi)$	0.51(7.25)

2) R250NLC-7

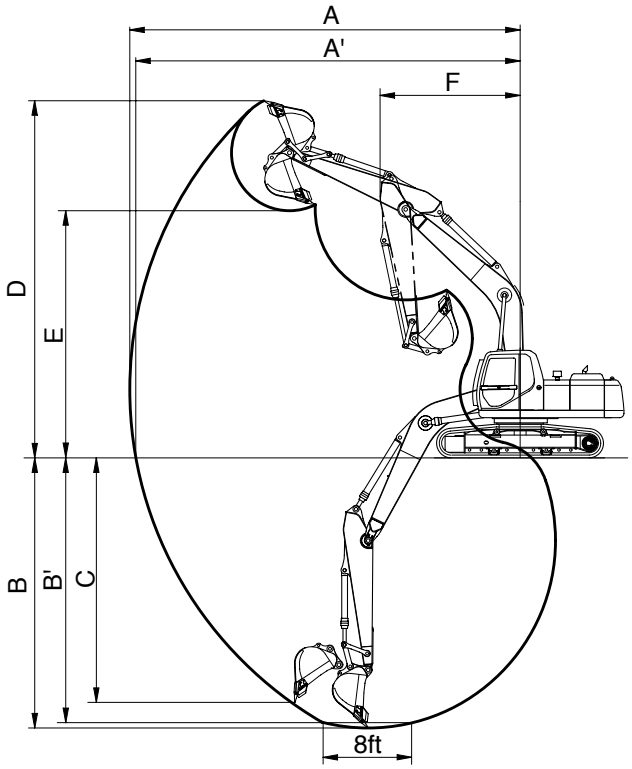


25072SP02

Description		Unit	Specification
Operating weight		kg(lb)	25100(55300)
Bucket capacity(SAE heaped), standard		$m^3(yd^3)$	1.08(1.41)
Overall length	A	mm(ft-in)	9920(32' 7")
Overall width, with 600mm shoe	B		2980(9' 9")
Overall height	C		3220(10' 7")
Superstructure width	D		2840(9' 4")
Overall height of cab	E		2990(9' 10")
Ground clearance of counterweight	F		1115(3' 8")
Engine cover height	G		2427(7' 12")
Minimum ground clearance	H		480(1' 7")
Rear-end distance	I		2870(9' 5")
Rear-end swing radius	I'		2965(9' 9")
Distance between tumblers	J		3830(12' 7")
Undercarriage length	K		4640(15' 3")
Undercarriage width	L		2980(9' 9")
Track gauge	M		2380(7' 10")
Track shoe width, standard	N		600(24")
Travel speed(Low/high)		km/hr(mph)	3.5/5.5(2.2/3.4)
Swing speed		rpm	12.6
Gradeability		Degree(%)	35(70)
Ground pressure(600mm shoe)		$kgf/cm^2(psi)$	0.51(7.25)

3. WORKING RANGE

1) R250LC/NLC-7 [5.85m(19' 2") BOOM]



25072SP04

Description		2.10m(6' 11") Arm	2.50m(8' 2") Arm	3.05m(10' 0") Arm	3.60m(11' 10") Arm
Max digging reach	A	9550mm(31' 4")	9870mm(32' 5")	10360mm(34' 0")	10870mm(35' 8")
Max digging reach on ground	A'	9360mm(30' 9")	9680mm(31' 9")	10190mm(33' 5")	10700mm(35' 1")
Max digging depth	B	6050mm(19'10")	6450mm(21' 2")	7000mm(23' 0")	7550mm(24' 9")
Max digging depth (8ft level)	B'	5840mm(19' 2")	6260mm(20' 6")	6830mm(22' 5")	7400mm(24' 3")
Max vertical wall digging depth	C	5480mm(18' 0")	5640mm(18' 6")	6150mm(20' 2")	6830mm(22' 5")
Max digging height	D	9450mm(31' 0")	9460mm(31' 0")	9670mm(31' 9")	9920mm(32' 7")
Max dumping height	E	6360mm(20'10")	6420mm(21' 1")	6630mm(21' 9")	6860mm(22' 6")
Min swing radius	F	4420mm(14' 6")	4200mm(13' 9")	3980mm(13' 1")	3900mm(12'10")
Bucket digging force	SAE	157[171]kN	157[171]kN	157[171]kN	157[171]kN
		16000[17450]kgf	16000[17450]kgf	16000[17450]kgf	16000[17450]kgf
		35270[38480]lbf	35270[38480]lbf	35270[38480]lbf	35270[38480]lbf
	ISO	179[195]kN	179[195]kN	179[195]kN	179[195]kN
		18200[19850]kgf	18200[19850]kgf	18200[19850]kgf	18200[19850]kgf
		40120[43770]lbf	40120[43770]lbf	40120[43770]lbf	40120[43770]lbf
Arm crowd force	SAE	135[148]kN	130[142]kN	115[125]kN	117[127]kN
		13800[15050]kgf	13300[14510]kgf	11700[12760]kgf	11900[12980]kgf
		30420[33190]lbf	29320[31990]lbf	25790[28130]lbf	26230[28610]lbf
	ISO	140[153]kN	134[147]kN	119[129]kN	121[132]kN
		14300[15600]kgf	13700[14950]kgf	12100[13200]kgf	12300[13420]kgf
		31530[34400]lbf	30200[32950]lbf	26680[29110]lbf	27120[29590]lbf

[ ] : Power boost

4. WEIGHT

Item	R250LC-7		R250NLC-7	
	kg	lb	kg	lb
Upperstructure assembly	5520	12170	←	←
Main frame weld assembly	2190	4800	←	←
Engine assembly	530	1170	←	←
Main pump assembly	120	260	←	←
Main control valve assembly	200	440	←	←
Swing motor assembly	330	730	←	←
Hydraulic oil tank assembly	190	420	←	←
Fuel tank assembly	180	400	←	←
Counterweight	4600	10140	←	←
Cab assembly	310	680	←	←
Lower chassis assembly	9880	21780	9780	21560
Track frame weld assembly	3070	6760	2965	6540
Swing bearing	360	800	←	←
Travel motor assembly	280	620	←	←
Turning joint	50	110	←	←
Track recoil spring and idler	300	660	←	←
Idler	170	370	←	←
Carrier roller	20	45	←	←
Track roller	50	110	←	←
Track-chain assembly (600㎜ standard triple grouser shoe)	1500	3310	←	←
Front attachment assembly(5.85m boom, 3.05m arm,1.08m^3 SAE heaped bucket)	4960	10930	←	←
5.85m boom assembly	1970	4340	←	←
3.05m arm assembly	1000	2200	←	←
1.08m^3 SAE heaped bucket	890	1960	←	←
Boom cylinder assembly	240	530	←	←
Arm cylinder assembly	340	750	←	←
Bucket cylinder assembly	220	490	←	←
Bucket control rod assembly	110	240	←	←

5. LIFTING CAPACITIES

(1) 5.85m(19' 2") boom, 2.10m(6' 11") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

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

Load point height		Load radius								At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg					*5900	5840			5220	3200	8.32
	lb					*13010	12870			11510	7050	(27.3)
4.5m (15ft)	kg			*7950	*7950	*6630	5570	6060	3690	4520	2710	8.91
	lb			*17530	*17530	*14620	12280	13360	8140	9960	5970	(29.2)
3.0m (10ft)	kg			*10440	8200	*7750	5190	5900	3550	4210	2480	9.17
	lb			*23020	18080	*17090	11440	13010	7830	9280	5470	(30.1)
1.5m (5ft)	kg			*12520	7520	8250	4850	5720	3380	4170	2430	9.14
	lb			*27600	16580	18190	10690	12610	7450	9190	5360	(30.0)
Ground Line	kg			13110	7250	8010	4640	5600	3270	4410	2580	8.80
	lb			28900	15980	17660	10230	12350	7210	9720	5690	(28.9)
-1.5m (-5ft)	kg	*15590	15160	13090	7230	7940	4580			5060	2990	8.13
	lb	*34370	33420	28860	15940	17500	10100			11160	6590	(26.7)
-3.0m (-10ft)	kg	*17410	15470	*12310	7390	8050	4680			*6420	3980	6.98
	lb	*38380	34110	*27140	16290	17750	10320			*14150	8770	(22.9)
-4.5m (-15ft)	kg	*13610	*13610	*9640	7790							
	lb	*30000	*30000	*21250	17170							

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) 5.85m(19' 2") boom, 2.50m(8' 2") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

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											4900	3000	8.67
	lb											10800	6610	(28.4)
4.5m (15ft)	kg							*6190	5670	*5740	3770	4280	2550	9.23
	lb							*13650	12500	*12650	8310	9440	5620	(30.3)
3.0m (10ft)	kg					*9730	8410	*7350	5280	5950	3590	3990	2340	9.48
	lb					*21450	18540	*16200	11640	13120	7910	8800	5160	(31.1)
1.5m (5ft)	kg					*12000	7650	8310	4910	5750	3410	3950	2290	9.45
	lb					*26460	16870	18320	10820	12680	7520	8710	5050	(31.0)
Ground Line	kg					13150	7280	8030	4660	5600	3270	4150	2410	9.13
	lb					28990	16050	17700	10270	12350	7210	9150	5310	(30.0)
-1.5m (-5ft)	kg			*15230	14960	13050	7190	7910	4560	5550	3220	4690	2750	8.49
	lb			*33580	32980	28770	15850	17440	10050	12240	7100	10340	6060	(27.9)
-3.0m (-10ft)	kg	*16500	*16500	*18440	15250	*12700	7300	7970	4610			5940	3550	7.41
	lb	*36380	*36380	*40650	33620	*28000	16090	17570	10160			13100	7830	(24.3)
-4.5m (-15ft)	kg			*15140	*15140	*10620	7620							
	lb			*33380	*33380	*23410	16800							

(3) 5.85m(19'82") boom, 3.05m(10' 0") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

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									*4100	3950	4400	2660	9.22
	lb									*9040	8710	9700	5860	(30.2)
4.5m (15ft)	kg							*5460	*5460	*5160	3830	3880	2280	9.74
	lb							*12040	*12040	*11380	8440	8550	5030	(32.0)
3.0m (10ft)	kg			*13880	*13880	*8560	*8560	*6670	5360	*5780	3620	3630	2090	9.98
	lb			*30600	*30600	*18870	*18870	*14700	11820	*12740	7980	8000	4610	(32.7)
1.5m (5ft)	kg			*9530	*9530	*11070	7800	*7970	4950	5750	3400	3580	2040	9.95
	lb			*21010	*21010	*24410	17200	*17570	10910	12680	7500	7890	4500	(32.6)
Ground Line	kg			*10660	*10660	*12720	7280	8010	4640	5560	3230	3730	2130	9.65
	lb			*23500	*23500	*28040	16050	17660	10230	12260	7120	8220	4700	(31.7)
-1.5m (-5ft)	kg	*10020	*10020	*13980	*13980	12930	7090	7830	4480	5460	3140	4150	2390	9.05
	lb	*22090	*22090	*30820	*30820	28510	15630	17260	9880	12040	6920	9150	5270	(29.7)
-3.0m (-10ft)	kg	*13650	*13650	*18590	14860	12960	7110	7820	4470			5080	2980	8.06
	lb	*30090	*30090	*40980	32760	28570	15670	17240	9850			11200	6570	(26.4)
-4.5m (-15ft)	kg	*17980	*17980	*16880	15340	*11570	7340	8020	4640			*6060	4480	6.48
	lb	*39640	*39640	*37210	33820	*25510	16180	17680	10230			*13360	9880	(21.3)

(4) 5.85m(19' 2") boom, 3.60m(11'10") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

Load point height		Load radius												At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		9.0m(30ft)		Capacity		Reach
																m(ft)
6.0m (20ft)	kg lb									*4210 *9280	4040 8910			3960 8730	2360 5200	9.77 (32.1)
4.5m (15ft)	kg lb									*4620 *10190	3890 8580	*2800 *6170	2650 5840	3530 7780	2040 4500	10.27 (33.7)
3.0m (10ft)	kg lb							*6010 *13250	5490 12100	*5300 *11680	3670 8090	*3990 *8800	2550 5620	3310 7300	1870 4120	10.49 (34.4)
1.5m (5ft)	kg lb			*12710 *28020	*12170 *28020	*10140 *22350	8040 17730	*7400 *16310	5040 11110	5790 12760	3430 7560	4210 9280	2430 5360	3260 7190	1820 4010	10.46 (34.3)
Ground Line	kg lb			*11110 *24490	*11110 *24490	*12150 *26790	7390 16290	8070 17790	4680 10320	5570 12280	3230 7120	4090 9020	2320 5110	3380 7450	1890 4170	10.18 (33.4)
-1.5m (-5ft)	kg lb	*9080 *20020	*9080 *20020	*13310 *29340	*13310 *29340	12950 28550	7090 15630	7830 17260	4470 9850	5430 11970	3100 6830			3710 8180	2100 4630	9.62 (31.6)
-3.0m (-10ft)	kg lb	*12220 *26940	*12220 *26940	*16960 *37390	14680 32360	12880 28400	7040 15520	7750 17090	4400 9700	5390 11880	3070 6770			4420 9740	2550 5620	8.71 (28.6)
-4.5m (-15ft)	kg lb	*15960 *35190	*15960 *35190	*18260 *40260	15050 33180	*12250 *27010	7180 15830	7850 17310	4490 9900					*5900 *13010	3580 7890	7.30 (24.0)

2) R250NLC-7

(1) 5.85m(19' 2") boom, 2.10m(6' 11") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

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

Load point height		Load radius								At max. reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
												m(ft)
6.0m (20ft)	kg					*5900	5290			5200	2870	8.32
	lb					*13010	11660			11460	6330	(27.3)
4.5m (15ft)	kg			*7950	*7950	*6630	5030	6040	3310	4500	2410	8.91
	lb			*17530	*17530	*14620	11090	13320	7300	9920	5310	(29.2)
3.0m (10ft)	kg			*10440	7330	*7750	4660	5870	3170	4190	2190	9.17
	lb			*23020	16160	*17090	10270	12940	6990	9240	4830	(30.1)
1.5m (5ft)	kg			*12520	6670	8210	4330	5690	3010	4150	2150	9.14
	lb			*27600	14700	18100	9550	12540	6640	9150	4740	(30.0)
Ground Line	kg			13050	6410	7970	4120	5570	2900	4390	2280	8.80
	lb			28770	14130	17570	9080	12280	6390	9680	5030	(28.9)
-1.5m (-5ft)	kg	*15590	13120	13030	6390	7900	4060			5040	2660	8.13
	lb	*34370	28920	28730	14090	17420	8950			11110	5860	(26.7)
-3.0m (-10ft)	kg	*17410	13420	*12310	6540	8020	4160			*6420	3560	6.98
	lb	*38380	29590	*27140	14420	17680	9170			*14150	7850	(22.9)
-4.5m (-15ft)	kg	*13610	*13610	*9640	6930							
	lb	*30000	*30000	*21250	15280							

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) 5.85m(19' 2") boom, 2.50m(8' 2") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

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											4880 10760	2680 5910	8.67 (28.4)
4.5m (15ft)	kg lb							*6190 *13650	5130 11310	*5740 *12650	3380 7450	4260 9390	2270 5000	9.23 (30.3)
3.0m (10ft)	kg lb					*9730 *21450	7530 16600	*7350 *16200	4750 10470	5920 13050	3210 7080	3970 8750	2070 4560	9.48 (31.1)
1.5m (5ft)	kg lb					*12000 *26460	6790 14970	8270 18230	4380 9660	5720 12610	3030 6680	3930 8660	2020 4450	9.45 (31.0)
Ground Line	kg lb					13090 28860	6440 14200	7990 17610	4140 9130	5570 12280	2900 6390	4130 9110	2120 4670	9.13 (30.0)
-1.5m (-5ft)	kg lb			*15230 *33580	12930 28510	12990 28640	6350 14000	7880 17370	4040 8910	5520 12170	2850 6280	4670 10300	2440 5380	8.49 (27.9)
-3.0m (-10ft)	kg lb	*16500 *36380	*16500 *36380	*18440 *40650	13210 29120	*12700 *28000	6450 14220	7940 17500	4090 9020			5910 13030	3170 6990	7.41 (24.3)
-4.5m (-15ft)	kg lb			*15140 *33380	13750 30310	*10620 *23410	6760 14900							

(3) 5.85m(19' 2") boom, 3.05m(10' 0") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

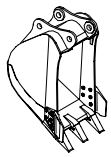
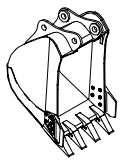
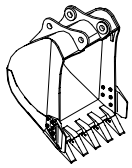
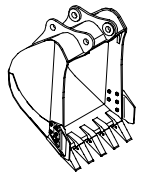
Load point height		Load radius										At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		Capacity		Reach
														m(ft)
6.0m (20ft)	kg lb									*4100 *9040	3570 7870	4380 9660	2370 5220	9.22 (30.2)
4.5m (15ft)	kg lb							*5460 *12040	5230 11530	*5160 *11380	3440 7580	3860 8510	2020 4450	9.74 (32.0)
3.0m (10ft)	kg lb			*13880 *30600	*13880 *30600	*8560 *18870	7780 17150	*6670 *14700	4830 10650	*5780 *12740	3240 7140	3610 7960	1840 4060	9.98 (32.7)
1.5m (5ft)	kg lb			*9530 *21010	*9530 *21010	*11070 *24410	6940 15300	*7970 *17570	4420 9740	5720 12610	3030 6680	3560 7850	1790 3950	9.95 (32.6)
Ground Line	kg lb			*10660 *23500	*10660 *23500	*12720 *28040	6430 14180	7980 17590	4120 9080	5530 12190	2850 6280	3710 8180	1860 4100	9.65 (31.7)
-1.5m (-5ft)	kg lb	*10020 *22090	*10020 *22090	*13980 *30820	12620 27820	12870 28370	6250 13780	7790 17170	3960 8730	5430 11970	2760 6080	4130 9110	2100 4630	9.05 (29.7)
-3.0m (-10ft)	kg lb	*13650 *30090	*13650 *30090	*18590 *40980	12840 28310	12900 28440	6270 13820	7780 17150	3950 8710			5060 11160	2640 5820	8.06 (26.4)
-4.5m (-15ft)	kg lb	*17980 *39640	*17980 *39640	*16880 *37210	13290 29300	*11570 *25510	6490 14310	7980 17590	4120 9080			*6060 *13360	4010 8840	6.48 (21.3)

(4) 5.85m(19' 2") boom, 3.60m(11'10") arm equipped with 1.08m³(SAE heaped) bucket and 600mm (24") triple grouser shoe.

Load point height		Load radius												At max. reach		
		1.5m(5ft)		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		7.5m(25ft)		9.0m(30ft)		Capacity		Reach
																m(ft)
6.0m (20ft)	kg									*4210	3660			3940	2090	9.77
	lb									*9280	8070			8690	4610	(32.1)
4.5m (15ft)	kg									*4620	3510	*2800	2350	3510	1790	10.27
	lb									*10190	7740	*6170	5180	7740	3950	(33.7)
3.0m (10ft)	kg							*6010	4940	*5300	3290	*3990	2250	3290	1630	10.49
	lb							*13250	10890	*11680	7250	*8800	4960	7250	3590	(34.4)
1.5m (5ft)	kg			*12710	*12170	*10140	7160	*7400	4510	5760	3060	4180	2130	3240	1580	10.46
	lb			*28020	*28020	*22350	15790	*16310	9940	12700	6750	9220	4700	7140	3480	(34.3)
Ground Line	kg			*11110	*11110	*12150	6540	8030	4160	5540	2860	4070	2030	3360	1640	10.18
	lb			*24490	*24490	*26790	14420	17700	9170	12210	6310	8970	4480	7410	3620	(33.4)
-1.5m (-5ft)	kg	*9080	*9080	*13310	12560	12890	6250	7790	3950	5400	2730			3690	1830	9.62
	lb	*20020	*20020	*29340	27690	28420	13780	17170	8710	11900	6020			8140	4030	(31.6)
-3.0m (-10ft)	kg	*12220	*12220	*16960	12660	12820	6190	7710	3880	5370	2700			4390	2240	8.71
	lb	*26940	*26940	*37390	27910	28260	13650	17000	8550	11840	5950			9680	4940	(28.6)
-4.5m (-15ft)	kg	*15960	*15960	*18260	13010	*12250	6330	7820	3970					*5900	3190	7.30
	lb	*35190	*35190	*40260	28680	*27010	13960	17240	8750					*13010	7030	(24.0)

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

			
0.79m³ SAE heaped bucket	1.03m³ SAE heaped bucket	※1.08m³ SAE heaped bucket	1.50m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation			
					5.85m (19' 2") boom			
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.1m arm (6' 11")	2.5m arm (8' 2")	3.05m arm (10' 0")	3.6m arm (11' 10")
0.79m³ (1.03yd³)	0.70m³ (0.92yd³)	890mm (35.0")	1050mm (41.3")	740kg (1630lb)				
1.03m³ (1.35yd³)	0.90m³ (1.18yd³)	1090mm (42.9")	1230mm (48.4")	850kg (1870lb)				
※1.08m³ (1.41yd³)	0.95m³ (1.24yd³)	1130mm (44.5")	1250mm (49.2")	890kg (1960lb)				
1.50m³ (1.96yd³)	1.30m³ (1.70yd³)	1490mm (58.7")	1610mm (63.4")	1020kg (2250lb)				

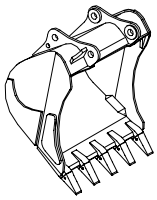
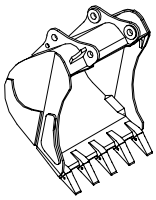
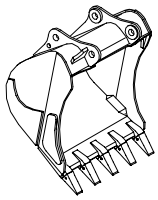
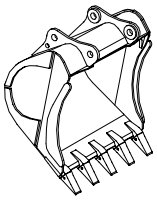
※ : Standard bucket

Applicable for materials with density of 2000kgf/m³ (3370lbf/yd³) or less

Applicable for materials with density of 1600kgf/m³ (2700lbf/yd³) or less

Applicable for materials with density of 1100kgf/m³ (1850lbf/yd³) or less

2) ROCK AND HEAVY DUTY BUCKET

			
1.07m³ SAE heaped bucket	1.27m³ SAE heaped bucket	1.46m³ SAE heaped bucket	铗1.16m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation			
					6.25m (20' 6") boom			
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.1m arm (6' 11")	2.5m arm (8' 2")	3.05m arm (10' 0")	3.6m arm (11' 10")
1.07m³ (1.40yd³)	0.95m³ (1.24yd³)	1060mm (41.7")	-	1110kg (2430lb)				
1.27m³ (1.66yd³)	1.10m³ (1.44yd³)	1220mm (48.0")	-	1130kg (2490lb)				
1.46m³ (1.91yd³)	1.28m³ (1.67yd³)	1370mm (53.9")	-	1260kg (2780lb)				
铗1.16m³ (1.52yd³)	1.00m³ (1.31yd³)	1305mm (51.6")	-	1260kg (2780lb)				

: Heavy duty bucket

铗 : Rock bucket

Applicable for materials with density of 2000kgf/m³ (3370lbf/yd³) or less

Applicable for materials with density of 1600kgf/m³ (2700lbf/yd³) or less

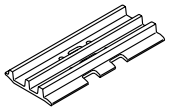
Applicable for materials with density of 1100kgf/m³ (1850lbf/yd³) or less

7. UNDERCARRIAGE

1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs and assembled track-type tractor shoes with triple grousers.

2) TYPES OF SHOES

Model	Shapes		Triple grouser 			
R250LC-7	Shoe width	mm(in)	600(24)	700(28)	800(32)	900(36)
	Operating weight	kg(lb)	25200(55600)	25500(26200)	25800(56900)	26100(57500)
	Ground pressure	kgf/cm²(psi)	0.51(7.25)	0.44(6.26)	0.39(5.55)	0.35(4.98)
	Overall width	mm(ft-in)	3180(10' 5")	3280(10' 9")	3380(11' 1")	3480(11' 5")
R250NLC-7	Shoe width	mm(in)	600(24)	-	-	-
	Operating weight	kg(lb)	25100(55300)	-	-	-
	Ground pressure	kgf/cm²(psi)	0.51(7.25)	-	-	-
	Overall width	mm(ft-in)	2980(9' 9")	-	-	-

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2EA
Track rollers	9EA
Track shoes	51EA

4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

Confirm the category from the list of applications in **table 2**, then use **table 1** to select the shoe. Wide shoes(Categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ **Table 1**

Track shoe	Specification	Category
600mm triple grouser	Standard	A
700mm triple grouser	Option	B
800mm triple grouser	Option	C
900mm triple grouser	Option	C

※ **Table 2**

Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	· These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft gound (Swampy ground)	· Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B · These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins B5.9-C
Type	4-cycle turbocharged, charger air coded diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	102× 120mm(4.0" × 4.7")
Piston displacement	5880cc(359cu in)
Compression ratio	17.3 : 1
Rated gross horse power(SAE J1995)	178Hp at 2000rpm(133kW at 2000rpm)
Maximum torque	72.2kgf · m(522lbf · ft) at 1500rpm
Engine oil quantity	24 ℓ (4.9U.S. gal)
Dry weight	506kg(1115lb)
High idling speed	2250 + 50rpm
Low idling speed	1050 ± 100rpm
Rated fuel consumption	167.0g/Hp · hr at 2000rpm
Starting motor	Nippon denso(24V-4.5kW)
Alternator	Delco Remy 24V-50A
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 112cc/rev
Maximum pressure	330kgf/cm^2 (4690psi)[360kgf/cm^2 (5120psi)]
Rated oil flow	2 × 224 ℓ /min (59.2U.S. gpm/ 49.3U.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/cm²(500psi)
Rated oil flow	30 ℓ /min(7.9U.S. gpm/6.6U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm²(4690psi) [360kgf/cm²(5120psi)]
Overload relief valve pressure	390kgf/cm²(5550psi)

[ ]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	151cc/rev
Relief pressure	275kgf/cm²(3910psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	59kgf · m(426lbf · ft)
Brake release pressure	33~50kgf/cm²(430~710psi)
Reduction gear type	2 - stage planetary
Swing speed	12.6rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm²(4690psi)
Capacity(max / min)	134.7/82cc/rev
Reduction gear type	Cluster type
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	6.0kgf/cm²(85psi)
Braking torque	40.6kgf · m(293lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm²(92psi)
	Maximum	26kgf/cm²(370psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø140× Ø95× 1345mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø150× Ø100× 1620mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø135× Ø90× 1185mm
	Cushion	Extend only

※ 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
R250LC-7	Standard	600mm(24")	0.51kgf/cm²(7.25psi)	51	3180mm(10' 5")
	Option	700mm(28")	0.44kgf/cm²(6.26psi)	51	3280mm(10' 9")
		800mm(32")	0.39kgf/cm²(5.55psi)	51	3380mm(11' 1")
		900mm(36")	0.35kgf/cm²(4.98psi)	51	3480mm(11' 5")
R250NLC-7	Standard	600mm(24")	0.51kgf/cm²(7.25psi)	51	2980mm(9' 9")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		PCSA heaped	CECE heaped		Without side cutter	With side cutter
R250LC-7 R250NLC-7	Standard	1.08m³(1.41yd³)	0.95m³(1.24yd³)	5	1130mm(44.5")	1250mm(49.2")
	Option	0.79m³(1.03yd³)	0.70m³(0.92yd³)	3	890mm(35.0")	1050mm(41.3")
		1.03m³(1.35yd³)	0.90m³(1.18yd³)	4	1090mm(42.9")	1230mm(48.4")
		1.07m³(1.40yd³)	0.95m³(1.24yd³)	5	1060mm(41.7")	-
		1.27m³(1.66yd³)	1.10m³(1.44yd³)	5	1220mm(48.0")	-
		1.46m³(1.91yd³)	1.28m³(1.67yd³)	5	1370mm(53.9")	-
		铗1.16m³(1.52yd³)	1.00m³(1.31yd³)	5	1305mm(51.6")	-
		1.50m³(1.96yd³)	1.30m³(1.70yd³)	6	1490mm(58.7")	1610mm(63.4")

: Heavy duty bucket

铗 : Rock bucket(Esco type)

9. 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	24(6.3)	SAE 30 SAE 10W SAE 10W-30 SAE 15W-40
Swing drive	Gear oil	6.0(1.6)	SAE 85W-140
Final drive		5.4×2 (1.4×2)	
Hydraulic tank	Hydraulic oil	Tank; 190(50.2) System; 300(79.3)	ISO VG 32 ISO VG 46 ISO VG 68
Fuel tank	Diesel fuel	340(89.8)	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	45(11.9)	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