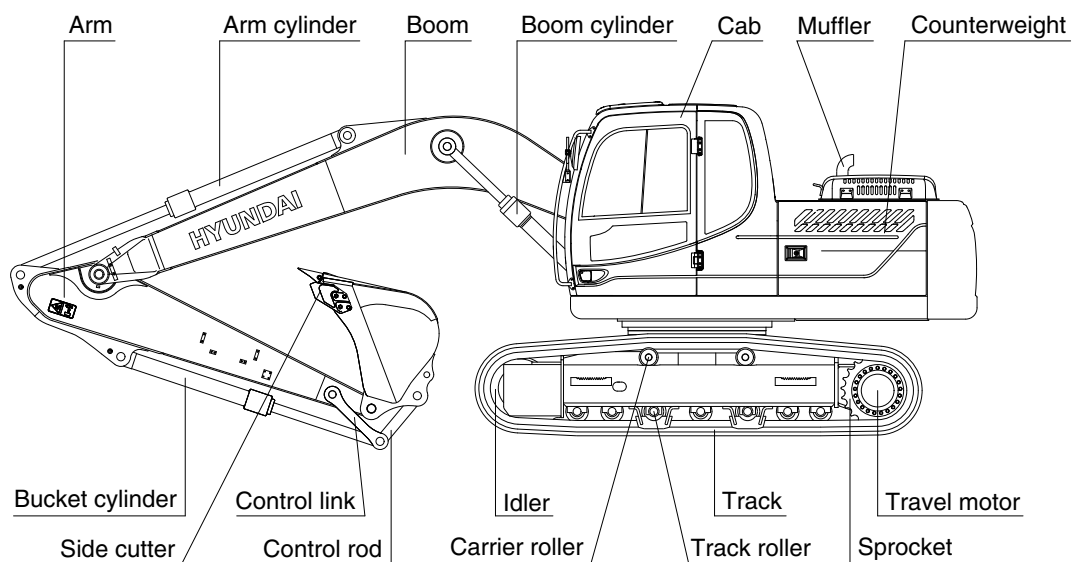
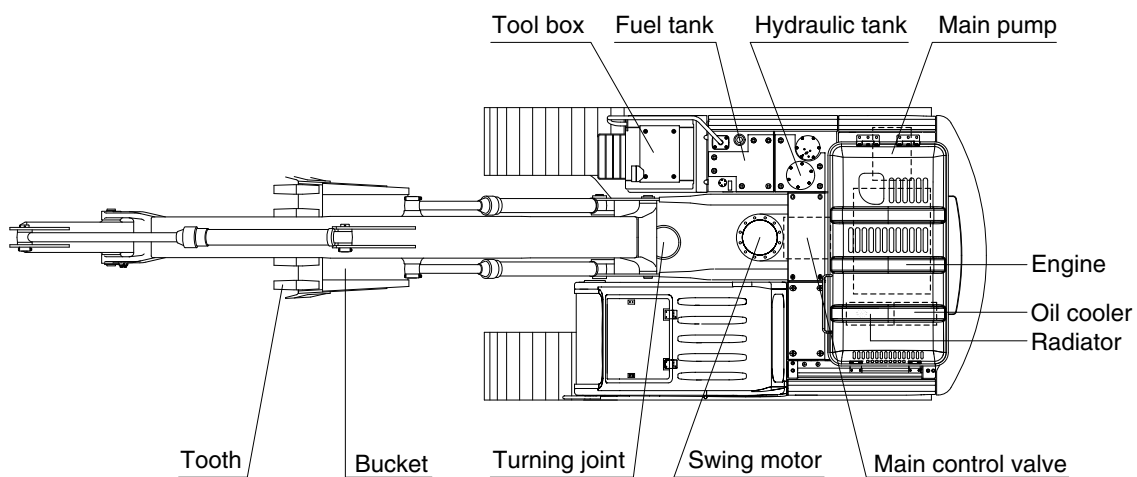


SPECIFICATIONS

1. MAJOR COMPONENT

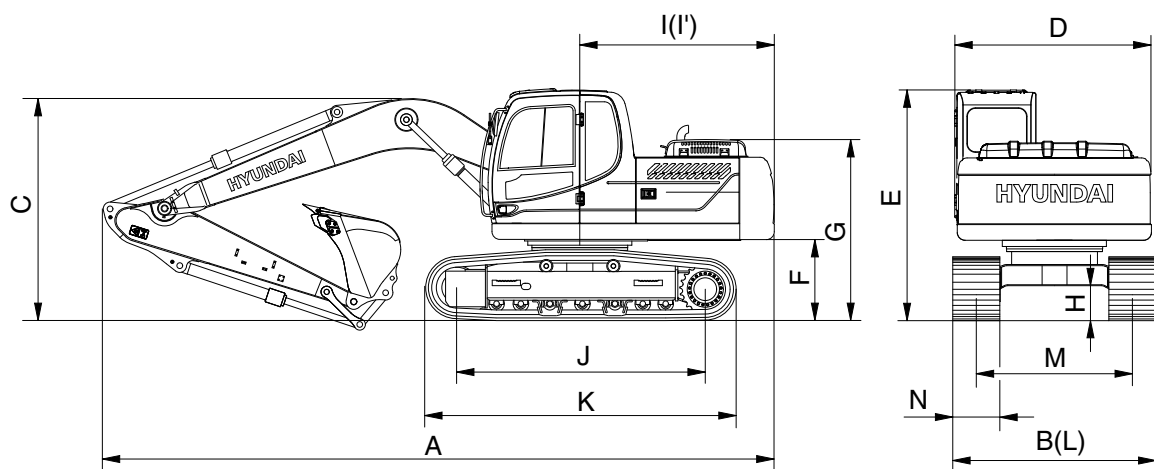


RB1609S2SP01

2. SPECIFICATIONS

1) R160LC-9

· 5.1 m (16' 9") BOOM and 2.6 m (8' 6") ARM

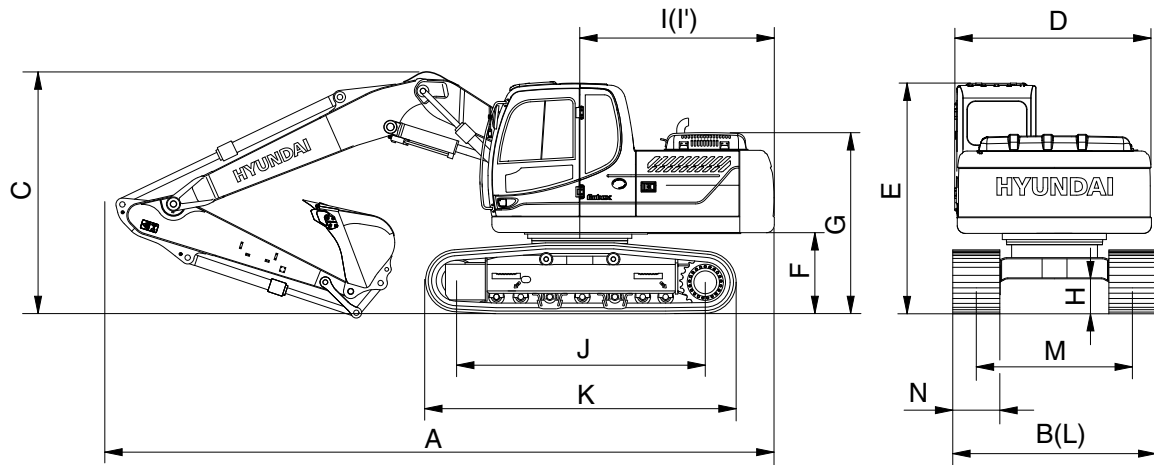


RB1609S2SP02

Description		Unit	Specification
Operating weight		kg (lb)	18000 (39680)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.89 (1.16)
Overall length	A	mm (ft-in)	8650 (28' 5")
Overall width, with 700 mm shoe	B		2690 (8' 10")
Overall height	C		2990 (9' 10")
Superstructure width	D		2475 (8' 1")
Overall height of cab	E		2980 (9' 9")
Ground clearance of counterweight	F		1055 (3' 6")
Engine cover height	G		2315 (7' 7")
Minimum ground clearance	H		460 (1' 6")
Rear-end distance	I		2480 (8' 2")
Rear-end swing radius	I'		2480 (8' 1")
Distance between tumblers	J		3170 (10' 5")
Undercarriage length	K		3960 (13' 0")
Undercarriage width	L		2590 (8' 6")
Track gauge	M		1990 (6' 6")
Track shoe width, standard	N		700 (28")
Travel speed (low/high)		km/hr (mph)	3.1/5.3(2.0/3.3)
Swing speed		rpm	9.6
Gradeability		Degree (%)	35(70)
Ground pressure (700 mm shoe)		kgf/cm ² (psi)	0.37(5.25)
Max traction force		kg (lb)	16700(36800)

2) R160LC-9

- 5.1 m (16' 9") HYDRAULIC ADJUSTABLE BOOM AND 2.6 m (8' 6") ARM

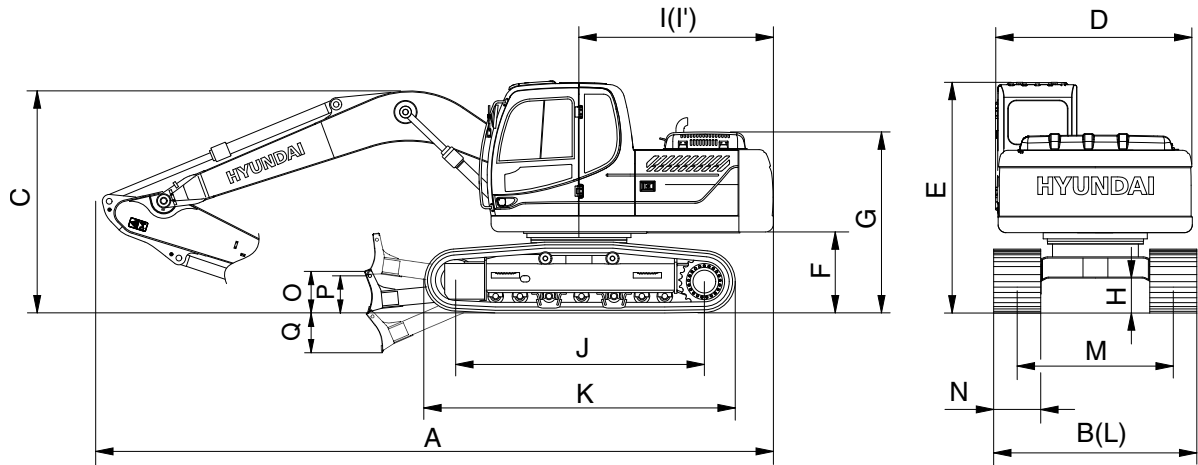


RB1609S2SP03

Description		Unit	Specification
Operating weight		kg (lb)	18290 (40320)
Bucket capacity (SAE heaped), standard		m³ (yd³)	0.89 (1.16)
Overall length	A	mm (ft-in)	8610 (28' 3")
Overall width, with 700 mm shoe	B		2690 (8' 10")
Overall height	C		3060 (10' 0")
Superstructure width	D		2475 (8' 1")
Overall height of cab	E		2980 (9' 9")
Ground clearance of counterweight	F		1055 (3' 6")
Engine cover height	G		2315 (7' 7")
Minimum ground clearance	H		460 (1' 6")
Rear-end distance	I		2480 (10' 5")
Rear-end swing radius	I'		2480 (8' 1")
Distance between tumblers	J		3170 (10' 5")
Undercarriage length	K		3960 (13' 0")
Undercarriage width	L		2590 (8' 6")
Track gauge	M		1990 (6' 6")
Track shoe width, standard	N		700 (28")
Travel speed (low/high)		km/hr (mph)	3.1/5.3(2.0/3.3)
Swing speed		rpm	9.6
Gradeability		Degree (%)	35(70)
Ground pressure (700 mm shoe)		kgf/cm²(psi)	0.38(5.4)
Max traction force		kg (lb)	16700(36800)

3) R160LCD-9

· 5.1 m (16' 9") BOOM and 2.6 m (8' 6") ARM

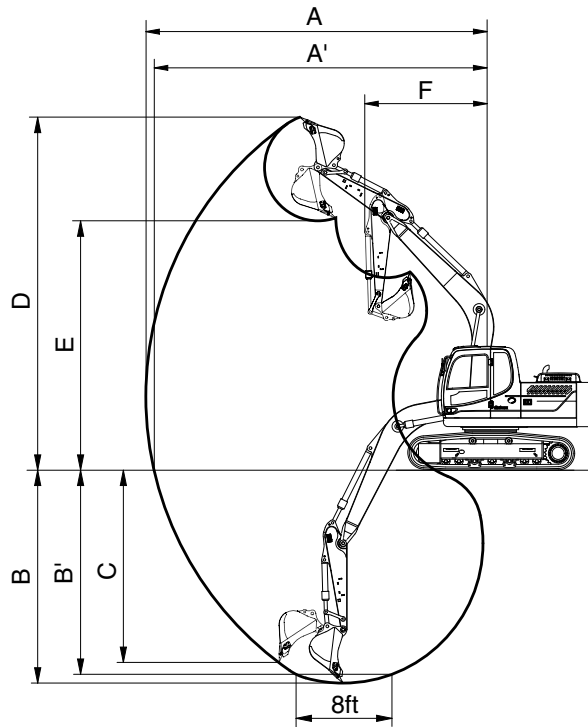


RB1609S2SP04

Description		Unit	Specification
Operating weight		kg (lb)	18800 (41450)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.89 (1.16)
Overall length	A	mm (ft-in)	9100 (29' 10")
Overall width, with 700 mm shoe	B		2690 (8' 10")
Overall height	C		2990 (9' 10")
Superstructure width	D		2475 (8' 1")
Overall height of cab	E		2980 (9' 9")
Ground clearance of counterweight	F		1055 (3' 6")
Engine cover height	G		2315 (7' 7")
Minimum ground clearance	H		460 (1' 6")
Rear-end distance	I		2480 (8' 2")
Rear-end swing radius	I'		2480 (8' 1")
Distance between tumblers	J		3170 (10' 5")
Undercarriage length	K		3960 (13' 0")
Undercarriage width	L		2590 (8' 6")
Track gauge	M		1990 (6' 6")
Track shoe width, standard	N		700 (28")
Height of blade	O		640 (2' 1")
Ground clearance of blade up	P		615 (2' 0")
Depth of blade down	Q		670 (2' 2")
Travel speed (low/high)		km/hr (mph)	3.1/5.3 (2.0/3.3)
Swing speed		rpm	9.6
Gradeability		Degree (%)	35 (70)
Ground pressure (700 mm shoe)		kgf/cm ² (psi)	0.39 (5.55)
Max traction force		kg (lb)	16700 (36800)

3. WORKING RANGE

1) 5.1 m (16' 9") MONO BOOM

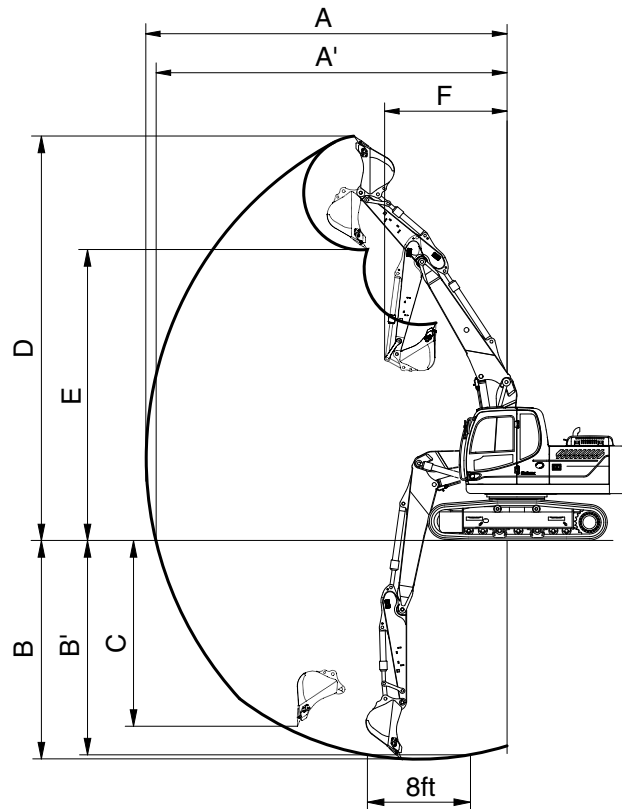


RB1609S2SP05

Description		2.2 m (7' 3") Arm	2.6 m (8' 6") Arm	3.1 m (10' 2") Arm
Max digging reach	A	8690 mm (28' 6")	9020 mm (29' 7")	9450 mm (31' 0")
Max digging reach on ground	A'	8530 mm (28' 0")	8860 mm (29' 1")	9300 mm (30' 6")
Max digging depth	B	5660 mm (18' 7")	6060 mm (19'11")	6560 mm (21' 6")
Max digging depth (8ft level)	B'	5430 mm (17'10")	5850 mm (19' 2")	6370 mm (20'11")
Max vertical wall digging depth	C	5120 mm (16'10")	5380 mm (17' 8")	5710 mm (18' 9")
Max digging height	D	8750 mm (28' 8")	8840 mm (29' 0")	8980 mm (29' 6")
Max dumping height	E	6110 mm (20' 1")	6220 mm (20' 5")	6390 mm (21' 0")
Min swing radius	F	3180 mm (10' 5")	3170 mm (10' 5")	3170 mm (10' 5")
Bucket digging force	SAE	107.9 [117.2] kN	107.9 [117.2] kN	107.9 [117.2] kN
		11000 [11940] kgf	11000 [11940] kgf	11000 [11940] kgf
		24250 [26330] lbf	24250 [26330] lbf	24250 [26330] lbf
	ISO	123.6 [134.2] kN	123.6 [134.2] kN	123.6 [134.2] kN
		12600 [13680] kgf	12600 [13680] kgf	12600 [13680] kgf
		27780 [30160] lbf	27780 [30160] lbf	27780 [30160] lbf
Arm crowd force	SAE	87.2 [94.7] kN	77.3 [83.9] kN	69.0 [74.9] kN
		8890 [9650] kgf	7880 [8560] kgf	7030 [7630] kgf
		19600 [21280] lbf	17370 [18860] lbf	15500 [16830] lbf
	ISO	91.0 [98.8] kN	80.3 [87.2] kN	71.4 [77.5] kN
		9280 [10080] kgf	8190 [8890] kgf	7280 [7900] kgf
		20460 [22210] lbf	18060 [19600] lbf	16050 [17430] lbf

[] : Power boost

2) 5.1 m (16' 9") HYDRAULIC ADJUSTABLE BOOM



RB1609S2SP06

Description		2.2 m (7' 3") Arm	2.6 m (8' 6") Arm
Max digging reach	A	8760 mm (28' 9")	9110 mm (29' 11")
Max digging reach on ground	A'	8590 mm (28' 2")	8950 mm (29' 4")
Max digging depth	B	5430 mm (17' 10")	5830 mm (19' 2")
Max digging depth (8ft level)	B'	5330 mm (17' 6")	5730 mm (18' 10")
Max vertical wall digging depth	C	4630 mm (15' 2")	4980 mm (16' 4")
Max digging height	D	9420 mm (30' 11")	9610 mm (31' 6")
Max dumping height	E	6710 mm (22' 0")	6910 mm (22' 8")
Min swing radius	F	3100 mm (10' 2")	2970 mm (9' 9")
Bucket digging force	SAE	107.9 [117.2] kN	107.9 [117.2] kN
		11000 [11940] kgf	11000 [11940] kgf
		24250 [26330] lbf	24250 [26330] lbf
	ISO	123.6 [134.2] kN	123.6 [134.2] kN
		12600 [13680] kgf	12600 [13680] kgf
		27780 [30160] lbf	27780 [30160] lbf
Arm crowd force	SAE	87.2 [94.7] kN	77.3 [83.9] kN
		8890 [9650] kgf	7880 [8560] kgf
		19600 [21280] lbf	17370 [18860] lbf
	ISO	91.0 [98.8] kN	80.3 [87.2] kN
		9280 [10080] kgf	8190 [8890] kgf
		20460 [22210] lbf	18060 [19600] lbf

[] : Power boost

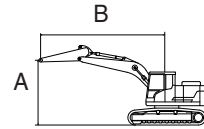
4. WEIGHT

Item	R160LC-9		R160LCD-9	
	kg	lb	kg	lb
Upper structure assembly	7880	17370	←	
Main frame weld assembly	1405	3100	←	
Engine assembly	370	820	←	
Main pump assembly	90	200	←	
Main control valve assembly	135	300	←	
Swing motor assembly (type 1)	240	530	←	
Swing motor assembly (type 2)	255	560	←	
Hydraulic oil tank assembly	165	360	←	
Fuel tank assembly	130	290	←	
Counterweight	2900	6390	←	
Cab assembly	440	970	←	
Lower chassis assembly	7240	15960	8240	18170
Track frame weld assembly	1990	4390	2235	4930
Swing bearing	260	575	←	
Travel motor assembly	300	660	←	
Turning joint	60	130	←	
Track recoil spring	140	310	←	
Idler	160	350	←	
Carrier roller	20	45	←	
Track roller	40	90	←	
Track-chain assembly (700 mm standard triple grouser shoe)	1300	2870	←	
Front attachment assembly (5.1 m boom, 2.6 m arm, 0.89 m³ SAE heaped bucket)	3090	6810	←	
5.1 m boom assembly	1060	2340	←	
2.6 m arm assembly	560	1240	←	
0.89 m³ SAE heaped bucket	610	1340	←	
Boom cylinder assembly	155	340	←	
Arm cylinder assembly	180	400	←	
Bucket cylinder assembly	125	280	←	
Bucket control link assembly	120	265	←	
Dozer blade assembly	-	-	655	1445
Dozer blade cylinder assembly	-	-	66	146

5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2600	2910	700	-	-	-	-	-

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



Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
6.0m 19.7ft	kg lb											*3850 *8490	3370 7430	5.86 (19.2)
4.5m 14.8ft	kg lb					*5370 *11840	5020 11070	*4800 *10580	3230 7120			*3640 *8020	2670 5890	6.74 (22.1)
3.0m 9.8ft	kg lb					*6610 *14570	4720 10410	4940 10890	3110 6860			*3650 *8050	2350 5180	7.20 (23.6)
1.5m 4.9ft	kg lb					7420 16360	4440 9790	4800 10580	2990 6590			3580 7890	2240 4940	7.32 (24.0)
0.0m 0.0ft	kg lb					7240 15960	4290 9460	4700 10360	2900 6390			3680 8110	2300 5070	7.13 (23.4)
-1.5m -4.9ft	kg lb			*9400 *20720	7890 17390	7210 15900	4250 9370	4680 10320	2880 6350			4120 9080	2560 5640	6.58 (21.6)
-3.0m -9.8ft	kg lb			*9550 *21050	8030 17700	*6820 *15040	4330 9550					*5060 *11160	3250 7170	5.58 (18.3)

- 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 Lift-point is bucket pivot mounting pin on the arm (without bucket mass).
 4. *indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

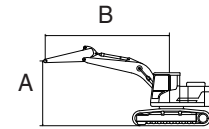
The difference between the weight of a work tool attachment must be subtracted.

Consult your Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

- ▲ Failure to comply to the rated load can cause possible personal injury or property damage.
Make adjustments to the rated load as necessary for non-standard configurations.

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2600	3260	700	-	-	-	-	-

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



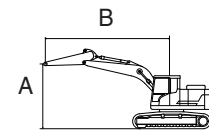
Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg											*3410	*3410	4.85
24.6ft	lb											*7520	*7520	(15.9)
6.0m	kg							*3840	3500			*2980	*2980	6.27
19.7ft	lb							*8470	7720			*6570	*6570	(20.6)
4.5m	kg					*4940	*4940	*4510	3450			*2850	2630	7.10
14.8ft	lb					*10890	*10890	*9940	7610			*6280	5800	(23.3)
3.0m	kg			*9510	9300	*6220	5060	*5030	3330	*3110	2370	*2880	2350	7.54
9.8ft	lb			*20970	20500	*13710	11160	*11090	7340	*6860	5220	*6350	5180	(24.7)
1.5m	kg					*7520	4760	5060	3190	3640	2320	*3060	2250	7.66
4.9ft	lb					*16580	10490	11160	7030	8020	5110	*6750	4960	(25.1)
0.0m	kg			*5290	*5290	7620	4570	4940	3090			*3430	2290	7.47
0.0ft	lb			*11660	*11660	16800	10080	10890	6810			*7560	5050	(24.5)
-1.5m	kg	*5090	*5090	*9190	8310	7550	4510	4900	3050			3990	2520	6.95
-4.9ft	lb	*11220	*11220	*20260	18320	16640	9940	10800	6720			8800	5560	(22.8)
-3.0m	kg	*9360	*9360	*10390	8430	*7270	4550	4960	3100			4940	3090	6.01
-9.8ft	lb	*20640	*20640	*22910	18580	*16030	10030	10930	6830			10890	6810	(19.7)
-4.5m	kg			*7050	*7050							*4690	*4690	4.39
-14.8ft	lb			*15540	*15540							*10340	*10340	(14.4)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2200	2910	700	-	-	-	-	-

Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
6.0m	kg											*3850	3370	5.86
19.7ft	lb											*8490	7430	(19.2)
4.5m	kg					*5370	5020	*4800	3230			*3640	2670	6.74
14.8ft	lb					*11840	11070	*10580	7120			*8020	5890	(22.1)
3.0m	kg					*6610	4720	4940	3110			*3650	2350	7.20
9.8ft	lb					*14570	10410	10890	6860			*8050	5180	(23.6)
1.5m	kg					7420	4440	4800	2990			3580	2240	7.32
4.9ft	lb					16360	9790	10580	6590			7890	4940	(24.0)
0.0m	kg					7240	4290	4700	2900			3680	2300	7.13
0.0ft	lb					15960	9460	10360	6390			8110	5070	(23.4)
-1.5m	kg			*9400	7890	7210	4250	4680	2880			4120	2560	6.58
-4.9ft	lb			*20720	17390	15900	9370	10320	6350			9080	5640	(21.6)
-3.0m	kg			*9550	8030	*6820	4330					*5060	3250	5.58
-9.8ft	lb			*21050	17700	*15040	9550					*11160	7170	(18.3)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2200	3260	700	-	-	-	-	-

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

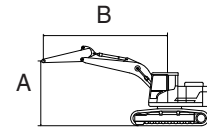


Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
6.0m 19.7ft	kg lb											*3850 *8490	3560 7850	5.86 (19.2)
4.5m 14.8ft	kg lb					*5370 *11840	5280 11640	*4800 *10580	3400 7500			*3640 *8020	2820 6220	6.74 (22.1)
3.0m 9.8ft	kg lb					*6610 *14570	4980 10980	5170 11400	3290 7250			*3650 *8050	2500 5510	7.20 (23.6)
1.5m 4.9ft	kg lb					7760 17110	4690 10340	5020 11070	3160 6970			3750 8270	2380 5250	7.32 (24.0)
0.0m 0.0ft	kg lb					7590 16730	4540 10010	4930 10870	3070 6770			3860 8510	2440 5380	7.13 (23.4)
-1.5m -4.9ft	kg lb			*9400 *20720	8340 18390	7550 16640	4510 9940	4900 10800	3050 6720			4320 9520	2720 6000	6.58 (21.6)
-3.0m -9.8ft	kg lb			*9550 *21050	8490 18720	*6820 *15040	4580 10100					*5060 *11160	3440 7580	5.58 (18.3)

Model		Type	Boom		Arm		Counterweight		Shoe		Wheel		Dozer		Outtriger	
R160LC-9		MONO BOOM	Length [mm]		Length [mm]		weight [kg]		width [mm]		width [mm]		Front	Rear	Front	Rear
			5100		3100		2910		700		-		-	-	-	-
Load point height		Load radius										At max. reach				
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach		
														m (ft)		
7.5m	kg												*2710	*2710	5.51	
24.6ft	lb												*5970	*5970	(18.1)	
6.0m	kg							*3700	3360				*2430	*2430	6.79	
19.7ft	lb							*8160	7410				*5360	*5360	(22.3)	
4.5m	kg							*4080	3300	*2560	2270		*2350	2240	7.56	
14.8ft	lb							*8990	7280	*5640	5000		*5180	4940	(24.8)	
3.0m	kg			*8040	*8040	*5620	4870	*4660	3160	3530	2230		*2380	2010	7.97	
9.8ft	lb			*17730	*17730	*12390	10740	*10270	6970	7780	4920		*5250	4430	(26.2)	
1.5m	kg			*6760	*6760	*7040	4520	4820	3000	3450	2160		*2530	1920	8.08	
4.9ft	lb			*14900	*14900	*15520	9960	10630	6610	7610	4760		*5580	4230	(26.5)	
0.0m	kg			*6160	*6160	7250	4280	4680	2870	3550	2230		*2820	1940	7.91	
0.0ft	lb			*13580	*13580	15980	9440	10320	6330	7830	4920		*6220	4280	(25.9)	
-1.5m	kg	*4790	*4790	*8760	7710	7140	4180	4610	2810				*3370	2110	7.42	
-4.9ft	lb	*10560	*10560	*19310	17000	15740	9220	10160	6190				*7430	4650	(24.3)	
-3.0m	kg	*8080	*8080	*11130	7800	7150	4190	4620	2820				4090	2520	6.55	
-9.8ft	lb	*17810	*17810	*24540	17200	15760	9240	10190	6220				9020	5560	(21.5)	
-4.5m	kg			*8450	8020	*5770	4330						*4750	3640	5.11	
-14.8ft	lb			*18630	17680	*12720	9550						*10470	8020	(16.8)	

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	3100	3260	700	-	-	-	-	-

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



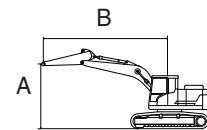
Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg											*2710	*2710	5.51
24.6ft	lb											*5970	*5970	(18.1)
6.0m	kg							*3700	3540			*2430	*2430	6.79
19.7ft	lb							*8160	7800			*5360	*5360	(22.3)
4.5m	kg							*4080	3470	*2560	2410	*2350	*2350	7.56
14.8ft	lb							*8990	7650	*5640	5310	*5180	*5180	(24.8)
3.0m	kg			*8040	*8040	*5620	5120	*4660	3340	3690	2360	*2380	2140	7.97
9.8ft	lb			*17730	*17730	*12390	11290	*10270	7360	8140	5200	*5250	4720	(26.2)
1.5m	kg			*6760	*6760	*7040	4780	5050	3180	3620	2290	*2530	2040	8.08
4.9ft	lb			*14900	*14900	*15520	10540	11130	7010	7980	5050	*5580	4500	(26.5)
0.0m	kg			*6160	*6160	7600	4540	4910	3050	3550	2230	*2820	2070	7.91
0.0ft	lb			*13580	*13580	16760	10010	10820	6720	7830	4920	*6220	4560	(25.9)
-1.5m	kg	*4790	*4790	*8760	8170	7480	4440	4830	2980			*3370	2240	7.42
-4.9ft	lb	*10560	*10560	*19310	18010	16490	9790	10650	6570			*7430	4940	(24.3)
-3.0m	kg	*8080	*8080	*11130	8250	7490	4450	4850	3000			4290	2670	6.55
-9.8ft	lb	*17810	*17810	*24540	18190	16510	9810	10690	6610			9460	5890	(21.5)
-4.5m	kg			*8450	*8450	*5770	4580					*4750	3860	5.11
-14.8ft	lb			*18630	*18630	*12720	10100					*10470	8510	(16.8)

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2200	2910	700	-	-	-	-	-

Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg	*5710	*5710	*5520	*5520							*5590	5240	4.42
24.6ft	lb	*12590	*12590	*12170	*12170							*12320	11550	(14.5)
6.0m	kg	*4710	*4710	*5430	*5430	*5230	5200					*4580	3230	5.95
19.7ft	lb	*10380	*10380	*11970	*11970	*11530	11460					*10100	7120	(19.5)
4.5m	kg			*7410	*7410	*5940	5000	5060	3180			4080	2540	6.82
14.8ft	lb			*16340	*16340	*13100	11020	11160	7010			8990	5600	(22.4)
3.0m	kg					*7320	4650	4920	3040			3630	2240	7.27
9.8ft	lb					*16140	10250	10850	6700			8000	4940	(23.9)
1.5m	kg					7360	4320	4750	2900			3480	2140	7.39
4.9ft	lb					16230	9520	10470	6390			7670	4720	(24.3)
0.0m	kg					7160	4140	4640	2800			3590	2190	7.20
0.0ft	lb					15790	9130	10230	6170			7910	4830	(23.6)
-1.5m	kg					7130	4120	4630	2780					
-4.9ft	lb					15720	9080	10210	6130					

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2200	3260	700	-	-	-	-	-

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

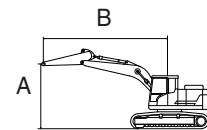


Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg	*5710	*5710	*5520	*5520							*5590	5500	4.42
24.6ft	lb	*12590	*12590	*12170	*12170							*12320	12130	(14.5)
6.0m	kg	*4710	*4710	*5430	*5430	*5230	*5230					*4580	3410	5.95
19.7ft	lb	*10380	*10380	*11970	*11970	*11530	*11530					*10100	7520	(19.5)
4.5m	kg			*7410	*7410	*5940	5260	5290	3350			*4250	2700	6.82
14.8ft	lb			*16340	*16340	*13100	11600	11660	7390			*9370	5950	(22.4)
3.0m	kg					*7320	4900	5140	3220			3800	2380	7.27
9.8ft	lb					*16140	10800	11330	7100			8380	5250	(23.9)
1.5m	kg					7700	4570	4980	3070			3660	2270	7.39
4.9ft	lb					16980	10080	10980	6770			8070	5000	(24.3)
0.0m	kg					7500	4400	4870	2980			3770	2330	7.20
0.0ft	lb					16530	9700	10740	6570			8310	5140	(23.6)
-1.5m	kg					7470	4370	4850	2960					
-4.9ft	lb					16470	9630	10690	6530					

Model		Type	Boom		Arm		Counterweight		Shoe		Wheel		Dozer		Outtriger	
R160LC-9		2-PIECE BOOM	Length [mm]		Length [mm]		weight [kg]		width [mm]		width [mm]		Front	Rear	Front	Rear
			5100		2600		2910		700		-		-	-	-	-
Load point height		Load radius										At max. reach				
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach		
														m (ft)		
7.5m	kg	*3840	*3840	*4630	*4630	*5020	*5020						*4130	*4130	4.99	
24.6ft	lb	*8470	*8470	*10210	*10210	*11070	*11070						*9110	*9110	(16.4)	
6.0m	kg	*3430	*3430	*4600	*4600	*4730	*4730	*4860	3290				*3530	2930	6.38	
19.7ft	lb	*7560	*7560	*10140	*10140	*10430	*10430	*10710	7250				*7780	6460	(20.9)	
4.5m	kg			*5540	*5540	*5470	5110	*5000	3240				*3330	2370	7.20	
14.8ft	lb			*12210	*12210	*12060	11270	*11020	7140				*7340	5220	(23.6)	
3.0m	kg					*6880	4750	4970	3090	3500	2170		*3310	2100	7.63	
9.8ft	lb					*15170	10470	10960	6810	7720	4780		*7300	4630	(25.0)	
1.5m	kg					7450	4390	4790	2930	3430	2110		3270	2010	7.74	
4.9ft	lb					16420	9680	10560	6460	7560	4650		7210	4430	(25.4)	
0.0m	kg					7200	4180	4660	2820	3390	2070		3350	2050	7.56	
0.0ft	lb					15870	9220	10270	6220	7470	4560		7390	4520	(24.8)	
-1.5m	kg					7130	4120	4620	2770							
-4.9ft	lb					15720	9080	10190	6110							

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	2600	3260	700	-	-	-	-	-

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

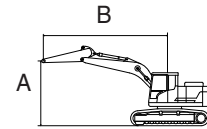


Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg	*3840	*3840	*4630	*4630	*5020	*5020					*4130	*4130	4.99
24.6ft	lb	*8470	*8470	*10210	*10210	*11070	*11070					*9110	*9110	(16.4)
6.0m	kg	*3430	*3430	*4600	*4600	*4730	*4730	*4860	3460			*3530	3100	6.38
19.7ft	lb	*7560	*7560	*10140	*10140	*10430	*10430	*10710	7630			*7780	6830	(20.9)
4.5m	kg			*5540	*5540	*5470	5360	*5000	3410			*3330	2510	7.20
14.8ft	lb			*12210	*12210	*12060	11820	*11020	7520			*7340	5530	(23.6)
3.0m	kg					*6880	5010	5200	3270	3660	2300	*3310	2240	7.63
9.8ft	lb					*15170	11050	11460	7210	8070	5070	*7300	4940	(25.0)
1.5m	kg					7790	4650	5020	3110	3600	2250	3430	2140	7.74
4.9ft	lb					17170	10250	11070	6860	7940	4960	7560	4720	(25.4)
0.0m	kg					7540	4430	4890	2990	3560	2200	3520	2180	7.56
0.0ft	lb					16620	9770	10780	6590	7850	4850	7760	4810	(24.8)
-1.5m	kg					7470	4370	4840	2950					
-4.9ft	lb					16470	9630	10670	6500					

Model		Type		Boom		Arm		Counterweight		Shoe		Wheel		Dozer		Outtriger	
R160LC-9		2-PIECE BOOM		Length [mm]		Length [mm]		weight [kg]		width [mm]		width [mm]		Front	Rear	Front	Rear
				5100		3100		2910		700		-		-	-	-	-
Load point height		Load radius										At max. reach					
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach			
														m (ft)			
7.5m	kg			*3530	*3530	*4170	*4170							*3270	*3270	5.67	
24.6ft	lb			*7780	*7780	*9190	*9190							*7210	*7210	(18.6)	
6.0m	kg			*3510	*3510	*4050	*4050	*4270	3350					*2880	2570	6.92	
19.7ft	lb			*7740	*7740	*8930	*8930	*9410	7390					*6350	5670	(22.7)	
4.5m	kg	*2600	*2600	*4010	*4010	*4800	*4800	*4540	3270	*3480	2220	*2750	2120	7.68			
14.8ft	lb	*5730	*5730	*8840	*8840	*10580	*10580	*10010	7210	*7670	4890	*6060	4670	(25.2)			
3.0m	kg			*8870	*8870	*6220	4830	5000	3110	3500	2170	*2750	1900	8.08			
9.8ft	lb			*19550	*19550	*13710	10650	11020	6860	7720	4780	*6060	4190	(26.5)			
1.5m	kg					7500	4430	4790	2930	3410	2090	*2870	1810	8.19			
4.9ft	lb					16530	9770	10560	6460	7520	4610	*6330	3990	(26.9)			
0.0m	kg			*6040	*6040	7180	4150	4630	2780	3340	2020	3030	1830	8.02			
0.0ft	lb			*13320	*13320	15830	9150	10210	6130	7360	4450	6680	4030	(26.3)			
-1.5m	kg			*9140	7470	7050	4040	4550	2710	3330	2010	3300	1990	7.54			
-4.9ft	lb			*20150	16470	15540	8910	10030	5970	7340	4430	7280	4390	(24.7)			

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outtriger	
R160LC-9	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5100	3100	3260	700	-	-	-	-	-

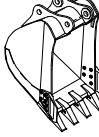
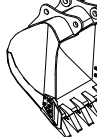
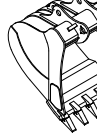
 : Rating over-front
  : Rating over-side or 360 degree



Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
														m (ft)
7.5m	kg			*3530	*3530	*4170	*4170					*3270	*3270	5.67
24.6ft	lb			*7780	*7780	*9190	*9190					*7210	*7210	(18.6)
6.0m	kg			*3510	*3510	*4050	*4050	*4270	3520			*2880	2720	6.92
19.7ft	lb			*7740	*7740	*8930	*8930	*9410	7760			*6350	6000	(22.7)
4.5m	kg	*2600	*2600	*4010	*4010	*4800	*4800	*4540	3450	*3480	2360	*2750	2250	7.68
14.8ft	lb	*5730	*5730	*8840	*8840	*10580	*10580	*10010	7610	*7670	5200	*6060	4960	(25.2)
3.0m	kg			*8870	*8870	*6220	5090	*5180	3290	3670	2300	*2750	2020	8.08
9.8ft	lb			*19550	*19550	*13710	11220	*11420	7250	8090	5070	*6060	4450	(26.5)
1.5m	kg					*7840	4680	5020	3100	3580	2220	*2870	1930	8.19
4.9ft	lb					*17280	10320	11070	6830	7890	4890	*6330	4250	(26.9)
0.0m	kg			*6040	*6040	7520	4400	4860	2960	3510	2160	*3130	1960	8.02
0.0ft	lb			*13320	*13320	16580	9700	10710	6530	7740	4760	*6900	4320	(26.3)
-1.5m	kg			*9140	7920	7390	4290	4780	2880	3490	2140	3470	2130	7.54
-4.9ft	lb			*20150	17460	16290	9460	10540	6350	7690	4720	7650	4700	(24.7)

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

			
0.39 m ³ SAE heaped bucket	0.50 m ³ SAE heaped bucket	0.64, 0.70, ◆0.72, ◆0.87, ※0.89 m ³ SAE heaped bucket	◆0.69 m ³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					5.1 m (16' 9") Mono boom			5.1 m (16' 9") Hyd adjustable boom	
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.2 m arm (7' 3")	2.6 m arm (8' 6")	3.1 m arm (10' 2")	2.2 m arm (7' 3")	2.6 m arm (8' 6")
0.39 m ³ (0.51 yd ³)	0.34 m ³ (0.44 yd ³)	620 mm (24.4")	740 mm (29.1")	410 kg (900 lb)	○	○	○	○	○
0.50 m ³ (0.65 yd ³)	0.44 m ³ (0.58 yd ³)	760 mm (29.9")	880 mm (34.6")	470 kg (1040 lb)	○	○	○	○	○
0.64 m ³ (0.84 yd ³)	0.55 m ³ (0.72 yd ³)	920 mm (36.2")	1040 mm (40.9")	510 kg (1120 lb)	○	○	●	○	●
0.70 m ³ (0.92 yd ³)	0.60 m ³ (0.78 yd ³)	990 mm (39.0")	1110 mm (43.7")	540 kg (1190 lb)	○	●	●	●	●
◆0.72 m ³ (0.94 yd ³)	0.65 m ³ (0.85 yd ³)	910 mm (35.8")	1030 mm (40.6")	620 kg (1370 lb)	●	●		●	
※0.89 m ³ (1.16 yd ³)	0.77 m ³ (1.01 yd ³)	1220 mm (48.0")	1340 mm (52.8")	610 kg (1340 lb)	●	●		●	
◆0.87 m ³ (1.14 yd ³)	0.78 m ³ (1.02 yd ³)	1060 mm (41.7")	1180 mm (46.5")	660 kg (1455 lb)	●			●	
◆0.69 m ³ (0.90 yd ³)	0.62 m ³ (0.81 yd ³)	990 mm (39.0")	-	700 kg (1540 lb)	○	●	●	●	●

◆ : Heavy duty bucket

※ : Standard bucket

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

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

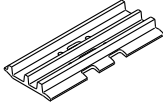
● Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less

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		
					
R160LC-9	Shoe width	mm (in)	500 (20)	600 (24)	※ 700 (28)
	Operating weight	kg (lb)	17550 (38690)	17800 (39240)	18050 (39790)
	Ground pressure	kgf/cm ² (psi)	0.51 (7.28)	0.43 (6.15)	0.38 (5.35)
	Overall width	mm (ft-in)	2490 (8' 2")	2590 (8' 6")	2690 (8' 10")
R160LCD-9	Shoe width	mm (in)	500 (20)	600 (24)	※ 700 (28)
	Operating weight	kg (lb)	18550 (40900)	18800 (41450)	19050 (42000)
	Ground pressure	kgf/cm ² (psi)	0.54 (7.69)	0.46 (6.5)	0.40 (5.64)
	Overall width	mm (ft-in)	2490 (8' 2")	2590 (8' 6")	2690 (8' 10")

※ : Standard

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
	R160LC/LCD-9S
Carrier rollers	2 EA
Track rollers	7 EA
Track shoes	49 EA

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) 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
600 mm triple grouser	Option	A
500 mm triple grouser	Option	A
700 mm triple grouser	Standard	B

※ **Table 2**

Category	Applications	Applications
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

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB4.5
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	107 × 124 mm (4.21" × 4.88")
Piston displacement	4500 cc (272 cu in)
Compression ratio	17.2 : 1
Rated gross horse power (SAE J1995)	130 Hp (97 kW) at 2200 rpm
Maximum torque	63.4 kgf · m (459 lbf · ft) at 1500 rpm
Engine oil quantity	11 l (2.9 U.S. gal)
Dry weight	371 kg (818 lb)
High idling speed	2345 ± 50 rpm
Low idling speed	700 ± 100 rpm
Rated fuel consumption	156 g/Hp · hr at 1400 rpm
Starting motor	24 V-4.8 kW
Alternator	24 V-70 A
Battery	2 × 12 V × 100 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 80 cc/rev
Maximum pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Rated oil flow	2 × 160 l/min (42.3 U.S. gpm / 35.2 U.K. gpm)
Rated speed	2000 rpm

[] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	30 l /min (7.9 U.S. gpm / 6.6 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools two-block
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi)[380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[] : Power boost

5) SWING MOTOR

Item	Specification	
	Type 1	Type 2
Type	Two fixed displacement axial piston motor	
Capacity	117.8 cc/rev	142.8 cc/rev
Relief pressure	285 kgf/cm ² (4053 psi)	
Braking system	Automatic, spring applied hydraulic released	
Braking torque	59 kgf · m (427 lbf · ft)	66.5 kgf·m (481 lbf·ft)
Brake release pressure	33~50 kgf/cm ² (469~711 psi)	22~36 kgf/cm ² (313~512 psi)
Reduction gear type	2 - stage planetary	

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	350 kgf/cm ² (4980 psi)
Reduction gear type	Planetary & differential type
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	11 kgf/cm ² (156 psi)
Braking torque	49.3 kgf · m (357 lbf · ft)

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 1090 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 120 × ø 85 × 1355 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 110 × ø 75 × 995 mm
	Cushion	Extend only
Dozer cylinder	Bore dia × Rod dia × Stroke	ø 110 × ø 85 × 320 mm
	Cushion	Extend only
Boom cylinder (adjust boom)	Bore dia × Rod dia × Stroke	ø 115 × ø 80 × 960 mm
	Cushion	Extend only
Adjust cylinder	Bore dia × Rod dia × Stroke	ø 160 × ø 95 × 650 mm
	Cushion	Extended 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.

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R160LC-9	Option	500 mm (20")	0.51 kgf/cm ² (7.28 psi)	49	2490 mm (8' 2")
	Option	600 mm (24")	0.43 kgf/cm ² (6.15 psi)	49	2590 mm (8' 6")
	Standard	700 mm (28")	0.38 kgf/cm ² (5.35 psi)	49	2690 mm (8' 10")

9) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
R160LC-9	0.39 m ³ (0.51 yd ³)	0.34 m ³ (0.44 yd ³)	3	620 mm (24.4")	740 mm (29.1")
	0.50 m ³ (0.65 yd ³)	0.44 m ³ (0.58 yd ³)	4	760 mm (29.9")	880 mm (34.6")
	0.64 m ³ (0.84 yd ³)	0.55 m ³ (0.72 yd ³)	5	920 mm (36.2")	1040 mm (40.9")
	0.70 m ³ (0.92 yd ³)	0.60 m ³ (0.78 yd ³)	5	990 mm (39.0")	1110 mm (43.7")
	0.89 m ³ (1.16 yd ³)	0.77 m ³ (1.01 yd ³)	5	1220 mm (48.0")	1340 mm (52.8")
	◆0.69 m ³ (0.90 yd ³)	0.62 m ³ (0.81 yd ³)	5	990 mm (39.0")	-
	◆0.72 m ³ (0.94 yd ³)	0.65 m ³ (0.85 yd ³)	5	910 mm (35.8")	1030 (40.6)
	◆0.87 m ³ (1.14 yd ³)	0.78 m ³ (1.02 yd ³)	5	1060 mm (41.7")	1180 (46.5)

◆ : Heavy duty bucket

9. RECOMMENDED OILS

HYUNDAI genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HYUNDAI and, therefore, will meet the highest safety and quality requirements.

We recommend that you use only HYUNDAI genuine lubricating oils and grease officially approved by HYUNDAI.

Service point	Kind of fluid	Capacity l (U.S. gal)	Ambient temperature °C (°F)									
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)	
Engine oil pan	Engine oil	11 (2.9)	★SAE 5W-40									
						SAE 30						
			SAE 10W									
			SAE 10W-30									
			SAE 15W-40									
Swing drive	Gear oil	type 1 : 5.0 (1.3)	★SAE 75W-90									
		type 2 : 6.2 (1.6)										
Final drive		5.8 × 2 (1.5 × 2)	SAE 80W-90									
Hydraulic tank	Hydraulic oil	Tank; 160 (42.3) System; 240 (63.4)	★ISO VG 15									
			ISO VG 46									
			ISO VG 68									
Fuel tank	Diesel fuel	260 (68.7)	★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	19 (5.0)	Ethylene glycol base permanent type (50 : 50)									
			★Ethylene glycol base permanent type (60 : 40)									

SAE : Society of Automotive Engineers

★ : Cold region

API : American Petroleum Institute

ISO : International Organization for Standardization

NLGI : National Lubricating Grease Institute

ASTM : American Society of Testing and Material

- ※ Using any lubricating oils other than HYUNDAI genuine products may lead to a deterioration of performance and cause damage to major components.
- ※ Do not mix HYUNDAI genuine oil with any other lubricating oil as it may result in damage to the systems of major components.
- ※ For HYUNDAI genuine lubricating oils and grease for use in regions with extremely low temperatures, please contact HYUNDAI dealers.