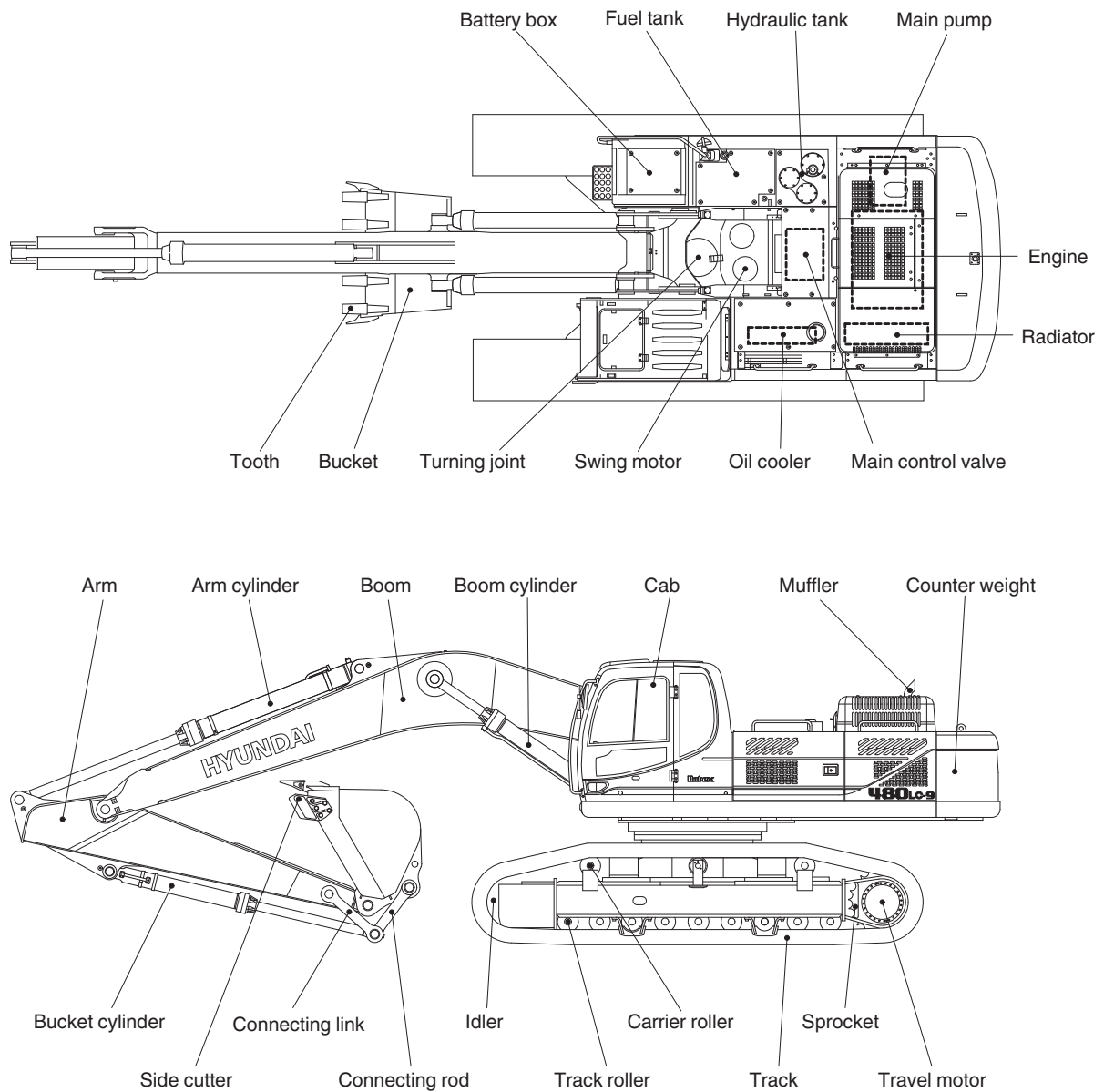


SPECIFICATIONS

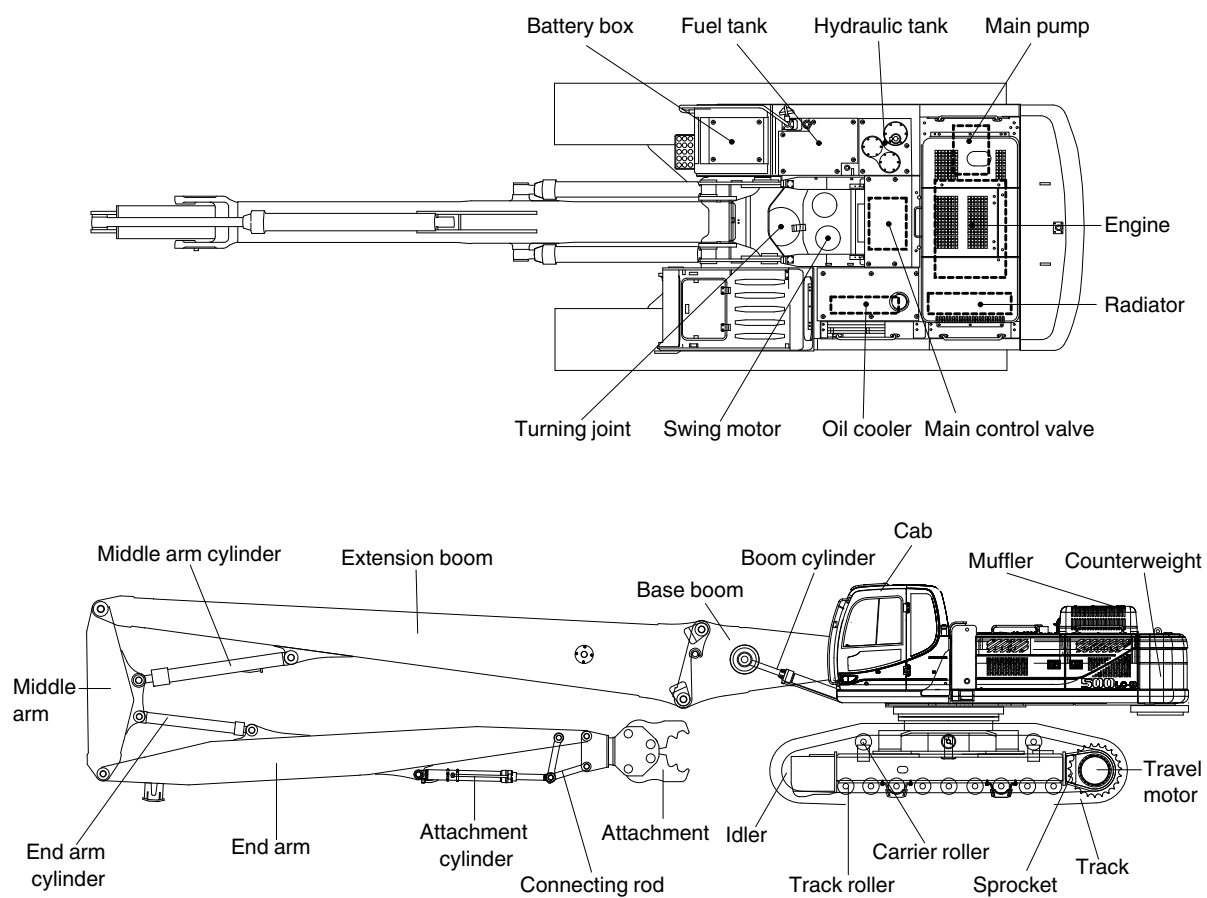
1. MAJOR COMPONENTS

1) R480/520LC-9



48092SP01

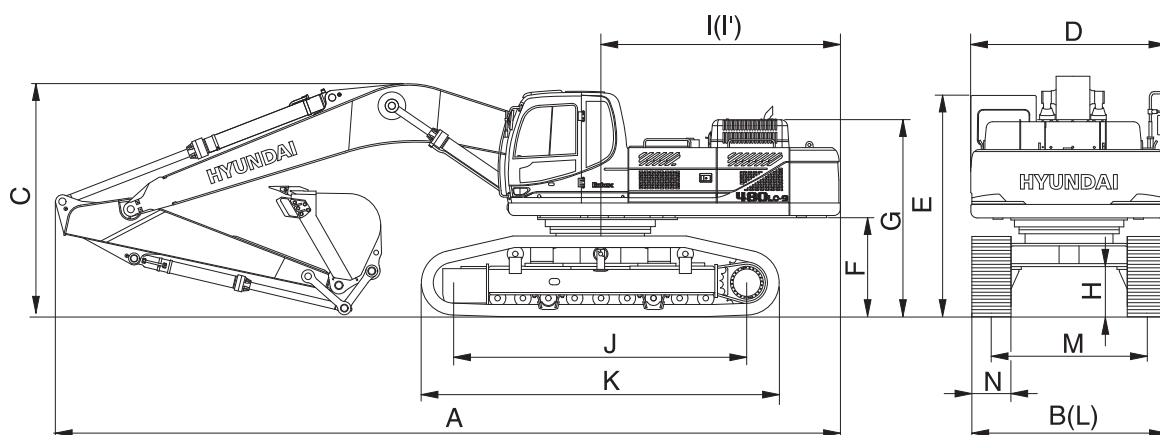
2) R520LC-9 DM



52092SP01

2. SPECIFICATIONS

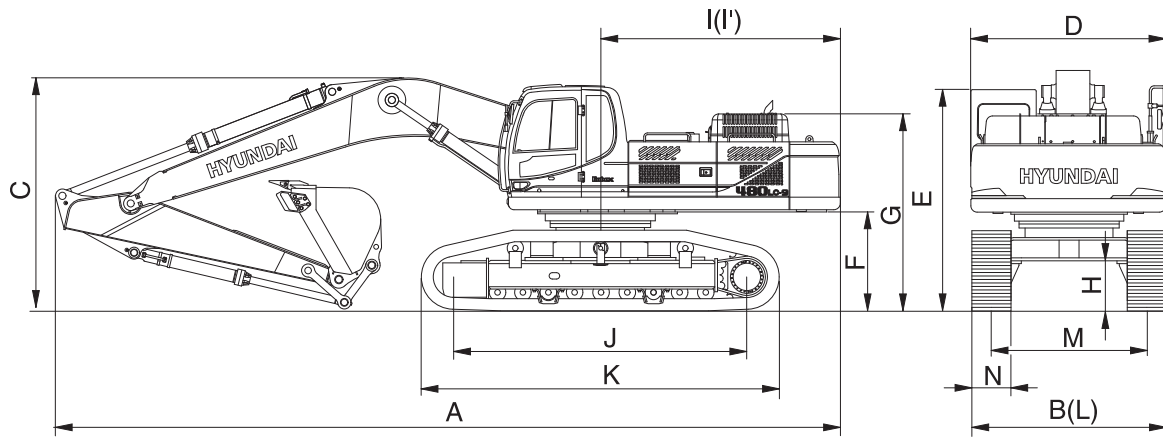
1) R480LC-9 [7.06 m (23' 2") BOOM, 3.38 m (11' 1") ARM]



48092SP02

Description		Unit	Specification
Operating weight		kg (lb)	48100 (106040)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	12060 (39' 7")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		3730 (12' 3")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3190 (10' 6")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2770 (9' 1")
Minimum ground clearance	H		555 (1' 10")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5462 (17' 11")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (8' 12")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.83 (11.80)
Max traction force		kg (lb)	38500 (84800)

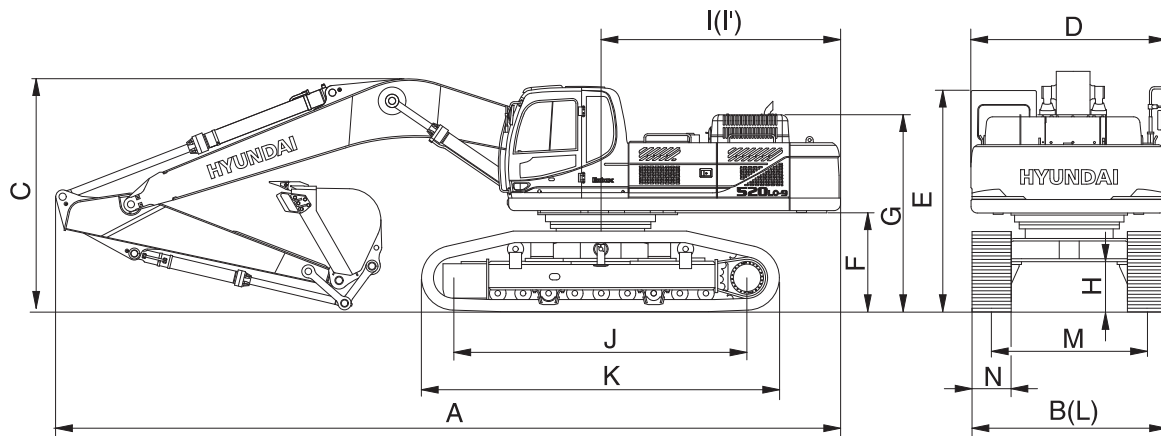
2) R480-9 [7.06 m (23' 2") BOOM, 3.38 m (11' 1") ARM]



48092SP02

Description		Unit	Specification
Operating weight		kg (lb)	46900 (103400)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	12060 (39' 7")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		3730 (12' 3")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3190 (10' 6")
Ground clearance of counterweight	F		1295 (4' 3")
Engine cover height	G		2770 (9' 1")
Minimum ground clearance	H		555 (1' 10")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4040 (13' 3")
Undercarriage length	K		5032 (16' 6")
Undercarriage width	L		3340 (10' 11")
Track gauge	M		2740 (8' 12")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.89 (12.66)
Max traction force		kg (lb)	38500 (84800)

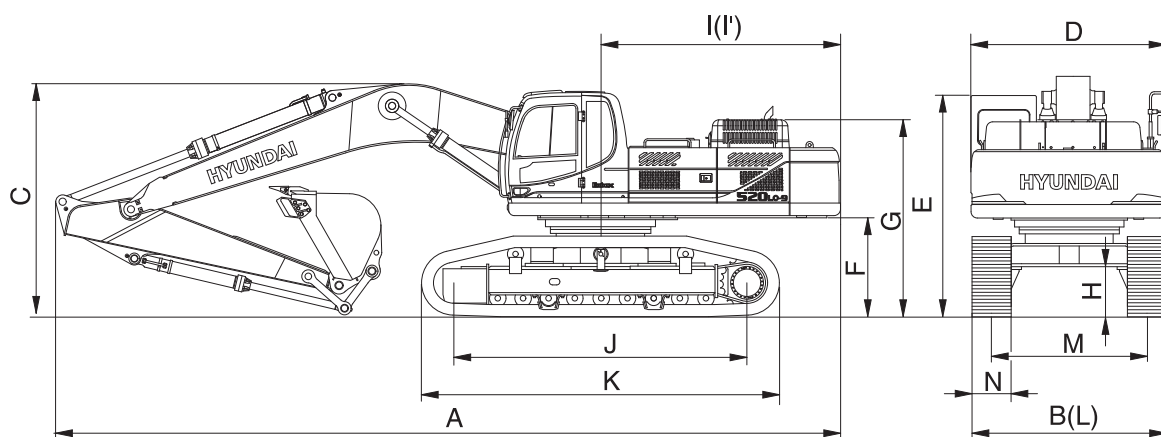
3) R520LC-9 [7.06 m (23' 2") BOOM, 3.38 m (11' 1") ARM]



48092SP03

Description		Unit	Specification
Operating weight		kg (lb)	51000 (112430)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	12060 (39' 7")
Overall width, with 600 mm shoe (transport position/working position)	B		2990/3540 (9' 10"/11' 7")
Overall height	C		3850 (12' 8")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3400 (11' 2")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2980 (9' 9")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5460 (17' 11")
Undercarriage width (transport position/working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position/working position)	M		2380/2940 (7' 10"/9' 8")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.88 (12.51)
Max traction force		kg (lb)	38500 (84800)

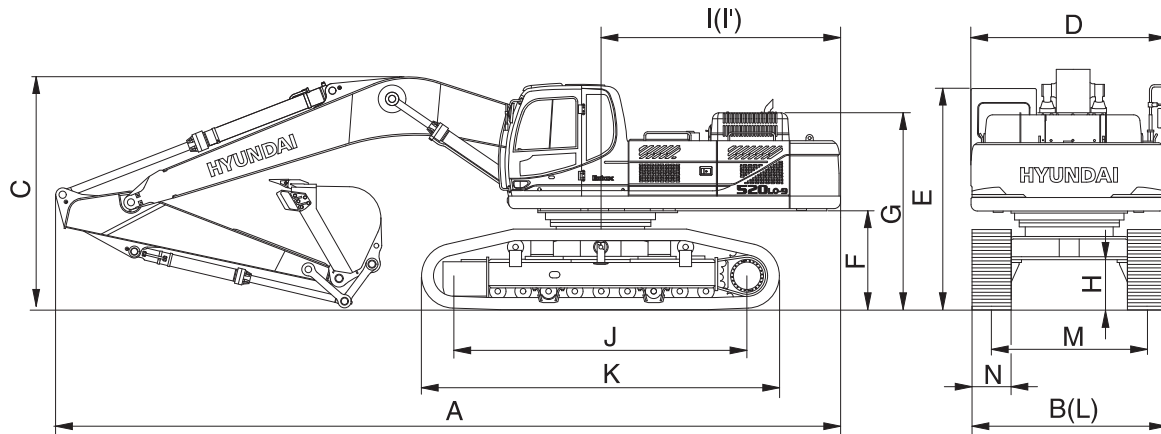
4) R520LC-9 [6.55 m (21' 6") BOOM, 2.4 m (7' 10") ARM]



48092SP03

Description		Unit	Specification
Operating weight		kg (lb)	50820 (112040)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	11780 (38' 8")
Overall width, with 600 mm shoe (transport position/working position)	B		2990/3540 (9' 10"/11' 7")
Overall height	C		4100 (13' 5")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3400 (11' 2")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2980 (9' 9")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5460 (17' 11")
Undercarriage width (transport position/working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position/working position)	M		2380/2940 (7' 10"/9' 8")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.88 (12.51)
Max traction force		kg (lb)	38500 (84800)

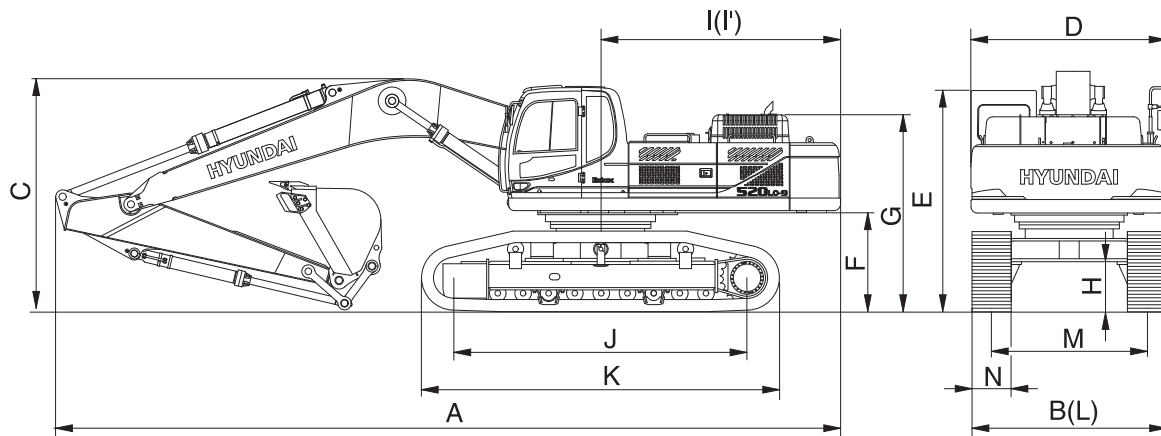
5) R520LC-9 [9.00 m (29' 6") BOOM, 5.85 m (19' 2") ARM]



48092SP03

Description		Unit	Specification
Operating weight		kg (lb)	52410 (115540)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	13800 (45' 3")
Overall width, with 600 mm shoe (transport position/working position)	B		2990/3540 (9' 10"/11' 7")
Overall height	C		5190 (17' 0")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3400 (11' 2")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2980 (9' 9")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5460 (17' 11")
Undercarriage width (transport position/working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position/working position)	M		2380/2940 (7' 10"/9' 8")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.91 (12.94)
Max traction force		kg (lb)	38500 (84800)

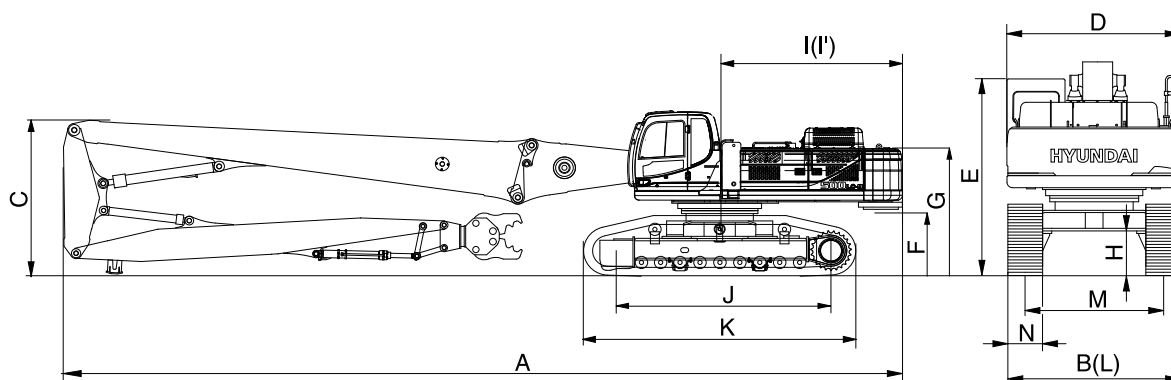
6) R520LC-9 [10.0 m (32' 10") BOOM, 6.85 m (22' 6") ARM]



48092SP03

Description		Unit	Specification
Operating weight		kg (lb)	53130 (117130)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	2.15 (2.81)
Overall length	A	mm (ft-in)	14620 (47' 12")
Overall width, with 600 mm shoe (transport position/working position)	B		2990/3540 (9' 10"/11' 7")
Overall height	C		5860 (19' 3")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3400 (11' 2")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2980 (9' 9")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5460 (17' 11")
Undercarriage width (transport position/working position)	L		2990/3540 (9' 10"/11' 7")
Track gauge (transport position/working position)	M		2380/2940 (7' 10"/9' 8")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.2/5.0 (2.0/3.1)
Swing speed		rpm	9.0
Gradeability		degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.92 (13.08)
Max traction force		kg (lb)	38500 (84800)

7) R520LC-9 DM [4.12 m (13' 6") BASE BOOM, 9.9 m (32' 6") EXTENSION BOOM, 2.72 m (8' 11") MIDDLE ARM, 8.00 m (26' 3") END ARM]

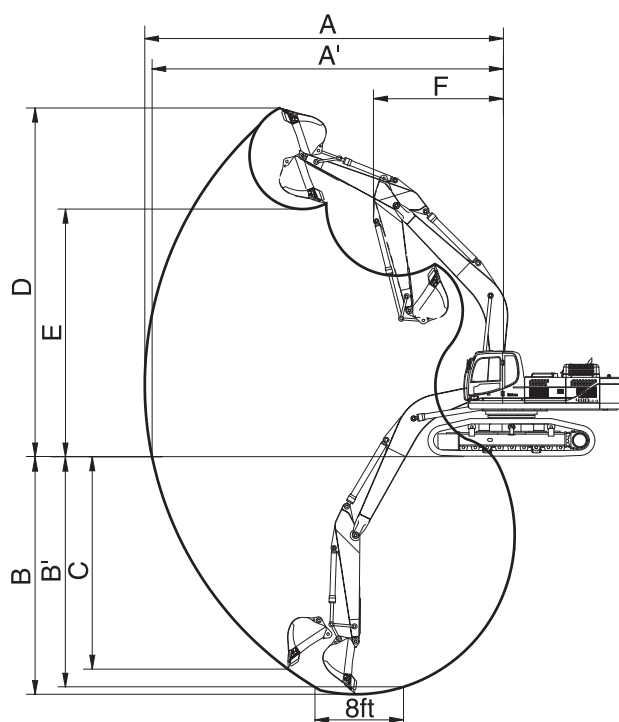


52092SP04

Description		Unit	Specification
Operating weight		kg (lb)	58700 (129410)
Overall length	A	mm (ft-in)	18100 (39900)
Overall width, with 600 mm shoe (transport position/working position)	B		2940 / 3540 (6480 / 7800)
Overall height	C		3500 (7715)
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3400 (11' 2")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2980 (9' 9")
Minimum ground clearance	H		770 (2' 6")
Rear-end distance	I		3695 (12' 1")
Rear-end swing radius	I'		3750 (12' 4")
Distance between tumblers	J		4470 (14' 8")
Undercarriage length	K		5460 (17' 11")
Undercarriage width (transport position/working position)	L		2990 / 3540 (9' 10" / 11' 7")
Track gauge (transport position/working position)	M		2380 / 2940 (7' 10" / 9' 8")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	5.0 / 3.2
Swing speed		rpm	9.0
Gradeability		degree (%)	35
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	1.01 (14.36)
Max traction force		kg (lb)	38500 (82000)

3. WORKING RANGE

1) R480LC-9 [7.06 m (23' 2") BOOM]

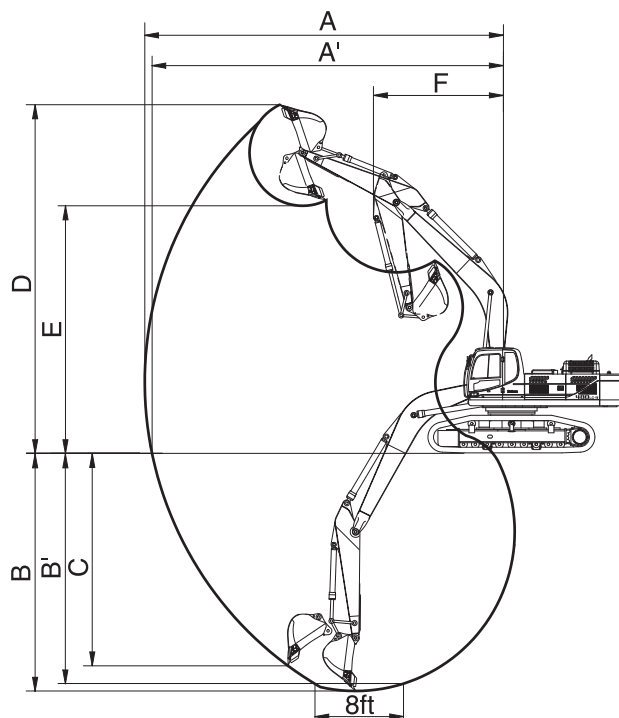


48092SP04

Description		2.40 m (7' 10") arm	2.90 m (9' 6") arm	3.38 m (11' 1") arm	4.00 m (13' 1") arm
Max digging reach	A	11160 mm (36' 7")	11550 mm (37' 11")	12100 mm (39' 8")	12660 mm (41' 6")
Max digging reach on ground	A'	10940 mm (35' 11")	11340 mm (37' 2")	11900 mm (39' 1")	12470 mm (40' 11")
Max digging depth	B	6850 mm (22' 6")	7350 mm (24' 1")	7810 mm (25' 8")	8450 mm (27' 9")
Max digging depth (8 ft level)	B'	6670 mm (21' 11")	7190 mm (23' 7")	7670 mm (25' 2")	8320 mm (27' 4")
Max vertical wall digging depth	C	5960 mm (19' 7")	5930 mm (19' 5")	6590 mm (21' 7")	7170 mm (23' 6")
Max digging height	D	10560 mm (34' 8")	10530 mm (34' 7")	10980 mm (36' 0")	11210 mm (36' 9")
Max dumping height	E	7120 mm (23' 4")	7180 mm (23' 7")	7620 mm (25' 0")	7820 mm (25' 8")
Min swing radius	F	5090 mm (16' 8")	4910 mm (16' 1")	4780 mm (15' 8")	4910 mm (16' 1")
Bucket digging force	SAE	216.7 [236.4] kN	219.7 [239.6] kN	220.7 [240.7] kN	222.6 [242.9] kN
		22100 [24110] kgf	22400 [24440] kgf	22500 [24550] kgf	22700 [24760] kgf
		48720 [53150] lbf	49380 [53870] lbf	49600 [54110] lbf	50040 [54590] lbf
	ISO	251.1 [273.9] kN	254.0 [277.1] kN	255.0 [278.2] kN	256.9 [280.3] kN
		25600 [27930] kgf	25900 [28250] kgf	26000 [28360] kgf	26200 [28580] kgf
		56440 [61570] lbf	57100 [62290] lbf	57320 [62530] lbf	57760 [63010] lbf
Arm crowd force	SAE	276.6 [301.7] kN	224.6 [245.0] kN	191.2 [208.6] kN	170.6 [186.2] kN
		28200 [30760] kgf	22900 [24980] kgf	19500 [21270] kgf	17400 [18980] kgf
		62170 [67820] lbf	50490 [55080] lbf	42990 [46900] lbf	38360 [41850] lbf
	ISO	290.3 [316.7] kN	234.4 [255.7] kN	199.1 [217.2] kN	176.5 [192.6] kN
		29600 [32290] kgf	23900 [26070] kgf	20300 [22150] kgf	18000 [19640] kgf
		65260 [71190] lbf	52690 [57480] lbf	44750 [48820] lbf	39680 [43290] lbf

[]: Power boost

2) R480LC-9 [6.55 m (21' 6") BOOM]

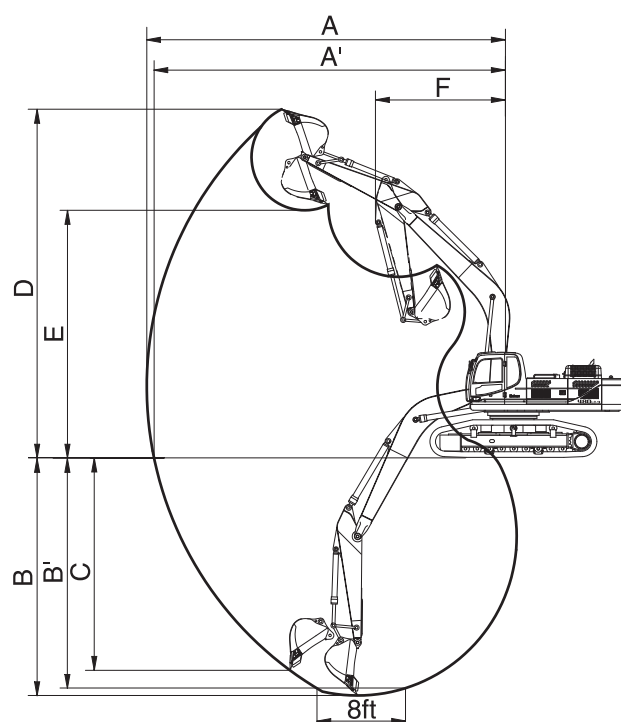


48092SP04

Description		2.40 m (7' 10") arm
Max digging reach	A	10610 mm (34' 10")
Max digging reach on ground	A'	10370 mm (34' 0")
Max digging depth	B	6370 mm (20' 11")
Max digging depth (8 ft level)	B'	6190 mm (20' 4")
Max vertical wall digging depth	C	5400 mm (17' 9")
Max digging height	D	10170 mm (33' 4")
Max dumping height	E	6750 mm (22' 2")
Min swing radius	F	4620 mm (15' 2")
Bucket digging force	SAE	216.7 [236.4] kN
		22100 [24110] kgf
		48720 [53150] lbf
	ISO	251.1 [273.9] kN
		25600 [27930] kgf
		56440 [61570] lbf
Arm crowd force	SAE	276.6 [301.7] kN
		28200 [30760] kgf
		62170 [67820] lbf
	ISO	290.3 [316.7] kN
		29600 [32290] kgf
		65260 [71190] lbf

[]: Power boost

3) R480LC-9 [9.00 m (29' 6") BOOM]

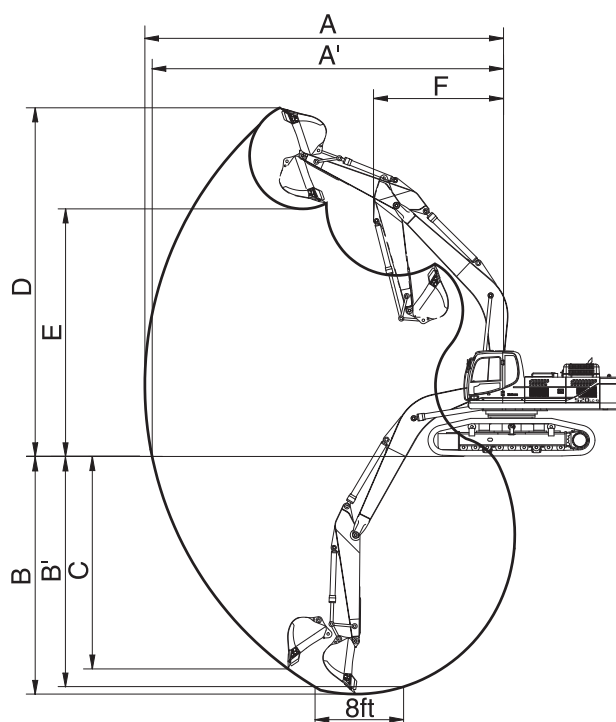


48092SP04

Description		5.85 m (19' 2") arm
Max digging reach	A	16350 mm (53' 8")
Max digging reach on ground	A'	16200 mm (53' 2")
Max digging depth	B	11560 mm (37' 11")
Max digging depth (8 ft level)	B'	11460 mm (37' 7")
Max vertical wall digging depth	C	10320 mm (33' 10")
Max digging height	D	13840 mm (45' 5")
Max dumping height	E	10440 mm (34' 3")
Min swing radius	F	5940 mm (19' 6")
Bucket digging force	SAE	189.3 kN
		19300 kgf
		42550 lbf
	ISO	217.7 kN
		22200 kgf
		48940 lbf
Arm crowd force	SAE	107.9 kN
		11000 kgf
		24250 lbf
	ISO	110.3 kN
		11250 kgf
		24800 lbf

[]: Power boost

4) R520LC-9 [7.06 m (23' 2") BOOM]

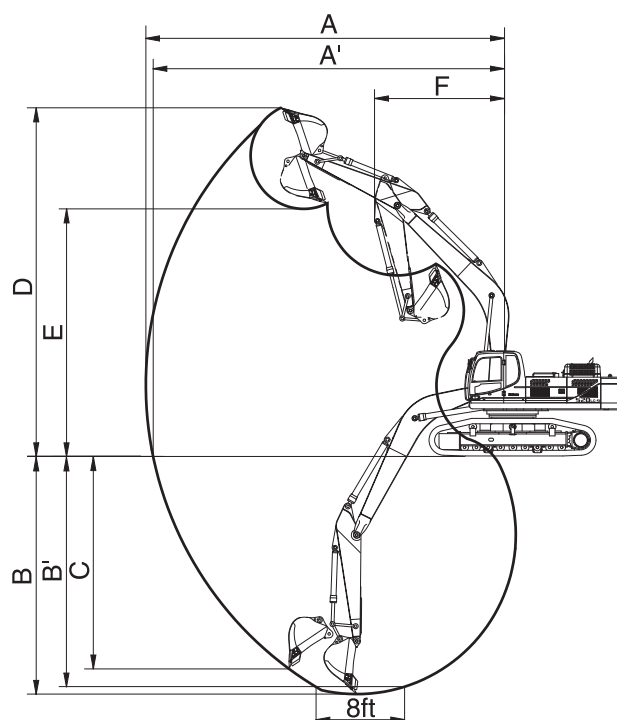


48092SP05

Description		2.40 m (7' 10") arm	2.90 m (9' 6") arm	3.38 m (11' 1") arm	4.00 m (13' 1") arm
Max digging reach	A	11140 mm (36' 7")	11530 mm (37' 10")	12080 mm (39' 8")	12640 mm (41' 6")
Max digging reach on ground	A'	10890 mm (35' 9")	11290 mm (37' 0")	11840 mm (38' 10")	12420 mm (40' 9")
Max digging depth	B	6610 mm (21' 8")	7110 mm (23' 4")	7590 mm (24' 11")	8210 mm (26' 11")
Max digging depth (8 ft level)	B'	6430 mm (21' 1")	6940 mm (22' 9")	7440 mm (24' 5")	8080 mm (26' 6")
Max vertical wall digging depth	C	4880 mm (16' 0")	4780 mm (15' 8")	5470 mm (17' 11")	5980 mm (19' 7")
Max digging height	D	10640 mm (34' 11")	10610 mm (34' 10")	11080 mm (36' 4")	11290 mm (37' 0")
Max dumping height	E	7290 mm (23' 11")	7350 mm (24' 1")	7760 mm (25' 6")	7980 mm (26' 2")
Min swing radius	F	5110 mm (16' 9")	4910 mm (16' 1")	4830 mm (15' 10")	4910 mm (16' 1")
Bucket digging force	SAE	247.1 [269.6] kN	251.1 [273.9] kN	253.0 [276.0] kN	253.0 [276.0] kN
		25200 [27490] kgf	25600 [27930] kgf	25800 [28150] kgf	25800 [28150] kgf
		55560 [60610] lbf	56440 [61570] lbf	56880 [62050] lbf	56880 [62050] lbf
	ISO	286.4 [312.4] kN	290.3 [316.7] kN	292.2 [318.8] kN	292.2 [318.8] kN
		29200 [31850] kgf	29600 [32290] kgf	29800 [32510] kgf	29800 [32510] kgf
		64370 [70220] lbf	65260 [71190] lbf	65700 [71670] lbf	65700 [71670] lbf
Arm crowd force	SAE	278.5 [303.8] kN	225.6 [246.1] kN	192.2 [209.7] kN	171.6 [187.2] kN
		28400 [30980] kgf	23000 [25090] kgf	19600 [21380] kgf	17500 [19090] kgf
		62610 [68300] lbf	50710 [55320] lbf	43210 [47140] lbf	38580 [42090] lbf
	ISO	291.3 [317.7] kN	235.4 [256.8] kN	200.1 [218.2] kN	177.5 [193.6] kN
		29700 [32400] kgf	24000 [26180] kgf	20400 [22250] kgf	18100 [19750] kgf
		65480 [71430] lbf	52910 [57720] lbf	44970 [49060] lbf	39900 [43530] lbf

[]: Power boost

5) R520LC-9 [6.55 m (21' 6") BOOM]

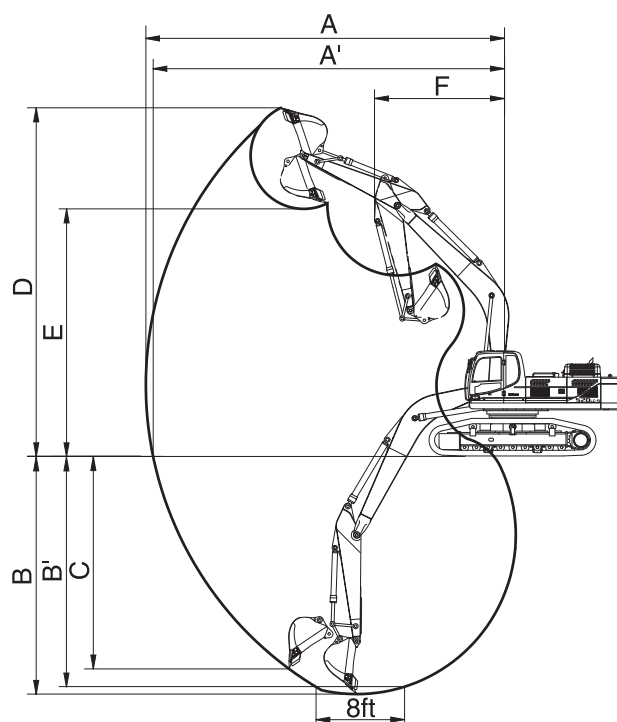


48092SP05

Description		2.40 m (7' 10") arm
Max digging reach	A	10590 mm (34' 9")
Max digging reach on ground	A'	10320 mm (33' 10")
Max digging depth	B	6130 mm (20' 1")
Max digging depth (8 ft level)	B'	5950 mm (19' 6")
Max vertical wall digging depth	C	4390 mm (14' 5")
Max digging height	D	10260 mm (33' 8")
Max dumping height	E	6920 mm (22' 8")
Min swing radius	F	4650 mm (15' 3")
Bucket digging force	SAE	247.1 [269.6] kN
		25200 [27490] kgf
		55560 [60610] lbf
	ISO	286.4 [312.4] kN
		29200 [31850] kgf
		64370 [70220] lbf
Arm crowd force	SAE	278.5 [303.8] kN
		28400 [30980] kgf
		62610 [68300] lbf
	ISO	291.3 [317.7] kN
		29700 [32400] kgf
		65480 [71430] lbf

[]: Power boost

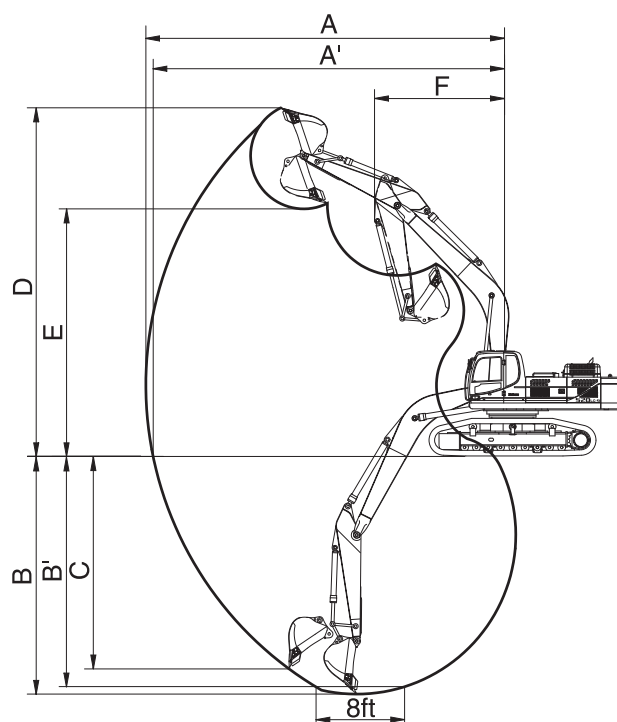
6) R520LC-9 [9.00 m (29' 6") BOOM]



48092SP05

Description		5.85 m (19' 2") arm
Max digging reach	A	16280 mm (53' 5")
Max digging reach on ground	A'	16100 mm (52' 10")
Max digging depth	B	11380 mm (37' 4")
Max digging depth (8 ft level)	B'	11280 mm (37' 0")
Max vertical wall digging depth	C	10070 mm (33' 0")
Max digging height	D	13930 mm (45' 8")
Max dumping height	E	10530 mm (34' 7")
Min swing radius	F	5940 mm (19' 6")
Bucket digging force	SAE	212.8 kN
		21700 kgf
		47840 lbf
	ISO	251.1 kN
		25600 kgf
		56440 lbf
Arm crowd force	SAE	107.9 kN
		11000 kgf
		24250 lbf
	ISO	110.8 kN
		11300 kgf
		24910 lbf

7) R520LC-9 [10.0 m (32' 10") BOOM]



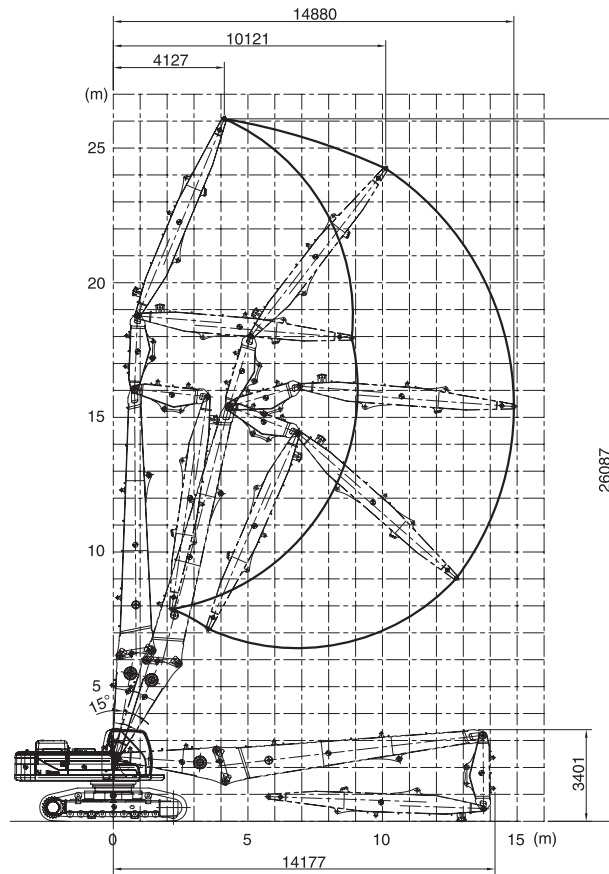
48092SP05

Description		6.85 m (22' 6") arm
Max digging reach	A	18170 mm (59' 7")
Max digging reach on ground	A'	18010 mm (59' 1")
Max digging depth	B	13010 mm (42' 8")
Max digging depth (8 ft level)	B'	12930 mm (42' 5")
Max vertical wall digging depth	C	11740 mm (38' 6")
Max digging height	D	15150 mm (49' 9")
Max dumping height	E	11760 mm (38' 7")
Min swing radius	F	6510 mm (21' 4")
Bucket digging force	SAE	213.8 kN
		21800 kgf
		48060 lbf
	ISO	252.0 kN
		25700 kgf
		56660 lbf
Arm crowd force	SAE	95.1 kN
		9700 kgf
		21380 lbf
	ISO	98.1 kN
		10000 kgf
		22050 lbf

8) R520LC-9 DM

* R520LC-9 Demolition Working Range

- 13.67 m BOOM
- 2.72 m Mid. ARM
- 8.0 m End ARM
- 14.2 Ton C/W (STD. 10.7 Ton + ADD. 3.5 Ton)
- Max. Allowable Crusher Weight : 2800 Kg



52092SP05

Description		R520LC-9 High Reach Demolition
Boom length		13750 mm
Middle arm length		2720 mm
End arm		8000 mm
Maximum working reach	A	14880 mm
Maximum working height	B	26087 mm

4. WEIGHT

1) ROBEX 480LC-9

Item		R480LC-9		R480-9	
		kg	lb	kg	lb
Upperstructure assembly		20000	44090	←	←
Main frame weld assembly		4430	9770	←	←
Engine assembly		940	2070	←	←
Main pump assembly		190	420	←	←
Main control valve assembly		420	930	←	←
Swing motor assembly		230	510	←	←
Hydraulic oil tank assembly		450	990	←	←
Fuel tank assembly		270	600	←	←
Counterweight	7.06 m boom	9200	20280	←	←
	9.0 m boom	10700	23590	←	←
Cab assembly		490	1080	←	←
Lower chassis assembly		19000	41890	17800	39240
Track frame weld assembly		7060	15570	6600	14550
Swing bearing		720	1590	←	←
Travel motor assembly		440	970	←	←
Turning joint		50	110	←	←
Track recoil spring		310	680	←	←
Idler		250	550	←	←
Carrier roller		40	90	←	←
Track roller		80	180	←	←
Track-chain assembly (600 mm standard triple grouser shoe)		2700	5950	2500	5510
Front attachment assembly (7.06 m boom, 3.38 m arm, 2.15 m ³ SAE heaped bucket)		9100	20060	←	←
7.06 m boom assembly		3260	7190	←	←
6.55 m boom assembly		3180	7010	←	←
9.0 m boom assembly		4050	8930	←	←
3.38 m arm assembly		1630	3590	←	←
2.15 m ³ SAE heaped bucket		1740	3840	←	←
Boom cylinder assembly		830	1830	←	←
Arm cylinder assembly		630	1390	←	←
Bucket cylinder assembly		300	660	←	←
Bucket control rod assembly		155	340	←	←

2) R520LC-9

Item	R520LC-9	
	kg	lb
Upperstructure assembly	17630	38870
Main frame weld assembly	4430	9770
Engine assembly	940	2070
Main pump assembly	190	420
Main control valve assembly	420	930
Swing motor assembly	230	510
Hydraulic oil tank assembly	450	990
Fuel tank assembly	270	600

Item		R520LC-9	
		kg	lb
Counterweight	7.06 m boom	10200	22500
	9.0 m boom	10700	23590
Cab assembly		490	1080
Lower chassis assembly		24100	53130
Lower track frame		2130	4700
Center frame support		8070	17790
Swing bearing		720	1590
Travel motor assembly		440	970
Turning joint		50	110
Track recoil spring		310	680
Idler		250	550
Carrier roller		40	90
Track roller		80	180
Track-chain assembly (600 mm standard triple grouser shoe)		2700	5850
Front attachment assembly (7.06 m boom, 3.38 m arm, 2.15 m ³ SAE heaped bucket)		9270	20440
7.06 m boom assembly		3260	7190
6.55 m boom assembly		3180	7010
9.0 m boom assembly		4060	8950
10.0 m boom assembly		4470	9850
3.38 m arm assembly		1610	3550
2.15 m ³ SAE heaped bucket		1740	3840
Boom cylinder assembly		830	1830
Arm cylinder assembly		630	1390
Bucket cylinder assembly		380	840
Bucket control rod assembly		180	400

3) R520LC-9 DM

Item		R520LC-9 DM	
		kg	lb
Upperstructure assembly		22750	50150
Main frame weld assembly		4430	9770
Engine assembly		940	2070
Main pump assembly		190	420
Main control valve assembly		420	930
Swing motor assembly		230	510
Hydraulic oil tank assembly		450	990
Fuel tank assembly		270	600
Counterweight		14200	31300
Cab assembly		490	1080
Lower chassis assembly		24100	53130
Lower track frame		2130	4700
Center frame support		8070	17790
Swing bearing		720	1590
Travel motor assembly		440	970
Turning joint		50	110
Track recoil spring		310	680
Idler		250	550
Carrier roller		40	90
Track roller		80	180

Item	R520LC-9 DM	
	kg	lb
Track-chain assembly (600 mm standard triple grouser shoe)	2700	5950
Front attachment assembly (4.12 m base boom, 9.9 m extension boom, 2.72 m middle arm, 8.0 end arm)	11850	26120
4.12 m base boom assembly	2310	5090
9.9 m extension boom assembly	4200	9260
2.72 m middle arm assembly	1100	2420
8.0 m end arm assembly	1460	3220
Boom cylinder assembly	1740	3840
Arm cylinder assembly (middle arm)	525	1160
Arm cylinder assembly (end arm)	270	600
Bucket cylinder assembly (crusher)	230	510
Bucket control rod assembly	180	400
Standard crusher	1850	4080

5. LIFTING CAPACITIES

1) ROBEX 480LC-9

- (1) 6.55 m (21' 6") boom, 2.40 m (7' 10") arm equipped with 2.15 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9200 kg (20280 lb) counterweight.



Rating over-front



Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
												m (ft)
6.0 m (20 ft)	kg					*12480	*12480	*11020	9310	*9470	6570	9.15
	lb					*27510	*27510	*24290	20530	*20880	14480	(30.0)
4.5 m (15 ft)	kg			*18440	*18440	*13960	13040	*11650	9010	*9440	5790	9.65
	lb			*40650	*40650	*30780	28750	*25680	19860	*20810	12760	(31.7)
3.0 m (10 ft)	kg					*15580	12220	*12420	8610	*9470	5410	9.86
	lb					*34350	26940	*27380	18980	*20880	11930	(32.3)
1.5 m (5 ft)	kg					*16700	11550	*13000	8240	*9510	5340	9.80
	lb					*36820	25460	*28660	18170	*20970	11770	(32.2)
Ground line	kg			*22790	17330	*16900	11170	*13090	8000	*9480	5590	9.47
	lb			*50240	38210	*37260	24630	*28860	17640	*20900	12320	(31.1)
-1.5 m (-5 ft)	kg	*25320	*25320	*20990	17370	*16060	11060	*12360	7920	*9240	6280	8.83
	lb	*55820	*55820	*46270	38290	*35410	24380	*27250	17460	*20370	13850	(29.0)
-3.0 m (-10 ft)	kg	*21780	*21780	*17910	17670	*13920	11190			*8390	7800	7.79
	lb	*48020	*48020	*39480	38960	*30690	24670			*18500	17200	(25.6)
-4.5 m (-15 ft)	kg			*12770	*12770							
	lb			*28150	*28150							

Note

- Lifting capacities are based on SAE J1097 and ISO 10567.
- 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.
- The load point is a hook located on the back of the bucket.
- * indicates load limited by hydraulic capacity.

- (2) 7.06 m (23' 2") boom, 3.38 m (11' 1") arm equipped with 2.15 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9200 kg (20280 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		Capacity		Reach
														m (ft)
6.0 m (20 ft)	kg							*9220	*9220	*8240	6740	*7490	4800	10.75
	lb							*20330	*20330	*18170	14860	*16150	10580	(35.3)
4.5 m (15 ft)	kg					*12140	*12140	*10130	9050	*8910	6530	*7530	4320	11.17
	lb					*26760	*26760	*22330	19950	*19640	14400	*16600	9520	(36.6)
3.0 m (10 ft)	kg			*19830	18930	*14060	12170	*11170	8540	*9450	6260	7470	4070	11.35
	lb			*43720	41730	*31000	26830	*24630	18830	*20830	13800	16470	8970	(37.2)
1.5 m (5 ft)	kg			*22320	17460	*15610	11360	*12080	8080	*9940	5990	7420	4010	11.30
	lb			*49210	38490	*34410	25040	*26630	17810	*21910	13210	16360	8840	(37.1)
Ground line	kg			*22800	16860	*16390	10850	*12610	7730	*10190	5790	7670	4140	11.02
	lb			*50270	37170	*36130	23920	*27800	17040	*22470	12760	16910	9130	(36.2)

Load point height		Load radius										At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		Capacity		Reach
														m (ft)
-1.5 m (-5 ft)	kg	*18070	*18070	*21950	16730	*16290	10610	*12600	7550	*10010	5680	*7770	4500	10.49
	lb	*39840	*39840	*48390	36880	*35910	23390	*27780	16640	*22070	12520	*17130	9920	(34.4)
-3.0 m (-10 ft)	kg	*24350	*24350	*20080	16870	*15280	10610	*11850	7530			*7590	5240	9.66
	lb	*53680	*53680	*44270	37190	*33690	23390	*26120	16600			*16730	11550	(31.7)
-4.5 m (-15 ft)	kg	*22100	*22100	*16990	*16990	*13120	10820	*9890	7710			*6910	6720	8.43
	lb	*48720	*48720	*37460	*37460	*28920	23850	*21800	17000			*15230	14820	(27.7)
-6.0 m (-20 ft)	kg			*11930	*11930	*8900	*8900							
	lb			*26300	*26300	*19620	*19620							

- (3) 9.0 m (29' 6") boom, 5.85 m (19' 2") arm equipped with 1.38 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10700 kg (23590 lb) counterweight.

Load point height		Load radius												At max. reach		
		3.0 m (10 ft)		5.0 m (15 ft)		7.0 m (25 ft)		9.0 m (30 ft)		11.0 m (35 ft)		13.0 m (45 ft)		Capacity		Reach
																m (ft)
10.0 m (35 ft)	kg													*4310	3590	13.54
	lb													*9500	7910	(44.4)
8.0 m (25 ft)	kg											*2660	*2660	*4240	2910	14.55
	lb											*5860	*5860	*9350	6420	(47.7)
6.0 m (20 ft)	kg									*5190	*5190	*4250	3640	*4230	2490	15.20
	lb									*11440	*11440	*9370	8020	*9330	5490	(49.9)
4.5 m (15 ft)	kg							*6800	*6800	*5710	4950	*4990	3450	*4270	2240	15.55
	lb							*14990	*14990	*12590	10910	*11000	7610	*9410	4940	(51.0)
2.0 m (5 ft)	kg			*16010	16000	*10420	9730	*7780	6520	*6260	4560	*5280	3230	*4320	2110	15.61
	lb			*35300	35270	*22970	21450	*17150	14370	*13800	10050	*11640	7120	*9520	4650	(51.2)
Ground line	kg			*16790	14290	*11730	8750	*8570	5940	*6720	4210	*5510	3020	*4390	2110	15.38
	lb			*37020	31500	*25860	19290	*18890	13100	*14820	9280	*12150	6660	*9680	4650	(50.5)
-2.0 m (-5 ft)	kg	*10920	*10920	*17330	13650	*12300	8170	*9000	5540	*6970	3950	*5550	2880	*4450	2250	14.87
	lb	*24070	*24070	*38210	30090	*27120	18010	*19840	12210	*15370	8710	*12240	6350	*9810	4960	(48.8)
-4.0 m (-15 ft)	kg	*14070	*14070	*17370	13550	*12100	7950	*8940	5340	*6850	3820	*4730	2830	*4450	2560	14.02
	lb	*31020	*31020	*38290	29870	*26680	17530	*19710	11770	*15100	8420	*10430	6240	*9810	5640	(46.0)
-6.0 m (-20 ft)	kg	*17730	*17730	*15490	13780	*11110	7980	*8260	5340	*6160	3850			*4320	3160	12.76
	lb	*39090	*39090	*34150	30380	*24490	17590	*18210	11770	*13580	8490			*9520	6970	(41.9)
-8.0 m (-25 ft)	kg	*17880	*17880	*12400	*12400	*9090	8270	*6620	5560					*3820	*3820	10.94
	lb	*39420	*39420	*27340	*27340	*20040	18230	*14590	12260					*8420	*8420	(35.9)
-10.0 m (-35 ft)	kg					*5220	*5220									
	lb					*11510	*11510									

2) ROBEX 520LC-9

- (1) 6.55 m (21' 6") boom, 2.40 m (7' 10") arm equipped with 2.15 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10200 kg (22490 lb) counterweight.



Rating over-front



Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
												m (ft)
7.5 m (25 ft)	kg									*9680	9450	8.27
	lb									*21340	20830	(27.1)
6.0 m (20 ft)	kg					*12520	*12520	*10940	10930	*9510	7850	9.07
	lb					*27600	*27600	*24120	24100	*20970	17310	(29.8)

Load point height		Load radius								At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
												m (ft)
4.5 m (15 ft)	kg			*18820	*18820	*14060	*14060	*11610	10610	*9480	7010	9.53
	lb			*41490	*41490	*31000	*31000	*25600	23390	*20900	15450	(31.3)
3.0 m (10 ft)	kg					*15650	14400	*12390	10200	*9510	6620	9.71
	lb					*34500	31830	*27320	22490	*20970	14590	(31.9)
1.5 m (5 ft)	kg					*16660	13790	*12920	9840	*9540	6600	9.62
	lb					*36730	30400	*28480	21690	*21030	14550	(31.6)
Ground line	kg			*22490	21060	*16730	13430	*12920	9610	*9500	6960	9.26
	lb			*49580	46430	*36880	29610	*28480	21190	*20940	15340	(30.4)
-1.5 m (-5 ft)	kg	*25000	*25000	*20550	*20550	*15740	13350	*12050	9550	*9220	7870	8.59
	lb	*55120	*55120	*45300	*45300	*34700	29430	*26570	21050	*20330	17350	(28.2)
-3.0 m (-10 ft)	kg	*20980	*20980	*17260	*17260	*13380	*13380			*8260	*8260	7.49
	lb	*46250	*46250	*38050	*38050	*29500	*29500			*18210	*18210	(24.6)
-4.5 m (-15 ft)	kg			*11720	*11720							
	lb			*25840	*25840							

Note

1. Lifting capacities 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) 7.06 m (23' 2") boom, 3.38 m (11' 1") arm equipped with 2.15 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10200 kg (22490 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		Capacity		Reach
														m (ft)
7.5 m (25 ft)	kg											*7510	6700	10.00
	lb											*16560	14770	(32.8)
6.0 m (20 ft)	kg							*9190	*9190	*8380	7980	*7470	5810	10.66
	lb							*20260	*20260	*18470	17590	*16470	12810	(35.0)
4.5 m (15 ft)	kg			*16290	*16290	*12260	*12260	*10120	*10120	*8830	7750	*7510	5290	11.05
	lb			*35910	*35910	*27030	*27030	*22310	*22310	*19470	17090	*16560	11660	(36.3)
3.0 m (10 ft)	kg			*20110	*20110	*14150	*14150	*11160	10110	*9380	7470	*7590	5040	11.20
	lb			*44330	*44330	*31200	*31200	*24600	22290	*20680	16470	*16730	11110	(36.7)
1.5 m (5 ft)	kg			*22300	21040	*15600	13560	*12020	9640	*9840	7200	*7680	5000	11.13
	lb			*49160	46390	*34390	29890	*26500	21250	*21690	15870	*16930	11020	(36.5)
Ground line	kg			*22570	20490	*16260	13060	*12490	9310	*10050	7000	*7750	5190	10.82
	lb			*49760	45170	*35850	28790	*27540	20530	*22160	15430	*17090	11440	(35.5)
-1.5 m (-5 ft)	kg	*19050	*19050	*21590	20400	*16040	12850	*12390	9130	*9790	6900	*7740	5670	10.26
	lb	*42000	*42000	*47600	44970	*35360	28330	*27320	20130	*21580	15210	*17060	12500	(33.7)
-3.0 m (-10 ft)	kg	*25420	*25420	*19580	*19580	*14900	12870	*11510	9130			*7520	6620	9.40
	lb	*56040	*56040	*43170	*43170	*32850	28370	*25380	20130			*16580	14590	(30.8)
-4.5 m (-15 ft)	kg	*21120	*21120	*16290	*16290	*12560	*12560	*9330	*9330			*6750	*6750	8.11
	lb	*46560	*46560	*35910	*35910	*27690	*27690	*20570	*20570			*14880	*14880	(26.6)
-6.0 m (-20 ft)	kg			*10870	*10870									
	lb			*23960	*23960									

- (3) 9.0 m (29' 6") boom, 5.85 m (19' 2") arm equipped with 1.38 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 10700 kg (23590 lb) counterweight.

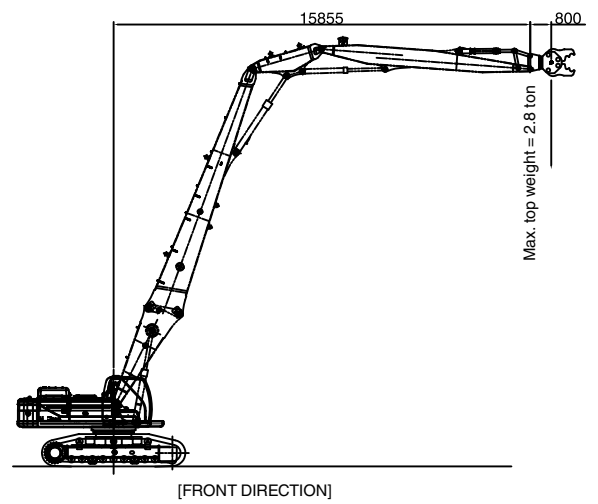
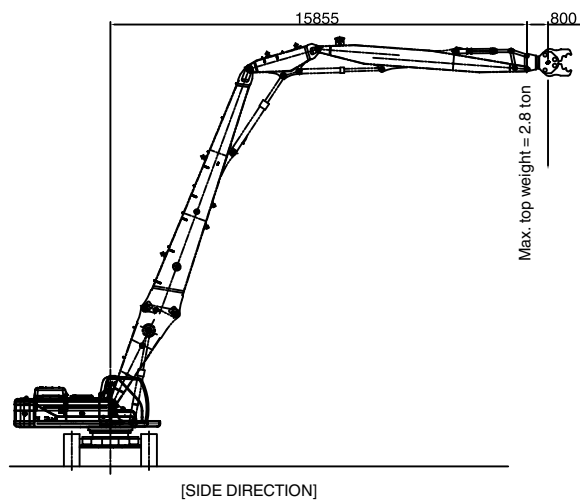
Load point height		Load radius												At max. reach		
		3.0 m (10 ft)		5.0 m (15 ft)		7.0 m (25 ft)		9.0 m (30 ft)		11.0 m (35 ft)		13.0 m (45 ft)		Capacity		Reach
																m (ft)
10.0 m (35 ft)	kg lb													*4210 *9280	3970 8750	13.66 (44.8)
8.0 m (25 ft)	kg lb									*4750 *10470	*4750 *10470	*2800 *6170	*2800 *6170	*4140 *9130	3270 7210	14.63 (48.0)
6.0 m (20 ft)	kg lb									*5130 *11310	*5130 *11310	*4310 *9500	4110 9060	*4130 *9110	2840 6260	15.25 (50.0)
4.0 m (15 ft)	kg lb					*8700 *19180	*8700 *19180	*6790 *14970	*6790 *14970	*5650 *12460	5520 12170	*4910 *10820	3900 8600	*4170 *9190	2580 5690	15.57 (51.1)
2.0 m (5 ft)	kg lb			*16120 *35540	*16120 *35540	*10440 *23020	*10440 *23020	*7740 *17060	7260 16010	*6190 *13650	5110 11270	*5190 *11440	3670 8090	*4230 *9330	2470 5450	15.60 (51.2)
Ground line	kg lb			*16710 *36840	16170 35650	*11660 *25710	9800 21610	*8490 *18720	6670 14700	*6630 *14620	4760 10490	*5400 *11900	3460 7630	*4290 *9460	2490 5490	15.35 (50.4)
-2.0 m (-5 ft)	kg lb	*11290 *24890	*11290 *24890	*17600 *38800	15570 34330	*12130 *26740	9250 20390	*8870 *19550	6270 13820	*6840 *15080	4500 9920	*5410 *11930	3320 7320	*4340 *9570	2660 5860	14.80 (48.6)
-4.0 m (-15 ft)	kg lb	*14480 *31920	*14480 *31920	*16990 *37460	15500 34170	*11860 *26150	9040 19930	*8750 *19290	6090 13430	*6680 *14730	4380 9660	*4170 *9190	3290 7250	*4330 *9550	3030 6680	13.91 (45.6)
-6.0 m (-20 ft)	kg lb	*18200 *40120	*18200 *40120	*15010 *33090	*15010 *33090	*10780 *23770	9100 20060	*8000 *17640	6110 13470	*5900 *13010	4430 9770			*4180 *9220	3740 8250	12.60 (41.3)
-8.0 m (-25 ft)	kg lb	*16860 *37170	*16860 *37170	*11770 *25950	*11770 *25950	*8630 *19030	*8630 *19030	*6210 *13690	*6210 *13690					*3610 *7960	*3610 *7960	10.71 (35.1)

- (4) 10.0 m (32' 10") boom, 6.85 m (22' 6") arm equipped with 1.38 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 11700 kg (25790 lb) counterweight.

Load point height		Load radius														At max. reach		
		3.0 m (10 ft)		5.0 m (15 ft)		7.0 m (25 ft)		9.0 m (30 ft)		11.0 m (35 ft)		13.0 m (45 ft)		15.0 m (50 ft)		Capacity		Reach
																		m (ft)
10.0 m (35 ft)	kg lb											*3340 *7360	*3340 *7360			*3040 *6700	2900 6390 (51.9)	
8.0 m (25 ft)	kg lb											*3490 *7690	*3490 *7690	*2300 *5070	*2300 *5070	*3000 *6610	2420 5340 (54.6)	
6.0 m (20 ft)	kg lb											*3740 *8250	*3740 *8250	*3300 *7280	3040 6700	*2990 *6590	2100 4630 (56.4)	
4.0 m (15 ft)	kg lb							*5930 *13070	*5930 *13070	*4810 *10600	*4810 *10600	*4060 *8950	*4060 *8950	*3540 *7800	2870 6330	*3020 *6660	1900 4190 (57.3)	
2.0 m (5 ft)	kg lb			*14880 *32800	*14880 *32800	*9450 *20830	*9450 *20830	*6850 *15100	*6850 *15100	*5360 *11820	5230 11530	*4400 *9700	3750 8270	*3720 *8200	2680 5910	*3060 *6750	1810 3990 (57.4)	
Ground line	kg lb			*12470 *27490	*12470 *27490	*10620 *23410	9810 21630	*7600 *16760	6700 14770	*5830 *12850	4780 10540	*4680 *10320	3460 7630	*3860 *8510	2510 5530	*3110 *6860	1800 3970 (56.7)	
-2.0 m (-5 ft)	kg lb	*8960 *19750	*8960 *19750	*13180 *29060	*13180 *29060	*11160 *24600	9140 20150	*8040 *17730	6210 13690	*6120 *13490	4440 9790	*4840 *10670	3240 7140	*3880 *8550	2380 5250	*3160 *6970	1900 4190 (55.1)	
-4.0 m (-15 ft)	kg lb	*11310 *24930	*11310 *24930	*15270 *33660	15220 33550	*11080 *24430	8850 19510	*8090 *17840	5940 13100	*6160 *13580	4240 9350	*4800 *10580	3120 6880	*3630 *8000	2340 5160	*3180 *7010	2130 4700 (52.6)	
-6.0 m (-20 ft)	kg lb	*13970 *30800	*13970 *30800	*14710 *32430	*14710 *32430	*10410 *22950	8830 19470	*7710 *17000	5870 12940	*5850 *12900	4180 9220	*4430 *9770	3100 6830			*3140 *6920	2540 5600 (49.0)	
-8.0 m (-25 ft)	kg lb	*17110 *37720	*17110 *37720	*12500 *27560	*12500 *27560	*9080 *20020	9040 19930	*6780 *14950	5990 13210	*5030 *11090	4290 9460					*2940 *6480	*2940 *6480 (44.0)	
-10.0 m (-35 ft)	kg lb			*9190 *20260	*9190 *20260	*6830 *15060	*6830 *15060	*4970 *10960	*4970 *10960							*2340 *5160	*2340 *5160 (36.9)	

3) R520LC-9 DM

This machine is designed for a maximum top weight attachment (including quick coupler weight) of 2.8 metric ton.

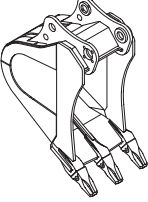
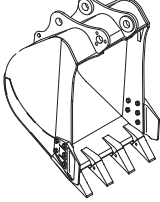
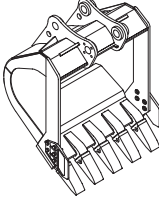
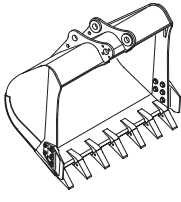


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6. BUCKET SELECTION GUIDE

1) ROBEX 480LC-9

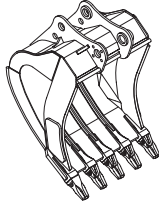
(1) GENERAL BUCKET

			
1.00 m³ SAE heaped bucket	1.38 m³ SAE heaped bucket	1.84 m³ SAE, 2.15 m³ SAE heaped bucket	2.79 m³ SAE, 3.03 m³ SAE, heaped bucket

Capacity		Width		Weight	Recommendation					
					7.06 m (23' 2") boom				6.55 m (21' 5") boom	9.0 m (29' 6") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.4 m (7' 10") arm	2.9 m (9' 6") arm	3.38 m (11' 1") arm	4.0 m (13' 1") arm	2.4 m (7' 10") arm	5.85 m (19' 2") arm
1.00 m³ (1.30 yd³)	0.90 m³ (1.18 yd³)	915 mm (36.0")	1065 mm (41.9")	1210 kg (2700 lb)						
1.38 m³ (1.80 yd³)	1.20 m³ (1.57 yd³)	1100 mm (43.3")	1250 mm (49.2")	1360 kg (3000 lb)						
1.84 m³ (2.41 yd³)	1.60 m³ (2.09 yd³)	1420 mm (55.9")	1570 mm (61.8")	1590 kg (3510 lb)						
2.15 m³ (2.81 yd³)	1.85 m³ (2.40 yd³)	1610 mm (63.4")	1760 mm (69.3")	1740 kg (3840 lb)						
2.79 m³ (3.65 yd³)	2.40 m³ (3.14 yd³)	2020 mm (79.5")	2170 mm (85.4")	2100 kg (4630 lb)						
3.03 m³ (3.96 yd³)	2.60 m³ (3.40 yd³)	2170 mm (85.4")	2320 mm (91.3")	2140 kg (4720 lb)						

	Applicable for materials with density of 2000 kgf/m³ (3370 lbf/yd³) or less
	Applicable for materials with density of 1600 kgf/m³ (2700 lbf/yd³) or less
	Applicable for materials with density of 1100 kgf/m³ (1850 lbf/yd³) or less

(2) ROCK-HEAVY DUTY BUCKET


◎ 2.20 m³, ◎ 2.43 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					7.06 m (23' 2") boom				6.55 m (21' 5") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.4 m (7' 10") arm	2.9 m (9' 6") arm	3.38 m (11' 1") arm	4.0 m (13' 1") arm	2.4 m (7' 10") arm
◎ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	1810 mm (71.3")	-	2255 kg (4970 lb)					
◎ 2.43 m ³ (3.18 yd ³)	2.10 m ³ (2.75 yd ³)	1860 mm (73.2")	-	2330 kg (5140 lb)					

◎ Rock-heavy duty bucket

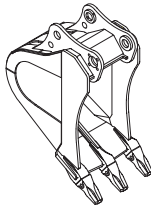
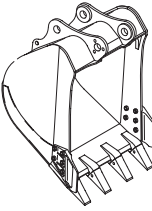
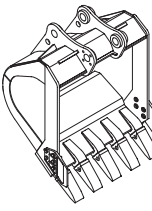
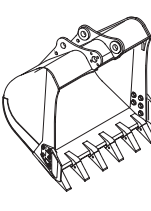
 Applicable for materials with density of 2000 kgf/m³ (3370 lbf/yd³) or less

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

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

2) ROBEX 520LC-9

(1) GENERAL BUCKET

			
★ 1.00 m ³ SAE heaped bucket	1.38 m ³ SAE, ★ 1.38 m ³ SAE, 1.65 m ³ SAE heaped bucket	1.84 m ³ SAE, 2.15 m ³ SAE, 2.79 m ³ SAE heaped bucket	3.03 m ³ SAE, 3.20 m ³ SAE heaped bucket

Capacity		Width		Weight	Recommendation					
					7.06 m (23' 2") boom				6.55 m (21' 5") boom	9.0 m (29' 6") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.4 m (7' 10") arm	2.9 m (9' 6") arm	3.38 m (11' 1") arm	4.0 m (13' 1") arm	2.4 m (7' 10") arm	5.85 m (19' 2") arm
1.38 m ³ (1.80 yd ³)	1.25 m ³ (1.63 yd ³)	995 mm (39.2")	1145 mm (45.1")	1420 kg (3130 lb)						
1.65 m ³ (2.16 yd ³)	1.48 m ³ (1.94 yd ³)	1140 mm (44.9")	1290 mm (50.8")	1520 kg (3350 lb)						
1.84 m ³ (2.41 yd ³)	1.65 m ³ (2.16 yd ³)	1245 mm (49.0")	1395 mm (54.9")	1630 kg (3590 lb)						
2.15 m ³ (2.81 yd ³)	1.92 m ³ (2.51 yd ³)	1415 mm (55.7")	1565 mm (61.6")	1740 kg (3840 lb)						
2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	1760 mm (69.3")	1910 mm (75.2")	1960 kg (4320 lb)						
3.03 m ³ (3.96 yd ³)	2.67 m ³ (3.49 yd ³)	1890 mm (74.4")	2040 mm (80.3")	2090 kg (4610 lb)						
3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	1980 mm (78.0")	2130 mm (83.9")	2205 kg (4860 lb)						
★ 1.00 m ³ (1.30 yd ³)	0.90 m ³ (1.18 yd ³)	915 mm (36.0")	1065 mm (41.9")	1210 kg (2700 lb)						

Capacity		Width		Weight	Recommendation					
					7.06 m (23' 2") boom				6.55 m (21' 5") boom	9.0 m (29' 6") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.4 m (7' 10") arm	2.9 m (9' 6") arm	3.38 m (11' 1") arm	4.0 m (13' 1") arm	2.4 m (7' 10") arm	5.85 m (19' 2") arm
★ 1.38 m ³ (1.80 yd ³)	1.20 m ³ (1.57 yd ³)	1100 mm (43.3")	1250 mm (49.2")	1360 kg (3000 lb)						

★ 5.85 m and 6.85 m arm only



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

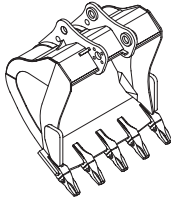
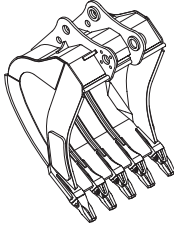
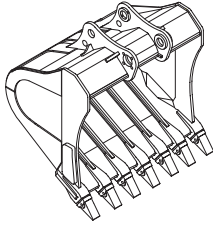


Applicable for materials with density of 1600 kgf/m³ (2700 lbf/yd³) or less



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

(2) HEAVY DUTY AND ROCK-HEAVY DUTY BUCKET

		
◆ 2.20 m ³ SAE heaped bucket	◎ 1.80 m ³ SAE heaped bucket	◎ 3.20 m ³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					7.06 m (23' 2") boom				6.55 m (21' 5") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.4 m (7' 10") arm	2.9 m (9' 6") arm	3.38 m (11' 1") arm	4.0 m (13' 1") arm	2.4 m (7' 10") arm
◆ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	1840 mm (72.4")	-	2170 kg (4780 lb)					
◎ 1.80 m ³ (2.35 yd ³)	1.50 m ³ (1.96 yd ³)	1560 mm (61.4")	-	2090 kg (4610 lb)					
◎ 3.20 m ³ (4.19 yd ³)	2.80 m ³ (3.66 yd ³)	2095 mm (82.5")	-	2900 kg (6390 lb)					

◆ Heavy duty bucket

◎ Rock-heavy duty bucket



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



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



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

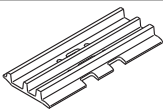
7. UNDERCARRIAGE

1) ROBEX 480LC-9

(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				
							
R480-9	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)	900 (36)
	Operating weight	kg (lb)	46900 (103400)	47440 (104590)	47710 (105180)	47980 (105780)	48520 (106970)
	Ground pressure	kgf/cm ² (psi)	0.89 (12.66)	0.77 (10.95)	0.73 (10.38)	0.68 (9.67)	0.61 (8.67)
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	3490 (11' 5")	3540 (11' 7")	3640 (11' 11")
R480LC-9	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)	900 (36)
	Operating weight	kg (lb)	48100 (106040)	48640 (107230)	48910 (107830)	49180 (108420)	49720 (109610)
	Ground pressure	kgf/cm ² (psi)	0.83 (11.80)	0.72 (10.24)	0.68 (9.67)	0.64 (9.10)	0.57 (8.11)
	Overall width	mm (ft-in)	3340 (10' 11")	3440 (11' 3")	3490 (11' 5")	3540 (11' 7")	3640 (11' 11")

(3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2EA
Track rollers	9EA
Track shoes	53EA

(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
600 mm triple grouser	Standard	A
700 mm triple grouser	Option	B
750 mm triple grouser	Option	B
800 mm triple grouser	Option	C

Track shoe	Specification	Category
900 mm triple grouser	Option	C

※ **Table 2**

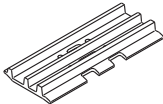
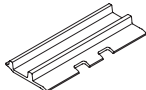
Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	- These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees - Travel at high speed only on flat ground - Travel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft ground (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

2) ROBEX 520LC-9

(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				Double grouser	
								
R520LC-9	Shoe width	mm (in)	600 (24)	700 (28)	750 (30)	800 (32)	600 (24)	700 (28)
	Operating weight	kg (lb)	51000 (112430)	51540 (113630)	51810 (114220)	52080 (114820)	51000 (112430)	51540 (113630)
	Ground pressure	kgf/cm ² (psi)	0.88 (12.51)	0.76 (10.81)	0.72 (10.24)	0.67 (9.53)	0.88 (12.51)	0.76 (10.81)
	Overall width	mm (ft-in)	3540 (11' 7")	3640 (11' 11")	3690 (12' 1")	3740 (12' 3")	3540 (11' 7")	3640 (11' 11")

(3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	3EA
Track rollers	9EA
Track shoes	53EA

(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
600 mm triple grouser	Standard	A
600 mm double grouser	Option	A
700 mm triple grouser, double grouser	Option	B
750 mm triple grouser	Option	B
800 mm 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 ground (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 QSM 11
Type	4-cycle turbocharged charger air cooled 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	125 × 147.1 mm (4.92" × 5.79")
Piston displacement	10800 cc (659 cu in)
Compression ratio	16.3:1
Rated gross horse power (SAE J1995)	362 Hp at 1900 rpm (357 Hp / 266 kW at 1900 rpm)
Maximum torque	170.6 kgf • m (1234 lbf • ft) at 1400 rpm
Engine oil quantity	37.85 ℓ (10 U.S. gal)
Dry weight	942 kg (2077 lb)
Low idling speed	1900 ± 50 rpm
High idling speed	950 ± 100 rpm
Rated fuel consumption	161.8 g/Hp • hr at 1900 rpm
Starting motor	Delco Remy 42MT (24 V-7.2 kW)
Alternator	Delco Remy (24 V-50 A)
Battery	2 × 12 V × 200 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 200 cc/rev
Maximum pressure	330 kgf/cm ² (4690 psi) [360 kgf/cm ² (5120 psi)]
Rated oil flow	2 × 360 ℓ /min (95.1 U.S. gpm/79.2 U.K. gpm)
Rated speed	1800 rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15 cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	27 ℓ /min (7.1 U.S. gpm/5.9 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330 kgf/cm ² (4690 psi) [360 kgf/cm ² (5120 psi)]
Overload relief valve pressure	380 kgf/cm ² (5400 psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	151 cc/rev
Relief pressure	285 kgf/cm ² (4050 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	59 kgf • m (427 lbf • ft)
Brake release pressure	33-50 kgf/cm ² (470-711 psi)
Reduction gear type	2-stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	345 kgf/cm ² (4910 psi)
Capacity (max / min)	160/100 cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	17-50 kgf/cm ² (242-711 psi)
Braking torque	103 kgf • m (745 lbf • ft)

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 170 × ø 115 × 1570 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 190 × ø 130 × 1820 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 160 × ø 110 × 1370 mm (R480LC-9)
		ø 160 × ø 115 × 1370 mm (R520LC-9)
	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.**

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R480-9	Standard	600 mm (24")	0.89 kgf/cm ² (12.66 psi)	48	3340 mm (10' 11")
	Option	700 mm (28")	0.77 kgf/cm ² (10.95 psi)	48	3440 mm (11' 3")
		750 mm (30")	0.73 kgf/cm ² (10.38 psi)	48	3490 mm (11' 5")
		800 mm (32")	0.68 kgf/cm ² (9.67 psi)	48	3540 mm (11' 7")
		900 mm (36")	0.61 kgf/cm ² (8.67 psi)	48	3640 mm (11' 11")
R480LC-9	Standard	600 mm (24")	0.83 kgf/cm ² (11.80 psi)	53	3340 mm (10' 11")
	Option	700 mm (28")	0.72 kgf/cm ² (10.24 psi)	53	3440 mm (11' 3")
		750 mm (30")	0.68 kgf/cm ² (9.67 psi)	53	3490 mm (11' 5")
		800 mm (32")	0.64 kgf/cm ² (9.10 psi)	53	3540 mm (11' 7")
		900 mm (36")	0.57 kgf/cm ² (8.11 psi)	53	3640 mm (11' 11")

Item		Width	Ground pressure	Link quantity	Overall width
R520LC-9	Standard	★ 600 mm (24")	0.88 kgf/cm ² (12.51 psi)	53	3540 mm (11' 7")
	Option	★ 700 mm (28")	0.76 kgf/cm ² (10.81 psi)	53	3640 mm (11' 11")
		★ 750 mm (30")	0.72 kgf/cm ² (10.24 psi)	53	3690 mm (12' 1")
		★ 800 mm (32")	0.67 kgf/cm ² (9.53 psi)	53	3740 mm (12' 3")
		☆ 600 mm (24")	0.88 kgf/cm ² (12.51 psi)	53	3540 mm (11' 7")
		☆ 700 mm (28")	0.76 kgf/cm ² (10.81 psi)	53	3640 mm (11' 11")

- ★ Triple grouser
- ☆ Double grouser

9) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R480LC-9	Standard	2.15 m ³ (2.81 yd ³)	1.85 m ³ (2.40 yd ³)	5	1610 mm (63.4")	1760 mm (69.3")
	Option	1.00 m ³ (1.30 yd ³)	0.90 m ³ (1.18 yd ³)	3	915 mm (36.0")	1065 mm (47.6")
		1.38 m ³ (1.80 yd ³)	1.20 m ³ (1.57 yd ³)	4	1100 mm (43.3")	1250 mm (49.2")
		1.65 m ³ (2.16 yd ³)	1.44 m ³ (1.88 yd ³)	5	1350 mm (55.9")	1500 mm (59.1")
		⊙ 1.80 m ³ (2.35 yd ³)	1.50 m ³ (1.96 yd ³)	5	1560 mm (61.4")	-
		1.84 m ³ (2.41 yd ³)	1.60 m ³ (2.09 yd ³)	5	1420 mm (55.9")	1570 mm (61.8")
		⬠ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	5	1810 mm (71.3")	-
		⊙ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	5	1810 mm (71.3")	-
		⊙ 2.43 m ³ (3.18 yd ³)	2.10 m ³ (2.75 yd ³)	5	1860 mm (73.2")	-
		2.56 m ³ (3.35 yd ³)	2.20 m ³ (2.90 yd ³)	6	1870 mm (73.6")	2020 mm (79.5")
		2.79 m ³ (3.65 yd ³)	2.40 m ³ (3.14 yd ³)	7	2020 mm (79.5")	2170 mm (85.4")
		3.03 m ³ (3.96 yd ³)	2.60 m ³ (3.40 yd ³)	7	2170 mm (85.4")	2320 mm (91.3")
		⊙ 3.20 m ³ (4.19 yd ³)	2.80 m ³ (3.66 yd ³)	5	2080 mm (81.9")	-
R520LC-9	Standard	2.15 m ³ (2.81 yd ³)	1.92 m ³ (2.51 yd ³)	5	1415 mm (55.7")	1565 mm (61.6")
	Option	1.38 m ³ (1.80 yd ³)	1.25 m ³ (1.63 yd ³)	4	995 mm (39.2")	1145 mm (45.1")
		1.65 m ³ (2.16 yd ³)	1.48 m ³ (1.94 yd ³)	5	1140 mm (44.9")	1290 mm (50.8")
		1.84 m ³ (2.41 yd ³)	1.65 m ³ (2.16 yd ³)	5	1245 mm (49.0")	1395 mm (54.9")
		2.56 m ³ (3.35 yd ³)	2.27 m ³ (2.97 yd ³)	5	1635 mm (64.4")	1785 mm (70.3")
		2.79 m ³ (3.65 yd ³)	2.47 m ³ (3.23 yd ³)	5	1760 mm (69.3")	1910 mm (75.2")
		3.03 m ³ (3.96 yd ³)	2.67 m ³ (3.49 yd ³)	6	1890 mm (74.4")	2040 mm (80.3")
		3.20 m ³ (4.19 yd ³)	2.82 m ³ (3.69 yd ³)	7	1980 mm (78.0")	2130 mm (83.9")
		3.60 m ³ (4.71 yd ³)	3.17 m ³ (4.15 yd ³)	7	2200 mm (86.6")	2350 mm (92.5")
		★ 1.00 m ³ (1.30 yd ³)	0.90 m ³ (1.18 yd ³)	3	915 mm (36.0")	1065 mm (47.6")
		★ 1.38 m ³ (1.80 yd ³)	1.20 m ³ (1.57 yd ³)	5	1100 mm (43.3")	1250 mm (49.2")
		⬠ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	5	1840 mm (71.3")	-
		⊙ 1.80 m ³ (2.35 yd ³)	1.50 m ³ (1.96 yd ³)	5	1560 mm (61.4")	-
		⊙ 2.20 m ³ (2.88 yd ³)	1.80 m ³ (2.35 yd ³)	5	1835 mm (72.2")	-
		⊙ 2.43 m ³ (3.18 yd ³)	2.10 m ³ (2.75 yd ³)	5	1885 mm (74.2")	-
		⊙ 3.20 m ³ (4.19 yd ³)	2.80 m ³ (3.66 yd ³)	7	2095 mm (82.5")	-

- ★ 5.85 m, 6.85 m arm only
- ⬠ Heavy duty bucket
- ⊙ Rock - heavy duty bucket

9. RECOMMENDED OILS

Use only oils listed below. Do not mix different brand oil.

Please use HYUNDAI genuine oil and grease.

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	35 (9.2)	★SAE 5W-40								
								SAE 30			
				SAE 10W							
				SAE 10W-30							
					SAE 15W-40						
Swing drive	Gear oil	5.0×2 (1.3×2)	★SAE 75W-90								
Final drive		5.0×2 (1.3×2)			SAE 80W-90						
Hydraulic tank	Hydraulic oil	Tank: 262 (69.2) System: 380 (100)	★ISO VG 15								
					ISO VG 46						
					ISO VG 68						
Fuel tank	Diesel fuel	621 (164)	★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 soft water★ ¹	50 (13.2)	Ethylene glycol base permanent type (50 : 50)								
			★Ethylene glycol base permanent type (60 : 40)								

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

★ : Cold region

Russia, CIS, Mongolia

★¹ : Soft water

City water or distilled water