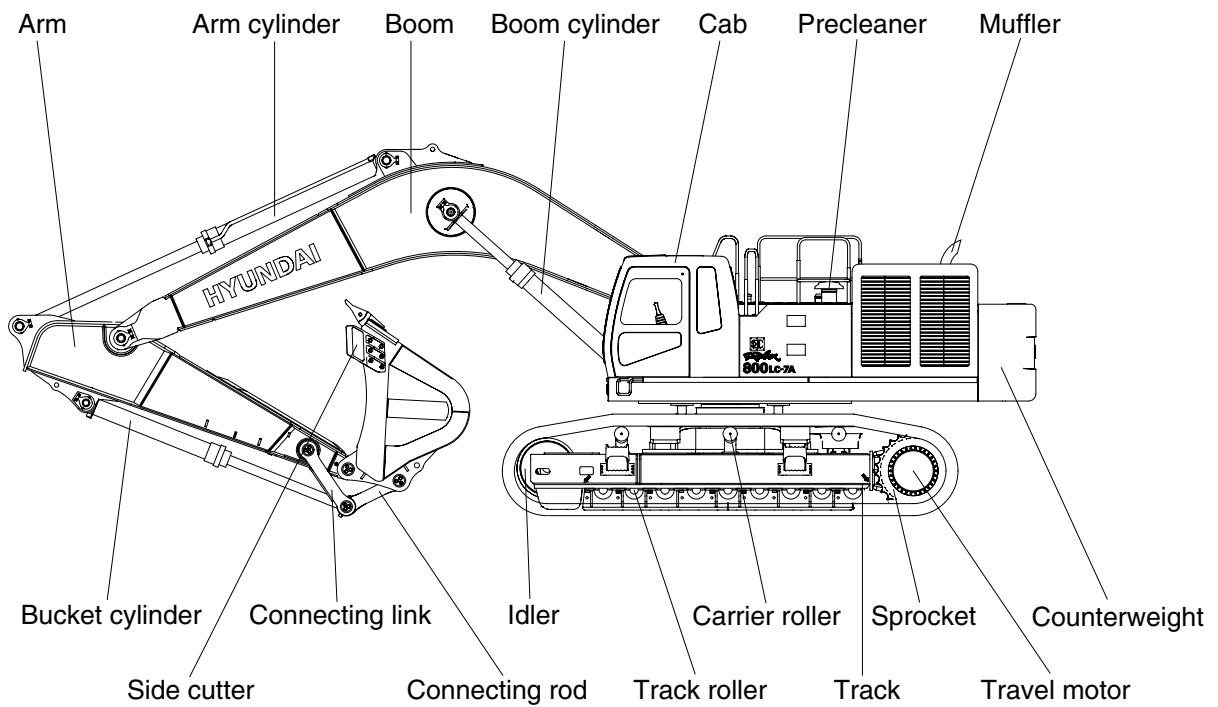
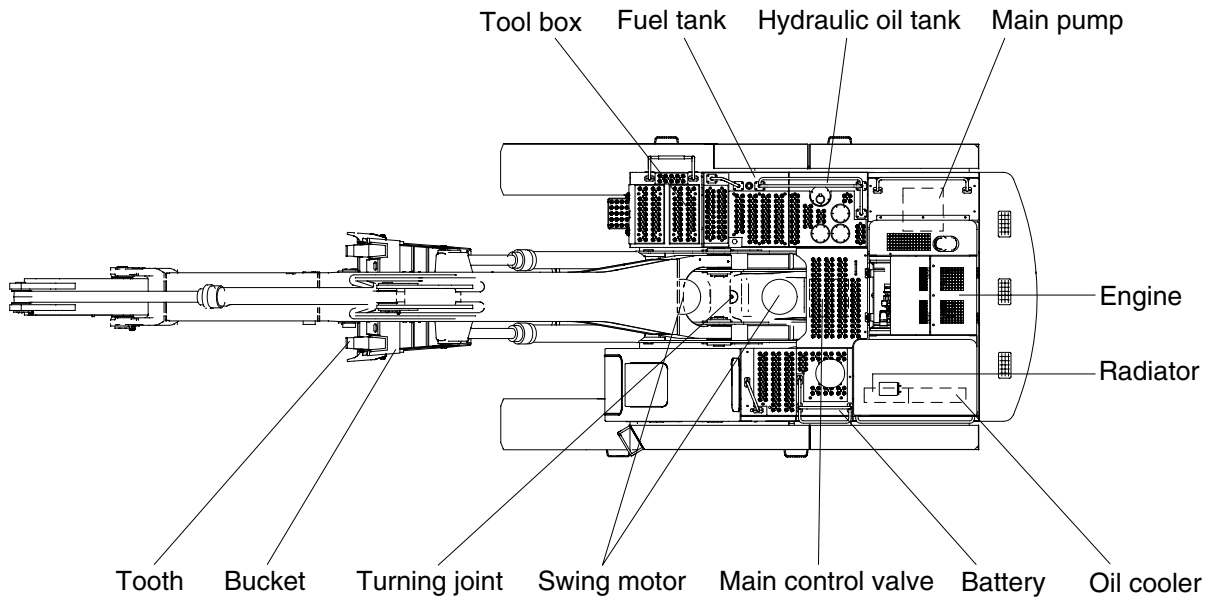


# GROUP 2 SPECIFICATIONS

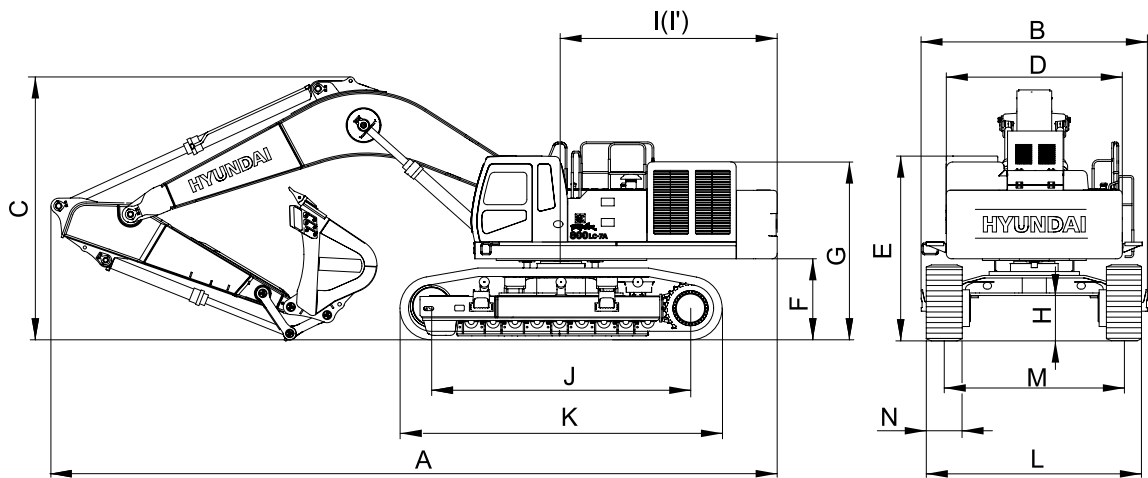
## 1. MAJOR COMPONENT



8007A2SP01

## 2. SPECIFICATIONS

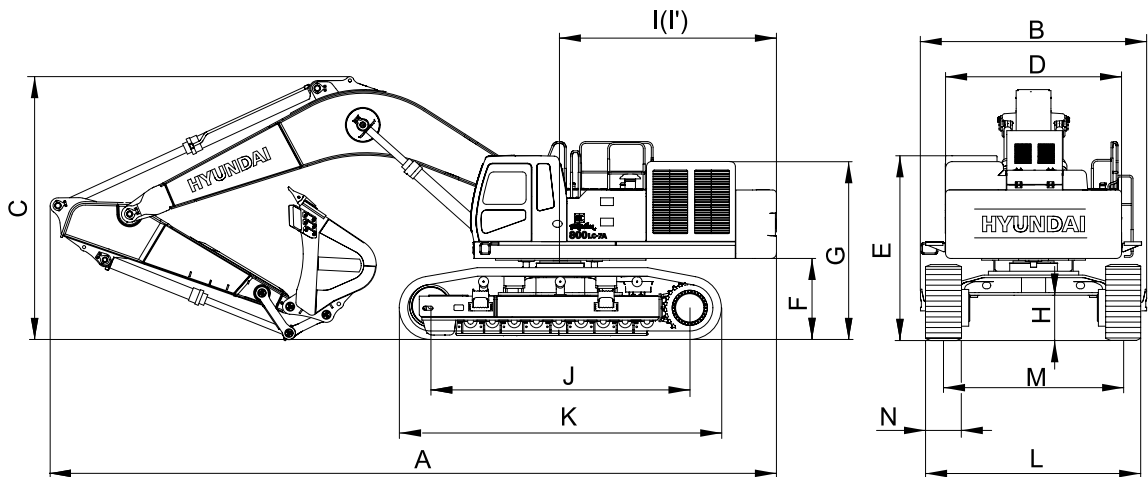
· 7.20m(23' 7") BOOM, 2.95m(9' 8") ARM



8007A2SP02

Description		Unit	Specification
Operating weight		kg(lb)	82320(181480)
Bucket capacity(SAE heaped), standard		m <sup>3</sup> (yd <sup>3</sup> )	4.53(5.93)
Overall length	A	mm(ft-in)	13100(43' 0")
Overall width, with 700mm shoe (Transport position/Working position)	B		3675/4395(12' 1 1/4' 5")
Overall height	C		5040(16' 6")
Superstructure width	D		3420(11' 3")
Overall height of cab	E		3580(11' 9")
Ground clearance of counterweight	F		1570( 5' 2")
Engine cover height	G		3480(11' 5")
Minimum ground clearance	H		880( 2' 11")
Rear-end distance	I		4200(13' 9")
Rear-end swing radius	I'		4315(14' 2")
Distance between tumbler	J		5030(16' 6")
Undercarriage length	K		6335(20' 9")
Undercarriage width (Transport position/Working position)	L		3480/4200(11' 5"/13' 9")
Track gauge (Transport position/Working position)	M		2780/3500(9' 1"/11' 6")
Track shoe width, standard	N		700(28")
Travel speed(Low/high)			km/hr(mph)
Swing speed		rpm	6.3
Gradeability		Degree(%)	35(70)
Ground pressure(700mm shoe)		kgf/cm <sup>2</sup> (psi)	1.07(15.22)

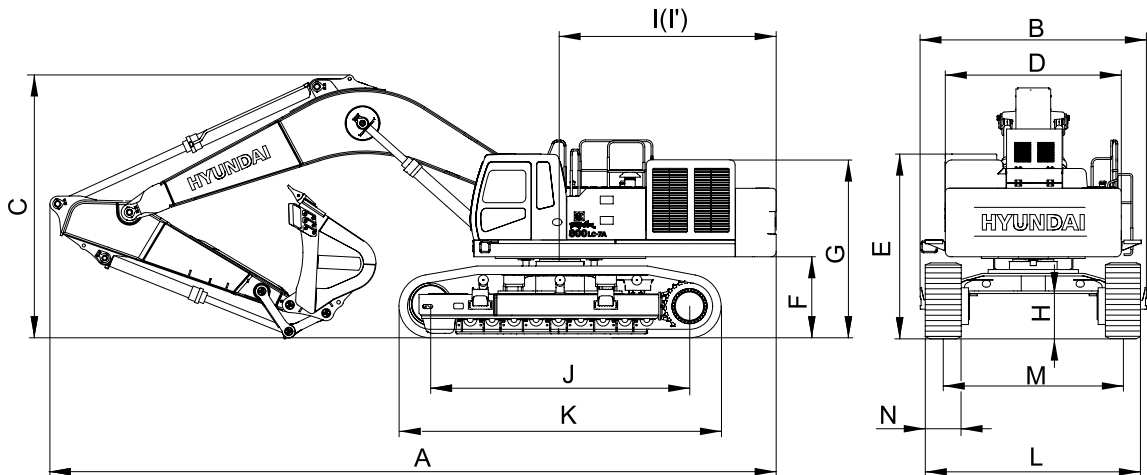
· 8.05m(26' 5") BOOM, 3.40m(11' 2") ARM



8007A2SP02

Description		Unit	Specification
Operating weight		kg(lb)	82500(181880)
Bucket capacity(SAE heaped), standard		m <sup>3</sup> (yd <sup>3</sup> )	3.40(4.45)
Overall length	A	mm(ft-in)	13950(45' 9")
Overall width, with 700mm shoe (Transport position/Working position)	B		3675/4395(12' 1"/14' 5")
Overall height	C		5360(17' 7")
Superstructure width	D		3420(11' 3")
Overall height of cab	E		3580(11' 9")
Ground clearance of counterweight	F		1570( 5' 2")
Engine cover height	G		3480(11' 5")
Minimum ground clearance	H		880( 2' 11")
Rear-end distance	I		4200(13' 9")
Rear-end swing radius	I'		4315(14' 2")
Distance between tumbler	J		5030(16' 6")
Undercarriage length	K		6335(20' 9")
Undercarriage width (Transport position/Working position)	L		3480/4200(11' 5"/13' 9")
Track gauge (Transport position/Working position)	M		2780/3500(9' 1"/11' 6")
Track shoe width, standard	N		700(28")
Travel speed(Low/high)		km/hr(mph)	2.6/4.0(1.6/2.5)
Swing speed		rpm	6.3
Gradeability		Degree(%)	35(70)
Ground pressure(700mm shoe)		kgf/cm <sup>2</sup> (psi)	1.07(15.22)

· 8.20m(26' 11") BOOM, 3.60m(11' 10") ARM

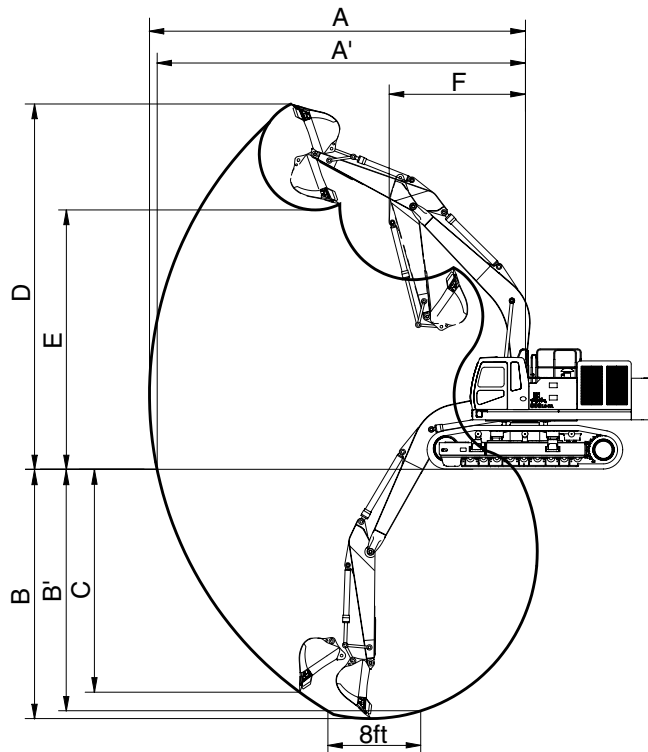


8007A2SP02

Description		Unit	Specification
Operating weight		kg(lb)	83170(183360)
Bucket capacity(SAE heaped), standard		m <sup>3</sup> (yd <sup>3</sup> )	3.40(4.45)
Overall length	A	mm(ft-in)	14110(46' 4")
Overall width, with 700mm shoe (Transport position/Working position)	B		3675/4395(12' 1"/14' 5")
Overall height	C		5250(17' 3")
Superstructure width	D		3420(11' 3")
Overall height of cab	E		3580(11' 9")
Ground clearance of counterweight	F		1570( 5' 2")
Engine cover height	G		3480(11' 5")
Minimum ground clearance	H		880( 2' 11")
Rear-end distance	I		4200(13' 9")
Rear-end swing radius	I'		4315(14' 2")
Distance between tumblers	J		5030(16' 6")
Undercarriage length	K		6335(20' 9")
Undercarriage width (Transport position/Working position)	L		3480/4200(11' 5"/13' 9")
Track gauge (Transport position/Working position)	M		2780/3500(9' 1"/11' 6")
Track shoe width, standard	N		700(28")
Travel speed(Low/high)		km/hr(mph)	2.6/4.0(1.6/2.5)
Swing speed		rpm	6.3
Gradeability		Degree(%)	35(70)
Ground pressure(700mm shoe)		kgf/cm <sup>2</sup> (psi)	1.07(15.22)

### 3. WORKING RANGE

· 7.2m(23' 7") BOOM

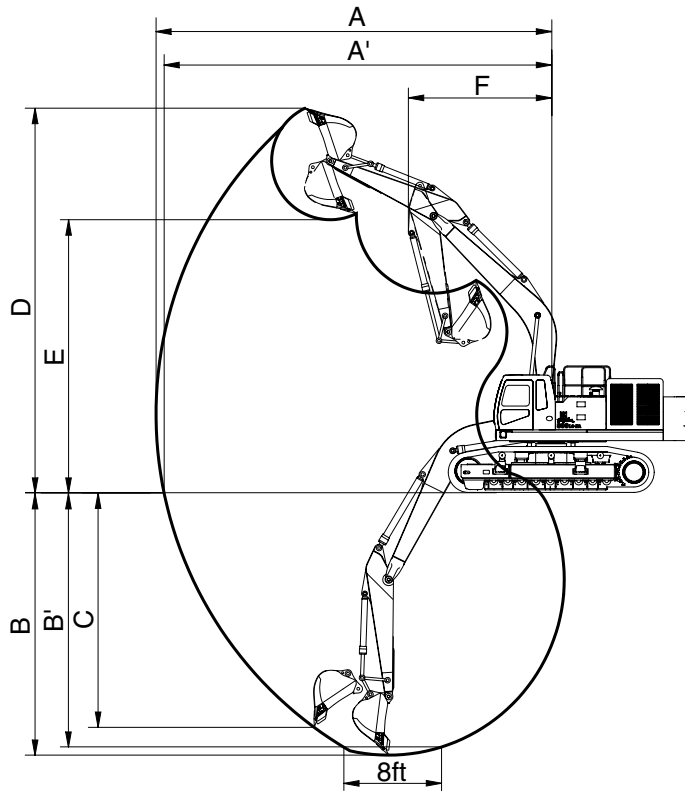


8007A2SP03

Description		2.95m(9' 8") Arm
Max digging reach	A	12250mm (40' 2")
Max digging reach on ground	A'	11970mm (39' 3")
Max digging depth	B	7240mm (23' 9")
Max digging depth (8ft level)	B'	7080mm (23' 3")
Max vertical wall digging depth	C	5670mm (18' 7")
Max digging height	D	11750mm (38' 7")
Max dumping height	E	7500mm (24' 7")
Min swing radius	F	5120mm (16' 10")
Bucket digging force	SAE	388.3[423.6] kN
		39600[43200] kgf
		87300[95240] lbf
	ISO	443.3[483.6] kN
		45200[49310] kgf
		99650[108710] lbf
Arm crowd force	SAE	318.7[347.7] kN
		32500[35460] kgf
		71650[78180] lbf
	ISO	333.4[363.7] kN
		34000[37090] kgf
		74960[81770] lbf

[ ] : Power boost

• 8.05m(26' 5") BOOM

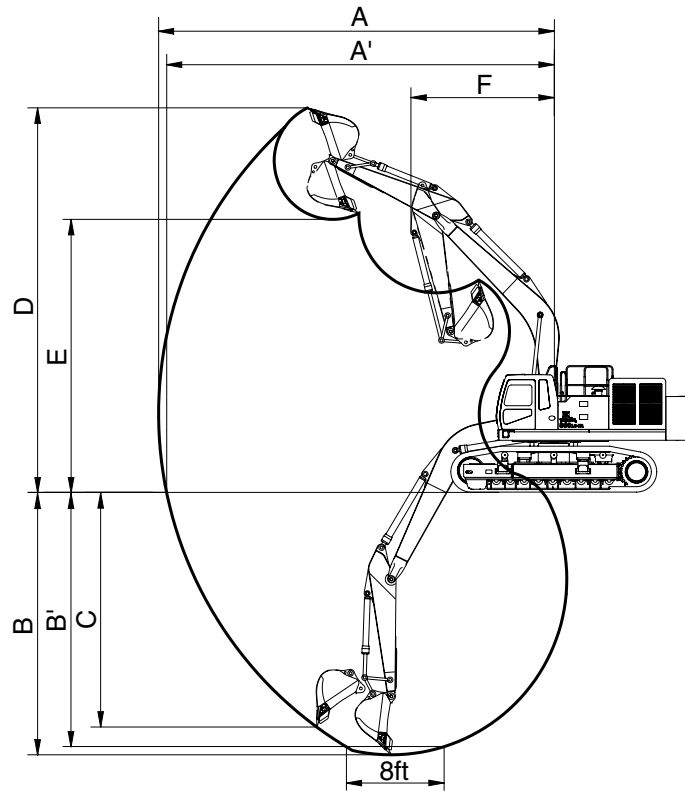


8007A2SP03

Description		3.40m(11' 2") Arm
Max digging reach	A	13420mm (44' 0")
Max digging reach on ground	A'	13160mm (43' 2")
Max digging depth	B	8450mm (27' 9")
Max digging depth (8ft level)	B'	8320mm (27' 4")
Max vertical wall digging depth	C	6190mm (20' 4")
Max digging height	D	11820mm (38' 9")
Max dumping height	E	7740mm (25' 5")
Min swing radius	F	6000mm (19' 8")
Bucket digging force	SAE	336.4[367.0] kN
		34300[37420] kgf
		75620[82500] lbf
	ISO	384.4[419.3] kN
		39200[42760] kgf
		86420[94270] lbf
Arm crowd force	SAE	292.2[318.8] kN
		29800[32510] kgf
		65670[71670] lbf
	ISO	305.0[332.7] kN
		31100[33930] kgf
		68560[74800] lbf

[ ] : Power boost

• 8.20m(26' 11") BOOM



8007A2SP03

Description		3.60m(11' 10") Arm
Max digging reach	A	13670mm (44' 10")
Max digging reach on ground	A'	13420mm (44' 0")
Max digging depth	B	8750mm (28' 8")
Max digging depth (8ft level)	B'	8630mm (28' 4")
Max vertical wall digging depth	C	6170mm (20' 3")
Max digging height	D	11780mm (38' 8")
Max dumping height	E	7770mm (25' 6")
Min swing radius	F	6080mm (19' 11")
Bucket digging force	SAE	336.4[367.0] kN
		34300[37420] kgf
		75620[82500] lbf
	ISO	384.4[419.3] kN
		39200[42760] kgf
		86420[94270] lbf
Arm crowd force	SAE	282.4[308.1] kN
		28800[31420] kgf
		63490[69270] lbf
	ISO	294.2[321.0] kN
		30000[32730] kgf
		66140[72160] lbf

[ ] : Power boost

#### 4. WEIGHT













Item	R800LC-7A	
	kg	lb
Upperstructure assembly	37510	82700
Main frame weld assembly	7620	16800
Engine assembly	1450	3200
Main pump assembly	300	660
Main control valve assembly	420	930
Swing motor assembly	360	790
Hydraulic oil tank assembly	1860	4100
Fuel tank assembly	1825	4020
Counterweight	12500	27560
Cab assembly	310	680
Lower chassis assembly	26200	57760
Lower track frame assy	11960	26370
Swing bearing	1200	2650
Travel motor assembly	935	2060
Turning joint	75	165
Track recoil spring and tension body	840	1850
Idler	510	1120
Sprocket	210	460
Carrier roller	80	180
Track roller	190	420
Track-chain assembly(700mm double grouser shoe)	4470	9850
Front attachment assembly(7.20m boom, 2.95m arm, 4.53m <sup>3</sup> SAE heaped bucket)	18610	41030
7.20m boom assembly	6370	14040
8.05m boom assy	7020	15480
8.20m boom assy	7480	16490
2.95m arm assembly	2910	6420
3.40m arm assembly	3070	6770
3.60m arm assembly	3290	7250
4.53m <sup>3</sup> SAE heaped bucket	4190	9240
Boom cylinder assembly	1460	3220
Arm cylinder assembly	950	2090
Bucket cylinder assembly	760	1680
Bucket control rod assembly	410	900



## 5. LIFTING CAPACITIES

















1) 7.20m(23' 7") boom, 2.95m(9' 8") arm equipped with 4.53m<sup>3</sup>(SAE heaped) bucket, 700mm (28") double grouser shoe and 12,500kg(27,560lb) counterweight.

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

















Load point height		Load radius										At max. reach					
		3.0m(10.0ft)		4.5m(15.0ft)		6.0m(20.0ft)		7.5m(25.0ft)		9.0m(30.0ft)		Capacity		Reach			
														kg	lb	m(ft)	
9.0m (30.0ft)	kg lb														*13830 *30490	13730 30270	9.35 (30.7)
7.5m (25.0ft)	kg lb									*9650 *21270	*9650 *21270	*13080 *28840	11020 24290	10.28 (33.7)			
6.0m (20.0ft)	kg lb							*17760 *39150	*17760 *39150	*15250 *33620	14270 31460	*12600 *27780	9500 20940	10.88 (35.7)			
4.5m (15.0ft)	kg lb			*33390 *73610	*33390 *73610	*24130 *53200	*24130 *53200	*19090 *42090	*19090 *42090	*15860 *34970	13800 30420	*12240 *26980	8650 19070	11.22 (36.8)			
3.0m (10.0ft)	kg lb			*37640 *82980	*37640 *82980	*26390 *58180	*26390 *58180	*20280 *44710	18440 40650	*16400 *36160	13240 29190	*11890 *26210	8270 18230	11.31 (37.1)			
1.5m (5.0ft)	kg lb			*36800 *81130	*36800 *81130	*27380 *60360	25490 56200	*20880 *46030	17520 38620	*16570 *36530	12720 28040	*11450 *25240	8310 18320	11.18 (36.7)			
Ground Line	kg lb			*35530 *78330	*35530 *78330	*26750 *58970	24570 54170	*20540 *45280	16880 37210	*16070 *35430	12340 27210	*10800 *23810	8800 19400	10.80 (35.4)			
-1.5m (-5.0ft)	kg lb	*32460 *71560	*32460 *71560	*31440 *69310	*31440 *69310	*24540 *54100	24230 53420	*19020 *41930	16580 36550	*14500 *31970	12170 26830	*9670 *21320	*9670 *21320	10.14 (33.3)			
-3.0m (-10.0ft)	kg lb	*29280 *64550	*29280 *64550	*25700 *56660	*25700 *56660	*20650 *45530	*20650 *45530	*15910 *35080	*15910 *35080			*7550 *16640	*7550 *16640	9.15 (30.0)			
-4.5m (-15.0ft)	kg lb			*17680 *38980	*17680 *38980	*14480 *31920	*14480 *31920										

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

2) 8.05m(26' 5") boom, 3.40m(11' 2") arm equipped with 3.4m<sup>3</sup>(SAE heaped) bucket, 700mm (28") double grouser shoe and 12,500kg(27,560lb) counterweight.

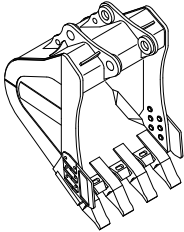
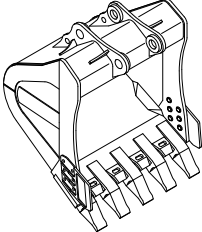
Load point height		Load radius												At max. reach				
		3.0m(10.0ft)		4.5m(15.0ft)		6.0m(20.0ft)		7.5m(25.0ft)		9.0m(30.0ft)		10.5m(35.0ft)		Capacity		Reach		
																		m(ft)
10.5m (35.0ft)	kg lb															*11350 *25020	*11350 *25020	9.61 (31.5)
9.0m (30.0ft)	kg lb															*10840 *23900	*10840 *23900	10.76 (35.3)
7.5m (25.0ft)	kg lb									*12650 *27890	*12650 *27890					*10590 *23350	9140 20150	11.56 (37.9)
6.0m (20.0ft)	kg lb									*13400 *29540	*13400 *29540	*11780 10920	10920			*10470 *23080	8020 17680	12.09 (39.7)
4.5m (15.0ft)	kg lb			*31100 *68560	*31100 *68560	*21890 *48260	*21890 *48260	*17200 *37920	*17200 *37920	*14330 *31590	14240 31390	*12390 *27320	10540 23240	*10430 *22990	7350 16200	12.39 (40.6)		
3.0m (10.0ft)	kg lb					*24560 *54150	*24560 *54150	*18750 *41340	18410 40590	*15230 *33580	13470 29700	*12860 *28350	10100 22270	*10430 *22990	7010 15450	12.47 (40.9)		
1.5m (5.0ft)	kg lb					*26100 *57540	24700 54450	*19830 *43720	17290 38120	*15900 *35050	12770 28150	*13180 *29060	9680 21340	*10430 *22990	6960 15340	12.35 (40.5)		
Ground Line	kg lb			*28910 *63740	*28910 *63740	*26300 *57980	23680 52210	*20210 *44560	16510 36400	*16130 *35560	12240 26980	*13160 *29010	9340 20590	*10360 *22840	7230 15940	12.02 (39.4)		
-1.5m (-5.0ft)	kg lb	*25600 *56440	*25600 *56440	*32870 *72470	*32870 *72470	*25320 *55820	23260 51280	*19770 *43590	16080 35450	*15750 *34720	11910 26260	*12580 *27730	9160 20190	*10150 *22380	7890 17390	11.44 (37.5)		
-3.0m (-10.0ft)	kg lb	*33670 *74230	*33670 *74230	*29490 *65010	*29490 *65010	*23270 *51300	23260 51280	*18390 *40540	15970 35210	*14550 *32080	11820 26060			*9610 *21190	9180 20240	10.59 (34.7)		
-4.5m (-15.0ft)	kg lb	*29990 *66120	*29990 *66120	*24760 *54590	*24760 *54590	*19940 *43960	*19940 *43960	*15790 *34810	*15790 *34810					*8300 *18300	*8300 *18300	9.37 (30.7)		
-6.0m (-20.0ft)	kg lb			*17990 *39660	*17990 *39660	*14730 *32470	*14730 *32470	*11080 *24430	*11080 *24430									

3) 8.20m(26' 11") boom, 3.60m(11' 10") arm equipped with 3.4m<sup>3</sup>(SAE heaped) bucket, 700mm (28") double grouser shoe and 12,500kg(27,560lb) counterweight.

Load point height		Load radius												At max. reach			
		3.0m(10.0ft)		4.5m(15.0ft)		6.0m(20.0ft)		7.5m(25.0ft)		9.0m(30.0ft)		10.5m(35.0ft)		Capacity		Reach	
																	
10.5m (35.0ft)	kg lb														*10590 *23350	*10590 *23350	9.96 (32.7)
9.0m (30.0ft)	kg lb														*10140 *22350	*10140 *22350	11.06 (36.3)
7.5m (25.0ft)	kg lb									*12080 *26630	*12080 *26630	*9090 *20040	*9090 *20040	*9910 *21850	8590 18940	11.84 (38.8)	
6.0m (20.0ft)	kg lb									*12840 *28310	*12840 *28310	*11380 *25090	10840 23900	*9820 *21650	7530 16600	12.36 (40.6)	
4.5m (15.0ft)	kg lb			*30160 *66490	*30160 *66490	*21170 *46670	*21170 *46670	*16570 *36530	*16570 *36530	*13770 *30360	*13770 *30360	*11870 *26170	10400 22930	*9790 *21580	6870 15150	12.65 (41.5)	
3.0m (10.0ft)	kg lb					*23800 *52470	*23800 *52470	*18100 *39900	18080 39860	*14670 *32340	13210 29120	*12370 *27270	9900 21830	*9800 *21610	6530 14400	12.73 (41.8)	
1.5m (5.0ft)	kg lb					*25350 *55890	24140 53220	*19190 *42310	16880 37210	*15350 *33840	12450 27450	*12720 *28040	9430 20790	*9820 *21650	6460 14240	12.61 (41.4)	
Ground Line	kg lb			*27180 *59920	*27180 *59920	*25610 *56460	23050 50820	*19610 *43230	16040 35360	*15630 *34460	11870 26170	*12770 *28150	9050 19950	*9790 *21580	6670 14700	12.28 (40.3)	
-1.5m (-5.0ft)	kg lb	*24050 *53020	*24050 *53020	*32290 *71190	*32290 *71190	*24740 *54540	22580 49780	*19260 *42460	15570 34330	*15350 *33840	11510 25380	*12340 *27210	8830 19470	*9650 *21270	7260 16010	11.72 (38.5)	
-3.0m (-10.0ft)	kg lb	*31460 *69360	*31460 *69360	*29120 *64200	*29120 *64200	*22860 *50400	22560 49740	*18050 *39790	15430 34020	*14330 *31590	11400 25130			*9230 *20350	8400 18520	10.90 (35.8)	
-4.5m (-15.0ft)	kg lb	*30290 *66780	*30290 *66780	*24710 *54480	*24710 *54480	*19820 *43700	*19820 *43700	*15740 *34700	15610 34410	*12170 *26830	11560 25490			*8200 *18080	*8200 *18080	9.72 (31.9)	
-6.0m (-20.0ft)	kg lb			*18500 *40790	*18500 *40790	*15160 *33420	*15160 *33420	*11720 *25840	*11720 *25840								

## 6. BUCKET SELECTION GUIDE

### 1) GENERAL BUCKET

	
<p>1.65 m<sup>3</sup> SAE heaped bucket</p>	<p>2.56 m<sup>3</sup> SAE heaped bucket</p>

Capacity		Width		Weight	Recommendation	
					10.5m (34' 5") boom	11.3m (37' 1") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		6.5m arm (21' 4")	8.0m arm (26' 3")
1.65 m <sup>3</sup> (2.16 yd <sup>3</sup> )	1.48 m <sup>3</sup> (1.94 yd <sup>3</sup> )	1140 mm (44.9")	1290 mm (50.8")	1520 kg (3350 lb)	-	
2.56 m <sup>3</sup> (3.35 yd <sup>3</sup> )	2.27 m <sup>3</sup> (2.97 yd <sup>3</sup> )	1635 mm (64.4")	1785 mm (70.3")	1870 kg (4120 lb)		-

Applicable for materials with density of 2000kgf/m<sup>3</sup> (3370lbf/yd<sup>3</sup>) or less

Applicable for materials with density of 1600kgf/m<sup>3</sup> (2700lbf/yd<sup>3</sup>) or less

Applicable for materials with density of 1100kgf/m<sup>3</sup> (1850lbf/yd<sup>3</sup>) or less

## 2) ROCK BUCKET

⊙3.40m³ SAE heaped bucket (A TYPE)	⊙3.40m³ SAE heaped bucket (B TYPE)	⊙4.04m³, 4.50m³ SAE heaped bucket	◆3.40m³ SAE heaped bucket	◆4.04m³, 4.50m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation		
					7.2m(23' 7") boom	8.05m(26' 5") boom	8.2m(26' 11") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter	2.95m arm (9' 8")	3.40m arm (11' 2")	3.60m arm (11' 10")	
⊙3.40 m³ (4.45 yd³) A TYPE	3.05 m³ (3.99 yd³)	1740 mm (68.5")	-	4600 kg (10140 lb)			
⊙3.40 m³ (4.45 yd³) B TYPE	2.97 m³ (3.88 yd³)	1700 mm (66.9")	-	3780 kg (8330 lb)			
⊙4.04 m³ (5.28 yd³)	3.60 m³ (4.71 yd³)	1970 mm (77.6")	-	5020 kg (11070 lb)			
⊙4.50 m³ (5.88 yd³)	3.99 m³ (5.22 yd³)	2130 mm (83.8")	-	5240 kg (11550 lb)			
◆3.40 m³ (4.45 yd³)	3.05 m³ (3.99 yd³)	1740 mm (68.5")	-	4670 kg (10230 lb)			
◆4.04 m³ (5.28 yd³)	3.60 m³ (4.71 yd³)	1970 mm (77.6")	-	4890 kg (10780 lb)			
◆4.50 m³ (5.88 yd³)	3.99 m³ (5.22 yd³)	2130 mm (83.8")	-	5240 kg (11550 lb)			

⊙ : Rock bucket      ◆ : Heavy duty bucket

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

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

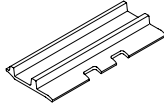
Applicable for materials with density of 1100kgf/m³ (1850lbf/yd³) or less

## 7. UNDERCARRIAGE

### 1) TRACKS

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

### 2) TYPES OF SHOES

Model	Shapes		Double grouser		
					
R800LC-7A	Shoe width	mm(in)	700(28)	800(32)	900(36)
	Operating weight	kg(lb)	82320(181480)	83060(183110)	83790(184720)
	Ground pressure	kgf/cm <sup>2</sup> (psi)	1.07(15.22)	0.94(13.37)	0.85(12.09)
	Overall width	mm(ft-in)	4200(13' 9")	4300(14' 1")	4400(14' 5")

### 3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	3EA
Track rollers	9EA
Track shoes	51EA

### 4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

#### Method of selecting shoes

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

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

※ **Table 1**

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

※ **Table 2**

Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	<ul style="list-style-type: none"> <li>• Travel at low speed on rough ground with large obstacles such as boulders or fallen trees</li> </ul>
B	Normal soil, soft ground	<ul style="list-style-type: none"> <li>• These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees</li> <li>• Travel at high speed only on flat ground</li> <li>• Travel slowly at low speed if it is impossible to avoid going over obstacles</li> </ul>
C	Extremely soft ground (Swampy ground)	<ul style="list-style-type: none"> <li>• Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B</li> <li>• These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees</li> <li>• Travel at high speed only on flat ground</li> <li>• Travel slowly at low speed if it is impossible to avoid going over obstacles</li> </ul>

## 8. SPECIFICATIONS FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Cummins QSX 15
Type	4-cycle turbocharged charge 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	137 × 169mm(5.39" × 6.65")
Piston displacement	15000cc(915cu in)
Compression ratio	17 : 1
Rated gross horse power(SAE J1995)	517ps at 1800rpm(510Hp / 380kW at 1800rpm)
Maximum torque	241.1kgf · m(1744lbf · ft) at 1400rpm
Engine oil quantity	45.4 l (12U.S. gal)      *43.5 l (11.5U.S. gal)
Dry weight	1451kg(3200lb)
High idling speed	1800 ± 50rpm
Low idling speed	800 ± 50rpm
Rated fuel consumption	165.5g/Hp · hr at 1800rpm
Starting motor	Prestolite MS7 (24V-9.0kW)
Alternator	Delco Remy 24V-100A
Battery	4 × 12V × 200Ah

\* Low noise

### 2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 280cc/rev
Maximum pressure	330kgf/cm <sup>2</sup> (4690psi)[360kgf/cm <sup>2</sup> (5120psi)]
Rated oil flow	2 × 504 l /min (133.1U.S. gpm/110.9U.K. gpm)
Rated speed	1800rpm

[ ]: Power boost



### 3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40kgf/cm <sup>2</sup> (569psi)
Rated oil flow	27 l /min(7.1U.S. gpm/5.9U.K. gpm)

### 4) MAIN CONTROL VALVE

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

[ ]: Power boost

### 5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	250cc/rev
Relief pressure	295kgf/cm <sup>2</sup> (4200psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	107kgf · m(774lb · ft)
Brake release pressure	30~50kgf/cm <sup>2</sup> (427~711psi)
Reduction gear type	2 - stage planetary

### 6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	350kgf/cm <sup>2</sup> (4980psi)
Capacity(max / min)	304.1/205.2cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	18kgf/cm <sup>2</sup> (256psi)
Braking torque	114kgf · m(825lb · ft)

## 7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm <sup>2</sup> (92psi)
	Maximum	25kgf/cm <sup>2</sup> (360psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

## 8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 200 × ∅ 140 × 1892mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 215 × ∅ 150 × 2250mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 200 × ∅ 140 × 1593mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

## 9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R800LC-7A	Standard	※ 700mm(28")	1.07kgf/cm <sup>2</sup> (15.22psi)	51	4200mm(13' 9")
	Option	※ 800mm(32")	0.94kgf/cm <sup>2</sup> (13.37psi)	51	4300mm(14' 1")
		※ 900mm(36")	0.85kgf/cm <sup>2</sup> (12.9psi)	51	4400mm(14' 5")

※ Double grouser

## 10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R800LC-7A	Standard	4.53m <sup>3</sup> (5.93yd <sup>3</sup> )	3.95m <sup>3</sup> (5.17yd <sup>3</sup> )	5	2040mm(80.3")	2200mm(86.6")
	Option	3.40m <sup>3</sup> (4.45yd <sup>3</sup> )	3.00m <sup>3</sup> (3.92yd <sup>3</sup> )	4	1615mm(63.6")	1775mm(69.9")
		4.80m <sup>3</sup> (6.28yd <sup>3</sup> )	4.19m <sup>3</sup> (5.48yd <sup>3</sup> )	5	2135mm(84.1")	2295mm(90.4")
		5.10m <sup>3</sup> (6.67yd <sup>3</sup> )	4.44m <sup>3</sup> (5.81yd <sup>3</sup> )	6	2245mm(88.4")	2405mm(94.7")
		⊙3.40m <sup>3</sup> (4.45yd <sup>3</sup> )	3.00m <sup>3</sup> (3.92yd <sup>3</sup> )	4	1635mm(64.4")	-

⊙ : Rock bucket

## 9. RECOMMENDED OILS

Use only oils listed below or equivalent.

Do not mix different brand oil.

Service point	Kind of fluid	Capacity l (U.S. gal)	Ambient temperature °C (°F)						
			-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)
Engine oil pan	Engine oil	45.4(12) 43.5(11.5) (Low noise)					SAE 30		
			SAE 10W						
			SAE 10W-30						
							SAE 15W-40		
Swing drive	Gear oil	6.0×2 (1.6×2)	SAE 85W-140						
Final drive		25×2 (6.6×2)							
Hydraulic tank	Hydraulic oil	Tank; 450(119)	ISO VG 32						
		System; 800(211)	ISO VG 46						
			ISO VG 68						
Fuel tank	Diesel fuel	940(248)	ASTM D975 NO.1						
			ASTM D975 NO.2						
Lower roller	Gear oil	1.56(0.4)	SAE 85W-140						
Upper roller		0.6(0.15)							
Idler		1.1(0.3)							
Fitting (Grease nipple)	Grease	As required	NLGI NO.1						
			NLGI NO.2						
Radiator (Reservoir tank)	Mixture of antifreeze and water 50 : 50	50(13.2) 56(15) (Low noise)	Ethylene glycol base permanent type						

**SAE** : Society of Automotive Engineers

**API** : American Petroleum Institute

**ISO** : International Organization for Standardization

**NLGI** : National Lubricating Grease Institute

**ASTM** : American Society of Testing and Material