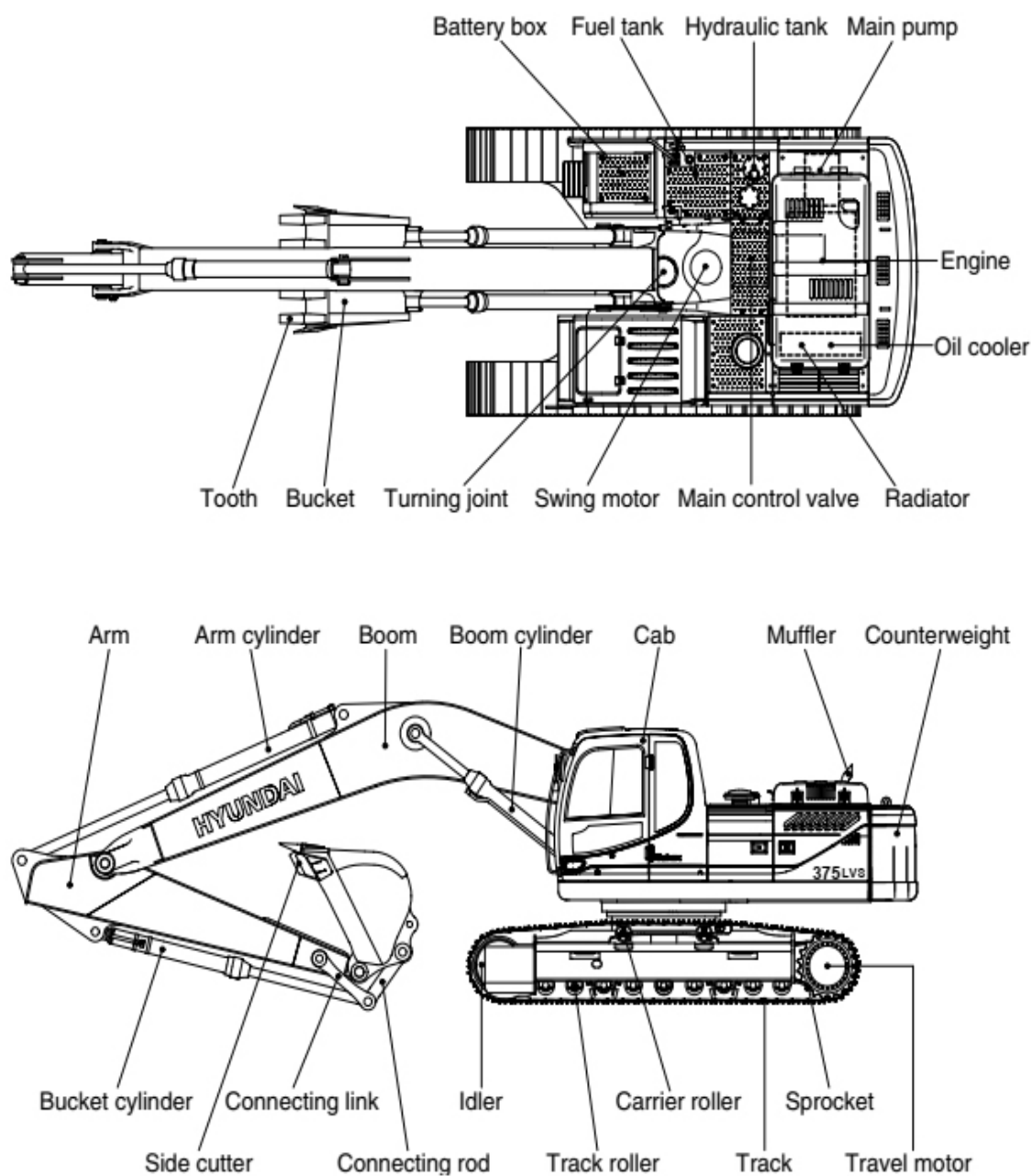
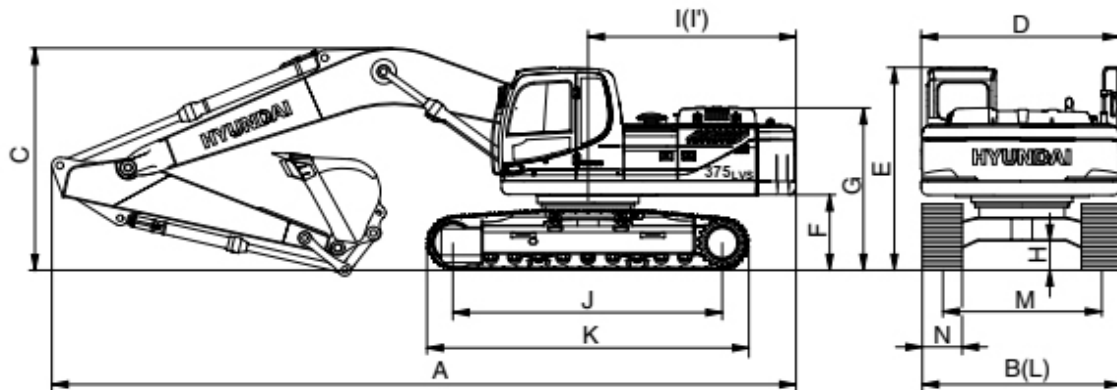


## 1. MAJOR COMPONENT



375LV82SP01

## 2. SPECIFICATIONS

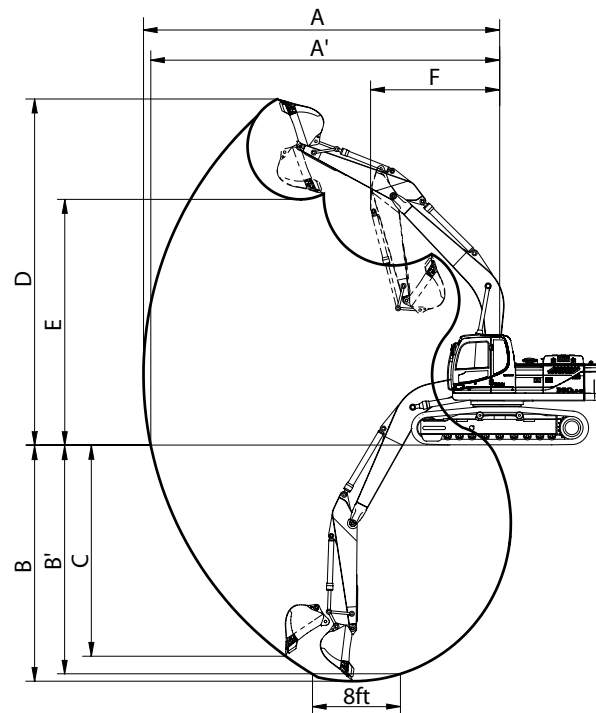


375LV52SP02

Description		Unit	Specification
Operating weight		kg (lb)	38700 (85320)
Bucket capacity (SAE heaped), standard		m³ (yd³)	1.90 (2.49)
Overall length	A	mm (ft-in)	10850 (35' 7")
Overall width, with 600 mm shoe	B		3340 (10' 11")
Overall height	C		3540 (11' 7")
Superstructure width	D		2980 ( 9' 9")
Overall height of cab	E		3175 (10' 5")
Ground clearance of counterweight	F		1250 ( 4' 1")
Engine cover height	G		2695 ( 8' 10")
Minimum ground clearance	H		555 ( 1' 10")
Rear-end distance	I		3350 (11' 1")
Rear-end swing radius	I'		3415 (11' 2")
Distance between tumblers	J		4340 (14' 3")
Undercarriage length	K		5280 (17' 4")
Undercarriage width	L		3340 (11' 0")
Track gauge	M		2740 ( 9' 0")
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	9.1
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm² (psi)	0.71 (10.30)
Max traction force		kg (lb)	30500 (67240)

### 3. WORKING RANGE

#### ·6.15 m (20' 2") BOOM



375LV52SP03

Description		2.8 m (9' 2") Arm
Max digging reach	A	10570 mm (34' 8")
Max digging reach on ground	A'	10330 mm (33' 11")
Max digging depth	B	6590 mm (21' 7")
Max digging depth (8ft level)	B'	6420 mm (21' 1")
Max vertical wall digging depth	C	4820mm (15' 10")
Max digging height	D	10450 mm (34' 4")
Max dumping height	E	7340 mm (24' 1")
Min swing radius	F	4130mm (13' 6")
Bucket digging force	SAE	199.1[217.2] kN
		20300 [22150] kgf
		44750 [48830] lbf
	ISO	228.5 [249.3] kN
		23300 [25420] kgf
		51370 [56040] lbf
Arm crowd force	SAE	175.5 [191.5] kN
		17900 [19530] kgf
		39460[43060] lbf
	ISO	182.4 [199.0] kN
		18600 [20100] kgf
		41010 [50940] lbf

[ ] : Power boost

## 4. WEIGHT















Item	R375LVS	
	kg	lb
Upperstructure assembly	15720	34660
Main frame weld assembly	3176	7000
Engine assembly	740	1630
Main pump assembly	193	430
Main control valve assembly	421	930
Swing motor assembly	443	980
Hydraulic oil tank assembly	335	740
Fuel tank assembly	237	520
Counterweight	6500	14330
Cab assembly	490	1080
Lower chassis assembly	11500	25350
Track frame weld assembly	3970	8750
Swing bearing	547	1210
Travel motor assembly	380	840
Turning joint	53	120
Track recoil spring and idler	225	500
Idler	261	580
Carrier roller	41	90
Track roller	79	180
Track-chain assembly (600 mm standard triple grouser shoe)	2410	5320
Front attachment assembly (6.15 m boom, 2.8 m arm, 1.90 m³ SAE heaped bucket)	6140	13540
6.15 m boom assembly	2983	6580
2.8 m arm assembly	1390	3070
1.90 m³ SAE heaped bucket	1760	3880
Boom cylinder assembly	356	790
Arm cylinder assembly	470	1040
Bucket cylinder assembly	310	690
Bucket control linkage assembly	366	810

## 5. LIFTING CAPACITIES

1) 6.15 m (20' 2") boom, 2.8 m (9' 2") arm equipped with 1.90 m<sup>3</sup> (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6500 kg (14330 lb) counterweight.

·  : 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)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
9.0 m (30 ft)	kg lb															
7.5 m (25.0 ft)	kg lb									*5340 *11770	*5340 *11770			*5140 *11330	*4490 *9900	8.79 (28.8)
6.0 m (20.0 ft)	kg lb									*5600 *12350	*5600 *12350			*5200 *11460	3680 8110	9.59 (31.5)
4.5 m (15.0 ft)	kg lb							*7040 *15520	*7040 *15520	*6130 *13510	5700 12570	*5280 *11640	*4020 *8860	*5260 *11600	3240 7140	10.07 (33.0)
3.0 m (10.0 ft)	kg lb					*11750 *25900	*11750 *25900	*8430 *18580	7780 17150	*6860 *15120	5390 11880	*6020 *13270	3880 8550	*4980 *10980	3020 6660	10.29 (33.8)
1.5 m (5.0 ft)	kg lb					*14020 *30910	*11190 *24670	*9700 *21380	7240 15960	*7580 *16710	5100 11240	*6100 *13450	3730 8220	4940 10890	2980 6570	10.25 (33.6)
Ground Line	kg lb					*14970 *33000	*10760 *23720	*10530 *23210	6900 15210	*8020 *17680	4890 10780	*5990 *13210	3630 8000	5150 11350	3110 6860	9.95 (32.6)
-1.5 m (-5.0 ft)	kg lb			*14110 *31110	*14110 *31110	*14920 *32890	*10690 *23570	*10780 *23770	6760 14900	7920 17460	4790 10560			5690 12540	3460 7630	9.38 (30.8)
-3.0 m (-10.0 ft)	kg lb	*15850 *34940	*15850 *34940	*20060 *44220	*20060 *44220	*14040 *30950	*10830 *23880	*10360 *22840	6800 14990	7850 17310	4840 10670			6090 13430	4210 9280	8.45 (27.7)
-4.5 m (-15.0 ft)	kg lb			*16840 *37130	*16840 *37130	*12100 *26680	*11170 *24630	*8910 *19640	*7040 *15520					*5740 *12650	5740 12650	7.01 (23.0)
-6.0 m (-20.0 ft)	kg lb															

- 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.




## 6. BUCKET SELECTION GUIDE

### 1) HEAVY DUTY BUCKET



1.90 m<sup>3</sup> SAE  
heaped bucket

Capacity		Width		Weight	Recommendation					
					6.15m(20'2") boom					
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.8 m arm (9' 2")					
※1.90m <sup>3</sup> (2.49yd <sup>3</sup> )	1.64 m <sup>3</sup> (2.2yd <sup>3</sup> )	1535 mm (60.4")	1660 mm (65.4")	1760 kg (3880 lb)						

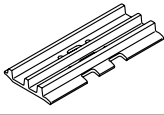
-  Applicable for materials with density of 2000 kg/m<sup>3</sup> (3370 lb/yd<sup>3</sup>) or less
-  Applicable for materials with density of 1600 kg/m<sup>3</sup> (2700 lb/yd<sup>3</sup>) or less
-  Applicable for materials with density of 1100 kg/m<sup>3</sup> (1850 lb/yd<sup>3</sup>) or less

## 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
			
R375LVS	Shoe width	mm (in)	600 (24)
	Operating weight	kg (lb)	38700 (85320)
	Ground pressure	kgf/cm <sup>2</sup> (psi)	0.71 (10.30)
	Overall width	mm (ft-in)	3340 (10' 11")

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

Item	Quantity
Carrier rollers	2 EA
Track rollers	9 EA
Track shoes	48 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 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
800 mm triple grouser	Option	C
900 mm triple grouser	Option	C

※ **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
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 QSL / HYUNDAI HE 8.9
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	114 × 145 mm (4.49" × 5.70")
Piston displacement	8900 cc (540 cu in)
Compression ratio	17.8 : 1
Rated gross horse power (SAE J1995)	311 Hp at 1700 rpm (232 kW at 1700 rpm)
Maximum torque	148 kgfm (1070 lbfft) at 1400 rpm
Engine oil quantity	31.7ℓ(8.4 U.S. gal)
Dry weight	740 kg (1630 lb)
Low idling speed	850 ± 100 rpm
High idling speed	1700 ± 50 rpm
Rated fuel consumption	164.8 g/Hphr at 1850 rpm
Starting motor	ST9514(24V-7.8kW)
Alternator	Delco Remy 24V-90A
Battery	2 × 12V × 150Ah

### 2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 185 cc/rev
Maximum pressure	330 kgf/cm <sup>2</sup> (4690 psi) [360 kgf/cm <sup>2</sup> (5120 psi)]
Rated oil flow	2 × 333ℓ/min (87.9 U.S. gpm / 73.2 U.K. gpm)
Rated speed	1700 rpm

[ ]: Power boost

### 3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm <sup>2</sup> (570 psi)
Rated oil flow	25.5ℓ/min (6.7 U.S. gpm/5.6 U.K. gpm)

### 4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330 kgf/cm <sup>2</sup> (4690 psi) [360 kgf/cm <sup>2</sup> (5120 psi)]
Overload relief valve pressure	390 kgf/cm <sup>2</sup> (5550 psi)

[ ]: Power boost

### 5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	240 cc/rev
Relief pressure	290 kgf/cm <sup>2</sup> (4120 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	2944 kgf·m (21290 lbfft)
Brake release pressure	26 kgf/cm <sup>2</sup> (370 psi)
Reduction gear type	2 - stage planetary

### 6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	360 kgf/cm <sup>2</sup> (5120 psi)
Capacity (max / min)	185.2/114.2 cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	10.6 kgf/cm <sup>2</sup> (154 psi)
Braking torque	4005kgf·m (28970 lbfft)

## 7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø160×Ø110×1500 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø170×Ø120×1750 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø150×Ø105×1285 mm
	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
R375LVS	Standard	600 mm (24")	0.68 kgf/cm <sup>2</sup> (9.67 psi)	48	3340 mm (10' 11")

## 9) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R375LVS	Standard	1.90 m <sup>3</sup> (2.49 yd <sup>3</sup> )	1.64 m <sup>3</sup> (2.2 yd <sup>3</sup> )	5	1535mm (60.4")	1660 mm (65.4")

## 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℃(℉)									
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)	
Engine oil pan	Engine oil	31.7 (8.4)										
				★SAE 5W-40								
				SAE 10W-30								
				SAE 15W-40								
Swing drive	Gear oil	8.0 (2.1)										
Final drive		5.5×2 (1.5×2)				SAE 85W-140						
Hydraulic tank	Hydraulic oil	Tank: 210 (55.5) System: 415 (110)		ISO VG 32								
				ISO VG 46								
				ISO VG 68								
Fuel tank	Diesel fuel	610 (161)		★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★ <sup>1</sup>	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

★<sup>1</sup> : Soft water

City water or distilled water