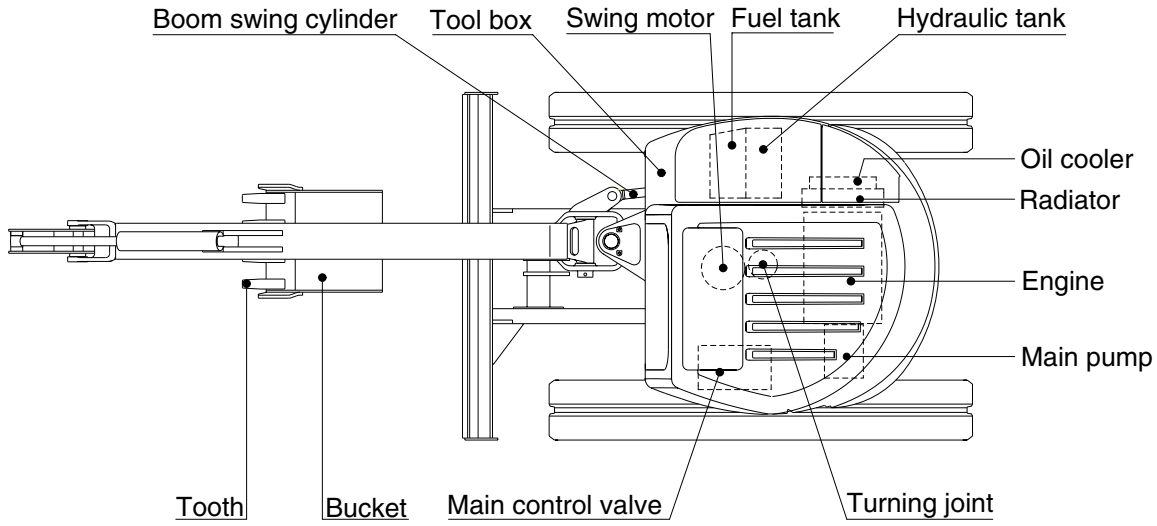
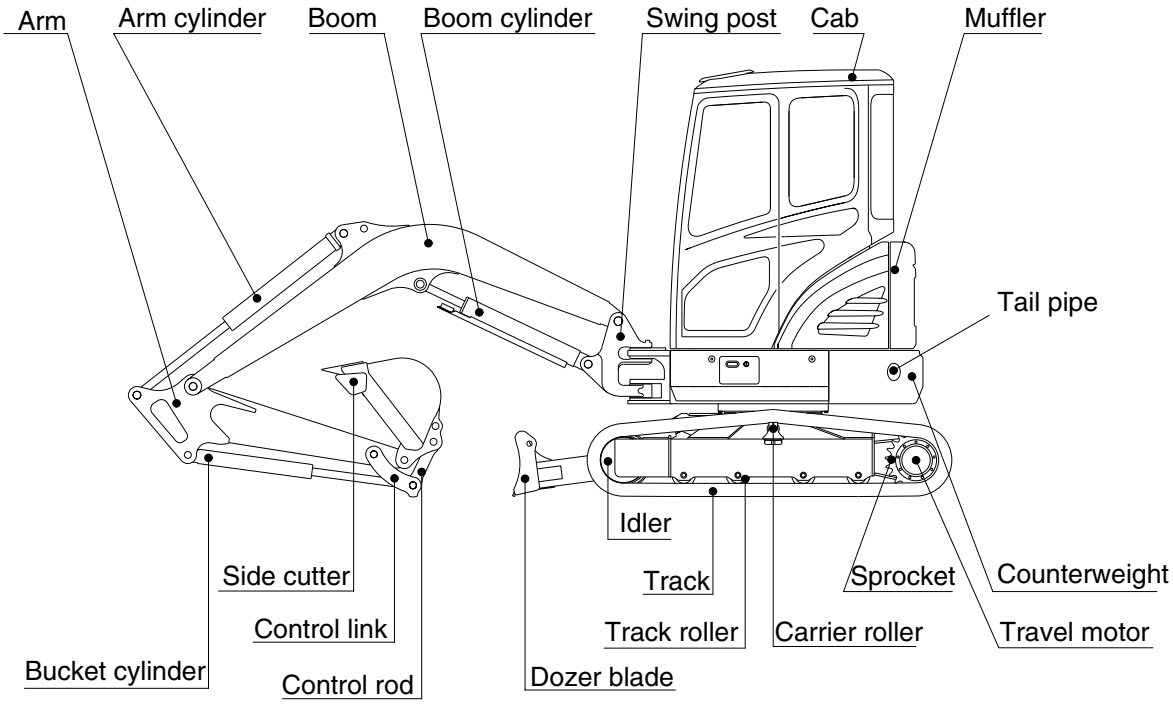
1. MAJOR COMPONENT

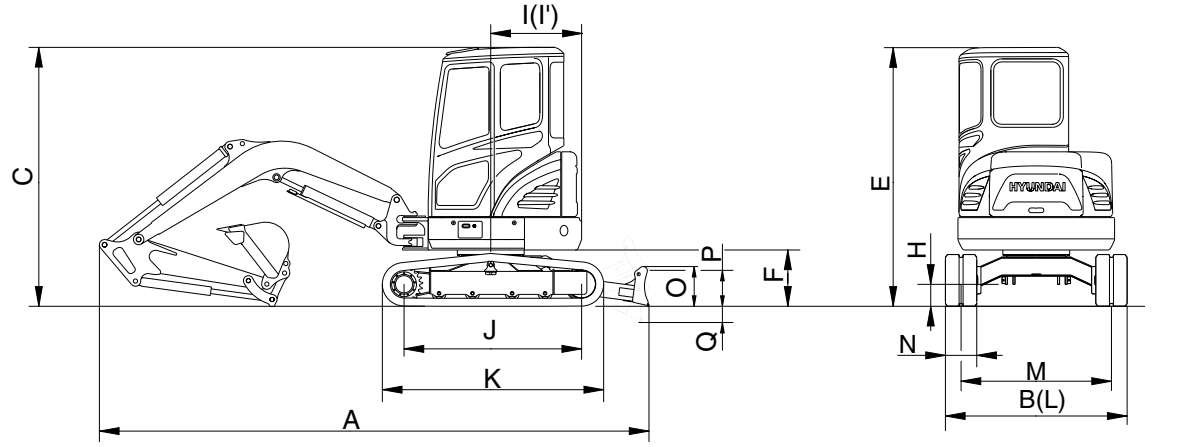




R35Z72SP01

2. SPECIFICATIONS

1) 2.5m(8' 2") MONO BOOM, 1.3m(4' 3") ARM, WITH BOOM SWING POST

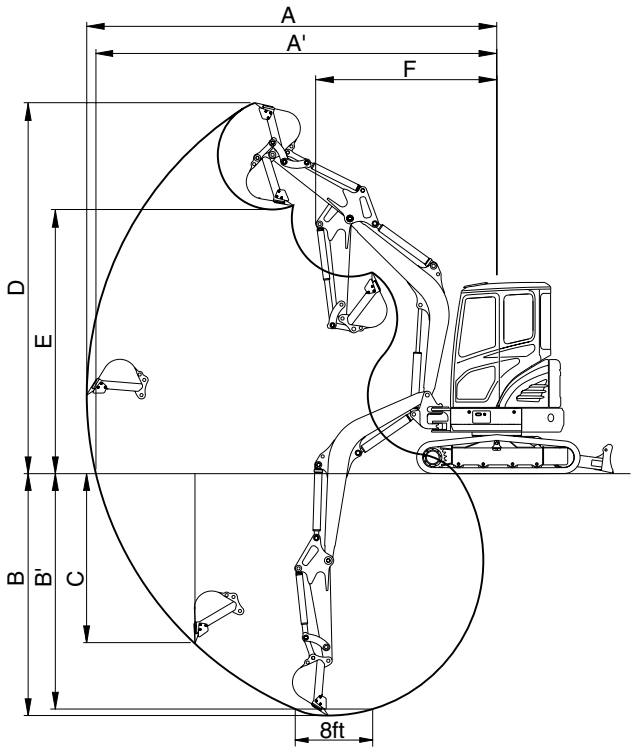


R35Z72SP02

Description		Unit	Specification
Operating weight		kg(lb)	3650(8050)
Bucket capacity(SAE heaped), standard		$m^3(yd^3)$	0.11(0.14)
Overall length	A	mm(ft-in)	4790(15' 9")
Overall width, with 300mm shoe	B		1740(5' 9")
Overall height	C		2500(8' 2")
Overall height of cab	E		2500(8' 2")
Ground clearance of counterweight	F		540(1' 9")
Minimum ground clearance	H		290(0' 11")
Rear-end distance	I		870(2' 10")
Rear-end swing radius	I'		870(2' 10")
Distance between tumblers	J		1700(5' 7")
Undercarriage length	K		2130(7' 0")
Undercarriage width	L		1740(5' 9")
Track gauge	M		1440(4' 9")
Track shoe width, standard	N		300(1' 0")
Height of blade	O		370(1' 3")
Ground clearance of blade up	P		375(1' 3")
Depth of blade down	Q		390(1' 3")
Travel speed(Low/high)		km/hr(mph)	2.7/4.5(1.7/2.8)
Swing speed		rpm	9.5
Gradeability		Degree(%)	35(70)
Ground pressure(300mm shoe)		$kgf/cm^2(psi)$	0.34(4.83)

3. WORKING RANGE

1) 2.5m(8' 2") MONO BOOM WITH BOOM SWING POST



R5572SP03

Description		1.3m(4' 3") Arm
Max digging reach	A	5360mm (17' 7")
Max digging reach on ground	A'	5240mm (17' 2")
Max digging depth	B	3150mm (10' 4")
Max digging depth (8ft level)	B'	2660mm (8' 9")
Max vertical wall digging depth	C	2190mm (7' 2")
Max digging height	D	4830mm (15'10")
Max dumping height	E	3460mm (11' 4")
Min swing radius	F	2350mm (7' 9")
Boom swing radius(left/right)		75°/50°
Bucket digging force	SAE	27.9 kN
		2850 kgf
		6280 lbf
	ISO	31.4 kN
		3200 kgf
		7050 lbf
Arm crowd force	SAE	18.9 kN
		1930 kgf
		4250 lbf
	ISO	19.5 kN
		1990 kgf
		4390 lbf

4. WEIGHT

Item	kg	lb
Upperstructure assembly	2100	4630
Main frame weld assembly	480	1060
Engine assembly	155	340
Main pump assembly	25	55
Main control valve assembly	25	55
Swing motor assembly	40	90
Hydraulic oil tank assembly	50	110
Fuel tank assembly	30	70
Boom swing post	80	180
Counterweight	420	925
Cab assembly	210	460
Lower chassis assembly	1170	2580
Track frame weld assembly	400	880
Swing bearing	50	110
Travel motor assembly	35	77
Turning joint	15	35
Track recoil spring	12.5	27.5
Yoke	5	11
Idler	20	44
Carrier roller	2.7	6
Track roller	7.7	17
Sprocket	7.5	16.5
Rubber track(300㎜)	127.5	281
Dozer blade assembly	140	310
Front attachment assembly (2.5m boom, 1.3m arm, 0.11m^3 SAE heaped bucket)	460	1015
2.5m boom assembly	140	310
1.3m arm assembly	80	180
0.11m^3 SAE heaped bucket	80	180
Boom cylinder assembly	40	90
Arm cylinder assembly	40	90
Bucket cylinder assembly	30	70
Bucket control link assembly	20	45
Dozer cylinder assembly	30	70
Boom swing cylinder assembly	30	70

5. LIFTING CAPACITIES

1) 2.5m(8' 2") boom, 1.3m(4' 3") arm equipped with 0.11m³(SAE heaped) bucket and 300mm(12") rubber track, the dozer blade up with 420kg(925lb) counterweight.

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

Load point height		Load radius								At max. reach		
		1.0m(3.3ft)		2.0m(6.6ft)		3.0m(9.9ft)		4.0m(13.2ft)		Capacity		Reach
												m(ft)
4.0m (13.2ft)	kg lb									600 1320	510 1120	3.94 (12.9)
3.0m (9.9ft)	kg lb							560 1230	470 1040	420 930	360 790	4.74 (15.6)
2.0m (6.6ft)	kg lb					890 1960	750 1650	540 1190	460 1010	360 790	300 660	5.11 (16.8)
1.0m (3.3ft)	kg lb					830 1830	690 1520	520 1150	440 970	340 750	290 640	5.18 (17.0)
Ground Line	kg lb			1570 3460	1260 2780	790 1740	650 1430	500 1100	420 930	360 790	300 660	4.98 (16.3)
-1.0m (-3.3ft)	kg lb	*2100 *4630	*2100 *4630	1590 3510	1270 2800	780 1720	650 1430	500 1100	420 930	440 970	370 820	4.45 (14.6)
-2.0m (-6.6ft)	kg lb			1630 3590	1310 2890	810 1790	670 1480					

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.

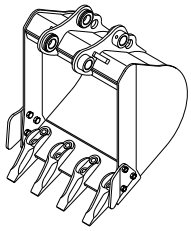
2) 2.5m(8' 2") boom, 1.3m(4' 3") arm equipped with 0.11m³(SAE heaped) bucket and 300mm(12") rubber track, the dozer blade down with 420kg(925lb) counterweight.

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

Load point height		Load radius								At max. reach		
		1.0m(3.3ft)		2.0m(6.6ft)		3.0m(9.9ft)		4.0m(13.2ft)		Capacity		Reach
												m(ft)
4.0m (13.2ft)	kg									*700	510	3.94
	lb									*1540	1120	(12.9)
3.0m (9.9ft)	kg							*760	470	*630	360	4.74
	lb							*1680	1040	*1390	790	(15.6)
2.0m (6.6ft)	kg					*1780	750	1410	460	*620	300	5.11
	lb					*3920	1650	3110	1010	*1370	660	(16.8)
1.0m (3.3ft)	kg					2400	690	1380	440	*650	290	5.18
	lb					5290	1520	3040	970	*1430	640	(17.0)
Ground Line	kg			*1730	1260	2340	650	1360	420	*740	300	4.98
	lb			*3810	2780	5160	1430	3000	930	*1630	660	(16.3)
-1.0m (-3.3ft)	kg	*2100	*2100	*2850	1270	2330	650	1350	420	*920	370	4.45
	lb	*4630	*4630	*6280	2800	5140	1430	2980	930	*2030	820	(14.6)
-2.0m (-6.6ft)	kg			*3540	1310	*2050	670					
	lb			*7800	2890	*4520	1480					

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



0.11m^3
SAE heaped bucket

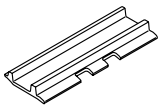
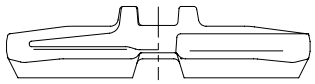
Capacity		Width		Weight	Recommendation
					2.5m (8' 2") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.3m (4' 3") arm
0.11m^3 (0.14yd^3)	0.09m^3 (0.12yd^3)	550mm (21.7")	610mm (24.0")	80kg (176lb)	Applicable for materials with density of 1600kgf/m^3 (2700ib/yd^3) or less

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 double grousers.

2) TYPES OF SHOES

Model	Shapes		Steel double grouser	Rubber track
				
R35Z-7	Shoe width	mm(in)	300(12")	300(12")
	Operating weight	kg(lb)	3720(8200)	3650(8050)
	Ground pressure	kgf/cm^2(psi)	0.34(4.83)	0.34(4.83)
	Overall width	mm(ft-in)	1740(5' 9")	1740(5' 9")

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	1EA
Track rollers	4EA
Track shoes	44EA

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Yanmar 3TNV88
Type	4-cycle diesel engine, low emission
Cooling method	Water cooling
Number of cylinders and arrangement	3 cylinders, in-line
Firing order	1-3-2
Combustion chamber type	Direct injection type
Cylinder bore × stroke	88 × 90mm(3.46" × 3.54")
Piston displacement	1642cc(100.2cu in)
Compression ratio	19.1 : 1
Rated gross horse power(SAE J1995)	27Hp at 2200rpm(20.3kW at 2200rpm)
Maximum torque at 1400rpm	10.8kgf · m(78.1lbf · ft)
Engine oil quantity	6.7 ℓ (1.8U.S. gal)
Dry weight	155kg(340lb)
High idling speed	2400+ 30rpm
Low idling speed	1100± 30rpm
Rated fuel consumption	185g/Hp · hr at 2200rpm
Starting motor	12V-1.2kW
Alternator	12V-40A
Battery	1 × 12V × 55Ah(5h rating)

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 17.5cc/rev
Maximum pressure	230kgf/cm² (3270psi)
Rated oil flow	2 × 38.5 ℓ /min (10.2U.S. gpm/ 8.5U.K. gpm)
Rated speed	2200rpm

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	10.7/5.1cc/rev
Maximum pressure	200/30kgf/cm^2(2845/430psi)
Rated oil flow	23.5/11.2 ℓ /min(6.2/3.0U.S. gpm/ 5.2/2.5U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	Sectional, 10 spools(11 Blocks)
Operating method	Hydraulic pilot system
Main relief valve pressure	230kgf/cm^2(3270psi) , 200kgf/cm^2(2845psi)
Overload relief valve pressure	250kgf/cm^2(3560psi)

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	22cc/rev
Relief pressure	200kgf/cm^2(2845psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	9.2kgf · m(66.5lbf · ft)
Brake release pressure	15~45kgf/cm^2(215~640psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	230kgf/cm^2(3270psi)
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	8kgf/cm^2(114psi)
Braking torque	6.5kgf · m(47lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	5kgf/cm²(71psi)
	Maximum	20kgf/cm²(284psi)
Single operation stroke	Lever	6.5/8.5mm(0.26/0.33in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 85 × ø 45 × 540mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 80 × ø 45 × 585mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 70 × ø 45 × 510mm
	Cushion	-
Boom swing cylinder	Bore dia × Rod dia × Stroke	ø 80 × ø 45 × 400mm
	Cushion	-
Dozer cylinder	Bore dia × Rod dia × Stroke	ø 95 × ø 50 × 152mm
	Cushion	-

※ 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
R35Z-7	300mm(12")	0.34kgf/cm²(4.83psi)	44	1740mm(5' 9")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R35Z-7	STD	0.11m³(0.14yd³)	0.09m³(0.12yd³)	4	550mm(21.7")	610mm(24.0")

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 ℃(°F)
			-20 (-4) / -10 (14) / 0 (32) / 10 (50) / 20 (68) / 30 (86) / 40 (104)
Engine oil pan	Engine oil	6.7(1.8)	SAE 30 SAE 10W SAE 10W-30 SAE 15W-40
Final drive	Gear oil	0.5×2 (0.1×2)	SAE 85W-140
Hydraulic tank	Hydraulic oil	Tank: 37(9.8) System: 60(15.9)	ISO VG 32 ISO VG 46 ISO VG 68
Fuel tank	Diesel fuel	40(10.5)	ASTM D975 NO.1 ASTM D975 NO.2
Fitting (Grease nipple)	Grease	As required	NLGI NO.1 NLGI NO.2
Radiator (Reservoir tank)	Mixture of antifreeze and water 50 : 50	5(1.3)	Ethylene glycol base permanent type