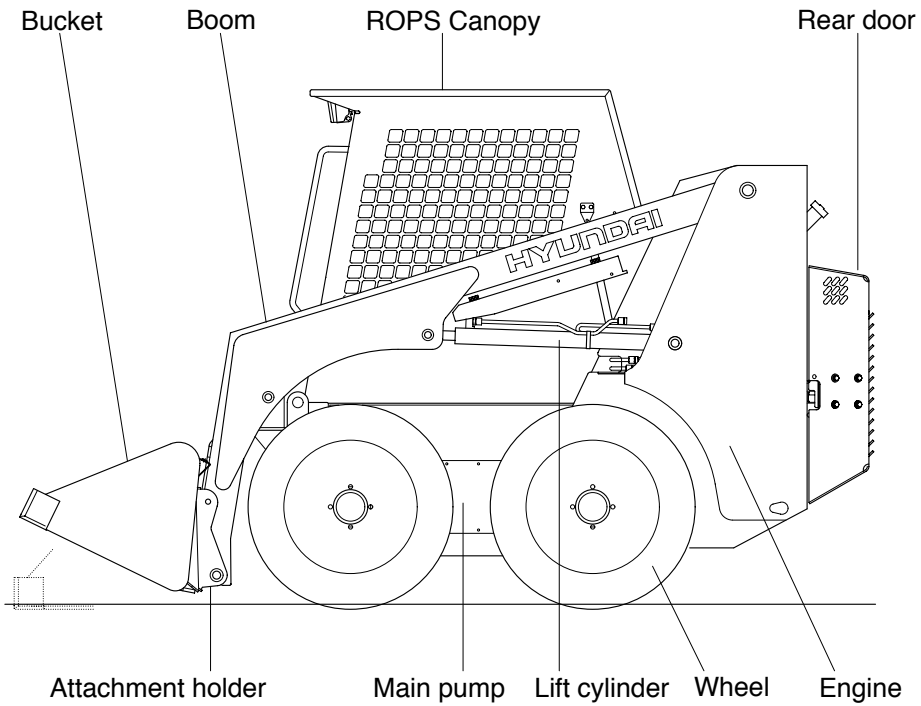
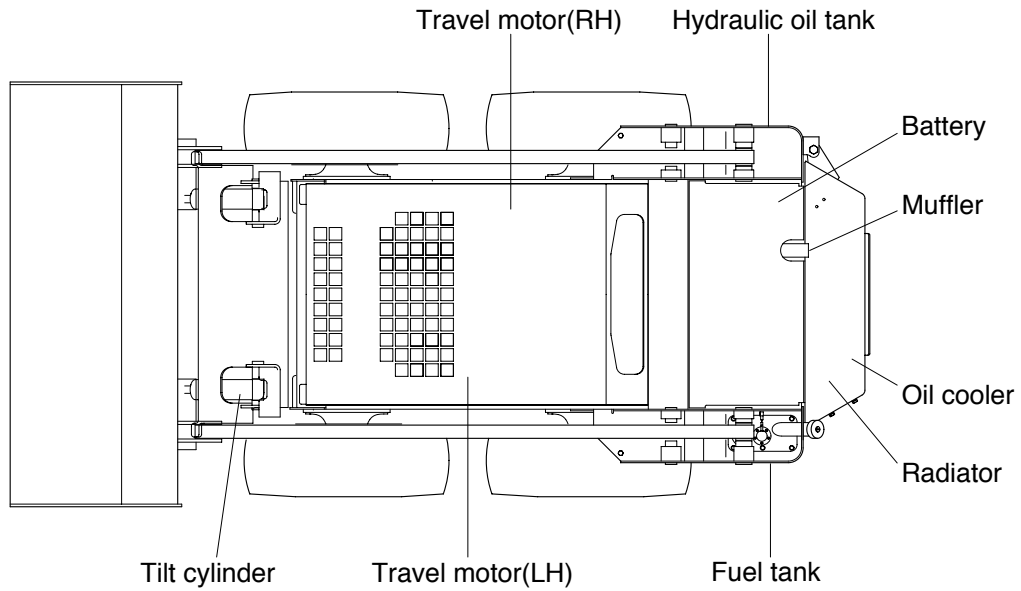


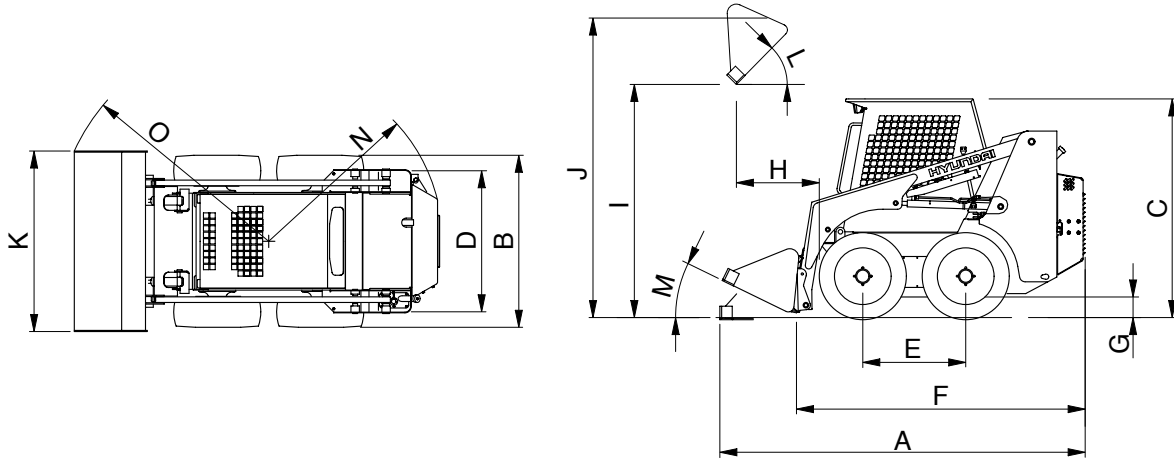
## GROUP 2 SPECIFICATIONS

### 1. MAJOR COMPONENTS



## 2. SPECIFICATIONS

### • WITH STANDARD BUCKET



Description		Unit	Specification	
Operating weight		kg(lb)	3260(7180)	
Bucket capacity	Struck	m <sup>3</sup> (yd <sup>3</sup> )	0.27(0.35)	
	Heaped		0.35(0.46)	
Overall length	A	mm(ft-in)	3470(11' 5")	
Overall width	B		1710( 5' 7")	
Overall height	C		2000( 6' 7")	
Tread	D		1377( 4' 6")	
Wheelbase	E		1045( 3' 5")	
Overall length(Less bucket)	F		2822( 9' 3")	
Ground clearance	G		218( 0" 8")	
Dump reach	H		568( 1' 10")	
Dump height	I		2550( 8' 4")	
Overall height(To hinge pin)	J		3150(10' 4")	
Width bucket	K		1778( 5' 10")	
Clearance circle(Rear)	N		1680( 5' 6")	
Clearance circle(Front / bucket)	O		1989( 6' 6")	
Dump angle	L		Degree(°)	40
Roll back angle(Carry position)	M	27		
Cycle time	Boom	Up	sec	4.0
		Down		3.5
	Tilt	Dump		2.3
		Roll back		2.2
Maximum travel speed		km/hr(mph)	11.7(7.3)	
Minimum turning radius(Without bucket)		mm(ft-in)	1250(4' 1")	
Gradeability		Degree(°)	30	

### 3. WEIGHT

Item	HSL810	
	kg	lb
Frame assembly	942	2075
Canopy	128	282
Engine assembly	225	495
Main pump assembly	59	130
Boom	338	744

#### 4. SPECIFICATION FOR MAJOR COMPONENTS

##### 1) ENGINE

Item	Specification
Model	Yanmar 4TNE98
Type	4-cycle diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Combustion chamber type	Direct injection type
Cylinder bore × stroke	98 × 110mm
Piston displacement	3320cc
Compression ratio	18 : 1
Rated gross horse power	70ps at 2500rpm
Maximum gross torque	24kgf · m at 1600rpm
Engine oil quantity	9.4
Dry weight	225kg
High idling speed	2650 ± 50rpm
Low idling speed	950 ± 50rpm
Rated fuel consumption	167g/Ps · hr
Starting motor	2.3kW
Alternator	12V-55AMP
Battery	1 × 12V × 90Ah

##### 2) MAIN PUMP

Item	Specification
Type	Axial tandem piston pump
Capacity	2 × 46.0cc/rev
Maximum operation pressure	320kg/cm <sup>2</sup> (4540psi)
Rated speed	2500rpm

### 3) AUXILIARY PUMP

Item	Specification
Type	Fixed displacement gear pump
Capacity	28cc/rev
Maximum operating pressure	210kg/cm <sup>2</sup> (2987psi)

### 4) MAIN CONTROL VALVE

Item	Specification
Type	3 spool(Mono block)
Main relief valve pressure	170kg/cm <sup>2</sup> (2418psi)

### 5) CYLINDER

Item		Specification
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø63 × Ø40 × 746mm
Boom cylinder	Bore dia × Rod dia × Stroke	Ø75 × Ø40 × 337mm

## 5. RECOMMENDED OILS

Use only oils listed below or equivalent.

Do not mix different brand oil.

Service point	Kind of fluid	Capacity (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	9.4(2.4)	SAE 30						
			SAE 10W						
Power train	Engine oil	Right : 10.5(2.1)	SAE 10W-30						
		Left : 10.5(2.1)							
Hydraulic tank	Hydraulic oil	Tank: 50(13.2)	ISO VG 32						
		System: 57(15.1)	ISO VG 46						
			ISO VG 68						
Fuel tank	Diesel fuel	85(22.1)	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	10.3(2.7)	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