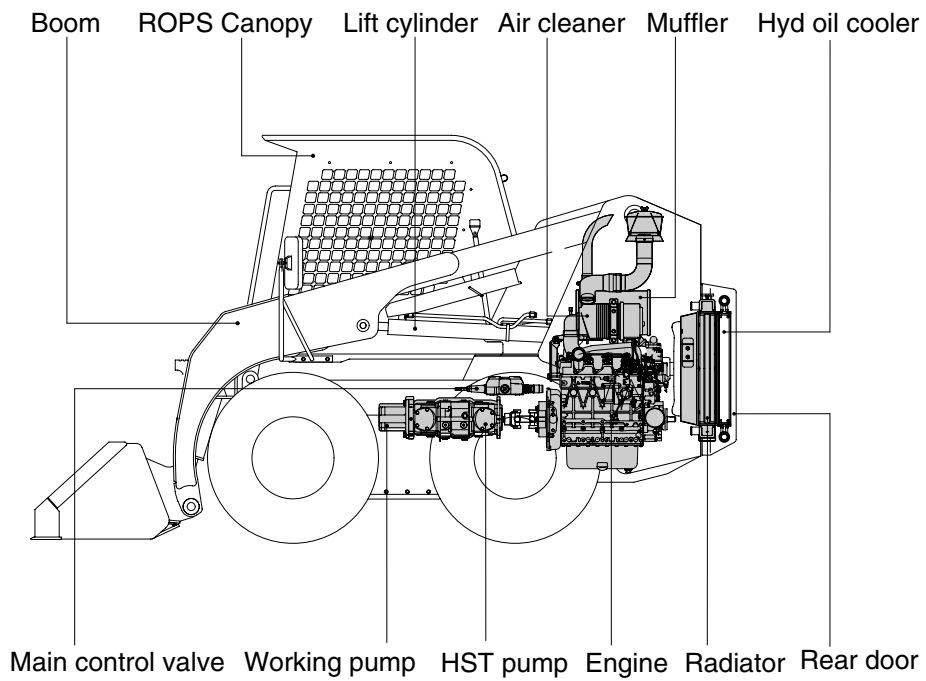
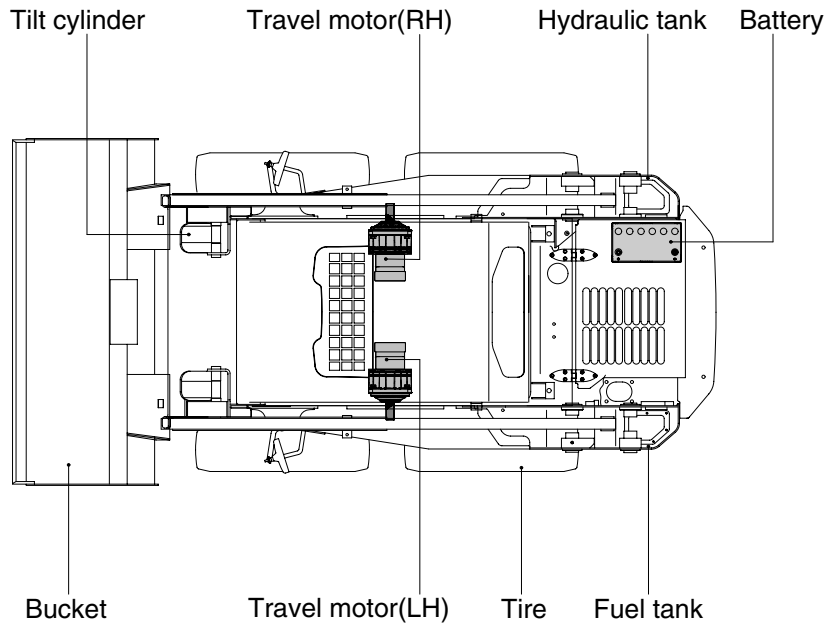


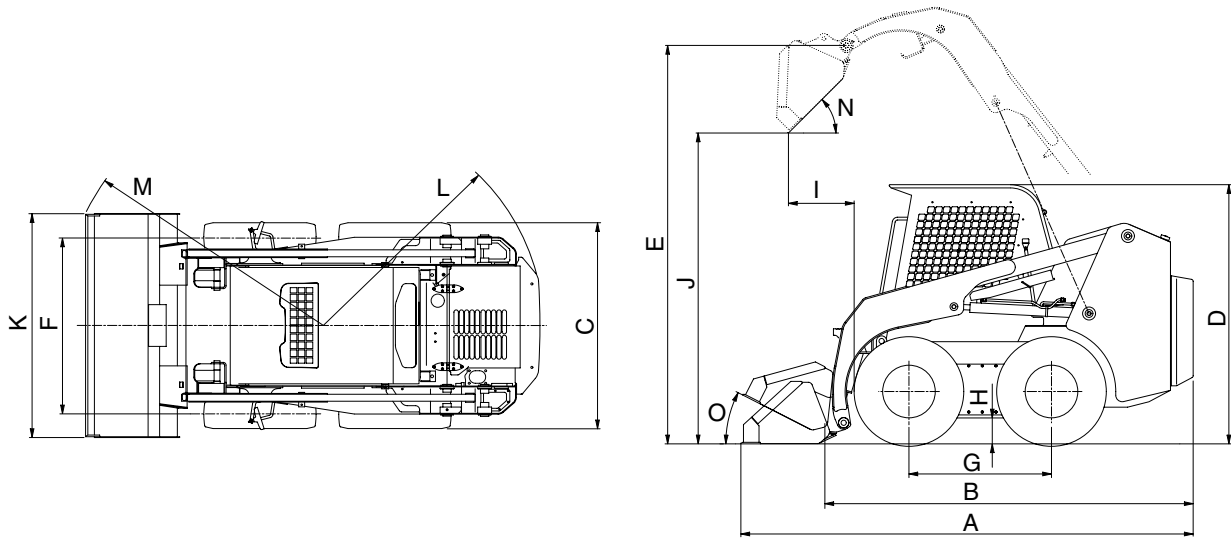
GROUP 2 SPECIFICATIONS

1. MAJOR COMPONENTS



2. SPECIFICATIONS

· WITH STANDARD BUCKET AND CANOPY



6507A2SP02

Description		Unit	Specification	
Operating weight		kg(lb)	2690(5790)	
Bucket capacity	Struck	m ³ (yd ³)	0.25(0.33)	
	Heaped		0.31(0.41)	
Overall length	A	mm(ft-in)	3270(10' 9")	
Overall length(Without bucket)	B		2625(8' 7")	
Overall width(Except bucket)	C		1515(5' 0")	
Overall height	D		1965(6' 5")	
Overall height(To hinge pin)	E		2915(9' 7")	
Tread	F		1255(4' 1")	
Wheelbase	G		990(3' 3")	
Ground clearance	H		183(0' 7")	
Dump reach	I		550(1' 10")	
Dump height	J		2240(7' 4")	
Bucket width	K		1625(5' 4")	
Clearance circle(Rear)	L		1560(5' 1")	
Clearance circle(Front / bucket)	M		1920(6' 4")	
Dump angle	N		Degree(°)	45
Roll back angle(Carry position)	O	27		
Cycle time	Boom	Up	sec	3.9
		Down		2.3
	Bucket	Dump		1.9
		Roll back		1.3
Maximum travel speed		km/hr(mph)	11.1(6.9)	
Minimum turning radius(Without bucket)		mm(ft-in)	1300(4' 3")	
Gradeability		Degree(°)	20	

3. WEIGHT

Item	HSL650-7A	
	kg	lb
Frame assembly	760	1680
Canopy	164	362
Engine assembly	184	405
HST pump assembly (Pilot)	55	121
HST pump assembly (Mechanical)	45	99
Working pump	14	31
Main control valve	19	42
Travel motor	40	88
Boom	250	550
Bucket	170	375
Tire(10 × 16.5-6PR)	40	88
Boom cylinder	43	95
Bucket cylinder	24	53
Seat	9.6	21
Battery	20	44
Rear door assembly	58	128

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Kubota V2403M-DI-E3B
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	87 × 102.4mm
Piston displacement	2434cc
Compression ratio	20.5 : 1
Rated gross horse power	48.3ps at 2500rpm
Maximum gross torque	16.2kgf · m at 1600rpm
Engine oil quantity	9.5 l
Dry weight	186kg
High idling speed	less than 2745rpm
Low idling speed	1000 ± 50rpm
Rated fuel consumption	169g/ps · hr
Starting motor	12V-2.0kW
Alternator	12V-70AMP
Battery	1 × 12V × 100~120Ah

2) MAIN PUMP ASSY(HST PUMP)

Item	Specification	
Type	Axial tandem piston pump	←
Control method	Mechanical (Direct)	Hydraulic (Pilot)
Capacity	2 × 43.5cc/rev	←
Maximum operation pressure	280kg/cm ² (3980psi)	310kg/cm ² (4410psi)
Rated speed	2400rpm	2400rpm

3) AUXILIARY PUMP

Item	Specification	
Type	Gear pump	←
Usage	Implement pump	High flow pump
Capacity	26.7cc/rev	19.1cc/rev
Maximum operation pressure	175kg/cm ² (2490psi)	150kg/cm ² (2130psi)
Rated speed	2400rpm	2400rpm

4) MAIN CONTROL VALVE

Item	Specification
Type	3 spool(Mono block)
Main relief valve pressure	175kgf/cm ² (2490psi)

5) TRAVEL MOTOR

Item	Specification
Type	Fixed gear motor
Capacity	477.3cc/rev

6) CYLINDER

Item	Specification
Boom cylinder	Bore dia × Rod dia × Stroke ø 63 × ø 40 × 695mm
Bucket cylinder	Bore dia × Rod dia × Stroke ø 63 × ø 35 × 337mm

7) WHEELS

Item	Specification	
Tire	Tubeless type(STD)	10 × 16.5 - 6PR
	Tube type	7.5 × 16 - 12PR
	Solid type	8.25 × 15

5. 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	9.5(2.5)	SAE 15W-40						
			SAE 30						
			SAE 10W						
			SAE 10W-30						
Chain case	Engine oil	Right : 9.2(2.4) Left : 9.2(2.4)	SAE 10W-30						
Hydraulic tank	Hydraulic oil	Tank; 38(10.1) System; 45(11.9)	ISO VG 32						
			ISO VG 46						
			ISO VG 68						
Fuel tank	Diesel fuel	60(15.9)	ASTM D975 NO.1						
			ASTM D975 NO.2						
Fitting (Grease nipple)	Grease	As required	NLGI NO.1						
			NLGI NO.2						
Radiator	Mixture of antifreeze and water 50 : 50	3.6(0.9)	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

※ Fuel

- Use low sulfur fuel or ultra low sulfur fuel is strongly recommended.
 - Low sulfur fuel : Sulfur content ≤ 500 ppm.
 - Ultra low sulfur fuel : Sulfur content ≤ 15 ppm.
- If high-sulfur fuel is used as a diesel fuel, change the engine oil and oil filter at shorter intervals (approximately half).