Operation & Maintenance Manual



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S16-C4

Skid-Steer Loader

S/N B5WG11001 & Above

7505430enGB (10-22) (A)

CN S4

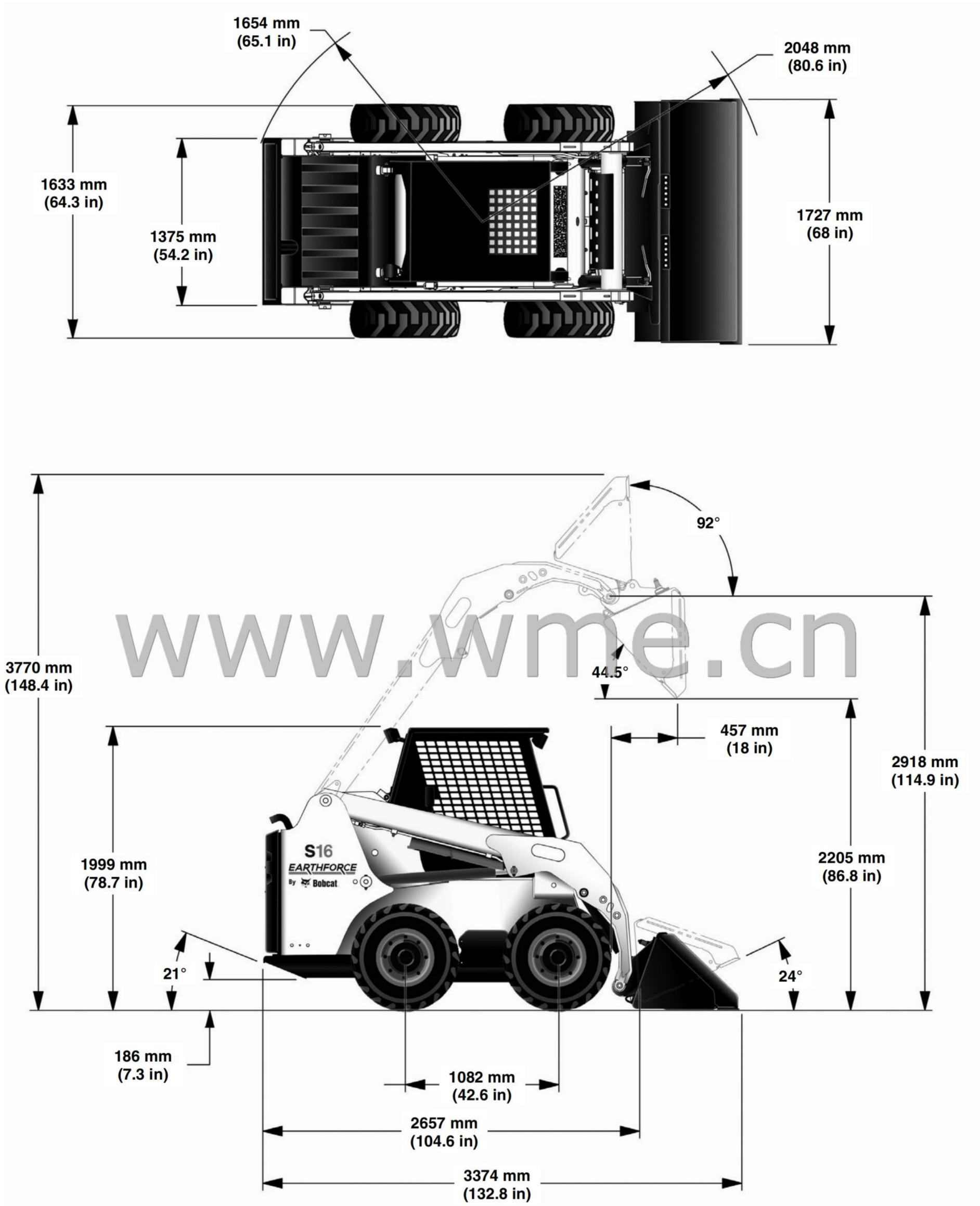
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LOADER SPECIFICATIONS

Machine Dimensions

- Dimensions are given for loader equipped with standard tyres and **68 in. Construction and Industrial bucket (part number: 6731406)** and may vary with other bucket types.

- Where applicable, specifications conform to SAE or ISO standards and are subject to change without notice.



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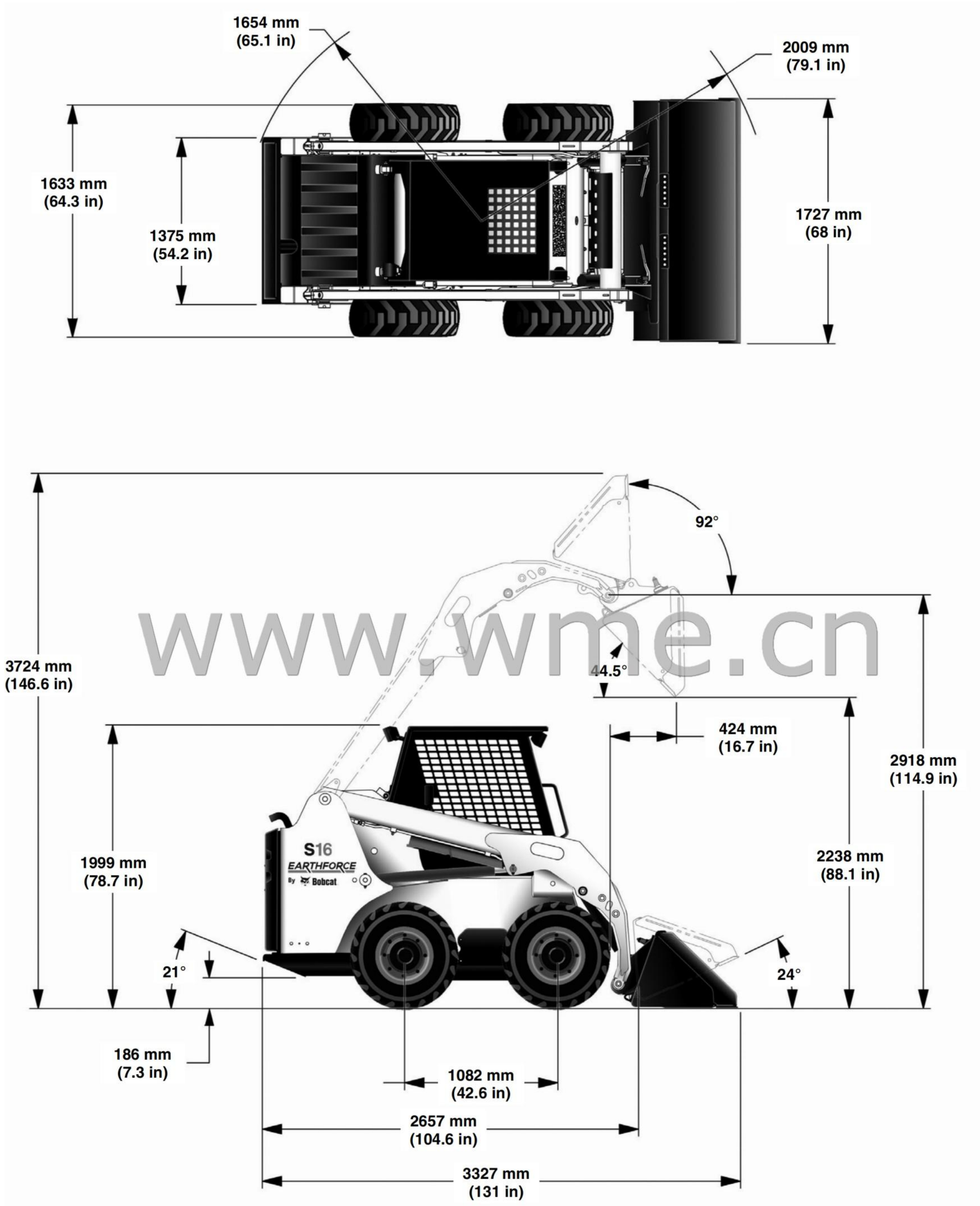
Changes of structure or weight distribution of the loader can cause changes in control and steering response, and can cause failure of the loader parts.

LOADER SPECIFICATIONS (CONT'D)

Machine Dimensions (Cont'd)

- Dimensions are given for loader equipped with standard tyres and **68 in. bucket (part number: 7311271)** and may vary with other bucket types.

- Where applicable, specifications conform to SAE or ISO standards and are subject to change without notice.



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Changes of structure or weight distribution of the loader can cause changes in control and steering response, and can cause failure of the loader parts.

LOADER SPECIFICATIONS (CONT'D)

Performance

Bucket Part Number	6731406	7311271
Rated Operating Capacity (ISO 14397-1)	687 (1515 lb)	744 (1640 lb)
with 200 Pound Frame Mounted Counterweight Kit (ISO 14397-1)	755 kg (1665 lb)	812 kg (1790 lb)
Tipping Load (ISO 14397-1)	1374 kg (3030 lb)	1487 kg (3279 lb)
Operating Weight	2619 kg (5775 lb)	2573 kg (5673 lb)
Breakout Force – Lift	1465 kg (3229 lb)	1565 kg (3451 lb)
Breakout Force – Tilt	1937 kg (4270 lb)	1924 kg (4241 lb)
Travel Speed	0 – 10,5 km/h (0 – 6.5 mph)	0 – 10,5 km/h (0 – 6.5 mph)

Engine

Make / Model	Kubota® / V2403 Stage IV
Fuel / Cooling	Diesel / Liquid
Horsepower: — SAE J1995 Net — SAE J1995 Gross	 36,0 kW (48.3 hp) @ 2700 rpm 36,5 kW (48.9 hp) @ 2700 rpm
Torque: — SAE J1995 Net — SAE J1995 Gross	 156,3 N•m (115.3 ft-lb) @ 1600 rpm 158,6 N•m (117.0 ft-lb) @ 1600 rpm
Low Idle rpm	1195 – 1245
High Idle rpm	Up to 2920
Number of Cylinders	4
Displacement	2434 cm^3 (148.5 in^3)
Bore / Stroke	87 mm / 102,4 mm (3.43 in / 4.03 in)
Lubrication	Gear Pump Pressure System with Filter
Crankcase Ventilation	Closed Breathing
Air Cleaner	Dry replaceable paper cartridge with separate safety element
Ignition	Diesel – Compression
Air Induction	Naturally Aspirated
Engine Coolant	Ethylene Glycol / Water Mixture
Starting Aid	Glow plugs – activated as needed in preheat position
Engine Operating Slope Limit	20° continuous; 30° intermittent

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LOADER SPECIFICATIONS (CONT'D)

Drive System

Main Drive	Fully hydrostatic, 4-wheel drive
Transmission	Infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors
Final Drive	Prestressed #80 heavy duty series endless roller chain (no master link) and sprockets in sealed chaincase with oil lubrication (Chains do not require periodic adjustments) Two chains per side with no idler sprocket
Axle Size	50,29 mm (1.98 in), heat treated
Wheel Bolts	Eight – 14 mm wheel bolts fixed to axle hubs

Controls

Machine Steering	Direction and speed controlled by two hand operated steering levers
Loader Hydraulics:	
— Lift and Tilt	Controlled by separate foot pedals
— Front Auxiliary (Option)	Controlled by lateral movement of the right hand steering lever
Engine	Hand operated speed control and key-type start switch
Service Brake	Two independent hydrostatic systems controlled by two hand operated steering levers
Secondary Brake	One of the hydrostatic transmissions
Parking Brake	Mechanical disc activated by manually operated switch on left instrument panel

Hydraulic System

Pump Type	Engine driven, gear type
Pump Capacity	57,2 L/min (15.1 U.S. gpm)
System Relief at Quick Couplers	22,3 – 23,3 MPa (223 – 233 bar) (3228 – 3373 psi)
Filter (Hydraulic / Hydrostatic)	Replaceable beta 10 micron = 200, spin-on element
Filter (Case Drain)	Replaceable beta 10 micron = 200, spin-on element
Hydraulic Cylinders: — Lift Cylinder (2): — Bore Diameter — Rod Diameter — Stroke — Tilt Cylinder (2): — Bore Diameter — Rod Diameter — Stroke	Double-acting 60,0 mm (2.36 in) 40,0 mm (1.57 in) 709,0 mm (27.91 in) 70,0 mm (2.76 in) 35,0 mm (1.38 in) 335,0 mm (13.19 in)
Control Valve (Manual)	3-Spool, open centre, manually operated with spring detent for lift float; Manually controlled auxiliary spool with spring detent for continuous flow
Control Valve (Electric)	3-Spool, open centre, manually operated with spring detent for lift float; Electrically controlled auxiliary spool for continuous flow
Hydraulic Function Time: — Raise Lift Arms — Lower Lift Arms — Bucket Dump — Bucket Rollback	 4.2 seconds 2.6 seconds 2.6 seconds 2.0 seconds

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LOADER SPECIFICATIONS (CONT'D)

Electrical System

Alternator	Belt driven, 120 amperes, open frame
Battery	12 volt, 600 cold cranking amperes @ -18°C (0°F), 133 minute reserve capacity @ 25 amperes
Starter	12 volt, gear type, 2,7 kW (3.62 hp)
Instrumentation	**Gauges:** Hourmeter, System Voltage, Engine Coolant Temperature, and Fuel Level **Warning lights:** Engine Oil Pressure, System Voltage, and Hydraulic Fluid Pressure **Indicator:** Interlock Control System **Other:** Lights

Capacities

Fuel	80,8 L (21.4 U.S. gal)
Engine Oil with Filter Change	8,5 L (9.0 qt)
Engine Cooling System with Heater	6,62 L (1.75 U.S. gal)
Engine Cooling System without Heater	6,24 L (1.65 U.S. gal)
Hydraulic / Hydrostatic Reservoir	9,31 L (2.5 U.S. gal)
Hydraulic / Hydrostatic System	28,8 L (7.62 U.S. gal)
Chaincase Reservoir	32,2 L (8.5 U.S. gal)

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Tyres

Standard Duty (Standard)	10.00 – 16.5, 8 Ply Rating
Heavy Duty (Option)	10.00 – 16.5, 10 Ply Rating
Solid (Option)	50 x 115 x 10
Recommended Pressure	Inflate tyres to MAXIMUM pressure shown on the sidewall of the tyre; DO NOT mix brands of tyres used on the same loader