EN

Bobcat®

Operation & Maintenance Manual



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S530-C4

Skid-Steer Loader

S/N B5N111001 & Above

7514635enGB (02-23) (A)

Original Instructions

CN S4

Skid-Steer Loaders Bobcat S530

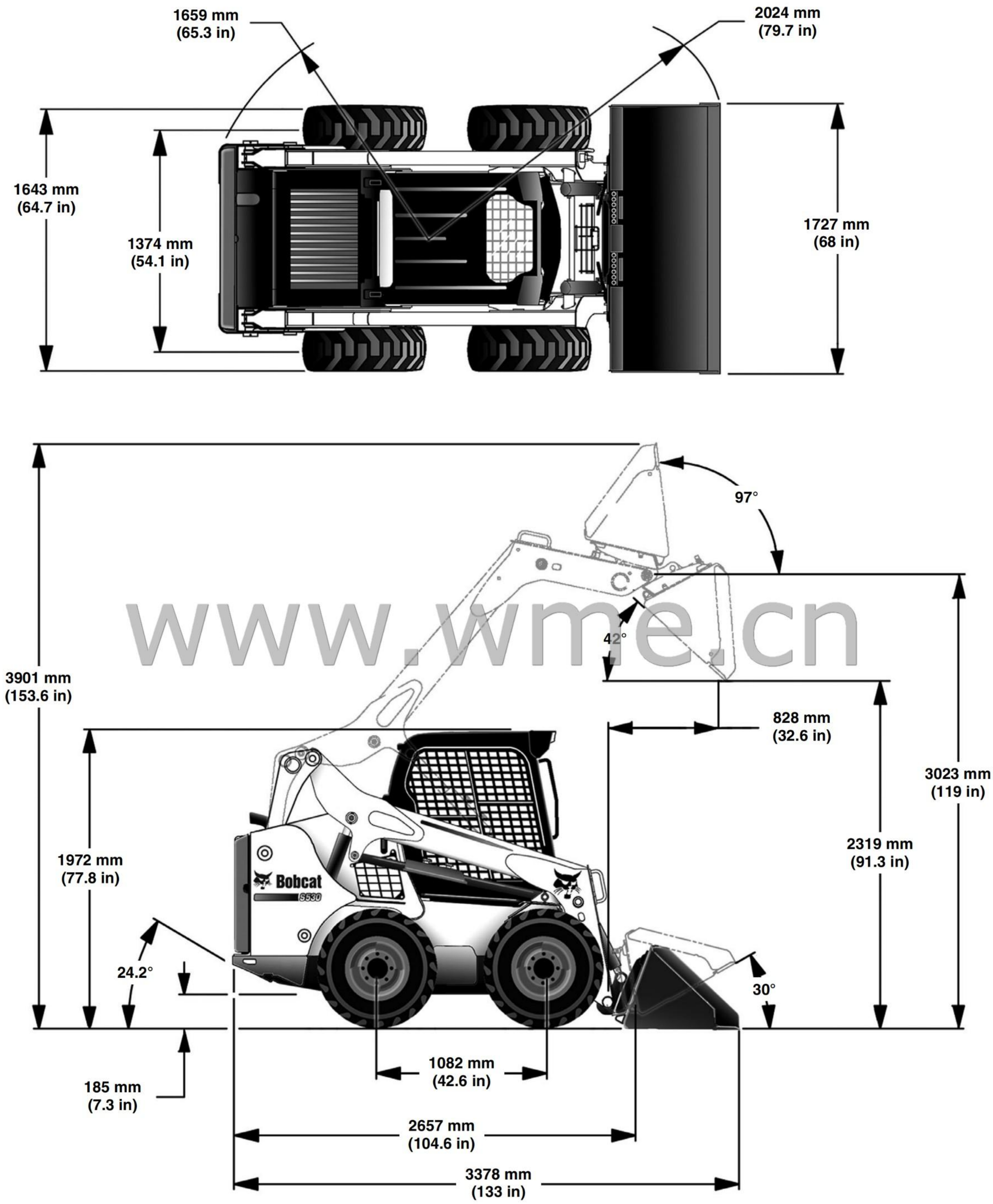
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LOADER SPECIFICATIONS

Machine Dimensions

- Dimensions are given for loader equipped with standard tyres and 68 in. Construction and Industrial bucket and may vary with other bucket types.

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



NA9079

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.

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LOADER SPECIFICATIONS (CONT'D)

Performance

Rated Operating Capacity (ISO 14397-1)	869 kg (1915 lb)
with 200 Pound Frame Mounted Counterweight Kit (ISO 14397-1)	937 kg (2065 lb)
Tipping Load (ISO 14397-1)	1737 kg (3830 lb)
Operating Weight	2815 kg (6207 lb)
Breakout Force – Lift	1793 kg (3953 lb)
Breakout Force – Tilt	1749 kg (3856 lb)
Travel Speed: — Single Speed Loader — Two-Speed Loader (Option): — Low Range — High Range	 0 – 11,8 km/h (0 – 7.35 mph) 0 – 11,8 km/h (0 – 7.35 mph) 0 – 17,3 km/h (0 – 11.02 mph)

Engine

Make / Model	Kubota® / V2403-MDI-E3B Stage IV
Fuel / Cooling	Diesel / Liquid
Horsepower: — ISO 9249 EEC / SAE J1349 Net — ISO 14396 Gross — SAE J1995 Gross	 34,4 kW (46.1 hp) @ 2700 rpm 34,4 kW (46.1 hp) @ 2700 rpm 36,5 kW (48.9 hp) @ 2700 rpm
Torque: — ISO 9249 EEC / SAE J1349 Net — SAE J1995 Gross	 148,6 N•m (109.6 ft-lb) @ 1600 rpm 158,6 N•m (117.0 ft-lb) @ 1600 rpm
Low Idle rpm	1075 – 1225
High Idle rpm	2760 – 2900
Number of Cylinders	4
Displacement	2433 cm^3 (148.5 in^3)
Bore / Stroke	87 mm / 102,4 mm (3.425 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	Propylene Glycol / Water Mixture
Starting Aid	Glow plugs automatically activated as needed in RUN 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 HSOC 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 – 9/16 in. wheel bolts fixed to axle hubs

Controls

Machine Steering	Direction and speed controlled by two hand operated steering levers or optional joystick(s)
Loader Hydraulics: — Lift and Tilt	Controlled by separate foot pedals or optional Joystick Controls (JC) or optional Selectable Joystick Controls (SJC)
— Front Auxiliary	Controlled by electrical switch on Right Hand steering lever or joystick
— Rear Auxiliary (Option)	Controlled by electrical switch on Left Hand steering lever or joystick
Auxiliary Pressure Release	Pressure relieved through quick couplers; Push couplers in, hold for 5 seconds
Engine	Hand operated speed control, additional foot operated speed control pedal with joystick option; key-type start switch or optional Keyless Start Panel or optional Deluxe Instrumentation Panel and function error shutdown
Service Brake	Two independent hydrostatic systems controlled by two hand operated steering levers or optional joystick(s)
Secondary Brake	One of the hydrostatic transmissions
Parking Brake	Mechanical disc activated by manually operated switch on left instrument panel

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LOADER SPECIFICATIONS (CONT'D)

Hydraulic System

Pump Type	Engine driven, gear type
Pump Capacity — Standard-Flow	64,7 L/min (17.1 U.S. gpm)
Pump Capacity — High-Flow	101,1 L/min (26.7 U.S. gpm)
System Relief at Quick Couplers	23,8 – 24,5 MPa (238 – 245 bar) (3450 – 3550 psi)
Filter (Hydraulic / Hydrostatic)	Replaceable beta 10 micron = 200, drop in element
Filter (Charge)	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; lift cylinders have cushioning feature on lower, tilt cylinders have cushioning feature on dump and rollback 69,9 mm (2.75 in) 41,4 mm (1.63 in) 540,0 mm (21.26 in) 69,9 mm (2.75 in) 38,1 mm (1.50 in) 330,7 mm (13.02 in)
Control Valve – Standard	3-Spool, open centre, manually operated with spring detent for lift float; Electrically controlled auxiliary spool
Control Valve – JC, and SJC	3-Spool, open centre with electric actuator controlled lift with float and tilt; Electrically controlled auxiliary spool
Fluid Lines	SAE Standard tubelines, hoses, and fittings
Hydraulic Function Time: — Raise Lift Arms — Lower Lift Arms — Bucket Dump — Bucket Rollback	 3.8 seconds 2.5 seconds 2.3 seconds 1.7 seconds

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LOADER SPECIFICATIONS (CONT'D)

Electrical System

Alternator	Belt driven, 90 amperes, open frame
Battery	12 volt, 680 cold cranking amperes @ -18°C (0°F) 120 minute reserve capacity @ 25 amperes
Starter	12 volt, gear type, 3,2 kW (4.29 hp)
Instrumentation	**Gauges:** Engine Coolant Temperature and Fuel Level **Warning lights:** Fuel Level, Seat Belt, Engine Coolant Temperature, Engine Malfunction, Hydraulic System Malfunction, Diesel Particulate Filter (DPF) / Diesel Exhaust Fluid (DEF), and General Warning **Indicators:** BICS™ Functions, Two-Speed, 3-Point Restraint, and Turn Signals **Data Display:** Operating Hours, Engine rpm, Speed Management Setting, Maintenance Clock Countdown, Battery Voltage, Service Codes, Engine Preheat Countdown, Lift and Tilt Compensation Setting, Steering Drift Compensation Setting, and Drive Response Setting **Other:** Audible Alarm, Lights, and Option / Accessory Switches **Optional Deluxe Instrumentation Panel:** *Additional displays for: Engine rpm, Engine Coolant Temperature, Engine Oil Pressure, System Voltage, Hydraulic Fluid Temperature, and Hydrostatic Charge Pressure *Additional Features Included: Keyless Start, Digital Clock, Job Clock, Password Lockout, Multiple-Language Display, Help Screens, Diagnostic Capability, and Engine / Hydraulic Systems Shutdown Function

Capacities

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Fuel	93,7 L (24.75 U.S. gal)
Engine Oil with Filter Change	8,7 L (9.2 qt)
Engine Cooling System with Heater	11,7 L (3.1 U.S. gal)
Engine Cooling System without Heater	11,4 L (3.0 U.S. gal)
Hydraulic / Hydrostatic Reservoir	7,57 L (2.0 U.S. gal)
Hydraulic / Hydrostatic System	36,0 L (9.5 U.S. gal)
Chaincase Reservoir	32,2 L (8.5 U.S. gal)
Air Conditioning Refrigerant (R-134a)	0,68 kg (1.5 lb)

LOADER SPECIFICATIONS (CONT'D)

Tyres

Hard Solidflex (Option)	31 x 10 – 20
Heavy Duty (Standard)	10.00 – 16.5, 10 Ply Rating
Heavy Duty Offset (Option)	10.00 – 16.5, 10 Ply Rating
Severe Duty (Option)	10.00 – 16.5, 10 Ply Rating
Solidflex (Option)	31 x 6 x 10
Super Float (Option)	31 x 12 – 16.5, 10 Ply Rating
Versatile Duty (Option)	10.00 – 16.5, 10 Ply Rating
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

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