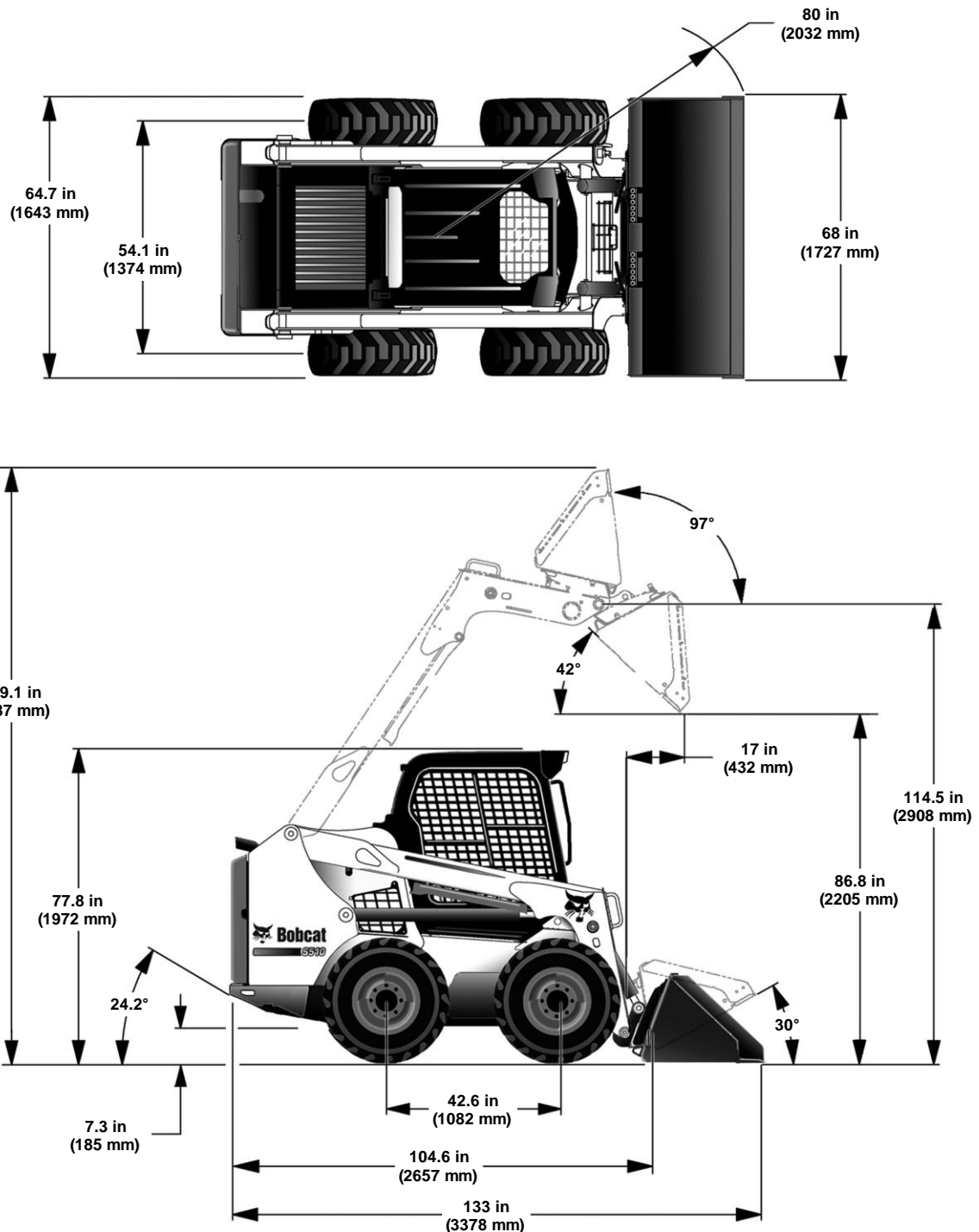


# S510 SKID-STEER LOADER SPECIFICATIONS

## Loader Dimensions

- Dimensions are given for loader equipped with standard tires and 68 in. Construction and Industrial bucket and may vary with other bucket types. All dimensions are shown in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.
- Where applicable, specifications conform to SAE or ISO standards and are subject to change without notice.



## Bobcat S510 Skid-Steer Loader Specifications

### PERFORMANCE

Rated Operating Capacity	1650 lb (748 kg)
with 200 Pound Frame Mounted Counterweight Kit	1800 lb (816 kg)
Tipping Load	3300 lb (1497 kg)
Operating Weight	5922 lb (2686 kg)
Breakout Force - Lift	3242 lb (1470 kg)
Breakout Force - Tilt	3276 lb (1485 kg)
Push Force	5306 lb (2406 kg)
Travel Speed: - Single Speed Loader - Two-Speed Loader (Option): Low Range High Range	0 - 7.35 mph (0 - 11,8 km/h)  0 - 7.35 mph (0 - 11,8 km/h) 0 - 11.02 mph (0 - 17,3 km/h)

### Engine

Make / Model	Kubota / V2403-MDI-E3B Interim Tier 4
Fuel / Cooling	Diesel / Liquid
Horsepower: - ISO 9249 EEC / SAE J1349 Net - ISO 14396 Gross - SAE J1995 Gross	46.1 hp (34,4 kW) @ 2700 rpm 46.1 hp (34,4 kW) @ 2700 rpm 48.9 hp (36,5 kW) @ 2700 rpm
Torque: - ISO 9249 EEC / SAE J1349 Net - SAE J1995 Gross	109.6 ft-lb (148,6 N•m) @ 1600 rpm 117.0 ft-lb (158,6 N•m) @ 1600 rpm
Low Idle rpm	1075 - 1225
High Idle rpm	2760 - 2900
Number of Cylinders	4
Displacement	148.5 in <sup>3</sup> (2433 cm <sup>3</sup> )
Bore / Stroke	3.425 in / 4.03 in (87 mm / 102,4 mm)
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

## Bobcat S510 Skid-Steer Loader Specifications

### 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	1.98 in (50,29 mm), heat treated
Wheel Bolts	Eight - 9/16 in. wheel bolts fixed to axle hubs

### Controls

Vehicle Steering	Direction and speed controlled by two hand operated steering levers or optional joystick(s)
Loader Hydraulics: - Lift and Tilt  - Front Auxiliary - Rear Auxiliary (Option)	Controlled by separate foot pedals or optional Advanced Control System (ACS) or optional Selectable Joystick Controls (SJC) Controlled by electrical switch on Right Hand steering lever or joystick 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 SJC option; key-type start switch or optional Keyless Start Panel or optional Deluxe Instrumentation Panel and function error shutdown
Starting Aid	Glow plugs automatically activated as needed in RUN position
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, manually operated switch on left instrument panel



## Bobcat S510 Skid-Steer Loader Specifications

### Electrical System

Alternator	Belt driven, 90 amperes, open frame
Battery	12 volts, 600 cold cranking amperes @ 00F (-180C), 115 minute reserve capacity @ 25 amperes
Starter	12 volts, gear type, 3.62 hp (2,7 kW)
Instrumentation	<p><b>Gauges:</b> Engine Coolant Temperature and Fuel Level</p> <p><b>Warning lights:</b> Fuel Level, Seat Belt, Engine Coolant Temperature, Engine Malfunction, Hydraulic System Malfunction, and General Warning</p> <p><b>Indicators:</b> BICS™ Functions, Two-Speed, 3-Point Restraint, and Turn Signals</p> <p><b>Data Display:</b> 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</p> <p style="text-align: right;">**SJC Option Only</p> <p><b>Other:</b> Audible Alarm, Lights, and Option / Accessory Switches</p> <p><b>Optional Deluxe Instrumentation Panel:</b> *Additional displays for: Engine rpm, Engine Coolant Temperature, Engine Oil Pressure, System Voltage, Hydraulic Fluid Temperature, and Hydrostatic Charge Pressure</p> <p>*Additional Features Included: Keyless Start, Digital Clock, Job Clock, Password Lockout, Multiple-Language Display, Help Screens, Diagnostic Capability, and Engine / Hydraulic Systems Shutdown Function</p>

### Capacities

Fuel	24.75 U.S. gal (93,7 L)
Engine Oil with Filter Change	9.2 qt (8,7 L)
Engine Cooling System: - with Heater - without Heater	3.1 U.S. gal (11,7 L) 3.0 U.S. gal (11,4 L)
Hydraulic / Hydrostatic Reservoir	2.0 U.S. gal (7,57 L)
Hydraulic / Hydrostatic System	8.4 U.S. gal (31,8 L)
Chaincase Reservoir	8.5 U.S. gal (32,2 L)

## Bobcat S510 Skid-Steer Loader Specifications

### Tires

Standard Duty (Standard)	10.00 - 16.5, 8 Ply Rating
Heavy Duty (Option)	10.00 - 16.5, 10 Ply Rating
Heavy Duty Offset (Option)	10.00 - 16.5, 10 Ply Rating
Heavy Duty Poly Fill (Option)	10.00 - 16.5, 10 Ply Rating
Severe Duty (Option)	10.00 - 16.5, 10 Ply Rating
Severe Duty Poly Fill (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
Recommended Pressure	Inflate tires to MAXIMUM pressure shown on the sidewall of the tire; DO NOT mix brands of tires used on the same loader