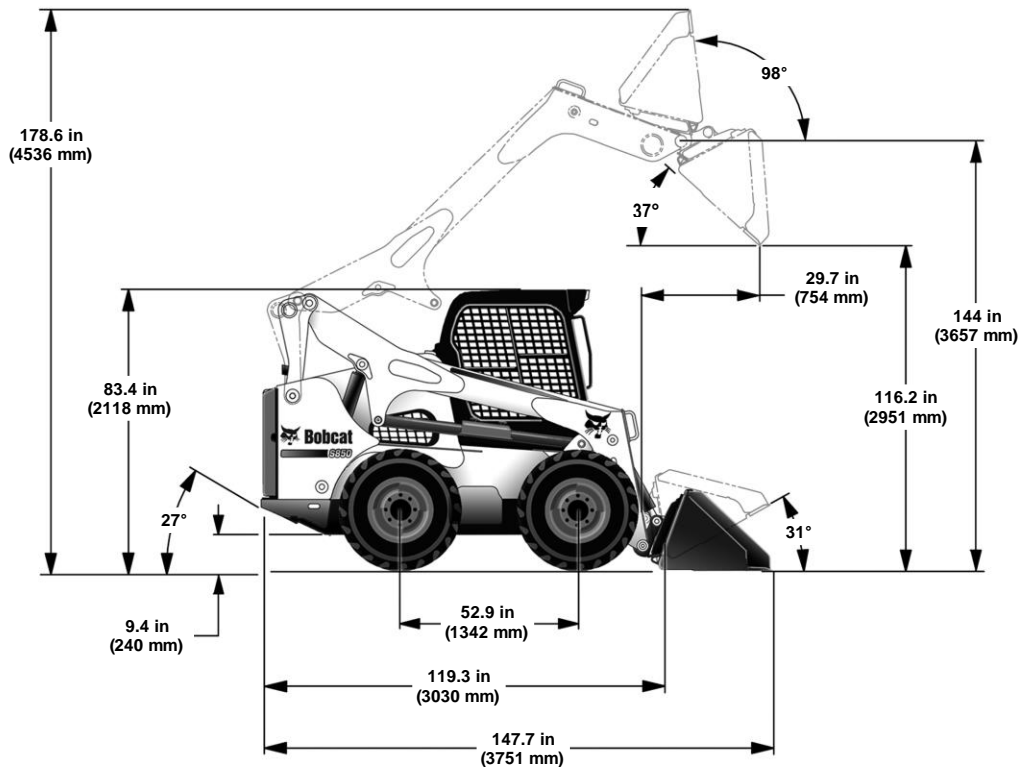
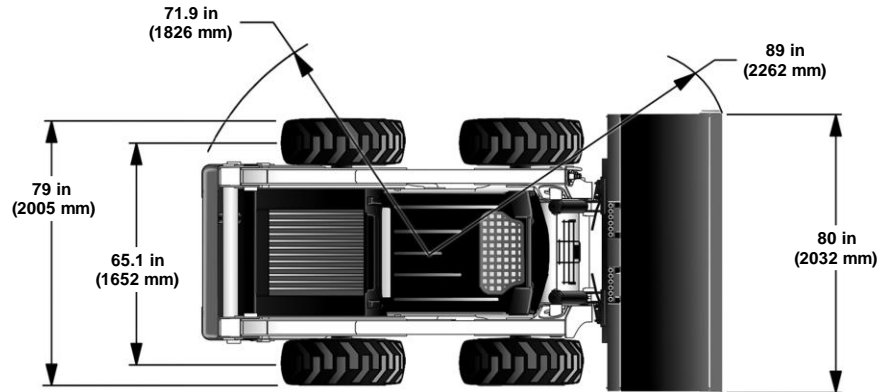


(S850) LOADER SPECIFICATIONS

Machine Dimensions

- Dimensions are given for loader equipped with standard tires and 80 in. Heavy Duty 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.



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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.

**Specification(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Bobcat equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors.*

(S850) LOADER SPECIFICATIONS (CONT'D)

Performance

Rated Operating Capacity	3950 lb (1792 kg)
with 200 Pound Frame Mounted Counterweight Kit	4100 lb (1860 kg)
with 300 Pound Frame Mounted Counterweight Kit	4150 lb (1882 kg)
with 400 Pound Frame Mounted Counterweight Kit	4250 lb (1928 kg)
Tipping Load	7900 lb (3583 kg)
Operating Weight	10237 lb (4643 kg)
Breakout Force – Lift	7525 lb (3413 kg)
Breakout Force – Tilt	9686 lb (4393 kg)
Travel Speed: – Single Speed Loader – Two-Speed Loader (Option): Low Range High Range	 0 – 7.1 mph (0 – 11,4 km/h) 0 – 7.1 mph (0 – 11,4 km/h) 0 – 12.3 mph (0 – 19,8 km/h)

(S850) LOADER SPECIFICATIONS (CONT'D)**Engine**

Make / Model	Bobcat Engine / 3,4L Bobcat Engine Tier 4
Fuel / Cooling	Diesel / Liquid
Horsepower: – ISO 9249 EEC / SAE J1349 Net – ISO 14396 Gross – SAE J1995 Gross	95.9 hp (71,5 kW) @ 2400 rpm 100.1 hp (74,6 kW) @ 2400 rpm 101.4 hp (75,6 kW) @ 2400 rpm
Torque: – ISO 9249 EEC / SAE J1349 Net – SAE J1995 Gross	262.4 ft-lb (355,8 N•m) @ 1600 rpm 280.5 ft-lb (380,3 N•m) @ 1600 rpm
Low Idle rpm	1050
High Idle rpm	2400
Number of Cylinders	4
Displacement	208.0 in ³ (3409 cm ³)
Bore / Stroke	3.86 in / 4.45 in (98 mm / 113 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	Turbo-Charged and Charged Air Cooled
Engine Coolant	Propylene Glycol / Water Mixture
Starting Aid	Air intake heater automatically activated as needed in RUN position

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 #120 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	3.13 in (79,4 mm), heat treated
Wheel Bolts	Eight – 16 mm wheel bolts fixed to axle hubs

(S850) LOADER SPECIFICATIONS (CONT'D)

Controls

Machine Steering	Direction and speed controlled by two hand operated steering handles or optional joystick(s)
Loader Hydraulics: – Lift and Tilt – Front Auxiliary – Rear Auxiliary (Option)	Controlled by separate foot pedals or optional Selectable Joystick Controls (SJC) Controlled by electrical switch on Right Hand steering handle or joystick Controlled by electrical switch on Left Hand steering handle 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
Service Brake	Two independent hydrostatic systems controlled by two hand operated steering handles or optional joystick(s)
Secondary Brake	One of the hydrostatic transmissions
Parking Brake (Standard)	Spring applied pressure release multi-disc brake activated by manually operated switch on left instrument panel

(S850) LOADER SPECIFICATIONS (CONT'D)**Hydraulic System**

Pump Type	Engine driven, gear type
Pump Capacity – Standard-Flow	23.0 U.S. gpm (87,1 L/min)
Pump Capacity – High-Flow (Option)	36.6 U.S. gpm (138,5 L/min)
System Relief at Quick Couplers	3450 – 3550 psi (23,8 – 24,5 MPa) (238 – 245 bar)
Filter (Hydraulic / Hydrostatic)	Replaceable beta 10 micron = 200, drop in element
Filter (Charge)	Replaceable beta 10 micron = 200, drop in element
Hydraulic Cylinders:	Double-acting; lift cylinders have cushioning feature on lower, tilt cylinders have cushioning feature on dump and rollback
Lift Cylinder (2):	
Bore Diameter	3.50 in (88,9 mm)
Rod Diameter	2.00 in (50,8 mm)
Stroke	27.51 in (698,75 mm)
Tilt Cylinder (2):	
Bore Diameter	3.25 in (82,6 mm)
Rod Diameter	1.50 in (38,1 mm)
Stroke	15.29 in (388,36 mm)
Control Valve – SCPA	3-Spool, open center, manually operated with spring detent for lift float; Electrically controlled auxiliary spool
Control Valve – SJC	3-Spool, open center with electric actuator controlled lift with float and tilt; Electrically controlled auxiliary spool
Fluid Lines	SAE Standard tubelines, hoses, and fittings
Fluid Type	BOBCAT FLUID, Hydraulic / Hydrostatic 6903117 – (Two – 2.5 U.S. gal) 6903118 – (5 U.S. gal) 6903119 – (55 U.S. gal)
Hydraulic Function Time:	
Raise Lift Arms	5.9 seconds
Lower Lift Arms	4.0 seconds
Bucket Dump	2.9 seconds
Bucket Rollback	2.3 seconds

(S850) LOADER SPECIFICATIONS (CONT'D)

Electrical System

Alternator	Belt driven, 120 amperes, open frame
Battery	12 volt, 1000 cold cranking amperes @ 0°F (-18°C), 186 minute reserve capacity @ 25 amperes
Starter	12 volt, gear type, 3.62 hp (2,7 kW)
Instrumentation	<p style="text-align: center;">Gauges:</p> <p style="text-align: center;">Engine Coolant Temperature and Fuel Level</p> <p style="text-align: center;">Warning lights:</p> <p style="text-align: center;">Fuel Level, Seat Belt, Engine Coolant Temperature, Engine Malfunction, Hydraulic System Malfunction, Diesel Exhaust Fluid (DEF) / AdBlue®, and General Warning</p> <p style="text-align: center;">Indicators:</p> <p style="text-align: center;">Diesel Exhaust Fluid (DEF) / AdBlue® Level, BICS™ Functions, Two-Speed, 3-Point Restraint, and Turn Signals</p> <p style="text-align: center;">Data Display:</p> <p style="text-align: center;">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: center;">Other:</p> <p style="text-align: center;">Audible Alarm, Lights, and Option / Accessory Switches</p> <p style="text-align: center;">Optional Deluxe Instrumentation Panel:</p> <p style="text-align: center;">*Additional displays for: Engine rpm, Engine Coolant Temperature, Engine Oil Pressure, System Voltage, Hydraulic Fluid Temperature, and Hydrostatic Charge Pressure</p> <p style="text-align: center;">*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>

(S850) LOADER SPECIFICATIONS (CONT'D)

Capacities

Fuel	29.5 U.S. gal (111,6 L)
Engine Oil with Filter Change	13.3 qt (12,6 L)
Engine Cooling System with Heater	3.8 U.S. gal (14,4 L)
Engine Cooling System without Heater	3.6 U.S. gal (13,6 L)
Hydraulic / Hydrostatic Reservoir	2.5 U.S. gal (9,5 L)
Hydraulic / Hydrostatic System	12.0 U.S. gal (45,4 L)
Chaincase Reservoir	12.0 U.S. gal (45,4 L)
Diesel Exhaust Fluid (DEF) / AdBlue®	4.6 U.S. gal (17,4 L)
Air Conditioning Refrigerant (R-134a)	1.5 lb (0,68 kg)

Tires

Heavy Duty (Standard)	14.00 – 17.5, 14 Ply Rating
Heavy Duty Poly Fill (Option)	14.00 – 17.5, 14 Ply Rating
Severe Duty (Option)	14.00 – 17.5, 14 Ply Rating
Severe Duty Poly Fill (Option)	14.00 – 17.5, 14 Ply Rating
Solidflex (Option)	36 x 7 x 11
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