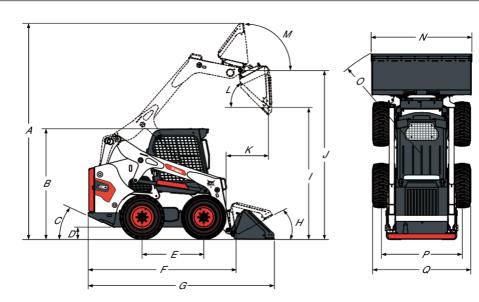


S650 L

Loaders Specifications

Dimensions



- (A) Operating height
- (B) Height with operator cab
- (C) Angle of departure
- (D) Ground clearance
- (E) Wheelbase
- (F) Length without attachment
- (G) Length with standard bucket
- (H) Rollback at ground position
- (I) Dump height with standard bucket
- (J) Height to bucket hinge pin
- (K) Dump reach at maximum height
- (L) Dump angle at maximum height
- (M) Rollback fully raised at maximum height
- (N) Width over standard bucket
- (N) Bucket width, 68-inch
- (N) Bucket width, 80-inch
- (O) Turning radius with standard bucket
- (P) Track, standard tyres
- (Q) Width over standard tyres

4026.0 mm 2065.0 mm 25.0° 207.0 mm 1150.0 mm 2754.0 mm 3474.0 mm 30.0° 2447.0 mm 3149.0 mm 800.0 mm 42.0° 97.0° 1880.0 mm 1727.0 mm 2032.0 mm 2106.0 mm 1507.0 mm

1832.0 mm



Specifications

Performance	
Tipping load (ISO 14397-1) Rated operating capacity (ISO 14397-1) Lift breakout force Tilt breakout force Axle torque	2564 kg 1282 kg 2135.0 2268.0 9278.0 Nm
Cycle Times	
Raise lift arms Lower lift arms Bucket rollback Bucket dump	3.9 s 2.6 s 1.7 s 2.3 s
Weights	
Operating weight Shipping weight	3777 kg 3540 kg
Engine	
Make / Model Fuel Cooling Power at 2400 RPM (ISO 14396 GROSS) Rated speed (EEC 80/1269, ISO 9249) Torque at 1600 RPM (SAE J1995 Gross): Number of cylinders Displacement Bore Stroke Lubrication Crankcase ventilation Air filter Ignition Starting aid Electrical	Kubota / V3307-DI-TE3 Diesel Liquid 54.6 kW 2400.0 RPM 264.0 Nm 4 3331 cm ³ 94.0 mm 120.0 mm Gear pump pressure Closed breathing Dry replaceable cartridge with safety element Diesel-compression Glow Plugs
Alternator Battery	Belt driven — 90 A — open 12 V — 950 A cold cranking at -18°C — 180 min reserve capacity
Starter	12 V — gear reduction type — 3.0 kW
Hydraulic System	
Pump type Pump capacity Pump capacity (with high flow option) System relief at quick couplers Control valve	Engine driven, gear type 87.10 L/min 115.50 L/min 23.8-24.5 MPa Three-spool, open-centre type with float detent on lift and electrically controlled auxiliary spool
Hydraulic filter Fluid lines	Full-flow replaceable — 10 μ m synthetic media element SAE standard tubelines, hoses, and fittings



Specifications

Hydraulic Cylinders

Lift cylinder (2)	Double-acting
Lift cylinder bore	76.2 mm
Lift cylinder rod	44.5 mm
Lift cylinder stroke	633.2 mm
Tilt cylinder (2)	Double-acting with cushioning feature on dump and rollback
Tilt cylinder bore	76.2 mm
Tilt cylinder rod	41.4 mm
Tilt cylinder stroke	355.0 mm
Drive System	
Transmission	Infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors
Final drive chains	Pre-stressed #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.
Main drive	Fully hydrostatic; four-wheel drive
Axle size	70.1 mm, heat treated. Axle tubes welded to chaincase.
	Labyrinth axle seal protection.
Wheel bolts	Eight 9/16–inch wheel bolts fixed to axle hubs
Traction	
Max. travel speed (low range)	11.4 km/h
Max. travel speed (high range - option)	19.8 km/h
Fluid Capacities	
Chaincase reservoir	39.20 L
Cooling system	11.40 L
Engine oil with filter	11.40 L
Fuel tank	90.50 L
Hydraulic reservoir	10.001
	10.20 L



Specifications

Fluid Specifications

Engine coolant

Engine oil

Hydraulic fluid

Controls

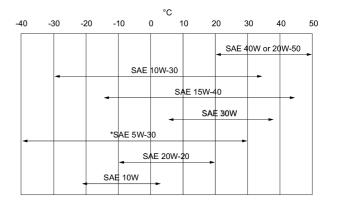
Engine	Hand lever throttle
Starting	Key-type starter switch and shutdown or optional keyless
	start. Glow plugs automatically activated by standard or
	Deluxe instrument panel.
Front auxiliary (standard)	Electrical switch on right-hand steering lever
Rear auxiliary (optional)	Electrical switch on left-hand steering lever
Loader hydraulics tilt and lift	Separate foot pedals, or Selectable Joystick Control (SJC)
Service brake	Two independent hydrostatic systems controlled by two
	hand-operated steering levers
Secondary brake	One of the hydrostatic transmissions
Parking brake	Mechanical disc, hand-operated rocker switch on dash panel
Parking brake, two-speed option	Spring-applied pressure release multi-disk brake activated by rocker switch
Vehicle steering	Direction and speed controlled by two hand levers

B4SZ 11001 — B4SZ 99999 • Specifications are subject to change without notice - Pictures of Bobcat units may show other than standard equipment

Propylene glycol/water mix (53% - 47%) with freeze protection to -37°C

5 L can - 6904844A, 25 L container - 6904844B, 209 L drum - 6904844C, 1000 L tank - 6904844D Propylene glycol concentrate coolant 5 L can - 6987646A, 25 L container - 6987646B, 209 L drum - 6987646C, 1000 L tank - 6987646D

Oil must meet API Service Classification of CL4 or better. Recommended SAE viscosity number for anticipated temperature range.



* Can be used only when available with appropriate diesel rating. For synthetic oil use the recommendation from the oil manufacturer.

Bobcat Superior SH, 5 L can - 6904842A, 25 L container - 6904842B, 209 L drum - 6904842C, 1000 L tank -6904842D

Bobcat Bio Hydraulic, 5 L can - 6904843A, 25 L container - 6904843B, 209 L drum - 6904843C, 1000 L tank -6904843D

Motor oil is not an acceptable alternative fluid.



Specifications

Auxiliary pressure release

Pressure is relieved through the coupler block. Push in and hold for 5 s.

Instrumentation

The following loader functions are monitored by a combination of gauges and warning lights in the operator's line of sight. The system alerts the operator of monitored loader malfunctions by way of audible alarm and visual warning lights.

Standard Instrument Panel

- Gauges
 - Engine coolant temperature
- FuelIndicators
 - Indicators
 - Bobcat Interlock Control System
 - Engine preheat
 - Two speed
 - Turn signals
- Warning lights
 - Engine temperature
 - Fuel level
 - General warning
 - Seat belt
 - Seatbar down
 - Engine malfunction
 - Hydraulic system malfunction
 - · Lift and tilt valve, hydraulics lock-out
 - Parking brake
 - Hydraulic oil temperature
 - Engine oil pressure
 - Hydraulic oil pressure
- Buttons
 - · Work lights and road lights
 - High flow auxiliary hydraulics
 - Auxiliary hydraulics
 - Information (Hour meter, Engine RPM, Battery voltage, Service codes, Service reminder, Maintenance clock)
 - Traction lock override
 - Press to operate loader
- Rocker switch
 - Parking brake
- Alarm
 - Beep when error, warning or shutdown condition exists

Deluxe Instrument Panel

Same gauges, warning lights and other features as Standard Instrument Panel, plus:

- Gauges
 - Engine oil pressure / temperature
 - Hydrostatic charge pressure
 - Hydraulic oil temperature
 - Battery



Specifications

- · Additional features
 - · Keyless start with password capability
 - Digital clock, date and time
 - User name and hourmeter
 - Attachment control information
 - · Current job hours
 - High Flow lockouts
 - Multi-language display
 - Help screens
 - Diagnostic capability
 - · Engine/hydraulic systems shutdown function
 - · Password lockout
- Icons
 - Active warnings
 - Vitals (Engine speed, Oil Pressure, Temperature, System voltage, Hydraulic charge pressure, Oil temperature)
 - Service
 - Main screen
 - Attachments
 - Security
 - Display
- Buttons
 - Left scroll
 - Enter
 - Right scroll

Serviceability

Access is available to the following through the rear door/tailgate and rear screen:

- Air cleaner
- Alternator
- Battery
- · Cooling system (engine oil and hydraulic oil coolers easily separable for cleaning)
- Engine oil and fuel filters
- Engine oil drain and dipstick
- · Hydraulic oil fill and filter (access at the upper right side of the machine)
- Starter
- Axle hubs provide protection for the axle seals

Bob-Tach™ pivots have replaceable wear bushings

Easy access to all grease points

Rod end of the tilt cylinder has a replaceable bushing

Tailgate has an optional lock for vandal-proofing

Tailgate is equipped with door-stop to hold door open while servicing

Tip-up operator cab gives access to certain hydraulic system components

Standard Features

- · Automatically activated glow plugs
- Bob-Tach™ frame
- Bobcat Interlock Control System (BICS)
- Electrically activated proportional front auxiliary hydraulics
- Engine/hydraulics system shutdown
- Manual
- Lift arm support
- · Work lights, front and rear



Specifications

- · Parking brake
- Standard Seat
- Standard Cab
- Seat belt
- · Seat bar
- 12 x 16.5, 12-ply, Heavy duty tyres
- Turbo-charger with approved spark arrestor
- · Warranty: 24 months or 2000 hours (whichever occurs first)

Options

- · Factory Options
 - 33 x 15.5-16.5, 12-ply, Superflotation tyres, offset rims
 - 12 x 16.5, 12-ply, Heavy duty tyres, offset rims
 - 12 x 16.5, 12-ply, Severe duty tyres
 - Russia Decals EAC
 - Tailgate Lock
 - Exhaust Shield [CIS]
 - Attachment control device
 - Automatic Ride Control
 - Bucket positioning kit
 - Sound option
 - 2 Speed
 - High-Flow hydraulics
 - Deluxe instrument panel
 - Deluxe Cab [CIS]
 - Deluxe Cab with Heating
 - Deluxe Cab with HVAC
 - Radio
 - Air conditioning
 - Power Bob-Tach™
 - Selectable Joystick Controls (SJC)
 - Automatic Reversing Fan
 - Back-up alarm
 - Beacon
 - Fire extinguisher
 - Custom paint color (min order of 5 units)



Specifications

- Dealer Installed Options
 - Engine block heater kit
 - Pre-cleaner HP aspiration kit
 - Deluxe instrument panel
 - Catalytic purifier kit
 - Radio kit
 - Back up alarm kit
 - Bucket positioning kit
 - Fire extinguisher kit
 - Rotating beacon kit
 - Road kit
 - Single-point lift kit
 - Fresh air heater kit
 - Front door kit
 - Plumbing kit for fresh air heater
 - Keyless kit
 - Replacement Bob-Tach™
 - Air conditioning kit
 - 200/300 lbs (74.4/111.9 kg) counterweight kit
 - Lexan rear window kit
 - Special applications front door kit
 - Four-point lift kit
 - 7 and 14-pin electrical attachment control kit
 - FOPS kit **
 - · Rear auxiliary hydraulic kit

Attachments

- Auger Accessories
- Augers
- Backhoe Accessories
- Backhoes
- · Bale Forks
- Box Blades
- Breaker Accessories
- Breakers
- Brushcat[™] Rotary Cutters
- Brush Saws
- Combination Buckets
- Concrete Mixers
- Concrete Pumps
- Construction / Industrial Buckets
- Diggers
- Dozer Blades
- Drop Hammers
- Dumping Hoppers
- Flail Cutters
- Forestry Cutters
- Graders
- Grapples, Industrial
- Landplanes
- Landscape Rakes
- Laser Equipment

- Planers
- Rear Stabilizers
- Remote Control
- Root Grapples
- Rotary Grinders
- Sand Cleaners
- Scarifiers
- Scrapers
- Seeders
- Silt Fence Installers
- Skeleton Buckets
- Snow Blades
- Snow Pushers
- Snow V-Blades
- Sod Layers
- Soil Conditioners
- Spreader
- Spreaders
- Steel Tracks
- Stump Grinders
- Sweepers
- Tillers
- Tilt-Tatch
- Tree Transplanters
- Trench Compactors



Specifications

- · Low Profile Buckets
- Miscellaneous
- Mixing Buckets
- Mowers
- Pallet Fork Accessories
- Pallet Forks, Hydraulic
- Planer Accessories

- Trenchers
- Utility Forks
- Utility Frames
- Vibratory Rollers
- Wheel Saws
- Wood Chippers