

S450

1940.6 mm

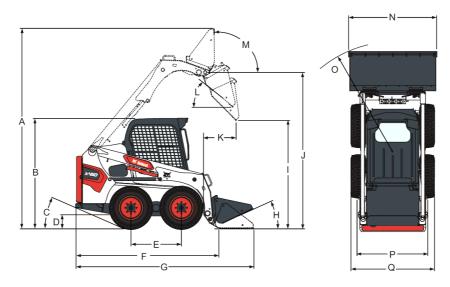
1488.4 mm

Loaders Specifications

Dimensions

(O) Turning radius with standard bucket

(Q) Width over tyres, 10 x 16.5, 10-ply, Heavy duty



(A)	Operating height	3558.0 mm
(B)	Height with operator cab	1976.0 mm
(C)	Angle of departure	23.0°
(D)	Ground clearance	214.0 mm
(E)	Wheelbase	900.0 mm
(F)	Length without attachment	2499.0 mm
(G)	Length with standard bucket	3172.0 mm
(H)	Rollback at ground position	26.0°
(l)	Dump height with standard bucket	2157.0 mm
(J)	Height to bucket hinge pin	2781.0 mm
(K)	Dump reach at maximum height	587.0 mm
(L)	Dump angle at maximum height	40.0°
(M)	Rollback fully raised at maximum height	91.0°
(N)	Width over standard bucket	1575.0 mm



Tipping load (ISO 14397-1)	Performance		
Raise lift arms	Rated operating capacity (ISO 14397-1) Torque Tilt breakout force Push Force	654 kg 1416.0 1807 daN 1866 daN	
Lower lift arms	Cycle Times		
Operating weight 2436 kg 2221 kg Engine Make / Model Bobcat 2.4L, 97/68 EC Stage V Fuel Diesel Liquid Power at 2600 RPM (ISO 14396) 36.5 kW Rated speed (EEC 80/1269, ISO 9249) 2600.0 RPM Torque at 1800 RPM (ISO 14396) 182.2 Nm Number of cylinders 4 Displacement 2393 cm³ Bore 90.0 mm Stroke 94.0 mm Lubrication Pressure system with filter Closed Air filter Dry replaceable cartridge with safety element Ignition Glow plugs Electrical Alternator 90 A Battery 12 V — 600 cold cranking A at -18°C — 115 min reserve capacity at 25 A Starter 12 V — gear type — 3.0 kW Hydraulic System Pump type Engine driven, gear type 63.20 L/min System relief at quick couplers Controlled auxiliary spool	Lower lift arms Bucket rollback Bucket dump	2.0 s 1.5 s	
Make / Model Fuel Cooling Diesel Liquid Power at 2600 RPM (ISO 14396) Rated speed (EEC 80/1269, ISO 9249) Torque at 1800 RPM (ISO 14396) 182.2 Nm Number of cylinders Usiplacement Sore 90.0 mm Stroke 94.0 mm Lubrication Crankcase ventilation Air filter Ignition Starting aid Electrical Alternator Battery 12 V — 600 cold cranking A at -18°C — 115 min reserve capacity at 25 A Starter Pump type Pump type Pump capacity System relief at quick couplers Control valve Book 2600.0 RPM 182.2 Nm	Operating weight Shipping weight	<u> </u>	
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Hydraulic System Pump type Pump capacity System relief at quick couplers Control valve Engine driven, gear type 63.20 L/min 22.4-23.1 MPa Three-spool, open-centre type with float detent on lift and electrically controlled auxiliary spool	Battery	12 V — 600 cold cranking A at -18°C — 115 min reserve capacity at 25 A	
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Hydraulic filter Full-flow replaceable Fluid lines SAE standard tubelines, hoses, and fittings	Pump capacity System relief at quick couplers Control valve Hydraulic filter	63.20 L/min 22.4-23.1 MPa Three-spool, open-centre type with float detent on lift and electrically controlled auxiliary spool Full-flow replaceable	



Hydraulic Cylinders				
Lift cylinder (2)	Double-acting			
Lift cylinder bore Lift cylinder rod	50.8 mm 31.8 mm 665.0 mm			
Lift cylinder rod Lift cylinder stroke				
Tilt cylinder (2)	Double-acting with cushioning feature on dump and			
	rollback			
Tilt cylinder bore	60.5 mm			
Tilt cylinder rod	31.8 mm			
Tilt cylinder stroke	357.0 mm			
Drive System				
Transmission	Infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors			
Final drive chains	Pre-stressed #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.			
Main drive	Fully hydrostatic; four-wheel drive			
Axle size	50.8 mm, heat treated. Axle tubes welded to chaincase.			
Mhaal halfa	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)	14.8 km/h			
Gradeability	20° Continuous and 30° Intermittent			
Fluid Capacities				
Chaincase reservoir	21.00 L			
Cooling system	9.60 L			
Engine oil with filter	5.50 L			
Fuel tank	53.80 L			
Hydraulic reservoir	5.30 L			

Hydraulic / Hydrostatic system

21.00 L



S450

Loaders Specifications

Fluid Specifications

Engine coolant

Engine oil

Hydraulic fluid

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

Refer to temperature range anticipated before next oil change.

Must use API Category CI-4 or better, or ACEA E7 or better.

Do not use API Category FA-4 engine oil.

(°C)
-40 -34 -29 -23 -18 -12 -7 -1 4 +10 +17 +21 +27 +32 +38 +43 +49

[1] SAE 10W-30

[2] SAE 15W-40

[3] Bobcat Synthetic Oil - SAE 5W-40

Bobcat engine oils are recommended for use in this machine. If Bobcat engine oil is not available, use a good quality engine oil that meets API Service Category of CI-4 or better, or ACEA E7 or better

* 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.

Controls

Engine Starting

Front auxiliary (standard)

Rear auxiliary (optional) Loader hydraulics tilt and lift Service brake

Secondary brake Parking brake

Vehicle steering Auxiliary pressure release Hand throttle or optional foot accelerator pedal (SJC) Key-type starter switch and shutdown or optional keyless start. Glow plugs automatically activated by Standard or Deluxe instrument panel.

Proporcional switch on Hand Levers or optional Selectable Joystick Controls (SJC)

Electrical switch on left-hand steering lever

Foot Pedals or optional Selectable Joystick Controls (SJC) Two independent hydrostatic systems controlled by two hand-operated steering levers

One of the hydrostatic transmissions

Mechanical disc, hand-operated rocker switch on dash panel

Hand Levers or optional Selectable Joystick Controls (SJC) Pressure is relieved through the coupler block. Push in and hold for 5 s.

B4J7 11001 — B4J7 99999 •



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
 - Fuel
- Indicators
 - Bobcat Interlock Control System
 - Engine preheat
 - Two speed
 - Turn signals
- · Warning lights
 - · Engine coolant 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
 - · Auto idle switch
 - · Work lights and road lights
 - 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



- · Additional features
 - Keyless start with password capability
 - Digital clock
 - User name and hourmeter
 - Attachments control information
 - Current job hours
 - High Flow lockouts
 - Multi-language display
 - · Help screens
 - Auto Idle
 - DPF Management
 - 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
 - DPF Regeneration
 - HEST Lamp
 - Inhibit DPF Regeneration
 - Forced Parked Regeneration
 - 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 radiators
- · Engine oil and fuel filters
- · Engine oil drain and dipstick
- · Hydraulic oil fill
- 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

- Bobcat Interlock Control System (BICS)
- · Parking brake



- Deluxe operator cab* Includes interior cab foam, side, top and rear windows, Deluxe wire harness, dome light and electrical power port ¹
- · Noise reduction kit
- · Operating lights, front and rear
- Deluxe instrument panel
- · Keyless start with password capability
- · Suspension seat
- · Seat belt
- Seat bar
- 10 x 16.5, 10-ply, Heavy duty tyres
- Bob-Tach™ frame
- Cushioned lift and tilt cylinders
- · Lift arm support
- · Engine/hydraulics system shutdown
- Spark Arrester
- Automatically activated glow plugs
- Electrically activated proportional front auxiliary hydraulics
- · Auxiliary hydraulics: variable flow/maximum flow
- Machine IQ (telematic)
- Manual
- · CE certification
- · Warranty: 24 months or 2000 hours (whichever occurs first)

Options

- Factory Options
 - Deluxe pressurized cab with heating
 - Deluxe pressurized cab with HVAC
 - Selectable Joystick Controls with 2 Speed (SJC R/C Ready)
 - Cloth Suspension Seat
 - 10 x 16.5, 10-ply, Versatile duty tyres
 - 31 x 10 20, Industrial duty tyres
 - 10 x 16.5, 10-ply, Severe duty tyres
 - Hydraulic bucket positioning (including ON/OFF switch)
 - Power Bob-Tach™
 - Radio
 - Strobe
 - Back-up alarm
 - Beacon
 - Work Lights LED
 - Road Option
 - Custom paint color (min order of 5 units)

^{1.} Roll Over Protective Structure (ROPS) – meets requirements of SAE-J1040 and ISO 3471; Falling Object Protective Structure (FOPS) - meets requirements of SAE-J1043 and ISO 3449, Level I



- · Dealer Installed Options
 - · Rear Camera with Display kit
 - Ride control
 - · Cab enclosure kit
 - Special applications front door kit
 - 200 lbs (74.4 kg) counterweight kit
 - Front axle counterweight kit
 - · Fuel cap locking kit
 - · Deluxe instrument panel
 - Replacement Bob-Tach™
 - · Fresh air heater kit
 - Front door kit
 - Door sensor kit
 - Plumbing kit for fresh air heater
 - Back up alarm kit
 - FOPS kit **
 - Single-point lift kit
 - Power Bob-Tach™ kit
 - · Operator cab, CE, enclosure kit
 - 7-pin attachment control
 - Four-point lift kit
 - · Rear auxiliary hydraulic kit
 - · Engine block heater kit
 - Road kit
 - · Bucket positioning kit
 - Keyless kit
 - Rear window wiper kit
 - 14-pin attachment control kit
 - 4-Way flasher kit
 - 80 mm Suspension seat kit
 - Cup holder kit
 - Headlight guard kit
 - Muffler guard kit
 - · Tail light guard kit

Attachments

- · Auger Accessories
- Augers
- · Backhoe Accessories
- · Backhoes
- Bale Forks
- · Boring Units
- · Box Blades
- Breaker Accessories
- Breakers
- Brushcat™ Rotary Cutters
- Brush Saws
- · Combination Buckets
- Concrete Mixers
- · Concrete Pumps
- · Construction / Industrial Buckets
- · Diggers

- · Planer Accessories
- 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



 Do 	zer	RI:	ad	മ

- · Drop Hammers
- · Dumping Hoppers
- Flail Cutters
- · Forestry Cutters
- Graders
- · Grapples, Industrial
- Landplanes
- · Landscape Rakes
- · Laser Equipment
- · Low Profile Buckets
- Miscellaneous
- · Mixing Buckets
- Mowers
- Pallet Fork Accessories
- Pallet Forks, Hydraulic
- · Pallet Forks, Standard

- · Soil Conditioners
- Spreader
- Spreaders
- Steel Tracks
- · Stump Grinders
- · Sweepers
- Tillers
- · Tilt-Tatch
- Tree Transplanters
- · Trench Compactors
- Trenchers
- · Utility Forks
- Utility Frames
- · Vibratory Rollers
- Wheel Saws
- · Wood Chippers

Environmental

Operator LpA(98/37 & 474-1)	86 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	98 dB(A)
Whole body vibration (ISO 2631–1) High speed	0.78 ms ⁻²
Whole body vibration uncertainty	0.39 ms ⁻²
Hand-arm vibration (ISO 5349-1) High speed	1.29 ms ⁻²