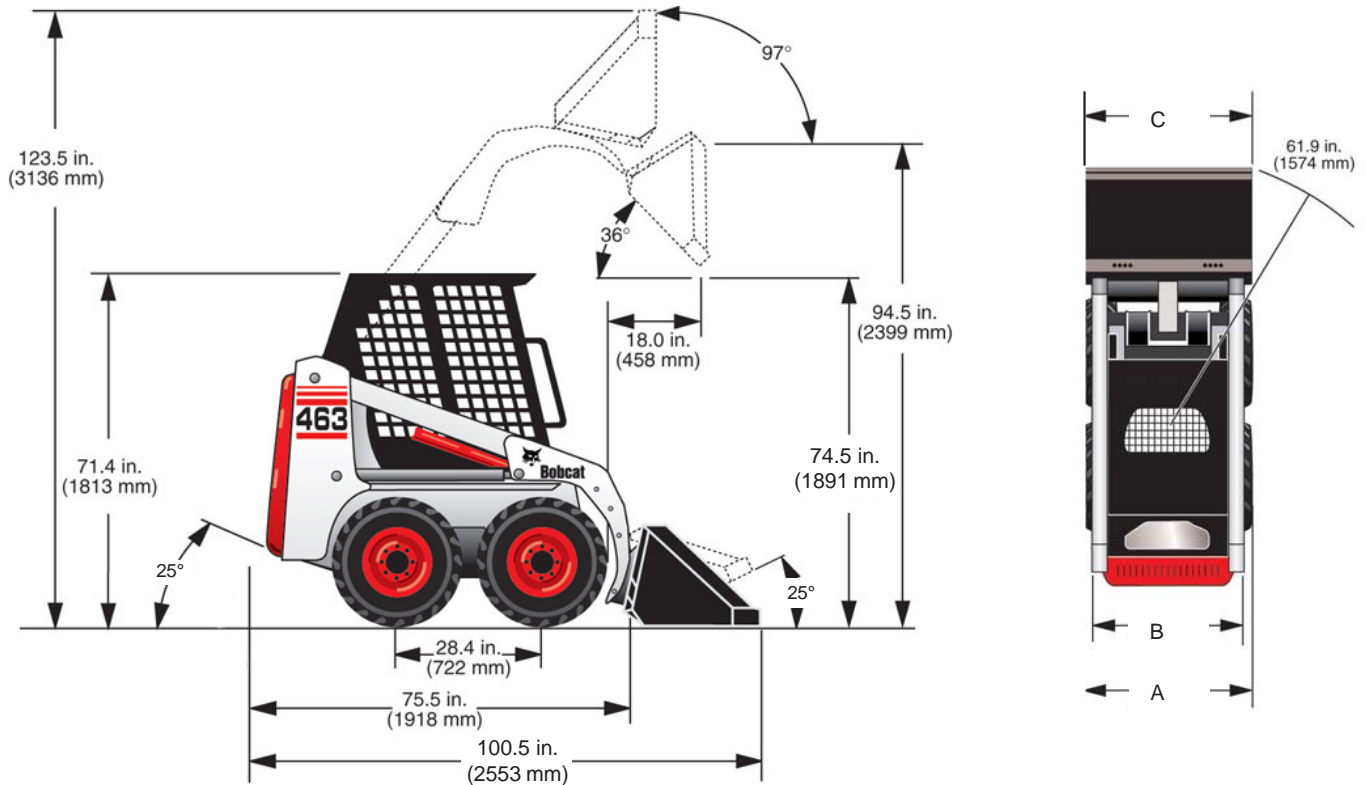


# 463 SKID-STEER LOADER SPECIFICATIONS

## DIMENSIONS



Angle of Departure .....	25°	Turning Radius	
Carry Position .....	8.14" (207 mm)	with Standard Bucket .....	61.3" (1557 mm)
Dump Angle @ Maximum Height .....	34°	A) Width (over tires)	
Dump Height with Standard Bucket .....	74.5" (1891 mm)	23 x 5.70-12 .....	35.4" (900 mm)
Dump Reach @ Maximum Height .....	18.5" (470 mm)	23 x 8.50-12 .....	43.3" (1100 mm)
Ground Clearance .....	5.5" (140 mm)	B) Wheel Tread	
Height to Bucket Hinge Pin .....	94.5" (2399 mm)	23 x 5.70-12 .....	29.6" (752 mm)
Height with Operator Cab .....	71.4" (1814 mm)	23 x 8.50-12 .....	35.5" (902 mm)
Length without Attachment .....	75.5" (1918 mm)	C) Width (over bucket)	
Length with Standard Bucket .....	100.5" (2553 mm)	36" Bucket .....	36.0" (914 mm)
Operating Height .....	123.3" (3132 mm)	44" Bucket .....	44.5" (1130 mm)
Rollback @ Carry Position .....	25°		
Rollback Fully Raised			
@ Maximum Height .....	97°		
Wheelbase .....	28.4" (722 mm)		

## PERFORMANCE

Rated Operating Capacity (SAE J732) .....	700 lbs. (318 kg.)
Tipping Load (SAE J732) .....	1405 lbs. (637 kg.)
Operating Weight (SAE) .....	2708 lbs. (1228 kg.)
Travel Speed .....	6.5 mph (10.5 km/hr)
Lift Breakout Force (SAE) .....	1450 lbf. (6450 N)
Tilt Breakout Force (SAE) .....	2025 lbf. (9008 N)
Axle Torque .....	1066 ft.-lbs. (1445 Nm)

## ENGINE/ELECTRICAL

Make/Model .....	Kubota/D1005-E2B
Fuel/Cooling .....	Diesel/Liquid
Horsepower (SAE J1349 Net) .....	22.5 HP (16,8 kW)
Maximum Governed RPM .....	3000 RPM
Torque @ 2200 RPM (SAE Gross) .....	43 ft.-lbs. (58,3 Nm)
Number of Cylinders .....	3
Displacement .....	61.1 cu. in. (1,0 L)
Bore/Stroke .....	2.99 / 2.90 in. (76 / 73,6 mm)
Fuel Consumption .....	0.75 gal/hr (2,8 L/hr)
	Estimated fuel consumption is based on testing by Bobcat Company in high duty cycle digging applications.
Lubrication .....	Pressure System with Filter
Crankcase Ventilation .....	Closed breathing
Air Cleaner .....	Dry replaceable cartridge with safety element
Ignition .....	Compression (Diesel)
Engine Coolant .....	Propylene glycol/water mix (53%-47%) with freeze protection to -34°F (-37°C)
Starting Aid .....	Glow plugs
Alternator .....	Belt Driven; 65 amps; Open
Battery .....	12 volt; 600 cold cranking amps @ 0°F (-18°C); 115 minute reserve capacity
Starter .....	12 volt; gear reduction type; 3.62 HP (2,7 kW)

## HYDRAULIC SYSTEM

Pump Type .....	Engine driven, gear type
Pump Capacity .....	10 GPM (37,1 L/min) @ 3000 RPM
System Relief @ Quick Couplers .....	3000 PSI (207 Bar)
Hydraulic Filter .....	Full flow replaceable, 10 micron cartridge filter element in the hydrostatic pump charge line
Hydraulic Cylinders .....	Double-acting, with dual cushions on tilt
Control Valve .....	3-Spool, open center with spring detent on lift and detent auxiliary spool.
Fluid Type .....	Bobcat Fluid (P/N 6563328) If fluid is not available, use 10W-30/10W-40 Class SE motor oil for temperatures above 0°F (-18°C) or 5W-30 Class SE motor oil for temperatures below 0°F (-18°C).

### *Bore Diameter*

Lift Cylinder (2) .....	2.00 in. (50,8 mm)
Tilt Cylinder (1) .....	3.00 in. (76,2 mm)

### *Rod Diameter*

Lift Cylinder (2) .....	1.25 in. (31,8 mm)
Tilt Cylinder (1) .....	1.25 in. (31,8 mm)

### *Stroke*

Lift Cylinder (2) .....	21.88 in. (555,8 mm)
Tilt Cylinder (1) .....	10.56 in. (268,2 mm)

### *Hydraulic Function Times*

Raise Lift Arms .....	3.6 Seconds	Bucket Dump .....	2.3 Seconds
Lower Lift Arms .....	2.5 Seconds	Bucket Rollback .....	2.1 Seconds

**DRIVE SYSTEM**

- Main Drive ..... Fully hydrostatic, 4-wheel drive
- Transmission ..... Infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors
- Final Drive Chains     Pre-stressed #60 HS 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 ..... 1.5 in. (38,1 mm) heat treated
- Wheel Bolts ..... (5) 7/16 in. Wheel bolts fixed to axle hubs



**CAPACITIES**

- Fuel Tank ..... 6.5 gals. (24,6 L)
- Cooling System ..... 6.0 qts. (5,7 L)
- Engine Oil with Filter ..... 5.0 qts. (4,7 L)
- Hydraulic Reservoir ..... 5.3 qts. (5,0 L)
- Hydraulic/Hydrostatic System ..... 4.0 gals. (15,1 L)

**CONTROLS**

- Vehicle Steering ..... Direction and speed controlled by two hand levers
- Loader Hydraulics
  - Lift & Tilt ..... Controlled by separate foot pedals
  - Front Auxiliary (Std.) ..... Controlled by lateral movement of Right Hand (RH) steering lever
- Auxiliary Pressure Release .. Lateral movement of RH steering lever after engine has been shut off.
- Engine ..... Hand lever throttle: key-type starter switch and shutdown
- Starting Aid ..... Glow Plugs – activated by Rocker Switch on dash panel
- Service Brake ..... Two independent hydrostatic systems controlled by two hand-operated steering levers
- Secondary Brake ..... One of the hydrostatic transmissions
- Parking Brake ..... Finger-operated toggle switch on left-hand instrument panel.

## INSTRUMENTATION

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

### **Standard Instrument Panel**

#### Gauges

Hourmeter  
Engine Coolant Temperature  
System Voltage

#### Warning Lights

Engine Oil Pressure  
Engine Coolant Temperature

#### Indicators

BICS Functions



## 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) for cleaning
- Engine oil and fuel filters
- Engine oil drain and dipstick
- Hydraulic oil fill
- Starter

- Axle hubs provide protection for the axle seals
- Bobtach pivots have replaceable wear bushings
- Easy access to all lift arm grease points
- Remote engine oil fill
- Rod end of the tilt cylinder has a replaceable bushing
- Tailgate has an optional lock for vandal proofing
- Tip-up operator cab gives access to certain hydraulic system components

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## OPTIONS/ACCESSORIES

Factory Field  
Option Kit

- Attachment Control Kit
- Backup Alarm
- Cab Enclosure (Includes front door with wiper, top & sliding side windows and side instrument panel)
- Cab Enclosure with Heat
- Catalytic Exhaust Purifier
- Engine Block Heater
- Fire Extinguisher Kit
- Horn
- Hydraulic Bucket Positioning
- Keyless Start
- Locking Fuel Cap
- Low Coolant Sensor Kit
- Rental Kit
- Rotating Beacon Light
- Seat Belt, 3" Wide
- Side Instrument Panel
- Side Windows Kit
- Sound Cab
- Special Applications Kit
- Strobe Light Kit
- Suspension Seat
- Tires: 23 x 8.50-12, 6 PR
- Tires: 23 x 8.50-12, 8 PR
- Top Window

## STANDARD FEATURES

- Auxiliary Hydraulics
- Bob-Tach
- Bobcat Interlock Control System (BICS)
- Instrumentation (See Page 4)
- Lift Arm Support
- Lights, Front and Rear
- Operator Cab\*
- Parking Brake
- Rear Window
- Seat, High Back Cushion
- Seat Bar
- Seat Belt
- Spark Arrestor Muffler
- Tires: 23 x 5.70-12, 4 PR,  
Bobcat Standard Duty

\* Roll Over Protective Structure (ROPS)—  
Meets requirements of SAE-J1040 and ISO 3471

## ATTACHMENTS

- |                   |                       |
|-------------------|-----------------------|
| Angle Broom       | Pallet Forks          |
| Auger             | Snow V-Blade*         |
| Backhoe           | Snowblower*           |
| Boring Unit       | Soil Conditioner      |
| Buckets           | Stump Grinder*        |
| Digger            | Sweeper               |
| Dumping Hopper    | Tiller                |
| Farm Grapple      | Trencher              |
| Hydraulic Breaker | Utility (Dozer) Blade |
| Landplane         | Utility Forks         |
| Mini Scraper      | Utility Grapple       |

See *Bobcat Product Price List* for specific attachment model availability.

\*Requires Attachment Control Kit

## SAFETY

Bobcat Interlock Control System (BICS) (Std.) .....	Requires the operator to be seated in the loader with the seat bar in place and the engine running. After the operator presses the "Press to Operate Loader" button, the loader's hydraulic lift and tilt functions and traction drive system can be operated.
Lift Arm Bypass Control (Std.) .....	Used to lower the lift arms in the event that the lift arms cannot be lowered during normal operating conditions.
Seat Belt (Std.) .....	Should always be worn when operating the loader
Seat Bar (Std.) .....	Secondary operator restraint, also serves as an arm rest
Operator Cab (Std.) .....	An enclosable operator cab with side screens with a minimal inside cab width of 27" (686 mm) as standard equipment. Meets SAE J1040 and ISO 3471 for Roll Over Protective Structure (ROPS) and SAE J1043 and ISO 3449 Level I for Falling Objects Protective Structure (FOPS). Level II option is available.

**Level I – Acceptance is intended for protection from falling bricks, small concrete blocks and hand tools encountered in operations such as highway maintenance, landscaping and other construction site services.**

**Level II – Acceptance is intended for protection from falling trees or rocks for machines involved in site clearing, overhead demolition or forestry.**

Lift Arm Support (Std.) .....	Use for servicing when lift arms are raised
Parking Brake (Std.) .....	Always set brake when leaving loader
Grab Handles (Std.) .....	Should always be used when entering/exiting loader
Safety Tread (Std.) .....	Slip resistant tread on lift arms and main frame to be used when entering/exiting loader
Attachment Steps (Std.) .....	Should always be used when entering/exiting loader
Rear Window (Std.) .....	Rear Window opening for emergency exit
Front & Rear Working Lights (Std.) .....	Use for indoor and low light operation
Backup Alarm (Opt.) .....	For use in jobs with low visibility
Lift Kits (Opt.) .....	Lift kits are available so that loaders may be lifted into remote areas
Special Applications Kit (Opt.) .....	Restricts objects and material from entering cab openings
Operator's Handbook (Std.) .....	Weather resistant operator handbook written in English will be attached to inside of cab, providing operational instructions and warnings by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.

## TRAINING RESOURCES

*These optional videotapes and training courses are available through Bobcat Parts*

**Bobcat Skid-Steer Loader Operator Training Course**

4-hour course provides video, classroom and hands-on training (also available in Spanish)

**Bobcat Skid-Steer Loader Service Safety Training Course**

2-hour course provides video, classroom and hands-on training

**Bobcat Skid-Steer Loader Safety Video**

Short and to-the-point video provides basic safety instructions for the Skid-Steer Loader

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