

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Request for Quotation

REQ NUMBER DNR210174

ADDRESS:CORRESPONDENCES:O'ATTENTION:OF

FRANK WHITTAKER 304-558-2316

RFQ COPY of Advantage Valley JEFFERDS CORPORATION
SALES • SERVICE • RENTAL

Cross Lanes, WV 25313

304-776-9100 • 1-866-426-2228

DIVISION OF NATURAL RESOURCES STONEWALL JACKSON STATE PARK ATTN: PARK SUPERINTENDENT 149 STATE PARK TRAIL ROANOKE, WV 26447

304-269-0523

DATE PRIN	TED TE	RMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
03/18/		10	autuck	Deliverent	NONE
BID OPENING DATE	04/14/		BID	OPENING TIME 01	:30PM
LINE	QUANTITY	LIGP CAT.	ITEM NUMBER	UNITPRICE	AMQUNT
0001		EA	765-85		G9
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	SPECIFICATION	1			33
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			5305-0130		CHASING DIVISION
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		j seeren	TERSE SIDE FOR TERMS AND CON	4DITIONS	
SIGNATURE			TELEPHONE	DATE	-2 /3
TITLE	FI F	EIN			
Soles Soci	alist	<u>55-03360</u>	65 <u> </u>	ADDRESS CHANGES	TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
- 5. Payment may only be made after the delivery and acceptance of goods or services.
- Interest may be paid for late payment in accordance with the West Virginia Code.
- 7. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 10. The laws of the State of West Virginia and the Legislative Rules of the Purchasing Division shall govern the purchasing process.
- 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
- 12. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
- 13. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
- 14. CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the tidividual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeCoxfidentiality.pdf.
- 15. LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
- 16. ANTITRUST: In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

- 1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
- 2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
- 3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
- 4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
- 5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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FRANK WHITTAKER 304-558-2316

AFQ NUMBER

of Advantage Valley

JEFFERDS CORPORATION
SALES • SERVICE • RENTAL

Cross Lanes, WV 25313 304-776-9100 • 1-866-426-2228 DIVISION OF NATURAL RESOURCES STONEWALL JACKSON STATE PARK ATTN: PARK SUPERINTENDENT 149 STATE PARK TRAIL ROANDKE, WV

ADDRESS:CORRESPONDENCE NOTATION FOR THE

26447

304-269-0523

DATE PRINTED T	ERMS OF SALE	SHIPVIA	f08	FREIGHTTERMS
03/18/2010				
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TO CONTACT	YOU REGARDI	NG YOUR BID:		
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SIGNATURE		TELEPHONE	DATE	
TITLE	FEIN		ADDRESS CHANGES	

DNR210174

Stonewall Jackson Wildlife Management Area Purchase of Compact Track Loader with Rotary Mulcher Attachment

The West Virginia Purchasing Division for the West Virginia Division of Natural Resources is requesting bids for the purchase of one (1) Forestry Grade Compact Track Loader with Rotary Mulcher Attachment. All items are to be F.O.B. Destination. Freight or delivery charges must be included in the price of the goods. Delivery must be made within thirty (30) days of purchase order award.

General Specifications:

The Forestry Grade Compact Track Loader with Rotary Mulcher Attachment must be manufactured for commercial use. All items must be new.

Information for Bidders:

Bidders must submit a unit price bid for each item to furnish all items specified.

Damaged Items:

Damaged or defective items must be replaced at no additional expense to The West Virginia Division of Natural Resources.

Warranty:

The equipment must be guaranteed to be free of defects in workmanship and material for a minimum of one (1) year from date of acceptance. However, if manufacturer warranty periods are longer than the required minimum one year warranty, those warranties shall apply.

Forestry Grade Compact Track Loader with Rotary Mulcher Attachment

ASV Model PT-100 Forestry Loader & ASV Model HD7460B Rotary Mulcher Attachment or equal. Forestry loader/rotary mulcher must meet the following specifications:

- Must have a diesel engine with a minimum horsepower of 99 HP and a minimum peak torque of 300 ft-lb;
- Must have general purpose tracks with minimum track width of 17 inches with a minimum ground contact area of 2,500 square inches;
- Must have a hydrostatic powertrain;
- Must have a heavy duty independent suspension of undercarriage;

DNR210174

Stonewall Jackson Wildlife Management Area Purchase of Compact Track Loader with Rotary Mulcher Attachment

- Must have pliot joystick controls;
- Must have a suspension seat with lap and shoulder belts and seat belt;
- Must have auxiliary hydraulic (quick connect fittings) with low flow maximum of 20 gpm and high flow maximum of 40 gpm;
- Must have an engine block heater;
- Must be ROPS/FOPS/OPS (certified);
- Must have indicators warning lights for engine oil pressure, hot hydraulic oil and low battery;
 voltage and a tachometer gauge, engine temperature gauge, and a fuel level gauge;
- Must have front and rear emergency exits and a heavy duty polycarbonate door and wiper;
- Must have light, hood, window, and condenser guards and skid plates;
- Must have a climate control system with high output with a/c, heat and service access;
- Must not exceed 13,000 lbs. (total weight) for entire package (track loader and mulcher attachment); and
- Must have a heavy duty rotary drum (quick attach) mulcher attachment which has a minimum cutting width of 60 inches and maximum outside width of 75 inches.

Forestry Loader/Mulcher to be delivered to the following location:

Stonewall Jackson Wildlife Management Area
Lewis County
114 Old Georgetown Road, Roanoke, WV

Contact: Gary Foster (304-637-0245) for delivery information

Forestry Mulcher Manufacturer's List

glease complete the below information concerning the brand(s) of equipment being bid in relation to this project. mandatory requirements stated in the specifications. Vendors should note the areas of the provided manufacturer's literature that adheres to the mandatory requirements outlined in the Request for Quotation. If bidding "or equal" brands, please attach manufacturer's literature documenting that it meets the

_	ITEM NO.	EQUIPMENT	MANUFACTURER	MODEL	
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			TII	5000	
	~	ASV Model PT-100 Forestry Loader & ASV Model	200		7
		HD7460B Rotary Mulcher Attachment or Equal	Bobut	10" Foresty Cul	Ž

FORESTRY MULCHER PRICING SHEET

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Ε	EM NO.	ITEM NO. QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	1	-	ASV Model PT-100 Forestry Loader & ASV	Ç	
		,	Model HD7460B Rotary Mulcher	66,68 66,68	16,68
			Attachment or Equal		,
Ţ_			The state of the s	TOTAL COST	



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Department of Administration
Purchasing Division
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Cross Lanes, WV 25313

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ADDRESS CORRESPONDENCE TO ATTENTION OF

PAGE
1

FRANK WHITTAKER 104-558-2316

DIVISION OF NATURAL RESOURCES STONEWALL JACKSON WILDLIFE MANAGEMENT AREA 114 OLD GEORGETOWN ROAD ROANOKE, WV

26447

304-637-0245

	304-770	-9100 • 1-000	J-420-22				
DATE PRINT	rea	TERMS OF SAL	E.***	SHIP	/IA	F.O.B	FREIGHTTERMS
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DIVISION OF JEFFERDS CORPORATION

406 Goff Mountain Road P O Box 7555 Cross Lanes, WV 25356-0555 Phone (304) 776-9100 / Fax (304) 776-0285 www.jefferds.com

Product Quotation

Quotation Number: 2532E03189

Date: 2010-04-14 08:53:14

Customer		Bobcat Sp	ecialist				
Division of Natu	ural Resources	Steve Lewis					
Attn: Frank Wh	ittaker	•	Phone: (304) 776-9100				
2019 Washingt	on Street East	Fax: (304)					
Charleston, W\	Cellular: (3						
Phone: (304) 5	E Mail: stev	/elewis	@jefferds.com	<u>n</u>			
Description		Part No	Qty	Price Ea.	Total		
•	at Compact Track Loader	M0039	1	\$40,085.00	\$40,085.00		
Factory Installed		M0039-P01-A51	1	\$2,224.00	\$2,224.00		
	rith Heat and AC	Power Bobtach		ŕ			
	High Flow Hydraulics, Hydraulic Bucket	M0039-P01-F40	1	\$1,350.00	\$1,350.00		
	Positioning	140020 DA1 CO4		#1 522 00	e1 522 AA		
	Selectable Joystick Controls (SJC)	M0039-R01-C04 M0039-R21-C02	1	\$1,533.00			
	Roller Suspension Carriage	M0039-R21-C02 M0039-A01-C01	1	\$1,018.00 \$102.00			
	Attachment Control Kit - 7 Pin		1				
Attachments	Forestry Cutter, 60"	7136624	1	\$16,427.00 \$3,941.00	•		
	Forestry Applications Kit	7131810	1	\$5,541.00	\$3,941.00		
Total of Items	s Onoted				\$66,680.00		
Quote Total -	-				\$66,680.00		
Notes:							

Notes:

All prices subject to change without prior notice or obligation. This price quote supercedes all preceding price quotes. Customer must exercise purchase option within 30 days from quote date.

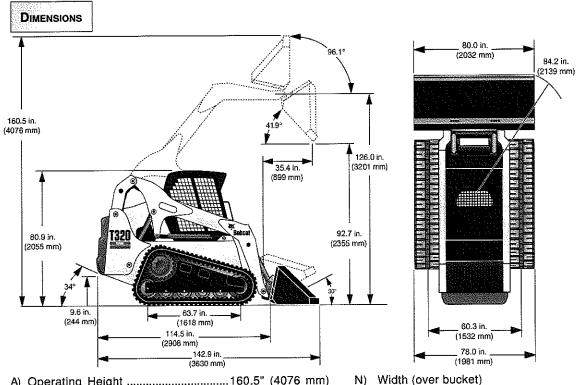
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Authorized Signatures	/		
Jan gu	4-11-10		
Bobcat of Advantage Valley, Cross	Date	Bobcat of Advantage Valley, Cross Lanes, WV	Date
Lanes,WV			

Exceptions to Specifications

Minimum horsepower and torque – Specifications are for minimum 99hp and torque was 300 ft-lb. Bobcat uses a 92 hp diesel engine with 232 ft-lb or torque. The measurement of horsepower and torque varies from mfg to mfg. Unless the horsepower was measured under the same circumstances, the comparison may not be valid. The Bobcat loader drive system was designed to operate and function properly with the engine and hydraulic package. Our attachments are built by Bobcat and designed to operate in the power range of the loader.

Hydraulic Flow – The specified hydraulic flow is a maximum of 20gpm on low flow and a maximum of 40 gpm on high flow. Our unit has a maximum of 21.2 gpm on low flow and a maximum of 37gpm on high flow. This is simply a design difference of the manufacturer and is not a measure of performance of the loader or attachment.

T320 COMPACT TRACK LOADER SPECIFICATIONS



A)	Operating Height	.160.5" (4076 mm)
B)	Height with Operator Cab	.80.9" (2055 mm)
	Angle of Departure	
D)	Ground Clearance	.8.7" (221 mm)
E)	Ground Contact Length	.63.7" (1618 mm)
F)	Length without Attachment	.114.5" (2908 mm)
G)	Length with Standard Bucket	.142.9" (3630 mm)
	Rollback @ Ground	
	Dump Height with Standard Bucket.	
J)	Dump Reach @ Maximum Height	.36.5" (927 mm)
K)	Height to Bucket Hinge Pin	.126.0" (3201 mm)
L)	Dump Angle @ Maximum Height	.41.9°
M)	Rollback Fully Raised	
	@ Maximum Height	
Ca	rry Position	.9.3" (236 mm)

	(1981 mm)			
N)	Width (over bucket)			
	74 in. Bucket	74.0"	(1880)	mm)
	80 in. Bucket			
O)	Turning Radius			
,	with Standard Bucket	84.2"	(2139	mm)
	Rear Clearance of Machine			
P)	Track Tread		·	
,	12.6 in. Tracks	60.3"	(1532	mm)
	18 in. Tracks	60.3"	(1532	mm)
Q)	Track (width over track)		,	
,	12.6 in. Tracks	73.0"	(1851)	mm)
	18 in. Tracks			
			•	,

PERFORMANCE

Rated Operating Capacity (ISO 14397 - no more than 35% of Tipping Load)	3200 lbs. (1452 kg)
Rated Operating Capacity (35% of Tipping Load) - Roller Suspension	2800 lbs. (1270 kg)
*Rated operating capacity (ROC) @ 35% of Tipping Load complies with ISO 14397-1 and SAE J 818	for crawler loaders.
Operating Capacity (ISO 14397 - no more than 50% of Tipping Load)	4604 lbs. (2089 kg)
Operating Capacity (50% of Tipping Load) - Roller Suspension	4046 lbs. (1835 kg)
Tipping Load (ISO 14397-1)	9208 lbs. (4177 kg)
Tipping Load - Roller Suspension	8092 IDS. (3670 Kg)
Operating Weight (SAE)	9702 lbs. (4401 kg)
Operating Weight - Roller Suspension Travel Speed	10308 lbs. (4676 kg)
Travel Speed	6.6 mph (10,6 km/hr)
Lift Breakout Force (SAE)	6700 ibs. (3039 kg)
Lift Breakout Force - Roller Suspension	6500 lbs. (2948 kg)
Tilt Breakout Force (SAE)	6300 lbs. (2858 kg)
Tilt Breakout Force - Roller Suspension	6100 lbs. (2/6/ kg)
Push Force	6200 lbs. (2812 kg)
Push Force - Roller Suspension	7500 lbs. (3402 kg)

ENGINE/ELECTRICAL

Make/Model	Kubota V3800-DI-T
Fuel/Cooling	Diesel/Liquid
Horsepower (SAE Gross)	. 92 HP (68,6 kW) @ 2400 RPM
Horsepower (SAE Net)	90.6 HP (67,6 kW) @ 2400 RPM
Maximum Governed RPM	. 2650 RPM
Torque, Maximum	. 232.3 LBF-FT (315 Nm) @ 1600 RPM
Number of Cylinders	. 4
Displacement	, 230 cu. in. (3769 cm³)
Bore/Stroke	. 3.94/4.72 in. (100/120 mm)
Fuel Consumption	. 3.8 gal/hr (14,4 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	. Open Breathing
Air Cleaner	. Dry replaceable paper cartridge with safety element
Ignition	. Diesel-Compression
Engine Coolant	. Propylene Glycol
Starting Aid	. Intake Air Heater
Alternator	. Belt driven; 90 amps; Open
Battery	. 12 volt; 950 cold cranking amps @ 0°F(-18°C);
	180 minute reserve capacity
Starter	. 12 volt; gear reduction type; 4.02 HP (3,0 kW)

HYDRAULIC SYSTEM

Pump TypePump Capacity	Engine driven, g	ear type
Standard	21.2 GPM (80,2	L/min) @ high idle
High Flow Option	37 GPM (140,1 l	L/min) @ high idle
System Relief @ Quick Couplers	3300 PSI (227,5	Bar)
Hydraulic Filter	Full flow replace	able, 3 micron synthetic media element
Hydraulic Cylinders	Double-acting; t	ilt cylinders have cushioning feature on
	dump and rollba	ck
Control Valve	3-Spool, open c	enter type with float detent on lift and electrically
	controlled auxilia	ary spool
Fluid Type	. Bobcat Hydraulic	:/Hydrostatic Fluid (P/N 6563328)
,	Motor oil is not ar	n acceptable alternative fluid
Bore Diameter		
Lift Cylinder (2)	. 3.00 in. (76,2 m	m)
Tilt Cylinder (2)	. 3.00 in. (76,2 m	m)
Rod Diameter		
Lift Cylinder (2)		
Tilt Cylinder (2)	. 1.50 in. (38,1 m	m)
Stroke		
Lift Cylinder (2)	. 25.0 in. (636 mr	n)
Tilt Cylinder (2)	. 15.1 in. (384 mr	n)
Hydraulic Function Times		
Raise Lift Arms		Bucket Dump2.7 Seconds
Lower Lift Arms	. 3.0 Seconds	Bucket Rollback2.1 Seconds

DRIVE SYSTEM

Main DriveFully hydrostatic, rubber track drive

TransmissionInfinitely variable tandem hydrostatic piston pumps,

driving two fully reversing hydrostatic motors

tension-grease cylinder and spring rollers-triple flange

GROUND PRESSURE

18 in. Track width 4.2 psi (28,9 kPa)	CAPACITIES
18 in. Track width - Roller Suspension	Fuel Tank
	Engine Lubricating with Oil Filter 12 ats. (11.4 L)

CONTROLS

Vehicle Steering	Direction and speed controlled by two hand levers
Loader Hydraulics	
Lift & Tilt	Controlled by separate foot pedals or optional Advanced Control System (ACS) or optional Selectable Joystick Control (SJC)
Front Auxiliary (Std.)	Controlled by electrical switch on Right Hand steering lever
Rear Auxiliary (Opt.)	Controlled by electrical switch on Left Hand steering lever
Auxiliary Pressure Release	Pressure is relieved through the coupler block, push in and hold for five seconds.
Engine	Hand lever throttle; key-type starter switch and shutdown
Starting Aid	Intake Air Heater – automatically activated by Standard or
9	Deluxe Instrument Panel
Service Brake	Two independent hydrostatic systems controlled by two hand operated
	steering levers
Secondary Brake	One of the hydrostatic transmissions
Parking Brake (Std.)	Finger-operated rocker switch on center control panel activates spring applied pressure release (SAPR) mult disc brake

SERVICEABILITY

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

Air cleaner

Alternator

Battery

Cooling system (radiator and hydraulic oil cooler) for cleaning

Engine oil and fuel filters

Engine oil drain and dipstick

Starter

Easy access to all lift arm grease points

Rod end of the tilt cylinders 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

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 an audible alarm and visual warning lights.

Standard Instrument Panel

<u>Gauges</u>

Engine Coolant Temperature

Fuel

Hourmeter

Indicators

Advanced Control System (ACS)

Attachment Control Device

BICS Functions

Intake Air Heater

Selectable Joystick Control (SJC)

Warning Lights

Engine Air Filter

Engine Coolant Temperature

Engine Oil Pressure

Fuel Level

General Warning

Hydraulic Filter Hydraulic Oil Temperature

Hydrostatic Charge Pressure

Seat Belt

System Voltage

Deluxe Instrument Panel (Option)

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

Bar-type gauges: Engine Oil Pressure, System Voltage, Hydrostatic Charge Pressure

and Hydraulic Oil Temperature

Attachments Information, Digital Tachometer, High Flow Lockouts, Multi-Language Display, Help Screens, Diagnostic Capability and

Engine/Hydraulic Systems Shutdown Function

ATTACHMENTS

Angle Broom* Auger

Backhoe Box Blade

Brush Saw Brushcat Rotary Cutter Buckets

Bucket Adapter Chipper*

Combination Bucket Concrete Mixer*

Digger Dozer Blade* Drop Hammer Dumping Hopper

Flail Cutter Forestry Cutter Grader*

Landplane

Grapple, Farm/Utility Grapple, Industrial Hydraulic Breaker

Landscape Rake Mower Pallet Forks - Standa

Pallet Forks - Standard Pallet Forks - Hydraulic Planer* Rear Stabilizer

Scarifier Seeder Snow Blade Snow V-Blade* Snowblower*

Snowblower*
Sod Layer
Soil Conditioner*
Spreader
Stump Grinder*
Super Scraper

Three-Point Hitch

Tiller Tilt-Tatch

Trench Compactor
Trencher

Utility Forks
Utility Frame
Vibratory Roller
Water Kit
Wheel Saw*

Whisker Broom

See Bobcat Product Price List for specific attachment model availability. *Requires Attachment Control Kit

Sweeper

FACTORY OPTIONS

Advanced Control System (ACS) Selectable Joystick Control (SJC) Back-up Alarm and Horn Engine Block Heater High Flow Auxiliary Hydraulics Hydraulic Bucket Positioning

DEALER ACCESSORIES

Attachment Control Kit Back-up Alarm Cab Accessory Harness Cab Enclosure Catalytic Exhaust Purifier Fire Extinguisher Kit FOPS Kit - Level II** Four-point Lift Kit
Four-Way Flasher Light Kit
Horn
Hydraulic Bucket Positioning
Locking Fuel Cap
Power Bob-Tach
Radio

Rear Auxiliary Hydraulics Ride Control Rotating Beacon Light Side Windows Kit Single-point Lift Kit Special Applications Kit Strobe Light Kit Tailgate Lock Kit

AC/HEATED CAB PACKAGES

A91 Option Package

Cab Enclosure with
Heat/Air Conditioning
High Flow Hydraulics
Power Bobtach
Sound Reduction
Hydraulic Bucket Positioning
Deluxe Instrumentation Panel
Engine Block Heater
Cab Accessory Harness
Horn
Backup Alarm
Attachment Control Kit

A71 Option Package

Cab Enclosure with
Heat/Air Conditioning
Power Bobtach
Sound Reduction
Deluxe Instrumentation Panel
Cab Accessory Harness
Attachment Control Kit

A51 Option Package

Cab Enclosure with Heat/Air Conditioning Power Bobtach Cab Accessory Harness

A31 Option Package

Cab Enclosure with Heat/Air Conditioning Cab Accessory Harness

HEATED CAB PACKAGES

H71 Option Package

Cab Enclosure with Heat Power Bobtach Sound Reduction Deluxe Instrumentation Panel Cab Accessory Harness Attachment Control Kit

H51 Option Package

Cab Enclosure with Heat Power Bobtach Cab Accessory Harness H31 Option Package Cab Enclosure with Heat Cab Accessory Harness

OPEN CAB PACKAGES

O71 Option Package

Power Bobtach
Deluxe Instrumentation Panel
Cab Accessory Harness
Attachment Control Kit

O51 Option Package

Cab Accessory Harness Deluxe Instrumentation Panel

SAFETY

Bobcat Interlock Control System (BICS) (Std.)	. Requires the operator to be seated in the loader with the seatbar
(BIOO) (Gtd.)	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.)	
	Three-point shoulder belt provides restraint for high range speeds.
Seat Bar (Std.)	. Secondary operator restraint, also serves as an arm rest
Operator Cab (Std.)	
Opolatio (0.00)	inside cab width of 33" (838 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.
	Chactare (1 C. C). Level in option to available.

FOPS 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.

FOPS 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.)	
Safety Tread (Std.)	Slip resistant tread on lift arms and main frame to be used when
	entering/exiting loader
Attachment Steps (Std.)	
Rear Window (Std.)	
Front & Rear Working Lights (Std.)	
Alarm Package (Opt.)	For use in jobs with low visibilityincludes horn and backup alarm
Lift Kits (Opt.)	Lift kits are available so loader may be lifted into remote areas
Special Applications Kit (Opt.)	
Operator's Handbook (Std.)	
	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 Loader Operator Training Course

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

Bobcat Loader Service Safety Training Course

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

Bobcat Loader Safety Video

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

COMPACT TRACK LOADER

3200 lbs. RATED OPERATING CAPACITY

EFFECTIVE SEPTEMBER 10, 2007

For the most up-to-date Bid Specs go to BobcatNET >> Compact Track Loaders>>T320>> Bid Specs

These bid specifications are to be used as guidelines when assisting purchasing agents and governmental specification writers in writing specifications for loaders. It is not the intent of these specifications to cover all details of design or construction. The unit shall be fully equipped to perform the work intended and shall be a new, current production model.

For individual assistance in preparing detailed specifications, contact the Sales & Marketing Support Department in West Fargo, ND office at 701/241-8705.

3200 LBS. RATED OPERATING CAPACITY

RKING	

Angle of Departure	25°
Angle of Departure	9.7" (246 mm)
Dump Angle @ Maximum Height	41.9°
Dump Height with Standard Bucket	99.1" (2517 mm)
Dump Reach @ Maximum Height	33.8" (859 mm)
Ground Clearance	8.7" (221 mm)
Height to Bucket Hinge Pin	128.8" (3272 mm)
Height with Operator Cab	80.9" (2055 mm)
Length without Attachment	114.5" (2908 mm)
Length with Standard Bucket	142.9" (3630 mm)
Operating Height	160.6" (4079 mm)
Rollback @ Ground	30°
Rollback Fully Raised @ Maximum Height	96.1°
Turning Radius with 80" Bucket	82.4" (2093 mm)
Length of track on ground (Ground Contact/Track Tread)	63.7" (1618 mm)
Width (over standard tracks) 17.7"	78.0" (1981 mm)
Width (over bucket)	80.0" (2032 mm)
Narrow Track Option (12.6")	72.0" (1829 mm)
Width (over bucket, narrow track option)	74 0" (1880 mm)
Ground Pressure	17.7" Track width – 4.2 PSI
Ground Pressure (optional)	12 6" Track width – 5.8 PSI
Ground Fressure (optional)	

PERFORMANCE

Rated Operating Capacity* (35% of Tipping Load)	3200 lbs. (1452 kg)
Rated Operating Capacity - Roller Suspension	2800 lbs. (1270 kg)
Operating Capacity (50% of Tipping Load)	4604 lbs. (2089 kg)
Operating Capacity - Roller Suspension	4046 lbs. (1835 kg)
Tipping Load	9208 lbs. (4177 kg)
Tipping Load - Roller Suspension	8092 lbs. (3670 kg)
Operating Weight (SAE)	9702 lbs. (4401 kg)
Operating Weight - Roller Suspension	10308 IDS. (4676 Kg)
Travel Speed	6.6 mph (10,6 km/hr)
Lift Breakout Force (SAE)	6700 lbs. (3039 kg)
Lift Breakout Force – Roller Suspension	6500 lbs. (2948 kg)
Tilt Breakout Force (SAE)	6300 lbs. (2858 kg)
Tilt Breakout Force - Roller Suspension	6100 lbs. (2767 kg)
Push Force	
Push Force – Roller Suspension	7500 lbs. (3402 kg)

^{*}Rated Operating Capacity (ROC) @ 35% of Tipping Load complies with ISO 14397-1 and SAE J 818 for crawler loaders.

ENGINE/ELECTRICAL

- Shall have 4 cylinder, liquid-cooled diesel engine; 92 HP (68.6 kW) at 2400 governed RPM. This engine is compliant with EPA Tier II Emission Standards.
- Turbo-Charger (approved as Spark Arrestor), dual element air cleaner and automatically activated air intake heater cold weather assist shall be provided as standard equipment.
- Cooling air shall be drawn from above the loader uprights to provide clean, cool air.
- Air cleaner shall have dry replaceable cartridge with safety element.
- Battery shall be 12 volt with a minimum of 950 cold-cranking amps.
- Alternator shall be a minimum 90 amp.
- Starter shall be 12 volt; gear reduction type, 4.02 HP (3.0 kW)
- Starting aid shall be an automatically activated air intake heater.

DRIVE SYSTEM

- Shall have Fully Hydrostatic Track Drive.
- Transmission shall be infinitely variable tandem hydrostatic piston pumps, driving 2 (two) fully reversing hydrostatic motors.
- Shall have 17.7" track width rubber track standard with 4.2 PSI (0.029 MPa) ground pressure
- Shall have optional 12.6" track width rubber tracks available with 5.8 PSI (0.040 MPa) ground pressure

HYDRAULIC SYSTEM

- Pump Type shall be gear type capable of providing 21.2 gpm (80,25 L/min) for bucket, lift arm and attachment operation.
- System pressure at the quick couplers shall be 3300 PSI (227,5 Bar).
- High Flow Hydraulics shall have hydraulic system capable of providing 37 gpm (140 L/min) and 3300 PSI (227,5 Bar) system relief pressure through auxiliary circuit for high flow hydraulic attachment operation.
- "Variable flow" and "Maximum flow" auxiliary hydraulics shall be standard.
- Control Valve shall be three-spool, open center type. Shall include lift (with float detent) tilt and front auxiliary hydraulic spools.
- Cylinders shall be double acting type. Tilt cylinders shall have cushioning feature on dump and rollback.
- A hydraulic oil cooler shall be standard equipment.
- Engine/Hydraulic System Shutdown shall provide automatic engine shutdown to prevent loader damage.
- Standard auxiliary hydraulics shall include flush face style quick couplers.
- Cylinders shall meet the following minimum specifications:

Function	# of Cylinders	Bore Diameter	Rod Diameter	<u>Stroke</u>
Lift	2	3.00" (76.2 mm)	1.63" (41.4 mm)	25.00" (636.0 mm)
Tilt	2	3.00" (76.2 mm)	1.50" (38.1 mm)	15.10" (383.5 mm)

OPERATOR COMFORT/CONTROLS

- Vehicle Steering shall have forward, reverse, travel speed and steering controlled by two independent hand levers.
- Hydraulic Functions lift and tilt functions controlled by separate foot pedals. Standard front auxiliary hydraulics controlled by electrical switches located on the right steering lever handle.
- Hydraulic Functions (Optional)—Advanced Control System. Allows operator to switch between Advanced Hand Control and Advanced Foot Control for lift and tilt functions.
- Hydraulic Functions (Optional)—Selectable Joystick Controls. Allows operator to switch between ISO and H-Pattern for lift and tilt functions.
- Left-hand switches shall control optional rear auxiliary hydraulics.
- Engine Speed shall be controlled by hand lever.
- Engine starting and shutdown functions shall be controlled electronically with the key switch.
- A feature for draining pressure from the auxiliary hydraulics circuit shall be provided by pressing and holding the quick couplers for five seconds.
- Keyless start system shall be available as part of the deluxe instrument panel option.
- Optional cab with heater and/or air conditioning shall be available without changing the loader profile.
- Parking brake shall be Spring Applied Pressure Release multi-disk brake.

CAPACITIES

Fuel Tank	30 gals. (113,6 L)
Engine Oil with Filter	
Cooling System	
Hydraulic Reservoir	4.7 gals. (17,8 L)
Hydraulic/Hydrostatic System	

LOADER INSTRUMENTATION

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

- Attachment Control Device (light)
- BICS Functions (light)
- Engine Air Filter (light & alarm)
- Engine Coolant Temp (gauge, light & alarm)
- Engine Oil Pressure (light & alarm)
- Fuel Level (gauge, light & alarm)
- Glow Plugs (light)
- Hourmeter (gauge)
- Hydraulic Filter Condition (light & alarm)
- Hydraulic Oil Temp (light & alarm)
- Hydrostatic Charge Pressure (light & alarm)
- System Voltage (light & alarm)
- Seat Belt (light)
- An air filter restriction indicator shall be provided as standard equipment.

LOADER CONDITION MONITOR/INSTRUMENTATION

An operating sensing system monitors the following loader conditions and functions:

Gauges

- Battery Condition
- Engine Coolant Temp
- Engine Oil Pressure
- Fuel Level
- Hvdraulic Oil Temp
- Hydrostatic Charge Pressure
- Tachometer

Warning Lights*** Alarm

- Advanced Control System
- Advanced Hand Controls
- Engine Coolant Temp
- Engine Oil Pressure
- Hydraulic Oil Temp
- Hydrostatic Charge Pressure

Other Functions

- Automatic Shutdown
- Bucket Positioning (Opt.)
- Clock
- Diagnostic Capability **
- Help Functions *
- High Flow Auxiliary Hydraulics (Opt.)
- Job Clock
- Kevless Start
- * Display informs operator of attachment function and usage.
- ** To simplify trouble shooting procedures for active warnings.
- *** The 14 warning lights that are included with the loader instrumentation are also included with the optional Deluxe Instrument Panel.

ATTACHMENTS

- All attachments must be mounted on a quick-change mechanism. No attachments will be considered unless it can be removed or mounted by an experienced operator in two (2) minutes or less.
- The quick change mechanism will incorporate two handles that drive spring loaded, wear compensating wedges into the attachment ensuring a tight attachment fit-up.
- Backhoe operation must be possible with the lift arms in the down position.
- A remote attachment control device shall be available for specified attachments to start the loader and operate the attachment from outside the operator control area.
- A single control unit must be provided which will control all available attachments.
- The following attachments must be available:
 - Angle Broom*
 - Auger
 - Backhoe
 - Bale Fork
 - Breaker
 - Brush Saw
 - Brushcat Rotary Cutter •
 - Chipper*
 - Combination Bucket
 - Concrete Mixer*
 - Concrete Pump
 - Dozer Blade
 - Drop Hammer
 - Dumping Hopper
 - Flail Cutter
 - Forestry Cutter
 - Grapple, Industrial
 - Grapple, Root
 - Landplane
 - Landscape Rake
 - Packer Wheel
 - Pallet Fork Heavy Duty

- Pallet Fork Hydraulic
- Planer-standard, curb or high flow*
- Scraper
- Seeder
- Snow V-Blade*
- Snowblower*
- Sod Layer
- Soil Conditioner—manual or hydraulic*
- Spreader
- Stabilizer
- Stump Grinder* •
- Three-Point Hitch
- Tiller
- Tree Spade*
- Trench Compactor
- Utility Frame
- Vibratory Roller
- Water Kit
- Wheel Saw ◆
- Whisker Broom

High flow auxiliary hydraulics required or approved

^{*}Attachment Control Kit required

SERVICEABILITY

- Access to the following service items shall be gained by opening the rear door/tailgate and rear screen:
 - Air cleaner
 - Alternator
 - Batterv
 - Cooling system (radiator and hydraulic oil cooler) for cleaning
 - Engine oil and fuel filters
 - Engine oil drain and dipstick
 - Fuel fill
 - Hydraulic oil fill
 - Starter
- Tailgate shall have optional lock for vandal proofing.
- Tailgate shall be equipped with a doorstop to hold the door open while servicing.
- Shall have easy access to all lift arm grease points.
- Rod end of the tilt cylinder shall have a replaceable bushing.
- Tip-up operator cab shall give access to certain hydraulic system components.

SAFETY EQUIPMENT

- An enclosable operator cab with side screens shall be provided as standard equipment. Cab shall meet SAE standards J1040 and J1043 for Rollover Protective Structure and Falling Object Protective Structure. Minimum inside cab width shall be 33" (838 mm).
- A seat belt and an electrically switch-operated parking brake shall be furnished as standard equipment.
- Front and rear work lights shall be standard.
- Additional operator protection shall be provided by a seat bar or similar device which restricts lift arm operation when not in use.
- A lift arm support device to assist in servicing the loader shall be provided as standard equipment.
- Loader shall be equipped with an interlock control system which requires that the operator be seated in the loader with the seat bar down in place and the engine running before the hydraulic lift, tilt and the traction drive system can be operated. The auxiliary hydraulics shall deactivate when the operator raises the seat bar. Should the engine not start or a system problem occur with the lift arms raised, the lift arms can be lowered by turning the lift arm by-pass control knob clockwise 1/4 turn. Then, pull up and hold until the lift arms slowly lower.
- Grab handles to assist the operator in mounting and dismounting the loader shall be provided as standard equipment.
- Shall have operational instructions and warnings by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.
- Shall have a weather resistant operator handbook written in English attached to the loader.

TRAINING RESOURCES

- A comprehensive Loader Operator Training Kit shall be available.
- A comprehensive Service Safety Training Kit shall be available.



Forestry Cutter Attachment

- Smooth operation
- Fast production
- High visibility

Forestry Applications Kit

- Protection for the operator
- Protection for the machine



Look to Bobcat!

Whether you're clearing every tree in an area or selectively thinning stands, choose the Bobcat® forestry cutter attachment. The compact size and legendary agility of Bobcat equipment lets you remove the trees you want—turning them into a bed of mulch that slows growth, and provides organic material for the trees you keep!

Cut higher trees and limbs down to size

Punch into large-diameter trees and bring the uppermost limbs quickly to the ground! The forestry cutter's tube-style drum and spiral tooth pattern allow one tooth to engage at a time—so operation is smooth and less horsepower is required to do the job.

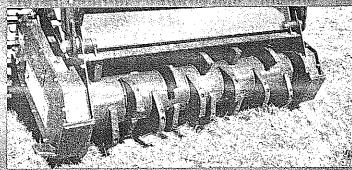
Grind trees from top to bottom!

Why take a tree to the wood chipper when you can take a forestry cutter attachment to the tree? Simply lower the forestry cutter onto the tree and its fast-cutting teeth can rip it to shreds, or tear it to pieces by repeatedly hitting it from the side.

Produce mulch

Tilt the forestry cutter slightly forward to throw material against counter combs that reduce particles to mulch. Lowering the optional front gate will help retain material when finer mulching is necessary. If required, the forestry cutter has the ability to till the mulch right into the soil!

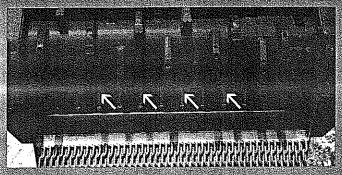
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The Bobcat Attachments Advantage: Bobcat attachments are engineered and manufactured to fit Bobcat loaders for optimum job performance, dependability and durability.



Mulching Counter Combs

- Counter combs provide the ability to do fine mulching and provide wear protection for the rear of the housing.
- Safety chains reduce debris fluowing rear

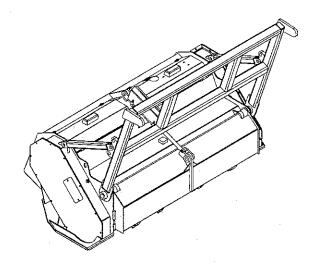


Ontional Front Gate

- Reduces ironicalischarge of material
- Promotes longer processing into line and ch
- Can be quickly added to any Bobcat forestry cutter

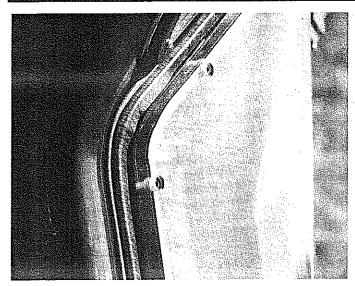
Specifications

2	
Overall width	73.4 in.
Cutting width	60 in.
Operating weight	2329 lb.
Operating weightw/ front gate	2449 lb.
Number of teeth	30
Tree diameter: Continuous use	4-5 in.
Intermittent removal	7-9 in.
Occasional removal	10-12 in.



Bobcat® Forestry Cutter Attachment and Required Forestry Door and Applications Kit

Forestry Applications Kit: Protect Your Operator, Protect Your Machine



Designed to protect you, and your investment, in the toughest conditions, the forestry applications kit must be installed on the loader in order to operate the forestry cutter attachment. The exclusive forestry door protects you from flying debris and objects. Other benefits include ISO 3449 Level II Falling Object Protective Structure (FOPS) and debris guards for muffler, lights and hydraulic components.

Forestry Cutter Attachment

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models*:

STORY COL

Compact Track

Loaders

Same

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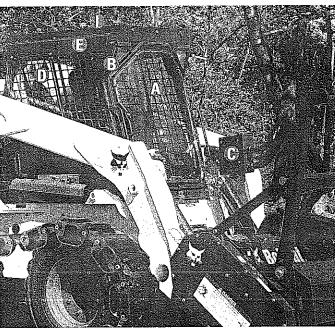
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All-Wheel Steer Loaders A300H

Loader must have proper cooling package See your Boheat dealer for details:

The exclusive emergency exit allows removal of front door, if necessary.

NOTE - Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Pictures of Bobcat units may show other than standard equipment. All dimensions are given for loader equipped with standard tires. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Bobcat Company complies with the requirements of ISO 9001 as registered with BSI.





The Forestry Applications Kit includes:

A Forestry Door (3/4 in. laminated polycarbonate)

The forestry cutter attachment will not operate without the door installed. Emergency exit allows removal of front door, if necessary

B Front and Rear Light Guards

1/4" polycarbonate material ensures branches and debris won't break lights

C Hydraulic Quick Coupler Guard

The guard, along with no exposed fittings on the hoses, helps protect the couplers, hoses and wire harness from falling trees and branches

D Fire Extinguisher

Mounted in the cab for quick access in an emergency

E Level II FOPS (meets ISO 3449)

Protects operator and cab from falling trees and objects

F Debris Screen for Radiator

Allows for longer operation time and easier cleanup of debris (daily maintenence still required)

G Muffler Guard

Protects tailpipe from damage and reduces material buildup in the engine compartment

H Lift Cylinder Debris Shields

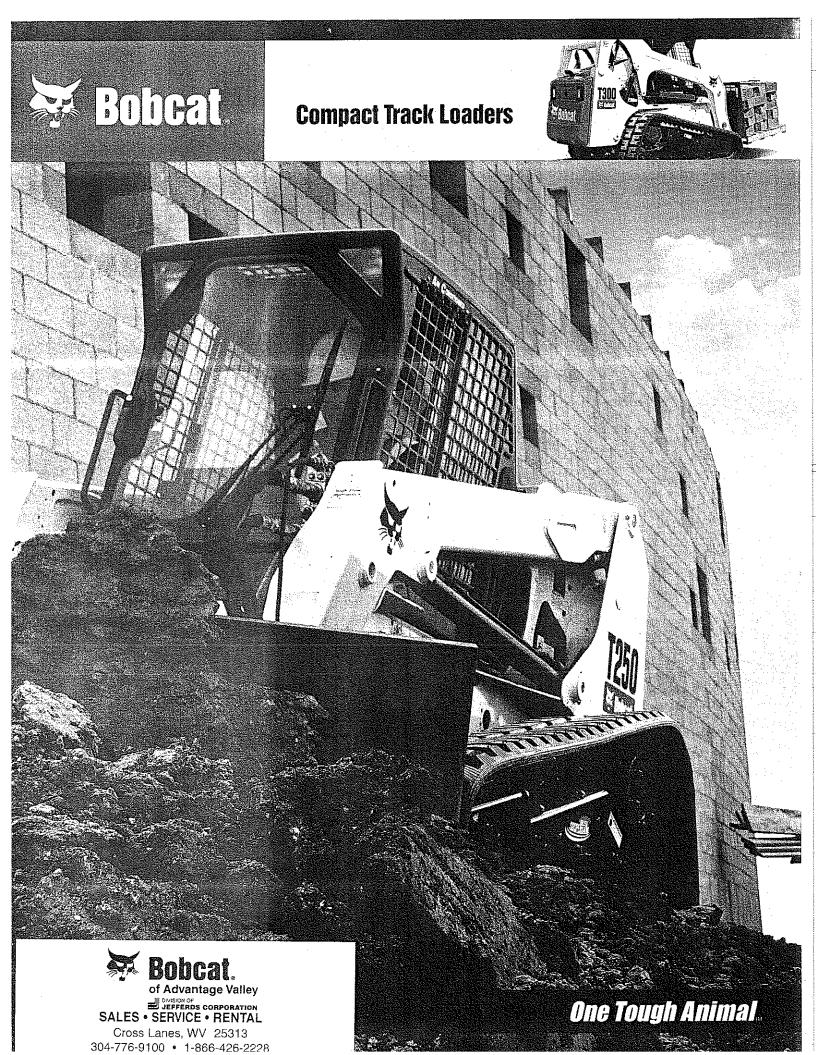
Protects lift cylinders, reduces material buildup in the engine compartment (daily maintenence still required)

I Top and Rear Windows (1/4 in. polycarbonate)

Protects operator and maximizes visibility





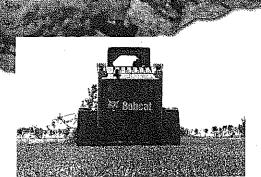




reach requirments with a choice of two lift arm confinurations - vertical and radius lift path.

Proven Track Record

Over 50 years of experience and innovation are built into every Bobcat® loader.



Low-Impact

High-flotation Bobcat compact track loaders help you minimize damage to lawns, natural terrain and other established surfaces. Fewer repairs to existing surfaces mean lower on-site costs and more profit! Many Bobcat compact track loaders offer multiple track options that meet your needs for lower ground pressure and better flotation.

Designed for Durability

Bobcat compact track loaders last longer in more demanding environments than any other track loader. They have a fully enclosed steel undercarriage with very few moving parts to minimize maintenance costs. Steel rollers and idlers are permanently sealed and lubricated, requiring no routine maintenance. Our new optional Roller Suspension is the first all-steel suspension system in the industry. Even the exclusive C-pattern rubber track has steel cables and imbeds to increase service life.

A Smoother Ride

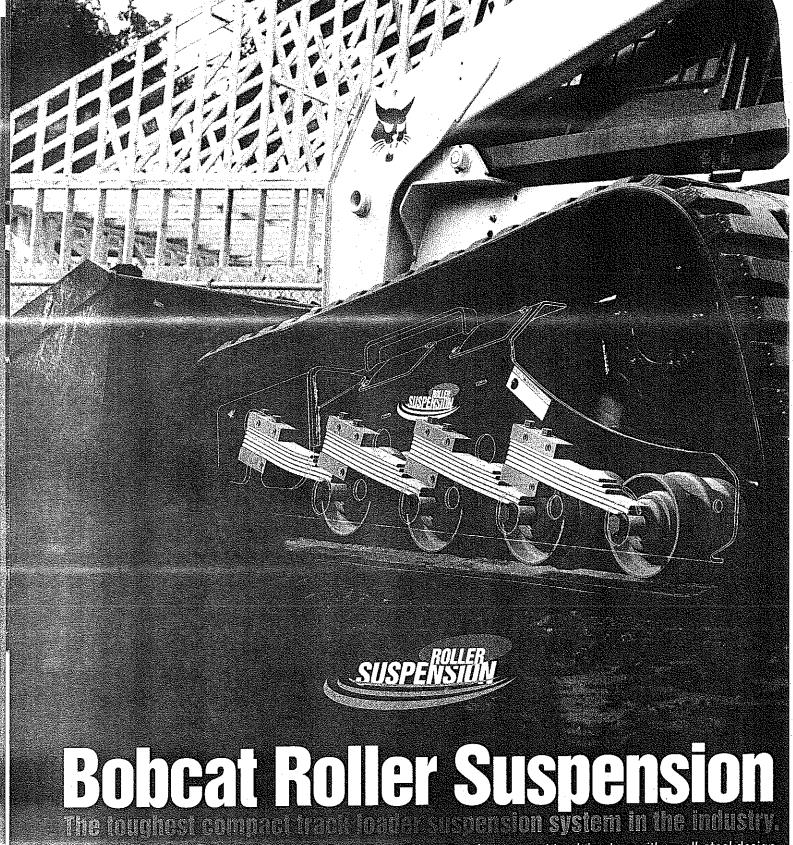
Bobcat compact track loaders ride over the top of rough terrain, such as ruts or potholes, and improve ride quality without sacrificing either grading performance or durability.

Superior Pushing Force

With more surface area in contact with the ground, compact track loaders provide more tractive effort than wheeled compact loaders. The pushing force of Bobcat compact track loaders is second to none due to direct-drive motors, a solid-mounted undercarriage, and a balance between machine weight and horsepower.

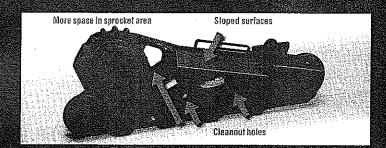
Expand Your Season

With the weight of the machine spread over a larger area, compact track loaders have a lower ground pressure than tire loaders. This increases flotation and allows you to work more productively in soft, sandy, wet or muddy conditions, where other machines aren't as effective. Some customers have added 10 days, or more, of extra income, per machine, in a season.



Bobcat Company is proud to introduce the first suspension system for compact track loaders with an all-steel design and steel imbed tracks for increased durability. Available as an option on select models, the Roller Suspension system delivers a more comfortable ride and is very robust in the demanding environments faced by compact track loaders.





Unmatched Strength and Durability

The heavy-duty Roller Suspension system allows you to go through harsher conditions, be in the field longer and spend less on undercarriage repair costs than other suspension systems.

- Longer lasting suspension components achieve a more comfortable ride without sacrificing durability
- · Steel leaf springs are more robust in extreme heat and cold
- Drive motors and hydraulic hoses are solid-mounted for better protection from debris and more uptime

Increased Comfort

A new level of comfort is achieved with durable steel leaf springs which greatly reduce the feedback from the ground. The more comfortable ride, together with easier turning, less vibration and reduced noise help keep you more comfortable throughout the day.

- Bumps are absorbed by roller travel for smoother ride
- Reduced vibration at the ground where it starts
- · Weight of the machine rests on rollers for easier turning

Ease of Maintenance

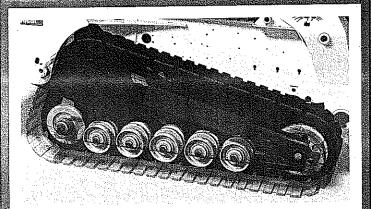
Just like our job-proven solid-mounted track undercarriage, Bobcat Roller Suspension is virtually maintenance free.

- Very few moving parts
- No exposed hydraulic hoses to damage
- · No moving pivots or tensioning rods that require maintenance and service
- 50% more sloped surfaces provide better debris shedding and faster cleanup.
- · Increased space around the sprocket area for quicker cleaning
- . New pressure washer access holes for easier cleanout

Increased Performance

Travel across jobsites faster due to the smoother ride. Easily drive over hard objects, rocks and curbs. Reduce material spills from the bucket and gain weight for pushing and grading.

- Increase productivity with faster travel on the jobsite, easier travel over objects
- Suspension stops minimize "grade bounce" and maintain the ground contact of the attachment's cutting edge, increasing grading accuracy
- · Heavy springs add weight to the loader for better pushing and grading
- Hugs the crest of hills and curbs to smoothly transition across the machine's fulcrum
- Reduced material spillage from the bucket increases productivity and provides faster jobsite cleanup



Forged Steel Rollers:

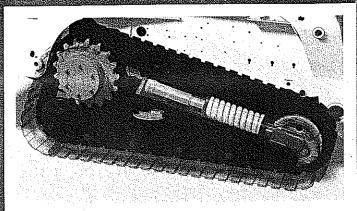
Forged steel rollers guide and support the center track area.

- Triple flange design minimizes de-tracking.
- Permanently sealed and lubricated requiring no routine maintenance.
- · Improve ride and overall track life.
- · More durable than rubber coated rollers.

Single Flange Forged Steel Idlers:

Single flange forged idlers guide and support the track around the ends of the undercarriage.

- More tolerant of debris than dual flange idlers so de-tracking is minimized.
- Permanently sealed and lubricated requiring no routine maintenance.
- Front idlers absorb shock loads and are part of a simple system which helps maintain track tension.

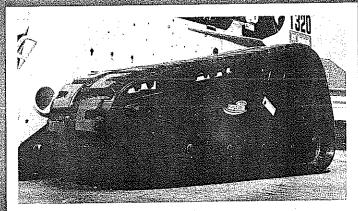


Easiest Track Maintenance in the Industry:

Track tension is easily adjusted by opening an access cover and adding grease to the tensioning cylinder with a common grease gun.

The elevated sprocket design sheds mud and debris as you work, reducing wear on both sprockets and tracks. The fully enclosed undercarriage has very few moving parts and is more tolerant of debris. Bobcat chose this undercarriage because open systems allow more material to collect and wear on components.

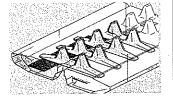


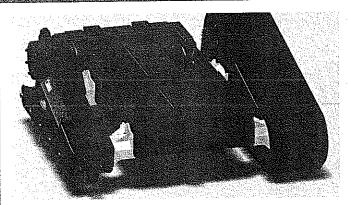


Exclusive C-Pattern Rubber Track:

Custom made for Bobcat and designed and built for the longest service life possible. The C-pattern design provides the best combination between flotation and traction. These durable rubber tracks feature three main components:

- Internal steel cables similar to steel belted radial tires provide a strong base.
- Steel imbeds guide and support the center of the track when engaging the drive sprocket, adding to durability.
- Special rubber compound is molded around the cables and imbeds to produce a strong, continuous rubber track reducing fatigue and cracking.
- Off-set Lugs for smoother ride.

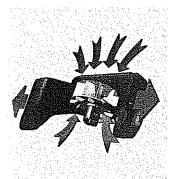




Solid-Mounted Track Undercarriage:

Both the standard track system and optional Roller Suspension feature a solid-mounted track undercarriage. This undercarriage provides the traction necessary to work in soft conditions like mud, sand, manure and dirt, and protects components from damage for longer life. Its design also stabilizes the loader and the work group — making it the best type of undercarriage for grading.

- · Consistent tractive effort improves pushing power
- · Produces a more level grade than other track systems
- Permits higher tipping loads for improved performance when carrying materials





Exclusive Dual Path Cooling:

Bobcat loaders bring cooler, cleaner air in from above the machine, while at the same time removing hot air from the engine and hydrostatic area, creating the **exclusive "dual-path" cooling system**. Both are then exhausted out two side vents, keeping hot air away from the operator. Bobcat chose this cooling system because "single path" systems pull air in from the sides or below the machine causing dust and debris to enter the engine compartment, possibly plugging the radiator and air filter.

SmartFAN:

The new hydraulically powered cooling fan on Bobcat loaders automatically adjusts to coolant temperature to give these benefits:

- . The ONLY variable speed fan in the industry
- · Rotates at full speed only when needed
- · Makes the machine 30% quieter in most operating conditions
- · Better jobsite communications
- · Better cooling in extreme conditions

Machine Shutdown Protection

A standard feature on Bobcat compact track loaders, this system monitors vital machine functions, such as engine coolant

Engine Coolant
Hydraulic Oil
Engine
Oil



temperature, engine oil pressure and hydraulic oil temperature.

If a monitored function is out of normal operating range, the system provides an audible alert, a warning message and, depending on the severity of the function, will shut down the machine to avoid failure. Features like this are why Bobcat loaders have the highest resale value in the industry.

Bobcat Built Hydraulic Cylinders:

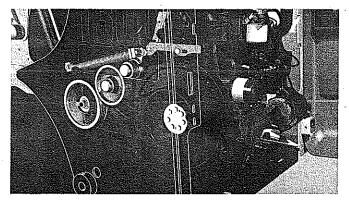
Bobcat makes its own cylinders to ensure they are designed and matched specifically to the requirements of our loaders. Our manufacturing process produces cylinders that have the significant durability advantages:



- Patented Inertia-Welded Cylinders have no voids (gaps) in the weld producing a stronger cylinder with up to five times more cycle life than conventionally welded cylinders.
- Hydraulically cushioned tilt cylinders offer smoother operation on extension and retraction for longer cylinder life.
- Stud-welded port fittings minimize distortion of the cylinder wall, providing longer joint life and reduced chance of leakage.





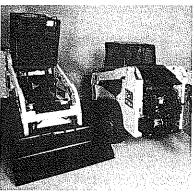


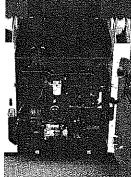
Bobcat Belt Drive – The Best Engine Access:

Bobcat loaders utilize a multi-groove Kevlar^{IM} belt and different size pulleys to power the hydraulic system. This allows the pump to turn faster than the engine, and provides the following benefits:

- One-side serviceability of all routine maintenance points due to a transversely mounted engine.
- · A quieter engine with a longer service life.
- Minimal maintenance with spring loaded idlers that maintain belt tension,
- 3-Year Belt Warranty (if belt needs to be replaced)

Bobcat has been using this system since 1983. It is time tested, exclusive to our loaders and offers more benefits than a direct drive system similar to the one we used over twenty years ago.



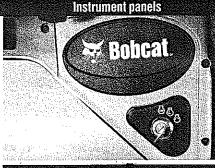


Ease of Serviceability:

Routine maintenance is an important factor in controlling operating costs. Bobcat loaders have the most convenient access to components in the industry.

- One-side serviceability is provided by a swing open tailgate and transversely mounted engine. Daily maintenance items such as engine fluid check, filters, battery, air cleaner and other components are all within easy reach.
- Fast access to hydraulic and hydrostatic components is a five minute procedure by simply removing two nuts and tipping back the cab. Other brands may take up to an hour and require special tools.
- · Easy-to-clean oil cooler and radiator.







Left Side Standard

Right Side Standard

Right Side Optional Deluxe

State-of-the-art instrument panels provide dozens of operational features, diagnostics and monitoring. Optional deluxe instrument panel includes keyless start security system, feature lockouts, digital time and job clocks, multi-language display, even a "help" menu.

Operator Space and Comfort

The Bobcat Standard

All-around visibility is at the design center of Bobcat loader cabs. Sight lines to the wheels increase your performance when operating in tight areas, such as grading next to a building, or backing on to a trailer. Overall comfort begins with the operator — more head, waist, leg and elbow room means less confinement and less fatigue. The rear-pivot seat bar accommodates larger operators and doubles as a secondary restraint and armrest. This provides comfortable support and more precise operation of controls. Additional standard features include: dome light, power port (for charging your cell phone), suspension seat

Exclusive Operator Training Kits

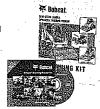
Operator Safety and Training:

Bobcat loaders are equipped with a number of safety features.

- The standard Bobcat Interlock Control System (BICS™) is available only on Bobcat loaders. This patented system prevents operation of lift and tilt functions and traction drive system unless the operator is in the seat with the seat bar down.
- Other Standard Features seat bar · seat belt · lift arm support · convenient steps and grab handles · Rollover and Falling Object Protective Structure (ROPS/FOPS cab) · lift arm bypass control · emergency front and rear exit windows.

Exclusive Operator Training Kits:

- Train operators and technicians on the safe operation and service of Bobcat equipment. Available through your Bobcat dealer in English and Spanish versions.
- Ten-minute safety videos ideal for rental customers are also available.
- · Visit www.bobcat.com for more information.





T140
Radius Path

With the T140, you get all the power, versatility and durability you expect from Bobcat equipment—you just get to work with it in tighter spaces. The T140 is small enough to work in confined areas, be towed behind many half-ton ton pickup trucks, yet strong enough to handle bigger landscaping and construction jobs.

1,400 lb. Rated Operating Capacity 49 hp Turbo Diesel Engine **6,660** _{lb}. Operating Weight

56 in. Width 16 gpm Hydraulic Flow



With the T180, experience the power and performance of a bigger machine while maintaining the maneuverability of a small unit. The pushing force to move material and visibility to the cutting edge and tracks makes this loader the perfect machine for grading, digging and backfilling.



66 hp Turbo Diesel Engine 7,367 ib.

68 in.

16/25 gpm Hydraulic Flow

Ra



Vertical Path

The T190 gives you profit-making performance. Not only do you get the performance of a bigger machine while maintaining the maneuverability of a small unit, but you also get a vertical lift path loader which provides excellent reach for lifting, carrying materials and loading trucks.

1,900 %

66 hp Turbo Diesel Engine Rated Operating Capacity

7612 Operating Weight

ԵՅ ա

16/25

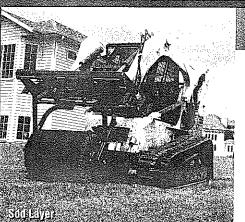
Hydraulic Flow



Experience the incredible strength of the T250 compact track loader. It's the perfect machine for grading, excavating, and pushing material. Also, with a radius lift path, this loader provides great visibility to work in tight areas and provides excellent reach at mid-lift height.

2500 Rated Operating Capacity

31 Turbo Diesel Engine 21/37_{***}



Dozer Blau

Vertical Paths Roller Suspension

The T300 offers top-end performance in every aspect of your work site. Not only does this machine have superior pushing force, great flotation, and unmatched operator comfort, but also excels at lifting heavy loads and dumping into tall trucks with its vertical lift arm path.

Rated Operating Capacity

Turbo Diesel Engine

9702

21/37 gm



Vertical Path • Roller Suspension



When there's no such thing as too much power, start up the Bobcat T320 compact track loader! Tough grading, heavy pushing and high-flow attachment applications are no sweat for the T320's impressive 92 horsepower engine.

3.100 $_{\scriptscriptstyle 0}$

Rated Operating Capacity

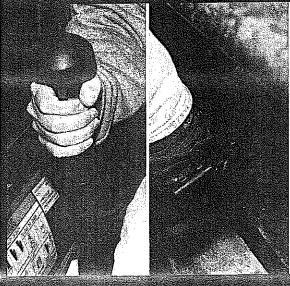
92., Turbo Diesel Engine

9.702 ... Operating Weight

80.

21/37

Control Options for Bobcat® Compact Track Loaders

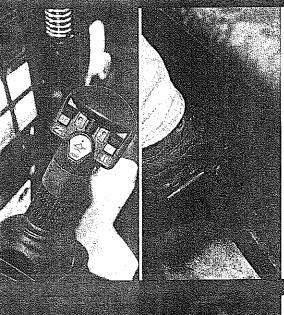


Bobcat Standard Controls

The Original...

Dual steering levers control the drive functions, while dual foot pedals control the loader lift & tilt. We invented this control style nearly 50 years ago, and it's still one of the most popular styles today.

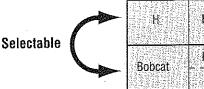
Pattern	Location	Left Right
	Hands	Drive Drive
Bobcat	Feet	Lift Titt



Advanced Control System (ACS)

Two control styles in one machine...

With this control option, the operator can choose between Bobcat controls and H-pattern hand controls - at the flip of a switch.



H Hands Drive/Lift	Drive/Tilt
in hand privacing	
Hands Drive	Drive
Bobcat Feet Lift	Tilt

Selectable Joystick Controls (SJC)

It's all in the hands...

These low-effort joysticks allow operators to control all machine functions with their hands. This state of the art system is also loaded with exclusive features:

Speed Management – Allows operator to match travel speed to operation requirements for optimizing attachment performance and even more precise control of machine movements in tight areas.

Horsepower Management – Automatically adjusts the drive system to maximize pushing and digging power without stalling the engine.

Foot Throttle – Since the feet are free of controls with SJC, a convenient foot throttle is provided to increase engine speed when needed.

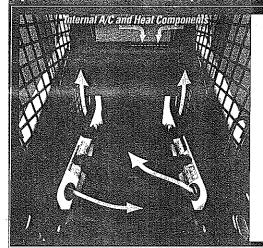
Fingertip Switches are integrated into the handles to easily control various machine functions. Control attachment functions, speed management, horn and blinkers without the need to let go of the joysticks.

Selectable Control Pattern – Can select ISO or H-Pattern hand controls at the flip of a switch to satisfy different operators.



Pattern	Location	Left	Right
ISO	Hands	Drive	Loader
H	Hands	Drive/Lif	t Drive/Tilt

Options for Bobcat® Compact Track Loaders



Enclosed Cab, Heat and Air Conditioning

Want the ultimate in comfort and protection? The Bobcat cab enclosure system is custom designed by Bobcat engineers specifically for your loader, then installed in our factory for a clean look. This makes it simply the best system on the market for keeping you comfortable, clean, and at the right temperature while you work.

• Fully Integrated A/C Design – Means there is no external A/C unit to get damaged, or obstruct visibility, and no cab space is sacrificed so you keep all your elbow room.

- 360° Vents Blow air where you want it thanks to special vents and duct work. Direct heated or cooled air to your face, torso, and feet – and to the windows and front door for defrosting.
- Curved Front Door We curved the front door outward, providing more space in the cab, and to have a clear sight path to the work area.



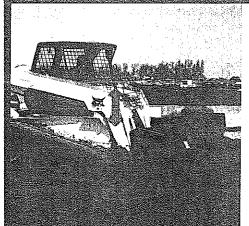


Deluxe Instrumentation

This intelligent Bobcat option lets the operator closely monitor and interact with the machine, and adds another level of security for theft prevention.

Deluxe Instrumentation Benefits:

- Keyless Start Security System Allows the panel to be locked at the end of the day, and only your security code will unlock it and allow the machine to start. No more keys to lose.
- Multi-Language Feature Displays vital machine functions and warnings in your choice of seven languages including Spanish, English, and French.
- Function Lockouts Allows an owner to lock out certain machine functions to prevent misuse or damage. For example, you may choose to lock out high flow hydraulics so your operators do not accidentally activate this function with a non-high flow attachment.
- Other Features Digital time clock, resettable hour meter, attachment controls help menu, and multiple password settings.



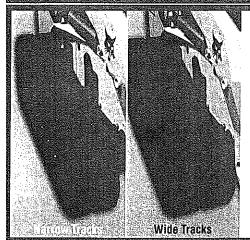
Ride Control

Want to make your machine ride smoother? The Ride Control option is made to better absorb shocks caused when carrying loads over uneven ground.

The cushioned ride is accomplished by an accumulator in the loader lift circuit. With the lift arms slightly raised, the accumulator acts like a shock absorber on vehicles. The result is a cushioned ride that makes the ride smoother, and reduces instances of spillage from a bucket or pallet forks.

Ride Control Advantages:

- · Provides smoother ride
- Reduces operator fatigue
- Reduces spillage



Track Options

Bobcat track loaders have the unique ability to accommodate different track widths. Optimize your track loader performance by selecting the track width that matches your needs.

Narrow Tracks – These tracks keep the machine narrow to fit through tight spaces, or to fit between the fenders of some trailers. Narrow tracks also provide the highest traction and pushing force.

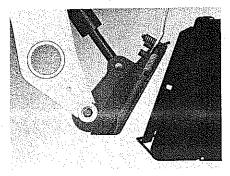
Wide Tracks – Wide tracks are the best option for sand and turf applications. These tracks make the machine wider and result in the lowest ground pressure and best flotation.

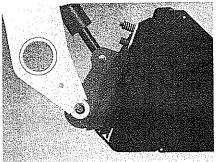
Features For Attachment Operation

Bob-Tach™

Attachment Mounting System

Change attachments in less than a minute! You can replace a bucket with a pallet fork, landscape rake, auger, grapple, and more than 70 Bobcat attachments quickly and easily with the Bob-Tach™ mounting system. Bobcat Company invented this system over 35 years ago, and it comes standard on all Bobcat loaders today.

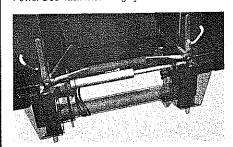




Power Bob-Tach™

Powered Mounting System

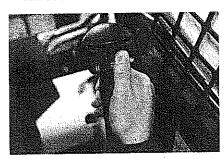
Change non-hydraulic attachments from the comfort of your cab - with the flip of a switch. You can swap a bucket with pallet forks without ever leaving your seat with the Power Bob-Tach mounting system.



Fingertip Auxiliary Control

Bobcat control of attachment hydraulics leads the industry. Here are some of the exclusive features:

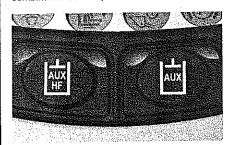
- Fingertip Controls make your attachment operation comfortable, controllable, and allow attachment adjustments while driving.
- Detent Feature This function allows attachment flow to be engaged continuously without need to hold the switch. The flow can even be locked in the opposite direction – this Bobcat exclusive is handy for attachments like sweepers, soil conditioners, and tillers that can be operated in either direction.
- Variable / Max Flow This selection allows variable, or "featherable" flow to be used for grapples and combination buckets to slowly move the cylinders, and a maximum flow rate to be used for an auger to quickly shake the dirt from the bit.



High Flow Hydraulics

Need more attachment power? This optional system provides additional hydraulic power to boost production of attachments like the Bobcat Flail Cutter, Trencher, Planer, and Stump Grinder.

Machines with this option have two flow ranges so attachments that require lower flow can still be used by selecting standard flow mode. This is required for attachments like grapples, combination buckets, and dozer blades.

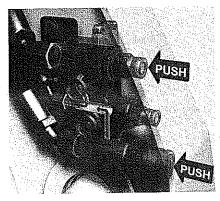


Quick Couplers

with pressure release

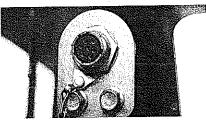
This unique design assures **hydraulic** attachment changes go quickly and smoothly.

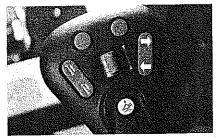
Trapped line pressure can make attachment changes anything but quick. So Bobcat loaders come with a handy feature to release trapped pressure. By simply pushing the coupler inward, the hydraulic oil is released through a return line back into the machine. The result is clean, quick attachment changes time after time.



Attachment Control Kit

Several attachments require control of more than one function. The Bobcat Attachment Control Kit allows fingertip control of these extra functions—so adjustments "on-the-fly" are easy to make. This kit is also fully integrated into the machine for a clean look and protected harness routing.







Speed Management

Want the ultimate in travel speed control?

Bobcat provides the only compact track loaders in the industry with Speed Management. By matching travel speed to your operation requirements, it maximizes attachment performance and gives you even more precise control of machine movements. Speed Management provides the following benefits when running many attachments:

- Allows you to "dial in" your required travel speed in small increments from 0 to 7 mph.
- Increased daily production by reducing the chance of stalling the machine.
- Better fuel consumption as you complete more work in less time.
- · Easier attachment hookup.
- Optimal productivity for attachments that require a slow travel speed.

Speed Management is included only with the Bobcat SJC™ control option (see the "Control Options" section for additional features of SJC).

Bobcat History

Pioneering Maneuverability:

Bobcat introduced its first compact loader in 1958 and two years later, the world's first skid-steer loader. This created an entire industry of machines that put the power of large equipment in a compact size with unmatched maneuverability.





Offering More Versatility:

In 1970 Bobcat invented the first quick-change attachment system for skid-steer loaders called the Bob-Tach $^{\!\mathsf{TM}}$ mounting system. Today we offer more attachments than anyone in the world empowering customers to transform all our machines into multi-task attachment carriers and reach higher levels of production.

One Tough Animal:

All over the world, Bobcat equipment is known for being durable and dependable. By lasting longer and minimizing down time we help our customers become as successful as possible.

Help When You Need It:

With 50 years of experience and over 550 locations we offer the best dealer network in the country for compact equipment. They offer a quality sales force, dependable parts department and qualified service technicians leading to a quality customer experience.





Leader by Design:Listening to the customer and a pioneering spirit is why Bobcat continues to lead the evolution of compact equipment...

- 1960 Invented the FIRST true skid-steer loader.
- Today One out of every two skid-steers is a Bobcat loader.
- 1970 Invented the FIRST attachment mounting system for skid-steer loaders.
- Today Bobcat Company manufactures more attachments than anyone in the world.
- 1977 Built the FIRST skid-steer with no chain adjustments required.
- Today Still a Bobcat exclusive.
- The FIRST secondary restraint seat bar is introduced.
- Today Bobcat is the only company that offers operator training kits for compact
- 1983 The FIRST skid-steer with a transversely mounted engine.
- Today Still a Bobcat exclusive.
- Introduced the FIRST compact excavator manufactured in the U.S.
- Today Still the only compact excavator manufactured in the U.S.
- Introduced the FIRST compact track loader with a solid-mounted undercarriage manufactured in the U.S.
- Today One out of every two compact track machines is a Bobcat.
- 2001 Invented the FIRST loader with all-wheel steer and skid-steer capabilities.
- Today Still a Bobcat exclusive.
- 2003 Revolutionized the way the world works with the invention of the Toolcat, the world's FIRST utility work machine - a cross between a pickup, attachment carrier and utility vehicle.
- Today The Toolcat utility work machine-still the only one of its kind.
- 2006 FIRST utility vehicle with RapidLink™ Attachment System.
- Bobcat launches its new line of compact tractors.
- 2008 Roller Suspension, the FIRST all-steel suspension system, is introduced.

A Constant Innovator:

In the late 1950s, a turkey farmer needed help-so in 1958 we introduced what was to become the world's first skid-steer loader. We created an industry by listening to the needs of the customer. This focus is the same today. In 2000, a superintendent needed help-so we built the world's first Toolcat utility work machine. We continue to be a global leader in innovation by listening to our customers.







Bob-Tach Mounting System









Toolcat Utility Work Machines







Compact Wheel Loader

Loaders

2006

Tractor

1960

1970

2003

2007

TIMELINE

Bobcat Compact Track Loaders







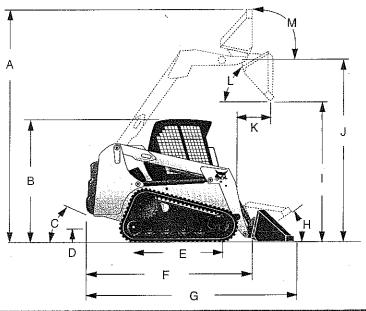


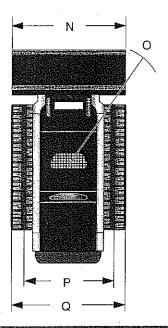




Loader	-T140	T180	T190	T250	T300	T320
Rated Operating Capacity (ROC) (35% of Tipping Load)	1400 lb. (653 kg)	1800 lb. (816 kg)	1900 lb. (862 kg)	2500 lb. (1135 kg)	3000 lb. (1362 kg)	3100 lb. (1452 kg)
ROC at 50% of Tipping Load	2022 lb. (917 kg)	2666 lb. (1209 kg)	3426 lb. (1554 kg)	3679 lb. (1669 kg)	4604 lb. (2089 kg)	4604 lb. (2089 kg)
Tipping Load	4044 lb. (1834 kg)	5331 lb. (2418 kg)	6851 lb. (3108 kg)	7358 lb. (3338 kg)	9208 lb. (4177 kg)	9208 lb. (4177 kg)
ROC w/ opt Roller Suspension		_	_	2300 lb. (1043 kg)	2800 lb. (1270 kg)	2800 lb. (1270 kg)
Lift Height to Bucket Pin	9 ft. 2 in. (2.8 m)	9 ft. 7 in. (2.9 m)	9 ft. 10 in. (3.0 m)	10 ft. 2 in. (3.1 m)	10 ft. 9 in. (3.3 m)	10 ft. 9 in. (3.3 m)
Lift Arm Path	Radius	Radius	Vertical	Radius	Vertical	Vertical
Size and Speed						•
Operating Weight	6660 lb. (3021 kg)	7367 lb. (3342 kg)	7612 lb. (3453 kg)	9347 lb. (4240 kg)	9702 lb. (4401 kg)	9702 lb. (4401 kg)
Width with bucket	56 in. (1422 mm)	68 in. (1727 mm)	68 in. (1727 mm)	80 in. (2032 mm)	80 in. (2032 mm)	80 in. (2032 mm)
Cab Height	77.4 in. (1967 mm)	76.3 in. (1938 mm)	76.3 in. (1938 mm)	80.9 in. (2055 mm)	80.9 in. (2055 mm)	80.9 in. (2055 mm)
Travel Speed	7.3 mph (11.8 km/hr.)	7.1 mph (11.4 km/hr.)	7.1 mph (11.4 km/hr.)	6.6 mph (10.6 km/hr.)	6.6 mph (10.6 km/hr.)	6.6 mph (10.6 km/hr.)
Engine	Interim Tier IV Compliant	Interim Tier IV Compliant	Interim Tier IV Compliant	Tier III Compliant	Tier III Compliant	Tier II Compliant
Horsepower	49	66	66	81	81	92
Туре	Diesel	Turbo Diesel	Turbo Diesel	Turbo Diesel	Turbo Diesel	Turbo Diesel
Fuel Tank Capacity	15 gal (50 L)	28 gal (106 L)	28 gal (106 L)	30 gal (114 L)	30 gal (114 L)	30 gal (114 L)
Dual Path Cooling System	Std	Std	Std	Std	Std	Std
Machine Shutdown Protection Feature	Std	Std	Std	Std	Std	Std
	Std	Std	Std	Std	Std	Std
Bobcat SmartFAN™ Horsepower Management	•		ded with SJC Option (s		etails) —	
Tracks/Undercarriage	·					
	Std	Std	Std	Std	Std	Std
Grease Cylinder Track Tensioning	3	4	4	5	. 5	5
Triple-Flange™ Rollers (per side)		55.2 in. (1401 mm)	55.2 in. (1401 mm)	63.7 in. (1618 mm)	63,7 in. (1618 mm)	63.7 in. (1618 mm)
Length of Track on Ground	48.4 in. (1230 mm)	12.6 in. (320 mm)	12.6 in. (320 mm)	17.7 in. (450 mm)	17.7 in. (450 mm)	17.7 in. (450 mm)
Track Width - Standard	11.8 in. (300 mm)	4.8 psi	4.9 psi	4.0 psi	4.2 psi	4.2 psi
Ground Pressure (w/ std tracks)	5.2 psi	· ·	15.8 in. (400 mm)	12.6 in. (320 mm)	12.6 in. (320 mm)	12.6 in. (320 mm)
Track Width - Optional		15.8 in. (400 mm)	4.1 psi	5.6 psi	5.8 psi	5.8 psi
Ground Pressure (w/ opt tracks) Roller Suspension	-	4.0 psi —	4. i psi	Opt	Opt	Opt
Control Options	<u></u>					
Bobcat Std (foot pedals / steering levers)	Std	Std	Std	Std	Std	Std
Advanced Control System (ACS)	Opt	Opt	Opt	Opt	Opt	Opt
Selectable Joystick Controls (SJC)	Opt	Opt	Opt	Opt	Opt	Opt
Machine Features						
Operating Lights	Std	Std	Std	Std	Std	Std
Bobcat Interlock Control System (BICS)		Std	Std .	Std	Std	Std
ROPS / FOPS Approved Cab Structure	Std	Std	Std	Std	Std	Std
	Std	Std	Std	Std	Std	Std
Suspension Seat		Opt	Opt	Opt	Opt	Opt
Cab with Heat	Opt —	Opt	Opt	Opt	Opt	Opt
Cab with Heat & Air Conditioning	Ont	Opt . Opt	Opt	. Opt	Opt	Opt
Sound Reduction Package	Opt	Opt	Opt	Opt	Opt	Opt
Deluxe Instrumentation	Opt Opt	Opt	Opt	Opt	Opt	Opt
Back-up Alarm & Horn	Opt Opt		Opt	Opt	Opt	Opt
Keyless Start System	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt	Opt
Hydrautic Bucket Positioning	Opt	Opt Opt	Opt	Opt	Opt	Opt
Ride Control		Opt	υμι	Oμι	-F-	- F-

Features For Attachments	T140	T180	T190	T250	T300	T320
Bob-Tach™ Mounting System	Std	Std	Std	Std	Std	Std
Power Bob-Tach™	Opt	Ópt	Opt	Opt	Opt	Opt
Hydraulic Standard Flow	16.9 gpm (64 L/min.)	16.9 gpm (64 L/min.)	16.9 gpm (64 L/min.)	21.2 gpm (80 L/min.)	21.2 gpm (80 L/min.)	21.2 gpm (80 L/min.)
Hydraulic High Flow (optional)	 .	26.4 gpm (100 L/min.)	26.4 gpm (100 L/min.)	37.0 gpm (140 L/min.)	37.0 gpm (140 L/min.)	37.0 gpm (140 L/min.)
Hydraulic Pressure (standard)	2700 psi	3300 psi	3300 psi	3300 psi	3300 psi	3300 psi
Hydraulic Pressure (high flow)	-	_	_	_		3670 psi
Pressure Release Hyd Quick Couplers	Std	Std	Std	Std	Std	Std
Fingertip Auxiliary Control	Std	Std	Std	Std	Std	Std
Attachment Control Kit	Opt	Opt	Opt	Opt	Opt	Opt
Speed Management		Include	d with SJC Option (see	attachment section for	details) ————	-

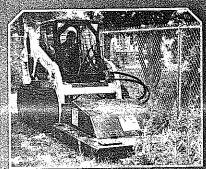




							DIME	NSION	IS Inches (mm)							
	A	В	C	D	E	F	G	H	Ī	J	K	L	M	N	0	P	0
T140	143.5 (3645)	77.4 (1967)	30°	8.6 (220)	48.4 (1230)	95.8 (2432)	124.1 (3153)	25°	82.8 (2104)	109.6 (2783)	25.6 (649)	40°	96°	56 (1422)	77.2 (1960)	43.2 (1097)	55 (1397)
T180	148.0 (3759)	76.3 (1938)	30°	10.3 (262)	55.2 (1401)	101.8 (2586)	130.3 (3310)	25°	86.5 (2197)	114.5 (2908)	19.1 (484)	44°	92°	68 (1727)	78.8 (2001)	53.4 (1356)	66 (1676)
T190	152.1 (3862)	76.3 (1938)	30°	10.3 (262)	55.2 (1401)	101.8 (2586)	130.3 (3310)	25°	91.0 (2310)	118.2 (3002)	30.9 (784)	42°	95°	68 (1727)	78.8 (2001)	53.4 (1356)	66 (1676)
T250	156.6 (3978)	80.9 (2055)	34°	9.6 (244)	63.7 (1618)	114.9 (2918)	142.9 (3630)	30°	95.4 (2423)	122.4 (3109)	23.8 (605)	41°	90°	80 (2032)	82.4 (2093)	60.3 (1532)	78 (1981)
T300	160.6 (4079)	80.9 (2055)	34°	9.6 (244)	63.7 (1618)	114.9 (2918)	142.9 (3630)	30°	99.1 (2517)	128.8 (3272)	36.5 (927)	42°	96°	80 _. (2032)	84.2 (2139)	60.3 (1532)	78 (1981)
T320	160.6 (4079)	80.9 (2055)	34°	9.6 (244)	63.7 (1618)	114.9 (2918)	142.9 (3630)	30°	99.1 (2517)	128.8 (3272)	36.5 (927)	42°	96°	80 (2032)	84.2 (2139)	60.3 (1532)	78 (1981)

NOTE — Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Pictures of Bobcat loaders may show other than standard equipment. All dimensions are given for loader equipped with standard tracks. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Bobcat Company complies with the requirements of ISO 9001 as registered with BSI.

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Stid-Steer Loaders

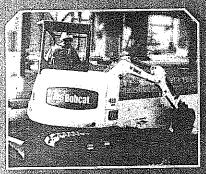


Compact Track Loaders

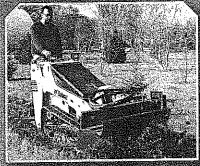


Attachments

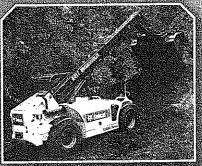
AllaWheel Steer Loader



Compact Excavators



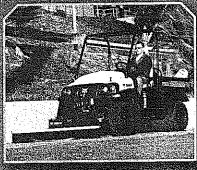
Mini Track Loaders



VersaHandler® Telescopic Tool Carriers



Toolcat" Utility Work Machines



Utility Vehicles



Compact Tractors



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State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency stafus. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1 -	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,	
2	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,	
-	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,	
	Application is made for 5% resident vendor preference for the reason checked: Ridder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,	
- ! -	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted or.	
	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.	
	der understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the uirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty ainst such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency the total from any unpaid balance on the contract or purchase order.	
	submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and horizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid horizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid horizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid not appropriate information does not contain the amounts of taxes paid not any other information.	
	required business taxes, provided that such monthation does not contain the street and such as the street control of the confidential.	
	der penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true daccurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate anges during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.	
	older: Bolicat & Advantage Valley Signed:	
	te: 4-14-10 Title: Block Spece list	
	neck any combination of preference consideration(s) indicated above, which you are entitled to receive.	

RFQ NO. DNR 216 104

STATE OF WEST VIRGINIA **Purchasing Division**

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE
Vendor's Name. Book of Alvantage Valley Jetterds Corp.
ST 500 5113/10
Authorized Signature.
State of WEST VIRGINIA
County of KANAWHA, to-wit:
Taken, subscribed, and sworn to before me this 13 day of APRIL , 2010.
My Commission expires MAY 22 20.15.
AFFIX SEAL HERE NOTORY PUBLIC My J. Williams
OFFICIAL SEAL

NOTARY PUBLIC STATE OF WEST VIRGINIA MARY K. WILLIAMS Jefferds Corporation 652 Winfleid Road P. O. Box 757 St. Albans, WV 25177 My Commission Expires May 22, 2015

Purchasing Affidavít (Revised 12/15/09)