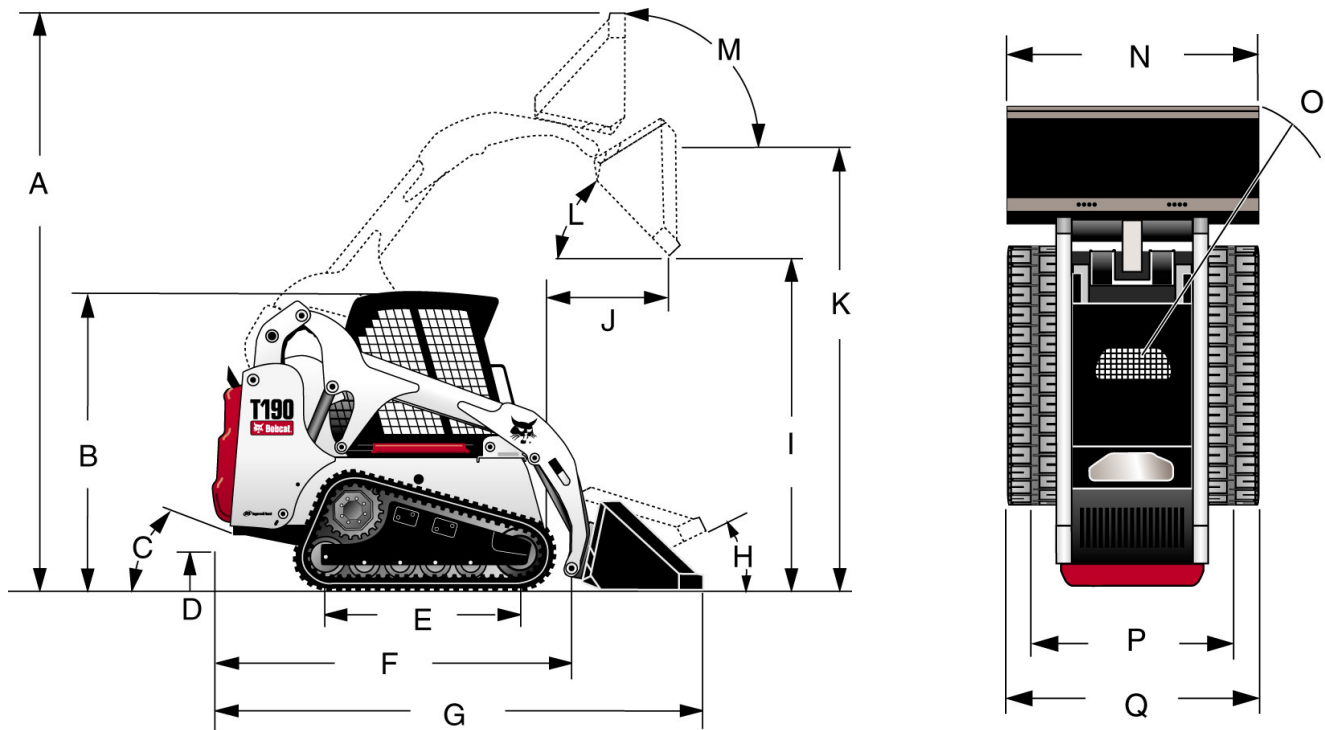


T190 COMPACT TRACK LOADER SPECIFICATIONS

DIMENSIONS



A) Operating Height	152.1" (3862 mm)	O) Turning Radius	
B) Height with Operator Cab	76.3" (1938 mm)	with 68 in. Bucket	78.8" (2001 mm)
C) Angle of Departure	30°	with 74 in. Bucket	80.2" (2037 mm)
D) Ground Clearance	8.1" (205 mm)	Rear Clearance of Machine ..	62.2" (1579 mm)
E) Ground Contact Length	55.2" (1401 mm)	Q) Width (over tracks)	
F) Length without Attachment	101.9" (2588 mm)	12.6 in. tracks	66.0" (1676 mm)
G) Length with Standard Bucket	130.3" (3309 mm)	15.8 in. tracks	73.9" (1877 mm)
H) Rollback @ Carry Position	25°	P) Track Tread	
I) Dump Height with Standard Bucket	91.0" (2310 mm)	12.6 in. tracks	53.4" (1356 mm)
J) Dump Reach @ Maximum Height	30.9" (785 mm)	15.8 in. tracks	53.4" (1356 mm)
K) Height to Bucket Hinge Pin	118.2" (3002 mm)	N) Width over Bucket	
L) Dump Angle @ Maximum Height	42°	68 in. Bucket	68.0" (1727 mm)
M) Rollback Fully Raised		74 in. Bucket	74.0" (1880 mm)
@ Maximum Height	95°		
Carry Position	6.6" (167 mm)		

PERFORMANCE

Rated Operating Capacity (ISO 14397- no more than 35% of Tipping Load)	1900 lbs. (862 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)	3426 lbs. (1554 kg)
Tipping Load (ISO 14397-1)	6851 lbs. (3108 kg)
Operating Weight (SAE)	7612 lbs. (3453 kg)
Operating Weight (wide track option)	7934 lbs. (3599 kg)
Travel Speed	7.1 mph (11,4 km/hr)
Lift Breakout Force (SAE)	4700 lbs. (2132 kg)
Tilt Breakout Force (SAE)	4450 lbs. (2018 kg)
Push Force	4700 ft.-lbs. (2132 kg)

ENGINE/ELECTRICAL

Make/Model	Kubota/V2403M-DI-T
Fuel/Cooling	Diesel/Liquid
Horsepower (SAE Gross)	66 HP (49,2 kW)
Horsepower (SAE Net)	61 HP (45,5 kW)
Maximum Governed RPM	2700 RPM
Torque @ 1475 RPM (SAE Net)	155.6 ft–lbs. (211 Nm)
Number of Cylinders	4
Displacement	158.7 cu. in. (2,6 L)
Bore/Stroke	3.43 / 4.03 in. (87,1 / 102,4 mm)
Fuel Consumption	2.08 gph (7,87 L/h)
	Estimated fuel consumption is based on testing by Bobcat Company in high duty cycle digging applications.
Lubrication	Pressure System with Filter
Crankcase Ventilation	Open
Air Cleaner	Dry replaceable cartridge with safety element
Ignition	Diesel-Compression
Engine Coolant	Propylene glycol/water mix (53%-47%) with freeze protection to -34°F (-37°C)
Starting Aid	Glow plugs
Alternator	Belt driven; 90 amps; Ventilated
Battery	12 volt; 600 cold cranking amps @ 0°F(-18°C);115 minute reserve capacity
Starter	12 volt, gear reduction type; 3.62 HP (2,7 kW)

HYDRAULIC SYSTEM

Pump Type	Engine Driven, gear type
Pump Capacity	
Standard	16.3 GPM (61,6 L/min) @ 3028 RPM
High Flow Option	25.5 GPM (96,4 L/min) @ 3028 RPM
System Relief @ Quick Couplers	3250 - 3350 PSI (224 - 231 Bar)
Hydraulic Filter	Full flow replaceable, Number 3 micron synthetic media element
Hydraulic Cylinders	Double-acting; tilt cylinders have cushioning feature on dump and rollback
Control Valve	3-Spool, open center type with float detent on lift and electrically controlled auxiliary spool
Fluid Type	Bobcat Hydraulic/Hydrostatic Fluid (P/N 6563328) Motor oil is not an acceptable alternative fluid

Bore Diameter

Lift Cylinder (2)	2.50 in. (63,5 mm)
Tilt Cylinder (2)	2.75 in. (69,8 mm)

Rod Diameter

Lift Cylinder (2)	1.50 in. (38,1 mm)
Tilt Cylinder (2)	1.375 in. (34,9 mm)

Stroke

Lift Cylinder (2)	23.67 in. (601,2 mm)
Tilt Cylinder (2)	13.19 in. (335,0 mm)

Hydraulic Function Times

Raise Lift Arms	3.7 Seconds	Bucket Dump	2.4 Seconds
Lower Lift Arms	2.4 Seconds	Bucket Rollback	1.9 Seconds

DRIVE SYSTEM

Main Drive Fully hydrostatic, rubber track drive
Transmission Infinitely variable tandem hydrostatic piston pumps,
driving two fully reversing hydrostatic motors
Tracks 12.6 in. width (320 mm) or optional 15.8 in. width (400 mm)
Tension-grease cylinder and spring rollers—triple flange

GROUND PRESSURE

12.6 in. 4.9 PSI (33,7 kPa)
15.8 in. 4.1 PSI (28,3 kPa)

CAPACITIES

Fuel Tank 28 gals. (106 L)
Cooling System 11 qts. (10,4 L)
Engine Oil with Filter 9.5 qts. (9 L)
Hydraulic/Hydrostatic Reservoir... 4.8 gals. (18,2 L)
Hydraulic/Hydrostatic System 8.5 gals. (32,2 L)
Roller & Idlers 100 cc each

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 System (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 Glow Plugs – automatically activated by Standard or 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 Finger-operated rocker switch on center control panel with
spring applied, pressure release multi disk 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
- Fuel fill
- Hydraulic oil fill
- Starter

Bobtach pivots have replaceable wear bushings
Easy access to all lift arm grease points
Rod end of the tilt cylinder has a replaceable bushing
Tailgate has an optional lock for vandal proofing
Tailgate is equipped with door stop to hold door open while servicing
Tip-up operator cab gives access to certain hydraulic system components

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 PanelGauges

Engine Coolant Temperature
Fuel
Hourmeter

Indicators

Attachment Control Device
BICS Functions
Glow Plugs

Warning Lights

Advanced Control System (ACS)
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

Additional features: Keyless Start with password capability, Digital Clock, Job Clock, Attachments Information, Digital Tachometer, High Flow Lockouts, Multi-Language Display, Help Screens, Diagnostic Capability and Engine/Hydraulic Systems Shutdown Function

ATTACHMENTS

Angle Broom*	Flail Cutter	Snow V-Blade*	Vibratory Roller
Auger	Grader*	Snowblower*	Wheel Saw*
Backhoe	Grapple, Farm/Utility	Sod Layer	Whisker Broom
Box Blade	Grapple, Industrial	Soil Conditioner*	
Brush Saw	Hydraulic Breaker	Spreader	
Brushcat Rotary Cutter	Landplane	Stump Grinder*	
Buckets	Landscape Rake	Sweeper	
Chipper*	Mower	Three-Point Hitch	
Combination Bucket	Pallet Fork - Standard	Tiller	
Concrete Mixer*	Pallet Fork - Hydraulic	Tree Spade	
Digger	Planer*	Trench Compactor	
Dozer Blade*	Scarifier	Trencher	
Drop Hammer	Scraper	Utility Forks	
Dumping Hopper	Snow Blade	Utility Frame	

For specific attachment model availability see *Bobcat Product Price List*. *Requires Attachment control Kit

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

16 inch rubber tracks

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 in place and the engine running. After the operator presses the "Press to Operate Loader" button, the loader's hydraulic lift and tilt functions and traction drive system can be operated.
Lift Arm Bypass Control (Std.)	Used to lower the lift arms in the event that the lift arms cannot be lowered during normal operating conditions
Seat Belt (Std.)	Should always be worn when operating the loader
Seat Bar (Std.)	Secondary operator restraint, also serves as an arm rest
Operator Cab (Std.)	An enclosable operator cab with side screens with a minimal inside cab width of 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 Object Protective Structure (FOPS). Level II option is available.

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

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

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

TRAINING RESOURCES

These optional videotapes and training courses are available through Bobcat Parts

Bobcat Skid-Steer Loader Operator Training Course

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

Bobcat Skid-Steer Loader Service Safety Training Course

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

Bobcat Skid-Steer Loader Safety Video

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