

247B/257B Series 3

Multi Terrain Loaders



259B Series 3

Compact Track Loaders



	247B Series 3	257B Series 3	259B Series 3
Engine			
Engine Model	Cat C2.2 T	Cat C3.4 DIT	Cat C3.4 DIT
Net Power (SAE 1349/ISO 9249)	42 kW (56 hp)	53 kW (71 hp)	53 kW (71 hp)
Weights			
Operating Weight	3174 kg (6,997 lb)	3656 kg (8,060 lb)	4052 kg (8,934 lb)
Operating Specifications			
Rated Operating Capacity at 50% Tipping Load	975 kg (2,150 lb)	1213 kg (2,675 lb)	1338 kg (2,950 lb)

Features

Comfortable Operator Station

Spacious, comfortable cab and ergonomic, low effort joystick controls reduce operator fatigue.

Suspended Undercarriage

Suspended undercarriages on the Cat Compact Track Loaders and Multi Terrain Loaders absorb shocks and vibrations from uneven terrain while allowing higher operating speeds, better material retention and increased operator comfort.

High Performance Power Train

High horsepower and torque deliver outstanding performance.

Advanced Hydraulic System

Hydraulic system provides maximum power and reliability for demanding applications.

More Work Tools

Caterpillar's broad range of performance matched work tools make the Cat Compact Track Loader and Multi Terrain Loader the most versatile machines on the jobsite.



Contents

Operator Station.....	3
Undercarriage	4
Power Train.....	5
Lift Linkages	5
Hydraulics	6
Work Tools.....	7
Serviceability.....	8
Customer Support.....	8
Specifications.....	9
Standard Equipment.....	14
Optional Equipment.....	15

The Cat B-Series 3 Compact Track Loaders and Multi Terrain Loaders feature suspended undercarriages for lower ground pressures and superior traction. Spacious, ergonomic operator station and easy-to-use pilot operated joystick controls keep you comfortable throughout the work day. High performance power train, advanced hydraulic system, traditional Cat reliability and a wide range of Cat Work Tools improve your productivity in the toughest working conditions.

Operator Station

Superior comfort to keep you productive throughout the work day.

All Day Comfort

Comfort and ease of operation have been designed into every aspect of the operator station. The wide, spacious interior and uncluttered floor provide a comfortable work environment with excellent head, shoulder and leg room to keep productivity high and fatigue low. The adjustable seat and low effort controls keep the operator comfortable throughout the work day.

Low Effort Joystick Controls

Ergonomic, pilot hydraulic controls deliver precise control with minimal effort. The right joystick controls the loader raise, lower and tilt functions while the left joystick controls the forward and reverse travel speed plus direction. Optional deluxe joysticks provide additional auxiliary controls with fingertip control of many work tool functions, including proportional work tool hydraulics and work tool electrical. Basic and deluxe joystick functions include one-touch continuous auxiliary hydraulic flow and momentary auxiliary hydraulic flow.

Excellent Visibility

The wide cab opening offers an exceptional view to the work tool. The sloped angle of the engine compartment allows excellent visibility to the rear of the machine. The standard rear view mirror gives the operator a panoramic view of the machine's rear and sides. The side windows remove easily for cleaning.

Additional Features for Maximum Comfort

The B-Series 3 machines offer the following additional features to help you on the job:

- Suspension seat option for even greater operator comfort.
- Easy to read instrument panels.
- Optional air conditioner and heater for greater comfort in extreme conditions.
- Standard floor mat with footrest provides non-slip surface and can be removed for easy cleaning.
- Ergonomic, contoured and padded armbar provides comfortable operation.



Undercarriage

Choice of undercarriage to meet your specific needs.



Multi Terrain Loader Undercarriage

The Cat 247B Series 3 and 257B Series 3 Multi Terrain Loaders feature a fully suspended, rugged, durable rubber track that is lightweight and pliable, yet reinforced with high tensile strength cords. The undercarriage provides extremely low ground pressure, allowing these machines to operate over sensitive surfaces and in soft underfoot conditions. The independently suspended undercarriage distributes the load and greatly reduces shock and vibration throughout the machine for a comfortable ride and excellent bucket load retention. The undercarriage also features:

- Heavy duty torsion axles that independently suspend each side of the machine frame for a smoother ride over rough terrain, even at high speeds.
- Components that are replaceable as individual wear items, reducing owning and operating costs.
- Low ground pressure: 27.3 kPa (4.0 psi) for the 247B Series 3 and 31 kPa (4.5 psi) for the 257B Series 3.



Compact Track Loader Undercarriage

The Cat 259B Series 3 Compact Track Loader features a fully suspended, steel embedded rubber track undercarriage for versatility, durability and comfort. Heavy-duty torsion axles suspend the undercarriage and can move independently relative to the machine and each other. These axles absorb most of the shock to the machine and operator, especially over rough terrain. This means smooth travel, even at high speeds, as well as better load retention and greater productivity. The undercarriage also features:

- Steel embedded rubber track that provides excellent durability in a wide variety of applications.
- Steel rollers with metal face seals for long-term durability and reliability in even the toughest conditions.
- Simple recoil grease tensioning system for quick track tension adjustment.
- Two track options – standard track width of 320 mm (12.6 in) or optional 400 mm (15.7 in) track.
- Low ground pressure: 41.2 kPa (6.0 psi) with the standard track and 34.4 kPa (5.0 psi) with optional 400 mm (15.7 in) track.

Power Train

Aggressive performance with fuel efficiency.

Cat Engine

The high performance power train provides high engine horsepower and torque. The B-Series 3 machines feature rugged, reliable Cat engines that meet U.S. EPA Tier 4 Interim and EU Stage IIIA emissions requirements.

Hand and Foot Throttles

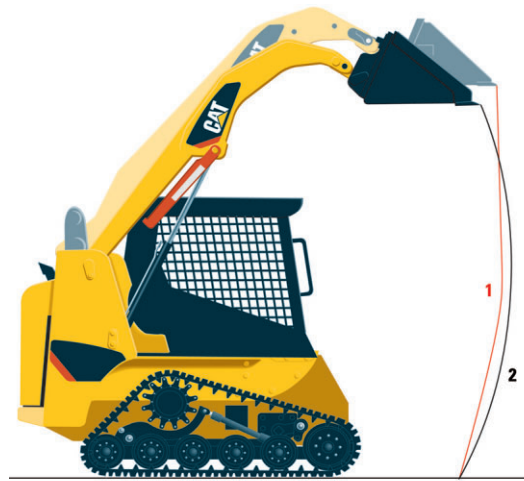
Hand and foot throttles allow the operator to match engine speed to the task. The hand throttle is ideal for jobs requiring constant engine speed such as cold planing, trenching or snow blowing. The foot throttle lets the operator vary engine speed and minimize fuel consumption for other tasks such as load and carry, truck loading, grading and dozing.

Anti-Stall Feature

The anti-stall system maximizes machine power at all times by matching the engine torque with the operational requirements of the hystat and implement systems. This load sensing feature prevents the engine from stalling even during part throttle operation, keeping productivity high and fuel consumption low.

Two Speed

Two speed is available as standard equipment on the 259B Series 3 Compact Track Loader and as an option on the 257B Series 3 Multi Terrain Loader to improve cycle times and get the job done faster.



Lift Linkages

Built for tough jobs.

Choice of Lift Designs

Two types of lifting arrangements are available – vertical lift (path #1 above) and radial lift (path #2) – to meet your specific application needs.

Vertical Lift

The 257B Series 3 and 259B Series 3 feature the vertical lift design which provides extended reach and lift height for quick and easy truck loading and material placement. The lift height is 3069 mm (121 in) on the 257B Series 3 and 3046 mm (120 in) on the 259B Series 3.

Radial Lift

The 247B Series 3, with its radial lift design, delivers excellent digging performance with superior mid-lift reach.





Hydraulics

Exceptional lift, breakout and power to meet your needs.

High Performance Hydraulic System

Maximum power and reliability are built into the machine's hydraulic system. In addition to providing power to the tracks, this system also provides the loader lift and tilt functions, powers the auxiliary circuit to drive work tools and drives the engine cooling fan. The hydraulic pumps are driven directly off the engine for maximum hydraulic performance and reliability – no belts are used. The hydraulic system also features:

- Standard auxiliary hydraulics to power work tools that are available through quick connect hydraulic couplings rigidly mounted to the loader arm.
- Cat ToughGuard™ hoses for increased reliability and durability.

High Flow Hydraulics

High flow hydraulic system is available on the 257B Series 3 and 259B Series 3 for greater machine versatility and increased work tool performance.

High Efficiency Cooling System

Cooling capacity is maximized through the use of a side-by-side cooling package and hydraulically driven cooling fan.

- High-efficiency, hydraulic oil cooler lets the machine work longer and harder in higher ambient temperatures, even with continuous work tool usage.
- Efficient, hydraulically driven cooling fan provides cooling even when the machine is under load.
- Optional variable speed demand fan provides improved fuel efficiency, increased machine performance, reduced sound levels and improved cold weather performance.

Work Tools

Do more jobs with one machine with Cat Work Tools.

The Right Tool for the Job

Get the most out of your machine with the comprehensive line of Cat Work Tools. Designed and built for optimum performance and durability, these tools deliver high productivity in a variety of applications to maximize the versatility and flexibility of the Cat Compact Track Loader and Multi Terrain Loader:

- Augers
- Backhoes
- Blades (angle, dozer)
- Buckets (general purpose, high capacity, dirt, utility, light material, multi purpose, industrial grapple, utility grapple)
- Brooms (angle, pickup, utility)
- Brushcutters
- Cold Planers
- Forks (pallet, industrial grapple, utility grapple, utility)
- Hydraulic Hammers
- Landscape Tillers
- Landscape Rakes
- Material Handling Arm
- Power Box Rakes
- Shear
- Snow Blowers
- Stump Grinders
- Trenchers
- Vibratory Compactors
- Wheel Saws

Quick Couplers

Work tools can be changed quickly and easily with the machine's quick coupler system. The standard quick coupler features manual engagement and disengagement of work tools using two high leverage handles. The optional hydraulic quick coupler allows the operator to quickly change tools without leaving the cab.



Serviceability

Simplified service and maintenance save you time and money.



Easy Service

Convenient service features make maintenance easy, reducing your downtime:

- Industry exclusive tilt-up cooling package provides superior access to service points and coolers.
- Rear door opens 90 degrees for easy access to both sides of the engine.
- Cab tilts rearward for easy access to all hydraulic pumps, motors, valves, lines and hydraulic tank.
- Daily maintenance points are easily accessible.
- Electrical wiring is color coded and numbered for easy identification.
- S-O-SSM oil sampling valve is standard to allow regular monitoring of the hydraulic oil quality.

Customer Support

Support you can count on.

Superior Dealer Services

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine, so you can make the right decision.
- For more information on Cat products, dealer services and industry solutions, visit us at www.cat.com.



B-Series 3 Compact Track and Multi Terrain Loaders Specifications

Engine		
Engine Model		
247B Series 3	Cat C2.2 T	
257B/259B Series 3	Cat C3.4 DIT	
Net Power (SAE 1349/ISO 9249)		
247B Series 3	42 kW	56 hp
257B/259B Series 3	53 kW	71 hp
Gross Power (SAE J1995)		
247B Series 3	46 kW	62 hp
257B/259B Series 3	55 kW	74 hp
Displacement		
247B Series 3	2.2 L	134 in ³
257B/259B Series 3	3.3 L	201 in ³
Stroke		
247B Series 3	100 mm	3.9 in
257B/259B Series 3	120 mm	4.7 in
Bore		
247B Series 3	84 mm	3.3 in
257B/259B Series 3	94 mm	3.7 in

Weights*		
Operating Weight		
247B Series 3	3174 kg	6,997 lb
257B Series 3	3656 kg	8,060 lb
259B Series 3 (320 mm/12.6 in tracks)	4052 kg	8,934 lb
259B Series 3 (400 mm/15.7 in tracks)	4185 kg	9,227 lb

Operating Specifications*		
Rated Operating Capacity (50% Tipping Load)		
247B Series 3	975 kg	2,150 lb
257B Series 3	1213 kg	2,675 lb
259B Series 3	1338 kg	2,950 lb
Rated Operating Capacity (35% Tipping Load)		
247B Series 3	683 kg	1,505 lb
257B Series 3	848 kg	1,870 lb
259B Series 3	937 kg	2,065 lb
Rated Operating Capacity with Optional Counterweight		
257B Series 3	1236 kg	2,725 lb
259B Series 3	1360 kg	3,000 lb
Tipping Load		
247B Series 3	1950 kg	4,300 lb
257B Series 3	2427 kg	5,350 lb
259B Series 3 (320 mm/12.6 in tracks)	2676 kg	5,900 lb
Breakout Force, Tilt Cylinder		
247B Series 3	1842 kg	4,060 lb
257B Series 3	2045 kg	4,508 lb
259B Series 3	2045 kg	4,508 lb
Ground Contact Area		
247B Series 3	1.14 m ²	1,770 in ²
257B Series 3	1.14 m ²	1,770 in ²
259B Series 3 (320 mm/12.6 in tracks)	0.96 m ²	1,495 in ²
259B Series 3 (400 mm/15.7 in tracks)	1.19 m ²	1,848 in ²
Ground Pressure		
247B Series 3	27.3 kPa	4.0 psi
257B Series 3	31 kPa	4.5 psi
259B Series 3 (320 mm/12.6 in tracks)	41.2 kPa	6.0 psi
259B Series 3 (400 mm/15.7 in tracks)	34.4 kPa	5.0 psi

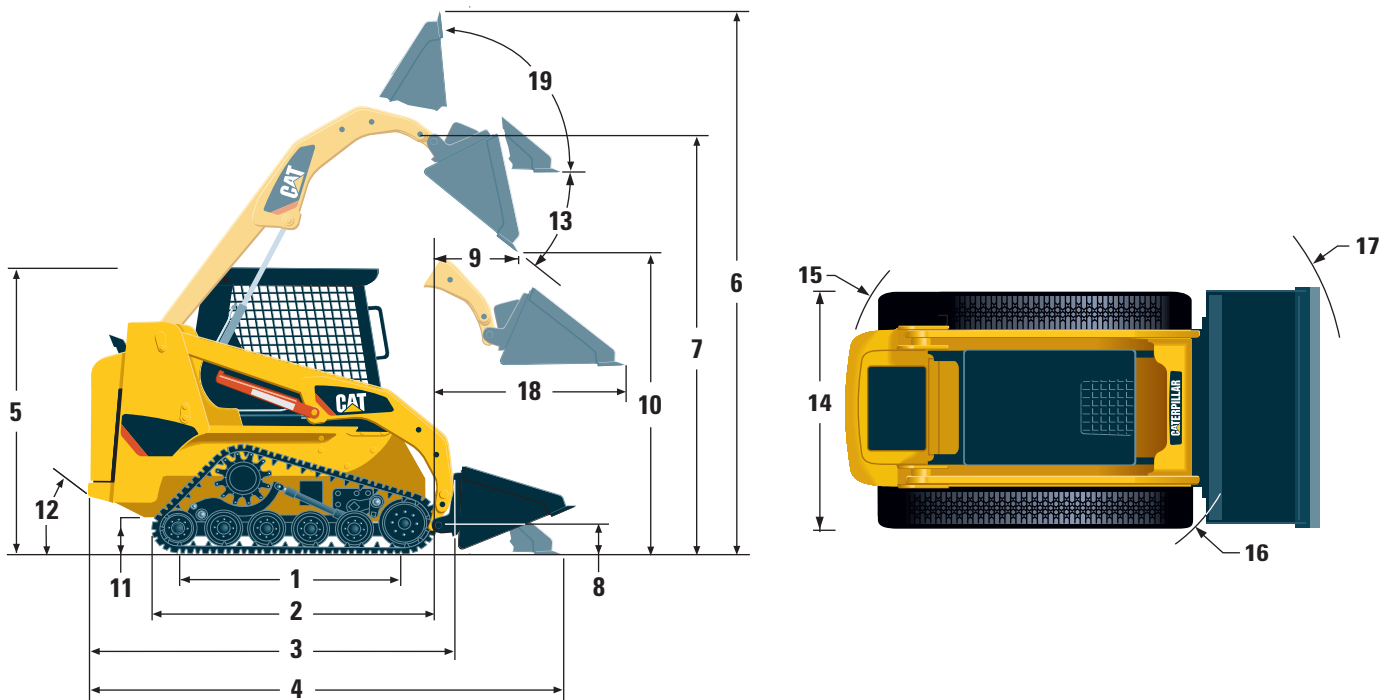
* Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, 1 speed (247B/257B Series 3) or 2 speed (259B Series 3), OROPS, dirt bucket, no optional counterweights and manual quick coupler (unless otherwise noted).

Hydraulic System		
Hydraulic Flow	Standard	
Loader Hydraulic Pressure	23 000 kPa	3,335 psi
Loader Hydraulic Flow – 247B Series 3	61 L/min	16 gal/min
Loader Hydraulic Flow – 257B/259B Series 3	83 L/min	22 gal/min
Hydraulic Power (calculated) – 247B Series 3	23.2 kW	31 hp
Hydraulic Power (calculated) – 257B/259B Series 3	31.9 kW	42.8 hp
Hydraulic Flow	High Flow – 257B Series 3, 259B Series 3	
Loader Hydraulic Pressure	23 000 kPa	3,335 psi
Loader Hydraulic Flow	117 L/min	31 gal/min
Hydraulic Power (calculated)	45 kW	60.3 hp

B-Series 3 Compact Track and Multi Terrain Loaders Specifications

Cab		Power Train			Service Refill Capacities		
ROPS	SAE J1040 MAY94, ISO 3471:1994	Travel Speed (Forward or Reverse)			Cooling System	10 L	2.6 gal
		247B Series 3	11.3 km/h	7.0 mph	Engine Crankcase		
FOPS	SAE J/ISO 3449 APR98 LEVEL I, ISO 3449:1992 Level I	257B Series 3	11.1 km/h	6.9 mph	247B Series 3	10 L	2.6 gal
		259B Series 3	9.5 km/h	5.9 mph	257B/259B Series 3	9 L	2.4 gal
FOPS Level II	SAE J/ISO 3449 APR98 LEVEL II, ISO 3449:1992 Level II (optional)	Travel Speed (Forward or Reverse) – 2 Speed			Fuel Tank		
		257B Series 3 (optional)	16.1 km/h	10 mph	247B Series 3	65 L	17 gal
		259B Series 3 (standard)	13.6 km/h	8.5 mph	257B/259B Series 3	84 L	22.2 gal
					Hydraulic System	55 L	14.5 gal
					Hydraulic Tank	35 L	9.2 gal

Dimensions

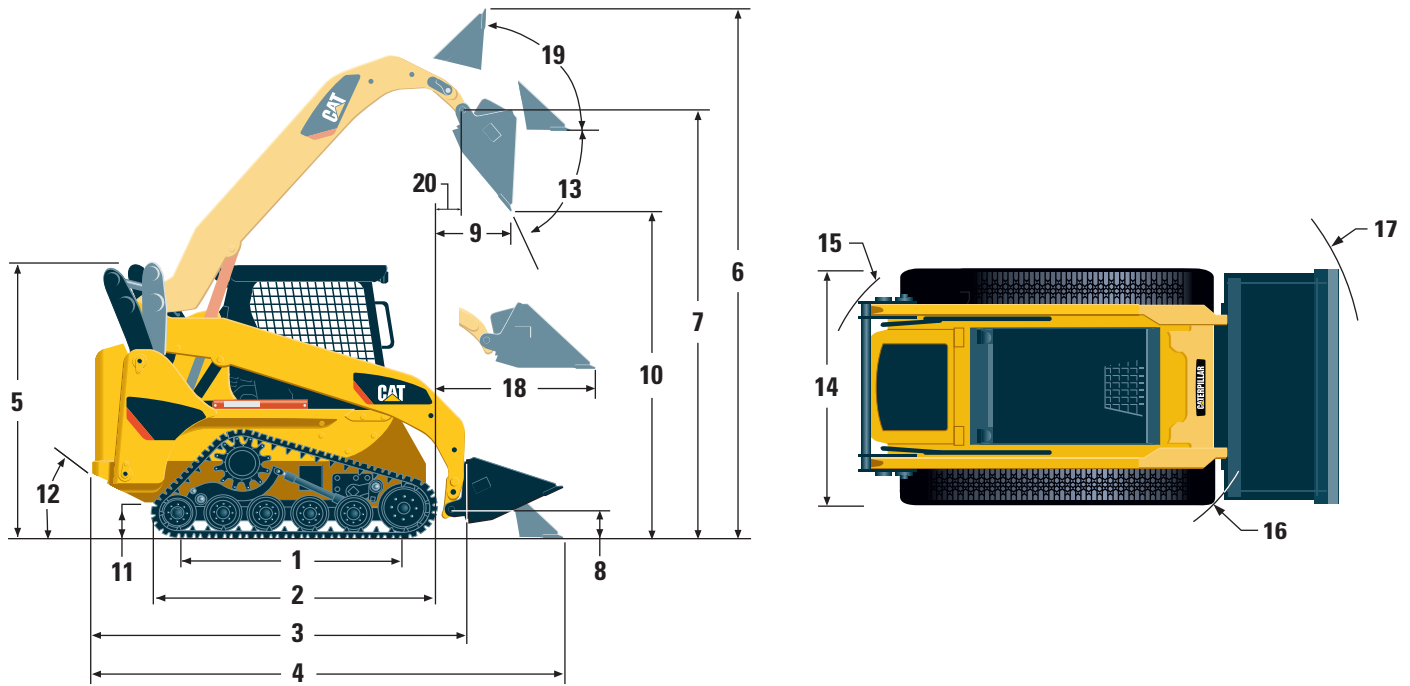


247B Series 3

	mm	in
1 Length of Track on Ground	1499	59
2 Overall Length of Track	1899	75
3 Length without Bucket	2518	99
4 Length with Bucket on Ground	3285	129
5 Height to Top of Cab	1990	78
6 Maximum Overall Height	3799	150
7 Bucket Pin Height at Maximum Lift	2862	112
8 Bucket Pin Height at Carry Position	220	8.7
9 Reach at Maximum Lift and Dump	625	25
10 Clearance at Maximum Lift and Dump	2134	84
11 Ground Clearance	267	10
12 Departure Angle		41°
13 Maximum Dump Angle		40°
14 Vehicle Width	1676	66
15 Turning Radius from Center – Machine Rear	1377	54
16 Turning Radius from Center – Coupler	1312	52
17 Turning Radius from Center – Bucket	2095	82
18 Maximum Reach with Arms Parallel to Ground	1339	53
19 Rack Back Angle at Maximum Height		82°

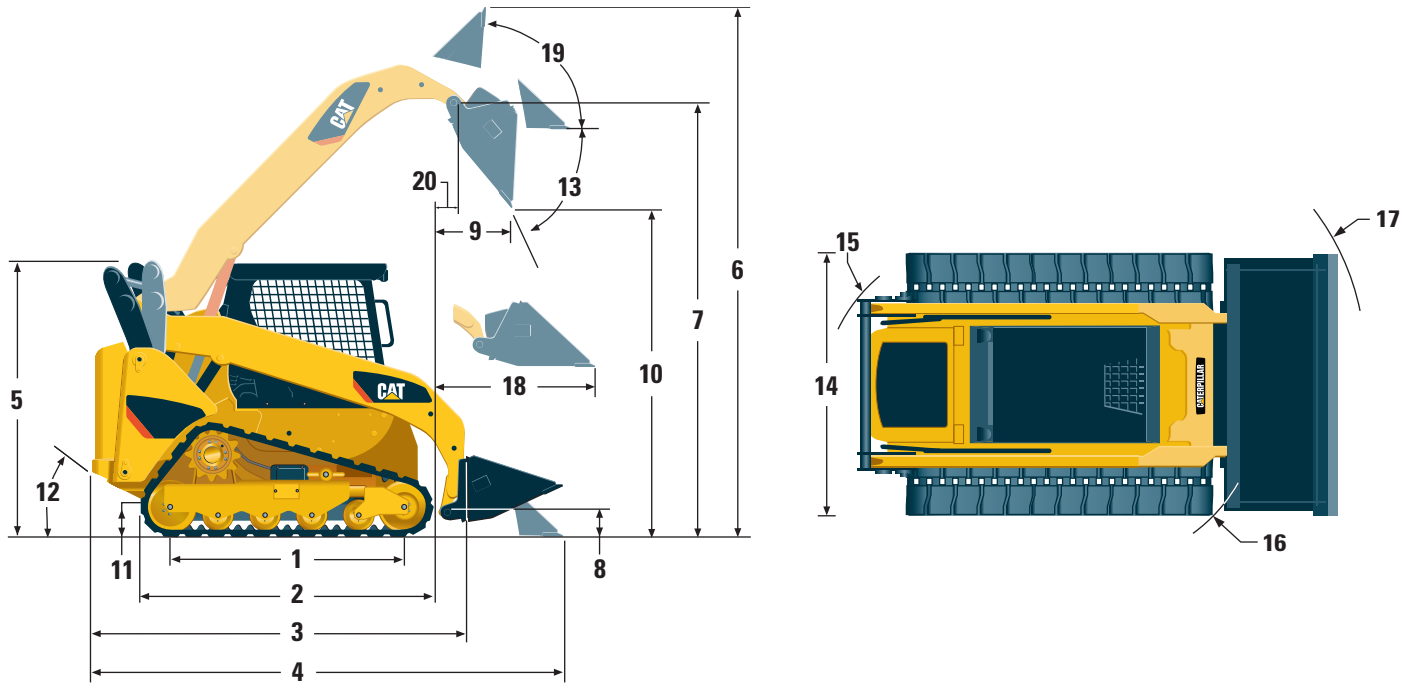
B-Series 3 Compact Track and Multi Terrain Loaders Specifications

Dimensions



	257B Series 3	
	mm	in
1 Length of Track on Ground	1499	59
2 Overall Length of Track	1899	75
3 Length without Bucket	2718	107
4 Length with Bucket on Ground	3439	135
5 Height to Top of Cab	2035	80
6 Maximum Overall Height	3895	153
7 Bucket Pin Height at Maximum Lift	3069	121
8 Bucket Pin Height at Carry Position	212	8
9 Reach at Maximum Lift and Dump	758	30
10 Clearance at Maximum Lift and Dump	2309	91
11 Ground Clearance	246	10
12 Departure Angle		37°
13 Maximum Dump Angle		50°
14 Vehicle Width	1676	66
15 Turning Radius from Center – Machine Rear	1451	57
16 Turning Radius from Center – Coupler	1412	56
17 Turning Radius from Center – Bucket	2192	86
18 Maximum Reach with Arms Parallel to Ground	1335	53
19 Rack Back Angle at Maximum Height		87°
20 Bucket Pin Reach at Maximum Lift	358	14.1

Dimensions



259B Series 3

	mm	in
1 Length of Track on Ground	1495	59
2 Overall Length of Track	1995	79
3 Length without Bucket	2722	107
4 Length with Bucket on Ground	3432	135
5 Height to Top of Cab	1986	78
6 Maximum Overall Height	3872	152
7 Bucket Pin Height at Maximum Lift	3046	120
8 Bucket Pin Height at Carry Position	195	8
9 Reach at Maximum Lift and Dump	740	29
10 Clearance at Maximum Lift and Dump	2243	88
11 Ground Clearance	222	9
12 Departure Angle		35°
13 Maximum Dump Angle		49.5°
14 Vehicle Width (320 mm/12.6 in tracks)	1676	66
Vehicle Width (400 mm/15.7 in tracks)	1755	69
15 Turning Radius from Center – Machine Rear	1471	58
16 Turning Radius from Center – Coupler	1393	55
17 Turning Radius from Center – Bucket	2174	86
18 Maximum Reach with Arms Parallel to Ground	1338	53
19 Rack Back Angle at Maximum Height		87°
20 Bucket Pin Reach at Maximum Lift	309	12.1

B-Series 3 Compact Track and Multi Terrain Loaders Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

ELECTRICAL

12 volt Electrical System
85 ampere Alternator (247B Series 3)
90 ampere Alternator (257B/259B Series 3)
Automatic Glow Plug Activation
Heavy Duty Battery, 880 CCA
(standard on the 257B/259B Series 3)
Ignition Key Start/Stop Switch
Lights: Gauge backlighting, two rear tail lights, two adjustable front and rear halogen lights, dome light.

OPERATOR ENVIRONMENT

Gauges: Fuel level, hour meter
Operator Warning System Indicators:
Air filter restriction, alternator output, armrest raised/operator out of seat, engine coolant temperature, engine oil pressure, glow plug activation, hydraulic filter restriction, hydraulic oil temperature, parking brake engaged
Vinyl seat
Pull Down Ergonomic Contoured Armrest
Control Interlock System, when operator leaves seat or armrest raised: Hydraulic system disables, hydrostatic transmission disables, parking brake engages
ROPS Cab, Open, Tilt Up
FOPS, Level I
Top and Rear Windows
Floor Mat
Interior Rear View Mirror
12 volt Electric Socket
Horn
Backup Alarm
Hand and Foot Throttle

POWER TRAIN

Cat C2.2 T Diesel Engine (247B Series 3)
Cat C3.4 DIT Diesel Engine
(257B/259B Series 3)
Engines are Tier 4 Interim/Stage IIIA Compliant
Air Cleaner, Dual Element, Radial Seal
S-O-SSM Sampling Valve, Hydraulic Oil Filters, Spin-on, Hydraulic Filters, Bayonet-type, Fuel and Water Separator
Tilt Up Radiator/Hydraulic Oil Cooler
Spring Applied, Hydraulically Released
Parking Brakes
Hydrostatic Transmission

OTHER

Engine Enclosure, Lockable
Extended Life Antifreeze, -36° C (-33° F)
Machine Tie Down Points (4)
Support, Lift Arm
Hydraulic Oil Level Sight Gauge
Radiator Coolant Level Sight Gauge
Radiator, Expansion Bottle
Cat ToughGuard™ Hose
Auxiliary, Hydraulics, Continuous Flow
Heavy Duty, Flat Faced Quick Disconnects
Split D-Ring to Route Work Tool Hoses
Along Side of Left Lift Arm
Electrical Outlet, Beacon
Belly Pan Cleanout

MANDATORY EQUIPMENT

Quick Coupler, Mechanical or Hydraulic
Seat Belt, 50 mm (2 in) or 75 mm (3 in)
EU Preparation Package
(Europe only – includes Demand Fan)
Cooling Fan, Demand or Standard
(EU Preparation Package includes Demand Fan)

Comfort Packages

(must select one of the following):

- Open ROPS (C0): Static Seat
- Open ROPS (C1): Suspension Seat, Deluxe Headliner
- Enclosed ROPS (C2): Features of C1 Package plus Heater, Cab Door, Side Windows, Cup Holder, Cab Debris Barrier
- Enclosed ROPS (C3): Features of C2 Package plus Air Conditioner

Control Packages for the 247B Series 3 (must select one of the following):

- Control Package 1: On/Off Auxiliary Hydraulics Basic
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe
- Control Package 3: Proportional Auxiliary Hydraulics Deluxe, Work Tool Harness

Control Packages for the 257B Series 3 (must select one of the following):

- Control Package 1: On/Off Auxiliary Hydraulics Basic
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe, 1 Speed
- Control Package 3: Proportional Auxiliary Hydraulics Deluxe, 1 Speed, Work Tool Harness
- Control Package 4: Proportional Auxiliary Hydraulics Deluxe, 2 Speed
- Control Package 5: Proportional Auxiliary Hydraulics Deluxe, 2 Speed, Work Tool Harness
- Control Package 6: High Flow Hydraulics, 1 Speed
- Control Package 7: High Flow Hydraulics, 2 Speed

Control Packages for the 259B Series 3 (must select one of the following):

- Control Package 1: Proportional Auxiliary Hydraulics Deluxe, 2 Speed
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe, 2 Speed, Work Tool Harness
- Control Package 3: High Flow Hydraulics, 2 Speed

B-Series 3 Compact Track and Multi Terrain Loaders Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

400 mm (15.7 in) track with dual flange
front idler (259B Series 3 only)
2 Speed Travel (257B Series 3 only)
Variable Speed Demand Fan
Counterweight

Beacon, Rotating
Engine Block Heater, 120V or 240V
Heavy Duty Battery, 880 CCA
(optional on the 247B Series 3)
Oil, Hydraulic, Cold Operation

Door, Glass or Polycarbonate
Self-Leveling
Paint, Custom

B-Series 3 Compact Track and Multi Terrain Loaders

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

© 2011 Caterpillar Inc.
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ6132-02 (06-2011)
Replaces AEHQ6132-01

