



Cat[®] CB54B

TANDEM VIBRATORY ROLLER

Top Features

The Cat[®] CB54B is a 10 ton roller with 1700 mm (67") tandem vibratory drums. It excels on a variety of asphalt mix designs as well as other granular materials.

- **Exceptional Visibility and Control** with handwheel steering technology, touch-pad machine functions, Eco-mode operation, and optional Cat Compaction Control. This machine can be equipped with a ROPS cab, non-ROPS cab, open platform, or sun canopy.
- **Smooth Operating Powertrain** with C4.4B engine that meets emissions equivalent to U.S. EPA Tier 3 and E.U. Stage IIIA standards.
- **Versatile Vibratory Systems** include choice of dual amplitude/dual frequency, 5-amplitude, and Versa-Vibe™ systems. Multiple options available to match thick and thin lifts as well as various paving speeds.
- **Cat Compaction Control** keeps the operator informed for higher performance and efficiency. Infrared temperature sensors combined with mapping keep the operator informed of when optimal temperatures exist and where compaction has taken place. Temperature Mapping records data for future analysis, while Pass-Count Mapping keeps the operator informed of where mat coverage has taken place and the number of passes made.
- **Industry-Leading Water Spray System** features a single fill point, dual water pumps, triple filtration, intermittent operation and high capacity for optimal performance. An optional freeze protection kit offers protection in cold temperatures.
- **Best Lifetime Value** with Eco-mode operation that conserves fuel, while oil-bath lubrication and 3 yr/3000 hr vibratory drum service interval extends operation and minimizes life-time operating costs.

Specifications

Weights

Operating Weight – w/SUN CANOPY

Standard machine	9274 kg	20,445 lb
Maximum machine	10 015 kg	22,080 lb
Static linear load	28.0 kg/cm	157 lb/in

Operating Weight – w/ROPS/FOPS/OPEN

Standard machine	9550 kg	21,055 lb
Maximum machine	10 175 kg	22,430 lb
Static linear load	28.5 kg/cm	160 lb/in

Operating Weight – w/NON-ROPS CAB

Standard machine	9681 kg	21,340 lb
Maximum machine	10 453 kg	23,045 lb
Static linear load	27.7 kg/cm	155 lb/in

Operating Weight – w/ROPS CAB

Standard machine	9725 kg	21,440 lb
Maximum machine	10 259 kg	22,620 lb
Static linear load	29.2 kg/cm	164 lb/in

Service Refill Capacities

Fuel Tank	208 L	55 gal
Fuel Usage (50% duty)	12 hours	
Cooling System	22 L	5.8 gal
Engine Oil	9 L	2.4 gal
Hydraulic Tank	36 L	9.5 gal
Water Tank	837 L	221 gal

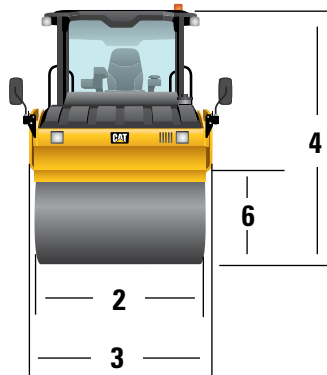
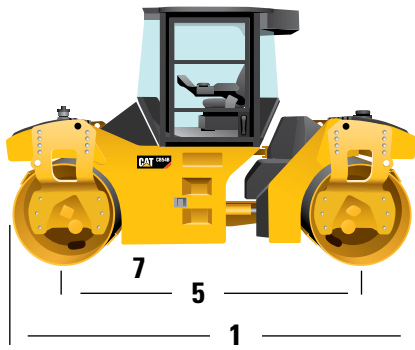
Engine – Powertrain

Engine Model	C4.4	
Number of Cylinders	4	
Rated Speed	2200 rpm	
Bore	105 mm	4.13"
Stroke	127 mm	5"
Gross Power:		
Tier 3, Stage IIIA	96.5 kW	129 hp (I), 131.2 hp (m)
Speed Ranges:		
Low	0 - 7 km/hr	4.3 mph
High	0 - 12 km/hr	7.5 mph
Gradeability (no vibrate):	38°	
Steering (Inside)	4.3 m	(14' 1")
Articulation Angle	35°	
Drum Offset	170 mm	(6")



CB54B Tandem Vibratory Roller

Dimensions



1 Overall Length	4565 mm	14' 9"
2 Drum Width	1700 mm	67"
Drum Offset	170 mm	6"
Drum Shell Thickness	17 mm	0.67"
Drum Diameter	1198 mm	47"
3 Overall width	1872 mm	6' 2"
4 Height at ROPS/FOPS	2982 mm	9' 9"
Height at Cab	2982 mm	9' 9"
5 Wheelbase	3300 mm	10' 10"
6 Curb Clearance	934 mm	37"
7 Ground Clearance	268 mm	10"

Vibratory Systems

Dual Amplitude, Dual Frequency

Frequency – Hz (vpm)	45/63.3	2700/3800
Amplitude – mm (in)	0.67 - 0.35	0.026 - 0.014

Dual Amplitude, Dual Frequency

Frequency – Hz (vpm)	45/53.3	2700/3200
Amplitude – mm (in)	0.67 - 0.35	0.026 - 0.014

Dual Amplitude, Dual Frequency

Frequency – Hz (vpm)	45/63.3	2700/3800
Amplitude – mm (in)	0.82 - 0.32	0.032 - 0.013

Dual Amplitude, Dual Frequency

Frequency – Hz (vpm)	45/53.3	2700/3200
Amplitude – mm (in)	0.82 - 0.32	0.032 - 0.013

Versa Vibe

Frequency – Hz (vpm)		45	2700
Amplitude – mm (in)	high	0.86	0.034
	low	0.72	0.028
Frequency – Hz (vpm)		63.3	3800
Amplitude – mm (in)	high	0.39	0.015
	low	0.26	0.010

Five amplitude

Frequency – Hz (vpm)		45	2700
Amplitude – mm (in)	high	1.06	0.042
	medium high	0.91	0.036
	medium	0.73	0.029
	medium low	0.54	0.021
	low	0.34	0.013

CB54B Standard and Optional Equipment

STANDARD EQUIPMENT:

- 12-Volt Electrical System
- 120 Amp Alternator
- 837 L (221 gal) Water Tank Capacity
- 2-Amplitude, 2-Frequency Vibratory System
- Locking Engine Compartment
- ROPS/FOPS Platform
- Sealed Pod Vibratory System
- Suspension Seat
- Triple Filtered Water Spray System
- Two-Speed Hydrostatic Transmission
- Working Lights

OPTIONAL EQUIPMENT:

- 5-Amplitude Vibratory System
- Air Conditioning
- Air Suspension Seat w/Heat
- Bio-Degradeable Oil
- Cat Compaction Control (Temperature and Pass-Count Mapping)
- Edge Cutter
- Freeze Protection Kit
- High Ambient Cooling System
- Halogen Lights w/Drum Edge Lights
- High Intensity Discharge (HID) Lights w/Drum Edge Lighting
- Mirrors
- Product Link™
- Recording Module (cab only)
- Roading Lights
- ROPS/FOPS Cab
- Sun Canopy
- Versa Vibe Vibratory System
- Warning Beacon
- Water Distribution Mats (cocoa)
- Water Distribution Mats (rubber)

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

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