

CB-334D

Double Drum Vibratory
Asphalt Compactor



CB-335D

Combi Asphalt
Compactor



CB-334D

Operating weight	3850 kg	8,490 lb
Compaction width	1300 mm	51"
Gross power	31,7 kW	42.5 hp

CB-335D

Operating weight	3620 kg	7,980 lb
Compaction width	1300 mm	51"
Gross power	31,7 kW	42.5 hp

All-around Performers



The CB-334D and CB-335D are versatile machines that can be used as the only compactor on small to intermediate sized jobs or on larger jobs in conjunction with high-production models.

The CB-334D and CB-335D are true 4 ton rollers. They are not stretched versions of 2.5 ton machines like most competitive units.

The CB-334D is performance driven with its high frequency vibratory system that generates 68 Hz (4,100 vpm). Its high tractive effort provides plenty of power to work on grades.

Meanwhile, the CB-335D is more versatility driven. Its steel front drum and rubber tired rear wheels allow it to function as both a vibratory and a pneumatic compactor. This versatility can help eliminate an operator, decrease maintenance costs and lower transportation expenses.

The CB-334D and CB-335D provide a comfortable and convenient operating environment that contribute to the versatility of the machines. The roomy operator's seat slides from side to side for excellent visibility to drum edge or tire contact points. Their low-profile design provides great visibility to the front and rear.

In addition, the machines are quiet for the operator and spectators. The low sound levels make them a perfect match for commercial jobs when compaction must coincide with day-to-day business operations, for example, on a parking lot at a convenience store. They also are simple to operate, allowing the least experienced crew member to operator them.

The CB-334D and CB-335D are supported by an extensive dealer network and parts distribution system as well as by Caterpillar dealer representatives that are highly trained and motivated. Caterpillar offers a comprehensive line of asphalt pavers, cold planers, compactors, reclaimers and stabilizers.

Caterpillar® 3014 Engine

Reliable and durable diesel engine provides years of low maintenance operation.



Precise balance and optimum running speed for smooth operation and extended engine life.

Engine is liquid-cooled keeping temperature low and helping reduce component wear.

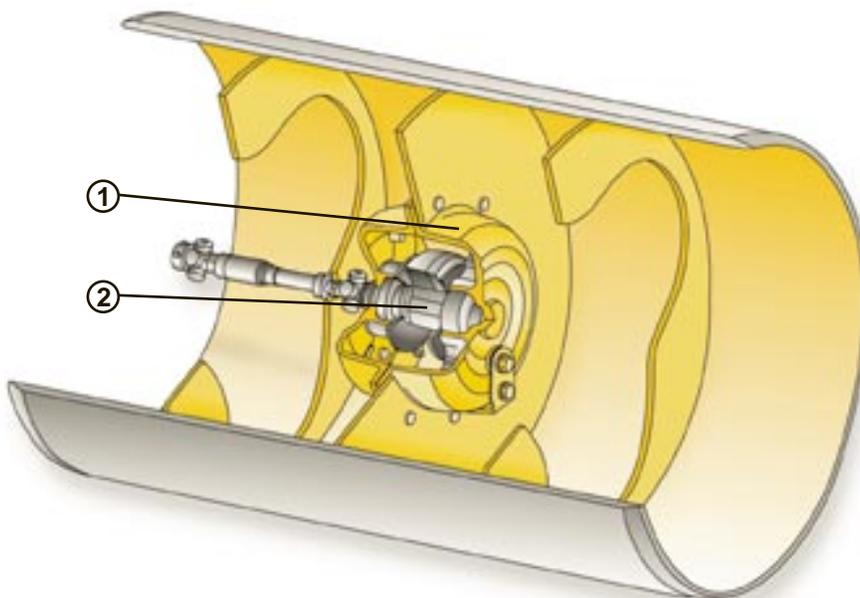
Timing drive use three helically cut gears that help reduce noise levels.

Heat-treated chrome molybdenum steel crankshaft provides durable service life.

Meets Tier I emissions engine regulations.

Vibratory System

Precise system delivers optimum compactive force.



Pod-style weight housings are assembled and sealed at the factory to ensure cleanliness, extended bearing life and easy field exchange/service.

Change interval for bearing lubrication is every three years or 3,000 hours.

Three-position vibratory control provides independent vibration control of front, rear or both drums.

Balance between frequency and amplitude provides a good mat finish for commercial work.

High frequency vibratory system produces 68 Hz (4,100 vpm). This is one of the highest frequencies in this size class.

1 Pod-style weight housing 2 Fixed eccentric weight

Operator Comfort

Operating ease and comfort promote all-day productivity.

Single-lever control provides simplified operation, making the machines a perfect fit for inexperienced operators.

Easy-to-understand instrument panel allows the operator to quickly verify the status of machine systems.

Lockable cover protects instrumentation and gauges.

Low sound levels make them comfortable for both operators and spectators.

Isolated operator's station with four rubber mounts helps eliminate vibration before it reaches the operator, controls and instrumentation.



Operator's Station

Environment for operator contributes to machine versatility.

Seat slides from side to side and locks into three positions – right, center and left.

When positioned on the left or right side, operator has unobstructed visibility to drum edge or wheel contact points.

Roomy operator's station provides plenty of leg room for all-day operation.

Adjustable bucket seat provides lasting comfort.

Optional suspension seat with armrests improves ride.

Note: machine is shown with optional suspension seat.



Excellent Forward and Rearward Visibility

Low-profile design provides convenient control of machines.



Excellent forward visibility allows the operator to see objects 0,6 m (2') high and 1 m (3.3') in front of the machine.

Rearward visibility is even better. Operator can see objects that are 0,8 m (2.5') behind the machine and flush to the surface.

Sloped engine enclosure and low-profile rear end provide unobstructed sight lines to ground personnel working near machine.

Water Spray System

Corrosion-proof system and extended-life components provide reliable operation.



Constant or intermittent spray capabilities provide extended operation between refills.

Polyethylene water tank capacity is 300 L (79 gal). When using the intermittent spray mode, an operator can expect to fill the tank only twice during an eight hour shift on the CB-334D and only once with the CB-335D.

Triple water filtration reduces machine downtime caused by system clogs.

Extended-life water pump provides optimum spray and flow.

Water pump and filters are conveniently located for easy access.

Large water tank drain allows system to be drained in less than five minutes.

Drum Design Keeps Production High

Weight is concentrated above each drum for excellent machine balance.

Specially designed drum edges help eliminate marks on deep lifts or when turning.

Drums are constructed of rolled steel plate and are finished to reduce surface irregularities.

Replaceable rubber mounts isolate vibration and enhance vibratory capabilities.

Each drum is fitted with two adjustable, spring-applied scrapers, positioned at the front and rear of each drum.



Tires Enhance Versatility – CB-335D

Weight is concentrated above the tires and drum for excellent machine balance.

Steel front drum and rubber tires at the rear allow a single machine to function as both a double drum and pneumatic compactor.

Four rubber tires generate a high ground contact pressure that penetrates deep into the lift.

Because the tires are flexible, horizontal pressures develop, assisting with compaction.

Each tire is fitted with a replaceable, spring-loaded scraper. The scrapers can be positioned above the tires when the they are not needed.



Serviceability

Time-saving features reduce maintenance requirements and increase production.



Engine enclosure pivots upward and locks into place.

External engine components, hydraulics and routine service points are clustered in easy-to-access locations.

Visual indicators simplify verification of fluid levels and filter conditions.

Extended-life oils increase maintenance intervals for the vibratory system, hydraulic system and engine oil.

Sealed-for-life bearing material in articulation hitch never needs to be greased.

Remote-mounted drains for hydraulic oil and cooling system provide simplified collection of fluids.

Quick-connect hydraulic test ports simplify system diagnosis.

Electrical wiring is color-coded and numbered for simple troubleshooting.

Nylon-braided wrap and all-weather connectors ensure electrical system integrity.

Engine

Caterpillar 3014 naturally aspirated, water-cooled, 4-stroke, 4-cylinder diesel engine. Meets Tier I emissions engine regulations.

Ratings at	RPM	kW	hp
Gross power	2,800	31,7	42.5

Ratings of Caterpillar machine engines are based on standard air conditions of 25°C (77°F) and 99 kPa (29.32") Hg dry barometer. Power is based on using 35° API gravity fuel having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]. Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.

The following ratings apply at 2,800 RPM when tested under the specified standard conditions for the specified standard:

Net Power	kW	hp
ISO 9249	29,2	39.1
SAE J1349 (JAN)90	28,9	38.7
EEC80/1269	29,2	39.1

Dimensions

Bore	84 mm	3.3"
Stroke	90 mm	3.5"
Displacement	2 L	122 cu. in.

Dual-element, dry-type air cleaner with visual restriction indicator.

Sound Levels

Sound levels measured at the operator's station are 82.1 dB(A), and sound levels measured at 15 m (50') are 69.7 dB(A).

Electrical System

The 12-volt electrical system includes one maintenance-free Cat battery and color-coded and numbered wiring wrapped in nylon braid. The system includes a 55-amp alternator. The starting system provides 750 cold cranking amps.

Frame

Frame is fabricated from heavy gauge steel plate and joined at the center articulation pivot by a single-piece hitch. Oscillating stops provide $\pm 9^\circ$ frame oscillation. Articulation angle is $\pm 35^\circ$. The articulation pivot is structurally reinforced for extended service life. Special bearing material in articulation hitch never needs to be greased.

Operator and Machine Protective Equipment

Roll Over Protective Structure (ROPS) is a two-post structure that bolts directly onto flanges welded to the machine frame. The ROPS meets SAE recommended practice J1040 May94. This structure may be an option in some areas and standard equipment in others. Consult your dealer for specifics.

Backup Alarm emits a 97 dB(A) alarm whenever the machine is in reverse.

Retractable Seat Belt that is 76 mm (3") wide is standard equipment.

Transmission

(CB-334D)

Variable-displacement piston pump supplies pressure flow to fixed-displacement hydraulic motors that drive the front and rear drums.

(CB-335D)

Variable-displacement piston pump supplies pressure flow to a fixed-displacement hydraulic motor that drives the front drum, and the pump supplies pressure flow to two fixed-displacement motors that drive the rear wheels.

For both machines, a propel lever located at the operator's station provides smooth hydrostatic control of the infinitely variable speeds in both forward and reverse.

CB-334D and CB-335D speed range

0-11 kmph	0-7 mph
-----------	---------

Final Drives

(CB-334D)

High-torque, low-speed hydraulic motors directly drive each drum.

(CB-335D)

High-torque, low-speed hydraulic motor directly drives the front drum, and two high-torque, low-speed hydraulic motors directly drive the rear wheels.

Water Spray System

Spray bars are constructed of stainless steel for corrosion resistance. The water tank is reinforced polyethylene. An electric water pump provides either continuous or intermittent spray. Intermittent spray setting increases spray time by 50% over continuous setting. Triple filtration includes a filter on the tank fill spout, an in-line filter at the water pump and filters on each spray nozzle. Spray nozzles are easily removed without tools for cleaning.

Water capacity 300 liters 79 gallons

Tire Wetting System (CB-335D option)

Tire Wetting System allows a solvent to be sprayed on the tire surfaces, helping prevent asphalt from adhering to the tires. One spray nozzle is positioned above each tire. The system is controlled with a momentary switch on the control console.

Capacity 20 liters 5.3 gallons

Instrumentation

The control console includes: steering wheel; engine throttle; water spray system switch; vibratory system switch; vibratory drum selector switch; hour meter; horn; fuel gauge; start switch; heat start switch; parking brake; and four-segment light for hydraulic oil temperature, oil pressure, alternator, and engine coolant. The control console is protected with a lockable cover.

Steering

An engine-driven gear-type pump supplies hydraulic fluid for the steering circuit.

	CB-334D		CB-335D	
Minimum turning radius				
Inside drum edge	3000 mm	118"	3000 mm	118"
Outside drum edge	4300 mm	169"	4300 mm	169"
Steering angle (each direction)		35°		35°

Hydraulic system

One 70 mm (2.75") bore, double-acting cylinder powered by a gear-type pump. Output @ 2800 rpm is 23 liter/min (6.1 gpm) with relief valve at 1,700 psi.

Compaction Characteristics

	CB-334D		CB-335D	
Vibration selections	Front, rear or both		Front	
Eccentric weight drive	Hydraulic		Hydraulic	
Frequency	68 Hz	4,100 vpm	68 Hz	4,100 vpm
Nominal amplitude	0,37 mm	0.015"	0,37 mm	0.015"
Centrifugal force per drum	32 kN	7,250 lb	32 kN	7,250 lb
Load per cm of drum contact/Pounds per linear inch:				
Static	14,8 kg/cm	83 lb/in	14,8 kg/cm	83 lb/in
Centrifugal	39,9 kg/cm	223 lb/in	39,9 kg/cm	223 lb/in

Brakes

Brake systems meet SAE J1472 and ISO 3450.

Service

■ Closed-loop hydrostatic drive system provides dynamic braking during machine operation.

Secondary and Parking

■ A multi-disc brake inside each drum traction motor immobilizes the roller. Activation is by a switch on the operator's console or when the engine is shut off.

Wheels and Tires (CB-335D)

7.50 x 16 6-ply tires are standard. Each tire is equipped with a replaceable scraper. The scrapers help clean asphalt or soil off the tires. The scrapers can be positioned above the tires when they are not needed. Wheels are on a fixed axle.

Weights (approximate)

Operating weights include lubricants, 80 kg (175 lb) operator, full fuel tank, full hydraulic system and half-full water tank.

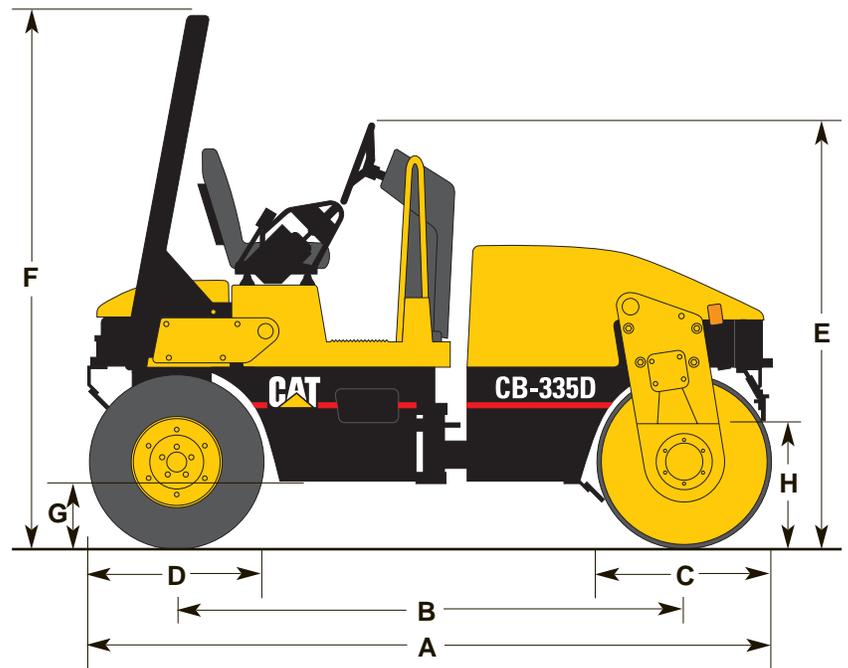
	CB-334D		CB-335D	
Operating (w/o ROPS)	3850 kg	8,490 lb	3620 kg	7,980 lb
Operating (w ROPS)	3965 kg	8,740 lb	3750 kg	8,265 lb
Weight at front drum	1930 kg	4,255 lb	1960 kg	4,320 lb
Weight at rear drum	1920 kg	4,235 lb	—	—
Weight at rear wheels	—	—	1660 kg	3,660 lb
Weight per rear wheel	—	—	415 kg	915 lb

Service Refill Capacities

	Liters	Gallons
Fuel Tank	48	12.7
Crankcase	7,1	1.9
Hydraulic fluid tank	35	9.3
Hydraulic circuit	43	11.4
Water Spray System	300	79
Tire wetting system	20	5.3

Dimensions

	CB-334D		CB-335D	
A Operating length	3120 mm	(123")	3120 mm	(123")
B Wheelbase	2321 mm	(91")	2321 mm	(91")
C Drum diameter	800 mm	(31")	800 mm	(31")
Drum shell thickness	13 mm	(0.5")	13 mm	(0.5")
D Tire diameter	—	—	770 mm	(30")
E Height at steering wheel	1892 mm	(74")	1892 mm	(74")
F Height at ROPS	2550 mm	(100")	2550 mm	(100")
G Ground clearance	260 mm	(10")	260 mm	(10")
H Curb clearance	585 mm	(23")	585 mm	(23")
I Compaction width	1300 mm	(51")	1300 mm	(51")
J Machine width	1390 mm	(55")	1390 mm	(55")



Optional Equipment

Note: Standard and optional equipment may vary. Consult your Caterpillar dealer for specifics.

Roll Over Protective Structure (ROPS) is a two-post structure that bolts directly onto flanges welded to the machine frame. The ROPS meets SAE recommended practice J1040 May94.

Sun Canopy is a fiber-glass structure that blocks the operator's station from the sun. ROPS is required.

Working Light Package consists of two front headlights and one rear light.

Roading Light Package consists of two front headlights, one rear light, turn signals and hazard lights.

Rotating Beacon includes an amber beacon and mount that can be attached to machines with ROPS. An extra mount is needed for machines without ROPS.

Suspension Seat is mechanical type with vertical adjustments and armrests.

Seat Switch requires the operator to be seated for the machine to be operated. Available with Suspension Seat option only.

Spark Arrestor Muffler eliminates burning carbon particles that can exit the muffler.

Engine Tachometer displays engine speed (rpm) on an analog dial.

High Ambient Cooling system provides the capability to achieve greater production rates at high ambient temperatures, up to 49 degrees C (120 degrees F). This option is available for the CB-334D only.

Non-Machined Drum Edges have a square profile instead of the standard design. When working on straight runs, a square profile may reduce marks in the mat. If desired, the square profile can be machined. This option is available for the CB-334D only.

Drum Guards bolt to the bulk heads to help prevent material from entering ends of the drums. This option is available for the CB-334D only.

Coco Mats retain water as it is distributed by the water spray system. The mats allow water to seep out of them, providing continuous water distribution to drum surfaces. This option is available for the CB-334D only.

Tire Wetting System allows a solvent to be sprayed on the tire surfaces, helping prevent asphalt from adhering to the tires. One spray nozzle is positioned above each tire. The system is controlled with a momentary switch on the control console. The system is fed by a 20 L (5.3 gal) tank located on the left side of the operator's station. This option is available for the CB-335D only.

Water Distribution Mats help keep drum surfaces wet in extremely dry, hot or windy conditions. The mats are constructed of flexible rubber and are designed to hold and disperse water on the drum surfaces. They also keep the drums clean by providing a secondary cleaning action to remove minor asphalt particles not removed by the drum scrapers. The mats can be retracted from the drums when not in use.

Value Analysis

Versatile Operation

- High-frequency vibratory system.
- CB-335D rubber tires make it effective on both asphalt and soil.

Productivity

- Responsive diesel power.
- High travel speeds.
- Nearly equal front-rear weight distribution.

Easy Control

- Single lever control of forward/reverse speeds.
- Low-effort steering.
- Excellent visibility.

Simplified Maintenance

- Simple, durable design.
- Rugged construction for extended service life.
- Easy access to all major components.

Total Customer Support System

Parts availability — most parts on dealer's shelf when you need them. Computer-controlled, emergency search system backup.

Parts stock lists — dealer helps you plan on-site parts stock to minimize your parts investment while maximizing machine availability.

Service capability — dealer's shop or fast field service by trained technicians using latest tools and technology.

Machine management services — effective preventive maintenance programs, cost-effective repair options, customer meetings, operator and mechanic training.

Remanufactured parts — pumps and motors, engines, fuel system and charging system components available from dealer at 20-50% of new part cost.

Literature support — easy-to-use parts books, operation and maintenance manuals, and service manuals help you get maximum value from equipment.

Flexible financing — your dealer can arrange attractive financing on the entire line of Caterpillar equipment. Terms structured to meet cash flow requirements. See how easy it is to own, lease or rent Cat equipment.

© 2001 Caterpillar

QEHQ9550-02 (3/01)
Replaces QEHQ9550-01

Materials and specifications are subject to change without notice.

CATERPILLAR[®]