**CB334E**Asphalt Compactor

**CB335E** 

Combi-Asphalt Compactor





	CB334E	CB335E
Cat® 3024C Diesel Engine		
Gross Power	34.1 kW (46 hp)	34.1 kW (46 hp)
Operating Weight (with ROPS)	3940 kg (8,688 lb)	3670 kg (8,092 lb)
Compaction Width	1.3 m (51")	1.3 m (51")

## Caterpillar® 3024C Engine

The Caterpillar® 3024C engine provides efficient power while meeting U.S. EPA Tier 2 and E.U. Stage II engine emission requirements.

#### **Power**

The Caterpillar® 3024C engine provides a gross power of 34.1 kW (46 hp) and a torque of 143 Nm for good performance and reliability in tough conditions.

#### **Large Cooling System**

The large cooling system keeps engine temperatures low in order to maximize fuel efficiency and minimize emissions.

#### **High Ambient Cooling**

The high ambient cooling system provides efficient operation in high ambient temperatures.



## **Operator's Station**

The convenient, comfortable operating environment with three-position seating provides good visibility and promotes day-long productivity.

#### **Operator's Station**

The operator's station incorporates a fully-equipped console and an adjustable suspension seat.

#### **Instrument Panel**

The easy-to-understand instrument panel integrates a fuel level indicator, hour meter and light indicators for machine functions.

#### **Pre-Heat Ignition System**

The key switch includes an automatic engine pre-heat feature in order to assist in cold-weather starting.

#### Traction Control (Optional)

The traction control system transfers torque between the front and rear drums on the CB334E and between the two sets of rear tires on the CB335E.



## **Vibratory System**

The vibratory system provides good balance between frequency and amplitude in order to meet various job site conditions.

#### **Dual Frequency Vibratory System**

The standard vibratory system incorporates two frequencies of 61 Hz (3,660 vpm) and 69 Hz (4,140 vpm) and an amplitude of 0.37 mm (0.015") in order to provide application versatility.

#### **Vibratory Selection**

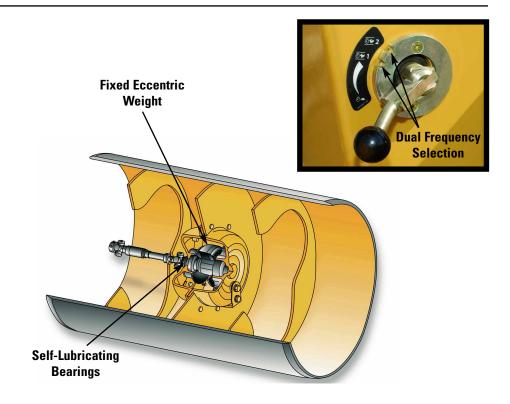
A vibratory selection switch provides front, rear and both drum vibratory capabilities.

#### **Automatic Vibratory Control**

The vibratory system includes an automatic start feature that activates whenever the propel lever is moved from the neutral position.

#### **Rear Drum Vibratory Delay**

The rear drum vibratory delay feature controls the start of the rear drum in order to assist power management on slopes.



## **Water Spray System**

Corrosion-proof components provide long life and reliable operation.

#### **Spray Capabilities**

The standard pressurized water spray system with constant or intermittent capabilities provides extended operation between refills. The intermittent spray setting increases spray time by 50% over the continuous setting.

#### **Water Pump and Filters**

The extended life water pump and filters are conveniently located for easy access while providing optimum spray and flow.

#### **Water Filtration**

Triple water filtration reduces machine downtime caused by system clogs.

#### **Large Water Tank Fill and Drain**

The large water tank fill and drain allow the system to be filled and drained within minutes.



## **Drum Design**

The Caterpillar drum design delivers high production and a smooth mat surface.

#### **Drum Edges**

The drum edge design promotes a smooth surface and reduces marks on lifts when turning.

#### **Folded Drum Supports**

The folded drum supports provide good visibility to the ground contact points.

#### **Self-Adjusting Scrapers**

Each drum is fitted with two retractable, spring-loaded, selfadjusting scrapers. The scrapers are designed for even wear.

#### **Replaceable Rubber Mounts**

The rubber mounts isolate vibration and enhance vibratory capabilities.

#### **Easy Access Tie-Down**

The tie-down location provides easy access for quick loading and unloading.



## **CB335E Tires Provide Uniform Compaction**

The CB335E incorporates a steel, front drum with rear, pneumatic tires. The pneumatic tires provide even compaction on uneven surfaces.

#### **High Contact Pressures**

Four 7.50 x 16, 6 ply rubber tires generate high contact pressures that penetrate deep into the lift.

#### **Flexible Tires**

The flexible tires provide a kneading action resulting in a smooth, tight surface.

#### **Self-Adjusting Scrapers**

Each tire includes a self-adjusting scraper. The scrapers are designed for even wear and can be retracted when not in use, limiting wear.

#### Tire Spray System (Optional)

The tire spray system applies a solvent to the tires in order to prevent material from adhering to them.



## **Reliability and Serviceability**

The CB-300 E-Series machines provide the reliability and serviceability that you've come to expect from Caterpillar.

#### **Vertical Lift Engine Enclosure**

The vertical lift engine enclosure allows fast access to routine service points.

#### **Water Spray System**

The filters can be easily removed without the use of special tools.

#### **Extended Life Oils**

Extended life oils increase maintenance intervals for the engine oil, hydraulic system and vibratory system. Remote mounted drains provide simplified collection of fluids.

#### **Quick-Connect Hydraulic Test Ports**

The quick-connect hydraulic test ports simplify system diagnosis.

#### **Oil-bath Lubrication**

An oil-bath lubricates the eccentric weight bearings, extending routine maintenance to 3 year/3000 hour intervals.



## **Engine**

Four-stroke cycle, four cylinder Caterpillar 3024C diesel engine meets U.S. EPA Tier 2 and E.U. Stage II engine emission requirements.

Engine	Cat 3024C	
Gross Power	kW	hp
SAE J1995	34.1	46
Net Power		
ISO 9249	33	44
Specifications		
Bore	84 mm	3.30"
Stroke	100 mm	3.94"
Displacement	2216 cm <sup>3</sup>	87 in <sup>3</sup>

- The net power ratings apply at a rated speed of 2400 RPM when tested under the reference conditions for the specific standard.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner and muffler.

## Transmission CB334E

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

#### **CB335E**

A variable displacement piston pump supplies pressure flow to the fixed displacement hydraulic motors that drive the front drum. The pump also supplies pressure flow to the two, fixed displacement motors that drive the rear wheels.

#### **Speed Range**

0-12.5 km/hr (0-8 mph)

## **Steering System**

Priority-demand hydraulic power assist steering system provides smooth machine handling.

#### **Minimum Turning Radius**

Inside Drum Edge 3.0 m (9' 10") Outside Drum Edge 4.3 m (14' 1")

Steering Angle 35°

## **Final Drives**

#### **CB334E**

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

#### **CB335E**

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

#### Instrumentation

The operator's station includes: steering wheel with knob, water spray system switch, vibratory drum selector switch, horn, hazard flasher control, turn signals, warning and working light switches, engine start switch with engine pre-heat feature and secondary brake.

The instrument panel cluster integrates the fuel level indicator, service hour meter and light indicators for: roading lights, vibration on and turn signals. The instrument panel is also equipped with warning light indicators for: engine pre-heat, secondary brake, alternator, engine temperature, engine oil pressure, engine coolant temperature and hydraulic oil pressure.

The vibratory system is actuated with a switch on the top of the propel lever. When the vibratory system is activated, a vibration indicator light illuminates.

The engine throttle control is operated via a three-position lever for low, intermediate and high engine speed.

The control console and hood are equipped with lockable covers.

### **Brakes**

The brake systems meet ISO 3450 and EN-500-4. The braking system will automatically engage if a pressure drop in the hydraulic system occurs.

#### Service

The service braking system consists of a closed-loop, hydrostatic system that provides dynamic braking during machine operation.

#### **Secondary**

A spring-applied, pressure-released brake inside of each propel motor immobilizes the machine. The secondary brake can be activated by a switch on the operator's console or when the engine is shut off.

### **Water Spray System**

The water spray system includes easy to clean spray bars that are constructed of stainless steel for corrosion resistance. The water tank is constructed of reinforced polyethylene. An intermittent spray setting increases spray time by 50% over the continuous setting. Triple water filtration includes a filter in the tank fill spout, an in-line filter at the water pump and filters in each spray nozzle.

# Tire Spray System (Optional)

The optional tire spray system allows a solvent to be sprayed on the tire surfaces in order to prevent asphalt from adhering to the tires. One spray nozzle is positioned above each tire. The system is controlled with an on/off switch on the control console.

## Wheels and Tires CB335E

Four 7.5 x 16, 6-ply tires are mounted on a fixed axle. Each wheel includes a retractable, self-loading, self-adjusting scraper that helps remove asphalt and soil particles from the tires. Optional 10.5/80 - 16 6-ply wide tires are available.

#### **Frame**

The frame is fabricated from heavy gauge steel plate and joined at the center articulation pivot. Two selfaligning bearings on the pivot housing provide a ±35 degree steering angle, and a horizontal pin provides a ±10 degree oscillation angle. The articulation pivot is structurally reinforced for extended service life. For transport purposes, the articulation pivot can be secured at the zero degree steering angle.

## **Electrical System**

The 12-volt electrical system includes one maintenance-free Cat® battery with 750 cold cranking amps. The wiring is color-coded, numbered and wrapped in nylon braid. The system includes a 65-amp alternator.

# Service Refill Capacities

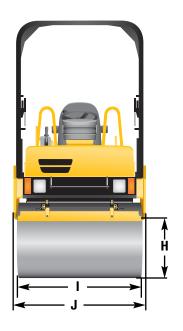
	Liters	Gallons
Fuel Tank	57	15
Engine Oil w/Filter	10.6	2.8
Hydraulic Fluid Tank	48	12.7
Water Spray System	300	79.0
Tire Spray System	20	5.3

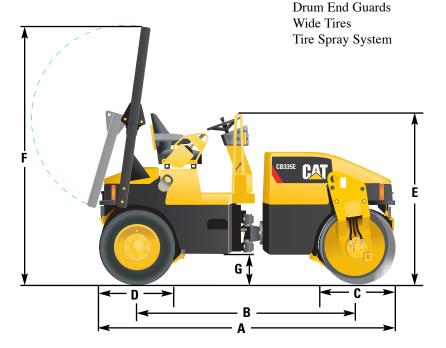
## **Dimensions**

		CB334E	CB335E
$\mathbf{A}$	Length	3.12 m (10' 3")	3.12 m (10' 3")
В	Wheelbase	2.32 m (7' 7")	2.32 m (7' 7")
$\overline{\mathbf{C}}$	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")
$\mathbf{E}$	Height at Steering Wheel	1.84 m (6' 0")	1.84 m (6' 0")
F	Height at ROPS	2.56 m (8' 4")	2.56 m (8' 4")
	Height with ROPS Folded	1.89 mm (6' 2")	1.89 mm (6' 2")
G	Ground Clearance	284 mm (11")	284 mm (11")
H	Curb Clearance	602 mm (23.5")	602 mm (23.5")
I	Compaction Width	1.3 m (51")	1.3 m (51")
J	Machine Width	1.39 m (55")	1.39 m (55")

## **Optional Equipment**

Roll-Over Protective Structure (ROPS) Foldable ROPS Sun Canopy Traction Control Working Light Package Roading and Working Light Package Light Protector Grids Warning Beacon Battery Disconnect Switch Engine Tachometer Suspension Seat Suspension Seat with Seat Switch Brake Release Pump (CB334E) Cocoa Mats Water Distribution Mats Spark Arrestor Muffler Non-Machined Drum Edges





## **Compaction Characteristics**

<b>Vibratory Selection</b>	
CB334E	Front, Rear or Both
CB335E	Front
Frequencies	61 Hz (3,660 vpm) 69 Hz (4,140 vpm)
Amplitude	0.37 mm (0.015")
Centrifugal Force	33.1 kN (7,448 lb)
Static Linear Load	
CB334E	15.2 kg/cm 86 lb/in
CB335E	15 kg/cm 84 lb/in

## Weights (approximate)

	CB334E	CB335E
with ROPS	3940 kg (8,688 lb)	3670 kg (8,092 lb)
at front drum	1940 kg (4,278 lb)	1950 kg (4,300 lb)
at rear drum	2000 kg (4,410 lb)	_
at rear wheels	_	1720 kg (3,793 lb)
per wheel	_	430 kg (948 lb)

Operating weights include lubricants, 80 kg (176 lb) operator, full fuel tank, full hydraulic system, half-full water tank and standard ROPS.

## Caterpillar offers a comprehensive line of Utility Compactors.

Contact your local Caterpillar® Dealer to learn more about the complete line of Caterpillar® Paving Products.



	CB14	CB14 XW	<b>CB14 Full Flush</b>
Operating Weight	1620 kg (3,571 lb)	1840 kg (4,057)	1600 kg (3,527 lb)
Drum Width	800 mm (31")	1000 mm (39")	900/800 mm (35/31")
Frequency	53.3 Hz (3,200 vpm)		
Centrifugal Force	10.3 kN (2,318 lb)	11.4 kN (2,2565 lb)	10.3 kN (2,318 lb)
Gross Power	16.1 kW (21.6 hp)	16.1 kW (21.6 hp)	16.1 kW (21.6 hp)



	CB214E	
Operating Weight	2390 kg (5,270 lb)	
Drum Width	1.00 m (3' 3")	
Frequency	63 Hz (3,780 vpm)	
Centrifugal Force	27.6 kN (6,075 lb)	
Gross Power	24.4 kW (32.7 hp)	



	CB224E	CB225E
Operating Weight	2570 kg (5,670 lb)	2240 kg (4,940 lb)
Drum Width	1.20 m (3' 11")	1.20 m (3' 11")
Frequency	63 Hz (3,780 vpm)	63 Hz (3,780 vpm)
Centrifugal Force	31.4 kN (6,975 lb)	31.4 kN (6,975 lb)
Gross Power	24.4 kW (32.7 hp)	24.4 kW (32.7 hp)

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