



345 GC

Hydraulic Excavator

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

Table of Contents

Specifications	2
Engine	2
Swing Mechanism	2
Weights	2
Track	2
Drive	2
Hydraulic System	2
Service Refill Capacities	2
Standards	2
Sound Performance	2
Operating Weights and Ground Pressures	3
Major Component Weights	3
Dimensions	4
Working Ranges and Forces	5
Bucket Specifications and Compatibility	6
Attachments Offering Guide	7
Standard and Optional Equipment	8
Dealer Installed Kit and Attachments	9



オフロード法2014年
基準適合

345 GC Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C9.3B	
Net Power – ISO 9249	258 kW	346 hp
Engine Power – ISO 14396	259 kW	347 hp
Bore	115 mm	5 in
Stroke	149 mm	6 in
Displacement	9.3 L	568 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets Japan 2014 emission standards.
- Recommended for use up to 3300 m (10,830 ft) altitude with engine power derate above 2300 m (7,550 ft).
- Advertised power tested per the standards in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Rated speed at 1,900 rpm.

⁽¹⁾Cat engines are compatible with the following renewable, alternative, and bio-fuels* with lower greenhouse gas emission impact:

- ✓ Up to B20 biodiesel (FAME)**
- ✓ Up to 100% HVO and GTL renewable fuels

*Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

**For use of higher blends, consult your Cat dealer.

Swing Mechanism

Swing Speed	8.35 rpm	
Maximum Swing Torque	154 kN·m	113,450 lbf·ft

Weights

Operating Weight	42 900 kg	94,500 lb
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- Reach boom, R3.35 m (11'0") stick, HDX 2.10 m³ (2.75 yd³) bucket, 600 mm (24") double grouser shoes, 9.0 mt (19,842 lb) counterweight.

Track

Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	49	
Number of Track Rollers (each side)	8	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	4.8 km/h	3.0 mph
Maximum Drawbar Pull	299 kN	67,105 lbf

Hydraulic System

Main System – Maximum Flow – Implement	630 L/min (315 L/min × 2 pumps)	166 gal/min (83 gal/min × 2 pumps)
Maximum Pressure – Equipment – Implement	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	28 000 kPa	4,061 psi
Boom Cylinder – Bore	160 mm	6 in
Boom Cylinder – Stroke	1392 mm	55 in
Stick Cylinder – Bore	180 mm	7 in
Stick Cylinder – Stroke	1758 mm	69 in
TB Bucket Cylinder – Bore	150 mm	6 in
TB Bucket Cylinder – Stroke	1356 mm	53 in
UB Bucket Cylinder – Bore	160 mm	6 in
UB Bucket Cylinder – Stroke	1396 mm	55 in

Service Refill Capacities

Fuel Tank Capacity	600 L	158.5 gal
Cooling System	40 L	10.5 gal
Engine Oil (with filter)	32 L	8.5 gal
Swing Drive	13.5 L	3.6 gal
Final Drive (each)	8 L	2.1 gal
Hydraulic System (including tank)	423 L	111.7 gal
Hydraulic Tank (including suction pipe)	186 L	49.1 gal
Diesel Exhaust Fluid (DEF) Tank	80 L	21.1 gal

Standards

Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262: 1998
Cab/ROPS	ISO 12117-2:2008

Sound Performance

ISO 6395:2008 (external)	106 dB(A)
ISO 6396:2008 (inside cab)	73 dB(A)

- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

345 GC Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		600 mm (24") Double Grouser Shoes		700 mm (28") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
9.0 mt (19,842 lb) Counterweight + Base Machine						
Reach Boom + R3.35TB (11'0") Stick + 2.10 m ³ (2.75 yd ³) HDX Bucket	42 100 (92,800)	78.4 (11.4)	42 900 (94,500)	79.8 (11.6)	42 500 (93,600)	67.8 (9.8)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

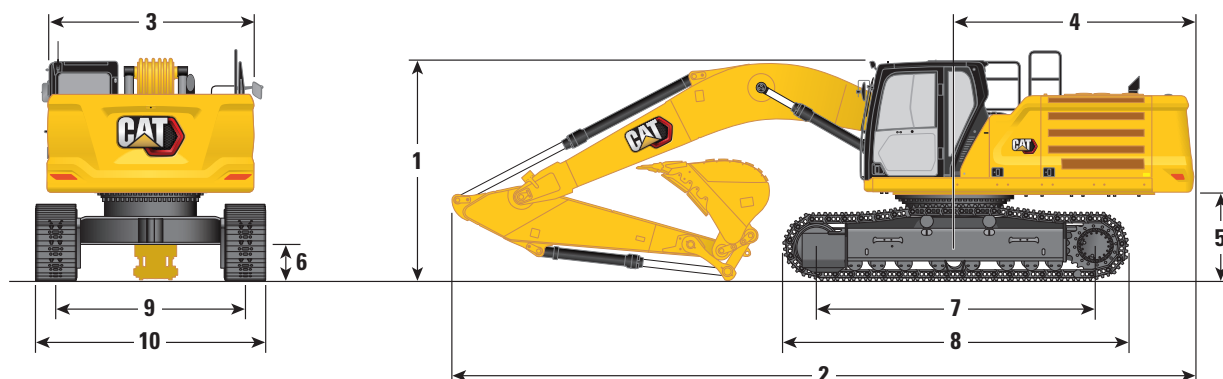
Major Component Weights

	kg	lb
Base machine with 9.0 mt (19,842 lb) counterweight, swing frame, base frame with HD track rollers and carrier rollers	28 600	63,060
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	4090	9,010
600 mm (24") Width, 15.5 mm (0.61") Thick, Double Grouser Track Shoes	4850	10,700
600 mm (24") Width, 15.5 mm (0.61") Thick, HD Triple Grouser Track Shoes	4750	10,460
700 mm (28") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	4440	9,790
Two Boom Cylinders	790	1,740
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	550	1,210
Counterweight:		
9.0 mt Counterweight	8990	19,842
Swing Frame:		
Swing Frame	3730	8,220
Undercarriage:		
Base Frame with HD Track Rollers and Carrier Rollers	8890	19,590
Booms (including lines, pins, stick cylinder):		
Reach Boom 6.9 m (22'8")	4020	8,870
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.35TB (11'0")	2250	4,960
Buckets (without linkage):		
2.10 m ³ (2.75 yd ³) HDX	2590	5,710

345 GC Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate and may vary depending on bucket selection.



Boom Options

Reach Boom
6.9 m (22'8")

Stick Options

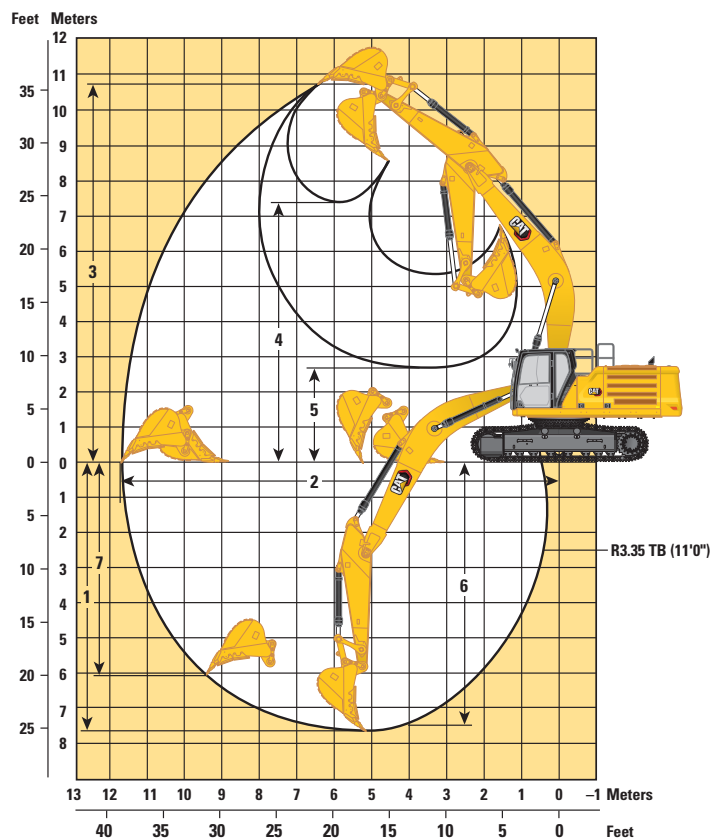
Reach Stick
R3.35TB (11'0")

	mm	ft
1 Machine Height:		
Cab Height	3230	10'7"
FOGS Height	3370	11'1"
Guardrails/Handrails Height	3370	11'1"
With Boom/Stick/Bucket Installed	3560	11'8"
With Boom/Stick Installed	3490	11'5"
With Boom Installed	3050	10'0"
With Boom/Stick/Bucket Installed (with auxiliary lines)	3560	11'8"
With Boom/Stick Installed (with auxiliary lines)	3490	11'5"
With Boom Installed (with auxiliary lines)	3050	10'0"
2 Machine Length:		
With Boom/Stick/Bucket Installed	11 600	38'1"
With Boom/Stick Installed	11 580	38'0"
With Boom Installed	10 370	34'0"
With Boom/Stick/Bucket Installed (with auxiliary lines)	11 600	38'1"
With Boom/Stick Installed (with auxiliary lines)	11 580	38'0"
With Boom Installed (with auxiliary lines)	10 370	34'0"
3 Upperframe Width without Walkways	2970	9'9"
4 Tail Swing Radius	3530	11'7"
5 Counterweight Clearance	1300	4'3"
6 Ground Clearance	520	1'7"
7 Length to Center of Rollers	4040	13'3"
8 Track Length	5030	16'6"
9 Track Gauge – Extended	2740	9'0"
10 Track Width/Undercarriage Width:		
600 mm (24") Shoes	3340	10'11"
700 mm (28") Shoes	3440	11'3"
Bucket Type	HDX	
Bucket Capacity	2.10 m ³	2.75 yd ³
Bucket Tip Radius	1890 mm	6'2"

345 GC Hydraulic Excavator Specifications

Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.



Boom Options

Reach Boom
6.9 m (22'8")

Stick Options

Reach Stick
R3.35 TB (11'0")

1 Maximum Digging Depth	7620 mm	25'0"
2 Maximum Reach at Ground Line	11 690 mm	38'4"
3 Maximum Cutting Height	10 800 mm	35'5"
4 Maximum Loading Height	7410 mm	24'4"
5 Minimum Loading Height	2710 mm	8'11"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7480 mm	24'6"
7 Maximum Vertical Wall Digging Depth	6150 mm	20'2"
Bucket Digging Force (ISO)	238 kN	53,500 lbf
Stick Digging Force (ISO)	180 kN	40,530 lbf
Bucket Type	HDX	
Bucket Capacity	2.10 m ³	2.75 yd ³
Bucket Tip Radius	1890 mm	6'2"

345 GC Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	9.0 mt (19,842 lb) Counterweight
									6.9 m (22'8") Reach Boom
		mm	in	m³	yd³	kg	lb	%	R3.35 (11'0")
Pin-On (No Quick Coupler)									
General Duty	TB	1600	63	2.00	2.62	1904	4,197	100	●
Heavy Duty	TB	1700	67	2.10	2.75	2415	5,324	100	⊖
Maximum load with pin-on (payload + bucket)								kg	5900
								lb	13,007
With Pin Grabber Coupler									
General Duty	TB	1600	63	2.00	2.62	1904	4,197	100	⊖
Heavy Duty	TB	1700	67	2.10	2.75	2415	5,324	100	○
Maximum load with coupler (payload + bucket)								kg	4850
								lb	10,692

The above loads are in compliance with hydraulic excavator standard EN474-5:2006+A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Bucket weight with Long tips.

- Maximum Material Density:**
- 2100 kg/m³ (3,500 lb/yd³)
 - ⊖ 1500 kg/m³ (2,500 lb/yd³)
 - 1200 kg/m³ (2,000 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

345 GC Hydraulic Excavator Specifications

Attachments Offering Guide

Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

☒ Match
 ☐ * Working range front only
 ☐ † Allowed usage on machine less than 50%

PIN-ON ATTACHMENTS

Counterweight		9.0 mt (19,842 lb)
Boom Type		Reach
Stick Length		3.35 m (11'0")
Hydraulic Hammers	H160 S	✓
	H180 S	✓
	H190 S	✓
Pulverizers	P232 Secondary Pulverizer	✓
	P332 Primary Pulverizer	✓
	P332 Primary Pulverizer Flat Top	✓

CAT PIN GRABBER COUPLER ATTACHMENTS

Counterweight		9.0 mt (19,842 lb)
Boom Type		Reach Boom
Stick Length		3.35 m (11'0")
Hydraulic Hammers	H160 S	✓
	H180 S	✓†*
Pulverizers	P232 Secondary Pulverizer	✓
	P332 Primary Pulverizer	✓
	P332 Primary Pulverizer Flat Top	✓

BOOM-MOUNT ATTACHMENTS

Counterweight		9.0 mt (19,842 lb)
Boom Type		Reach Boom
Mobile Scrap and Demolition Shears	S2090	✓
	S3070 Flat Top	✓

345 GC Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS AND STICKS			HYDRAULIC SYSTEM		
6.9 m (22'8") Reach boom		✓	Boom and stick regeneration circuit	✓	
3.35 m (11'0") Reach stick		✓	Electronic main control valve	✓	
CAB			Automatic hydraulic oil warmup	✓	
ROPS	✓		Reverse swing damping valve	✓	
High-resolution 203 mm (8 in) LCD touchscreen monitor	✓		Automatic swing parking brake	✓	
Automatic bi-level air conditioner	✓		High performance hydraulic return filter	✓	
Jog dial and shortcut keys for monitor control	✓		Two speed travel	✓	
Keyless push-to-start engine control	✓		Fine swing		✓
Height-adjustable console, three steps with tool	✓		Combined two-way auxiliary circuit		✓
Mechanically adjustable seat suspension	✓		Combined two-way auxiliary circuit with hammer return filter		✓
51 mm (2 in) seat belt	✓		SAFETY AND SECURITY		
Fixed left-side console	✓		Caterpillar One Key security system	✓	
Bluetooth integrated radio	✓		Lockable external tool/storage box	✓	
12V DC outlets (×2)	✓		Lockable door, fuel, and hydraulic tank locks	✓	
Document storage	✓		Lockable fuel drain compartment	✓	
Cup and bottle holders	✓		Service platform with anti-skid plate and recessed bolts	✓	
Openable two-piece front window	✓		RH handrail and handhold	✓	
Upper radial wiper with 70/30 with washer	✓		Standard visibility mirror package	✓	
Openable steel hatch	✓		Signaling/warning horn	✓	
LED dome light	✓		Ground-level secondary engine shutoff switch	✓	
Roller front sunscreen	✓		Rearview camera and right-hand-side mirror	✓	
CAT TECHNOLOGY			SERVICE AND MAINTENANCE		
Cat Product Link™	✓		Grouped location of engine oil and fuel filters	✓	
Auto hammer stop	✓		Scheduled Oil Sampling (S-O-S SM) sampling ports	✓	
ELECTRICAL SYSTEM			Electric refueling pump with automatic shutoff		✓
Maintenance-free 1,000 CCA batteries (×2)	✓		UNDERCARRIAGE AND STRUCTURES		
Centralized electrical disconnect switch	✓		Towing eye on base frame	✓	
LED chassis light, LH boom lights, cab lights	✓		9 mt (19,842 lb) counterweight	✓	
Premium surrounding lighting		✓	600 mm (24") double grouser, triple grouser track shoes		✓
ENGINE			700 mm (28") triple grouser track shoes		✓
Cold start block heater		✓			
Two selectable modes: Power, Smart	✓				
Automatic engine speed control	✓				
Up to 3300 m (10,830 ft) altitude capability	✓				
52° C (126° F) high-ambient cooling capacity	✓				
Hydraulic reverse fan		✓			
-18° C (0° F) cold start capability	✓				
-32° C (-25° F) cold start capability		✓			
Double element air filter with integrated precleaner	✓				
Remote disable	✓				

Dealer Installed Kit and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Lower radial wiper
- Polycarbonate hatch
- LH/RH electrical pedal for tool control

SAFETY AND SECURITY

- Bluetooth® receiver
- Bluetooth key fob

GUARDS

- Falling object guard system
- Mesh guard full front
- Mesh guard lower half front
- Full protecting vandalism guard

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

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Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

AEXQ3145-01 (09-2021)
Replaces AEXQ3145
Build Number: 07D
(Japan)

