



345 GC

Hydraulic Excavator

Technical Specifications

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

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345 GC Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C9.3	
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 China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Recommended for use up to 3300 m (10,830 ft) altitude with engine power derate above 2300 m (7,550 ft).
- Net power is tested per ISO 9249. 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 blends up to B100, consult your Cat dealer.

Swing Mechanism

Swing Speed	8.27 rpm	
Maximum Swing Torque	155 kN·m	114,543 lbf-ft

Weights

Operating Weight	42 200 kg	93,000 lb
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• Reach boom, R2.9TB (9'6") stick, HD 2.41 m³ (3.15 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	5.2 km/h	3.2 mph
Maximum Drawbar Pull	292 kN	65,532 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

Standards

Brakes	ISO 10265:2008
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Sound Performance

ISO 6395:2008 (external)	107 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.

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Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		600 mm (24") Double Grouser Shoes		600 mm (24") HD Triple Grouser Shoes		700 mm (28") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
	kg (lb)	kPa (psi)	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 + 2.41 m ³ (3.15 yd ³) HD Bucket	41 500 (91,400)	77.3 (11.2)	42 200 (93,100)	78.7 (11.4)	42 100 (92,900)	78.5 (11.4)	41 800 (92,200)	66.8 (9.7)
Reach Boom + R2.9TB (9'6") Stick + 2.41 m ³ (3.15 yd ³) HD Bucket	41 400 (91,300)	77.2 (11.2)	42 200 (93,000)	78.6 (11.4)	42 100 (92,800)	78.4 (11.4)	41 800 (92,100)	66.7 (9.7)
Mass Boom + M3.0UB (9'10") Stick + 2.77 m ³ (3.62 yd ³) SDV Bucket	42 600 (93,800)	79.3 (11.5)	43 300 (95,500)	80.7 (11.7)	43 200 (95,300)	80.5 (11.7)	42 900 (94,600)	68.5 (9.9)

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

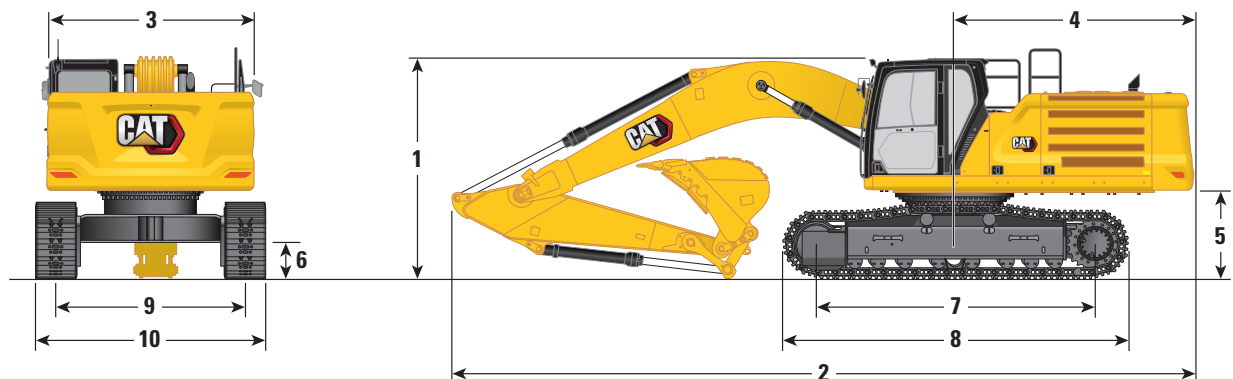
Major Component Weights

	kg	lb
Base machine with 9.0 mt (19,842 lb) counterweight, swing frame, two boom cylinders, and SD track rollers and carrier rollers	28 110	61,970
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 SD Track Rollers and Carrier Rollers	8890	19,590
Booms (including lines, pins, stick cylinder):		
Reach Boom 6.9 m (22'8")	4020	8,870
Mass Boom 6.55 m (21'6")	4160	9,180
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R2.9TB (9'6")	2200	4,840
Reach Stick R3.35TB (11'0")	2250	4,960
Mass Stick M3.0UB (9'10")	2710	5,980
Buckets (without linkage):		
2.41 m ³ (3.15 yd ³) HD	2460	5,410
2.77 m ³ (3.62 yd ³) SDV	2950	6,490

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Dimensions

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



Boom Options

Reach Boom
6.9 m (22'8")

Mass Boom
6.55 m (21'6")

Stick Options

Reach Stick

Mass Stick

R3.35TB (11'0")		R2.9TB (9'6")		M3.0UB (9'10")	
mm	ft	mm	ft	mm	ft

1 Machine Height:

Cab Height	3230	10.6	3230	10.6	3230	10.6
FOGS Height	3370	11.1	3370	11.1	3370	11.1
Guardrails/Handrails Height	3370	11.1	3370	11.1	3370	11.1
With Boom/Stick/Bucket Installed	3560	11.7	3660	12.0	4040	13.3
With Boom/Stick Installed	3490	11.5	3420	11.2	3880	12.7
With Boom Installed	3050	10.0	3050	10.0	3080	10.1
With Boom/Stick/Bucket Installed (with auxiliary lines)	3560	11.7	3660	12.0	4040	13.3
With Boom/Stick Installed (with auxiliary lines)	3490	11.5	3420	11.2	3880	12.7
With Boom Installed (with auxiliary lines)	3050	10.0	3050	10.0	3080	10.1

2 Machine Length:

With Boom/Stick/Bucket Installed	11 600	38.1	11 620	38.1	11 300	37.1
With Boom/Stick Installed	11 580	38.0	11 560	37.9	11 270	37.0
With Boom Installed	10 370	34.0	10 370	34.0	10 010	32.8
With Boom/Stick/Bucket Installed (with auxiliary lines)	11 600	38.1	11 620	38.1	11 300	37.1
With Boom/Stick Installed (with auxiliary lines)	11 580	38.0	11 560	37.9	11 270	37.0
With Boom Installed (with auxiliary lines)	10 370	34.0	10 370	34.0	10 010	32.8

3 Upperframe Width without Walkways

2970	9.7	2970	9.7	2970	9.7
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4 Tail Swing Radius

3530	11.6	3530	11.6	3530	11.6
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5 Counterweight Clearance

1300	4.3	1300	4.3	1300	4.3
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6 Ground Clearance

520	1.7	520	1.7	520	1.7
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7 Length to Center of Rollers

4040	13.3	4040	13.3	4040	13.3
------	------	------	------	------	------

8 Track Length

5030	16.5	5030	16.5	5030	16.5
------	------	------	------	------	------

9 Track Gauge – Extended

2740	9.0	2740	9.0	2740	9.0
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10 Track Width/Undercarriage Width:

600 mm (24") Shoes	3340	11.0	3340	11.0	3340	11.0
700 mm (28") Shoes	3440	11.3	3440	11.3	3440	11.3

Bucket Type

HD HD SDV

Bucket Capacity

2.41 m ³	3.15 yd ³	2.41 m ³	3.15 yd ³	2.77 m ³	3.62 yd ³
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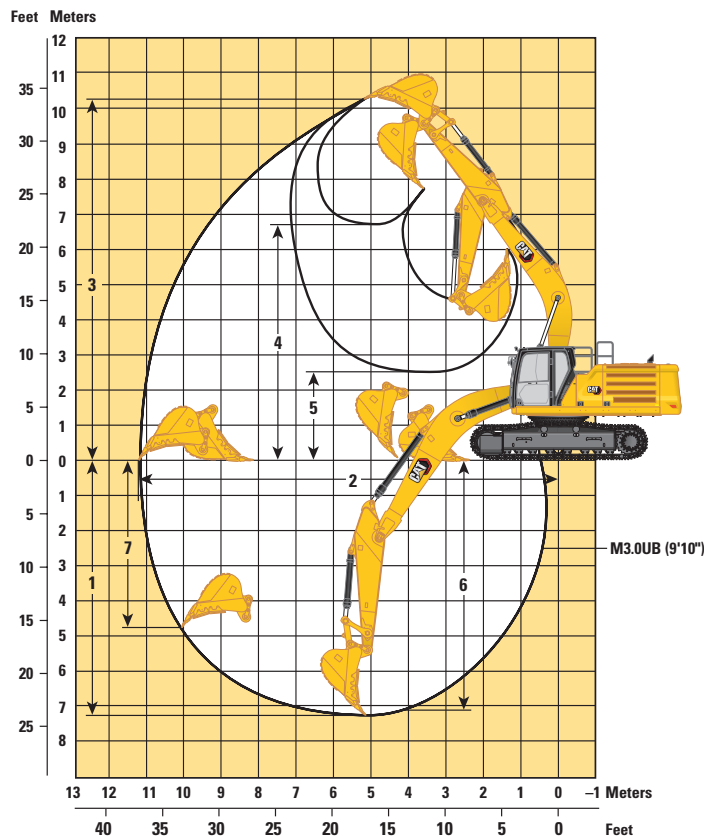
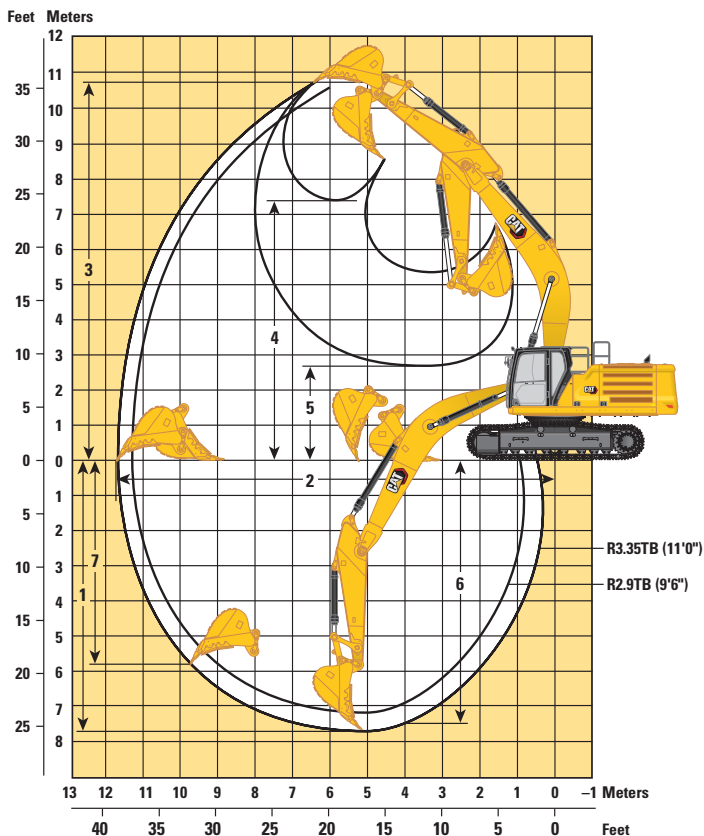
Bucket Tip Radius

1930 mm	6.3 ft	1930 mm	6.3 ft	2100 mm	6.9 ft
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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")

Mass Boom
6.55 m (21'6")

Stick Options

Reach Stick

Mass Stick

	R3.35TB (11'0")		R2.9TB (9'6")		M3.0UB (9'10")	
	mm	ft	mm	ft	mm	ft
1 Maximum Digging Depth	7650	25.1	7200	23.6	7280	23.9
2 Maximum Reach at Ground Line	11 710	38.4	11 290	37.0	11 220	36.8
3 Maximum Cutting Height	10 720	35.2	10 540	34.6	10 250	33.6
4 Maximum Loading Height	7390	24.2	7210	23.7	6710	22.0
5 Minimum Loading Height	2680	8.8	3130	10.3	2520	8.3
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7500	25.0	7040	23.0	7130	23.0
7 Maximum Vertical Wall Digging Depth	5800	19.0	5390	17.7	4760	15.6
Bucket Digging Force (ISO)	235 kN	52,860 lbf	235 kN	52,860 lbf	262 kN	59,010 lbf
Stick Digging Force (ISO)	180 kN	40,530 lbf	198 kN	44,550 lbf	190 kN	42,790 lbf
Bucket Type	HD		HD		SDV	
Bucket Capacity	2.41 m ³	3.15 yd ³	2.41 m ³	3.15 yd ³	2.77 m ³	3.62 yd ³
Bucket Tip Radius	1930 mm	6.3 ft	1930 mm	6.3 ft	2100 mm	6.9 ft

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Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	9.0 mt (19,842 lb) Counterweight		
		mm	in	m ³	yd ³	kg	lb		Reach Boom		Mass Boom
									R2.9 (9'6")	R3.35 (11'0")	M3.0 (9'10")
Pin-On (No Quick Coupler)											
Heavy Duty	TB	1650	65	2.41	3.15	2377	5,240	100	⊖	○	
	TB	1850	73	2.69	3.52	2517	5,548	100	○	○	
Severe Duty	TB	1550	61	2.14	2.80	2254	4,968	90	●	⊙	
	TB	1650	65	2.41	3.15	2497	5,504	90	⊙	⊖	
Severe Duty – Extreme	TB	1550	61	2.10	2.75	2675	5,897	90	⊙	⊖	
	TB	1650	66	2.30	3.00	2828	6,234	90	⊖	⊖	
General Duty	UB	1550	62	2.61	3.41	2341	5,162	100			○
	UB	1950	77	3.43	4.48	2717	5,989	100			◇
Severe Duty – V Edge	UB	1450	59	2.39	3.12	2571	5,668	90			⊖
Severe Duty	UB	1550	61	2.61	3.41	2656	5,855	90			⊖
	UB	1850	73	3.21	4.20	2991	6,593	90			◇
Severe Duty Extreme	UB	1500	59	2.45	3.13	2874	6,336	90			⊖
Maximum load with pin-on (payload + bucket)								kg	6215	5785	6025
								lb	13,702	12,754	13,283

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)
- ⊙ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 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

No Match

PIN-ON ATTACHMENTS

Counterweight		9.0 mt (19,842 lb)		
Boom Type		Reach	Reach	Mass
Stick Size		R2.9 (9'6")	R3.35 (11'0")	M3.0 (9'10")
Hydraulic Hammers	H140 GC	✓	✓	
	H140 GC S	✓	✓	
	H160 GC	✓	✓	✓
	H160 GC S	✓	✓	✓
	H180 GC	✓	✓	✓
	H180 GC S	✓	✓	✓
	H190 S			✓*

CAT PIN GRABBER COUPLER ATTACHMENTS

Counterweight		9.0 mt (19,842 lb)		
Boom Type		Reach Boom		Mass
Stick Size		R2.9 (9'6")		M3.0 (9'10")
Hydraulic Hammers	H160 GC	✓		✓
	H160 GC S	✓		✓
	H180 GC	✓*		
	H180 GC S	✓		✓*

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	✓	
6.55 m (21'6") Mass boom		✓	Electronic main control valve	✓	
2.9 m (9'6") Reach stick		✓	Automatic hydraulic oil warmup	✓	
3.35 m (11'0") Reach stick		✓	Reverse swing damping valve	✓	
3.0 m (9'10") Mass stick		✓	Automatic swing parking brake	✓	
CAB			High performance hydraulic return filter	✓	
High-resolution 203 mm (8 in) LCD touchscreen monitor	✓		Two speed travel	✓	
Automatic bi-level air conditioner	✓		Bio hydraulic oil capability	✓	
Jog dial and shortcut keys for monitor control	✓		Fine swing		✓
Keyless push-to-start engine control	✓		Combined two-way auxiliary circuit		✓
Height-adjustable console, three steps with tool	✓		Combined two-way auxiliary circuit with hammer return filter		✓
Mechanically adjustable seat suspension	✓		SAFETY AND SECURITY		
51 mm (2 in) seat belt	✓		Caterpillar One Key security system	✓	
Fixed left-side console	✓		Lockable external tool/storage box	✓	
Bluetooth integrated radio with USB ports	✓		Lockable door, fuel, and hydraulic tank locks	✓	
12V DC outlets (×2)	✓		Lockable fuel drain compartment	✓	
Document storage	✓		Service platform with anti-skid plate and recessed bolts	✓	
Cup and bottle holders	✓		RH handrail and handhold (ISO 2867 Compliant)	✓	
Openable two-piece front window	✓		Standard visibility mirror package	✓	
Upper radial wiper with 70/30 with washer	✓		Signaling/warning horn	✓	
Openable steel hatch	✓		Ground-level secondary engine shutoff switch	✓	
LED dome light	✓		Rearview camera and right-hand-side mirror	✓	
Roller front sunscreen	✓		SERVICE AND MAINTENANCE		
CAT TECHNOLOGY			Grouped location of engine oil and fuel filters	✓	
Cat Product Link™	✓		Scheduled Oil Sampling (S-O-S SM) sampling ports	✓	
Auto hammer stop	✓		Electric refueling pump with automatic shutoff		✓
ELECTRICAL SYSTEM			UNDERCARRIAGE AND STRUCTURES		
Maintenance-free 1,000 CCA batteries (×2)	✓		Towing eye on base frame (ISO 15818 Compliant)	✓	
Centralized electrical disconnect switch	✓		9 mt (19,842 lb) counterweight	✓	
LED chassis light, LH boom lights, cab lights	✓		600 mm (24") triple grouser track shoes		✓
Premium surrounding light package		✓	600 mm (24") HD triple grouser track shoes		✓
ENGINE			600 mm (24") double grouser track shoes		✓
Cold start block heater		✓	700 mm (28") triple grouser track shoes		✓
Two selectable modes: Power, Smart	✓				
Automatic engine speed control	✓				
2300 m (7,550 ft) altitude capability with no engine power de-rating	✓				
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 <ul style="list-style-type: none">• Lower radial wiper• Polycarbonate hatch• LH/RH electrical pedal for tool control | SAFETY AND SECURITY <ul style="list-style-type: none">• Bluetooth® receiver• Bluetooth key fob | GUARDS <ul style="list-style-type: none">• 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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AEXQ2379-03 (09-2021)
Replaces AEXQ2379-02
Build Number: 07D
(China)

