



330 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 Kits and Attachments	10
330 GC Environmental Declaration	11

330 GC Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C7.1	
Net Power		
ISO 9249	149.8 kW	201 hp
ISO 9249 (DIN)	204 hp (metric)	
Engine Power		
ISO 14396	151 kW	202 hp
ISO 14396 (DIN)	205 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³
Biodiesel Capability	Up to B20 ⁽¹⁾	

- Meets China Nonroad Stage IV emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Advertised power is tested per the specified standard 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.
- Engine speed at 2,000 rpm.

⁽¹⁾Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to:

- ✓ 20% biodiesel FAME (fatty acid methyl ester)*
- ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

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

*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Swing Mechanism

Swing Speed	11.5 rpm	
Maximum Swing Torque	105 kN·m	77,370 lb-ft

Weights

Operating Weight	30 400 kg	67,000 lb
------------------	-----------	-----------

- HD Long undercarriage, Reach boom, R3.2 m (10'6") stick, HD 1.60 m³ (2.09 yd³) bucket, 600 mm (24") triple grouser shoes and 6700 kg (14,770 lb) counterweight.

Track

Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	800 mm	31 in
Number of Shoes (each side)	50	
Number of Track Rollers (each side)	9	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.3 km/h	3.3 mph
Maximum Drawbar Pull	247 kN	55,528 lbf

Hydraulic System

Main System – Maximum Flow – Implement	560 L/min (280 × 2 pumps)	148 gal/min (74 × 2 pumps)
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	28 400 kPa	4,120 psi
Boom Cylinder – Bore	140 mm	6 in
Boom Cylinder – Stroke	1407 mm	55 in
Stick Cylinder – Bore	150 mm	6 in
Stick Cylinder – Stroke	1646 mm	65 in
Bucket Cylinder – Bore	135 mm	5 in
Bucket Cylinder – Stroke	1156 mm	46 in

Service Refill Capacities

Fuel Tank Capacity	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	5.5 L	1.5 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal
Diesel Exhaust Fluid (DEF) Tank	41 L	10.8 gal

Standards

Brakes	ISO 10265:2008
Cab/Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Operator Protective Guards (OPG) (optional)	ISO 10262:1998 Level II

Sound Performance

GB/T 25614-2010 (external)	103 dB(A)
GB/T 25615-2010 (inside cab)	70 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.

330 GC Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		600 mm (24") HD Triple Grouser Shoes		600 mm (24") Double Grouser Shoes		800 mm (31") 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)
Base Machine Configurations								
Base Frame with Track Rollers and Carrier Rollers								
Base Machine with 6700 kg (14,770 lb) Counterweight and HD Long Undercarriage								
Reach Boom + R3.2CB2 (10'6") Stick + 1.60 m ³ (2.09 yd ³) HD Bucket	30 400 (67,000)	58 (8.3)	30 600 (67,500)	58 (8.3)	30 700 (67,700)	58 (8.3)	31 400 (69,200)	45 (6.5)
Reach Boom + R3.2CB2 (10'6") Stick + 1.54 m ³ (2.01 yd ³) SD Bucket	30 600 (67,500)	58 (8.3)	30 800 (67,900)	58 (8.3)	30 900 (68,100)	58 (8.3)	31 500 (69,400)	45 (6.5)

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

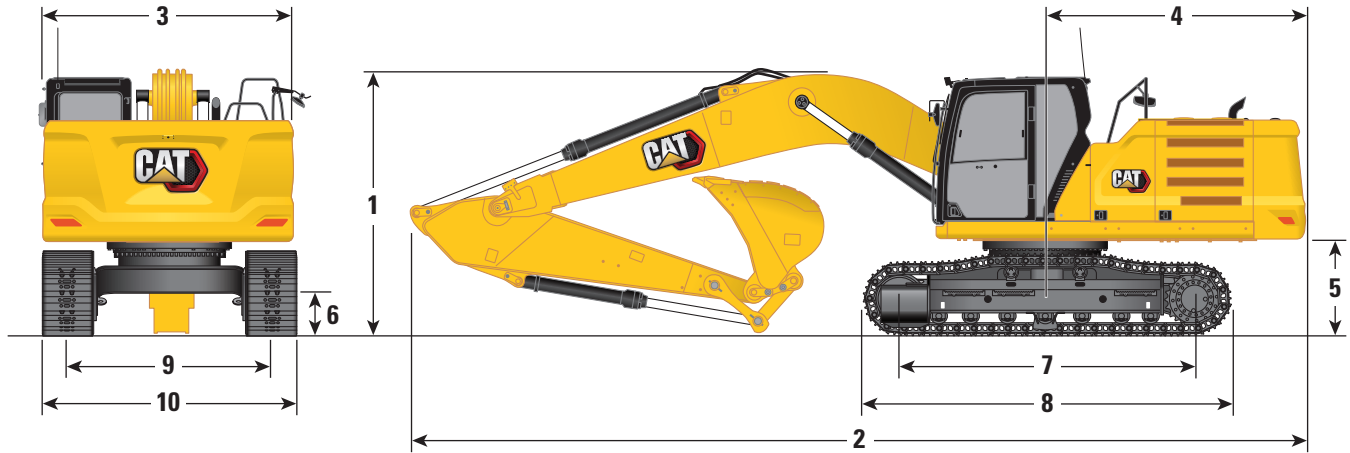
Major Component Weights

	kg	lb
Base machine (With 6700 kg [14,770 lb] counterweight, upper frame, HD long undercarriage with rollers and two boom cylinders – weight of 90% fuel tank and 75 kg [165 lb] operator not included.)	21 200	46,700
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	3620	8,000
600 mm (24") Width, 13 mm (0.51") Thick, HD Triple Grouser Track Shoes	3830	8,400
600 mm (24") Width, 14.5 mm (0.57") Thick, Double Grouser Track Shoes	3960	8,700
800 mm (31") Width, 13 mm (0.51") Thick, Triple Grouser Track Shoes with Step Extension	4590	10,100
Two Boom Cylinders	490	1,080
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	460	1,010
Counterweight:		
6700 kg (14,770 lb) Counterweight	6700	14,770
Boom (including lines, pins, stick cylinder):		
Reach Boom 6.15 m (20'2")	2300	5,070
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.2CB2 (10'6")	1470	3,240
Reach Stick R2.65CB2 (8'8")	1350	2,980
Buckets (without linkage, with tips and sidecutters):		
1.60 m ³ (2.09 yd ³) HD, CB Linkage	1290	2,840
1.54 m ³ (2.01 yd ³) SD, CB Linkage	1460	3,220
Quick Couplers:		
Pin Grabber QC CB with Pins	530	1,170
Pin Grabber QC CB without Pins	500	1,100
Universal QC CB	430	950

330 GC Hydraulic Excavator Specifications

Dimensions

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



Boom Option

Reach Boom
6.15 m (20'2")

Stick Options

Reach Stick

R3.2CB2 (10'6")

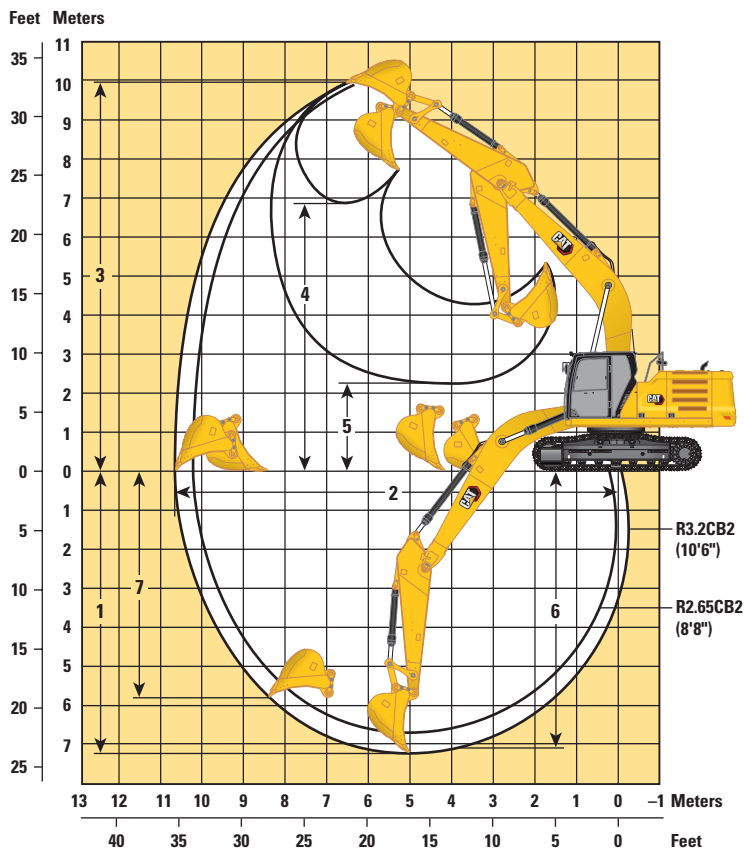
R2.65CB2 (8'8")

	R3.2CB2 (10'6")		R2.65CB2 (8'8")	
1 Machine Height:				
Cab Height	3050 mm	10'0"	3050 mm	10'0"
OPG Height	3190 mm	10'6"	3190 mm	10'6"
Handrail Height	3050 mm	10'0"	3050 mm	10'0"
With Boom/Stick/Bucket Installed	3400 mm	11'2"	3450 mm	11'4"
With Boom/Stick Installed	3380 mm	11'1"	3380 mm	11'1"
With Boom Installed	3050 mm	10'0"	3050 mm	10'0"
2 Machine Length:				
With Boom/Stick/Bucket Installed	10 420 mm	34'2"	10 420 mm	34'2"
With Boom/Stick Installed	10 420 mm	34'2"	10 420 mm	34'2"
With Boom Installed	9230 mm	30'3"	9230 mm	30'3"
3 Upperframe Width	2940 mm	9'8"	2940 mm	9'8"
4 Tail Swing Radius	3130 mm	10'3"	3130 mm	10'3"
5 Counterweight Clearance	1110 mm	3'8"	1110 mm	3'8"
6 Ground Clearance	490 mm	1'7"	490 mm	1'7"
7 Length to Center of Rollers	3990 mm	13'1"	3990 mm	13'1"
8 Track Length	4850 mm	15'11"	4850 mm	15'11"
9 Track Gauge	2590 mm	8'6"	2590 mm	8'6"
10 Undercarriage Width:				
600 mm (24") Shoes	3190 mm	10'6"	3190 mm	10'6"
800 mm (31") Shoes	3390 mm	11'1"	3390 mm	11'1"
Bucket Type	HD		HD	
Bucket Capacity	1.60 m ³	2.09 yd ³	1.60 m ³	2.09 yd ³
Bucket Tip Radius	1662 mm	5'5"	1662 mm	5'5"

330 GC Hydraulic Excavator Specifications

Working Ranges and Forces

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



Boom Option

Reach Boom
6.15 m (20'2")

Stick Options

Reach Stick

	R3.2CB2 (10'6")		R2.65CB2 (8'8")	
1 Maximum Digging Depth	7260 mm	23'10"	6710 mm	22'0"
2 Maximum Reach at Ground Line	10 690 mm	35'1"	10 210 mm	33'6"
3 Maximum Cutting Height	9980 mm	32'9"	9980 mm	32'9"
4 Maximum Loading Height	6930 mm	22'9"	6790 mm	22'3"
5 Minimum Loading Height	2280 mm	7'6"	2830 mm	9'3"
6 Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	7100 mm	23'4"	6530 mm	21'5"
7 Maximum Vertical Wall Digging Depth	6030 mm	19'9"	5720 mm	18'9"
Bucket Digging Force (ISO)	179 kN	40,240 lbf	179 kN	40,240 lbf
Stick Digging Force (ISO)	126 kN	28,330 lbf	145 kN	32,600 lbf
Bucket Type	HD		HD	
Bucket Capacity	1.60 m ³	2.09 yd ³	1.60 m ³	2.09 yd ³
Bucket Tip Radius	1662 mm	5'5"	1662 mm	5'5"

330 GC Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Counterweight							6700 kg (14,770 lb)	
		Width		Capacity		Weight		Fill	Reach	
		mm	in	m ³	yd ³	kg	lb	%	R3.2 (10'6")	R2.65 (8'8")
Pin-On (No Quick Coupler)										
General Duty	CB	1400	55	1.54	2.02	1125	2,480	100	●	●
Heavy Duty	CB	1300	51	1.36	1.78	1173	2,587	100	●	●
	CB	1350	53	1.45	1.90	1194	2,633	100	●	●
	CB	1450	57	1.57	2.05	1280	2,822	100	●	●
	CB	1450	57	1.60	2.09	1274	2,809	100	●	●
	CB	1500	60	1.65	2.16	1308	2,884	100	⊙	●
	CB	1600	63	1.80	2.36	1348	2,973	100	⊙	⊙
	CB	1650	66	1.90	2.49	1369	3,019	100	⊖	⊙
Severe Duty	CB	1750	69	2.00	2.62	1397	3,081	100	⊖	⊙
	CB	1300	51	1.36	1.78	1321	2,911	90	●	●
	CB	1350	54	1.45	1.90	1346	2,967	90	●	●
Maximum load with pin-on (payload + bucket)								kg	4490	4915
								lb	9,899	10,836
With Pin Grabber Quick Coupler										
General Duty	CB	1400	55	1.54	2.02	1125	2,480	100	⊙	●
Heavy Duty	CB	1300	51	1.36	1.78	1173	2,587	100	●	●
	CB	1350	53	1.45	1.90	1194	2,633	100	⊙	●
	CB	1450	57	1.57	2.05	1280	2,822	100	⊖	⊙
	CB	1450	57	1.60	2.09	1274	2,809	100	⊖	⊙
	CB	1500	60	1.65	2.16	1308	2,884	100	⊖	⊙
	CB	1600	63	1.80	2.36	1348	2,973	100	⊖	⊖
	CB	1650	66	1.90	2.49	1369	3,019	100	○	⊖
Severe Duty	CB	1750	69	2.00	2.62	1397	3,081	100	○	⊖
	CB	1300	51	1.36	1.78	1321	2,911	90	●	●
	CB	1350	54	1.45	1.90	1346	2,967	90	●	●
Maximum load with coupler (payload + bucket)								kg	3964	4389
								lb	8,739	9,676

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 General Duty 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)

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.

330 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

PIN-ON ATTACHMENTS

Counterweight		6700 kg (14,770 lb)	
Boom Type		Reach	
Stick Lengths		R3.2 (10'6")	R2.65 (8'8")
Hydraulic Hammers	H120 S	✓	✓
	H130 GC	✓	✓
	H130 GC Side Mount	✓	✓
	H130 GC S	✓	✓
	H130 S	✓	✓
	H140 GC	✓	✓
	H140 GC S	✓	✓
	H155 Side Mount	✓	✓
	H160 GC	✓	✓
	H160 GC S	✓	✓
Compactors (Vibratory Plate)	CVP110	✓	✓

330 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
CAB			ENGINE		
ROPS	✓		Cat® C7.1 single turbo diesel engine	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓		Two selectable modes: Power, Smart	✓	
Auto bi-level air conditioner	✓		Automatic engine speed control	✓	
Keyless push-to-start engine control	✓		Automatic engine idle-shutdown	✓	
Height-adjustable console	✓		4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Fixed left-side console	✓		52° C (125° F) high-ambient cooling capability without derate	✓	
Mechanical-suspension seat	✓		-18° C (0° F) cold start capability	✓	
51 mm (2") seat belt	✓		-32° C (-25° F) cold start capability		✓
Console mounted radio (with Bluetooth® pairing and USB port)	✓		2 × 115 Amp dual alternator	✓	
24V DC outlet	✓		Sealed double element air filter with integrated precleaner	✓	
Document storage	✓		Two-stage fuel filtration with water separator and indicator	✓	
Cup and bottle holders	✓		Electric fuel priming pump	✓	
Openable two-piece front window	✓		On-demand electric cooling fans with auto-reverse function	✓	
Rear window emergency exit	✓		HYDRAULIC SYSTEM		
Upper radial wiper with washer	✓		Electronic main control valve	✓	
Openable steel hatch	✓		Electric boom regeneration circuit	✓	
LED dome light	✓		Stick regeneration circuit	✓	
Roller front sunscreen	✓		Automatic hydraulic oil warm up	✓	
Roller rear sunscreen		✓	Automatic two-speed travel	✓	
Washable floor mat	✓		Boom and stick drift reduction valve	✓	
Beacon ready	✓		High performance hydraulic return filter	✓	
CAT TECHNOLOGY			Final drive with bio hydraulic oil capable travel motor	✓	
Remote Flash	✓		Advanced Tool Control (two pump, one/ two way high-pressure flow)		✓
			Basic Tool Control (one pump, one way high-pressure flow)		✓
			Quick Coupler circuit for Cat Pin Grabber and CW Dedicated		✓

(continued on next page)

Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
BOOM, STICKS AND LINKAGE			SERVICE AND MAINTENANCE		
6.15 m (20'2") Reach boom	✓		Grouped location of engine oil and fuel filters	✓	
3.2 m (10'6") Reach stick		✓	Ground-level second dipstick for engine oil	✓	
2.65 m (8'8") Reach stick		✓	Side entry to service platform	✓	
Bucket Linkage, CB2 family	✓		Scheduled Oil Sampling (S·O·S SM) ports	✓	
UNDERCARRIAGE AND STRUCTURES			Electric refueling pump with automatic shut off		✓
Track guiding guard, center	✓		Radiator screen		✓
Bottom guards	✓		Integrated vehicle health management system	✓	
Travel motor guards	✓		SAFETY AND SECURITY		
Swivel guard		✓	Auto hammer stop	✓	
Grease lubricated track	✓		Rearview camera and right-side mirror	✓	
Tie-down points on base frame	✓		Right-hand-sideview camera		✓
6700 kg (14,770 lb) counterweight	✓		Secure start with PIN code	✓	
600 mm (24") triple grouser track shoes		✓	Caterpillar One Key security system	✓	
600 mm (24") HD triple grouser track shoes		✓	Lockable external tool/storage box	✓	
600 mm (24") double grouser track shoes		✓	Lockable door, fuel, and hydraulic tank locks	✓	
800 mm (31") triple grouser track shoes		✓	Lockable fuel drain compartment	✓	
ELECTRICAL SYSTEM			Service platform with anti-skid plate and recessed bolts	✓	
2 × Machine Electronic Control Module	✓		RH handrail and hand hold	✓	
Maintenance-free 1,000 CCA batteries (×2)	✓		Signaling/warning horn	✓	
After engine shutdown, programmable time delay LED working lights: one chassis mounted, one LH boom mounted	✓		Ground-level secondary engine shutoff switch in cab	✓	
Centralized electrical disconnect switch	✓		Lockable disconnect switch	✓	
LED chassis light, Left Hand (LH) and Right Hand (RH) boom lights, cab lights	✓		Hydraulic lock out lever	✓	
Compatible with Electronic Technician	✓		Travel alarm		✓
			Swing alarm		✓
			Inspection lighting		✓

330 GC Attachments

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Polycarbonate roof hatch

GUARDS

- Operator Protective Guards (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)
- Mesh guard lower half front

SERVICE AND MAINTENANCE

- Grease gun holder

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

Engine

- The 330 GC meets China Nonroad Stage IV emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

**Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).*

***Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg (1.9 lb) of refrigerant which has a CO₂ equivalent of 1.216 metric tonnes (1.340 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

GB/T 25614-2010 (external)	103 dB(A)
GB/T 25615-2010 (inside cab)	70 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.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Advanced hydraulic systems balance power and efficiency
 - Smart mode matches machine power to digging requirements automatically
 - Cut maintenance costs up to 25% with extended service intervals
 - Programmable high-efficiency cooling fans run only when needed
 - The latest hydraulic oil filter provides longer life with a 3,000-hour replacement interval

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

© 2023 Caterpillar
All rights reserved

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXJ0078-07 (10-2023)
Replaces AEXJ0078-06
Build Number: 07F
(China)

