



Cat[®] 303.5 CR

MINI EXCAVATOR

FEATURES:

The Cat[®] 303.5 CR Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

ALL DAY COMFORT

- Choose either a canopy or a sealed and pressurized cab which can be equipped with air conditioning, adjustable wrist rests, and a suspension seat option to help keep you working comfortably all day long.

EASY TO OPERATE

- Controls are easy to use and the intuitive next generation LCD monitor provides easy to read machine information. An advanced touchscreen monitor can also be equipped.

STICK STEER TRAVEL MODE

- Moving around the job site is even easier with the Cat Stick Steer option. Easily switch from traditional travel controls with levers and pedals to joystick controls to move the machine and to operate the blade. The benefit of less effort and improved control is in your hands!

BIG PERFORMANCE IN A COMPACT DESIGN

- Strong lift and dig performance helps you get the job done faster. The compact radius design lets you access and work in the tightest areas. Dozer float allows for easy clean up.

SAFETY ON THE JOB SITE

- Your safety is our top priority. The Cat mini excavator is designed to help keep you safe on the job. Courtesy work lights and a fluorescent retractable seat belt are just a couple of the safety features we've built into the machine.

SIMPLE SERVICE FOR LESS DOWNTIME

- Maintenance is quick and easy on the Cat mini excavator. Routine check points are easy to access at ground level through the side doors. The unique tilt up cab or canopy lets you reach additional service areas when needed.

LOWER OPERATING COSTS

- Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat mini excavator was designed with reducing your operating costs in mind.

UNMATCHED DEALER SUPPORT

- Your Cat dealer is here to help you reach your business goals. From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.

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Specifications

Engine

Engine Model	Cat® C1.7	
Net Power @ 2,200 rpm		
ISO 9249:2007, 80/1269/EEC	17.6 kW	23.6 hp
Gross Power @ 2,200 rpm		
SAE J1995:2014	18.4 kW	24.7 hp
Bore	84.0 mm	3.3 in
Stroke	100.0 mm	3.9 in
Displacement	1.7 L	104.0 in ³

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when the engine is at rated speed and rated power when the engine is installed with the factory configured fan, air intake system, exhaust system, and alternator with a minimum alternator load.

Weights

Minimum Operating Weight with Canopy*	3480 kg	7,673 lb
Maximum Operating Weight with Canopy**	4050 kg	8,930 lb
Minimum Operating Weight with Cab*	3620 kg	7,982 lb
Maximum Operating Weight with Cab**	4190 kg	9,239 lb
EU: CE Plate Weight with Canopy***	3530 kg	7,784 lb
EU: CE Plate Weight with Cab***	3630 kg	8,004 lb

*Minimum Weight is based on fixed rubber tracks, operator, full fuel tank, standard stick, blade, bucket and no extra counterweight.

**Maximum Weight is based on steel tracks, operator, full fuel tank, long stick, blade, bucket and extra counterweight.

***CE Plate Weight is based on the most common EU configuration. Includes 75 kg (165 lb) operator and full fuel tank and excludes bucket.

Weight Increase from Minimum Configuration

Cab	140 kg	309 lb
Counterweight (light)	100 kg	221 lb
Counterweight (extra)	250 kg	551 lb
Long Stick	20 kg	44 lb
Steel Tracks	130 kg	287 lb
Angle Blade	160 kg	353 lb

Travel System

Travel Speed – High	4.5 km/h	2.8 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Maximum Traction Force – High Speed	16.9 kN	3,799 lbf
Maximum Traction Force – Low Speed	31.0 kN	6,969 lbf
Ground Pressure – Minimum Weight	29.6 kPa	4.3 psi
Ground Pressure – Maximum Weight	35.7 kPa	5.2 psi
Gradeability (maximum)	30 degrees	

Service Refill Capacities

Cooling System	7.0 L	1.8 gal
Engine Oil	6.0 L	1.6 gal
Fuel Tank	45.0 L	11.9 gal
Hydraulic Tank	20.0 L	5.3 gal
Hydraulic System	45.0 L	11.9 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	100 L/min	26 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	181 bar	2,625 psi
Auxiliary Circuit – Primary		
Flow*	70 L/min	18 gal/min
Pressure*	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow*	25 L/min	7.0 gal/min
Pressure*	245 bar	3,553 psi
Digging Force – Stick (standard)	18.9 kN	4,249 lbf
Digging Force – Stick (long)	16.9 kN	3,799 lbf
Digging Force – Bucket	33.0 kN	7,419 lbf

*Flow and pressure are not combinable. Under load, as flow rises pressure goes down.

Swing System

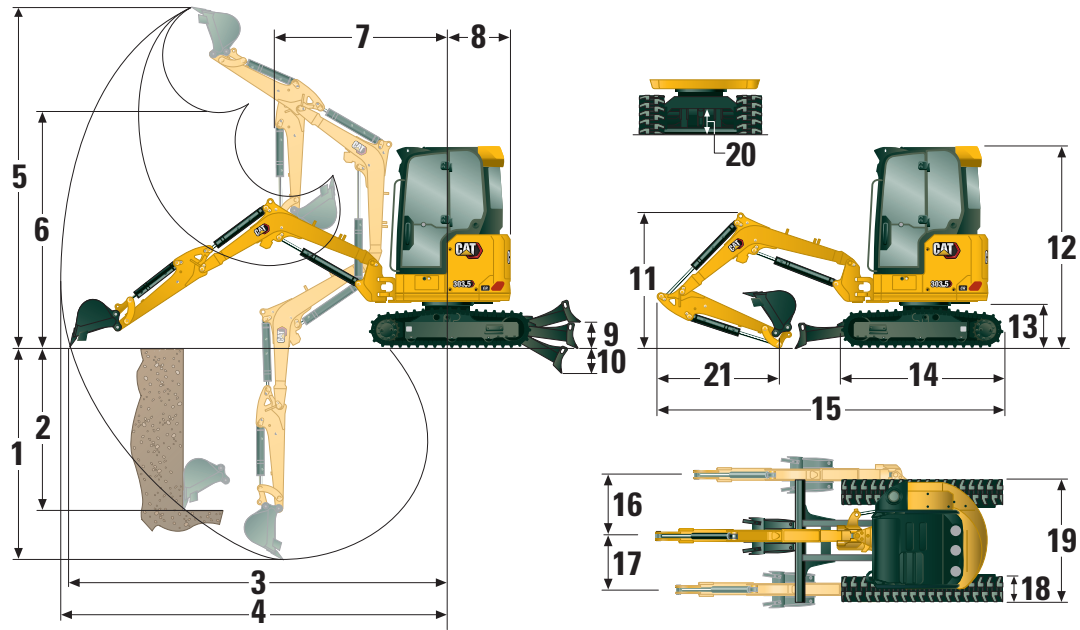
Machine Swing Speed	9.0 rpm
Boom Swing – Left	75 Degrees
Boom Swing – Right	50 Degrees

Blade

Width	1780 mm	70.1 in
Height	350 mm	13.8 in

Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 (Level I)



Dimensions

	Standard Stick	Long Stick
1 Dig Depth	2810 mm (110.6 in)	3110 mm (122.4 in)
2 Vertical Wall	2250 mm (88.6 in)	2390 mm (94.1 in)
3 Maximum Reach at Ground Level	5130 mm (202.0 in)	5380 mm (211.8 in)
4 Maximum Reach	5270 mm (207.5 in)	5510 mm (216.9 in)
5 Maximum Dig Height	4920 mm (193.7 in)	5020 mm (197.6 in)
6 Maximum Dump Clearance	3490 mm (137.4 in)	3600 mm (141.7 in)
7 Boom in Reach	1760 mm (69.3 in)	1860 mm (73.2 in)
8 Tail Swing		
without Counterweight	890 mm (35.0 in)	890 mm (35.0 in)
with Counterweight (light)	960 mm (37.8 in)	960 mm (37.8 in)
with Counterweight (extra)	1005 mm (39.6 in)	1005 mm (39.6 in)
9 Maximum Blade Height	385 mm (15.2 in)	385 mm (15.2 in)
10 Maximum Blade Depth	535 mm (21.1 in)	535 mm (21.1 in)
11 Boom Height in Shipping Position	1520 mm (59.8 in)	1750 mm (68.9 in)
12 Overall Shipping Height	2480 mm (97.6 in)	2480 mm (97.6 in)
13 Swing Bearing Height	565 mm (22.2 in)	565 mm (22.2 in)
14 Overall Undercarriage Length	2220 mm (87.4 in)	2220 mm (87.4 in)
15 Overall Shipping Length†	4800 mm (189.0 in)	4850 mm (190.9 in)
16 Boom Swing Right	870 mm (34.3 in)	870 mm (34.3 in)
17 Boom Swing Left	640 mm (25.2 in)	640 mm (25.2 in)
18 Track Belt/Shoe Width	300 mm (11.8 in)	300 mm (11.8 in)
19 Track Width	1780 mm (70.1 in)	1780 mm (70.1 in)
20 Ground Clearance	310 mm (12.2 in)	310 mm (12.2 in)
21 Stick Length	1260 mm (49.6 in)	1560 mm (61.4 in)

†Overall Shipping Length depends on blade position during shipment.

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Cab

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	904 (1,993)	*835 (*1,841)	583 (1,285)	575 (1,268)	3.95 (13.0)
	Long Stick	kg (lb)							*758 (*1,671)	514 (1,133)	507 (1,118)	4.26 (14.0)
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	888 (1,958)	867 (1,911)	*809 (*1,784)	483 (1,065)	478 (1,054)	4.41 (14.5)
	Long Stick	kg (lb)				*1033 (*2,377)	892 (1,967)	870 (1,918)	*750 (*1,653)	435 (959)	430 (948)	4.67 (15.3)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	833 (1,836)	813 (1,792)	*860 (*1,896)	454 (1,001)	449 (990)	4.54 (14.9)
	Long Stick	kg (lb)				*1462 (*3,223)	831 (1,832)	811 (1,788)	*805 (*1,775)	410 (904)	406 (895)	4.79 (15.7)
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	805 (1,775)	786 (1,733)	*947 (*2,088)	472 (1,041)	466 (1,027)	4.39 (14.4)
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	793 (1,748)	774 (1,706)	*907 (*2,000)	424 (935)	420 (926)	4.63 (15.2)

Minimum Weight includes cab, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	*917 (*2,022)	*835 (*1,841)	720 (1,587)	663 (1,462)	3.95 (13.0)
	Long Stick	kg (lb)							*758 (*1,671)	638 (1,407)	588 (1,296)	4.26 (14.0)
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	1086 (2,394)	988 (2,178)	*809 (*1,784)	602 (1,327)	556 (1,226)	4.41 (14.5)
	Long Stick	kg (lb)				*1033 (*2,377)	*1033 (*2,377)	992 (2,187)	*750 (*1,653)	546 (1,204)	504 (1,111)	4.67 (15.3)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	1031 (2,273)	936 (2,064)	*860 (*1,896)	568 (1,252)	524 (1,155)	4.54 (14.9)
	Long Stick	kg (lb)				*1462 (*3,223)	1029 (2,269)	933 (2,057)	*805 (*1,775)	518 (1,142)	477 (1,052)	4.79 (15.7)
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	1003 (2,211)	909 (2,004)	*947 (*2,088)	591 (1,303)	545 (1,202)	4.39 (14.4)
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	991 (2,185)	897 (1,978)	*907 (*2,000)	536 (1,182)	494 (1,089)	4.63 (15.2)

Maximum Weight includes cab, steel tracks, extra counterweight, operator, full fuel tank and blade.

Canopy

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	884 (1,949)	866 (1,909)	*835 (*1,841)	555 (1,224)	549 (1,210)	3.95 (13.0)
	Long Stick	kg (lb)							*764 (*1,684)	490 (1,080)	485 (1,069)	4.26 (14.0)
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	846 (1,865)	829 (1,828)	*809 (*1,784)	458 (1,010)	455 (1,003)	4.41 (14.5)
	Long Stick	kg (lb)				*1034 (*2,280)	851 (1,876)	834 (1,839)	*755 (*1,664)	413 (911)	411 (906)	4.67 (15.3)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	791 (1,744)	776 (1,711)	*860 (*1,896)	429 (946)	427 (941)	4.54 (14.9)
	Long Stick	kg (lb)				*1461 (*3,221)	788 (1,737)	772 (1,702)	*809 (*1,784)	389 (858)	387 (853)	4.79 (15.7)
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	763 (1,682)	749 (1,651)	*947 (*2,088)	446 (983)	443 (977)	4.39 (14.4)
	Long Stick	kg (lb)	*1351 (*2,978)	*1351 (*2,978)	*1351 (*2,978)	*1694 (*3,735)	749 (1,651)	735 (1,620)	*908 (*2,002)	402 (886)	399 (880)	4.63 (15.2)

Minimum Weight includes canopy, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	*917 (*2,022)	*835 (*1,841)	691 (1,523)	639 (1,409)	3.95 (13.0)
	Long Stick	kg (lb)							*758 (*1,671)	612 (1,349)	566 (1,248)	4.26 (14.0)
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	1044 (2,302)	953 (2,101)	*809 (*1,784)	577 (1,272)	534 (1,177)	4.41 (14.5)
	Long Stick	kg (lb)				*1033 (*2,277)	*1033 (*2,277)	956 (2,108)	*750 (*1,653)	523 (1,153)	483 (1,065)	4.67 (15.3)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	989 (2,180)	901 (1,986)	*860 (*1,896)	544 (1,199)	504 (1,111)	4.54 (14.9)
	Long Stick	kg (lb)				*1462 (*3,223)	987 (2,176)	898 (1,980)	*805 (*1,775)	495 (1,091)	458 (1,010)	4.79 (15.7)
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	961 (2,199)	874 (1,927)	*947 (*2,088)	566 (1,248)	523 (1,153)	4.39 (14.4)
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	949 (2,092)	862 (1,900)	*907 (*2,000)	513 (1,131)	473 (1,043)	4.63 (15.2)

Maximum Weight includes canopy, steel tracks, extra counterweight, operator, full fuel tank and blade.

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ENGINE			OPERATOR ENVIRONMENT <i>(continued)</i>		
Cat C1.7 NA Engine (U.S. EPA Tier 4 Final/ EU Stage V)	✓		Retractable High Visibility Seat Belt (75 mm/3 in)	✓	
Automatic Engine Idle	✓		Coat Hook	✓	
Automatic Engine Shutdown	✓		Cup Holder	✓	
Automatic Two Speed Travel	✓		Storage Pocket	✓	
Fuel Water Separator	✓		Skylight	✓	
Power on Demand (not available in all regions)	✓		Mounting Bosses for Front	✓	
Variable Displacement Piston Pump	✓		Signaling/Warning Horn	✓	
Load Sensing/Flow Sharing Hydraulics	✓		Interior Light (Cab only)	✓	
HYDRAULICS			Boom Light, Halogen (not available in all regions)	✓	
Smart Tech Electronic Pump	✓		LED Front Lights		✓
Accumulator	✓		LED Front and Rear Lights		✓
Automatic Swing Brake	✓		LED Boom Light		✓
Auxiliary Hydraulic Lines	✓		Utility Space for Mobile Phone	✓	
One and Two Way Auxiliary Flow	✓		Mirrors Left and Right		✓
Continuous Auxiliary Flow	✓		Camera		✓
Auxiliary Line Quick Disconnects	✓		Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only) (Cab only)		✓
OPERATOR ENVIRONMENT			Next Generation Color LCD Monitor (IP66)	✓	
Tilt-up Canopy or Tilt-Up Cab	✓		– Fuel Level and Coolant Temperature Gauges	✓	
Cab with Air Conditioning		✓	– Maintenance and Machine Monitoring	✓	
Cab with Heater		✓	– Performance and Machine Adjustments	✓	
Top Guard ISO 10262:1998 Level I	✓		– Numeric Security Code	✓	
ROPS – ISO 12117-2:2008	✓		– Multiple Languages	✓	
TOPS – ISO 12117:1997	✓		– Hour Meter with Wake Up Switch	✓	
Stick Steer Mode	✓		– Jog Dial (cab only)	✓	
Travel Cruise Control	✓		Next Generation Advanced Monitor		✓
Control Pattern Changer (optional in some regions)	✓		– Touch Screen		✓
Adjustable Wrist Rests	✓		– Site Reference System		✓
Washable Floor Mat	✓		– High Definition Camera Capable (IP68 and IP69K)		✓
Travel Pedals and Hand Levers	✓		– Numeric Security Code		✓
No Travel Pedals and Hand Levers (optional in some regions)		✓	UNDERCARRIAGE		
Machine Security	✓		Rubber Belt (300 mm/11.8 in wide)	✓	
Standard Key with Pass Code	✓		Steel Track (300 mm/11.8 in wide)		✓
Push to Start with Key Fob/Pass Code		✓	Dozer Blade	✓	
Fabric Suspension Seat (Cab only)	✓		Dozer Blade Float	✓	
Vinyl Suspension Seat (Canopy only)	✓		Angle Blade		✓
Vinyl Non-Suspension Seat (Canopy only) (not available in all regions)		✓	Tie Downs on Track Frame	✓	
Hydraulic Lockout – All Controls	✓				

(continued on next page)

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Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
BOOM, STICK AND LINKAGES			ELECTRICAL		
One Piece Boom (2400 mm/94.5 in)	✓		12 Volt Battery	✓	
Standard Stick (1260 mm/49.6 in)	✓		Software (machine and monitor)	✓	
Long Stick (1560 mm/61.4 in)		✓	Maintenance Free Battery	✓	
Front Shovel Capable	✓		Battery Disconnect	✓	
Pin-On	✓		Signaling/Warning Horn	✓	
Dual Lock Manual Coupler		✓	12 Volt Power Socket	✓	
Hydraulic Coupler		✓	Product Link™ PL243 (regulations apply)		✓
Thumb Ready (not available in all regions)	✓		Product Link PLE643 (regulations apply)		✓
Certified Lifting Eye (optional in some regions)	✓		Travel Alarm (standard in some regions)		✓
Attachments including Couplers, Thumbs, Buckets, Augers and Hammers		✓	GUARDING		
2nd Auxiliary Hydraulic Lines		✓	Polycarbonate Half Height Front Guard (Canopy only)		✓
Bucket Divert Lines		✓	Polycarbonate Front Guard (ISO 10262:1998 Level I and EN356 P5A)		✓
Boom Lowering Check Valve		✓	Heavy Duty Front Guard ISO 10262:1998 Level II		✓
Stick Lowering Check Valve		✓	OTHER		
Hydraulic Quick Coupler Lines (not available in all regions)		✓	Bio Oil Capable		✓
			Eco Drain		✓
			Water Jacket Heater		✓
			Light Counterweight (100 kg/221 lb)		✓
			Extra Counterweight (250 kg/551 lb)		✓

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 Cat® C1.7 engine meets U.S. EPA Tier 4 Final and EU Stage V 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 (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuelsRefer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

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

- Operator Sound Pressure 78 dB(A) (ISO 6396:2008)
Average Exterior Sound Pressure 94 dB(A) (ISO 6395:2008)
- European Union Directive "2000/14/EC"

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
 - Power On Demand provides full time efficiency and power when you need it and is transparent to the operator
 - Auto idle and auto engine shutdown
 - Extended maintenance intervals reduce fluid and filter consumption
 - Remote Flash and Remote Troubleshoot (if equipped)
 - Cat Grade with Advanced 2D and 3D improves operator efficiency minimizing fuel consumption (if equipped)

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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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AEHQ8351-01 (08-2022)
Replaces AEHQ8351
Build Number: 07A
(Global excluding
China and Japan)

