



# Cat<sup>®</sup> 308 CR VAB

## MINI HYDRAULIC EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 308 CR Variable Angle Boom (VAB) Mini Excavator delivers maximum power and performance in a mini size to help you work in a wide range of applications. The Variable Angle Boom provides the maximum in linkage flexibility in tight applications.

### ALL DAY COMFORT

- A sealed and pressurized cab is equipped with an improved air conditioning system, adjustable wrist rests and a suspension seat to help keep you working comfortably all day long.

### EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation Monitor provides customizable machine operator preferences and easy to read machine information.

### 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 with a push of a button. The benefit of less effort and improved control is in your hands!

### BIG PERFORMANCE IN A MINI DESIGN

- Increased lifting, swinging, travel and multi-functioning performance help you get the job done more efficiently, and dig-to-blade 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. A back-up camera, courtesy work lights and a fluorescent retractable seat belt are just a few 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 with grouped service points and robust service panels.

### 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.

## Specifications

### Engine

Engine Model	Cat <sup>®</sup> C3.3B	
U.S. EPA Tier 4 Final/EU Stage V		
<b>Net Power @ 2,200 rpm</b>		
ISO 9249:2007, 80/1269/EEC	51.8 kW	69.5 hp
<b>Gross Power</b>		
SAE J1995	55.4 kW	74.3 hp
Bore	94 mm	3.7 in
Stroke	120 mm	4.7 in
Displacement	3.33 L	203 in <sup>3</sup>

- Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, exhaust system and fan.

### Weights

Minimum Operating Weight with Standard Stick*	8655 kg	19,084 lb
Maximum Operating Weight with Standard Stick**	9245 kg	20,385 lb
Minimum Operating Weight with Short Stick*	8690 kg	19,161 lb
Maximum Operating Weight with Short Stick**	9280 kg	20,462 lb

\*Minimum Weight is based on rubber tracks, no counterweight, operator, full fuel tank, blade, and no bucket.

\*\*Maximum Weight is based on steel tracks with rubber pads, counterweight, operator, full fuel tank, blade, and no bucket.

### Weight Increase from Minimum Configuration

Counterweight	250 kg	552 lb
Short Stick*	35 kg	77 lb
Steel Tracks with Pads	341 kg	752 lb

\*Short stick weight exceeds standard stick weight due to its heavy duty design.



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## Travel System

Travel Speed – High	5.1 km/h	3.2 mph
Travel Speed – Low	3.1 km/h	1.9 mph
Maximum Traction Force – High Speed	27.8 kN	6,250 lbf
Maximum Traction Force – Low Speed	67.5 kN	15,175 lbf
Ground Pressure – Minimum Weight	37.9 kPa	5.5 psi
Ground Pressure – Maximum Weight	40.6 kPa	5.9 psi
Gradeability (maximum)	30 degrees	

## Service Refill Capacities

Cooling System	10.0 L	2.6 gal
Engine Oil	11.2 L	3.0 gal
Fuel Tank	147 L	39 gal
Hydraulic Tank	53 L	14 gal
Hydraulic System	110 L	29 gal

## Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	167 L/min	44 gal/min
Operating Pressure – Equipment	285 bar	4,134 psi
Operating Pressure – Travel	285 bar	4,134 psi
Operating Pressure – Swing	250 bar	3,626 psi
Maximum Auxiliary Circuit – Primary		
Flow at Pump*	131 L/min	35 gal/min
Pressure at Pump*	285 bar	4,134 psi
Maximum Auxiliary Circuit – Secondary		
Flow at Pump*	33 L/min	9 gal/min
Pressure at Pump*	285 bar	4,134 psi
Digging Force – Stick (Standard)	42.3 kN	9,509 lbf
Digging Force – Stick (Short)	41.0 kN	9,217 lbf
Digging Force – Bucket	62.0 kN	13,946 lbf

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

## Swing System

Machine Swing Speed	10.6 rpm
Boom Swing – Left	60 degrees
Boom Swing – Right	50 degrees

## Blade

Width (Standard)	2300 mm	90.6 in
Width (Wide)	2450 mm	96.5 in
Height	431 mm	17 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 II)

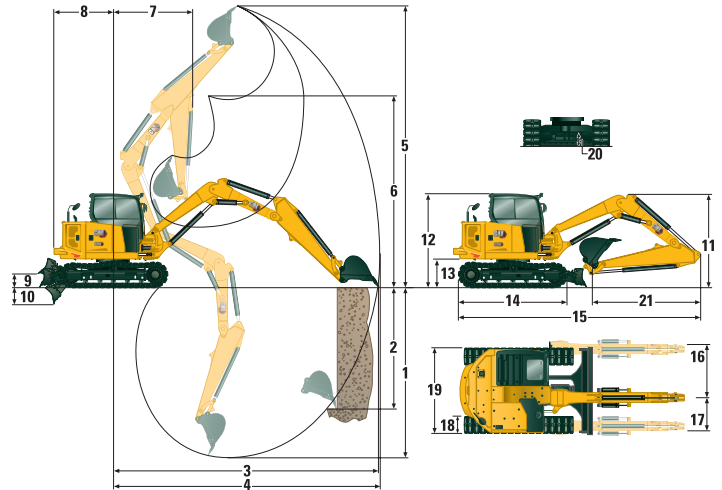
## Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	99 dB(A)

• European Union Directive “2000/14/EC”

## Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.430 metric tonnes.



## Dimensions

	Short Stick		Standard Stick	
	VAB In	VAB Out	VAB In	VAB Out
1 Dig Depth	3700 mm (145.7 in)	3305 mm (130.1 in)	3815 mm (150.2 in)	3460 mm (136.2 in)
2 Vertical Wall	2435 mm (95.9 in)	3510 mm (138.2 in)	2520 mm (99.2 in)	3725 mm (146.7 in)
3 Maximum Reach at Ground Level	6210 mm (244.5 in)	7575 mm (298.2 in)	6300 mm (248.0 in)	7715 mm (303.7 in)
4 Maximum Reach	6430 mm (253.1 in)	7750 mm (305.1 in)	6515 mm (256.5 in)	7885 mm (310.4 in)
5 Maximum Dig Height	5300 mm (208.7 in)	8045 mm (316.7 in)	5220 mm (205.5 in)	8180 mm (322.0 in)
6 Maximum Dump Clearance	3510 mm (138.2 in)	6160 mm (242.5 in)	3450 mm (135.8 in)	6285 mm (247.4 in)
7 Boom in Reach	3110 mm (122.4 in)	2460 mm (96.9 in)	3120 mm (122.8 in)	2710 mm (106.7 in)
8 Tail Swing with Counterweight	1585 mm (62.4 in)	1585 mm (62.4 in)	1585 mm (62.4 in)	1585 mm (62.4 in)
Tail Swing without Counterweight	1450 mm (57.1 in)	1450 mm (57.1 in)	1450 mm (57.1 in)	1450 mm (57.1 in)
9 Maximum Blade Height	370 mm (14.6 in)	370 mm (14.6 in)	370 mm (14.6 in)	370 mm (14.6 in)
10 Maximum Blade Depth	407 mm (16.0 in)	407 mm (16.0 in)	407 mm (16.0 in)	407 mm (16.0 in)
11 Transport Height	2330 mm (91.7 in)	2330 mm (91.7 in)	2475 mm (97.4 in)	2475 mm (97.4 in)
12 Cab Height	2541 mm (100.0 in)	2541 mm (100.0 in)	2541 mm (100.0 in)	2541 mm (100.0 in)
13 Swing Bearing Height	756 mm (29.8 in)	756 mm (29.8 in)	756 mm (29.8 in)	756 mm (29.8 in)
14 Overall Undercarriage Length	2880 mm (113.4 in)	2880 mm (113.4 in)	2880 mm (113.4 in)	2880 mm (113.4 in)
15 Overall Shipping Length	6440 mm (253.5 in)	6440 mm (253.5 in)	6450 mm (253.9 in)	6450 mm (253.9 in)
16 Boom Swing Right	935 mm (37.0 in)	935 mm (37.0 in)	935 mm (37.0 in)	935 mm (37.0 in)
17 Boom Swing Left	605 mm (24.0 in)	605 mm (24.0 in)	605 mm (24.0 in)	605 mm (24.0 in)
18 Track Belt/Shoe Width	450 mm (17.7 in)	450 mm (17.7 in)	450 mm (17.7 in)	450 mm (17.7 in)
19 Overall Track Width	2300 mm (90.6 in)	2300 mm (90.6 in)	2300 mm (90.6 in)	2300 mm (90.6 in)
20 Ground Clearance	350 mm (13.8 in)	350 mm (13.8 in)	350 mm (13.8 in)	350 mm (13.8 in)
21 Stick Length	1665 mm (65.6 in)	1665 mm (65.6 in)	1820 mm (71.7 in)	1820 mm (71.7 in)

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## Short Stick

Lift Capacities – Minimum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 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		
4.5 m (14.8 ft)	VAB out	kg (lb)	*2576 (*5,680)	*2576 (*5,680)	*2576 (*5,680)	*2662 (*5,870)	1778 (3,920)	1530 (3,374)	*1709 (*3,768)	1076 (2,373)	921 (2,031)	5.87 (19.3)		
	VAB in	kg (lb)				*1627 (*3,588)			*1627 (*3,588)		*1627 (*3,588)	4.20 (13.8)		
3 m (9.8 ft)	VAB out	kg (lb)				*2920 (*6,439)	1644 (3,625)	1403 (3,094)	*1563 (*3,446)	869 (1,916)	738 (1,627)	6.54 (21.5)		
	VAB in	kg (lb)				*2094 (*4,617)	*2094 (*4,617)	1589 (3,504)	*1562 (*3,444)	*1562 (*3,444)	1244 (2,743)	5.15 (16.9)		
1.5 m (4.9 ft)	VAB out	kg (lb)				*3044 (*6,712)	1479 (3,261)	1245 (2,745)	*1568 (*3,457)	802 (1,768)	678 (1,495)	6.74 (22.1)		
	VAB in	kg (lb)	*4840 (*10,672)	3179 (7,010)	2634 (5,808)	*2671 (*5,890)	1690 (3,726)	1446 (3,188)	*1763 (*3,887)	1243 (2,741)	1066 (2,351)	5.42 (17.8)		
0 m (0 ft)	VAB out	kg (lb)				*2616 (*5,768)	1402 (3,091)	1171 (2,582)	*1266 (*2,792)	831 (1,832)	702 (1,548)	6.53 (21.4)		
	VAB in	kg (lb)	*5725 (*12,624)	2873 (6,335)	2352 (5,186)	*3089 (*6,811)	1551 (3,422)	1314 (2,897)	*2391 (*5,272)	1268 (2,796)	1078 (2,377)	5.14 (16.9)		

Minimum Weight includes rubber belts, cab, operator, full fuel tank, no counterweight, and no bucket.

Lift Capacities – Maximum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 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		
4.5 m (14.8 ft)	VAB out	kg (lb)	*2576 (*5,680)	*2576 (*5,680)	*2576 (*5,680)	*2662 (*5,870)	2005 (4,421)	1731 (3,817)	*1709 (*3,768)	1238 (2,730)	1066 (2,351)	5.87 (19.3)		
	VAB in	kg (lb)							*1627 (*3,588)	*1627 (*3,588)	*1627 (*3,588)	4.20 (13.8)		
3 m (9.8 ft)	VAB out	kg (lb)				*2920 (*6,439)	1927 (4,249)	1657 (3,654)	*1563 (*3,446)	1063 (2,344)	913 (2,013)	6.37 (20.9)		
	VAB in	kg (lb)				*2094 (*4,617)	*2094 (*4,617)	1791 (3,949)	*1562 (*3,444)	*1562 (*3,444)	*1562 (*3,444)	5.15 (16.9)		
1.5 m (4.9 ft)	VAB out	kg (lb)				*3044 (*6,712)	1706 (3,762)	1446 (3,188)	*1568 (*3,457)	939 (2,070)	802 (1,768)	6.74 (22.1)		
	VAB in	kg (lb)	*4840 (*10,672)	3591 (7,918)	2986 (6,584)	*2671 (*5,890)	1918 (4,229)	1648 (3,634)	*1763 (*3,887)	1421 (3,133)	1226 (2,703)	5.42 (17.8)		
0 m (0 ft)	VAB out	kg (lb)				*2616 (*5,768)	1629 (3,592)	1373 (3,027)	*1266 (*2,792)	973 (2,145)	829 (1,828)	6.53 (21.4)		
	VAB in	kg (lb)	*5725 (*12,624)	3285 (7,243)	2704 (5,962)	*3089 (*6,811)	1779 (3,923)	1516 (3,343)	*2391 (*5,272)	1458 (3,215)	1249 (2,754)	5.14 (16.9)		

Maximum Weight includes steel tracks with pads, cab, operator, full fuel tank, counterweight, and no bucket.

## Standard Stick

Lift Capacities – Minimum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 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		
4.5 m (14.8 ft)	VAB out	kg (lb)	*2330 (*5,138)	*2330 (*5,138)	*2330 (*5,138)	*2630 (*5,799)	1815 (4,002)	1567 (3,455)	*2034 (*4,485)	1060 (2,337)	911 (2,009)	6.03 (19.8)		
	VAB in	kg (lb)												
3 m (9.8 ft)	VAB out	kg (lb)				*2910 (*6,417)	1687 (3,720)	1444 (3,184)	*1809 (*3,989)	867 (1,912)	740 (1,632)	6.67 (21.9)		
	VAB in	kg (lb)				*2011 (*4,434)	*2011 (*4,434)	1630 (3,594)	*1915 (*4,223)	1433 (3,160)	1242 (2,739)	5.24 (17.2)		
1.5 m (4.9 ft)	VAB out	kg (lb)				*3087 (*6,807)	1522 (3,356)	1287 (2,838)	*1584 (*3,493)	803 (1,771)	683 (1,506)	6.87 (22.5)		
	VAB in	kg (lb)	*4640 (*10,231)	3273 (7,217)	2722 (6,002)	*2622 (*5,782)	1732 (3,819)	1487 (3,279)	*2177 (*4,800)	1244 (2,743)	1071 (2,362)	5.50 (18.0)		
0 m (0 ft)	VAB out	kg (lb)				*2727 (*6,013)	1437 (3,169)	1206 (2,659)	*1305 (*2,878)	828 (1,826)	702 (1,548)	6.67 (21.9)		
	VAB in	kg (lb)	*5762 (*12,705)	2932 (6,465)	2408 (5,310)	*3098 (*6,831)	1587 (3,499)	1349 (2,975)	*2548 (*5,618)	1263 (2,785)	1079 (2,379)	5.24 (17.2)		

Minimum Weight includes rubber belts, cab, operator, full fuel tank, no counterweight, and no bucket.

Lift Capacities – Maximum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 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		
4.5 m (14.8 ft)	VAB out	kg (lb)	*2330 (*5,138)	*2330 (*5,138)	*2330 (*5,138)	*2630 (*5,799)	2043 (4,505)	1769 (3,901)	*2034 (*4,485)	1216 (2,681)	1051 (2,317)	6.03 (19.8)		
	VAB in	kg (lb)												
3 m (9.8 ft)	VAB out	kg (lb)				*2910 (*6,417)	1914 (4,220)	1646 (3,629)	*1809 (*3,989)	1005 (2,216)	865 (1,907)	6.67 (21.9)		
	VAB in	kg (lb)				*2011 (*4,434)	*2011 (*4,434)	*2011 (*4,434)	*1915 (*4,223)	1619 (3,570)	1409 (3,107)	5.24 (17.2)		
1.5 m (4.9 ft)	VAB out	kg (lb)				*3087 (*6,807)	1749 (3,857)	1488 (3,281)	*1584 (*3,493)	936 (2,064)	803 (1,771)	6.87 (22.5)		
	VAB in	kg (lb)	*4640 (*10,231)	3685 (8,125)	3074 (6,778)	*2622 (*5,782)	1959 (4,320)	1689 (3,724)	*2177 (*4,800)	1419 (3,129)	1228 (2,708)	5.50 (18.0)		
0 m (0 ft)	VAB out	kg (lb)				*2727 (*6,013)	1664 (3,669)	1408 (3,105)	*1305 (*2,878)	965 (2,128)	827 (1,824)	6.67 (21.9)		
	VAB in	kg (lb)	*5762 (*12,705)	3343 (7,371)	2760 (6,086)	*3098 (*6,831)	1815 (4,002)	1551 (3,420)	*2548 (*5,618)	1450 (3,197)	1246 (2,747)	5.24 (17.2)		

Maximum Weight includes steel tracks with pads, cab, operator, full fuel tank, counterweight, and no bucket.

# 308 CR VAB Mini Hydraulic Excavator

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>ENGINE</b>			<b>OPERATOR ENVIRONMENT (CONTINUED)</b>		
Cat C3.3 Diesel Engine (U.S. EPA Tier 4 Final/EU Stage V) – Electronic Engine, Turbo, Diesel Particulate Filter (DPF)	✓		Next Generation Advanced Monitor <i>(below are all included with Next Generation Advanced Monitor option)</i>		✓
Automatic Engine Idle	✓		– Touch Screen		
Automatic Engine Shutdown	✓		– Site Reference System		
Automatic Swing Brake	✓		– High Definition Camera Capable (IP68 & IP69K)		
Automatic Two Speed Travel	✓		– Numeric Security Code		
Fuel Water Separator with Indicator	✓		<b>UNDERCARRIAGE</b>		
Radial Seal – Double Element Air Filter	✓		Greased and Lubricated Track	✓	
Extended Life Coolant, –37° C (–35° F)	✓		Hydraulic Track Adjusters	✓	
Ecology Drain	✓		Tie Down Eyes on Track Frame	✓	
<b>HYDRAULICS</b>			Dozer Blade	✓	
Smart Tech Electronic Pump	✓		Wide Dozer Blade		✓
Electronic Variable Displacement Piston Pump	✓		Dozer Float	✓	
Load Sensing/Flow Sharing Hydraulics	✓		Bolt-on, Reversible Wear Edge	✓	
Power On Demand	✓		Steel Tracks (450 mm/17.7 in wide)		✓
Hydraulic Temperature Monitoring	✓		Wide Steel Tracks (600 mm/23.6 in)		✓
Certified Accumulator	✓		Steel Track with Rubber Pads		✓
HYDO Advanced Hydraulic Oil	✓		Track Guides		✓
<b>OPERATOR ENVIRONMENT</b>			<b>BOOM, STICK AND LINKAGES</b>		
Top Guard ISO 10262 1998 Level I	✓		Variable Angle Boom	✓	
ROPS ISO 12117-2:2008	✓		Standard Stick (1820 mm/71.7 in)	✓	
Sealed and Pressurized Cab	✓		Short Stick (1665 mm/65.6 in)		✓
Stick Steer Mode	✓		Front Shovel Capable – Pin-on/Manual	✓	
Travel Cruise Control	✓		Coupler/Hydraulic Coupler (not available in all regions)		
Control Pattern Changer	✓		Thumb Ready (not available in all regions)	✓	
Adjustable Wrist Rests	✓		Attachments including Buckets, Augers and Hammers		✓
Molded Footrests	✓		2nd Auxiliary Hydraulic Lines		✓
Removable, Washable Floor Mat	✓		Boom Lowering Check Valve		✓
Travel Pedals and Hand Levers	✓		Stick Lowering Check Valve		✓
Cat Key with Passcode Option	✓		Certified Lifting Eye		✓
Push to Start with Bluetooth® Key		✓	<b>ELECTRICAL</b>		
HVAC with Automatic Temperature Control	✓		12 Volt Electrical System	✓	
Hydraulic Lockout Controls	✓		60 Ampere Alternator	✓	
Integrated Lower Front Window	✓		Circuit Breaker	✓	
Assisted Front Window Overhead Storage	✓		900 CCA Maintenance Free Battery	✓	
Rear Window Emergency Exit	✓		Battery Disconnect	✓	
Fabric, High Back, Suspension Seat	✓		Ignition Key Stop Switch	✓	
Air Suspension Heated Seat		✓	Product Link Elite (regulations apply)		✓
Retractable Seat Belt (75 mm/3 in)	✓		Travel Alarm		✓
Coat Hook	✓		Rearview Camera		✓
Cup Holder	✓		Rotating Beacon		✓
LED Interior Light	✓		<b>GUARDING</b>		
Literature Holder	✓		Mesh Front Guard ISO 10262 1998 Level I		✓
Mounting Bosses for Top and Front Guards	✓		Heavy Duty Front Guard ISO 10262 1998 Level II		✓
12V Power Socket	✓		Overhead Cab Guard ISO 10262 1998 Level II		✓
Radio – Bluetooth, Auxiliary, Microphone, USB (charging only)	✓		Polycarbonate Front Window EN356 P5A		✓
Skylight	✓		Track Guards		✓
Signaling/Warning Horn	✓		<b>OTHER</b>		
Cab and (left side) Boom Work Lights	✓		Additional Counterweight		✓
Utility Space for Mobile Phone	✓		Locks on External Enclosure Doors	✓	
Rain Visor		✓	Lockable Fuel Cap	✓	
Next Generation Color LCD Monitor (IP66)	✓		Beacon Socket	✓	
– Jog Dial Interface	✓		Rear Reflectors	✓	
– Fuel Level and Coolant Temperature Gauges	✓		Water Jacket Heater		✓
– Maintenance and Machine Monitoring	✓		Refueling Pump		✓
– Performance and Machine Adjustments	✓				
– Numeric Security Code	✓				
– Multiple Languages	✓				
– Camera Ready (IP68 & IP69K)	✓				
– Hour Meter with Wake Up Switch	✓				

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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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AEHQ8169-01 (05-2021)  
Replaces AEHQ8169  
Build Number: 07A  
(North America, Europe, ANZP)

